

Stimulus: A Medical Humanities Journal

Volume 4 *Stimulus: A Medical Humanities Journal*

Article 1

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Full Issue of Stimulus Volume IV

The Stimulus Team

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s t i m u l u s

a medical humanities journal





WHAT'S INSIDE THIS ISSUE:

A collection of poetry, short stories, drawings, graphics, research, essays, music, and experiences from the students, faculty, and alumni of UTA as well as a number of community creators.

NOTE TO READER

From the Stimulus Team

Stimulus: A Medical Humanities Journal was created to be an experience for its readers. Unlike many other academic journals, it contains a unique combination of academic works, personal experiences, and artistic expressions. In this way, Stimulus can be seen as a portable art gallery.

Just as any piece of art can be interpreted in a number of different ways, so too can the articles that follow. We invite you to gain insight on the creators' interpretation of their own work by referencing the creator biographies at the end of this journal, in which our creators shared their purpose, artistic opinion, and the underlying meaning(s) of their submission.

In this Volume, we chose to provide trigger warnings for submissions that may contain sensitive content. Please note when the following icon appears at the beginning of a submission before continuing to read:

**Sensitive
Content**



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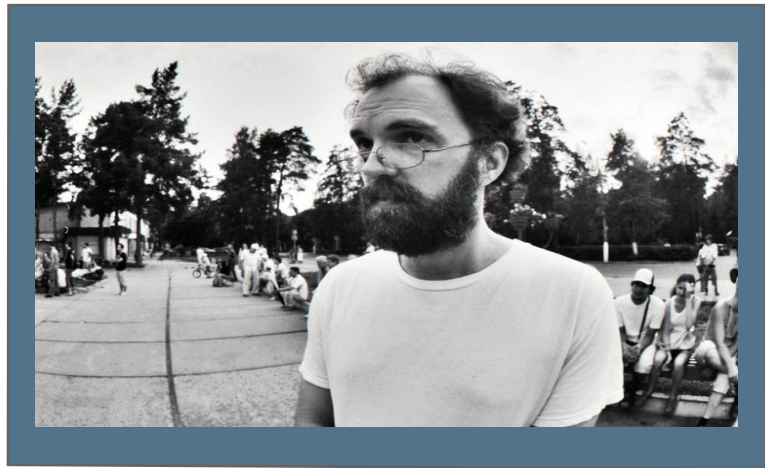
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LETTER FROM THE CHAIR OF THE DEPARTMENT OF PHILOSOPHY AND HUMANITIES

It gives me great pleasure to recommend to you the fourth issue of *Stimulus: A Medical Humanities Journal*. *Stimulus* has exceeded expectations on every front. It has created and sustained enthusiasm among UTA's Medical Humanities students and among faculty as well, something truly rare. Moreover, the journal proves that there was a distinct need for a vehicle



through which students and others might express the full range of their human experience. What better vehicle than a wide-ranging journal devoted to the Medical Humanities? Sickness, ageing, and mortality, which are Medicine's main reasons for being, are universal and some of the hardest realities we must face. We can lose sight of them in the pursuit of scientific knowledge (as necessary as that is) or in the pursuit of medicine-as-business (which is not necessary at all but rather a dubious political and social decision). We can thank the Medical Humanities for putting the humanity back in to medicine and for reminding us that everyone's soul is in need of the therapy (or consolation) that only artistic creation and philosophical reflection can provide. *Stimulus* offers us just this in large doses. May this issue go some way towards healing your soul, giving you hope, and keeping you human. We need as much such medicine as we can get these days.

Dr. Kenneth Williford
Professor & Chair
Department of Philosophy & Humanities
The University of Texas at Arlington

LETTER TO THE EDITOR FROM DR. GELLMAN

Dear Stimulus Staff,

Great work on *Stimulus* Volume 4!

It has been exhilarating to see the UTA community's excitement and pride as *Stimulus* continues to grow. It is wonderful to offer a creative platform related to health care. Many thanks to our students, faculty, staff, and UTA community members who have had a voice in our *Journal*.

I want to share my tremendous appreciation for the many hours of dedication from both our *Editorial* and *Design* team members of *Stimulus*, many of whom have also contributed in the past. A special ovation to our Editor-in-Chief, Cami Henyan, for her tireless efforts with Volumes 3, Volume 4, and in early planning for Volume 5! A special note of thanks to our UTA Library staff, including Leah McCurdy, for her assistance in bringing *Stimulus* to worldwide publication and distribution. In addition, my sincere gratitude to Dr. Williford and Dr. Shupe in the Philosophy Department, and the leadership in the College of Liberal Arts, for promoting and supporting *Medical Humanities* learning at UTA.

My hope to all present and future practitioners is this important reminder: "*there's a person in there*".

Sincerely,

Dr. G

Steven P. Gellman MD, MFA, FAAFP

UTA Associate Professor of Practice

UTA Pre-med Consultant

Founder UTA Medical Humanities Program



LETTER FROM THE STIMULUS TEAM



Photo above taken by Eman Khan at the first Annual *Stimulus: A Medical Humanities Journal* Celebration Event in the sixth floor of the UTA Library.

Welcome to the fourth edition of *Stimulus: A Medical Humanities Journal*!

The fourth collection features prose, visual arts, and media from students, faculty, staff, alumni, affiliates, and members of the surrounding community. *Stimulus: A Medical Humanities Journal* is a student-led journal that is organized by the Mavericks for Medical Humanities organization and supported by the UTA's Department of Physiology and UTA's College of Liberal Arts.

Medical humanities is at the focal point of the medical sciences and artistic expression, exemplifying the humanistic nature of clinical practice. Through medical humanities, many different avenues are explored which include but are not limited to: ethical, historical, literary, philosophical and religious perspectives. In the present day, the humanistic side of medicine that the discipline underscores is crucial as it connects the mind, body, spirit and soul that can be overlooked in clinical practice. For these reasons, each person involved in the creation of this journal from the authors, editors, and designers are deeply connected to the mission and essence of medical humanities.

As a team, we take pride in amplifying the experiences and voices of each person who entrusted us with their stories, artistic creations, and personal perspectives. As such, our journal is a culmination of a vast array of diverse pieces, all of which relate to medical humanities in more ways than one. We are extremely proud of all of the hard work that has gone into creating each piece and their inclusion in *Stimulus* is a testament to our ever-expanding mission to give each person an opportunity to express themselves. We have enjoyed learning from our fellow UTA community and growing in our knowledge of the medical humanities through their submissions.

We would like to thank the UTA faculty and staff who have helped and given support to the establishment of *Stimulus*: to Digital Publishing Librarians Dr. Leah Marie McCurdy, Vanessa Garrett, and Hang Pham-Vu, and copy editor Janet Long for their efforts in helping to put the journal together; Dean of the College of Liberal Arts Dr. Elizabeth Newman for her advocacy of this journal and medical humanities at UTA, Dr. Eli Shupe for her support and teachings on the medical humanities, Dr. Kenneth Williford Chair of the Philosophy and Humanities Department; UTA Alumna, Caroline Nguyen for creating the *Stimulus* logo; as well as the club leadership for collaborating with us and spreading the word about our journal. We would also like to thank Karysa Nelson and Thao Thu Nguyen, the founders of the journal, for trusting us with your vision and goal for the journal. Finally, a very special thanks to Dr. Steven Gellman for continuing to contribute to the journal and guide us on how to honor *Stimulus* and the UTA community in this year's volume.

All in all, we are thrilled to showcase the creativity and talents of the many individuals who have contributed to the fourth edition of *Stimulus: A Medical Humanities Journal*. We hope that you enjoy reading this journal as much as we enjoyed putting it together for you!



STIMULUS

STIMULUS TEAM
BIOGRAPHIES

STIMULUS TEAM



Cami Henyan **Editor-in-Chief**

Cami Henyan is an alumna of UTA who received her bachelors in biology and minor in medical humanities in 2023. Cami is currently pursuing her masters of medical science at UNT HSC and is hoping to go to medical school soon after. This is her third volume of Stimulus and second volume as editor in chief. She also works as a medical scribe for Cook Children's and hopes to become a pediatrician herself. Cami credits medical humanities for her success as a pre med student and understanding of the medical field. She has learned about the intricacies of medical humanities through the diverse views of the publishing authors and artists over three years. Cami has been inspired by medical humanities and Dr. Gellman to make a conscious effort to give back to her community through compassionate and empathetic volunteer work. Her favorite way to give back to her community is to visit hospitals with her therapy dog Luna. Outside of work and school, Cami enjoys spending time with friends and family, traveling, attending book clubs, and walking her dog. Cami is immensely grateful for the opportunities and education this journal has given her. She will take the lessons she learned from this experience into her career as a healthcare provider and always remember that a patient is a person first. She is so excited for the future of the journal!

Nadia Rique **Lead Graphic Designer**

Nadia is an alumna of UTA who majored in Public Relations and Advertising. During her time at UTA, she honed her skills in marketing and advertising, gaining valuable experience in graphic design and strategic communication. Posting and creating informational content on media outlets is one of her favorite activities. In the future, she wants to work for an advertising or public relations agency as a creative or social media manager. She also champions mental health advocacy, aiming to support individuals dealing with depression or codependency issues. Nadia thought she had found her calling the day she learned about the *Medical Humanities Stimulus Journal* as it resonated so much with her personality. Now, she can't wait to share volume 4 with everyone. She wants to remind everyone that every challenge is an opportunity for growth and learning.





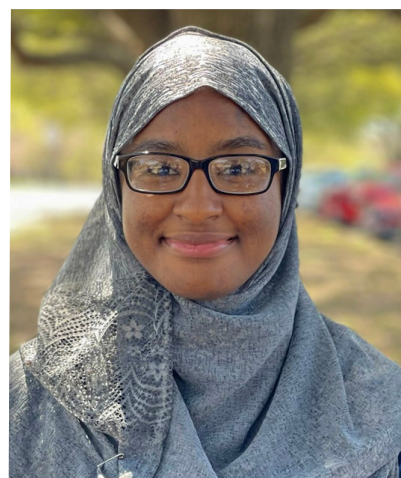
Amal Eltahir Ali **Graphic Designer**

Amal Eltahir Ali is an alumnus of the University of Texas at Arlington where she received a Bachelors of Science in Biology and a Minor in Medical Humanities and Bioethics. Amal is currently in a gap year where she works, studies, and volunteers as she aspires to go to medical school to become a pediatrician. Her love of creating artwork, painting, drawing, and creative writing combined with her aspirations of becoming a pediatrician led her towards Medical Humanities. She attributes her increased love of the medical field to the medical

humanities minor, organization, and advisor Dr. Gellman as well as the *Stimulus* journal. This is Amal's third volume working for *Stimulus*. Amal is a graphic designer of *Stimulus* having worked on *Stimulus* Volume 2 and Volume 3 as a lead graphic designer, and currently Volume 4 as a graphic designer and a mentor for this volume's lead graphic designer. Additionally, she believes that *Stimulus* is a great way to showcase students, faculty, and the communities' talents as well as to represent the different ways people express what medical humanities is. This volume would be her third time working with *Stimulus* so she can't wait for everyone to be able to read and enjoy another *Stimulus* journal!

Eman Eltahir Ali **Graphic Designer**

Eman Eltahir Ali is a senior who's currently working towards her major, a Bachelor of Arts in Biology at UTA and taking a few extra classes. After graduation, she hopes to go to Medical School or to graduate school. Her career aspirations are working in a field that cares for and helps people. Outside of *Stimulus* work, she likes to have fun by relaxing, such as reading a book, drawing, or watching TV. Her interest in *Stimulus* and Medical Humanities as a whole, is due to her creative arts and science background. Currently, she is one of the graphic designers and a mentor for the new lead graphic designer. This would be the third journal she's worked on and has loved seeing the *Stimulus* journal grow each volume and each year. She is also excited to see where this goes and the new designs. She hopes everyone looks forward and is excited for *Stimulus: A Medical Humanities Journal Vol. IV* and more to come!



Jennifer Nguyen Editor

Jennifer is a junior at UTA majoring in Public Health and minoring in Biology. She is working towards becoming a Physician Assistant in the future. She has volunteered as a medical assistant and is now working as a medical scribe in the ER. She was drawn to medical humanities from her experience working as a scribe in a physician's office. She was able to see how compassionate and caring the provider was for his patients. He took the time to get to know each and every one of them personally and was very understanding and thorough when it came to their concerns, which inspired her to do the same. She is also the External Affairs officer for the club



Mavericks for Medical Humanities, which is where she began her journey in learning about humanities. This has led her to explore different volunteering opportunities and work with the community. As a member of the Editorial team for *Stimulus*, she has been able to see the amazing different works created by those contributing to the journal. She cannot wait for everyone to see the incredible work published in volume 4 of our journal!



Calyn Hoang Editor

Calyn Hoang is a third-year undergraduate student on the pre-physician assistant track. She is majoring in Public Health and minoring in Biology. Throughout her time at UTA, she has served on the executive board of Mavericks for Medical Humanities and Pre-PA along with being an undergraduate teaching assistant and undergraduate research assistant. Becoming a member of the editorial team for *Stimulus: A Medical Humanities Journal* has allowed her to gain new experiences and see the amazing works of various authors.

Chris Casarez
Editor

Chris Casarez is a fourth-year first-generation undergraduate student majoring in Biology and minoring in Medical Humanities and Bioethics on the pre-medicine track. Throughout his time at the University of Texas at Arlington, he has served as an undergraduate teaching assistant, an undergraduate research assistant through the UT-System LSAMP program, and as resident assistant through the department of Apartment and Residence Life. Additionally, he was one of the first Medical Humanities and Bioethics interns at Arlington Memorial Hospital. Through the program, he learned about the humanistic side of medicine by observing both clinical and non-clinical roles of the patient-provider

relationship within a hospital setting. The experiences he had as an intern encouraged him to continue his path towards medicine. In the future, he plans to attend medical school in Texas to become a family medicine physician. As a second year editorial member for Stimulus: A Medical Humanities Journal, he is constantly amazed at the culmination of creativity and passion from the UTA community.



Mayte Campos-Tovar
Graphic Designer

Mayte Campos-Tovar, a second-year student at UTA, explores her passions in medical humanities as they work on the creation of the fourth volume of *Stimulus: A Medical Humanities Journal*. With passions and hobbies that integrate art and medicine, Mayte aims to show how these themes blend inside of this edition of the journal through their interest in graphic design developed through their love of art. She is currently majoring in psychology and Interdisciplinary studies with concentrations in medical humanities and bioethics,

alongside Spanish for global competency. As they embark on their second volume with Stimulus, she wishes to continue her work in the medical field and on-campus throughout the upcoming semesters and volumes!

Deepanjali Chandrasekaran Graphic Designer

Deepanjali Chandrasekaran, a final year masters student at the University of Texas at Arlington majoring in Computer Science, is set to graduate in May 2024. Driven by a profound passion for technology, she has consistently exhibited a strong work ethic and a proactive approach to her studies. Deepanjali is renowned for her dedication to achieving her goals and her continuous pursuit of learning and self-improvement. Outside of her academic endeavors, Deepanjali nurtures a love for



arts and crafts, finding joy in activities such as painting and designing, which serve as outlets for her creativity and relaxation. Additionally, her exceptional interpersonal skills have earned her the respect and admiration of her peers and colleagues. Deepanjali enthusiastically joined the design team of Stimulus: A Medical Humanities Journal in October 2022. Being part of this team has provided her with valuable opportunities to develop her skills and explore new realms of creativity. Deepanjali's unwavering dedication to both her technical studies and her artistic pursuits renders



Hallie Young Editor

I define my time at UTA with advocacy for humanity in medicine and staunch commitment to legal scholarship. As a Philosophy Undergraduate, I hope my work sparks substantive conversation. Through thought and genuine compassion, we all may change the world—One word at a time!

Chloe Hoang Graphic Designer

Chloe Hoang is a third-year undergraduate student at UTA majoring in Biology. Chloe is currently on the pre-med track and working as an ER medical scribe. At UTA, Chloe is an officer in the Mavericks for Medical Humanities along with being undergraduate research assistant in APAI Lab and former UGTA. This last year after joining the design team of Stimulus: A Medical Humanities Journal, she has been excited to create designs and being part of the making of the next upcoming Stimulus volume.



STIMULUS

CREATORS

Underneath the Sycamore

Jessica Nwankwo



My art piece is titled “Underneath the Sycamore” and depicts the process of woman’s body becoming one with the earth, of transformation and change, of growth. And her lover is sitting right next to her, holding her hand and savoring those last moments before things are completely different. It is supposed to be a representation of what the process of dying can look like, particularly in moments when a person has approached the acceptance phase, but their loved ones are scared of the thought of them not being around and of them entering that great unknown. I drew some inspiration from a song of the same name by a band called Death Cab for Cutie, including the feelings of peace and healing underneath the sycamore tree with a loved one, in a safe and secure space even with the struggles and uncertainties surrounding them. Additionally, there is symbolism associated with sycamore trees, such as strength, longevity, and beauty, which I wanted to depict in the art as the woman becomes a tree herself and passes on, and her partner is able to recognize that something beautiful can grow and come out of this transitional period between life, death, and the afterlife.



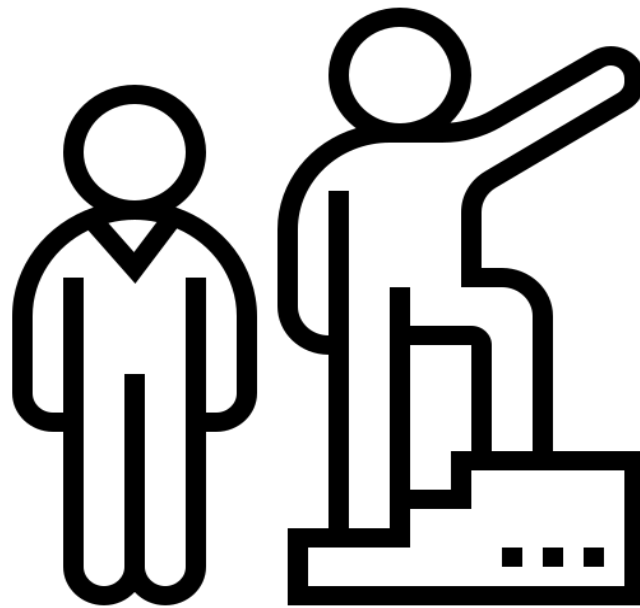
Mentorship that Heals: Leading With Kindness in Medicine

Caroline Nguyen

Medicine is a rigorous field that challenges individuals in many ways that compound with inevitable personal struggles encountered outside of training. Certainly throughout medical school students are embarking on their journeys to become medical professionals, but often they are also undergoing personal growth during this already critical period in their lives. Many students will undoubtedly undergo “growing pains” in both their personal and professional development during these formative years. For this reason, mentorship in medicine should be healing for students and trainees, just as physicians serve as healers for their patients.

Dr. CR serves as a prime example of a mentor who leads with kindness and is one of the most beloved faculty at my institution, due to her caring nature demonstrated by her kind leadership style. In her own right, she is an accomplished woman in medicine, which includes being an abdominal transplant surgeon, conducting research in the Department of Neurobiology, heading the Willed Body Program, and serving as the co-director for our first basic science course and first organ system course. At the start of the midterm week of one of her courses, I was broken up with by a partner of many years I was looking forward to marrying after medical school; after a few text messages and a phone call, my life plans were shattered. I emailed Dr. R that due to my emotional pain I could not participate in “What’s Anatomically Correct?”, the fun *Jeopardy*-styled review session she hosted weekly in which I was due to participate in only a few days. She responded, “I am sorry to hear that you are having problems. Please let me know if I can be of any help. You can come and talk to me at any time.” This led to me sobbing to her for hours in her office, to which she listened intently and initiated the healing process for my emotional wounds. One piece of comfort she offered was that my life is too meaningful and my future is too bright to jeopardize because of temporary pain, no matter how immense and valid. Years later, although I have since completed the pre-clinical courses she directs, we maintain a relationship as former student faculty and catch up over coffee periodically about life inside and outside of medicine.

This experience with Dr. R was critical in my professional development, as her providing me with that safe space to vent about my personal problems gave me the strength to continue through the academic rigors of medical school despite embarking on a personal healing journey triggered by the breakup. Her leadership style also showed me that it is possible for some of the most successful and respected people to remain kind and patient, despite giving so much time and effort to others. While caring for my personal struggles, these moments with my mentor reinvigorated my perseverance to fight for my future as a physician. Knowing that I had a mentor who genuinely cared about my wellness as an individual, not just my wellness as a student, especially in some of my darkest moments, invigorated me to work relentlessly toward my dream of becoming a physician, while still leading with kindness and authenticity. Just as she cared for me as both a student and an individual, I will also provide for my patients' pathologies and wellness.



Breathe

Karli Kirkendoll



Breathe is a multimedia sculpture made out of clay and faux plants. It highlights our vital connection with plants and the urgent need for planet conservation. It symbolizes our relationship with nature through a different perspective, emphasizing the role of plants in survival. The sculpture is a call to action, urging viewers to recognize the importance of conservation for a sustainable future not only for us but also for the future generations to come.

Grieving Spirits at an Empty Grave

Megan Mosman



Grieving Spirits at the Empty Grave is made of acrylic paint on canvas. I created this painting for a Biomedical Ethics course. In the class we were discussing the ethics of using unclaimed bodies as cadavers for medical research without any consent. I often use painting as a way to process the information and knowledge learned in my academic courses. This painting helped me express my thoughts on an abstract concept into a visual work of art. Academics are my work; painting is my passion



More than Existence

Madison Rodriguez Fowlkes

the lull betwixt the last leaf to fall
and the first bloom of spring
calls for a chapter of introspection
after months of days blocked by the hour,
the assignment, the class, the shift,
my first thought, by default, being relief
the joy of all things I could do with my "free time"

after taking a moment to fully exhale,
feeling rested and renewed I think,
but what is it that am I to do now that I am only me?
not actively a student or an applicant
the incessant thought of
how many of my boxes are checked,
or whether or not
what I am doing will look good enough on paper compared to others,
fades, becoming almost unobtrusive
but still present enough
for contemplation of goals, my passions,
for a moment, I can take a step back and ruminate.

who could I be?
the endless timelines,
the stories that have yet to be written,
the landscapes that have yet to cross my eye,
my bones splinter under the weight of all the lives I could live
but just a finite number of days left



a writer
in the gloomy mountains I indulge in my darkest depths
strange, familiar, comfort in the desolation
a recluse, pen to paper
the soothing white noise of a river flowing in the distance
beyond the trees,
perhaps the answer is in there somewhere
though, I know I could never grow here
is comfort, happiness?

a simple life
a big red farmhouse
a wood fire stove to warm my skin in the night
the light of the sun by day as I rest in a field of wildflowers
watching the speckled clouds slowly dance across clear blue skies
a psithurism fills the air
only, where is the purpose?

a daughter
one that could always have someone to turn to
a woman, vowed to protect me from my first breath
instead,
a severed relationship,
unheard cries for love and acceptance
persistently cut by the leftover glass in my mother's own wounds
she never bothered to pick them out
so I don't know how to clean my own
instead I am stuck,
lying in a pool of self doubt
fueling the fire that envelops me
of my own assessment of worth and achievement

despite who I could be,
I know that I am most notably
a wife
a girl who cowered into her dark corners
now painstakingly accepts her light as she delves into me
beckoning me to bare myself as I am
to relax, to reflect, to live as if its my last day on earth



and if it was?
if I die tomorrow, will I be satisfied with all things done thus far?
will I mourn the lives I could have lived
or appreciate every step
of the onerous journey towards a passion
even if I never get close enough to brush my fingers against it?

the truth is
all I wish to be in this life
is a sanctum,
an attentive ear ready for one's concerns,
a trusted source,
a shoulder to laugh or cry on,
as I so desperately seek myself

so if today was the last day,
if I never got to see the next bloom,
or write the next page,
as the sun disappears below the horizon
together, amongst the wildflowers
I hope we can all find our peace.



Perhaps

Agnes Otieno

Natural selection is described as reproductive success; being able to not only survive but also pass down your genes to offspring and I guess everyone goes forth and prospers.

I find it disturbing that we measure survival and fitness by reproductive success. Perhaps life is different as an animal in the jungle or a plant in the wild. Maybe survival is easier, because looking at the human species, why is it that most people with more than 5 offspring are deep in poverty, struggling to feed the mouths that are scientific decorations of esteemed fitness?

Furthermore, this very definition emphasizes the stereotypical misogynistic thought that the woman's purpose is to bear offspring, it does not consider the inequality that goes into reproduction.

Perhaps natural selection should be redefined, especially for humans. In a world where the rich get richer and the poor get poorer, maybe survival of the fittest should be making it past adolescence with a sane mind, going through your twenties unbruised by the brutality of this world, flourishing in your thirties with a mediocre career, planning for retirement in your 40s, and slowly decomposing while awaiting death after that.



Or perhaps survival of the fittest should simply be one's ability to make it through the day and still be able to appreciate sunsets, stop and smell the flowers, and maybe dance in the rain under the cloudiest skies.

Our success as a species should definitely account for more than the number of offspring we can produce.

Shoreline Allure

Dr. Steven Gellman, M.D., MFA



I am inexplicably drawn to the shoreline for spiritual renewal and inner solace. Its timeless beauty, natural rhythms, and extraordinary power align with the deepest parts of my inner being.

Padre Island National Seashore - December 2023

Through A Doll's Eyes

Margaret Syllah

Entry 1

My owner's name is Amy. I was here for Amy's birthday, and they kept saying "Happy 90th birthday" so that helped me realize that she might be 90 years old. I remember when I was with my previous owner on her 1st birthday. She got so many toys, and they looked exactly like me, except they weren't.

My previous owner looked way younger and smaller than Amy, but they were also so much alike. They both love me so much! Amy holds me just like my previous owner did. She wipes my cheek whenever I'm dirty or get dusty, and then she gently caresses my cheeks and forehead. She kisses me so much, too. She likes to keep me close, and whenever they try to take me away from her, she cries for me to come back, just like my previous owner. Her memory isn't always perfect. She forgets that I'm hers sometimes. She also forgets who some of her friends and family are when they visit, but they are always so patient and kind when she says she can't remember.

Entry 2

Amy likes having me by her side at all times, even when she watches TV and falls asleep on the couch. She tries to feed me some of her food, even though I can't eat. When she's having a bad day, she just holds me close and rubs my back. I wish I could hold her back and tell her it's okay. She's so kind to me. The nurses say she loves me, but I already knew that.



Entry 3

Amy's been getting worse lately. She doesn't seem like her happy self. She's in bed longer and has a hard time getting up. She doesn't eat as much either, and she stopped trying to feed me too. She's been getting more bruises on her body and losing her balance. Her family has been visiting her more often, too. Whenever they come, they leave crying. I still watch over her and stay by her side, but I'm more in her chair than in her arms now.

Entry 4

My owner is going to be leaving soon. I don't know when it will be, but I've heard the conversations the nurses have had with each other, and they said it's coming up.

Entry 5

Lately, at night, I hear her making loud noises whenever she breathes, much more often than before. I've been watching her sleep a lot more, each time waiting for her next breath. It always came. I would watch her carefully until she was awake again. The nurses seem to also check in on her more often now, especially when she sleeps. They say she's weaker now and might go soon.

Entry 6

Amy still sleeps for long periods of time, and whenever she's awake, she talks about her husband visiting. I've never seen her husband visit before. The nurses just say "alright" to her, but her family keeps trying to remind her that he's gone.



Entry 7

Amy asked to hold me today as she got ready for bed. I was overjoyed to be held by her again. As her hands shook and trembled, she rubbed my cheek just like she used to. She wiped away the dust that I got in the crevices of my plastic body. It was dark in the room, and the only source of light came from the moon and lamps lit outside. Despite the darkness, I could still see her face so clearly, she was smiling at me as she held me in her arms while I laid in bed with her. She brought her covers up to tuck us both in. We stayed warm together under the covers. I watched her as she closed her eyes to sleep. Her loud breathing sounds fill the quiet room with noise, as she has been doing the past few nights. She looked relaxed and calm and had a slight smile on her face.

Soon enough, her arm went slack around me. Her chest didn't rise as high in between breaths. There were longer pauses between her loud breaths. I still watched her, waiting for her next breath each time, and it always did happen. Until it didn't. And then silence filled the room. Her loud breaths were no more.



Broken Hearts

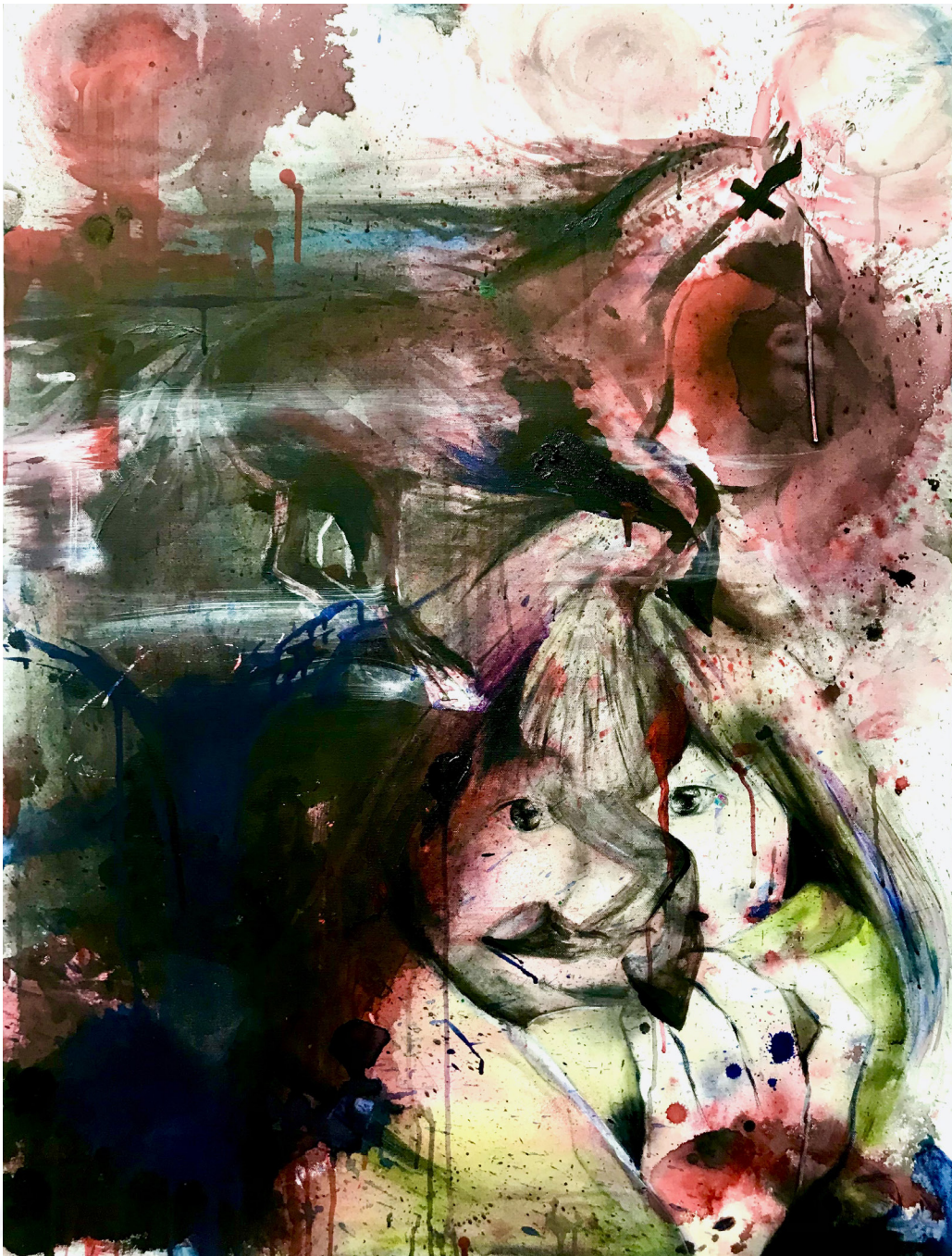
Ami Patel



We are like the clock hands at 12:30,
walking towards the place where we won't be able to return to
how do we fix the broken hands when the clock keeps going...
we are like broken hands,
there is no undone or a way of changing hands
if we stay broken, must we run backwards to be fixed...
we move forward,
walking towards the place where we won't be able to return to
we are like the clock hands at 12:30,
we cannot run backwards to be fixed
our hands fall forward in time,
we move in place till we reach 12:00,
we are not broken anymore...

Bipolar

Shuang Gou



The painting *Bipolar* draws inspiration from one of my friend's struggle with bipolar disorder. Through her experiences, marked by hyperactivity and uncontrollable emotions, I empathized with her suffering and also incorporated my own emotional experiences into the artwork. Previously, my art leaned towards traditional realism. However, with this piece, I aimed for something new, recognizing the inherent abstraction of thoughts and emotions. Converting mental imagery into visual form posed a challenge. As humanity still grapples with understanding the brain's working mechanism, I sought to infuse the painting with a mysterious atmosphere.

I aimed to portray the chaotic state of the brain when emotions take control, using a background with complex textures and multiple layers to present the intricate scenes I envisioned inside the mind. Avoiding leaving too many obvious brushstrokes, I employed techniques such as splashing, pouring, dripping, and spraying to achieve the randomness of texture and natural rendering. I started without planning. I prefer the inspiration to drive me to go, aiming to catch multiple momentary sensations, much like how emotions and thoughts occur in the brain, elusive and unpredictable.



Why Did Captain Miller's Hand Tremble in the Movie *Saving Private Ryan*? Where Medicine influences Art & Art influences Medicine

Dr. Ogan Gurel, MD - BioHealth Innovation Specialist, University of Texas at Arlington / MICHI

If one types “Why Did Captain Miller’s Hand Tremble in *Saving Private Ryan*?” on Google Search, nearly all the results cite post-traumatic stress disorder (PTSD) as the cause. Likewise, Google’s Generative AI output[1] lists a number of causes including “Combat fatigue, Stress and nervousness, Intense anxiety, Anticipation of warfare, Previous memories of fighting,” and so on. Querying ChatGPT yields a similar result:[2]

In the movie “Saving Private Ryan,” Captain Miller’s hand trembles during certain scenes due to post-traumatic stress disorder (PTSD). The character, played by Tom Hanks, is a veteran of the D-Day invasion at Omaha Beach during World War II. The intense and brutal nature of the battle, as depicted in the film’s opening sequence, takes a toll on Miller’s mental and emotional well-being. ... The hand tremors specifically emphasize the lasting effects of trauma on Captain Miller’s life, even after the immediate danger has passed.

Notes

[1] https://www.google.com/search?q=Why+Did+Captain+Miller%E2%80%99s+Hand+Tremble+in+Saving+Private+Ryan%3F&rlz=1C1UEAD_enUS1070US1070&oq=Why+Did+Captain+Miller%E2%80%99s+Hand+Tremble+in+Saving+Private+Ryan%3F&gs_lcrp=EgZjaHJvbWUyBg-gAEEUYOTIICAEQABgWGB4yCAgCEAAyFhgeogEJNjQyMGowajEiqAIAAsAIA&sourceid=chrome&ie=UTF-8

[2] ChatGPT query: <https://chat.openai.com/c/9975377a-7510-4783-83c5-589f32e4a6d6>

All of these are wrong, and the likely correct diagnosis, based on applying the basic principles of medicine, will be presented in this article. Given that these conclusions contradict generative AI, it should be clear that this article has *not been written by ChatGPT* or by any other of highly fashionable but clearly fallible AI systems. Beyond getting the answer right, a thoughtful medical analysis of this artistic twist—the “trembling” of Captain Miller’s hand—also provides insight, as all great art profoundly does, on the human condition—the deeper meaning of this iconic film.

The 19th century physician, Sir William Osler is famously quoted as saying, “Listen to your patient; [they] are telling you the diagnosis.” In the spirit of that wise advice, let us listen, then, to the movie’s lead, Captain Miller (Tom Hanks), imagining ourselves as his doctor. Our patient describes his symptoms in this 30-second clip [here](#)[3] and below are the corresponding lines from the screenplay[4]:

CAPTAIN HAMILL

I mean it. Find him. Get him home.

Miller is a bit taken aback by Captain Hamill’s forceful sincerity. Then he shakes it off and motions to his men.

....

EXT. FRENCH COUNTRY SIDE - NIGHT The FINAL RUMBLES of the DISTANT ARTILLERY fade away. The night is dark. Sarge eases up alongside Miller and speaks quietly to him.

SARGE

How long’s your hand been shaking?

MILLER

A couple of weeks. It started in Portsmouth when they brought us down for loading.

Notes

[3] 30 second video clip: https://drive.google.com/file/d/1AXACsenamI_SXsgBA_7D5hYkRkBLyED8/view

[4] <https://foo4.backblazeb2.com/file/screenplays/posts/saving-private-ryan-1998/scripts/Saving%20Private%20Ryan%20-%20Screenplay.pdf>

SARGE

Is it getting worse?

MILLER

No. It comes and goes. It stops when I look at it.

SARGE

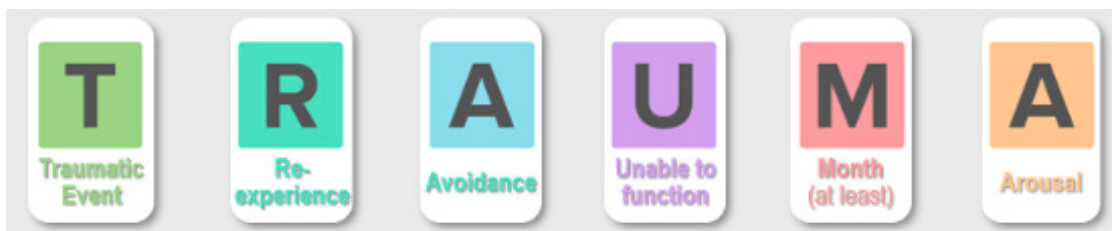
You may have to find yourself a new line of work, this one doesn’t seem to agree with you anymore.

MILLER

I’ll be alright.

From a medical perspective, this brief patient history, sparse as it may seem, has tremendous diagnostic value and clearly points *away from PTSD*, or even plain “nervousness,” as the cause of Captain Miller’s hand tremor. While the formal diagnosis of PTSD is beyond the scope of this article, it suffices to note that PTSD has six canonical components, conveniently associated with the mnemonic “TRAUMA”[5]:

Figure 1. The Six Components of PTSD – T R A U M A



Notes

[5] Note that all graphics are adapted (unless otherwise cited) from the author’s own work with the [mini-MD program](#). In this case, this is from the *Act II – Neuroscience – Forebrain* section and as adapted from Khoussam HR (2001) *West J Med* 174(6):424.

The first and most important element of PTSD — namely, the existence of a prior traumatic event— is clearly lacking as the hand shaking “started in Portsmouth,” before Captain Miller landed on the beaches at Normandy. Any psychiatrist—any generally trained physician for that matter—would, unlike ChatGPT, eliminate PTSD as a possible cause[6]. Also relevant is that the shaking “comes and goes,” and stops when Captain Miller looks at it, facts to which we will return later. To summarize:

Key points from the history	1. Recent onset hand shaking (~ two weeks)
	2. No associated traumatic event
	3. Sporadic
	4. No mention of associated pain or other symptoms

The history is typically followed by a physical examination, which begs the question, How can one examine a character in a movie? While we often associate the physical exam with poking and prodding (or listening with the stethoscope), the initial (and most important part) is observation[7]. In observing Tom Hanks, then, we note the following features.

Key points from the exam	1. The hand shaking is unilateral
	2. Right hand
	3. General shaking of the hand
	4. Patient appears calm; behavior absent of acute distress or pain

Notes

[6] Unless, of course, there was some other *trauma* in Captain Miller’s life that could serve as the inciting event for PTSD. As far as we know, no such prior trauma was described by our patient.

[7] Also termed “inspection.” Incidentally, this is one reason why appreciating art and art appreciation offer such valuable skills for being a good clinician.

Of course, these few seconds from a movie clip are necessarily incomplete as far as a physical exam is concerned. But points #1 and #2 are indisputable and will be, as we shall see, very important in making the presumptive diagnosis. For one thing, entities such as PTSD and its closely related cousins, panic disorder and generalized anxiety disorder, often present with generalized symptoms, namely, symptoms that are bilateral or even affecting the entire body. In other words, PTSD, while often instigated by specific psychological triggers, is manifested by general physiological effects[8]. With PTSD one would not expect just the right hand to shake, as is seen with Captain Miller. Regarding point #3, "General shaking of the hand," it should be noted that movement disorders are complex, manifesting with a great variety of abnormal movements, and thus their diagnosis often requires specialized training[9]. Moreover, we are not observing a real patient, but rather Tom Hanks acting as one, and while he was brilliant in the role[10] there are limits to how one can realistically simulate serious neurologic conditions. That being said, Steven Spielberg[11] was likely aware of these subtleties and directed Tom Hanks to shake his hand in this more intermediate (and unilateral) manner[12]. Finally, regarding point #4, notwithstanding the lack of a full mental status exam, we can be fairly confident that Captain Miller's mind is generally normal. In other words, there are no signs of mood disturbance, anxiety, psychosis (thought disorder), dementia, delirium or other such conditions.

To summarize: the history and physical rule out PTSD or other similar anxiety disorders and the focal nature of the symptoms point to some sort of neurological condition. Furthermore, the unilateral localization and character of the "shaking" is not typical of more complex movement disorders. We are left, then, with the most likely cause being a **focal** (also called **partial**) **seizure**. Focal seizures, as outlined in the schematic below,[13] manifest as focal symptoms, which can be sensory or motor, or even behavioral. In the case of Captain Miller, his shaking of the right hand can be described as a **focal motor seizure**. Such partial seizures can be further categorized as being

Notes

[8] The reason for this is that the psychological triggers (such as re-experiencing previous trauma) activate a generalized anxiety circuit which subsequently activates the sympathetic nervous system, the so-called "Fight or Flight" response.

[9] There are, for example, different types of "trembling," from the "pill-rolling" tremor seen in Parkinson's disease, to the fine movements in essential tremors, to intention tremors, to the flapping tremors (asterixis) as seen in liver failure, etc.

[10] Nominated for an Academy Award for Best Actor.

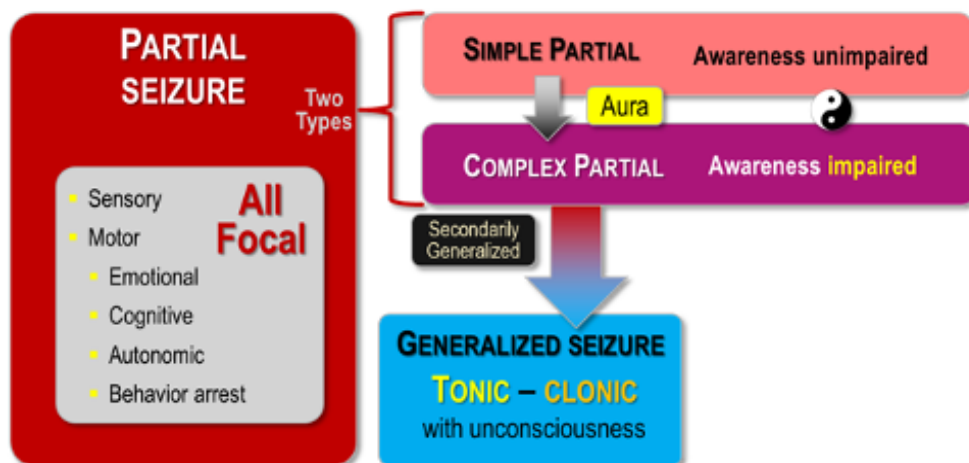
[11] Won an Academy Award for Best Director.

[12] Imagine Steven Spielberg telling Tom Hanks, "Shake your hand kind of in between a fine tremor and a large flapping." In other words, the directorial instructions may have been, "Not too fine, as in essential tremor, and not a large amplitude as with asterixis or the cerebral palsies."

[13] From the [mini-MD Act III – Neurology – Epilepsy](#).

“simple,” in which awareness (consciousness) is unimpaired and “complex,” in which awareness (consciousness) is impaired[14]. Putting all this together, we confidently say Captain Miller is suffering from a **simple partial motor seizure**, without apparent secondary generalization.

Figure 2 Seizure Disorders can Manifest as either Focal or Generalized



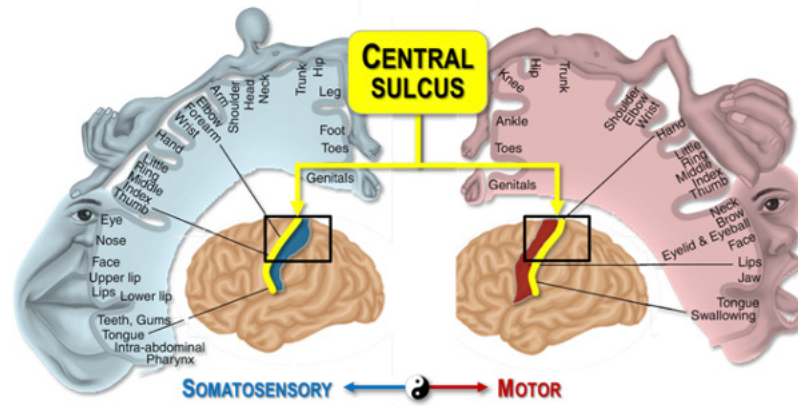
Focal findings suggest focal lesions. In other words, this fundamental principle of neurology tells us that a **localized problem** such as “right hand shaking” strongly suggests **localized pathology** within those specific brain regions responsible for movements of the right hand. Indeed, we can be confident, even without a brain CT or MRI, what part of Captain Miller’s brain is affected. It turns out that along what is termed the **central sulcus** there are regions responsible for motor activity (*anterior* to the central sulcus) and regions responsible for sensory activity (*posterior* to the central sulcus). Furthermore, these motor and sensory functions are systematically distributed anatomically from head to toe (inferiorly to superiorly) according to the following schematic, termed the **homunculus**. [15]

Notes

[14] The latter can sometimes become secondarily generalized to produced generalized (tonic-clonic) seizures.

[15] From the [mini-MD Act II Neuroscience – Forebrain](#); adapted from Malinowski MN (2019) In: Deer T et al (eds) *Deer’s Treatment of Pain*. Springer.

Figure 3 The Homunculus - Motor and Sensory Functions are Systematically Distributed over the Brain



Movements and sensations related to the feet, for example, are localized superiorly along the central sulcus, while functions corresponding to the face are distributed further inferiorly and laterally, close to the temporal lobe. In Chapter 21 of the novel, *Waves*[16], the protagonist, Tomas, identifies the *exact region of the brain* responsible for Captain Miller's malady.

TOMAS:

Yes. Captain Miller's problem was in the left side of his brain, the cerebral cortex, halfway up the central sulcus and just about a half-centimeter in front of that. This is what would have killed John H. Miller if he had survived Normandy.

What Tomas has described is the first part of any neurologic diagnosis, namely, an **anatomic** diagnosis, according to what might be called the Neurologic Method [17]. Following this framework, the next step then would be to identify the presumptive **pathologic** diagnosis[18], ultimately leading to elucidating the mechanism and cause, hence **etiologic** diagnosis. In short: a neurologist progresses in diagnostic specificity from the anatomic to the pathologic to the etiologic.

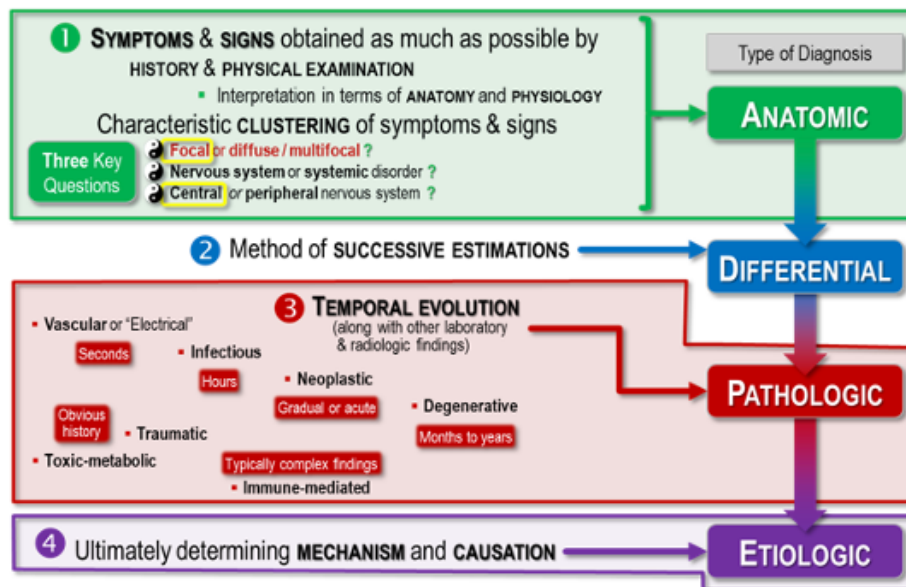
Notes

[16] Gurel O (1989) *Waves*.

[17] From the [mini-MD Act III Neurology – Principles](#).

[18] A key hint pointing at the pathophysiologic diagnosis is the time (or temporal) evolution of disease. For example, with a “vascular” or “electrical” pathophysiology, as in a stroke or epilepsy, the disease will manifest its symptoms within seconds. In contrast, a neoplastic (cancer) related pathophysiology as in a brain tumor, might manifest gradually, as in weeks. Sometimes it can be acute if the cancer grows into a critical area of the brain or, as is likely the case with Captain Miller, inciting a seizure syndrome—secondary epilepsy. In any case, this “acute” presentation of cancer is unlikely to unfold in seconds as would be the case with a stroke or primary epilepsy.

Figure 4 Outline of the Neurologic Method



In medical school one learns that a **new-onset, focal, adult seizure** is a brain tumor unless proven otherwise. Indeed, the time course recounted by Captain Miller, being in **gradual / acute**, suggests a neoplastic (cancer) pathophysiology. Putting all this together leads us to conclude that Captain Miller was not suffering from PTSD, as ChatGPT would have us believe, but rather from a brain tumor, as nearly any observant doctor would conclude. In the absence of an MRI to provide further clues or a biopsy to confirm, we cannot, of course, know what type of brain tumor that might be, but suffice to say that in 1944, the survival rate of malignant brain tumors was quite low[19]. My sense is that Captain Miller had a feeling something serious was brewing within his body. Indeed, he may have understood that if the Nazis weren't to kill him, he might, in fact, be dying from this insidious force brewing within. He tells Sargeant Horvath, "I'll be alright," but one gets the impression that Captain Miller isn't really convinced that "He'll be alright."

Notes

[19] Even though, the statistics are not so favorable. For a malignant brain tumor the 5-year survival rate is approximately 36% ([cancer.net - https://www.cancer.net/cancer-types/brain-tumor/statistics](https://www.cancer.net/cancer-types/brain-tumor/statistics)) while for some other types of brain cancer, such as meningioma the survival rates are much better, ranging around 80%. Of course, the prognosis for any particular individual depends highly on such factors as the location of the tumor, the histologic grade, and other parameters.

This may very well be the ultimate message—the fundamental moral imperative—that Steven Spielberg aims to share: namely, that while all of us die sooner or later, whether from battling disease or battling evil, what is important is how we pass on our life to others. In this way, Steven Spielberg wished to portray the metaphor of the “shaking hand” being, like a brain tumor or other such illness, something that can be found in anybody, not just the valiant on the battlefield. Captain Miller’s moral imperative becomes very much our own. Evidence for this can be found in the very last moments of the film as Captain Miller lies dying, telling Private Ryan (Matt Damon) this famous line, “Earn this.” In that final, poignant scene, Steven Spielberg directs the camera to specifically focus for several seconds on the dying man’s trembling right hand, emphasizing his connection to all of our mortal selves. After Miller dies, Spielberg directs the camera to shift focus and linger (yes, for several seconds!) on Matt Damon’s right hand, rock steady and not shaking. The focus is not on the captain’s battle injury, but rather on his inherent mortality—connecting his plight to all of us—which is then emphasized by the focus on the private’s hand, devoid of apparent disease. Captain Miller didn’t just save Private Ryan’s life; he gave that young life a true and lasting purpose. Like a great doctor, study this last [clip](#)[20] and make your own conclusion, bearing in mind that an artistic genius like Steven Spielberg wastes precious little camera time on that which is not significant.

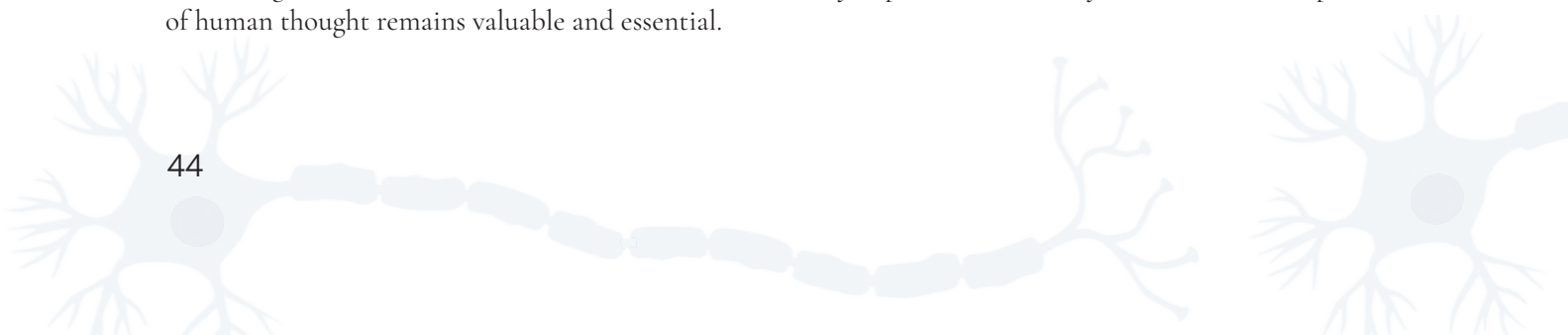
The deeper—human—meaning, therefore, of *Saving Private Ryan* is wrapped up in the medical diagnosis of Captain Miller’s shaking right hand. And from a strictly medical standpoint, any aspiring doctor should watch these scenes so that the important message that a “new-onset, adult, focal seizure is a brain tumor unless otherwise ruled out” will, like the movie,

or any great art,
never be forgotten[21].

Notes

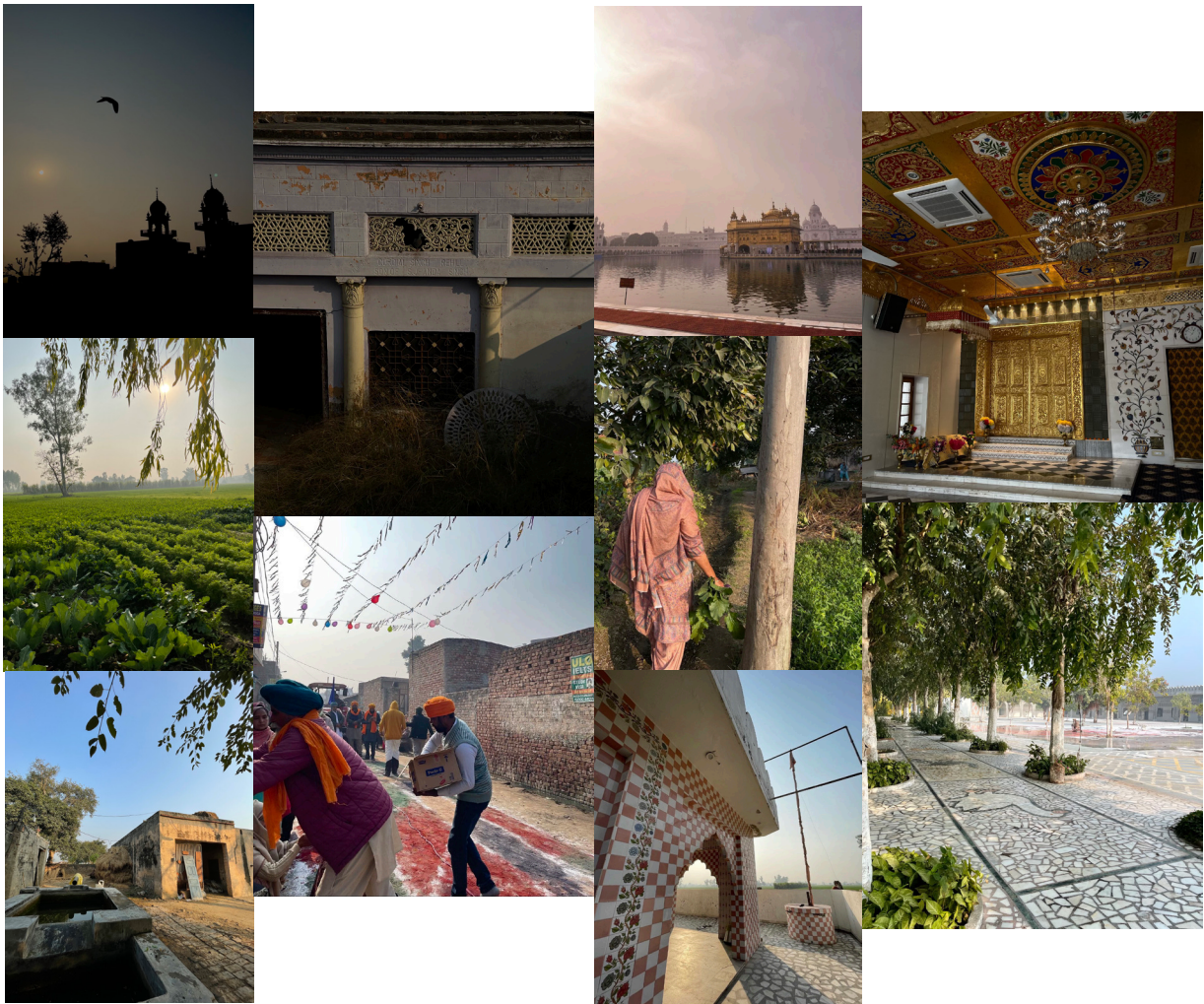
[20] 60 second video clip: <https://drive.google.com/file/d/1-ydX5SZa5tiMIXKebUXUBLLo-fxwHpPz/view>; the video is cut off but if you watch the movie you can see that the focus on Matt Damon persists for several seconds!

[21] From this article we also have seen how primitive and limited generative AI can be. But that is an entirely different (and important issue). For my own part, cognizant of my own mortality, one lesson I wish to pass on to future generations of doctors is that we cannot exclusively depend on such AI systems and that the power of human thought remains valuable and essential.



Meri mitti meri maa: A celebration of Punjab's land

Amanpreet Chahal



Capturing the vibrant tapestry of culture, this collection of images unveils the essence of a land steeped in rich values and traditions. My Panjab, motherland of the Sikhs. An identity I hold dear to me and moulds my very being. From the evergreen leaves swaying in the breeze to the lively colors of traditional attire, each photograph narrates a tale of resilience, community, and timeless beauty that defines Punjab and its people. Through the lens, the spirit of sikhi shines, the warmth of hospitality radiates, and the hymns of gurbani vibrate. This visual journey paints a mosaic of life in Punjab, celebrating its diversity and embracing the heritage that is the very soul of Punjab. A land the fortunate are able to call home.

1958 Chevy Impala

Joshua Cupps

A firm handshake and a contagious smile,
Can I sit with you for a while?
Looks like the Dallas Cowboys let us down today,
How the hell are you anyway?

Reliving memories past,
Our time fleeting fast.
How many lives have you lived?
No really, how did you catch all those fish?
Eyes eager and ready to ignite,
Tell me, how did you paint those old Chevy stripes?
The secret is good tape and a hand of sleight!

Mechanic, fisherman, soldier, father, and a legend at pool,
A life so rich you had me fooled.
Grateful for gaining an old friend,
Until the day we meet again.



Domestic Violence Survivors Health Campaign

Jacquelyn Argueta, Grace Postlewate, Marisela Sierra, and Rim Solomon

Overview

During the Fall semester of 2023, our Health Communication class was tasked with designing a health campaign for the Relational Violence and Sexual Assault Prevention (RVSP) program on the University of Texas at Arlington's (UTA) campus. The maintained demographic of our team's desired target audience consisted of minority women. Our original plan for a health campaign included creating a resource for survivors of domestic violence (DV) and sexual assault (SA). However, after surveying attendees of RVSP's Empower Hour, we shifted our focus to also providing resources for support systems of DV survivors, as well as the survivors themselves.

There were limitations presented during survey distribution, which led to non-probability sampling and potential bias in our response set. Our team looked to audience considerations, such as attitudes and theoretical foundations, to make the focal shift of who the resource would be for. While looking at survey responses, it was discovered our resource would be more effective if it also included information for survivors' support systems.

We created a content piece for RVSP's social media page and a Linktree. Our persuasive strategy is based on measured and theoretical ties to what would appeal to our target audience. Our team went through several content design edits, with feedback considerations from Dr. Grace Brannon, to create content that is unbiased, navigable, and welcoming to all survivors.

Target Audience and Sampling

The desire to focus on a resource for minority women and their support systems is rooted in acknowledging research where it has been discovered minority women are more likely to have their situations of domestic violence minimized, stigmatized, and overlooked (Hulley et al., 2022). Stockman et al. indicate that "ethnic minority women [have] higher rates of depression, post-traumatic stress disorder (PTSD), low self-esteem, and suicidality" in situations of Intimate Partner Violence (IPV), especially in similar circumstances measured to white women (2015). Due to this negative trend discussed at length in our Field Research Project, we wanted our resource to be easy to use for both survivors and their support systems.

A limitation we faced in sampling included time and resource restrictions. When surveying our audience at RVSP's Empower Hour, we needed to resort to a convenient non-probability method. A better recommendation for future surveys like this might include stratified probability sampling, where representative demographics are equally represented and elected in a random order, compared to simply walking up to anyone we saw, without a pattern, and asking them to take our survey. Our participants were chosen due to accessibility and were not chosen to represent an accurate strata of the population's demographics.

The main criteria of the project were to create the resource within the time frame of 9 weeks, with our team being created on September 27, 2023, to complete work for final submission on December 5, 2023. Due to this limitation, our group was unable to gather a greater, more accurate sample of the student population. The research/surveying we conducted also faced the limitation of not being supported by UTA's infrastructural designs, such as the Institutional Review Board (IRB), limiting the pathways of distribution.

We physically sought respondents by presenting the questionnaire to them via QR codes. This method may have also caused a participant bias and could have positively skewed our data towards social desirability. Further, our team handed out candy to incentivize response rates, due to limitations in collecting a sizable response, which potentially skews data further.

Many survivors of DV are diagnosed with PTSD after escaping their abuser (Thompson, 2018).

Without institutions, such as IRB, we were limited to verbally expressing warnings and using an introduction page on our survey to warn respondents of its potential to trigger negative emotions and thoughts.

Finally, our surveying was limited in its assumption that respondents knew what DV is. We created our questions with an unconscious bias that respondents knew how to identify abusive situations for themselves. Future considerations include adding dimensional questions to our survey to gauge knowledge of what DV and SA constitute. This consideration could help gather accurate data from UTA students to craft a more specific and appealing message.

Theoretical Foundation

After identifying our target audience and learning about the attitudes of the audience via surveying at Empower Hour, we took the first work day to review the results. In review, we found over 70% of participants know someone who is a survivor of domestic violence, while only 30% of participants faced domestic violence themselves. The smallest metrical standard deviation in our data set (4.6) relates to believing there is a negative stigma associated with reaching out for help. We derived that there were more even quantities of responses spread across a scale of *Strongly Agree* to *Strongly Disagree*.

It was learned through supporting sources during our field research assignment that "ethnic minorities [have] higher rates of depression, post-traumatic stress disorder (PTSD), low self-esteem, and suicidality" (Stockman et al., 2015). To better understand the source we wanted to create, it may be useful to look at the source through the lens of theoretical foundations surrounding the resource with the gathered consideration of stigma hindering outreach.

The dialectic of internal and external loci, combined with the health images we see portrayed and cultivated in media, could describe barriers in discussing the topic of abuse and relational violence. According to Pré and Overton, the internal locus of control is most popular in North America (2020, p. 161). Internal locus of control includes orientations of frustration with failure and reluctance to ask for help (Pré & Overton, 2020, p. 161). Further, Pré and Overton posit that in a situation of health management, the orientation limits one in a dangerous health situation because “people who believe they control their fate ... believe they are responsible for what happens” (Pré & Overton, 2020, p. 161). Because of the responsibility North Americans may feel they have to protect themselves and their health, the stigma of seeking support is enhanced and explained.

Types of media one consumes can also codify how we believe about certain topics and the ways culture is perceived. Cultivation theory operates on the principle that media’s influence is not uniform or automatic, according to Gerbner and colleagues (1994). Three factors contribute to moments when cultivation is most profound, which includes the following: “a. media images are highly consistent, b. people are exposed to large amounts of media, and c. people have a limited basis for evaluating what they see and hear” (Gerbner et al., 1994).

Compared to the rest of the world, America specifically “consume[s] more media than most”, with “an average of 11 hours and 27 minutes every day” for the typical adult (Pré & Overton, 2020, p. 239). The Cultivation Theory’s criteria of consuming media in both high consistency and large amounts are easily satisfied, with room for a limited basis for evaluation to be determined. In a world of social media, the basis for knowledge about a topic surely varies individually.

Sex and violence are pervasive themes in the media violence is the focus of study for cultivation theory enthusiasts. Through the years, numerous studies have been conducted to analyze the impacts of violent media on human behavior. According to Pré & Overton, despite differing results on behavior, “researchers agree that there is an association between violence in the media and violence in real life” (2020, p. 260). Our media also rarely depicts safe sexual practices, which include wearing condoms and consent, with one study revealing that “1 out of every 200 sexual references in popular media mentioned safe sex” (Pré & Overton, 2020, p. 259). With the heavy consumption of media and a heavy manifestation of unsafe and violent depictions of relationships in media, one can easily conclude efficacy in seeking secure options to leave violent situations may be low. Moreover, minority women are more often likely to be objectified and dehumanized in the media than white women (Pré & Overton, 2020, p. 259).

Factors of self-responsibility, combined with continuous exposure to desensitizing media, can lead to perpetual discouragement of seeking help or reaching out to support systems. According to the Theory of Reasoned Action (TRA), “we make decisions and deliberate choices based on two primary considerations: (1) how strongly we believe a behavior will lead to positive outcomes, and (2) the perceived social implications of performing that behavior” (Pré & Overton, 2020, p. 322). Therefore, if we are to form our beliefs on cultivated media, and that cultivated media depicts violence and unsafe sex, particularly in disproportionate images for minority women, then one may not believe there is a positive outcome in coming forward, and the criteria is not met. Further, if the perceived social implications are derived from cultivated media, and cultivated media trivializes sexual violence, then the criteria of TRA are also not met. These are the conditions we considered in crafting content. As a result, we turned to a pathway an individual could take privately, to minimize social implications, for coming forward.

Persuasive Strategies and Campaign Creation

As mentioned in Target Audience and Sampling, above, a survivor of DV is more likely to express symptoms of depression, and the likelihood of such expression is heightened when the person is a minority (Stockman et al., 2015). While TRA does not satisfy audience conditions, perhaps the Elaboration Likelihood Model (ELM) might. In the ELM, “people are more likely to pay closer attention when using high-involvement channels, such as reading and talking” (Pré & Overton, 2020, p. 313). Though we acknowledge a digital divide, it was decided early on it would be inappropriate to assume minority groups on campus would be affected by such a divide because (a) students on campus are paying for school somehow and (b) it is now nearly impossible to achieve an academic semester without technological competence. Through ELM, we operated through principles of tailored messaging by soliciting input and looking towards “cultural values, beliefs, attitudes and behaviors to contextualize health messages” (Pré & Overton, 2020, p. 314). We looked towards peripheral considerations for what materials would appeal to our target audience. A flaw in our design might include a lack of material language translation.

A piece of peripheral consideration for students includes navigational ease. Our team created a Linktree due to its popularity on social media among young users and its ability to put multiple sources in one hub. Linktree is a fully customizable website that allows for the organization of topics with section headers and provides engagement analytics. Because DV feels different in every case, we wanted to be inclusive with the information offered. We looked towards including relevant RVSP materials, hotlines, and contact pathways (and what to expect when using such pathways), so the material was multifaceted and durable through time.

A QR code is an easy shortcut for sharing links and piques the curiosity in people. Creating curiosity is an important factor in persuading an audience to pay closer attention to what one is asking of them. We utilized QR codes consistently for the duration of this project for distributing our survey to respondents. We also created a QR code on our content piece that guides audiences to our Linktree. The strategy of embedding the QR code in our carousel post comes from its success in gathering high response and viewing rates during surveying at Empower Hour. The survey’s analytics demonstrate a total of 108 individuals scanned the code, 53 individuals responded, and 46 participants completed the survey with an 87% completion rate.

Because we discovered that 70% of our respondents knew of someone who experienced DV, we believed survivors needed to be well informed in understanding how they could help before making failed attempts that may do more harm than good. We pulled resources from the National Domestic Violence Hotline website that discussed power and control, why people stay, and ways to support them. We felt these resources were particularly relevant to the attitudes learned in our survey. We also pulled sources from the Washington State Department of Social and Health Services for definitions and signs of abuse to look out for as a support person. After collecting these resources, we reached out to Dr. Brannon for feedback, and received accolades for “finding reputable sources and integrating them.” Our team’s Linktree can be found at the following website: <https://linktr.ee/safe-homes23>

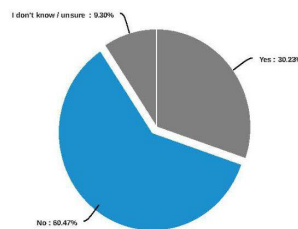
Originally, the carousel post draft we submitted as a check-point throughout the duration of our project had a light purple background because we believed it to be soft and inviting. Dr. Brannon recommended we “use teal [Sexual Assault Awareness Month] colors instead” because the light shade of purple was irrelevant to our cause. We also added faces to the carousel post of Dawn Burch, Confidential Student Advocate for RVSP, and Kendra Zellen, Assistant Director of Student Advocacy Services, to make the post more personable and familiar. In soliciting feedback from Dawn Burch, she also stated we had “amazing work on [our] graphics.”

Acknowledgements

We are grateful for the collaborative experiences provided during the creation of our health campaign. We would like to thank Dr. Grace Brannon for her experience and insights. Additionally, we are appreciative of Dawn Burch and Kendra Zellan for their time taken in educating our class about the mission of RVSP and all their considerations. We sincerely hope this carousel post and Linktree are useful for survivors. In the event they are not utilized, we then hope the frameworks of such materials are helpful in future campaign endeavors pursued by RVSP’s services.

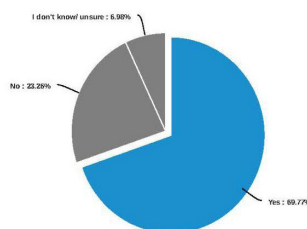
Appendix A: Survey Analytics

Have you experienced a domestic violence situation?



Answer	Count	Percent	20%	40%	60%	80%	100%
Yes	13	30.23%	[Progress bar]				
No	26	60.47%	[Progress bar]				
I don't know / unsure	4	9.3%	[Progress bar]				
Total	43	100 %					

Do you know anyone who has survived domestic violence?



Answer	Count	Percent	20%	40%	60%	80%	100%
Yes	30	69.77%	[Progress bar]				
No	10	23.26%	[Progress bar]				
I don't know / unsure	3	6.98%	[Progress bar]				
Total	43	100 %					

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Gone but Not Forgotten

Raeed Chowdhry

My child, my child, where are you now?

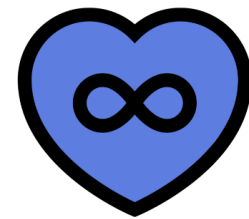
Are you in heaven, or in hell, or somewhere in between?

Did you feel any pain, or fear, or love, when the angel of death took you away from me?

My child, my child, what did you do wrong?

Were you not innocent, and pure, and good, as any child should be?

Did you not deserve to live, and learn, and play, in this world that God has made for you to see?



My child, my child, who is to blame?

Is it the enemy, or the friend, or the one who claims to be?

Is it the soldier, or the politician, or the media, who decides your fate and destiny?

My child, my child, how can I go on?

How can I bear this grief, and rage, and loss, that consumes me like a fire?

How can I find the strength, and hope, and peace, to live another day and not expire?

My child, my child, I will not forget you

You are always in my heart, and soul, and mind, as long as I breathe and exist

You are always my inspiration, and motivation, and aspiration, to fight for justice and resist

My child, my child, I will not give up

I will not let your death be in vain, or your memory be erased

I will not let the oppressor win, or the oppressed lose, or the humanity be disgraced

My child, my child, I will not hate

I will not hate the ones who took you, or the ones who let them do it

I will not hate the ones who hate me, or the ones who hate themselves, or the ones who hate the truth

My child, my child, I will love

I will love you, and myself, and the ones who love me back

I will love the ones who need me, and the ones who help me, and the ones who share my track

My child, my child, I will pray

I will pray for you, and for me, and for everyone who suffers

I will pray for forgiveness, and for mercy, and for grace, from the One who knows and offers

My child, my child, I will hope

I will hope for a better day, and a better way, and a better world to come

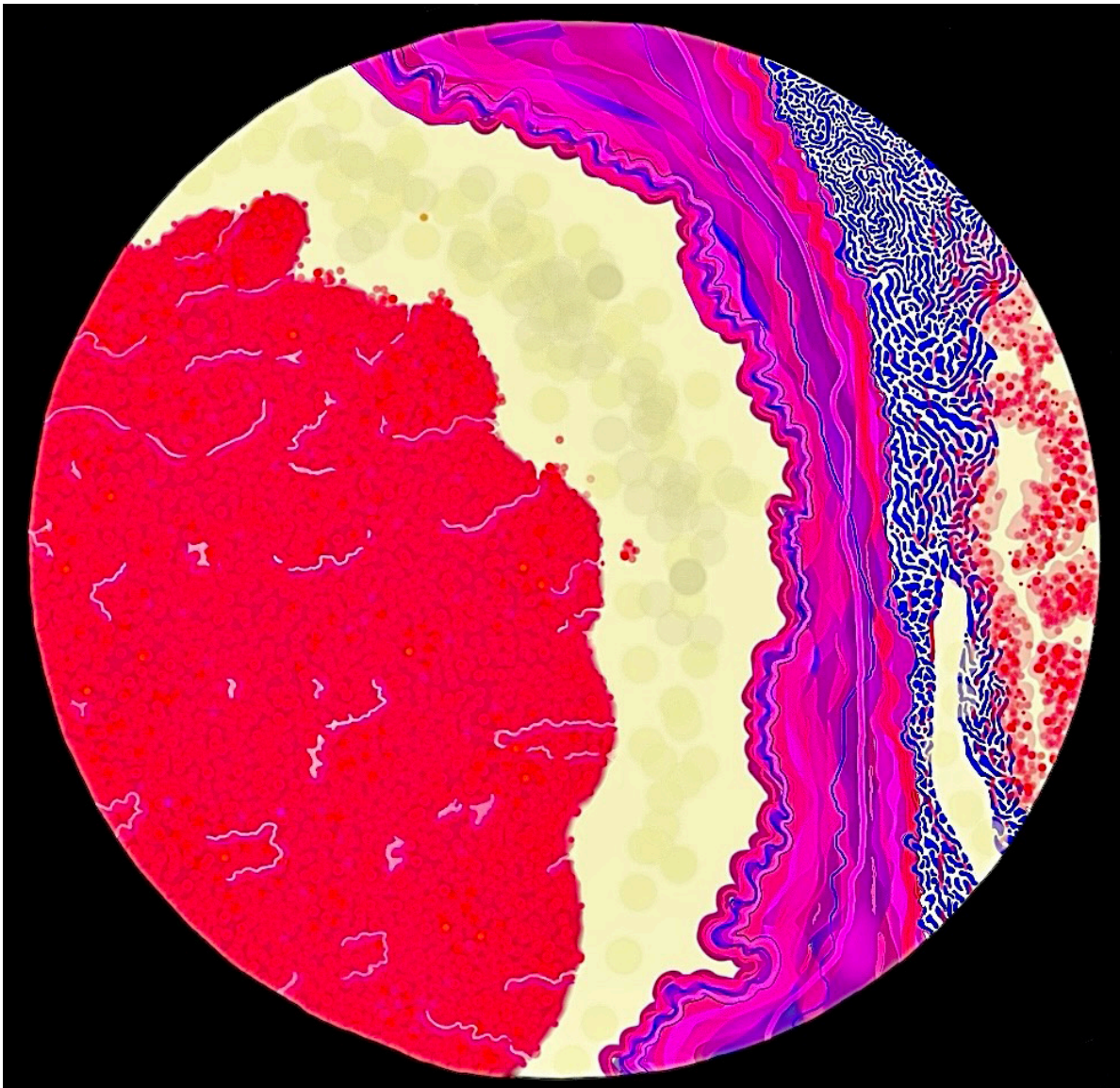
I will hope for a day when there is no war, and no violence, and no harm to anyone

صَبْرٌ

(Sabr is a word of Arabic origin that means patience, endurance, perseverance, or persistence. It is traditionally a quality that is praised, especially in times of difficulty and hardship.)

Kidney Histology x400

Hannah McDaniel



My art piece is inspired by kidney histology. I think that as an organ the kidneys are fascinating and was inspired to draw this stylized piece depicting its histology at x400 magnification. This art piece holds a special place in my heart because so many people are affected by kidney failure and kidney disease and the efforts to create an artificial kidney are still in the works. I used a digital art medium in order to not be limited by the colors or supplies I had on hand. My process involves underpainting and then many layers of hand drawn small details.

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The Poetry of Dance: Vindication of former selves through our Secret Dance Lives

Esther Kentish and Sparishita Dey

Dance, as a poetic expression, showcases our ability to convey emotions and freedom through movement. This hidden dance life provides a sense of liberation for our past selves. From a Physics perspective, we aim to explore the essence of dance, a creative expression with aesthetic and symbolic movements. Acting as a language, aesthetics, and a form of memory, dance shapes our past and constructs a path for future expression. This examination spans both the poetic and physics perspectives.



Dance as Language

Poetry is an echo, asking a shadow to dance. — Carl Sandburg

Dance can be performed in groups or solo. However, having a secret dance life is unique because it encourages the pursuit of solo, private expression of oneself through pronounced movement. Secret: not known or seen or not meant to be known or seen by others. Dance is the interlocutor between our public lives vs private lives. Dance also helps to reconcile our former selves. When using dance as a vehicle to access earlier periods of life and our past, it helps to access our memories. Laura Marcus states that “Language, as well as the workings of memory, shapes the past.” In terms of our secret dance lives, there is a particular interest that is taken because of the autobiographical lens that it has when allowing us to tell the story of ourselves. Secret dance enables people to express themselves in a manner that is open and safe. Also, dancing is a poetic language forcing others to showcase a part of themselves—their private selves. The reason that showing who you are in secret is easier is because you are able to showcase vulnerability. Vulnerability is the ability to reveal or showcase aspects of yourself that would otherwise make you feel sad and/or uncomfortable. Any language becomes beautiful when it is succinct but able to communicate a specific object or scenario through a single word or phrase and the perceiver is able to immediately relate to the person who is trying to communicate to them. Dance is a language in and of itself, specifically when language may not be available.

Dance as Aesthetics

I would define, in brief, the poetry of words as the rhythmical creation of Beauty. — Edgar Allan Poe

Dance is connected to aesthetics or “beauty” in several ways. For example, there is a philosophical link to aesthetics. There is a beauty in dance, because dance in and of itself is an art form. Because dance is an art form, we can appreciate the beauty of the movements. One of the elements that we are particularly interested in examining is the phonaesthetics in poetry and lyrics or consonance/dissonance in music. Examining the connection between poetry and dance reveals a unique avenue for self-expression. Writing poetry allows individuals to liberate their internal ideas, crucial especially in challenging times. In physics, the beauty of a theory lies in its concise and compact appearance, hiding complex intuitions until revealed to the trained eye.

Dance, from a theoretical perspective, is defined by its predictability, compressibility, and unique perspective. Our bodies, as vessels of movement, contribute to a solid understanding of space. Fractals, tessellations, and repeated behaviors in dance echo symmetry, shaping experiences and fostering an imaginative exploration of symmetrical concepts. This dynamic motivates us to seek a more profound understanding of the world, resonating with nature’s hidden frequencies tuned to our bodies. Dance, as a universal language, relies on motion and rhythm, familiar concepts to all living bodies. Its aesthetic appeal lies in visual expression, especially when coupled with music, adding a deeper resonance through an orthogonal symmetry. Our affinity for repeated beats and rhythmic regularity mirrors the aesthetic appeal of dance. From an interdisciplinary perspective, mathematics and physics offer indicative models of aesthetics, characterized by minimal assumptions, succinct expression, a unique perspective, and providing general solutions. Special relativity exemplifies these traits, built on fundamental axioms yet capable of reproducing Newton’s laws, demonstrating aesthetic qualities through foundational formalism and practical utility. However, when a theory is able to successfully mask the complexity of its implications, while also standing the test of time, it supersedes the notion of simply being “aesthetic” in its form, it becomes elegant, a word often associated with classical dance forms like ballet. General relativity is celebrated for its beauty and elegance, captured in the poetic language of tensor algebra. It extends special relativity, portraying a universe with curved spacetime in four dimensions. This elegant portrayal is mirrored in dance, as seen in the Indian classical dance form Kathak. The term “elegant” describes the graceful appearance and disciplined movements of the dancer, highlighting the deliberate coordination and respect for fundamental rules, akin to the structured principles found in physics. Both disciplines, physics and dance, may seem rule-bound, but these rules stem from creativity, imagination, and individual expression, making them unique and nuanced.

Dance as Shape

The Movement of Dance

To read a poem is to hear it with our eyes; to hear it is to see it with our ears. — Octavio Paz

Movement is an elemental factor in the ways that we process dance. Because dance is consistent with everything else that human beings have a sensory experience with in nature, it makes sense for dance to be a natural phenomenon. Humans are also a part of the same nature and sensory experience. Therefore, our comprehension of nature is something physics tries to describe through various “laws.” The use of physics to describe elements through laws creates parallels that can ultimately be drawn up. Arguably, the laws of physics birth dance. There are a few key elements in terms of dance, particularly rotation, swaying, leaping, and intentional entropy. These elements define the movement and the shape of dance. Rotation is a key element of many dance forms or what we like to do when we dance. The rotation that we examine or see in dance is also reflective of the phenomena that we experience in a sensory manner in nature, for example, orbits of stars, black holes, and other celestial experiences. Swaying becomes ubiquitous as oscillations that appear everywhere in nature, too, thus, becoming deterministic systems in time. Swaying is one example of a movement showcased and cast by dance. Twerking, a form of dance originating from Africa, also is actualised via oscillations, making the repetition a common theme for that particular dance type as well as for other forms of dance.

Leaping is another example, visible in dance forms like ballet and modern contemporary dance. The parallelism of dance in relation to nature appears as many things in nature manifest as “leaps” e.g. in order for things to happen at a molecular level, an activation energy must be reached by a molecule to react, or the photoelectric effect. Furthermore, dance helps us to organise our internal thoughts and process difficult, chaotic, and unorganised information. Dance is an intentional entropy-lowering action, particularly when the dance is choreographed. We argue our affinity to low-entropy states emerges from disarray. Dance tries to counteract the natural path of increasing entropy, but naturally things tend towards chaos. Engaging in the act of dancing serves as a means to fill a void, allowing us to navigate and comprehend the unpredictable nature of our individual identities. Dance serves as a means to reflect our emotions and modulate our sensory perception, leading to a fragmented or interrupted experience, which eventually aids in our cognitive processing.



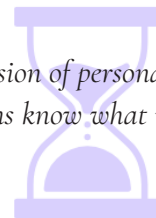
Dance has a geometry, as do most things.

A mathematician, like a painter or a poet, is a maker of patterns. If his patterns are more permanent than theirs, it is because they are made with ideas. — G. H. Hardy

When we try to model and understand the complex world around us, we break it up into cells, just like the individual components of tessellations. We try to study what goes on in each of these and find some logic or order to the way that the different cells interact. When comparing the analysis of microscopic systems with macroscopic systems, it is evident that a direct correspondence between the two is not obvious. Frequently, the macroscopic system does not necessarily exhibit deterministic behaviour that directly corresponds to the microscopic observations. Instead, random interferences may arise, leading to either disruption or additional effects. This introduces a component of “disorder” or “chaos” into the system. Similar to the realm of dance, wherein the analysis of movement can be deconstructed into the individual motions of distinct bodily components, it remains evident that the replication of such movements by different individuals is inherently unattainable. The reason that this is unattainable is because dance is unique to that particular person making it an individualised experience. This stochasticity emerges as an immanent outcome of the individual, manifested through their emotional disposition and personal interpretation of the surrounding reality they perceive. Dance, like analogical components, is defined by both motion and spatial dimensions. Its power lies in the oscillation through time and space, serving as a tool to release emotions and invigorate the soul. Liberating pain, dance fosters empathy and self-understanding. Introducing the dimension of time in dance expresses the human affinity for geometry more fully, allowing a deeper connection with lost parts of oneself and the wounds of the past. Time in dance becomes a means to travel both forward and backward, creating a subconscious connection that was initially absent. Through dance, we are able to exist and subconsciously experience four-dimensional space-time. It might, in fact, be one of the only ways we are able to comprehend time as a dimension, at an individual level. It is a way to communicate 4D reality to each other and it does so successfully where words may fail.

Dance in the Pendulum (Time)

Poetry is not a turning loose of emotion, but an escape from emotion; it is not the expression of personality, but an escape from personality. But, of course, only those who have personality and emotions know what it means to want to escape from these things. — T. S. Eliot



The Poetry of Dance: Vindication of former selves through our Secret Dance Lives

Dance, intertwined with time, becomes a tool for navigating our experiences and constantly reshaping our sense of self. Through hidden choreographies, we engage with the world and ourselves, fostering a duality that ensures a connection with both our individuality and shared experiences. This multiplicity allows us to revisit and reevaluate aspects of our lives, finding redemption, especially after traumatic situations, through the combination of music and dance. The centrality of time in dance draws parallels to evolution, linking it to philosophical debates on determinism and free will. In mathematical and physical terms, dance reflects the dichotomy of determinism and stochasticism—order and chaos— as our movements, akin to a perturbed system, carry a unique and evolving language beyond explicit rules. Our movements, governed by unique rules, reflect our inner thoughts and emotions, adding a personal touch. Dance, an intentional extension of our body language, embodies these rules, creating a stochastic element.

Similar to perturbation theories in Physics, small fluctuations in our mental conditions can lead to chaotic dance motion. While our minds may seem chaotic, our inclination to move is a response to stimuli, reflecting conscious choices. In quantum physics, the concept of a wave function, describing a particle's state, aligns with dance variables like arm, leg, and hip movements. This dance wave function encapsulates potential expressions, awaiting observation or conscious processing. For example, choices and time delineate how movement, in particular, evolves through time and space. However, the way that we explore a specific movement can be weighed against the emotion that we have placed into the movement. For example, in modern contemporary dance, the way in which dance is constructed and choreographed may take on flowy and light movements, like twirls, spins, leans, and bends. However, these transcendent, angelic-like movements can be contrasted with hard, unpointed feet. Whereas in ballet, the dancers are positioned to have their toes pointed and the movements are very clean and elegantly executed.

Freedom comes when these actions are executed with free-will because the non-deterministic value increases and the dancer is able to be elevated into a new realm of belief, understanding, or experience. By doing so, this freedom give the dancers choices regarding time and also the awakening of the evolution of movement. Thus, creating a strong parallel between quantum mechanics, determinism, and free will. The many possible emotions and their mapping to movement exist at the same time in our mind, but once we translate it and actually move in real life, we collapse our wave function and this is what others observe. But the emotion of dance feels more than just that one movement, maybe because it came from the possibility of so many more because it was a consequence of all the different emotions and thoughts that induced that motion. We often look back and remember those emotions, and dance allows us to go back in time and relive the evolution of that wave.

Dance is a visual expression of continuous energy transfer, spiritualizing the process of experience. It serves as a means to reconnect with lost aspects of ourselves, especially from pre-traumatic or overwhelming life phases. Resonance in perception and emotion defines our painting of reality, and the intersection of reality and belief lies in imagination. Engaging in creation through imagination allows us to travel between systems, transferring energy and creating the dance experience.

The Paradox of Knowledge: A Personal Exploration Inspired by Descartes

Prisha Kakliya

If I were to select a favorite quote, it would undoubtedly be one by René Descartes: “If you would be a real seeker after truth, it is necessary that at least once in your life you doubt, as far as possible, all things.”

Immersing myself in René Descartes’ *Principles of Philosophy*, I found myself grappling with a moral dilemma. I came to the stark realization that my perceived depth of understanding in my knowledge was merely superficial.



Whether it was my comprehension of hydrostatic equilibrium—a state of balance in a fluid where the pressure at any given point is equal in all directions—or the tricarboxylic acid cycle—a series of chemical reactions that unfold within eukaryotic mitochondria—or even the elementary knowledge that an atom constitutes the smallest unit of matter, I unquestioningly accepted everything I read.

I now recognize my foolishness; I had unconsciously learned to accept knowledge without question. I thought I understood something to a great extent when I was only parroting what I had always been told to believe. Could hydrostatic equilibrium’s principles be extended beyond the physical realm? Does the tricarboxylic acid cycle’s chemistry reflect broader natural themes? How do atoms relate to the concept of causality? It became evident that I barely scratched the surface of knowledge I believed I completely possessed. I carry forward that learning does not simply mean to regurgitate the things that I have read but to think critically. I cannot scratch past surface-level passiveness if I am not actively skeptical. This revelation has prompted me to question everything I encounter and has taught me to live in a continuous pursuit of knowledge. I hope to never find complete satisfaction with the amount that I learn as I realize the invariable capacity to always learn more.

DREAM - CHEMO BRAIN

Anthony Nguyen



Gilded rays of blissful warmth obscure his vision. Mark blinks once, then twice, yet the sun's brightness doesn't fade. Around him, there are no wires or beeping monitors in sight. This scenery before him makes no sense.

He's sitting on the wooden steps of a house (his house?) overlooking a vibrant pasture dyed golden by the advent of sunset. Trees, full of youthful green leaves, sway gently in the breeze—cool but not the biting cold he was accustomed to. Overhead, clouds drift by at a leisurely pace, the sharp odor of antiseptics absent from the air.

Where was he? Wasn't he in the hospital? Why was it so warm here? He takes in a deep breath of air, and instead of the strangled gasp he was expecting, his body complies with his desire. The atmosphere is fresh, frighteningly so. Greedily, he takes another lungful.

"There you are," a stranger calls out to him. "I was looking for you."

Mark turns around painfully slow— as if he was expecting them. He’s met by the sight of a woman, or at least the figure of one. He can’t tell for sure. Her face is blurred out, and all of her finer details are shrouded in a fuzzy static. Despite this, his body relaxes against his will.

Who are you?, he wants to ask. Is this paradise? Are you the one that brought me here?

Instead, a deep rumble comes from his chest, full of mirth, full of an emotion he can’t name. Whatever it is, it’s warmer than the sun he feels on his face.

“What’s so funny?” she asks.

“Nothing,” his voice responds autonomously. “I was just thinking you’re beautiful today as well.”

The woman swats the back of his head with her free hand. There’s a small sting, but whatever pain he feels is drowned out by the laugh that erupts from his belly. She huffs, sitting down beside him.

“Shameless as ever, Mark,” she says.

“Sorry not sorry,” he grins back— his face aches from smiling so wide.

Something is placed in his hand. Alcohol? His stomach turns, but he pries at the pull tab without a second thought. A satisfying hiss greets his ears, the frothy foam licking his fingertips. When he takes a sniff, it’s not as foul as he expects.

“Tristan’s a bad influence on you,” he criticizes.

She clicks her tongue at him, all fondness and no bite. “Drink up, bore.”

He groans before smiling. “What’s the occasion?”

She pauses. Mark can’t make out her face, but he guesses she must’ve had a perplexed expression if he could see it. The tilt of her head said it all.



“Do we need a reason to drink?”

“Nah, but it would be fun to have one.”

She ribs him with her elbow. That one actually kind of hurt. “You think of it then.”

“Yeah, yeah,” he grouses in faux irritation.

After the diagnosis, Mark’s life had been wrought with nothing but hardship. Chemotherapy, radiation, immunotherapy—treatment plan upon treatment plan had been stacking without any clear end. Celebration? There was no time for that. Incessant visceral pains demanded his attention from dawn til dusk. Yet in this moment, an instance where the perpetual stabbing and gouging that tortures his lungs ceases to exist, thousands of memories flit by too fast for him to see yet nonetheless leave him contented—fulfilled.

“To you,” he settles on. He leans against her, whispering the words, savoring them. “To me. To our new life together.”

She leans back against him, her head filling in the crook of his neck. Her breath is hot against his skin. “You big softie.”

Together, they take a sip.

...

It tastes like blood. Pungent red iron.

His ears start to ring, a painful high-pitched frequency that brings on a migraine. Suddenly, the world’s tilting and falling off its axis. The woman says something to him, asks him a question. She’s fading from his vision, no, everything is going black. He tries to say something back.

He can’t reply.

His throat is on fire.



Mark's eyes snap open and the dreary gray ceiling of his room greets him with all of the solemnity of a widow who had lost her husband in an extraneous war. Unfeelingly. Numb. What comes next is the terrible cough that unfurls from his chest, a great burning that scorches each alveolus and forces out festering crimson droplets onto the pristine white of his gown. There's a hurried rustling from the bedside chair, the sound of covers being briskly shrugged off, and he's eased up by steady hands.

"Easy now," a companionable bystander says to him. "I've got you. I've got you."

He has half the decency to hack into his elbow, shielding whoever sat him up from the rain of sputum and fetid bodily products that rushed out. It takes him an eternity to calm his spasming airways and another half-century to regain a fraction of his breath, all the while, a soothing hand rubs comforting circles into his back. When he's done coughing, he doesn't dare look at his soiled arm. The eerie warmth told him enough, yet the distinct scent of rot elaborated on a story he already knew too well.

Mortality: his end is nearing and rapidly at that.

"Mark."

His hands tremble. He clenches them and unclenches them, but they continue to shake despite his best efforts. As the weight of reality settles in, Mark finds himself unable to bear its unfathomable burden. What will happen once his time comes?

"Mark..."

Will a vantablack curtain fall over his eyes? Will he lose all semblance of himself? Does he stop thinking, or does the pain consume everything that he is, leaving no room for thought? Just what does death look like? Is she a heartless mistress, a jailor who will anchor his soul in purgatory's sunken trenches? Perhaps she's a grotesque, passionate monster, a merciless plague that'll ensure his suffering even as his mortal body decomposes. His pulse thrums erratically in his hollow breast. The palpitations deafen him.

“Mark!”

He’s shaken from his stupor, two hands coming up to cup his cheeks and steering his head to stare into distraught auburn eyes. When his vision focuses, Mark finally addresses the person who’s in the room with him, albeit warily. The person is a woman in her mid-thirties, a beauty with silky onyx hair that comes down to her shoulders. She has alabaster skin that’s devoid of any blemishes, an immaculate ivory reminiscent of a sculpted magnum opus, and she’s outfitted in a set of pajamas that are slightly too big for her. Yet, what catches Mark’s attention is the expression she wears. If worry could be knitted onto someone’s face, she’d perfectly embody that. Her lips tug into a tight frown, brows creasing with evident concern. Her eyes take his breath away. Though fat tears shelter themselves in the far-reaching corners like the dew-drops of spring’s first rain, the way she looks at him is unworldly.

She looks at him, a sickly deathbound abomination, as if he’s worth a damn.

“You’re scaring me, Mark,” the woman hisses, two parts fear and one part desperation. “Say something back. Please...”

He cautiously narrows his eyes. “Hello... I’m sorry, but do I know you?”

She looks at him flabbergasted, as if they weren’t just two strangers in the dark. A second later, her expression softens and the worry morphs into a terrible sadness. Something inside of him aches when he sees her like this, something he can’t quite name yet feels nonetheless. It hurts.

“So it’s happening again,” she grieves. “Yes, you know me. We’ve been married for ten years, Mark.”

He tilts his head and squints at her even harder. Nothing comes to mind. He truly doesn’t have any recollection. “Huh.”

“We met in college, remember?” she continues, one of her hands drifting down to intertwine with his fragile fingers. “In that horrible advanced French class. I had no clue what the professor was lecturing about and forced you into tutoring me.”



“I did take French for a few years, but I think you have the wrong person. We’ve never met before.”

The woman shakes her head, eyes insistent, pleading. “No, we have. You introduced me to your best friend, Tristan, and the three of us have been inseparable since grad school. We traveled all across the world together. France, Finland, Taiwan, Côte d’Ivoire; you name it, we’ve been there. You showed us how beautiful the world could be.”

He shakes his head. “Like I said, I think you have the wrong guy.”

“How about the one-year pilgrimage we went on together to find the perfect home?” she shoots back nervously. “You couldn’t have forgotten that, right?”

“Listen, lady—”

“No! I’m not mistaken, so stop acting so difficult!”

Mark closes his eyes. He can’t look her in the eyes. Guilt suffocates him. “I’m sorry.”

“You proposed to me on a beach in Seychelles, covered head to toe in sand and seawater!” she exclaims. Bringing up her left hand, a platinum band on her ring finger reflects pale moonlight and enunciates a forgotten promise.

Mark strains himself, combing through each neuron and synapse to recall even the faintest vestige of whoever this person was to him. He descends into the deepest canyon within his mind—explores every inch of the winding catacombs of his heart. No effort is spared in his search; each cobweb is swept, each wayside pebble is unturned, and he double-checks, triple-checks, quadruple-checks the trails he has already traversed for any hints of the past. Nonetheless, he comes up blank, empty-handed. His silence says everything for him, and across from him, she’s devastated.

Warm hyaline rivers flow freely down her face and soak the thin fabric covering his legs. She muffles her weeping by crying into his lap. Not knowing what to do, Mark lets her.

“We must have been close,” he condoles, attempting to placate her. For some reason, this causes her to cry even harder. Wisely, Mark shuts up and allows her to calm herself down. It takes a while, but he’s not in any rush. When she finally heaves her last sob, silence blessedly descends and grants them both respite. The woman eventually sits up, her puffy, tear-stricken face lodging a javelin through his heart. Unsteadily, she gathers her bearings as she wipes her eyes one last time.

The woman starts to say something but pauses before any words leave her lips. Hesitation chains her as she repeatedly opens and closes her mouth, and the mounting tension causes Mark to feel uneasy. No matter what she says, he doubts there will be any connection.

It’s not like he’s actively trying to create distance between them, and frankly, he’s flattered that someone is going to such lengths to persuade him. Yet, the human psyche is a strange contraption. The more vulnerable a person becomes, the more guarded they act. In a natural response to ensure self-preservation, they barricade themselves behind walls of skepticism and speculation, scrutinizing everything and nothing at all. At some point, even compassion and goodwill appear to be weapons used to cut down what dwindling defenses remain and paranoia prevails.

The woman recognizes the obvious distrust etched in Mark’s irises, and she finally resigns. At a loss for words, the woman buries her face in her hands. She sniffles, but no tears fall. They’ve all dried up.

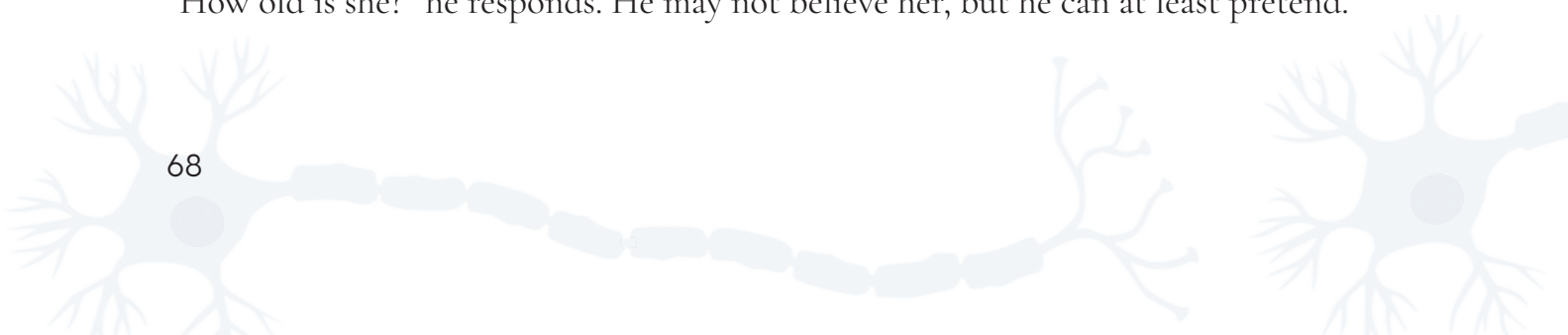
“You really don’t remember me,” she whispers.

Mark swallows thickly. “No.”

She ponders for a bit before pulling out a locket and opening it. Whatever’s inside of it causes her to smile. In a reverent motion, she takes the locket and extends it towards Mark. He doesn’t want to accept it at first, but when he notices that the woman won’t relent, he obliges and takes the charm. He peers inside the locket out of curiosity. A photograph of a young girl beams back at him.

“We have a daughter together,” she says.

“How old is she?” he responds. He may not believe her, but he can at least pretend.



“She’ll be three this year,” the woman smiles forlornly. “She has the brightest, bluest eyes. Just like her father.”

He chuckles. “I can see that. She’s the cutest. What’s her name?”

“Mari.”

Electricity shoots down his spine, a pulsing shockwave that brings forth a certain, indescribable clarity. Why? The name is nothing special—it’s but a meager two syllables long. Despite this, something’s entrancing about how the name sounds, as if a siren was singing into his ear. He wants to say her name. He has to.

“Mari,” he repeats to himself. Something flickers behind his eyes, and he desperately grasps it. “Mari.”

Vivid colors flash through his mind, and he’s suddenly transported to a time before the cancer. Instead of a mere photograph, he’s holding the world in his hands, an infant whose worth dwarfs pillars of gold and vaults full of gemstones. Light comes through a single-paned window, casting an ethereal glow on the newborn babe. She looks like a miracle, like a gift from Heaven. He holds her tightly to his chest, cradling the very definition of love. Someone leans against him, and he turns his head slightly to face them. At last, the final piece of the puzzle clicks into place and everything is right again.

“Josie?”

“Mark!”

She crashes into him before he can brace himself, causing them to tumble over in a frantic embrace. He strings his arms around her waist and shoulders, discarding all decorum and drawing her closer to his heart. Tears stream down uncontrollably once more, but these are filled

with relief, not despair. The emptiness in his chest fills. With his other half found, he’s whole once more.

“Oh God,” he gasps. “I didn’t mean to—”

“It’s okay,” she reassures. “It’s okay.”

“But I forgot you!”

She shakes her head against him, her hair nuzzling his chin. “You didn’t. Not completely, and that’s all that matters.”

He wants to argue with her—wants to vent how he doesn’t deserve such forgiveness—but there’s nothing to say if she’s mandated a decision. Mark settles for holding her even tighter instead, trying with all his being to memorize each slope and valley of her form so that he may never forget again. He focuses on her breathing, the soft empyrean lullaby that gently breezes above his collarbone, and mentally notes how nothing else in the world can sound as melodic. He takes in her scent, inhaling as much of her as his feeble organs would allow. She smells sweet; a fragrance more divine than ambrosia.

He doesn’t know how many times he has already forgotten her, but this time he swears it will be the last. He’d rather die if he forgets again.

“I love you,” he whispers. “Thank you for loving me.”

Josie doesn’t reply, however, the soft kiss against his forehead tells him all he needs to know:

Beloved. Until death do us part. May even in death, we continue to love each other.



temporary forever home

Lisa Phan



To find yourself longing for a home you no longer spend all your time in is a confusing feeling. You've been here, on this bed that is not yours and the walls that have not seen you live, for so long and yet you cannot call this your home. It isn't your home. You're home is somewhere else and the nostalgia of it will always wash over you as you fall asleep at night.

Finding Hope

Arinze Awagu

This is the story of a young man who was given hope through medicine and found the strength to carry on following his dreams because of it. Living in Nigeria posed a lot of challenges for a young boy who was born with sickle cell anemia. “Harry” was the fourth of five children, and the second one to develop this genetic disorder after his eldest brother “Will.” This meant that both brothers had restricted childhoods in many ways just to be “safe.” At a young age Harry was already accustomed to hospitalizations and was on a heavy medication regimen just like Will. They lived in a society where being frequently ill was stigmatized and earned them the title “sickler” very early in life. They were told that sicklers did not live long and they had to be extra careful with everything they did. They despised that term and everything it stood for. They wished they were “normal” so they could play sports, go swimming, play in the rain and do other things that they saw kids their age do. They prayed for a miracle, but it came a little too late for Will.

Harry was only 8 years old when he witnessed his 17-year-old brother lose the battle against sickle cell disease. Their entire family was devastated about his demise. Harry was not only devastated, but he also began to subconsciously come to terms with his own imminent demise, this made him depressed and despondent. He wanted to get to grow up, be a doctor, enjoy life, even have kids of his own. All that seemed like a fool’s dream to him now.

He did grow up, but he lived life like he wasn't going to be around much longer and at 25, he went to the United States to earn a Master's degree. That was when he had a hematologist for the first time. After months of care under his new doctor, he was offered a spot in a stem cell transplant clinical trial for sickle cell anemia. Being a microbiologist, he understood the science behind the procedure and the flames of hope for a "normal" life were rekindled in him.

He underwent the procedure and is expected to make a full recovery and lead a fairly normal and long life. He has also started the process of studying to become a doctor himself so he can help revive the same hope that he got from other people.

To hope is to expect and desire something to happen, sometimes against reason. The ability to hope is something that unifies all of us, it is an attribute of humanity at its core. Having hope restored or given through medicine can be a very powerful source of strength and willingness to move on, to keep going, to live, and to enjoy life. Hope can be found in various places and situations and wherever there is life, there is hope.



commentary on octopus pots

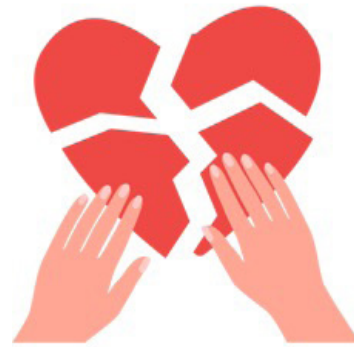
Christina Nguyen

i discovered there are worse feelings
than the gradual fractures
that with time,
cause the heart to shatter

because one can find a way
to reassemble it all
and like new,
the original silhouette remains true

but it takes a certain type of pain
to warp the heart ever so slightly
that after a thundering swell,
the ache mimics the alarm of death

perhaps it is the heart mourning
its natural form
for when a person is truly devastated,
it remains as a reminder:
the most immense sadness of a lifetime



Interpreting Don McLean's "American Pie": When the Meaningless Becomes Meaningful

Dr. Ogan Gurel

Two words are often associated with the classic folk-rock song "American Pie" by singer-songwriter Don McLean: masterpiece and mystery. As you read this essay, you may wish to listen to the official version posted on [YouTube](#) although given its iconic status most readers are surely more than familiar with the work. As a masterpiece, it has been listed as the No. 5 song in the Songs of the Century project as compiled by the Recording Industry Association of America (RIAA), the National Endowment of the Arts, and Scholastic Inc[1], with the original recording being selected by the Library of Congress for the National Recording Registry as being "culturally, historically, or artistically significant[2]." The problem is that for such a masterful work of art, the lyrics seem utterly meaningless; or more precisely, so mysterious that countless theories have been counted and discounted as to their meaning. Here are a few lines to consider:

When the jester sang for the King and Queen
In a coat he borrowed from James Dean
And a voice that came from you and me

Over the 50 years since the song's release the pundits and critics have opined. So many wild [interpretations](#) have been proffered that one's head spins at the nonsense, wracking the brain nearly as much as the lyrics themselves. A quick read through the interpretations section of Wikipedia's article only confirms the **mystery**. For nearly five decades, Don McLean himself insisted that the lyrics would remain a mystery, stating that:

"You will find many interpretations of my lyrics but none of them by me... Sorry to leave you all on your own like this but long ago I realized that songwriters should make their statements and move on, maintaining a dignified silence[3]."

In 2015 McLean announced that he would reveal the meaning of the lyrics after all, suggesting something to the effect of "things heading in the wrong direction ... life ... becoming less idyllic[4]." But such a revelation is vague, and McLean likely knew that. More recently, in a 2022 documentary commemorating the song's 50th anniversary, McLean "revealed" a few hints (the "marching band" was the military-industrial complex, "sweet perfume" refers to tear gas, etc.) but in general he refutes most of the other interpretations of the song's meaning and concludes by stating that the lyrics were intended to be "impressionist" and that the words were completely fictional with no basis in real-life events[5].

All of this speculation, along with the documented opinion of McLean himself, lead us to one conclusion: the meaning of "American Pie" remains a mystery.

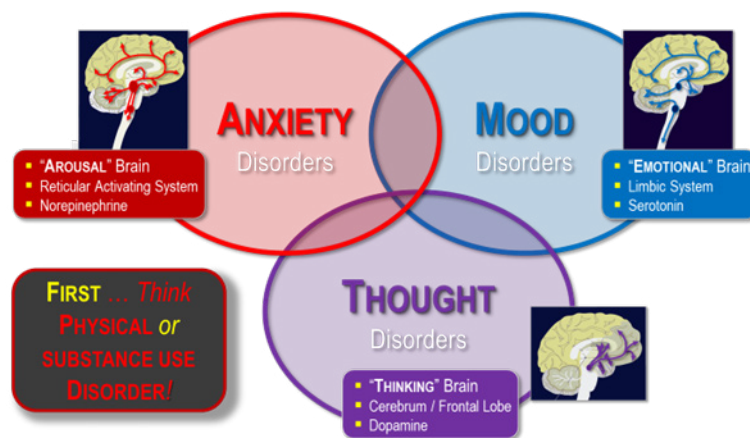
But is it really a mystery? And why, despite the half-century of dogged appeals for an explanation, has McLean been so coy about its meaning?

Perhaps the answer is simple: the lyrics to "American Pie" are meaningless. Of course, it seems heretical to consider such a masterpiece as being meaningless but this article will argue, using the logic of medicine, that the song becomes meaningful only by acknowledging that it is meaningless. In short, "American Pie" is a masterful description of that mental state termed psychosis: the lyrics meaningfulness making it, therefore, even more of a masterpiece.

Understanding this paradox of meaning arising from the meaningless, requires us to briefly study psychiatry. To this we will first provide an overview framework of the field, from there zoom into the so-called "thought disorders," and then outline that most insidious of psychiatric syndromes: psychosis. The illustrations that follow are taken from the mini-MD program, a comprehensive, visual, and conceptual overview of medicine[6].

The first concept to consider is that there are essentially three categories of mental disorders: anxiety disorders, mood disorders, and thought disorders. This is illustrated below indicating too that there can be overlaps between these three categories and suggesting as well that different parts of the brain and different neurotransmitters are involved. Moreover, the box in the lower left-hand

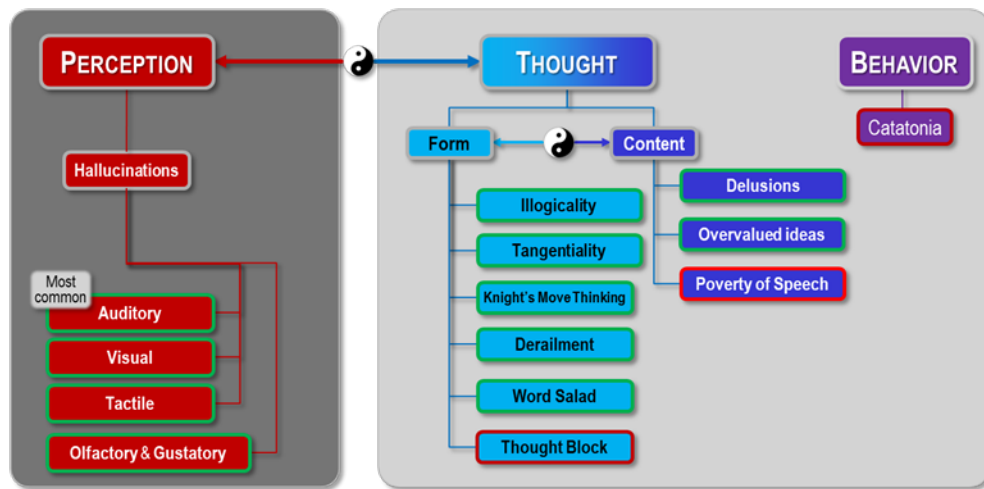
corner makes an important point: namely that when confronted with a patient presenting with psychiatric symptoms, it is important to first consider medical (e.g., physical) disorders or substance use issues. Often psychiatric symptoms arise from mental disorders. But not always. It is beyond the scope of this article to delve deeper into this framework but it suffices to say that one important subset of mental disorders are the thought disorders: derangements, in simple terms, of the "thinking" brain typically involving the cerebrum (frontal lobes) and the neurotransmitter dopamine.



Let us now zoom into the "Thought disorders." The three boxes below outline the key aspects: first the classic symptoms of psychosis, then the medical disorders that can manifest as psychosis (remember that these need to be ruled out before considering a psychiatric diagnosis) and then the various mental disorders in which psychosis may play a prominent role of which the most common is schizophrenia.

PSYCHOTIC SYMPTOMS	CONDITIONS WITH PSYCHOTIC SYMPTOMS (AXIS III)	PSYCHOTIC ILLNESSES (AXIS I)
<ul style="list-style-type: none"> ■ Perception Disorder (Hallucinations) ■ Thought Disorder (Delusions / Formal Thought Disorder) ■ Delusional mood (Affective disorder) ■ First-rank symptoms <ul style="list-style-type: none"> • Delusional perception • Auditory hallucinations • Delusions of thought interference • Passivity phenomenon or delusions of control 	<ul style="list-style-type: none"> ■ General Medical Conditions <ul style="list-style-type: none"> • HIV / AIDS; malaria; syphilis • Alzheimer's; Parkinson's; multiple Sclerosis; brain tumor • Systemic lupus erythematosus (SLE) • Hypoglycemia; hyperthyroidism (Graves' disease) & hypothyroidism ■ Substance Use <ul style="list-style-type: none"> • Cocaine, amphetamine, methamphetamine, mephedrone • MDMA • Cannabis • LSD; psilocybins (magic mushrooms) • Ketamine 	<ul style="list-style-type: none"> ■ Schizophrenia (most common) ■ Schizoaffective disorder ■ Schizophreniform disorder ■ Delusional disorder ■ Brief psychotic disorder ■ Postpartum psychosis ■ Bipolar disorder ■ Severe Depression ■ Psychosis Suicide

When it comes to psychosis, then, we can describe it both a disorder of perception, namely, hallucinations, and disorders of thought, with these being outlined in more detail in the illustration below.



BEHAVIOR

Catatonia

Long long time ago, I can still remember
 How that music used to make me smile
 And I knew if I had my chance
 That I could make those people dance
 And maybe they'd be happy for a while

But February made me shiver
 With every paper I'd deliver
 Bad news on the doorstep
 I couldn't take one more step

I can't remember if I cried
 When I read about his widowed bride
 But something touched me deep inside
 The day the music died

As mentioned, disorders of perception are characterized by hallucinations, which include auditory hallucinations (the most common) as well as visual, tactile, and (more rarely) olfactory and gustatory hallucinations. When it comes to disorders of thinking, there are two varieties: (1) disorders of form, which include illogicality, tangentiality, word salad, and others, as well as (2) disorders of thought content, such as delusions. Finally, in many cases of schizophrenia, behavior can be affected presenting as catatonia (also seen in severe depression), which in simple terms is most often manifested as a state of profound lack of movement and communication.

Now that we have the tools of psychiatry in hand, albeit, of course, in a simplified, conceptual manner, let us now apply this to an interpretation of the lyrics of "American Pie." Again, you are encouraged to listen to the song on [YouTube](#).

The song begins slowly, as compared to its later frenetic pace, with the words, "Long long time ago, I can still remember ..."

McLean proceeds in a careful, deliberate pace, pausing with each chord. And then the telltale lines: "Bad news on the doorstep / I couldn't take one more step." It is well known that a psychotic episode may be triggered by an emotional or stressful event and indeed if there is anything that is definite about the song is that its original inspiration came from McLean's childhood experience as a newspaper delivery boy and his vivid memory at that time of the death in an airplane crash of the rock-and-roll musician Buddy Holly. We can ascribe that to the trigger: "... something touched me deep inside / The day the music died."

The song then moves on to nonsensical lyrics that almost perfectly describe the various disorders of form such as illogicality, derailment and word salad. Since when does "moss grow fat on a rolling stone?" That is entirely illogical! Moving on from vegetation and rocks, we are now in the world of jesters, kings and queens! That sounds like textbook derailment. And then the jester borrowed a coat from James Dean! We are now in the world of word salad. There is no meaning to these lyrics. When a mind is profoundly disordered so that the thought lacks all form, what is communicated becomes utterly meaningless. But in that meaninglessness arises meaning: namely the diagnosis of psychosis, which in broad terms is defined as a profound disconnection from reality.

And then, in contrast to the near-catatonic opening, the song accelerates forward in an increasingly frenetic pace, veering, crashing towards full blown expressions of both auditory "They were singin' / Bye-bye, Miss American Pie" and visual "And the three men I admire most / The Father, Son, and the Holy Ghost / They caught the last train for the coast" hallucinations.

PERCEPTION

And they were singing bye-bye, Miss American Pie
Drove my Chevy to the levee but the levee was dry
And them good old boys were drinking whiskey and rye
Singing, "This'll be the day that I die"
This will be the day that I die

They were singing bye-bye, Miss American Pie
Drove my Chevy to the levee but the levee was dry
Them good old boys were drinking whiskey and rye
Singing, "This'll be the day that I die"

Auditory Hallucinations

Visual Hallucinations

And the three men I admire most
The Father, Son, and the Holy Ghost
They caught the last train for the coast
The day the music died

THOUGHT

Form

Illogicality

Now for ten years we've been on our own
And moss grows fat on a rolling stone
But that's not how it used to be
When the jester sang for the King and Queen
In a coat he borrowed from James Dean
And a voice that came from you and me

Derailment

Word Salad

Even though one doesn't always think of psychiatric disorders as being fatal, as one might with, for example, cancer, they indeed can be fatal when it comes to suicide. It may be no mistake that the song ends, in multiple refrain, with the words, "This'll be the day that I die."

As mentioned, Don McLean has never really revealed the secret meaning behind the lyrics. Yes, there are hints of the tragic death of Buddy Holly along with (perhaps) some other references, but the evidence is compelling that "American Pie" is an exploration, personal or otherwise, into the mysteries of psychosis[7]. And when one considers another of McLean's masterpieces, "Vincent"[8], a poignant, chilling description of the life and mind of Van Gogh, we see in that case a brilliant depiction of the vicissitudes of depression. Indeed, "Vincent" is explicitly about depression, wrapped in beautiful, heartrending harmonies while "American Pie" is implicitly about psychosis, hidden within mysterious, inscrutable lyrics in which their meaning only becomes clear when we understand the profoundly oblivious anguish of a mind losing its grip on reality.

"American Pie" is a masterpiece. It is mysterious. And it is a miracle.

Notes

- [1] "[RIAA, NEA Announce Songs of the Century](#)," (Press release). Recording Industry Association of America (RIAA). March 2001.
- [2] "[National Recording Registry Picks Are 'Over the Rainbow'](#)," Library of Congress. 29 March 2017
- [3] "[What is Don McLean's song "American Pie" all about?](#)" The Straight Dope. 14 May 1993.
- [4] Hawksley R (7 April 2015). "[American Pie: 6 crazy conspiracy theories](#)" The Daily Telegraph.
- [5] Farber J (19 July 2022). "["I said, Don, it's time for you to reveal': 50 years later, the truth behind American Pie](#)" The Guardian.
- [6] Mini-MD, Act IV – Psychiatry.
- [7] This analysis is by no means intended as a diagnosis of Don McLean himself. For one thing, a doctor (and certainly not a lay person) cannot make such a diagnosis without having actually examined the patient. This is a fundamental principle of medical ethics. McLean may have been describing someone else, or perhaps amalgamating multiple persons who may have had aspects of psychosis. At any rate, it is a masterful description of the condition, as accurate as any textbook and as profoundly memorable and compelling as any work of art.
- [8] For the official Don McLean video on YouTube, listen to <https://www.youtube.com/watch?v=ciLNMesqPho>.

Using Humor in Healthcare: Is It A Risk Worth Taking?

Ava Trinh

While working at a small chiropractic practice in the summers, I noticed a comfortable and fond atmosphere between the patients and the chiropractor. The chiropractor formed relationships with most of his patients from the beginning, which I saw resulted in a build-up of trust and genuine satisfaction from both parties. His patients and shadowees have told me that the “environment at this office was so different” from other chiropractic clinics in that interactions were more personal and gleeful and not so “dull” or “superficial.” They treated each other as if they were good long-term friends, almost like family. Aside from his effective treatments and genuine care, I believe that some other factors also contribute to these positive reviews and chemistry: personal conversations infused with humor. During each appointment with a patient, he would converse with them with lighthearted, humorous comments. He would say, “What’s up old man, long time no see!” to a patient he had seen just last week, or “How are you and your 20th girlfriend doing?” to a patient who shared with him his love life. The patients and doctor would meet and leave with smiles and chuckles; an overall positive impact was made with each visit. Because I suspected that humor played a significant role in strengthening the relationships between the chiropractor and his patients, and thus contributed to a thriving business as patients spread positive awareness of his practice, I investigated humor’s role and impact in healthcare and the work field. While I researched its significance in these fields, I also came across controversies regarding this subject. Some individuals consider the use of humor in professional settings as inappropriate and risky, while others, in growing numbers, argue that it is a good relationship-building tool and provides numerous health benefits. What needs to be considered by all is that the primary goal in healthcare is to improve patient well-being while respecting their individual needs and the specific context of care, and adhering to ethical standards. Breaking down humor’s advantages and methods in which it can still adhere to healthcare’s primary goal will prove how it serves as an indispensable tool in these fields, outweighing the risks and cons it is perceived to have. As I head towards the medical field, I want to explore this subject and the topic of relevant ethics, the power of humor, and proper usage so that I can learn and also share with others an inexpensive way healthcare workers can help enhance patient relationships, health, and human performance and build a thriving healthcare community.



For ages, humor has been integrated into healthcare as a perceived aid in the healing process. For example, in the 14th century, French surgeon Henri de Mondeville used humor to distract patients from the pain endured during surgery as well as a therapy to aid recovery. German priest Martin Luther advised individuals with depression not to isolate themselves, but to surround themselves with friends who could joke and make them laugh (Savage et al.). During the polio outbreak in the 1930s, hospitals began bringing clowns in to cheer up sick children. It seemed as if a positive, light-hearted distraction from their condition helped boost the liveliness of patients and thus their mental and physical

health since the use of humor grew widespread throughout the years. Dr. Hunter “Patch” Adams, a doctor devoted to making people happier and healthier through humor, established the Gesundheit Institute in 1972, a hospital dedicated to spreading humor, fun, friendship and joy to patients. These examples serve to show that the belief that humor has therapeutic benefits has persisted for centuries.

Some caregivers, though, were still reluctant in using humor in healthcare because there was limited empirical evidence supporting the mechanisms mediating humor’s positive impact. With the lack of evidence, these caregivers deemed it not likely to be scientifically useful. However, this all changed in the 20th century when pioneering investigators examined the psychophysiological mechanisms of humor. Psychology Professor at Stanford University William F. Fry used a pulse oximeter and recorded that an increase in ventilation and muscle activity and the creation of forceful exhalation used to remove pulmonary secretions resulted after three minutes of continuous laughter. Dr. Lee S. Berk and colleagues also conducted a pioneering study in which they examined the impact of laughter-induced eustress (a “positive emotional state”) on cortisol and catecholamine concentrations and observed that humor reduced cortisol and catecholamine levels as well as increased the production of antibodies and endorphins, the body’s natural pain killers (Berk et al.). Furthermore, a more recent study conducted by Michael Miller, director of the Center for Preventive Cardiology, reported that laughter is linked to the healthy function of blood vessels. On another note, mental stress can negatively impact the endothelium by causing vasoconstriction, which could lead to a buildup of cholesterol and potentially to coronary artery disease. Miller’s studies documented that, during laughter, the endothelium facilitates vasodilation and an increase in blood flow (Miller et al.).

Just as humor has been scientifically found to be linked to many internal bodily benefits, it is also believed that humor can strengthen personal relationships and build bonds between patients, staff, and healthcare professionals. In 2013, Researchers Tanay and colleagues published a meta-analytical study that evaluated the effects of humor on adults undergoing cancer treatment. The researchers found that humor “enhances feelings of closeness or togetherness when shared in the context of trust between the patient and nurse and may be used as a coping mechanism in a stressful situation” (Tanay et al.). Recognizing and making light of incongruities or stressful situations such as the initial diagnosis of a disease or treatment process can elicit a positive emotional response that nurses and patients can share. Such shared experiences can create a sense of togetherness in the nurse-patient relationship. This can help patients feel less alone and more capable of handling their illnesses or injuries. Humor can build trust and, as research suggests, when two people (even strangers) laugh together, they are far more likely to like one another.



To provide more emphasis on how humor can positively affect overall health, medical researchers argue that laughter may also improve patients’ and staffs’ moods and help “lessen stress, depression, and anxiety,” making individuals “feel happier and relaxed” (Mayo Clinic). Radiation oncologist Rajiv Samant shared his experience in the healthcare facility and claimed that humor

helped elevate the atmosphere for both his patients and health care professionals by reducing stress, elevating moods, and improving communication (Samant). Samant reported that his patients appreciate the use of humor and would like for their healthcare providers to reciprocate their jokes, smiles, and laughs, especially those cancer patients who want to be reassured that things are okay and try to take light in their situation. Furthermore, Psychology researchers Rene T. Proyer and Julia Raecke studied a group of Medical Assistants in Germany and reported that the Medical Assistants use humor for various coping and social and educational purposes (Raecke and Proyer). In a study conducted on nurses' experiences of humor in clinical settings, researcher Fatemeh Ghaffari and colleagues also reported that the majority of nurses believed that humor affected patient outcomes positively and that it preserved and promoted nurses' physical and mental health. They have used humor to cope with stressful personal-environment relations (e.g., dealing with patients who violate social norms) and to increase work enjoyment, frequency of flow, and perceived meaningfulness of work (Bartzik et al.). Based on their experiences, nurses considered humor a workplace requirement and essential for patient care in stressful situations (Ghaffari et al.).

While a growing number of individuals deem humor to be a positive tool in healthcare, there are those who consider humor to be dangerous as it has potential to harm relationships and even business. For one, it can lead to misunderstandings, offense, or discrimination when used inappropriately. Humor can be misinterpreted by the patient, which may cause more confusion or harm to both the patient and the staff. There are patients who say that they are "horrified that they could one day be the target of their physician's jokes" (Hardy). Others argue that it can be frustrating to a patient when a healthcare provider appears not to take something seriously when they use humor and consider it inappropriate when humor is used in a setting where critical conditions exist. It is argued that derogatory or cynical humor exists within healthcare professionals and students when they need to release stress or let off steam, and they happen to direct it towards patients, which is "unprofessional and unethical" (Aultman & Meyers). This goes to show that even some healthcare individuals find the use of humor unnecessary and potentially problematic.



Another issue that humor carries is the legal risks associated with it. These risks traditionally take the form of legal claims such as defamation, trademark dilution or infringement, harassment, and infliction of emotional distress. A doctor's use of humor can lead to a malpractice claim. The case of D.B. vs Ingham is a prime example. The patient (D.B.) was undergoing a colonoscopy and the anesthesiologist (Ingham) made several offensive comments about the patient to the gastroenterologist she was working with. Ingham's statements regarding D.B. were mean-spirited and extreme; she insulted the patient repeatedly, used disparaging language, and made false allegations about his medical condition. The jury found in favor of the plaintiff and awarded him 2 six-figure awards (along with punitive damages)—one award for a claim of defamation and the other for medical malpractice, presumably because such "jokes" between treating physicians were closely attuned enough to the patient's medical procedure to be considered within the scope of practice for medical malpractice purposes.

While considering these risks, it is important to remember that humor in medicine has noteworthy positive and therapeutic benefits. Besides, these risks can be minimized or avoided when conservatively selecting the content and manner of humor. For example, it is best to avoid using humor during any acute crisis (but it can help to adjust the crisis afterwards), when the patient needs quiet time, or when a patient is trying to communicate something important or trying to come to grips with any emotional crisis. It is also important to avoid ethnic jokes, sarcasm, and mockery, or humor at the expense of any other person (laugh with, not at), or joking about any patient or their condition. To avoid pitfalls is to remain positive and inclusive. With these considerations in mind, humor can actually be a low-risk way to positively influence some patients' experiences when used in combination with professional empathy, compassion, and knowledge; humor can humanize and strengthen physician-patient encounters.

It is also worth noting that maintaining professionalism and adhering to ethical standards is essential. The use of humor should have a balanced and context-dependent approach—that the appropriateness of humor in healthcare depends on the specific context, the patient's needs, and the healthcare provider's judgment. Humor should not be overused, underused, or compromise the quality of care or the patient's comfort. The common ground that all sides of the argument agree on is that the primary goal in healthcare is to improve patient well-being while respecting their individual needs and the specific context of care.



“HUMOR REMINDS US TO BE JOYOUS AND POSITIVE; IT REMINDS US TO BE HUMAN”

Medical individuals like Rajiv Samant (mentioned above) and medical student Everett Claridge advocate for ethical training and overall use of humor to be implemented in healthcare education. They argue that humor should be considered part of the communication skills training for all healthcare professionals, suggesting that it can elevate the atmosphere for both patients and health professionals and benefit mental health. However, there are also those, like educators and administrators, who will say that medical schools are already filled with more important and serious learning objectives and humor training shouldn't be as focused on. In response to that, Claridge argues that the

sheer stress of a demanding curriculum ... often leaves a 'doom and gloom' impression of medicine. It can be draining. Humour reminds us to be joyous and positive; it reminds us to be human. Medical trainees have argued that the stamina needed when caring for a patient with challenging conditions can come, in part, from the ability to find humour in the world of medicine. (Claridge)

With both arguments in mind, where one side is in favor of medical humor while the other side is against it, I've found more supporting weight to argue that humor is too useful of a tool for it not to be used. The increased scientific evidence supporting the emotion-mind-body relationship clearly documents that mood, thoughts, and feelings have a profound impact on our immune system and general health. When used in combination with professional empathy, compassion, and knowledge, humor carries the potential to create this impact and improve patient well-being, which is a primary goal in healthcare. While I understand that humor may not come naturally for some—and don't suggest for clinicians to spend more time trying to figure out how to make me laugh rather than staying on current best practices in their field, I encourage all that it's a habit worth learning considering its benefits in the healthcare world.



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Ugly is my Father

Nahum Ding

Ugly is my father

For my father is not a good-looking man, his outward appearance is ugly

My father is ugly

My father has an ugly crooked smile so I can have a big smile and straight teeth

My father has an ugly back so I can run, jump, and swim

My father has ugly English so I can speak fluently and articulate in front of others

My father has an ugly memory so I can memorize and gain knowledge in school

My father is ugly so I can achieve my dreams and succeed

For my father is not a good-looking man, but his love for me is far more beautiful than his outward appearance



Nature within You

Sejal Dulal



The inspiration in taking this photograph was nostalgia and love for my country. I was born in Nepal, and I recently also traveled back to my country. There I felt at peace surrounded by nature. The serenity of the greens and the everyday lifestyle of villagers was captured in this photograph. A life so simple to them meant a lot to me as someone who lives in suburban America.

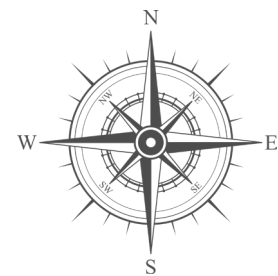
Ethical Standards of International Medicine When Comparing Eastern and Western Medicinal Practices

Joshua Rahmon

International medicine encompasses a diverse range of practices, with both Eastern and Western styles standing as pillars in the medical community. Ethical standards in a global context play an integral role in ensuring the well-being of patients; allowing physicians to maintain the integrity of the medical profession, while supplying care to their diverse community. While both Eastern and Western medicinal practices share fundamental ethical principles, distinctions arise in their approach to many aspects of healthcare.

In Western culture, a large emphasis of patient care is placed on evidence-based practices, often rooted in rigorous scientific methodologies and literature-based diagnoses. Ethical standards in this context prioritize patient autonomy and informed consent. The principle of beneficence and non-maleficence guide Western medical professionals to maximize the benefits of care, whilst minimizing potential harm and adverse side effects. Furthermore, Western medicine places great importance on the principles of justice, striving to ensure equitable access to quality healthcare resources and treatments.

Conversely, Eastern medicinal practices, often rooted in traditions such as Traditional Chinese medicine and Ayurveda (medicine rooted in ancient Indian beliefs) often embrace a holistic perspective. Ethical considerations in these practices may involve balancing the body's energy, and promoting harmony between body, mind, and spirit. Unlike Western medicine, patient involvement in decision making may differ, with familial dynamics, religion, and communal considerations influencing the type of care a patient receives. Critics may argue that some Eastern practices lack empirical evidence, instead relying on anecdotal methods passed on from many generations of "healers."



These topics raise concerns about the efficacy of care received and the safety of the practices being "prescribed." Proponents assert these traditions have withstood the test of time, addressing health concerns in a manner that is viable in the unique community, complementing the holistic well-being of an individual.



A key ethical divergence arises when comparing the approach to individualism versus collectivism. Western medicine tends to prioritize individual autonomy overall, whereas Eastern medicine often integrates communal perspectives, neglecting the personal rights and choices innate to all human beings. Globalization and increased cross-cultural interactions have prompted a growing awareness of the need for ethical convergence in the international medicine community. There have been efforts to integrate the undeniable advantages of both Eastern and Western medicine while simultaneously acknowledging universal ethical principles in all patient-physician interactions. Collaboration and dialogue between physicians from varying backgrounds and formal training levels can foster a mutual understanding and enhance the ethical fabric that must unite all practitioners globally.

The ethical standards of international medicine reflect the antagonistic dissonance between Eastern and Western medicine. While both traditions share core ethical values, variations arise in their emphasis on individualism, evidence-based practice, and holistic beliefs. Finding a balance that respects cultural diversity while maintaining ethical norms is essential for the well-being of all persons seeking medical treatment and the continued advancement of global healthcare.





Ali from Aleppo

Raeed Chowdhry

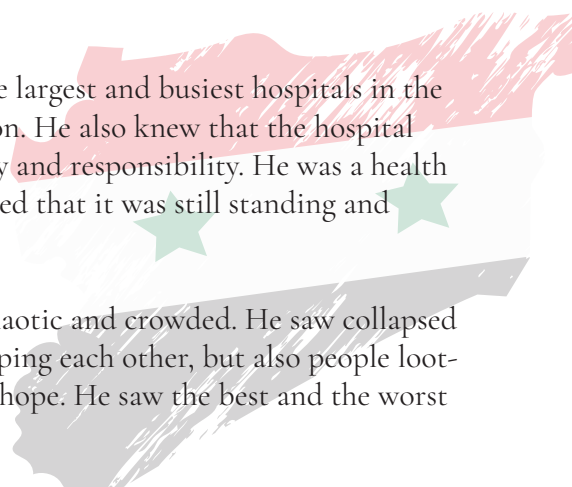
The ground shook violently, waking up Ali from his sleep. He grabbed his phone and checked the time. It was 4:17 a.m. He felt another jolt and heard a loud rumble. He jumped out of his bed and ran to the door. He opened it and saw his neighbors running down the stairs, screaming and panicking. He followed them, hoping that his apartment building would not collapse.

Ali reached the ground floor and ran outside. He looked around and saw chaos and destruction everywhere. Buildings were cracked and crumbling, cars were smashed and overturned, power lines were snapped and sparking, and people were injured and bleeding. He heard sirens and screams, and felt aftershocks and tremors. He realized that he had just survived a massive earthquake, one of the worst in Turkey's history.

He checked his phone again and saw that he had no signal. He tried to call his wife and children, who were still in Aleppo, Syria, but he couldn't get through. He felt a surge of fear and anxiety. He wondered if they were safe, if they had felt the earthquake, if they had enough food and water, if they had any hope of escaping the war-torn city. He prayed to God to protect them and to reunite them soon.

“Ya Allah, please protect my family. Please let them be safe. Please let me hear from them soon.” He whispered to himself.

Ali was a nurse at the Gaziantep University Hospital, one of the largest and busiest hospitals in the region. He knew that many people would need medical attention. He also knew that the hospital would be overwhelmed and understaffed. He felt a sense of duty and responsibility. He was a health care worker, and he had taken an oath to save lives. He just hoped that it was still standing and functioning.



He got into his car and drove to the hospital. The roads were chaotic and crowded. He saw collapsed buildings, damaged cars, and injured people. He saw people helping each other, but also people looting and fighting. He saw fear and despair, but also courage and hope. He saw the best and the worst of humanity.

He reached the hospital and parked his car. He was relieved to see that it was still intact and operational. He ran to the emergency department and saw a scene of horror: He saw blood, bodies, and bandages. He saw doctors, nurses, and volunteers. He saw pain, suffering, and death. He saw life and death.

He reported to his supervisor and received his assignment. He was to assist in the triage area, where he had to sort the patients according to the severity of their injuries and the urgency of their treatment. He had to make quick and difficult decisions. He had to prioritize who to save and who to let die.

He took a deep breath, put on his mask and gloves, and got to work.

He worked non-stop for the next twelve hours. He treated hundreds of patients, most of them with serious and life-threatening injuries. He performed triage, first aid, wound care, IV therapy, CPR, and other procedures. He used his skills, knowledge, and experience to provide the best possible care. He also used his empathy, kindness, and patience to provide comfort and support. He listened to their stories, their fears, their hopes. He related to them, as he had gone through similar situations in his own life. He had witnessed the horrors of war, the violence of bombs, the cruelty of bullets. He had fled his homeland, leaving behind his family, his friends, his memories. He had sought refuge in Turkey, hoping for a better life, a safer life, a peaceful life. He understood their pain, their suffering, their trauma. He also understood their resilience, their strength, their faith. He admired them, as they had taught him how to survive, how to cope, how to live.

He tried to comfort the patients and their families, as well as his colleagues and himself. He tried to be calm, kind, and supportive. He tried to be human.

“Please, please, save my son. He’s only seven years old. He’s all I have left.” A woman begged him, holding her son’s hand.

“I’m sorry, ma’am. Your son has severe internal bleeding and organ damage. We don’t have the equipment or the staff to operate on him. There’s nothing we can do,” he said, with tears in his eyes.

“No, no, no. You can’t say that. You can’t give up on him. He’s a fighter. He’s a survivor. He’s my miracle. Please, please, don’t let him die.” She cried, clutching her son’s chest.

He hugged her and whispered, “I’m so sorry. I wish I could do more. I wish I could save him. But I can’t. I’m so sorry.”

He felt a pang of guilt and grief. He wished he could save every life. He wished he could heal every wound. He wished he could end every pain. But he couldn’t. He was only human.



He moved on to the next patient, a young man with a gunshot wound in his leg. He recognized him as one of the Syrian refugees who had fled the war and settled in Gaziantep. He asked him his name and how he got shot.

“My name is Omar. I was trying to help some people who were trapped under a collapsed building. But some looters came and started shooting at us. They wanted to take our belongings and our food. They didn’t care about our lives,” he said, with a grimace of pain.

He felt a surge of joy and relief. He was glad he could help someone. He was glad he could make a difference. He was glad he could save a life. He felt alive.

He continued his work, saving some lives and losing others. He did not know how many lives he saved or lost. He did not know if his family was safe or not. He did not know if the earthquake was over or not. He did not know what the future would bring. He only knew that he had to keep working. He had to keep saving lives.

He was a health care worker. He was a hero.

“That’s terrible. I’m sorry you had to go through that. You’re very brave and generous. You did the right thing,” he said, as he cleaned and bandaged his wound.

“Thank you. You’re very kind and helpful. You’re doing a great job,” he said, with a smile of gratitude.

He finally took a break and went to the staff room. He was exhausted, physically and mentally. He had seen too much, done too much, felt too much. He needed a break, a rest, a moment of peace. He sat on a couch and turned on the TV. He wanted to watch something light and funny, something that would distract him and make him laugh. He flipped through the channels, but he couldn’t find anything like that. All he saw were news reports about the earthquake, the aftermath, the rescue efforts, the death toll. He felt a wave of sadness and despair. He wondered if it would ever end, if things would ever get better, if there was any hope for the future.



He stopped at a channel that showed images of Aleppo, his hometown. He felt a pang of nostalgia and longing. He recognized the streets, the buildings, the landmarks. He remembered the times he had spent there, the people he had loved there, the life he had had there. He wished he could go back there, to see his wife and children, to hug them and kiss them, to tell them that he missed them and loved them. He wondered if they were watching the same channel, if they were thinking of him, if they were waiting for him.

He watched as the reporter talked about the earthquake that had hit Syria as well, causing more damage and destruction to the already devastated country. He watched as the reporter said that the situation was dire and desperate, that the humanitarian aid was scarce and insufficient, that the access was difficult and dangerous, that the chances of survival were slim and bleak. He watched as the reporter showed footage of collapsed buildings, trapped people, dead bodies, and crying children. He felt a surge of anger and frustration. He wondered why this was happening, why the world was so cruel, why God was so unfair. He wanted to do something, to help them, to save them, to change things. But he felt powerless, useless, hopeless. He felt like he had failed them, like he had abandoned them, like he had betrayed them.

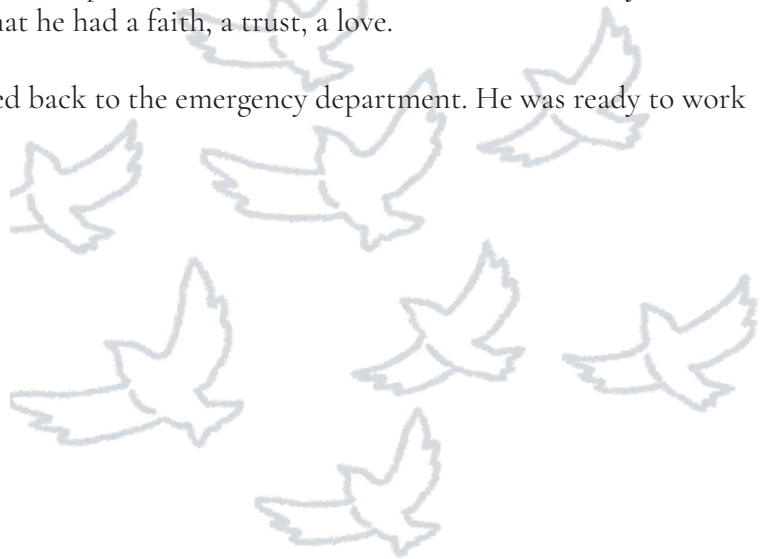
He turned off the TV and closed his eyes. He tried to calm himself and clear his mind. He took a deep breath and said a silent prayer. He asked God to forgive him and to guide him. He asked God to protect his family and to reunite them. He asked God to heal his patients and to reward them. He asked God to bless his colleagues and to strengthen them. He asked God to end the war and to bring peace. He asked God to stop the earthquakes and to restore order. He asked God to show him mercy and to give him grace.

He opened his eyes and looked at his phone. He saw that he had a signal and a message. He opened it and read it. It was from his wife. She said that they were safe, that they had felt the earthquake, but that it was not too strong. She said that they had enough food and water, but that they were still in danger. She said that they had hope of escaping, but that they needed his help. She said that they loved him and that they missed him. She said that they were praying for him and that they were proud of him.

He felt a wave of relief and joy. He smiled and cried. He typed a reply and sent it. He said that he was safe, that he had survived the earthquake, but that it was very bad. He said that he had enough supplies, but that he was very tired. He said that he had hope of seeing them, but that he needed more time. He said that he loved them and that he missed them. He said that he was praying for them and that he was grateful for them.

He put his phone in his pocket and stood up. He felt a jolt and heard a rumble. He realized that it was another earthquake, another aftershock, another test. He braced himself and waited for it to pass. He told himself that he would be okay, that he would make it, that he would not give up. He told himself that he had a mission, a vision, a passion. He told himself that he had a family, a community, a humanity. He told himself that he had a faith, a trust, a love.

He walked out of the lounge and headed back to the emergency department. He was ready to work again.



Lights Shine Through

Samantha Chasteen



Light Shines Through is my personal visualization of grief. It is not uncommon for bottled-up emotions, like grief, to unravel at the end of the day, which is one of the reasons I chose to paint a sunset. Grief can be consuming and is depicted by the black mass with shooting spikes placed at the center of the painting. The darkness of grief can obscure the brightness of life that surrounds us. The background is a sunset, representing the love and beauty of life that is constant in the world. The brightness of life can seep through the darkness and instill healing and hope, which is illustrated by the lines and dots of colors in the black mass. I utilized traditional painting and finger painting. I chose finger painting because it can be difficult and confusing to process grief, which may leave one feeling like a scared child. On the other hand, there is an innate innocence in the beauty of life.

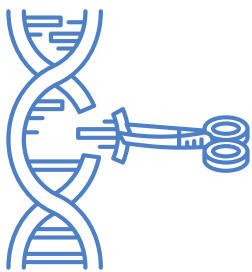
A Potential Approach to Ethical Embryonic Editing: A Proposed Philosophical Framework

Hallie Young

In 2018, Chinese scientist He Jiankui blurred the lines between medical fiction and reality by revealing twin babies born from genetically modified embryos[1]. The unprecedented announcement provoked debates among bioethicists concerning the moral implications of irrevocably editing the human genome. While contemporary consensus regards human germline editing morally repugnant, advancements[2] in genetic technology have underscored the need for reopened discussions of human genetic modifications, especially before-birth, germline-affecting modification (i.e., Embryonic Genetic Editing or EGE). EGE is a process that cuts, replaces, or otherwise alters specific DNA sequences in early-stage embryos, resulting in changes that can be inherited by the embryo's offspring. EGE's invaluable therapeutic potential may be ethically realized given a proper framework. Under such a framework, EGE will answer common objections to justify its acceptance as an ethical and effective practice.

Framework for Ethical EGE

Based on the concepts of Autonomy (1) and Benefit (2), I propose that, for an EGE modification to be a morally permissible[3] practice, it must:



- (1) be conditional on obtaining prior and informed consent from (when applicable) the egg provider, gestational carrier, and intended parents, and
- (2) carry a reasonable expectation for improved Quality of Life (QOL) for the edited party. Genetic modifications cannot be morally permissible if they carry merely an equivalent or diminished QOL.

The premises of the Autonomy-Benefit Concept Framework (ABC) are constructed to preclude concerns typically surrounding EGE; the Condition of Autonomy (1) avoids appropriating genetic material or body without prior approval and ensures that intended parents are not misled into believing their child will receive unmodified genetic material. The Condition of Benefit (2) prevents trivial modifications (in cases of estimated equivalent QOL compared to no modification outcomes) or modifications expected to disadvantage the child (in cases of diminished QOL).

ABC does not declare what qualifies as a necessarily improved or diminished QOL nor does it claim who should or could make such decisions. This framework is an argument of ideal moral theory and a tool to prove EGE's permissibility.

Objection of Consent

Humans born from edited embryos are unable to consent to their EGE modifications. EGE critics cite embryonic nonconsent as proof of EGE's inherent immorality, but this objection ignores the certainty that embryos do not consent to any procreative decision. Parents inevitably make autonomous choices to which their future children cannot feasibly consent (e.g., with whom to procreate, at what age to reproduce, what food to consume during gestation, etc). EGE embryos hold at least as much power over their birth as non-EGE embryos.

ABC's treatment of future children arguably promises more permissibility than non-EGE procreative decisions because ABC considers a child's best interests. Intending another's best interest when consent becomes impossible is generally permissible. Suppose the following:



Press Here

There is a comatose man and a button. The man suffers a condition that floods every moment of his life with acute agony. However, pressing the button will make this condition disappear and grant the man health. The man has no proxies, his preferences are unknown, and he cannot communicate in any way. His coma is unaffected by the button.

Pressing the button entails acting without the man's consent, yet it is instinctually the more appealing choice. The button's expected benefits to the man's QOL justify interference, and leaving the man to endure preventable suffering feels immoral. The underlying principle, viz., one is justified to act in another's reasonable best interest when consent is unknown and unattainable, can be applied to EGE: It is justified to act in the reasonable best interest of an embryo's future QOL.

Objection of Nature

The inherent existential character of editing another's genetic material elicits concerns about "playing God" (i.e., exercising unnatural control over humanity and human bodies). This fallacious appeal to nature is problematic. In addition to being vague about what constitutes too much control, it ignores the inherent unnaturalness inextricable to contemporary living. Parents commit many "unnatural" acts that affect their children's bodies (e.g., vitamin supplements, vaccinations, essential surgeries) with the expectation of increasing the child's QOL. It is hypocritical to renounce EGE while engaging or allowing other unnatural practices.

Objection of Disparity

There exists concern that EGE will exacerbate health outcome inequalities between the privileged and disadvantaged. However, it is unreasonable to burden EGE alone with protecting medical justice. Inequitable treatment for the underprivileged exists in every societal sector and remains inseparable from modern life's exploitative character. Even if the rich are the only population that could afford (and thus undergo) EGE procedures, they are already the only population affording other health luxuries (e.g., expensive surgeries, personal trainers, nutritious food); inequality (and subsequent health disparity) will exist regardless of EGE.

While it is disquieting to envision a society where the historically powerful are engineered to superhuman perfection and the oppressed languish, such a future is unlikely under ABC. ABC's Condition of Benefit restricts the trivial modifications pervasive in dystopias of reckless alteration. Additionally, as privileged progenitors endow descendants with beneficially edited genes, those descendants will have less need for scarce health resources (e.g., donated organs, expensive medication, or ventilators) thus freeing more of those resources for the public. Furthermore, EGE gaining greater acceptance and genetic technologies advancing could reasonably make genetic modification more accessible to the underprivileged.



Objection of Eugenics

Eugenics is a form of population control intended to create a community with specific “ideal”[4] traits. Historically, eugenics is imposed by a government/higher authority and pursued with tactics like forced sterilization, genocide, segregation, or (theoretically) genetic engineering. Advocates for the vulnerable and marginalized (e.g., disabled people, racial minorities, Queer individuals) express that editing to remove certain traits is a modern form of eugenics.

Concerns of marginalized community decrease are understandable; there is precedent for falling disabled populations following the introduction of reproductive interventions. For example, Denmark's Down Syndrome birth rate decreased dramatically after the introduction of prenatal genetic screening (PGS). Denmark mothers whose PGS detects chromosomal aberrations indicative of Down Syndrome terminate their pregnancy 95 percent of the time, and there is a reasonable expectation that rates of Down Syndrome-preventing modifications will be similar when EGE becomes a more practical treatment option[5]. Activists express that termination at the first sign of Down Syndrome (and similar discriminatory reproductive choices) communicates a rhetoric of disabled defectiveness which views a disabled life as tragic and not worth living. These sentiments are similar to eugenic calls to eradicate the “feeble-minded.”

While the distress of disabled communities is legitimate, it would be remiss to assume ABC-guided EGE modifications promote eugenics. A primary factor of eugenics' atrociousness is a complete lack of consent; authoritative states force eugenics on a population through paternalist practices designed to inhibit the autonomy of the subjugated. Inversely, ABC views consent[6] as a *necessary* condition for permissible modification—similar reasoning justifies why the Danish mothers' decisions to terminate Down Syndrome pregnancies is not eugenics because they made an individual, autonomous reproductive decision. Furthermore, EGE does not intend to steer a population towards imposed ideals; permissibility is based on what best benefits the child and that will vary for different children in different contexts. There is no “base human” pursued in EGE procedures, only expected increased QOL.

Under ABC, to be permissible, all modifications must be expected to increase a child's QOL. It follows that any child modified by EGE would be expectedly worse off had no EGE occurred. Promoting vague disability advocacy ideals/increasing the population of certain conditions without regard for the remediable suffering of the otherwise-modified who serve that goal would be using those otherwise-modified as mere means to achieve an end.

Those troubled by populations of individuals with Down Syndrome (or similar conditions) have no justification for exploiting the lives and suffering of others for social change. The burden of improvement is not incumbent upon suffering fetuses; those alive must create a world where the conditions warranting protection do not necessitate diminished QOL. It is the responsibility of the living, not the unborn, to accept, accommodate, or cure.

Objection of Lineage

Unlike somatic genetic editing which only affects the individual undergoing the procedure, EGE modifications are heritable changes that may be carried on through descendants. The ramifications of modifying an entire germline can appear overwhelming, but further contemplation reveals that lineage editing is merely the modification of a collection of *individuals*. Thus, many objections levied against germline editing (e.g., future descendants cannot consent to modification)[7] find answers in previous individual-focused refutations.



Admittedly, ABC bears conceivable weakness when discussing *individually* evaluated QOL concerning hereditary outcomes due to the difficulty of estimating one modification's impact on an entire lineage. Nevertheless, similar weakness may be observed in any significant decision estimated across a wide duration; it is not the business of mortals to know all the consequences they effect. At the least, one can act in service of what they reasonably expect is another's best interest.

Generally, what is beneficial for a parent will benefit the child, even if only indirectly. A parent unburdened by suffering or expensive accommodation can invest more time, money, and energy in their child's well-being.



Notes

[1] Greely H. T. (2019). CRISPR'd babies: human germline genome editing in the 'He Jiankui affair'. *Journal of law and the biosciences*, 6(1), 111–183. <https://doi.org/10.1093/jlb/lso10>

[2] Wilkinson E. UK regulator approves “groundbreaking” gene treatment for sickle cell and β thalassaemia *BMJ* 2023; 383 :p2706 [doi:10.1136/bmj.p2706](https://doi.org/10.1136/bmj.p2706)

[3] Permissibility is a necessary but not sufficient condition for moral obligation. Similarly, The potential for permissibility does not equate to permissibility (i.e., expected benefit from modification is a necessary but not sufficient condition for moral permissibility).

[4] Ideal based on subjective, prejudiced, and often racist philosophies.

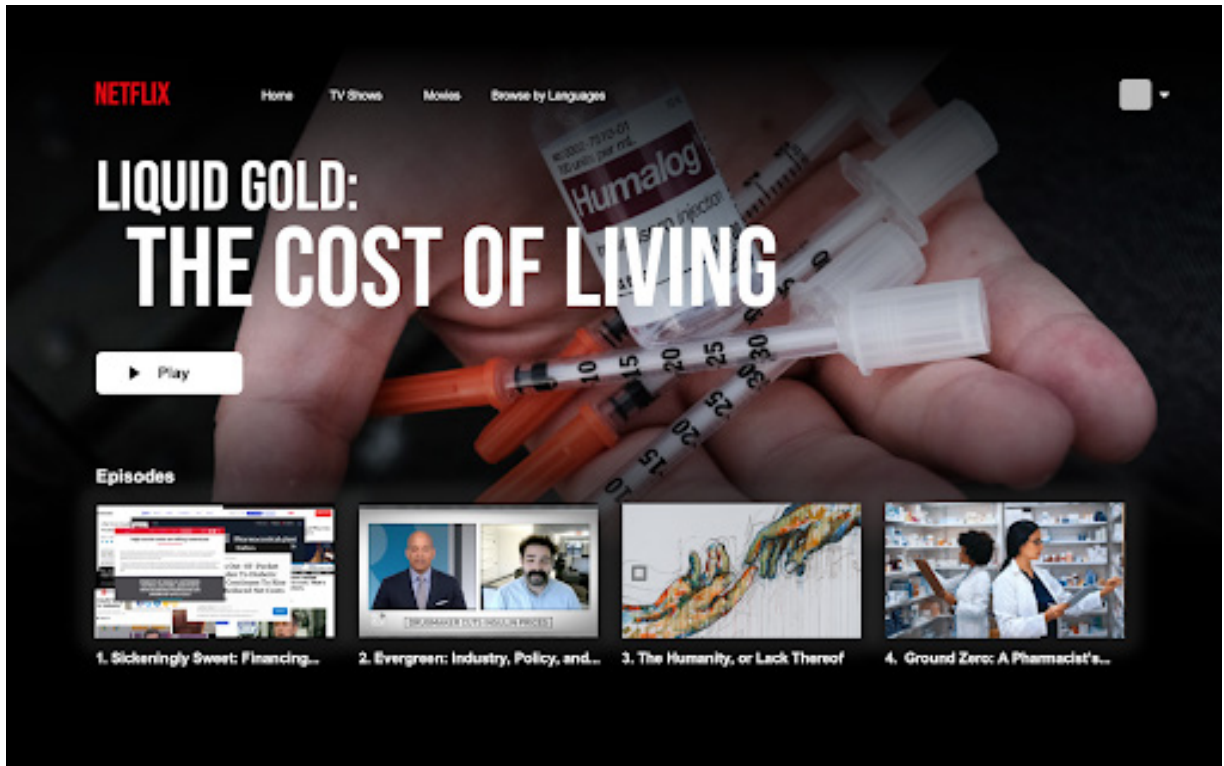
[5] Lou S, Carstensen K, Petersen OB, et al. Termination of pregnancy following a prenatal diagnosis of Down syndrome: A qualitative study of the decision-making process of pregnant couples. *Acta Obstet Gynecol Scand*. 2018; 97: 1228-1236. <https://doi.org/10.1111/aogs.13386>

[6] While a child cannot consent to modifications, the OBJECTION OF CONSENT establishes that parents may act as proxies in their child's best interest.

[7] For a response to this example, see OBJECTION OF CONSENT and Condition of Benefit

Liquid Gold

Juliana Le



As I was brainstorming ideas for this project, I had a thought about the purpose of the HUMA 3360 course I took in the summer—exploring various healthcare issues in America through the medium of film. Reflecting on the films and documentaries I’ve watched, I realized how much they have broadened my knowledge on numerous subjects, thanks to the unique approach that films provide. With this realization, the concept of creating a Netflix documentary began to take shape in my mind. I envisioned a series of short episodes that would delve into different aspects of the healthcare issues I wanted to highlight. The challenge, however, was finding the perfect title for the movie. After contemplating various options, a good friend of mine suggested *Liquid Gold*, and it felt like a revelation. This title aptly captures the current state of insulin—a precious and life-saving resource with an exorbitant cost. The high price of insulin goes beyond financial implications; it inflicts a profound toll on people’s lives, leading families to grapple with tough decisions between healthcare and basic necessities. Witnessing these struggles, I became determined to raise awareness about this critical issue through my project. By presenting this topic through a “Netflix documentary” with storytelling and impactful visuals, I hope to shed light on the human aspect of the insulin crisis, fostering empathy and understanding among viewers. I aim to convey the urgency of the situation and advocate for change, ultimately inspiring others to join the cause and address this pressing concern in the American healthcare system.

Link to the video: [Liquid Gold.mp4](#)

As She Lay Sleeping

Jessica Nwankwo

As she lay sleeping,
 Bundled up in blankets in the room beside,
 Bedside care we carried out
 From our living room lookout post.
 Rising for observation
 Through a sliver into her slumbering world,
 Each and every time
 She snoozed soundly.

As she lay sleeping,
 Time slipped by sneakily
 As we conversed
 In this universe
 Of cinnamon-scented candles and holiday warmth.
 Minute by minute,
 Hour by hour,
 A sacred silence.

Fold by fold,
 I cherished the quiet
 And the lack of distress
 In the room beside
 As she lay sleeping.
 My brigade of paper cranes
 A rainbow of protective peace
 In parallel to her gentle sleep.

And come again,
 As she lay sleeping,
 Our hearts fluttered
 At every stir and every sound
 And we watched quietly, the rises and falls of her chest—
 Slow but steady, a sweet somnolence—
 From the doorway, now a wider invitation
 Into her slumbering world.

And in due time, her daughter would return,
 Her eyes glistening with gratitude
 The love and care emanating from her radiant presence
 With a tiredness that lurked behind.
 And in our parting, as we exchanged words of well-wishing,
 I pondered what she dreamed about
 As she lay sleeping,
 As she snoozed soundly in the room beside.

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Transcendence of Faith

Angela Silva



Beyond the scientific world, I have a deep love for darkness and horror. I don't just observe; I create within these realms, viewing everything with an artist's eye. This perspective adds an intriguing layer to my artistic endeavors. Whether capturing the eerie beauty of the unknown or infusing a touch of the macabre into my creations, I find inspiration in everything from everyday life to classical art.

In the intersection of science, art, and the mysterious, I thrive. Unraveling the complexities of biology and translating the enigmatic into visual masterpieces, I navigate both worlds with curiosity and a commitment to finding beauty in unconventional places.

The Impact of COVID-19 on Undergraduate Students' Academic Performance at the University of Texas at Arlington

Mohamed Abdalati

Supervising professor: Whitney Tholen, Ph.D. December 2023

The Department of Biology and Microbiology, The University of Texas at Arlington, Honors College

Abstract

The Coronavirus COVID-19 pandemic has brought unprecedented challenges to higher education, impacting students' academic performance. This study investigates the effects of the pandemic on Microbiology undergraduate students at the University of Texas at Arlington (UTA) from 2019 to 2022. A retrospective cohort study design was employed, analyzing academic records of 3,059 Microbiology undergraduates. Results indicate a significant decline in academic performance during spring 2020 and 2022. Lab grades dropped from 88.0 to 82.5, while overall class averages fell from approximately 87 to 82.5. A literature review explored the relationship between socioeconomic status (SES) and academic performance during the pandemic. Lower SES students experienced more substantial declines, highlighting the pandemic's exacerbation of educational disparities. This study reveals the COVID-19 pandemic significantly impacted students in higher education as indicated by academic performance at UTA. Findings emphasize the need for tailored interventions and equitable education strategies to support students navigating unforeseen disruptions.



Introduction

The COVID-19 pandemic, a global health crisis initiated by the emergence of SARS-CoV-2, has significantly impacted various sectors, including education. This disruption necessitated rapid shifts in educational methodologies, particularly in higher education, with a substantial transition to remote learning modalities to ensure educational continuity (UNESCO, 2020).

The pandemic's transition to online learning presented unique challenges for both students and educators. The abrupt shift required significant adjustments in pedagogical approaches and the development of online curricula (Al Lily et al., 2020; Arias, 2019). Disciplines requiring practical components, such as Microbiology, experienced significant impacts due to the closure of laboratories and restrictions on in-person interactions, hampering hands-on practical experiences for

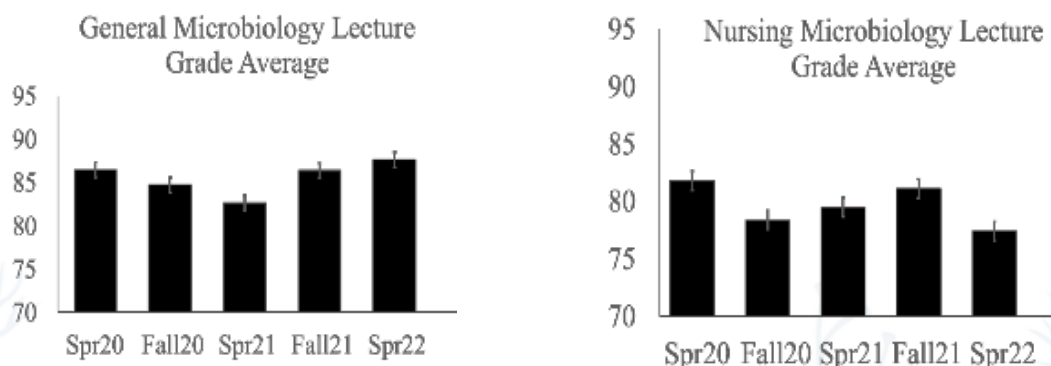
students (Pearse et al., 2023; Restini et al., 2023). Furthermore, the pandemic had profound implications on students' mental health and well-being. The transition to remote learning, coupled with uncertainties and anxieties surrounding the pandemic, resulted in increased stress and anxiety levels among students (Cao et al., 2020; Shin et al., 2023). Educational institutions implemented various measures to provide mental health resources and support services to address students' psychological needs (Villatoro et al., 2023; Yang et al., 2021). This research aims to investigate the multifaceted impact of the pandemic on the academic performance of undergraduate students in the Microbiology program at UTA. It explores the challenges in instructional delivery, mental health implications, and the resultant variations in academic performance during this period.

Methods

This research employed a retrospective cohort design, targeting undergraduate students in the Microbiology program at UTA. The study spanned from the Fall semester of 2019 to the Fall semester of 2022, capturing data from both pre-pandemic and pandemic periods. This time frame was strategically selected to provide a comprehensive understanding of the pandemic's impact on academic performance.

Data collection focused on academic records, specifically grades in Microbiology courses. To ensure the protection of student privacy and adherence to ethical standards, all data handling procedures were in strict compliance with the University's Institutional Review Board (IRB) guidelines. Personal identifying information was excluded from the dataset to maintain confidentiality. The analysis was bifurcated into descriptive and inferential statistical methods. Descriptive statistics provided a foundational understanding of the overall grade trends and distributions. Inferential statistics, including t-tests and ANOVA, were employed to assess the significance of differences in academic performance across the analyzed periods. Special attention was given to the effects of the transition to online learning and the pandemic's disproportionate impact on students from varied socioeconomic backgrounds.

Socioeconomic Status (SES) Consideration was a key component of the analysis of examining the influence of SES on academic performance. This involved a detailed exploration of how students from different SES backgrounds were affected differently by the transition to online learning and other pandemic-related educational challenges. Ethical Compliance and Data Integrity: The study maintained the highest standards of ethical compliance and data integrity. All procedures were reviewed and approved by the University's IRB, ensuring that the research adhered to the ethical guidelines for academic research.



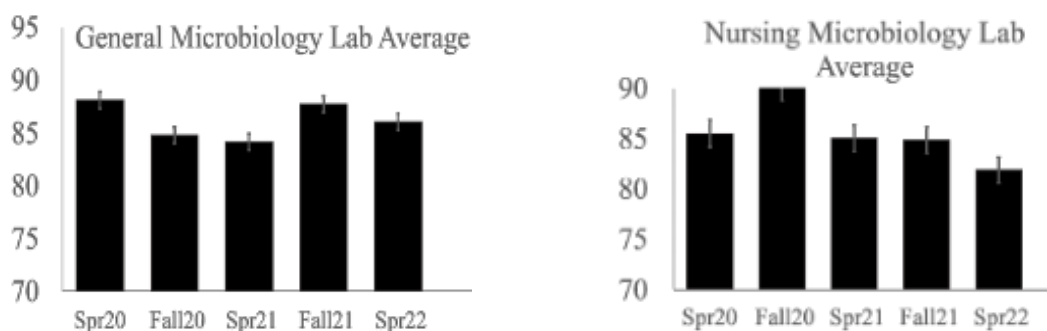


Fig 1. General and nursing microbiology students' Lec/Lab grade average across multiple semesters. (a) The x-axis represents the grade averages in general microbiology lectures while the y-axis shows correspondent semesters. (b) The x-axis represents the grade averages in the general microbiology lab while the y-axis shows correspondent semesters. (c) The x-axis represents the grade averages in the nursing microbiology lab while the y-axis shows correspondent semesters. (d) The x-axis represents the grade averages in nursing microbiology lecture while the y-axis shows correspondent semesters.

Results

The comprehensive analysis of academic records for Microbiology undergraduates at UTA demonstrated a marked decrease in performance metrics during the peak of the COVID-19 pandemic. Specifically, the average lab grade in general microbiology plummeted from an 88.0 in the spring of 2020 to 82.5 in the spring of 2021. Concurrently, the overall class average experienced a similar downturn from approximately 87 to 82. This trend was mirrored in the nursing microbiology cohorts, which saw a decline in average grades from 82.0 to 78.0 over the same periods.

The grade distributions, as depicted in Fig.1, elucidate the broader academic impact across consecutive semesters. The decline is graphically represented, showing the comparative semester-wise performance before and during the pandemic. Despite the overall downward trend, an intriguing anomaly was observed in the lab-only averages for Nursing Microbiology. There was an upswing from approximately 86 in spring 2020 to around 90 in spring 2021. This contrast might be attributable to adaptations made to accommodate nursing students, many of whom were actively engaged in the healthcare response to the pandemic. The tailored flexibility in coursework seemingly translated into a relative improvement in academic outcomes for this subgroup.

The subgroup analysis focusing on the SES impact revealed stark disparities. Students from lower SES backgrounds were disproportionately affected, with a more significant drop in academic performance relative to their higher SES peers. This is in line with Bulman's findings (2022) on educational inequities exacerbated during the pandemic. Furthermore, the pandemic's fallout included decreased college attendance among lower SES student's post-lockdown, potentially reflecting the exigencies of work and family care prevalent in these groups (Fig.2).

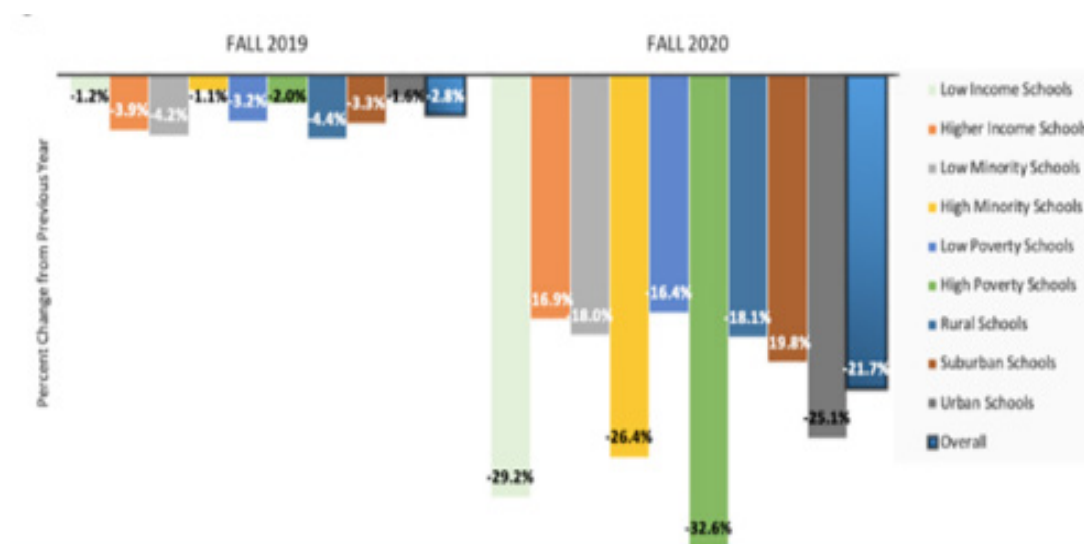


Fig. 2. Changes in Number of Students Enrolling in College After High School by Income Characteristics (from National Student Clearinghouse Center, High School Benchmarks, 2020.)

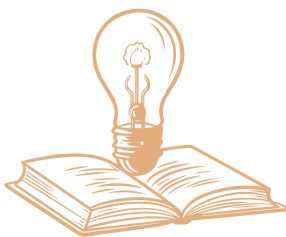
The results collectively underscore the profound effect of the pandemic on the academic trajectory of microbiology students at UTA. The pervasive decline in grades across the board, with pronounced SES-based disparities, highlights the critical necessity for robust and responsive support systems. These systems should not only facilitate academic engagement during disruptions but also provide a safety net that accounts for diverse socioeconomic backgrounds.

Discussion

The observed decline in academic performance, particularly during the spring of 2020 and 2021, aligns with global trends noted during the pandemic. As institutions rapidly shifted to online modes of instruction, the quality and effectiveness of educational delivery were inevitably impacted. However, the disparity in this decline, with students from lower SES backgrounds bearing the brunt, resonates with historical educational disparities accentuated by socioeconomic factors. Such findings mirror the research by Catalano et al. (2021), highlighting how disadvantaged communities often face the most significant educational challenges. The pronounced technological disparities between different SES groups emerged as a pivotal factor influencing academic outcomes during the pandemic. As digital learning became the norm, access to reliable internet and essential technological tools was critical. The “digital divide” a pre-existing concern, became a chasm during the pandemic, with students from lower SES backgrounds often left on the disadvantaged side. This technological disparity echoes the findings of Castaño-Muñoz et al. (2020) and Mishra et al. (2021), emphasizing how limited access to essential digital resources can detrimentally impact academic engagement and outcomes.

The importance of robust support systems, both academic and socio-emotional, has been underscored during the pandemic. As the data suggests, students with stronger support networks, typically from higher SES backgrounds, navigated the challenges of the pandemic more effectively. The finding that students from lower SES backgrounds often lacked these support structures is concerning, particularly given the heightened academic and personal challenges they faced. Institutions, moving forward, must recognize these disparities and work towards ensuring equitable support for all students, especially during crises. The observed increase in the average lab-only average for Nursing Microbiology students during the pandemic is intriguing. While this research posits that increased flexibility, especially for frontline healthcare worker students, might have played a role, further investigation is required. The nuances of specific courses and the unique challenges and supports available to students within them warrant closer scrutiny.

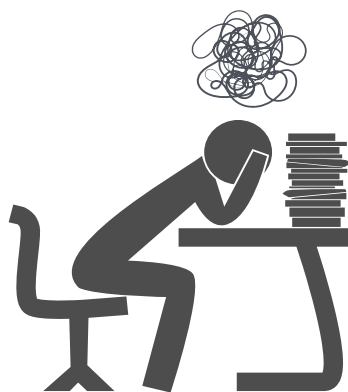
This research underscores the need for educational institutions to adopt a more holistic, student-centered approach, especially during disruptions. Recognizing the unique challenges faced by different student demographics, particularly those from lower SES backgrounds, is crucial. Institutions must proactively work towards bridging technological, academic, and socio-emotional support gaps to ensure equitable educational outcomes. Future research should delve deeper into understanding the long-term implications of the observed academic decline. Additionally, exploring the efficacy of the various digital tools and online pedagogies employed during the pandemic can offer insights into refining online education further. Lastly, understanding the psychological impacts of the pandemic on students, beyond just academic outcomes, is crucial. Such holistic understanding can guide institutions in fostering resilient, adaptable, and well-supported student communities, ready to navigate future challenges. The COVID-19 pandemic, while disruptive, offers valuable lessons for educational institutions. Recognizing disparities, understanding challenges, and proactively working towards inclusive, equitable education must be the way forward.



Conclusion

The COVID-19 pandemic, with its widespread repercussions, has significantly disrupted higher education, casting profound implications for students, educators, and institutions globally. Our research at UTA, specifically analyzing the academic trajectory of microbiology undergraduate students, provides compelling findings of this disruption. A salient finding from our study is the undeniable decline in academic performance, with the spring semesters of 2020 and 2021 bearing the brunt of this downturn. This trend of “learning loss” during the pandemic aligns with global observations and underscores the profound challenges introduced by the rapid transition to online learning environments. Disciplines like Microbiology, which rely heavily on hands-on, practical components, were particularly disadvantaged by the limitations of remote learning, with laboratory components and practical training sessions being notably affected.

The educational shift was not just about navigating online platforms but grappling with the altered dynamics of student-teacher interactions, the challenges of self-motivation in isolated environments, and the often-impersonal nature of digital learning. For many students, the essence of collegiate learning—collaborative study sessions, real-time discussions, and on-campus resources—was markedly absent. This not only impacted their academic scores but also reshaped their entire educational experience. While the overarching theme was one of academic decline, nuances emerged when factors such as SES were considered. SES, an ever-present factor in educational outcomes, manifested more prominently during the pandemic. Students from lower SES backgrounds faced compounded challenges, not just from the pedagogical shifts but also from exacerbated technological disparities. The digital divide was more than a peripheral issue; it was a stark reality for many, further deepening the chasm of educational inequities.



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Further Resources

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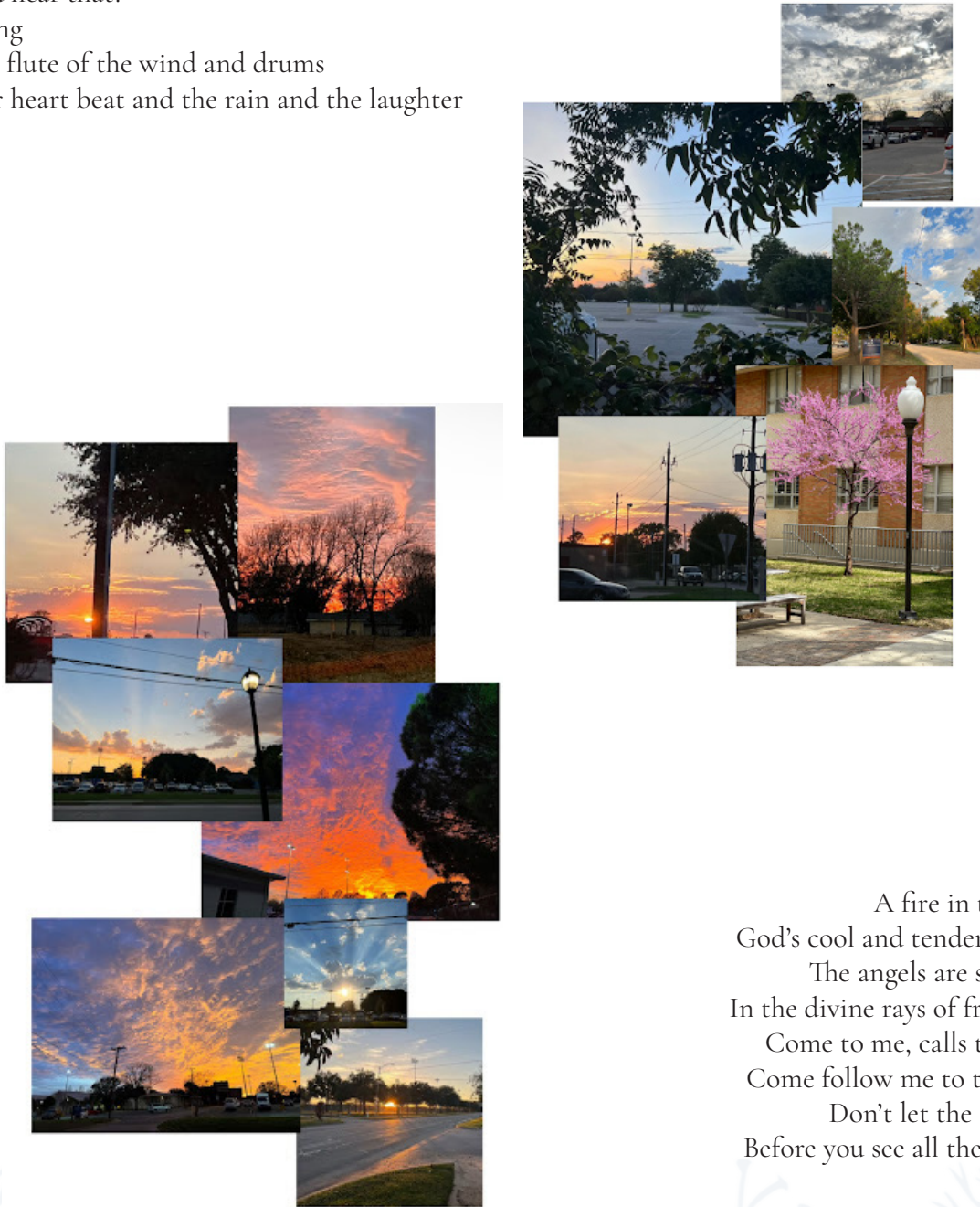
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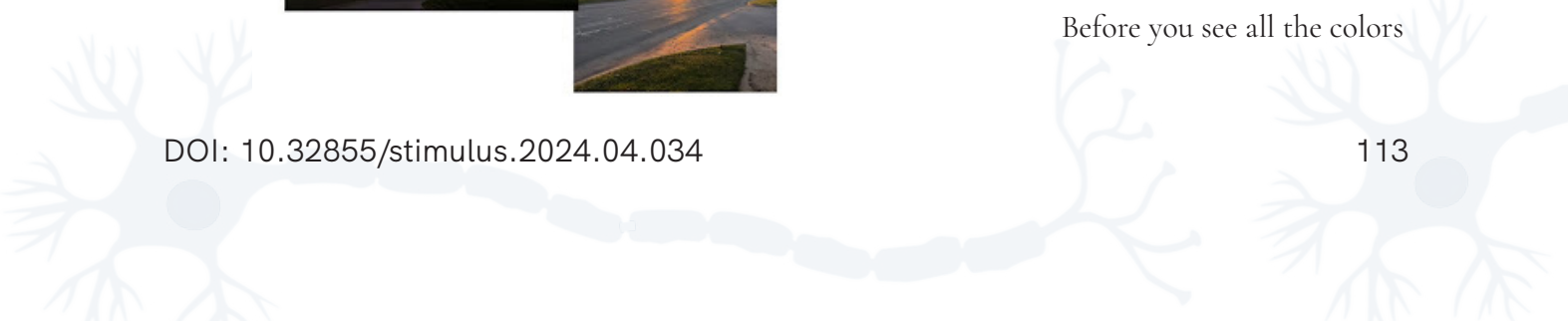
Poetographs

Ekjot Birdi

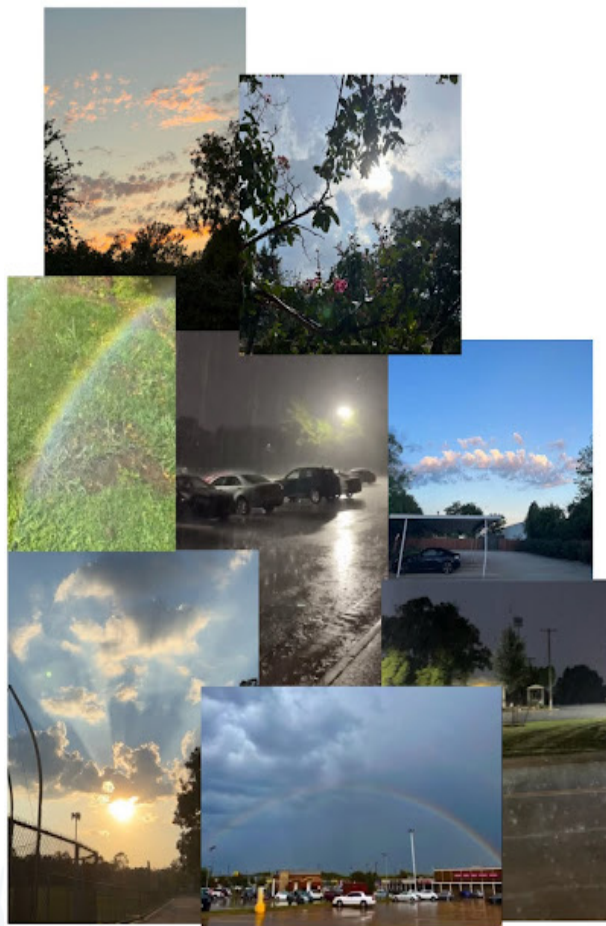
Do you hear that?
The song
It's the flute of the wind and drums
of your heart beat and the rain and the laughter



Sunset
A fire in the sky
God's cool and tender touch
The angels are singing
In the divine rays of freedom
Come to me, calls the sun
Come follow me to the end
Don't let the sun set
Before you see all the colors



My love, R&R
 Here today I profess my love for thee,
 Deeply tranquil, and worry-free state
 In doing absolutely nothing,
 Accomplishing the biggest thing of all
 Sitting down under the shade of a tree
 Laying on the ground, staring at a wall
 Chewing, eating, tasting so slowly
 Standing in a tropical sauna-shower
 Letting the warmth wash over me
 At the beach, looking to the shore
 Waves moving



A relief from the hot winds
 The sky awash in clouds and color
 Rain comes and kisses the Earth cool
 And awakens dormant plants and worms
 The sizzle of the day replaced by
 The calm and gentle breeze-sky
 It took so long, but now it's here
 Later still it will disappear
 And even now, cannot have it
 Come so close to understanding
 Death and birth will repeat
 Gain and loss and pain and glee
 Are only here with "I" and "me"

In this game of love
Expect nothing in return
Except for Everything in its entirety

Sway to the rhythm
Undulate to the current
Life is a celebration



Through the Eyes of a Rookie

Muhammed AbdalRahman

4:45 AM: “Engine 6, Medic 6, 21-16 Lancaster Drive Major Medical Emergency, Seizure Alert, Code 3.”

Sirens and alarms blaring on repeat from the firestation’s speakers force me awake. I sluggishly sat upright and shoved myself into my boots before walking out into the pitch black hallway. After what might have been the fifth call of the night, everything just felt like routine. As I walked, I couldn’t tell if I had actually slept or if I had just been in a barely lucid loop of the previous calls.

I’m bathed in fluorescent light as I open the bay door and load into the truck. Boots, tones, and engines roaring. Adrenaline coursed through my body, fighting my fatigued state of mind, as we peeled off into the street. I sat in the back and tried to rest my eyes for a moment. Thoughts of what the call could be raced through my head as the muffled and rhythmic sirens blared into the early morning. For all we knew, it could’ve been completely unrelated to a seizure, and be something else entirely.

4:53 AM: We’ve made it to the scene. I hopped out onto an ill-lit suburban street with my Airway and Med bags in tow, bee-lining to my Field Training Officers. Flashing red and white lights painted our path as we quickly made our approach to an unassuming house. A soft yellow glow seemed to be coming out of the open door.

“DALLAS FIRE DEPARTMENT!” an FTO shouted once we made it to the porch .

No answer met our ears. We entered the house, scanning the surrounding rooms. Then, we saw her. Sprawled behind the coffee table, a woman lay unresponsive. We moved with haste and caution, assessing the scene for any hazards or present threats.

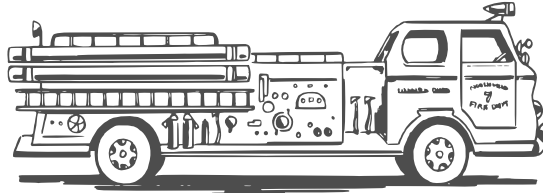
“Ma’am, can you hear us?” the same FTO tried directly talking to her when he reached her side.

We still received no response. Her skin was very pale and she was barely moving. I checked her breathing and pulse while a medic kept trying to wake her up.

“Pulse strong and regular,” I reported. “Breathing shallow and deep”

Her breathing turned into a groan mere seconds after I made my assessment, beginning to gain consciousness.

As she continually tried to convince us that she was fine, we at least made sure that she didn't get to her current predicament by falling before helping her up. We lifted her by the arms gently from the floor and led her onto the couch, the woman now more aware of her surroundings by this time. The color had returned to her face and she was able to speak now, giving my FTO her brief medical history while I hooked her up to the monitor for her vitals.



“Were you doing anything when the pain started?” my FTO asked.

Before she could answer, a man that must have been her husband came rushing down the stairs with a handful of papers and his phone, the flashlight still on.

“I tell ya what happened!!” he shouted, a heavy Southern drawl lacing his words. “We was havin’ dinner, and a couple hours after dinner, she said she done got the cramps! Now, ain’t I told you that you was exaggerating, Fernanda?! Now we here with her hootin’ and hollerin’ on the floor!”

Thankfully, some firefighters pulled him back to calm him down and ask questions, so he wouldn't further disturb her.

“Y—hiccup—uh... he right,” she responded indifferently.

“Pulse 90, Blood Pressure 137 over 86, Respirations 18 and here's the 4 lead,” I read off the monitor to my FTO, trying to get back on track.

From there, my FTO explained how she could go to the hospital where they would be able to run more tests. In his opinion though, he thought that her situation probably had something to do with simple heartburn, based on the information he had received. If she refused transport to the hospital, she could always call 911 back or go in her own vehicle to better diagnose the issue.

“That sounds—!” She paused for a moment.

When the moment passed, so did her gas.

“Oh my!” the woman's expression was filled with embarrassment. “I apologize! I feel much better now, though. Thank y'all for all the help.”

A little flustered, I got up and shuffled over to my other FTO, where I reviewed the Narrative Summary and Vitals with him.



5:15 AM: We had made it back to the station with 45 minutes left in our shift. I had mixed feelings about it, since we didn't have any "exciting" calls, but I still enjoyed every minute of the experience. After submitting our reports, I listened in on conversation about the call we just had.

The firefighters discussed non-emergency 911 calls, some frustrated with the waste of resources and time. While I agreed with that logic at first, I remembered what my instructor had once said to us before we graduated. "To us trained professionals, it may not seem like an emergency. But to that person, it is a real emergency in their world. Even if it's lil' ol' grandma asking you to bring plants inside."

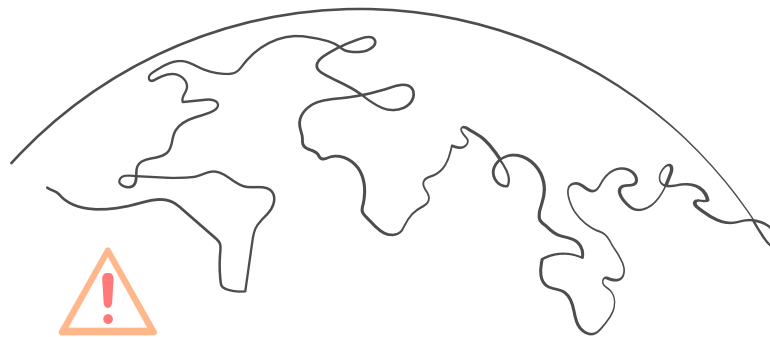


In this field, no matter where you go, it is extremely easy to become jaded. The things we constantly encounter are almost never normal, so we cannot expect our own level of a "normal" reaction to such things. "We can't selectively numb emotion... Numb the dark you numb the light." (Brown)

What we can do, however, is arm ourselves with this mindset and keep reminding ourselves of the idealism that we came into this profession with.

I say "we," but as I write this, I myself am still profoundly green. I often see so many ahead of me, all fighting this same battle of empathy and understanding the various people we come in contact with. Those same firefighters who complained about the non-emergency 911 calls were the same ones who I witnessed having a genuine interest in every patient, truly care for them, and be their advocate.

I only hope that, through everything, I am still able to remind myself of what it means to be there for those who are scared and have their world shaken.



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Visceral Symmetry

Ayesha Tanvee



Art has always been my form of peace. It's like a friend who holds my hand in good and bad times even though the pencil is in my hand. I drew this particular piece in anger after a certain interaction. I was 16. I sat down, looked at some inspiration pieces and went into airplane mode as I drew each stroke. Human anatomy art has always been one of my favorites. The art is what is inside each of us, details we aren't even aware of until we see it in art form.



The Feeling

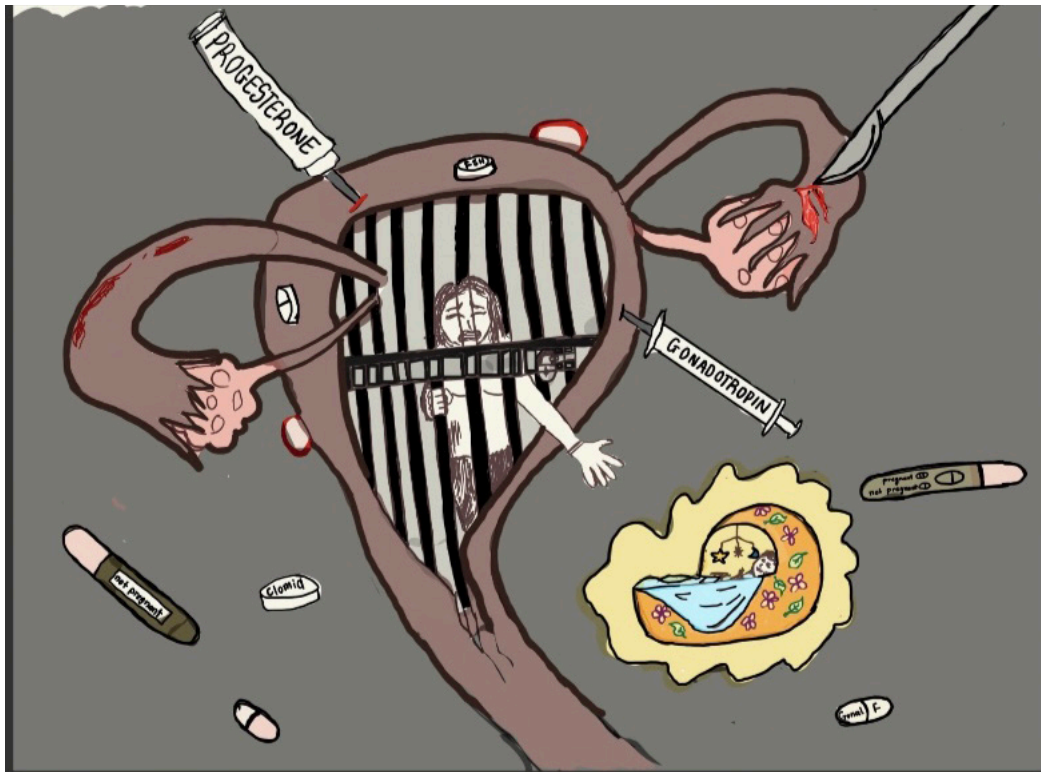
Margaret Syllah

The feeling you get seeing a kid with their parents,
The kind of warmth you feel seeing such a wonderful sight,
and eager to have your own moment like that,
The feeling you get when someone lets you hold their child,
The king of light, but heavy weight that is in your arms and
makes you want to have your own.
The feeling of joy you get when a child smiles at you,
You can't help but to smile back, and you think anything is
worth seeing that smile again.

The feeling you get when a child hugs you,
And knowing they do it out of their own loving heart.
The feeling you get, knowing you are willing to have kids of your own,
All the sacrifices you know you're willing to make to receive that
wondrous gift and share your love.
The feeling you get when you go to the doctor because something is not right,
The doctor says that you may have a hard time having a child.
The feeling of shock when the words don't process then and there,
Then, later, it hits you that your body is acting against your wishes.

The feeling of hope each time you try a new medication and treatment,
The crushing feeling of despair when they fail.
The feeling you get when the dreams you had seem further away
each passing day,
The agony you feel when you think you may not be able to have your own.
The feeling of not being able to control your own body,
Your dreams of being a mother dwindle away.

The feeling of losing a piece of you that you always thought you would have.
It's a stab to the heart, a stomp on your dreams, a feeling of brokenness.
The feeling you get when the dreams, aspirations, love and life
you thought you'd get to have.
All get crushed in a moment.
The feeling you get... When you've lost something you never had.



HIV Disparities in the United States

Robert Parra

HIV

Human immunodeficiency virus or HIV is a virus that affects T cells, which are important for immune function, and has two subtypes, HIV-1 and HIV-2. HIV-2 is primarily found in West Africa while HIV-1 is the subtype that mostly comprises the infections in other parts of the world. HIV is thought to have mutated from a virus that affects other primates known as simian immunodeficiency virus (SIV), when humans came into contact with blood from an infected animal. Without proper treatment, HIV can progress to AIDS or acquired immunodeficiency syndrome, which is when the immune system has been so badly damaged by the virus it is ill-equipped to function properly. Initially HIV/AIDS was described as a new and exotic disease and underwent several name changes until 1986. The AIDS epidemic in the United States officially started in Los Angeles, California, in 1981 when groups of homosexual men were becoming infected with a type of pneumonia known as pneumocystis pneumonia (PCP), an opportunistic infection (Sharp & Hahn, 2011). HIV is largely spread through unsafe anal or vaginal sexual contact and the sharing of IV needles among recreational drug users. The disease can also spread during unsafe medical procedures and accidental needle sticks among healthcare workers (Boily et al., 2009).

Prevalence

Many strides have been made in understanding this disease and developing treatments, testing methods, and education but it persists as an important public health issue in the U.S. and abroad. According to the World Health Organization (WHO), HIV's global prevalence is reported as 38 million (WHO, 2018). In the U.S., HIV's prevalence has been reported by the Centers for Disease Control and Prevention (CDC) as 1.2 million as of 2018 and about 14% are unaware of their status (WHO, 2018). Additionally, the CDC reported that in 2018 there were 36,400 new HIV infections (CDC, 2020).

The CDC's data on prevalence of HIV in 2018 in the U.S. reveals differences among population groups and even among regions of the country. The Black population had 482,900 cases, which was greater than any other ethnicity and males in general had 912,100 reported cases vs. 261,800 for females (CDC, 2020). Transmission-wise, Black male to male sexual contact ranked the highest with 661,800 cases when compared to other means of transmission and other groups (CDC, 2020).

Social Determinants of Health

HIV prevalence is higher among Hispanics and Blacks compared to other groups for numerous reasons, which are referred to as social determinants of health or SDOH. SDOH are non-medical factors that can influence health. They can include the environment in which one is raised and lives in, language and literacy skills, access to health care and education, and socioeconomic status. SDOH are important to consider because they are what define the human experience. They provide the context for how we live and thrive, and can shape who we are. Regarding HIV, learning that one has been infected can be a tumultuous and harrowing experience. Therefore, considering the circumstances that might have contributed to increasing the risks of acquiring it is important and can add another dimension of understanding of the patient as a person.

For instance, Hispanics that come from different countries or areas other than the continental U.S. have different risk factors for contracting HIV. Hispanics of Puerto Rican descent for example, are more likely to be infected with HIV through IV usage or high-risk heterosexual contact compared with Hispanics from the continental U.S. or from Mexico (CDC, 2020). Hispanics often find themselves in communities with higher rates of HIV infection, have a higher incidence of poverty, and sometimes face language barriers to accessing health care.

The machismo attitudes pervasive throughout Latin cultures can stigmatize HIV status which affects the likelihood that men may seek testing and help with a sensitive issue like HIV (CDC, 2020). Machismo attitudes consist of masculine ideas such as bravado, establishing social dominance, having great sexual prowess, and sometimes includes misogyny and homophobia (Rubia & Basurto, 2016).

The Black community, much like Hispanics, are also significantly impacted by HIV as mentioned previously and experience stigma similarly. In the Black community this can be a source for fear and shame since there may be little to no social support, which can lead an individual to feel ostracized (Overstreet et al., 2012). Another factor that contributes to higher HIV rates in the black community is a higher rate of incarceration. This rate leads to higher HIV cases for a few reasons. Among these is that some Black inmates engage in riskier activities like drug use and unsafe sexual practices, and can be subject to rape which may predispose them to HIV (Rowell-Cunsolo et al., 2016).

SDOH such as socioeconomic status and health literacy levels can potentially influence HIV prevalence, outcomes, and individual behaviors (Gant et al., 2012). Interestingly when studying other chronic diseases, they tend to fall on a socioeconomic continuum whereas HIV is almost entirely a disease that affects the economically disadvantaged as previously mentioned in the context of Black and Hispanic populations. Important to consider is that minorities are historically more likely to experience discrimination. The negative impact of this can manifest in numerous ways from residential segregation practices to the quality of school one has access to (Pellowski et al., 2013). Such practices and experiences can prevent individuals from obtaining a good education and decrease access to networking opportunities and health care. It is not surprising to find that HIV rates are higher among lower income areas due to these factors (Pellowski et al., 2013).



Negative stigma surrounding HIV also presents problems for these individuals' mental health and is associated with feelings of hopelessness and depression (Burrack, 1993). Such factors can lead these individuals to feel apprehensive about testing since an HIV diagnosis can permanently mark an individual with this stigma and other stigmas such as engaging in illicit drug use (Earnshaw et al., 2013). Stigmas may deter individuals from seeking HIV care after a diagnosis and affect adherence to HIV treatments leading to poor outcomes and increased mortality. Another issue is self-stigmatization which can lead individuals to engage in unsafe sex to escape feelings of depression and possibly seek validation (Earnshaw et al., 2013).

Language and Literacy

Language as a cross-cultural barrier is an issue that affects Hispanics in the U.S. as it relates to HIV and impacts this population as much as lack of insurance does (Rajabiun et al., 2008). These barriers decrease access to the most basic care in this population since it impedes their ability to communicate with providers, make appointments, convey their concerns, and be more engaged in prevention and treatment strategies (Sherbuk et al., 2020). Language barriers can present a unique challenge for both patient and provider in that even when an interpreter is available there is sometimes concern as to whether anything is lost in translation. Further when using a translator, some patients have expressed privacy concerns (Mogobe et al., 2016).

Health care literacy is especially relevant to both Black and Hispanic populations. Minority groups generally report lower levels of education which have been correlated with low health literacy (Rajabiun et al., 2008). In some cases, low health literacy in some Hispanics may be due to language barriers. Low health literacy is correlated with not seeking routine care which can be preventive in nature.

In the case of HIV, individuals are less likely to seek testing, understand the importance of managing their condition, and are less likely to be aware of preventive and safe sex practices (Mogobe et al., 2016). Minority young males who engage in sexual acts with other males report lower levels of both HIV and safe sex education which has been correlated with increased risks for HIV and other sexually transmitted infections (Raifman et al., 2018).

Several measures have attempted to address this issue in the Hispanic community. Media campaigns are one approach that has been effective in making Hispanics aware of HIV testing and risks. The bilingual Hombres Sanos program, a social marketing campaign which was targeted at Hispanic men, showed some promising results. During a six month follow up, participants were more likely to get tested for HIV, use protection during sexual encounters, and be aware of where to seek testing or treatment, if necessary, compared to those who had not been exposed to the campaign (Martínez-Donate et al., 2009).

Similar approaches targeting the Black population and gay men of color also exist and have positively impacted the communities they are serving. One such group, the 3MV Project focused its efforts on HIV prevention education using discussion and risk reduction planning. After participating in the 3MV program, 81% were more likely to get HIV testing, 25% more likely to reduce the number of casual sex partners, and 65% more likely to avoid unprotected anal sexual activity (Wilton et al., 2009). The results emphasize that when exposed to this educational experience individuals are likely to adopt safer sex practices.

Biases and Stigma

Providers exhibiting biases can set a negative tone for any visit regardless of the reason for the visit.



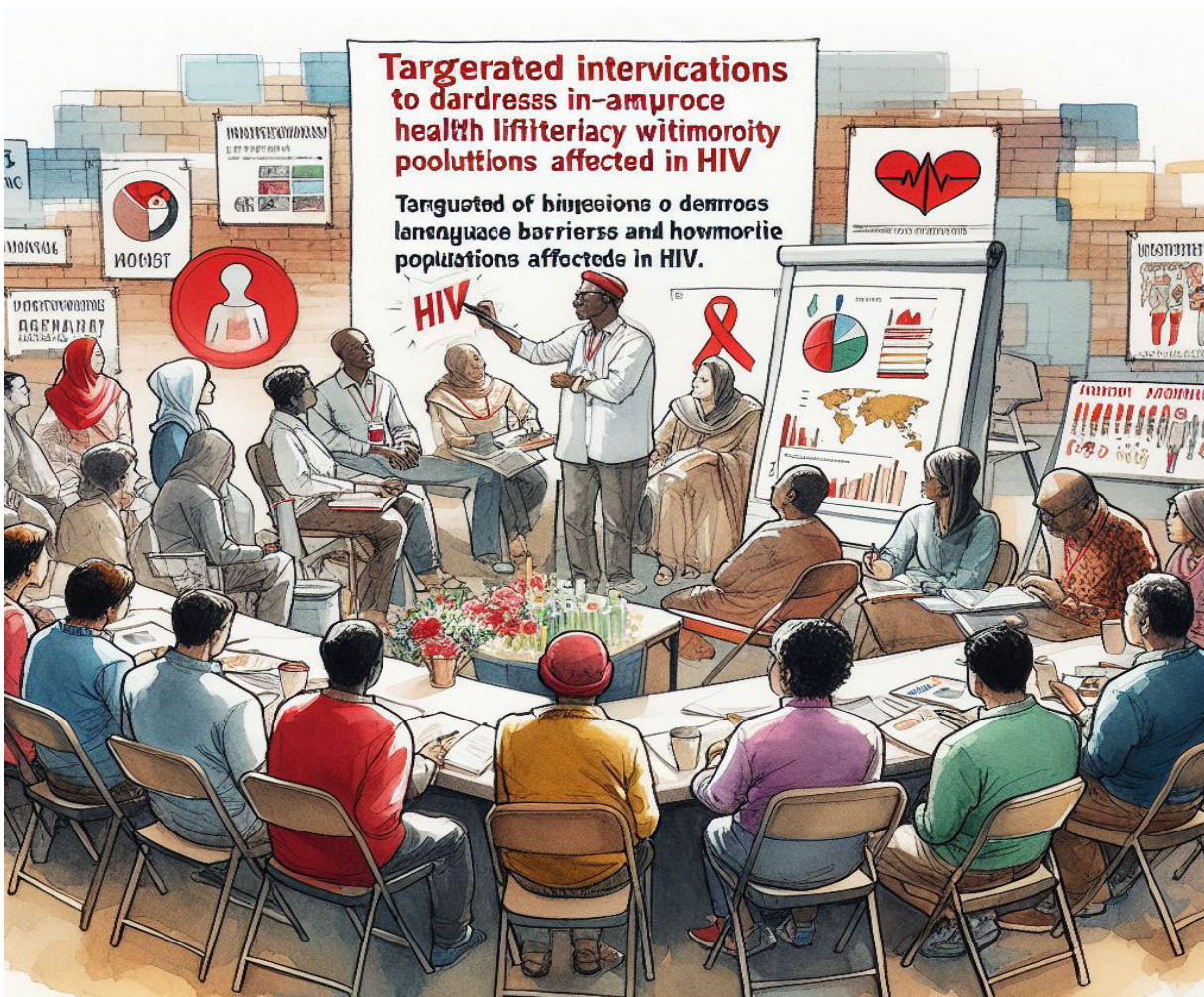
These biases can create environments that make the patient feel uncomfortable and hamper the patient-provider relationship and contribute to negative health care outcomes. This can manifest itself in a variety of ways. Examples include homophobic and transphobic views, racist views, and believing HIV patients to be poorer and less likely to be compliant (Geter et al., 2018). These attitudes can cause patients to feel marginalized and lead to medical mistrust and noncompliance (Feagin & Bennefield, 2014).

Attempts to remedy bias and stigma among health care providers are currently underway. Continuing education modules exist to help which usually have extensive literature on the topic (Calabrese et al., 2017). One study that explored what worked in large health care settings found that participatory activities were effective and helped HIV patients, White men who have sex with men (MSM), and minority MSM to receive better care (Nyblade et al., 2009). These activities included using toolkits, such as “Understanding and Challenging HIV Stigma: A Toolkit for Action,” which help engage the personnel. Other approaches which were also effective involved including HIV positive patients from these vulnerable populations and even HIV positive health care workers in these kinds of activities (Nyblade et al., 2009). This allowed these individuals to share their story and give the other health care workers a greater insight into how stigma negatively affected them and their care. These kinds of activities also help address PrEP and ways to bring it up to Black and Hispanic MSM in a non-judgmental way (Nyblade et al., 2009).

Addressing stigma in Black faith-based groups has been the focus of some studies with results showing that with proper education, HIV stigma can be reduced in these organizations thus enabling them to be accepting and helpful toward members of the community that may look to them for social support. A recent study had similar findings but also implemented a protocol to help establish a stronger relationship between faith-based centers and hospitals which may prove to be helpful for these populations (Bradley et al., 2018).

In Hispanic faith-based groups a similar strategy has been employed to address HIV related stigma and encourage HIV testing using a peer-driven approach (Flórez et al., 2017). After participating in this program, the participants reported having a more thorough understanding of how HIV is transmitted, how people deal with HIV, and the consequences of HIV stigma (Flórez et al., 2017).

Another similar approach to address Hispanics and HIV stigma outside of a faith-based context has been one which uses promoters, who are people that are either HIV positive or family members of those with HIV.



(Rios-Ellis et al., 2015). This program succeeded by incorporating several culturally apt concepts such as respect, confidence, and the importance of family into activities for participants (Rios-Ellis et al., 2015). After the activities 62% of the participants were more willing to discuss HIV, 63% reported they would be more likely to associate or help someone with HIV, and 82% suggested they would be more likely to practice safe sex (Rios-Ellis et al., 2015).

Conclusion

HIV continues to pose a threat to minority communities owing to a plethora of structural and socioeconomic barriers. Some of the obstacles that stand in the way of reducing these disparities not only are institutional but also have a basis in ideas and beliefs that permeate within the cultures of the most vulnerable groups and health care (Mogobe et al., 2016). Obstacles such as stigma, bias, and health literacy are currently being addressed through various methods which have been highlighted in this paper.

Current approaches like media campaigns, programs aimed at health care providers, and community interventions including those that use faith-based entities have shown some promising success in addressing these problems. These strategies and programs have attempted to address issues like language barriers, health literacy, and HIV stigma and biases within and directed at the Hispanic and Black communities. These issues that patients face are important for health care providers to consider and understand since they can provide a stronger insight into what makes the patient a human beyond a set of clinical symptoms and reasons why the patient may present as they do. If greater measures and efforts are not taken to address these issues within the minority communities, HIV rates will continue to increase and put these vulnerable populations at increased risk for negative health outcomes and place more pressure on an already stressed health care system.

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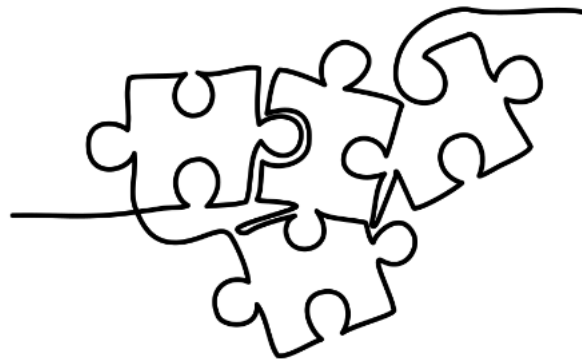
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Pieces of a Healthy Heart

Serena Young and Jasdeep Kaur



This digital art composition showcases a diverse array of medical practices, weaving together alternative, allopathic, and Western approaches. Within the artwork, the healing traditions of herbal medicines reflect the rich tapestry of India and Africa, where healers harness the potency of various plants, roots, and herbs for therapeutic purposes. This piece also captures holistic healing, portraying Homeopathy alongside self-healing methodologies such as acupuncture, chiropractic, yoga, and sauna practices. Each element contributes to the narrative, which illustrates the global versatility of how different cultures choose to address health and well-being. In a contemporary twist to this, the artwork incorporates symbols of Western medicine, featuring depictions of pharmaceutical drugs and vaccines. Different doctors from all around the world utilize various methods to cure their patients, thus proposing the puzzle piece. These illustrations are depicted in each puzzle piece which are all connected, showcasing a fusion of traditional wisdom and cutting-edge advancements in the pursuit of wellbeing. This piece depicts the importance of cross-cultural medicines and how they can all be used to achieve this common goal.



The Witch Inside

Alexis Ellerbe

This isn't a happy story. But it is a story y'all must hear, and y'all must hear it, here and now. I'm getting too old to keep telling it, and you must take over for me, ok? It's imperative that you keep telling it. Y'all have to promise. This is a true story, and the others must be warned. It is almost my hope that you'll fall asleep by the end, so you won't know the pain. But the end isn't the worst part, it's the middle, and you'll definitely be awake for that part.

Best if you come 'round the table and listen.

Now first, you must know that the witches come at night. They come on brooms flying through the skies with the squeals of delightful horror trailing on their heels; on the backs of rats, cockroaches, and gremlins of the night; on the crests of waves, swimming with the most disgusting beings that reside in the depths of the ocean.

They come with the purpose of abduction. Not just for your children, or your spouse, or your beloved belongings, but your healthiest. Your best and brightest, your spiritually enlightened, your physically fit, and your emotionally content are all prey to these descending beings.

One such being is particularly frightful. Not because her face is marred with the scars from her victims or because her eyes convey the despair of the thousands of spirits she has taken, but because she comes when you are at the peak of your already fleeting life. She loves to devour the soul of a person who thinks they already know the world, the stars, and everything in between. She lures them in with promises of grandeur and success and friends and the most passionate and fruitful love. But that's not what happens my dear children.

Instead, she guts them. She rips from them everything that made them special, everything that made them whole. She transforms their minor insecurities into mountains of self-doubt, fear, anxiety, and depression so insurmountable that these people

go running into her arms. But that's the ending, and I'm getting ahead of myself. To fully grasp the net this witch has cast, I must first start from the beginning.

This story is about a pair of twins, perfectly alike in every way, Alice and Alex. Their caramel skin glowed in sunlight and moonlight alike, with eyes so dark they were pools of onyx that shimmered with every emotion, and their hair swayed with the wind and curled at the slightest hint of moisture. They were short, and proudly so. They were vivacious, kind, and the people everyone wanted to see. Their smiles lit up the room, and their laugh attracted attention for miles. Truly intelligent individuals—both with academic scholarships to a highly prestigious university. They were happy. And it showed. Their combined aura emanated for miles in every direction, a homing beacon for the witch.

If anyone was watching the grimy rooftops on the outskirts of town, they would have seen a perversion of a woman—tattered rags only barely covering her distorted bodice, hair infested with dirt, bugs, and leaves. They would've heard the growl of a starving woman on the hunt. If only someone had seen her.

Alice used to love the beach. Alice at the beach was an Alice in perfect bliss. The waves soothed her soul, and when the sand curled around her toes she felt as if she was being wrapped in a warm hug. The beach was her true love, but the witch took that from her. So quickly, so silently, that Alice never made a sound.

Alice and Alex's 18th birthday, supposedly a day of wonderful excitement, was July 1st. In the early morning when the sun was barely rising, gentle knocks on the window startled Alice out of her wonderful dreams.



Alice and Alex shared a room, but Alice was by far the lighter sleeper of the two. Against her better judgement, Alice crept to the window pane to see what had caused the disturbance. And to her dismay, she found a candle dimly lit sitting just outside the glass, its glowing hues blending with the pale morning light. With curiosity bubbling within her, she gently opened the window, only to be ripped out of her home into the air. Grasping for anything to save her, she latched onto the limb of the tree that resided next to her window. Holding on for dear life, she struggled and struggled for some salvation. She thought she'd found it in a branch to leverage herself up. But just as she applied her body weight to the thing that was supposed to be her lifeline, it snapped. And at that moment, she was both saved and destroyed.



The witch grabbed her arm and pulled her onto a higher, more stable branch. I won't say she pulled her safely into her arms, because just the mere contact between the two started the process of draining Alice's life. In the midst of Alice's thankful praise, she had yet to notice the gnarled claws that dug holes into her skin, and the eyes that bore into her soul. She was busy being grateful when she should've been running away. With appreciation in her heart, she barely stopped to question how the witch appeared or how she was even ripped outside in the first place. She should've. But she didn't. Instead, Alice let the witch continue to dig into her arms and bore into her soul. Then, after a moment, the witch disappeared into thin air as fast as she had come. Dazed and high on adrenaline, Alice stumbled back through the window and climbed into bed, not yet feeling the effects of this encounter. Wounds already closing up and scarring, she went back to sleep.

Alex had seen everything, though, and she made a promise that the witch wouldn't hurt her sister again. But, it wasn't that simple.

On Alice and Alex's 18th birthday, they went to the beach at sunset to have a bonfire. The sun touched the ocean with the sensuality of two lovers dancing under the moon, and the sand was just on the precipice of cooling off in the absence of the sun. It was absolutely the perfect night. But Alice was not at rest. Her scars were the only physically permanent memory of the early morning, but her aura had waned as well. She smiled but not as bright; she laughed but without as much vibrancy; she glowed but not as radiant. She sat, and she smiled through her party, but Alex knew she wasn't the same Alice as the one she had said goodnight to last evening.

Alex poked and prodded and tried to get her sister to tell her how she was feeling, but Alice's only response was:

"I'm fine."





She wasn't. And she wouldn't be. As the days passed, Alex no longer recognized her sister. The beach was no longer her love; she had no energy to leave the comfort of her bed. She sat isolated in her room until it was acceptable for her to fall asleep at 9 PM. The scars hadn't gone away. In fact, they had festered and bled, and now, she wore bandages on her forearms like protective armor. Her glow had faded into black eyes and a sullen soul. Alex persisted, however. She engaged her sister, made sure she'd showered, and said at least 5 sentences, a feeble attempt to remind Alice just how beautiful her voice was. Oh, how she'd wished that would've been enough.

But on Christmas Eve, in the dead of night, the witch came back . She snuck into her room with the cunning of a lioness and the hunger of a malnourished killer whale. The gnarled woman crawled through the window, her fingers gripping the window pane like vices as she pulled herself through. The silence was suddenly eerie and tense as opposed to its normal lethargy. The wooden floors creaked under the weight of the demon disguised as a woman. The witch hobbled across the room towards Alice's perpetual habitat that was her bed, and gently, ever so gently, took Alice's hand into her claws. And all Alex could do was stare. Stare as Alice walked

willingly out of the window with her back poised and straight, with her smile natural and carefree, and with a sashay in her step that Alex hadn't seen in months.

I never saw my sister after that night. So, as you fall asleep and dream your pretty, pretty dreams, I hope you remember that this was not a happy story, but a terrible memory. I ask that if you notice your loved ones pulling away, withering away, you call for help. From your parents, from your friends, from your counselor. Someone. Anyone. And I pray that you lock the window.



My Dance with Time

Lauren Ngo



We wait to graduate high school, then we wait to graduate college, then there's medical school, then residency, then fellowship, then retirement. For us to be happy, we, as humans, desire to meet goals we set for ourselves, yet we only have a limited, undisclosed amount of time on this Earth to achieve them. We all have experienced this arduous struggle with time, where there never seems to be enough of it. Time always seems to fall just short for things we want to last but drags on for things we don't. I've always felt this way acutely, but recently I have been trying to re-evaluate not just my mindset of time but my approach to it. As such, this piece is both an outlet and inspiration for my relationship with time.

Like anything in life, having a healthy and balanced relationship with time is a carefully committed partnership. There are certain steps to take to keep in sync, commitments to keep, and a dedication to each other. In addition to the dancing number depicted in the piece, the woman is wearing a popular traditional Vietnamese garment called an ao dai. This distinction was made not just to reflect my heritage but also to highlight the predominance of Eurocentric fashion in art.

The creation of this piece is a reminder to be kind with the time that we have, for all the periods of agonizing and waiting, time will pass anyways...



Writing Won't Warp War

Ella Scott

These penned letters won't shield civilians.
Metaphors won't dry a motherless child's eyes.
As I reach for lined sheets, bullets rain on millions.

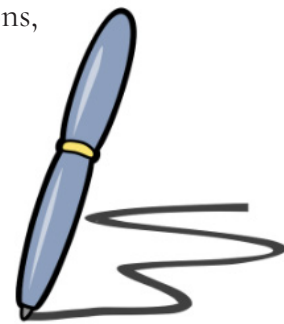
My handwriting will occupy a page, not rebuild bombed urban areas. "We fight for peace," food the government provides: lies.
These penned letters won't shield civilians.

Soldiers cling to each other rather than their weapons.
A father's tears stain his children before whispering goodbyes.
As I reach for lined sheets, bullets rain on millions.

Bodies line the streets as pleading nurses are replaced by fill-ins performing amputations in the lobby. Award a Nobel Peace Prize if these penned letters can shield civilians.

Children roam among rubble where they frolicked with companions, but what once flourished in fields is mowed down or dies.
As I reach for lined sheets, bullets rain on millions.

Teacup-sized hands wipe a pale pink nightgown of vermilion.
Then another evacuation helicopter flies
if these penned letters won't shield civilians.
As I reach for lined sheets, bullets rain on millions.



There's beauty in the small things, too

Ava Trinh





In the hustle of our fast-paced lives, taking mindful minutes to connect with the beauty of nature can be a transformative and refreshing experience. Amidst the chaos, a few quiet moments spent in contemplation, surrounded by the wonders of the natural world, can bring a sense of calm and clarity. Whether it's the gentle rustle of leaves in a serene forest, the rhythmic crashing of waves against the shore, or the vibrant colors of a sunset painting the sky, nature offers a sanctuary for mindfulness.

I captured these quiet photos when I found myself immersed in the appreciation of my surroundings. The focus of my photos may not be anything special, but to me, I found beauty in them. Each picture led me to reflect on my blessings, such as my ability to see and a functioning body, momentarily bringing peace to my mind. In each location, I became aware of what was happening inside of me—heart, mind, and body—and outside in my environment, accepting all the sensations, emotions, and thoughts that came to me.

I want to share with readers that these mindful minutes allow us to tune into the present moment, fostering a deeper connection with the world around us and providing solace for the mind and spirit. The beauty of nature becomes a powerful reminder of the importance of slowing down, appreciating simplicity, and finding harmony in the midst of life's complexities. I invite everyone to take a moment of reflection, relax, and reset the mind and body; a little bit of mindfulness can go a long way for our well-being and health.

Breathe in. Breathe out. Let us practice the art of appreciation and find joy in the simple things.



STIMULUS

CREATOR
BIOGRAPHIES

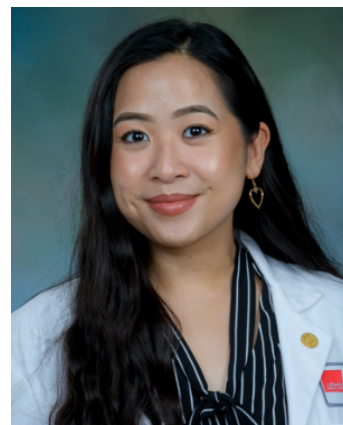


Jessica Nwankwo, the creator of “Underneath the Sycamore”, is an alumna from the University of Texas at Arlington with an Honors B.S. in Biology and B.S. in Psychology with minors in Medical Humanities & Bioethics and Clinical Psychology

Jessica Nwankwo is a UTA alumni who studied Biology and Psychology during her time there. While she has her sights set on a career in the medical field, these aspirations do not detract from her intrinsic creative nature; rather, Medical Humanities has shown her how these two passions can intersect. Art and writing are ways Jessica is able to bring life to her reflections, observations, and experiences and share these things with others.

Caroline Nguyen, the author of “Mentorship that Heals: Leading with Kindness in Medicine”, is a third-year medical student at the University of Texas Medical Branch John Sealy School of Medicine and an alumna from the University of Texas at Arlington with a B.S. in Biology with a minor in Biochemistry.

Caroline Nguyen’s passion for medical humanities originates from her belief that before being a clinical science, medicine is a unique way to connect with others in their most vulnerable states. Her piece “Mentorship that Heals: Leading with Kindness in Medicine” was inspired by a mentor’s support for her wellness as both a student and individual during one of the most difficult moments of her medical school education thus far. As her experience was integral in reinvigorating her perseverance in her medical training, she wanted to share the importance of finding proper mentors to support you through your darkest times.



Karli Kirkendoll, the creator of “Breathe” is a Biology undergraduate student at the University of Texas at Arlington.

Karli Kirkendoll embarked on her academic journey at TCC before progressing to UTA, where she currently pursues a degree in biology with a pre-med focus. Originally from Oklahoma City, Karli relocated to Texas during her freshman year of high school. In her household, she grew up with her amazing, inspiring mother and younger brother in which they have a super tight bond. Karli is a young, proud Puerto Rican woman. High school was an excellent period for Karli as she actively engaged in both sports and the arts.

As a skilled soccer player, she showcased her talents on the field, while her artistic abilities in multimedia artwork garnered her several accolades. Beyond her artistic achievements, Karli loves to travel and has an adventurous spirit that led her to explore various corners of the country and the Caribbean. Eager to make a difference in healthcare, Karli is currently in the process of becoming an Emergency Medical Technician (EMT) and one day become a doctor in the future. With a multifaceted background that combines academic excellence, artistic accomplishments, and a passion for healthcare, Karli Kirkendoll stands strong for a future marked by contributions to both her community and the field of medicine.

Megan Mosman, the creator of “Grieving Spirits at the Empty Grave” is a University Studies senior at the University of Texas at Arlington.

Megan Mosman is a native of Fort Worth, Texas. She graduated from Tarrant County College, South Campus, in Spring 2022, with an Associate of Arts Degree. Next, she transferred to UTA to pursue a Bachelor of Science degree in University Studies, with a focus on Art and Humanities. She expects to graduate in Spring 2024. Her favorite classes have been advanced painting and humanities. In 2023, Megan Mosman had a solo Art Exhibit of her paintings, entitled “Fantasy Lands,” at Gallery West at UTA. She has participated in group exhibitions in 2024 at the NASAD Exhibition, Gallery 295, at UTA and in 2023 in the On the Spectrum Exhibition, Art Corridors Gallery, at Tarrant County College SE Campus, Arlington, Texas. Also, Megan is a member of the Phi Kappa Phi Honor Society, UTA Chapter. For extracurricular activities, Megan enjoys visiting national parks, swimming, dancing, playing basketball, and attending summer camps.



Madison Rodriguez Fowlkes, the creator of “More than Existence” is a senior Biology major at the University of Texas at Arlington.

Madison Rodriguez Fowlkes is a pre-medicine senior at UTA, graduating in Spring of 2024 with her Bachelor of Science in Biology. Between working and classes, she enjoys traveling and exploring new places, reading, creative writing, and simply existing day to day with her little family. Madison draws inspiration from fleeting moments one might wish they could have lingered in a bit longer, as well as those that one might hope to eventually let go of. She believes every moment, whether it is a drive to the grocery store flooded with the light of the setting sun, a random weeknight take-out date, or an opportunity to make an unexpected connection, should be cherished.

Through writing, Madison believes that one can fully immerse themselves and live in emotion for a while. This is not only to move forward from them but to also revisit those moments as one continues to evolve throughout life. Madison hopes that as she evolves throughout life, she can continue to try and build connections with others through these shared emotions we often feel compelled to conceal.

Agnes Otieno, the author of “perhaps”, graduated from UTA in Spring 2023 with a Bachelor of Science in Biology.

She has always been interested in writing and shortly dabbled in blogging in high school. Most of her work revolved around current events and issues that made me pause and think. As with most great ideas, her short piece on Natural Selection came to me while showering. It was a creative assignment for her ecology class, but since she was doing in the class, she had initially planned not to submit it, but it turned out better than expected. She hopes this piece prompts the reader to embrace a new perspective on survival and encourages them to reflect on how the traditional definition of Natural Selection fits in the world we live today.



Dr. Steven Gellman, the author of “Shoreline Allure”, and founder of the Medical Humanities program at UTA.

He arrived at UTA after practicing Family Medicine for over 30 years in Coppell, Texas. In addition to teaching multiple Medical Humanities courses, he enjoys assisting health professions students with career preparation and graduate program admissions. In this image, he combines his lifelong passion for photography with his spiritual home at the shoreline.

Margaret Syllah, the creator of “The feeling” and “Through a Doll’s Eyes”, is a nursing student at the University of Texas at Arlington.

Margaret Syllah is a J1 nursing student at the University of Texas Arlington, striving to be either a labor and delivery nurse or a NICU nurse. She loves children with all her heart and seeks out any opportunity to work with them. Currently, she is employed as a Toddler Teacher with Lionheart Children’s Academy in Plano, fulfilling her passion, working with kids ranging from one to two years of age. She is a first-generation African and American student and the first of her family to attend college. She is the oldest of 3 siblings. She works every day to honor God and her family. She loves service work and giving her time and resources to help others. She is very hard-working and sees everything through to the end.

She graduated from Sachse High School in 2021. She took many Honors, AP, and Dual Credit classes to help set her up as best as possible. She was awarded Clinical Rotation Student of the Year and Food Science Student of the Year. She is fluent in both English and French. During her free time, she enjoys writing, drawing, listening to music, watching cartoons, and spending time with her family and friends. Margaret is a child at heart and does what she can to share carefree spirit with others.



Ami Patel, the creator of “broken hands”, is a senior undergraduate student pursuing a B.S. in Public Health at the University of Texas at Arlington.

Ami Patel has formerly served as the President of the on-campus organization Mavericks Medical Humanities at the University of Texas at Arlington. She is expected to graduate in the Spring of 2024 and has plans to pursue a master’s degree in the future. Additionally, in the future she hopes to pursue a career in infectious disease or epidemiology. She created “broken hands” to provide a new perspective on the decisions we make as time passes, with an analogy of hands moving on a clock to the choices we make as time progresses. In doing so, the piece also reflects our ability to move on in spite of mistakes that have been made as the future is yet to come.

Shuang Gou, the creator of “bipolar”, is an intermediate graduate student at the University of Texas at Arlington.

Gou was born in the Sichuan province of China. Having earned her BFA from China, she is currently pursuing her MFA as a graduate student of intermedia at UTA. Gou’s artistic journey has seen multiple works featured in various exhibitions in Texas and Chicago and has recently completed a solo exhibition in the University Center Gallery at UTA. Her artistic endeavors revolve around probing the spiritual essence of humanity within the modern world and also shows her reflections on the subtle and complicated psychological world.

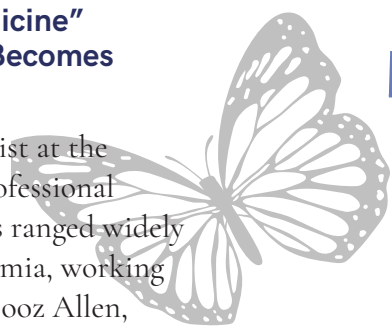


Amidst the relentless whirlwind of our fast-paced and highly commercialized society, she craves the rediscovery and reconnection to our innate nature. Through many of her paintings, Gou strives to capture the vibrancy and richness of life, addressing the challenge of finding balance in our busy modern existence and identifying sources where individuals can replenish their energy. Gou seeks to create a delicate balance between illusion and reality, allowing viewers to venture into a realm where their own interpretations and emotions come alive. Her aim is to create a profound connection with the audience, allowing them to perceive the world from a different perspective. Gou hopes her art can build up communication and understanding beyond the boundaries of languages, culture, and races and provide the audience with a different angle of viewing this world. In the words of Zen Buddhism, “communication from heart to heart, without the need for words,” resonates with her artistic mission.

Dr. Ogan Gurel, author of “Why Did Captain Miller’s Hand Tremble in the Movie Saving Private Ryan? Where Medicine influences Art & Art influences Medicine” and “Interpreting Don McLean’s “American Pie”: When the Meaningless Becomes Meaningful



Dr. Ogan Gurel serves as BioHealth Innovation Specialist at the University of Texas – Arlington and the Multi-Interprofessional Center for Health Informatics (MICHI). His career has ranged widely across medicine, scientific research, industry and academia, working at companies and institutions such as IBM, Samsung, Booz Allen, Sungkyunkwan University, DGIST, and the Solbridge International School of Business (Korea) as well as many innovative startups. Prior to surgical training at the Massachusetts General Hospital, Dr. Gurel obtained an MD degree Alpha Omega Alpha from the Columbia University College of Physicians & Surgeons (also doing graduate work in structural biology, earning an M.Phil degree) and received his Bachelor’s degree in Biochemical Sciences cum laude from Harvard College working with Prof. Martin Karplus (Nobel Prize in Chemistry 2013).



Authoring 14 peer-reviewed scholarly papers (as well as a novel, *Waves*), presenting nearly 200 conference proceedings, and co-inventor on ten patent applications (four granted), Dr. Gurel has also given keynote addresses and other speeches at scientific and business conferences and seminars worldwide. Throughout his career, Dr. Gurel has always sought to integrate science and art, having published a novel, *Waves*, that melds science into art, and teaching the mini-MD, a comprehensive overview of medicine, that brings art into science.

Amanpreet Chahal

Amanpreet Chahal is a senior at the University of Texas at Arlington majoring in Biology with a minor in Neuroscience, on a pre-health track. Out of the many titles in her life, a Sikh holds the most importance. The word Sikh in Punjabi means to be a “learner” or a “disciple”, contributing to her belief that learning is continuous throughout one’s life. She strives to integrate the values of Sikhi to her daily life, through Kirat Karni (honest living), Vand Chakna (sharing with others), and Naam Japna (Remembering God). She also wishes to integrate these values into her future healthcare practices, leading to more inclusive, compassionate, and effective healthcare that benefits individuals and communities alike.

In her spare time, she volunteers at Texas Health Resources Arlington Memorial and with the children of her local Gurudwara. Additionally, she enjoys photography as a creative outlet, showcasing the human experience through a lens and having the ability to share that souvenir with others. This love for photography coupled with her religious and cultural background was the foundation for the piece, “Meri Mitti Meri Maa: A Celebration of Punjab’s Land.”



Joshua Cupps, the creator of “1958 Chevy Impala”, is an alumnus of the University of Texas at Arlington.

Josh is a UTA alum and a former Mavericks for Medical Humanities President. Through his time taking coursework in Medical Humanities and becoming more involved with the student organization, he has seen the beauty of the field in connecting people and ideas closer than before. His experiences with Medical Humanities has transformed his perspective of holistic medical practice and deepened his self-understanding by inspiring him to use his writing as a tool for creative expression.

Jacquelyn Argueta, Grace Postlewate, Marisela Sierra, and Rim Solomon, the creators of “Domestic Violence Survivors Health Campaign.”

Jacquelyn Argueta completed her BA in Communication Studies; achieving the distinction, cum laude from the University of Texas at Arlington, in December 2023. Jacquelyn was born and raised in Fort Worth, Texas, and has a passion to serve her community and make meaningful change. As a first generation college graduate, she strives to inspire others by showcasing resilience and determination. Post-grad, Jacquelyn continues to expand her skills as she transitions into a new leadership role in 2024.



Jacquelyn Argueta, Grace Postlewate, Marisela Sierra, and Rim Solomon, the creators of “Domestic Violence Survivors Health Campaign.”

Grace Postlewate is a current undergraduate student at the University of Texas at Arlington pursuing her bachelor’s degree in Communication Studies. She is currently working as an undergraduate research assistant for Diversity, Equity, and Inclusion initiatives in the professional world, and is a member of the Lambda Pi Eta Honor Society. Grace worked in operations as a retail manager and recently transitioned into the Human Resources department as a Generalist of a mid-size organization at the end of 2022. She oversees administration of benefits and accommodations, and assists colleagues in accessing wellness options. Grace has been recognized at her educational institution on the Dean’s list for the past four semesters, and was chosen as the first recipient of her organization’s Core Values Awards for Care. She is dedicated to advancing understandings of wellness, and aims to bridge knowledge gaps about domestic violence and sexual assault by promoting tangible solutions for health campaign effectiveness. For inquiries or further discussion, she can be reached at grace.postlewate@mavs.uta.edu.

Jacquelyn Argueta, Grace Postlewate, Marisela Sierra, and Rim Solomon, the creators of “Domestic Violence Survivors Health Campaign.”

Marisela Sierra is in her last semester at The University of Texas at Arlington, she is pursuing a BA in Communications Studies. She is also currently enrolled in a teacher certification program and is expected to begin teaching in the fall of 2024. Marisela’s passion has always been to help children. She is excited for her future as an educator and eager to make a difference in her community.





Jacquelyn Argueta, Grace Postlewate, Marisela Sierra, and Rim Solomon, the creators of “Domestic Violence Survivors Health Campaign.”

Rim Solomon is a student at the University of Texas at Arlington graduating with a Bachelor of Arts in organizational communications, with a minor in leadership in May of 2024. She has an ethnic Eritrean background but was born and raised in Dallas, Texas. Her goals include but are not limited to advocating for minority women, advocating for diverse leadership as well as continual professional development.

Rim is focused on her professional development, and in doing so is currently working on two certifications- operations management, and security management. She plans to retrieve a Project Management Professional certification after obtaining experience in the workforce post-graduation.

Raeed Chowdhry, the creator of “Gone but Not Forgotten” and “Ali from Aleppo”, is a senior undergraduate at the University of Texas at Arlington.

Raeed Chowdhry is a senior at the University of Texas at Arlington, pursuing a dual major in Biological Chemistry and Biology on the pre-med track. Raeed aspires to attend medical school and specialize in cardiology, driven by a desire to provide compassionate care to underserved populations. As a first-generation Pakistani-American, Raeed has been deeply influenced by the experiences of the immigrant and other historically neglected communities. Witnessing their unique struggles with discrimination and poor access to healthcare, Raeed was inspired to pursue a career in medicine to address these challenges.

Raeed was part of the inaugural cohort of medical interns at the Dr. Bob Mann Medical Clinic at Mission Arlington, where he assisted people from underserved and underprivileged communities to receive access to quality healthcare at no additional cost to them. Additionally, Raeed has conducted research in Organic Chemistry, Analytical Chemistry, and Biochemistry, contributing to projects aimed at improving existing medications, developing novel medicines, and enhancing diagnostic techniques for improved healthcare and patient experiences. In his spare time, Raeed volunteers as an online ESL teacher at the Permian Basin Adult Literacy Center, assisting people with learning English to help them achieve their professional and personal goals. Raeed believes that his diverse experiences, ranging from medical internships to research and community service, will guide him to become a caring, well-rounded healthcare provider in the future.





Hannah McDaniel, the creator of “Kidney Histology x400” is a senior undergraduate student majoring in Biology at the University of Texas at Arlington.

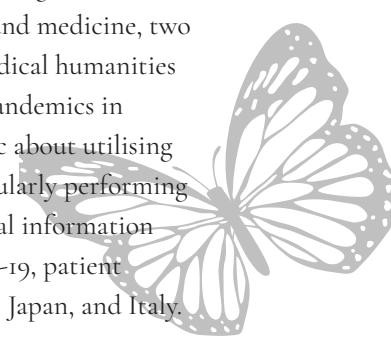
Hannah McDaniel is a senior biology student at UT Arlington. She was inspired to create “Kidney Histology x400” after she took anatomy and found that the kidneys were her favorite organ system. After seeing how many patients are affected by kidney disease, she wanted to attract attention to the continued efforts of researchers and developers in creating the artificial kidney. She plans to pursue medicine and will be applying to medical school this May. Art has always been one of her passions along with reading, and baking.

Esther Kentish, the author of “The Poetry of Dance: Vindication of former selves through our Secret Dance Lives”

Esther Kentish holds a Bachelor of Arts (2017) in English Literature and Language with a minor in Philosophy from the University of Texas at Arlington, a Master of Science (2018) in Technical Communication from North Carolina State University, and a Master of Science (2020) in Medical Humanities from King’s College London. Esther matriculated at the University of Oxford in 2020 and spent two years in the Faculty of English. Esther worked with patients in a hospital as a Mental Health Technician in the geriatric in North Carolina, United States, and is currently working in Britain on COVID-19 research. Her research focuses on scientific communication, medical humanities, poetry, life writing, autobiography, and biography.

Authoring 6 books, one of which, *The Emotional Healing Behind Words*, is a

poetic memoir featuring a critical, meta-data analysis of 47 poems written between 2009 and 2012. Esther is a member of the Royal Society of Literature and an Associate Member of the Royal Society of Medicine. TEDx speaker and published author, Esther Kentish, examines the interwoven parts and interactions between illness and narrative in projects that communicate the scientific aspects of medicine and illness through life-writing, patient narratives, and digital media. In addition, the publication of Esther’s literary work promotes de-stigmatization of illnesses while investigating their origin and cause. Esther’s study focuses on English literature and medicine, two specific subfields under Medical Humanities. Esther intends to use her research platform in medical humanities and literature to examine the impacts of mortality from diseases and illnesses, the realities of pandemics in both abstract and physical spaces, and its impact on both gender and race. Esther is enthusiastic about utilising qualitative tools such as metadata analysis and data visualisation as well as artistic tools (particularly performing arts such as spoken word poetry, music, and dance) to communicate statistical value and medical information regarding the aetiology and progression of disease. Esther is presenting her research on COVID-19, patient narratives, autobiographies, and biographies in the United States, the United Kingdom, France, Japan, and Italy.





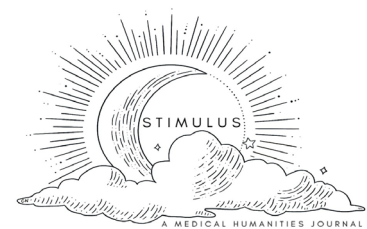
Sparshita Dey, author of “The Poetry of Dance: Vindication of Former Selves Through Our Secret Dance Lives”

Sparshita Dey is a 3rd year DPhil Candidate of Particle Physics at the University of Oxford, working predominantly on the LUX-ZEPLIN experiment, a world-leading dark matter direct detection effort. She is also involved in the HydroX experiment at Stanford, SLAC, as a visiting scholar, looking at the potential of doping dual phase xenon time projection chambers with hydrogen to improve sensitivity to low mass dark matter.

Having trained in both Hindustani classical music and the North Indian classical dance form kathak from a young age, she has always had an avid interest in the arts. She is particularly fascinated by the interplay between scales (or “raags”) and beats, which often seem to mimic the behaviour of patterns and symmetries seen in Physics. Her interest in this interplay between the arts and Physics (and Mathematics as the language connecting both) has led to an active interest in interdisciplinary projects, teaching and outreach activities, which besides music and dance, is often something she enjoys doing in her free time.

Prisha Kakliya, author of “The Paradox of Knowledge: A Personal Exploration Inspired by Descartes”

Prisha Kakliya is a first-year undergraduate student at UTA with a keen interest in medical ethics. She was inspired by René Descartes’ “Principles of Philosophy,” her favorite quote became a catalyst for self-discovery. In her piece, she confronts the realization that her knowledge was often superficial, leading her to embrace a mindset of active skepticism and continuous learning.



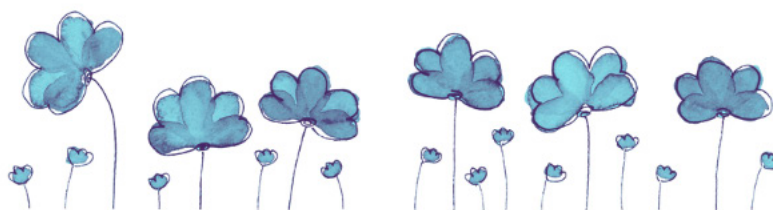
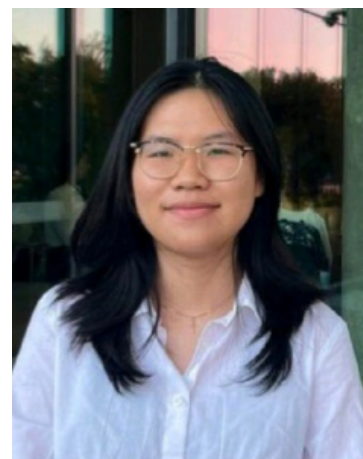


Anthony Nguyen, the creator of “DREAM | CHEMO BRAIN” is a junior Microbiology student at the University of Texas at Arlington.

Alongside being a student, Anthony Nguyen works as a medical scribe in an emergency room setting. He is the youngest person in a family of seven, and lives with his mother, father, sister, and three dogs. Creative writing has been his hobby for several years; however, he stopped writing as frequently after starting university. To reignite his passion, he published a short story to Stimulus for people to relate with and enjoy. Other fun facts about the author are that hippos are his favorite animal, he enjoys playing video games, and he does research on insect gut microbiomes under the supervision of Dr. Ravenscraft!

Lisa Phan, the creator of “temporary forever home”

Lisa Phan, having an interest in both science and art, considers medical humanities to be a well-deserved area of her studies. She has found it valuable for her self-introspection and as a person aspiring to work in the healthcare field. Her art piece hopes to illustrate what it may feel like for someone to find themselves in a long-term care living arrangement when initially, things were supposed to be temporary. It’s hard to find comfort in a new place even for the sake of your health. She hopes her art piece shows the importance of viewing the world with empathy.



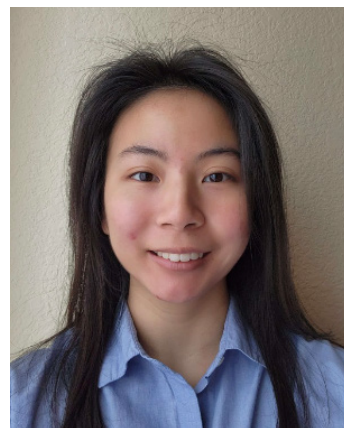
Arinze Awagu, the author of “finding hope” was born and raised in Lagos, Nigeria to a catholic household with 4 siblings.



He is a medical microbiologist. He has been involved with the Mavericks for Medical Humanities since 2021. His interest in medical humanities stems from his own experiences as a patient all through his life, the significance of humanity in medicine is really important to him because regardless of whatever condition a person has, they are human first. He particularly appreciates the emphasis on the patient-centered care and how it impacts the patient's experience. He is currently pursuing his second bachelors degree as a biology major on the pre-med track and pursuing the minor in medical humanities. His piece was inspired by his personal experience with sickle cell anemia and how those experiences have led him to pursue a career as a physician, and one that can bring hope to as many patients he encounters.

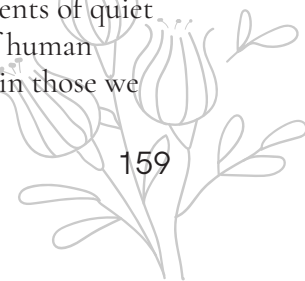
Christina Nguyen, the creator of “commentary on octopus pots” is a senior Biology major at the University of Texas at Arlington

Christina Nguyen is a pre-medicine student and Vice President for Mavericks for Medical Humanities. She is an avid adventurer who enjoys concerts and traveling in her spare time. Christina finds inspiration to write from her experiences traveling abroad, volunteering at the Mission Arlington Medical Clinic, from scribing in the emergency room, from interacting with fellow passionate peers, and from her time spent resting. She hopes to one day serve as a physician who aims to improve community health education.



Ava Trinh, the creator of “Using Humor in Healthcare” and “There’s beauty in the small things, too” is a first year undergraduate student majoring in Biology at the University of Texas at Arlington.

Ava Trinh is currently a UTA freshman biology major on the pre-dental track. Ava hopes to share with others that, amidst the constant stress and rigors of academia, our ability to care for others is deeply intertwined with the capacity to care for ourselves. By taking moments to appreciate the little things all around — the laughter shared with friends, our blessings, and attention to the beauty in the mundane — students not only recharge in their own spirits but also cultivate a sense of empathy and compassion that can help shape their future interactions with patients. She believes that in these moments of quiet reflection lies the power to build deeper understanding of human experience, encouraging healing not only in ourselves but in those we are destined to serve.



Nahum Ding, the author of “Ugly is my Father”



Sejal Dulal, the creator of “Nature within You”, is a junior majoring in biology at the University of Texas at Arlington.

Sejal Dulal is currently a junior majoring in Biology and she has had a passion for photography from childhood. As an introvert, she finds difficulty expressing herself through words, hence she turned to photography to speak her mind. She loves capturing moments so that even when life happens, the memories still exist. Besides taking pictures of people and life around her, she finds herself indulging in photographing nature. Serenity is different for everyone, her serenity lies in taking pictures of the sky because of its mystery, from blue to pink, even the sky expresses itself differently and she finds that fact ever so comforting. With her photography, she hopes that more people see and appreciate the beauty of the world around them. She hopes that people take solace in nature during times of hardship to find peace within themselves.

Joshua Rahmon the creator of “ Ethical Standards of International Medicine When Comparing Eastern and Western Medicinal Practices” is a dual biochemistry and psychology major on the pre-med track of study.

In the future, Rahmon plans to become an emergency medical physician, so he can provide patient care at the most critical times of their lives. He enjoys learning about the Medical Humanities as it is an often underrepresented but integral part of complete patient care. Joshua is also an active member of undergraduate research at UTA with the McFarland Research Group. His research involves synthesis and characterization of light-triggered metallodrugs for cancer therapy. When he’s not studying, he enjoys spending quality time with friends and family, traveling, and enjoying time outdoors soaking up the sun.



He hopes his work will illuminate the need for compromise in an ever-globalized society, allowing others to become educated on the pros and cons of Eastern vs Western Medicine, while maintaining respect for all viewpoints. His work is dedicated to his parents, who have provided amazing guidance, and unconditional love for the entirety of his life; and to his grandmother, who is an absolute beacon of light and strength through adversity. To God be the Glory.



Samantha Chasteen, the creator of “Light Shines Through”, is a student at the University of Texas at Arlington majoring in psychology and minoring in medical humanities.

Samantha Chasteen is a proud Texan born and raised in Arlington, Texas. She is a first-generation college student currently majoring in psychology and minoring in medical humanities at UTA. She aspires to become a physician to serve and heal those in her community. Studying medical humanities has changed the way she views and approaches the world and herself. The art in the Stimulus showed her that art has an essential role in medicine and inspired her to create a piece of art depicting the common yet often overlooked experience of grief. She hopes that the art she has shared may resonate with those who view it. Samantha’s greatest inspiration and pride is her loving family that encourages her to strive to the fullest.

Hallie Young, the creator of “A Potential Approach to Ethical Embryonic Editing: A Proposed Philosophical Framework” is a philosophy undergraduate student at the University of Texas

Hallie Young defines her time at UTA with advocacy for humanity in medicine and a staunch commitment to legal scholarship. As a Philosophy Undergraduate, Hallie hopes her work sparks substantive conversation. Through thought and genuine compassion, she believes we all may change the world—One word at a time!





Juliana Le, the creator of “Liquid Gold”, is a senior majoring in microbiology with a minor in psychology at the University of Texas at Arlington.

Juliana Le, a senior majoring in Microbiology with a minor in Psychology, embarks on her journey as a dedicated scholar and aspiring healthcare provider. Hailing from Ho Chi Minh City, Vietnam, Juliana’s passion for medicine was ignited by her father, an esteemed orthopedic surgeon whose unwavering commitment and clear vision deeply inspired her. Juliana’s leadership shines through her roles as a teaching assistant in various labs and her current position as Student Director for the Leadership Honors Program.

Juliana also champions gender equity in healthcare through her executive position as a Public Relations Director for the Advancement of Females in Medicine organization. Beyond academia, Juliana finds solace in volunteering weekly at a cat cafe, embodying her compassion for both humans and animals. With a trifecta of certifications as a Pharmacy Technician, Phlebotomy Technician, and ongoing training as an Emergency Medical Technician, Juliana is committed to honing her skills in healthcare delivery. Her frontline experience has sensitized her to the pressing issue of medication affordability, particularly the soaring costs of insulin, which she explores through the lens of medical humanities in her project “Liquid Gold.” Juliana’s ultimate goal is to attend PA school and pursue a career as a Physician Assistant, where she can continue making meaningful contributions to healthcare.

Angela Silva, the creator of “Transcendence of Faith”, is an alumna from the University of Texas at Arlington with a B.S.

Angela Denise Silva Cruz, a native of San Antonio who spent her formative years in Dallas, is a versatile artist and aspiring scientist. Proud of her indigenous roots, Angela draws inspiration from her Mexican heritage in her art and daily life, her passion for expression has been on an unyielding journey of self-discovery through various mediums. Her skill has been recognized with notable placements at the Texas Art Education Association’s Visual Arts Scholastic Event (TAEA VASE). Angela’s passion for the natural world led her to pursue a Bachelor of Science degree in biology at the University of Texas at Arlington.



Currently employed as a veterinary technician, Angela finds fulfillment in caring for animals, including her own lively bulldog. Additionally, Angela enjoys immersing herself in the worlds of literature, writing, music, and activism finding solace and inspiration in these pursuits. With her impending graduation, Angela sets her sights on further studies in veterinary medicine and wildlife conservation, driven by her love for animals and desire to make a difference. Balancing her artistic and scientific endeavors, Angela wishes to epitomize the fusion of creativity and intellect.



Mohamed Abdalati, the creator of “The Impact of COVID-19 on Undergraduate Students’ Academic Performance at the University of Texas at Arlington”, is an undergraduate student at the University of Texas at Arlington with a double major in biology and microbiology and a minor in Arabic language.

Mohamed Abdalati is a distinguished Honors undergraduate student at The University of Texas at Arlington, with a Bachelor of Science in Biology and Microbiology in addition to a Minor in Arabic Language (Spring 2024). A Texas native with formative years spent in Libya, Abdalati’s return to the U.S. in 2018 marked the beginning of a standout academic trajectory that underscores his commitment to scholarly excellence. Abdalati’s undergraduate stint has been remarkable.

He secured an Honors Undergraduate Research Fellowship position and received funding for his research project in Microbiology. His research was presented at the ASM annual conference in Stephenville, TX (2023), where he presented his findings, reinforcing his expertise in his field. Abdalati’s Honors thesis, emblematic of his dedication, is a significant contribution to the UTA students, faculty, and the broader scientific community. His thesis, along with his recent manuscript publication acceptance, “The Impact of COVID-19 on Undergraduate Students’ Academic Performance at University of Texas at Arlington,” by Stimulus: A Medical Humanities Journal, attests to his potential in shaping the scientific discourse. As he aspires to medical school and a future Doctorate in Medicine, Abdalati’s journey is a testament to his academic prowess and a promise of his impact on the medical sciences.

Ekjot Birdi, the creator of “Poetographs” is a senior undergraduate student at the University of Texas at Arlington

Ekjot Kaur Birdi hails from the serene town of Frisco, where her journey began amidst the Texas landscape. From her formative years, she exhibited a vibrant athleticism, dedicating herself to varsity track from 2017 to 2019. Currently a senior at the University of Texas at Arlington, Ekjot is pursuing Environmental Science and Philosophy, driven by her passion for understanding the interplay between humanity and nature (and their inherent inseparability). She is interested in toxicology, farmer’s rights, occupational safety and hazards, agroecology, eastern spirituality, determinism, and one love. Her research projects with wonderful UTA faculty include one covering reflexive awareness (in and outside of Tibetan Buddhism) and the intricate relationship between agriculture and the environment.

Ekjot’s diverse interests manifest in her eclectic hobbies, which range from painting and poetry to sewing and fashion design. An avid reader, her favorite book, “Don Quixote,” reflects her appreciation for literature and introspection and inspires her to *pacencia y barajar los cartos*. When not engrossed in her studies or creative endeavors, she finds solace in the serene melodies of bossa

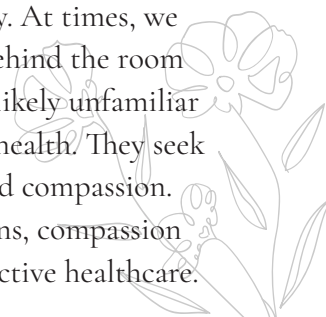


nova, and Samba. Beyond her academic endeavors, Ekjot is engaged in advocacy and community service. As a Student Research Fellow at the Roosevelt Institute and an intern at organizations like the Sikh American Legal Defense and Education Fund, she actively contributes to causes close to her heart. Her leadership roles and participation in various campus clubs, including the Philosophy Society and the Environmental Science Club, underscore her commitment to effecting positive change.



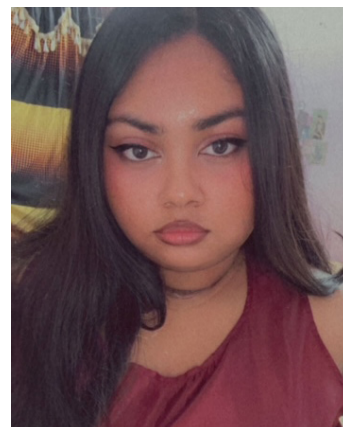
Muhammed AbdalRahman, the creator of “Through the Eyes of A Rookie” is a freshman biology major at the University of Texas at Arlington

Alongside being a student, Muhammed Tariq AbdalRahman is also a part-time emergency medical technician, and is passionate about fostering empathy within the medical field. They also enjoy going to the gym, swimming and cooking. The goal of this work was to serve as a moment of self-reflection and a window into the mindset of an “empathetic” provider. There is a risk of becoming overly focused on tasks and technical aspects within the medical journey. At times, we can lose sight of the human element, the individual behind the room number and the chart. This individual, just like us, is likely unfamiliar with medical complexities and entrusts us with their health. They seek not only guidance and support, but understanding and compassion. Through all the IVs, medications, and computer screens, compassion and human connection remain essential pillars of effective healthcare.



Ayesha Tanvee, the creator of “Visceral Symmetry”, is a microbiology student at the University of Texas at Arlington.

Ayesha Tanvee, an international student from Bangladesh, is currently pursuing her passion for microbiology at the University of Texas at Arlington. Drawing inspiration from her diverse cultural background, Ayesha’s artistic flair extends beyond the confines of her scientific studies. Her artwork reflects a unique perspective, inviting viewers to delve into the intricate tapestry of life’s mysteries, where each individual represents a universe of their own. Ayesha’s academic journey has been enriched by her involvement in groundbreaking research for visceral leishmaniasis with the International Centre for Diarrhoeal Disease Research, Bangladesh. Alongside her scientific pursuits, she has honed her skills in social media management, leveraging digital platforms to amplify artistic discourse and engage with broader audiences.



Despite her busy schedule, Ayesha remains deeply committed to community service and creative expression. From volunteering her time to having experience in leading a creative production team, she thrives in dynamic environments where collaboration and innovation flourish. A natural storyteller, Ayesha finds peace in sketching characters, crafting intricate paper designs, and painting. As a left-handed Virgo, Ayesha finds joy in the small pleasures of life, whether it's with some boba tea or cuddling up with her beloved cat. Her warm and compassionate nature shines through in her interactions with friends and peers, making her a cherished member of any community. Looking ahead, Ayesha plans to embark on the next chapter of her journey by pursuing medical school after graduation.



Robert Parra, author of “HIV Disparities in the United States” is a pre-PA alumnus of UT Arlington.

For several years now he has been interested in all things related to exercise, health, and medicine. However, he came to be interested in a career in health care after both his own experiences as a patient and witnessing his grandparents’ struggles with strokes and cardiovascular disease and how complex these conditions can be to manage without proper guidance. Through his various experiences as an interpreter and a volunteer triage member at a couple of community-based clinics that serve low-income patients in the area he has grown to be interested in understanding various disparities in health care.

Dissecting and analyzing these disparities he feels can help increase understanding of patient behaviors and help improve health outcomes. Taking medical humanities courses has helped broaden his perspective of health care and the importance of incorporating the humanities approach into patient care. The inspiration for his submission stems from not only wishing to treat and educate vulnerable populations in the future but also wanting to understand them as a person, where they are coming from, and what environmental circumstances might affect them and influence their health care. He elected to create his piece in essay form since he feels this is the best method and approach, he can utilize to inform others about issues that he feels are salient to medicine and medical humanities.



Serena Young and Jasdeep Kaur, the creators of “Pieces of a Healthy Heart” are fourth year undergraduate students at the University of Texas at Arlington pursuing a Bachelors in Science in Biology.

Serena Young is a fourth-year UTA student pursuing her B.S. in Biology with a minor in Spanish on the pre-dental track. She was raised in the DFW area with her three other siblings and currently has two dogs. Serena is an outdoors person who loves to rollerblade and run marathons in different states. She also likes to dabble in the arts, namely film and digital photography. Her passion for science and the arts has drawn her to the field of dentistry and she hopes to one day serve the local community to address the oral health disparities in marginalized neighborhoods.



Serena Young and Jasdeep Kaur, the creators of “Pieces of a Healthy Heart” are fourth year undergraduate students at the University of Texas at Arlington pursuing a Bachelors in Science in Biology.

Born and raised in Texas, Jasdeep Kaur is a driven fourth-year student at the University of Texas at Arlington, pursuing a bachelor’s in science in Biology with a passion for medicine. Jasdeep’s sights are set on attending medical school to fulfill her dream of becoming a surgeon. Growing up in a close-knit Punjabi household as a first-generation student, her upbringing gives her a deep respect for diverse cultures and a powerful work ethic. Beyond her academic pursuits, Jasdeep finds joy in a diverse array of hobbies ranging from snowboarding through snow-covered slopes to capturing moments through her camera lens.

She thrives on adrenaline-fueled activities and enjoys traveling which allows her to immerse herself in different cultures and landscapes. Yet, amidst her pursuits, her passion is to intersect medicine and art to create an understanding and unity across borders. This project draws upon diverse medicinal practices and highlights the shared humanity within the healthcare system. With hopefully dedication, she hopes to turn passion to purpose and make a meaningful impact in the field of medicine and beyond.

Alexis Ellerbe, the author of “The Witch Inside”, is a current student at the University of Texas Medical Branch School of Medicine, and a lifelong fiction author.

After spending the first 18 years of her life in San Antonio, Texas, she spent her undergrad years in Houston, attending Rice University and obtaining a Bachelors in Biology. While at Rice, she took courses in fiction, satire, poetry, and fairytales, and continued to improve her translation of her vivid dreams into short stories and poems. She has had the opportunity to perform some of her pieces in front of her peers, poems entitled “I am the Sun” and “Nesting Doll”.

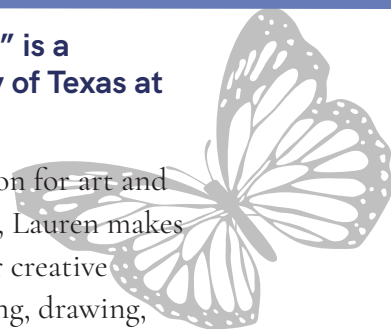
Her aims for her short fiction works are to use humor, absurdity, or childlike wonder to take the reader on a journey through a range of hard to discuss topics. Her career ambitions include orthopedic surgery and academia, while her personal interests involve traveling the world, watching sci-fi movies, curating music playlists for every occasion, and kickboxing. She can be contacted via her email agellerb@utmb.edu, and she wishes you happy reading!



Lauren Ngo, the creator of “My Dance with Time” is a biomedical engineering student at the University of Texas at Arlington.

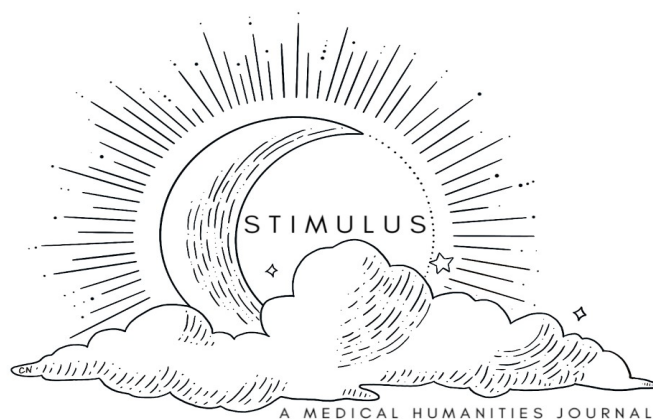
Along with her interest in science, she has a deep passion for art and the humanities. Although her education keeps her busy, Lauren makes an effort to balance her professional trajectory with her creative side. She enjoys various hobbies such as reading, painting, drawing, and crocheting. Lauren is the secretary of Mavericks for Medical Humanities, an organization within her university that hopes to encourage medical students to make time for the humanities.

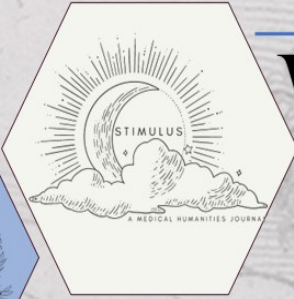
She believes that a strong connection to creativity and emotional expression is important for medical professionals, as it allows them to better understand their patients and one another. Though her engineering background may seem to conflict with her love of the arts, Lauren believes that the two must coexist. The daughter of two immigrants from Vietnam, and a member of a large Vietnamese family, Lauren is deeply influenced by her heritage. Naturally, this heritage also impacts her artwork. During her visits to Vietnam, Lauren found inspiration in the beautiful Vietnamese art that she witnessed, and was especially drawn to the country’s traditional fashion. She makes a conscious effort to include elements of this artwork within her own creations; in doing so, she strengthens her connection to a world which she values immensely. Her submission to this journal incorporates this Vietnamese fashion into a unique take on a classic Western piece.



Ella Scott, the creator of “Writing Won’t Warp War”, is a senior at the University of Texas at Arlington.

Ella Scott has writing and PR experience being The Shorthorn’s engagement editor and working for Downtown Arlington. Her passion is informing the public through writing but also writing poetry after falling in love with the genre in a class.





WHAT'S AT UT ARLINGTON

Pre-health

Please be sure to visit the UTA Health Professions Office:

[Health Professions - College of Science - The University of Texas at Arlington \(uta.edu\)](https://www.uta.edu/academics/schools-colleges/science/degree-programs/health-professions/advising)

You can set up advising with our Health Professions faculty and staff:

<https://www.uta.edu/academics/schools-colleges/science/degree-programs/health-professions/advising>

- Health Professions Advisor - Sandy Hobart
- Pre-med Consultant - Dr. Steven Gellman
- Assistant Dean of the College of Science and JAMP Faculty Director - Dr. Greg Hale
- UTA Student Peer and Alumni Mentors

In addition, UTA has a great variety of pre-health student organizations serving the comprehensive needs of a variety of pre-health career needs.

Symposium and Fair

We hope you were able to attend this year's second annual Medical Humanities Symposium, which was held on April 7, 2022, on the 6th Floor of the Central Library. We also successfully held our first Medical Humanities Fair full of activities and booths in Fall of 2021. We look forward to our Second Annual Fair in Fall 2022 and the third annual Symposium in Spring 2023.

Mavericks for Medical Humanities Organization

Medical, dental, pharmacy schools, etc., no longer look exclusively at test scores and grades: It is important that applicants are well-rounded and have a firm grasp on bioethics. Mavericks for Medical Humanities is an organization at UTA that is a fun, interactive way to begin incorporating ethics, empathy, and the humanities into your education! Plus, we are all good friends here and we love a good discussion that goes beyond the bounds of your typical pre-req course! We hope that you will join our meetings this upcoming year our club is open to all majors, and we have big plans in store. To stay updated on meeting times, follow the links provided to join our GroupMe, see meeting topics on the Instagram, and explore the medical humanities at UTA!

Contacts:

<https://linktr.ee/med.humanitiesUTA>
medhumanities.uta@gmail.com

Stimulus Contact:

https://linktr.ee/UTA_MedHumanities_Stimulus

<https://medhumanitiesuta.wixsite.com/stimulus>

stimulus.mhj@uta.edu

Medical Humanities and Bioethics Minor and Certificate

We are excited to announce that UTA now offers a minor in Medical Humanities and Bioethics. This program requires 18 credit hours, of which HUMA 3300, PHIL 3319, and a Disability Studies course are required. Starting Fall 2022, an internship opportunity to the Medical Humanities and Bioethics Minor will be added. Interested Minor students will need to contact Dr. Gellman to be sure they have met the prerequisites to take part in this internship.

The Medical Humanities Certificate Program includes a 12-credit plan. The HUMA 3300 course is required along with a variety of elective options in multiple disciplines.

UTA offers four courses in Medical Humanities taught by Dr. Gellman: HUMA 3300: Medical Humanities; HUMA 3360/SCIE 4301: Issues in American Healthcare thru Film; SCIE 4303: Clinical Medicine and the Human Experience; and SCIE 4304: The Art of Diagnosing Disease in Humans.

Dr. Eli Shupe is overseeing the Bioethics courses, including: PHIL 3319: Biomedical Ethics; HUMA 3340: Healthcare Through Fiction; and PHIL 3341: Topics in Bioethics.

Dr. Sarah Rose is overseeing the Disability Studies Program, which includes multiple possible course selections. The Disability Studies Minor offered at UTA is taught by faculty from all over campus: the Colleges of Liberal Arts, Nursing and Health Innovation, Business, Education, and the School of Social Work. This multidisciplinary minor prepares students for careers in law, education, public health, nursing, engineering, communication, and social work, among other fields.

We have an Art Studio in the Philosophy Department on the 3rd floor of Carlisle where Medical Humanities and Bioethics students can develop their creativity. There are a variety of supplies for student use.

Faculty and Staff Contacts:

Steven Gellman: steven.gellman@uta.edu

Sandy Hobart: sandy.hobart@uta.edu

Eli Shupe: eli.shupe@uta.edu

Sarah Rose: srose@uta.edu



WHEREVER THERE IS LIFE,
THERE IS HOPE.

-From "*Finding Hope*" by Arinze Awagu