



SCOPE

VOLUME I 2015

COPYRIGHT

Copyright © 2015 by Scope Staff

All rights reserved.

Cover and Magazine design by Christopher Itoh and Lin Li

No part of this magazine may be reproduced in any form or by any electronic or mechanical means including information storage and retrieval systems, without permission in writing from the author. The only exception is by a reviewer, who may quote short excerpts in a review.

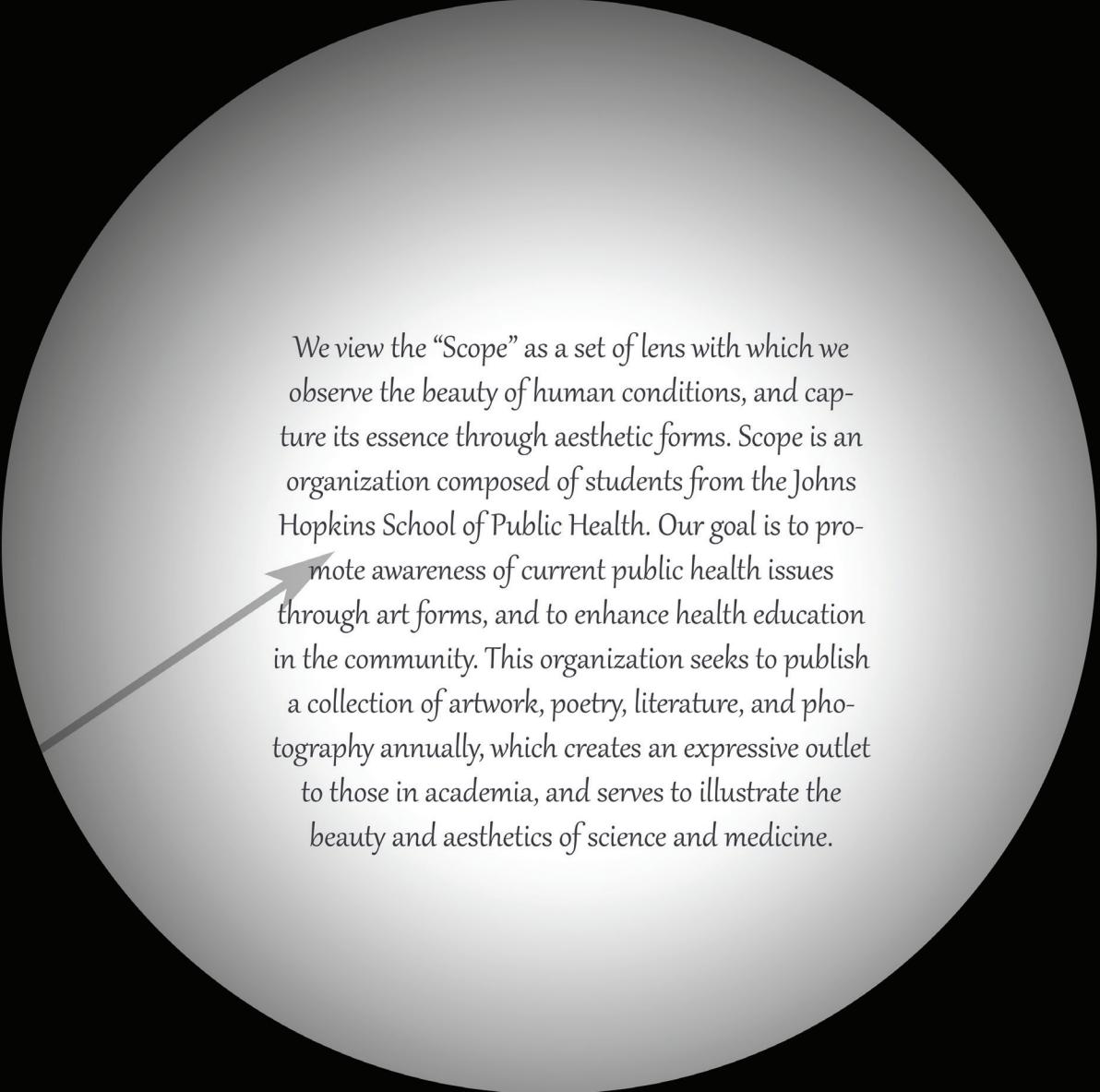
Visit the Facebook Page at www.facebook.com/scope.jhmi

Printed in the United States of America

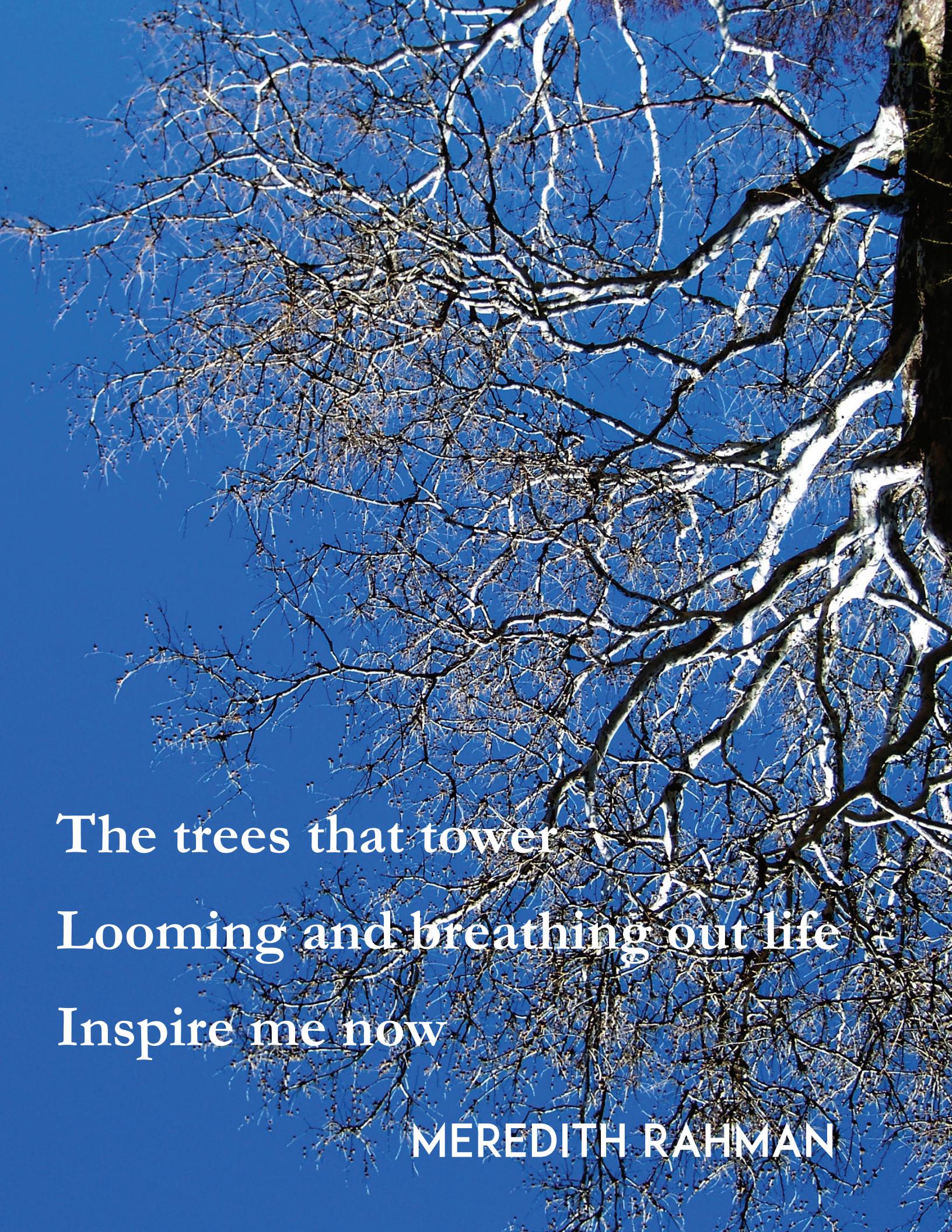
First Printing: May 2015

Scope

Sponsored by Student Assembly at the Johns Hopkins Bloomberg School of Public Health



We view the “Scope” as a set of lens with which we observe the beauty of human conditions, and capture its essence through aesthetic forms. Scope is an organization composed of students from the Johns Hopkins School of Public Health. Our goal is to promote awareness of current public health issues through art forms, and to enhance health education in the community. This organization seeks to publish a collection of artwork, poetry, literature, and photography annually, which creates an expressive outlet to those in academia, and serves to illustrate the beauty and aesthetics of science and medicine.

A photograph of a large, leafless tree, likely a birch or similar, viewed from below against a clear, vibrant blue sky. The tree's intricate network of bare branches reaches upwards and outwards, creating a complex, organic pattern. The bark of the trunk and larger branches is visible, showing a light color with some darker, textured areas.

The trees that tower
Looming and breathing out life
Inspire me now

MEREDITH RAHMAN

LETTER FROM THE EDITOR:

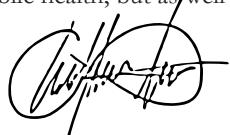
The blend between art and science has always been my personal curiosity. In the past, I've focused on developing patient education material for free clinics and creating anatomical origami models, which have been featured internationally. After coming to Johns Hopkins Bloomberg School of Public Health, I realized that many of my colleagues had artistic talents--however, an outlet for expression and creativity was not immediately available. As a result, upon coming to graduate school, they deviate from the arts.

I realized that many academic papers published are written solely for professionals, who are elites of their field, which prevents scientific knowledge to be accessible to a wider audience. Thus, a knowledge gap between academia and the general public is created. In addition, these papers carry little emotional weight in stressing the importance of their hypotheses. In academia, the research may be stringently controlled and tested, with the utmost elegant experimental design. While these paper boast their significant data through charts and numbers, which can be objectively viewed, the subjective interpretation of these data can also be very important. The call for social change or discovery of knowledge from subjective interpretation is critical, and cannot be underestimated. Data, graphs, and p-values can only do so much to stir the people in changing their lifestyle or prior knowledge because they hold little emotional relevance. Art is a medium that can communicate much more than statistics--they can communicate the essence of the problems and arouse or inspire people to change and action.

Scope started with these ideas in a conversation with colleagues. A few months later, we were able to create a team of talented individuals to launch the student organization. We established two goals: (1) to communicate important medical and public health issues through art forms, and (2) to create an outlet for the Johns Hopkins academic community to explore their passions and express them with the surrounding Baltimore community.

In our first annual issue of Scope Magazine, we attempt to answer fundamental questions about our field--what is "health", and what is its significance in the community? We began by exploring the individual--our intricate anatomy and what makes us think, breath, and perceive art. Our individual anatomy lead us to examine health at the "population" level, where we look into topics such as our global environment. We end with "conflicts" that may arise from interactions within the population. Here we reflect upon recent events in Baltimore, to war and military.

This project comes to fruition with the support of many helpful, talented, and creative individuals. First and foremost, I would like to express deep gratitude to the Student Assembly at Johns Hopkins Bloomberg School of Public Health for their financial support. I would also like to thank the Scope officers for helping establish events and develop the magazine, as well as setting a strong foundation for the organization upon which future officers and members can build. Thanks to my colleague, Jason Lin, for his expertise on magazine design. And above all, I would like to thank all the painters, poets, writers, photographers, and artists, who have made the ultimate gift of submitting their artworks to this magazine. These are invaluable contributions to this magazine, with hopes to not only inspire both artists and scientists to pursue the art of medicine and public health, but as well as our first readers of this magazine.



Christopher Itoh

SCOPE

- 3** The Scope Mission
Scope Staff
- 4** Lung Haiku Meredith Rahman
- 5** Letter From the Editor
Christopher Itoh

CONTENTS



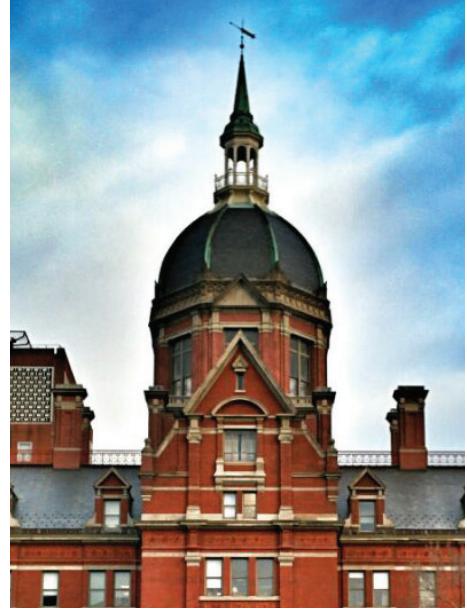
HEALTH

- 8** Cheers for Public Health Oliver Chen
- 10** Health Stephanie Owusu Hopkins Dome – Day Kamil Abdullah
- 11** Prevention Paulani Mui
- 12** Fig Jitngru Fang Tripping Taste Julia Gall



ANATOMY

- 13** Anatomy Anonymous
- 14** What Lies Within Neurodegeneration Tushar Chakravarty
- 15** Anatomical Origami Christopher Itoh



POPULATION

- 18 **Everyday Chaos** Brittany Kmush
- 19 **Remove the Handle** Brittany Kmush
- 20 **Waste** Erin Coco
- 20 **Public Health Haiku** Jennifer Le, Elizabeth Chmielewski, Felicity Gonzalez, Christopher Itoh, Lin Li, Dora Lin
- 22 **My Heart** Rashimi Shrestha
Heart Poem Meredith Rahman
- 23 **Infant And Maternal Mortality In Afghanistan And The World**
Masooda Omari
- Aboriginal Child** Xaviour Walker

CONFLICT

- 24 **ER** Lin Li
- 26 **Memorial** Diane Horvarth-Casper
- 27 **Hopkins Dome - Night** Kamil Abdullah
- 28 **Heal The City** Yue Liu, Christopher Itoh
- 29 **War And Medicine** Christopher Itoh
- 30 **Promises To Eternity** Nicholas Weber
Waves Of The Mind Dora Lin

SCOPE STAFF

- Christopher Itoh** Founder & Editor-In-Chief
- Lin Li** Creative Director & Art Editor
- Yue Liu** Finance Director
- Meredith Rahman** Prose Editor
- Stephanie Owusu** Photography Editor
- Dora Lin** Social Media Manager

太白醉酒圖



CHEERS FOR PUBLIC HEALTH

OLIVER YÌ-BING CHÉN

HEALTH

DATE PAINTED: 2006
INK ON RAW XUAN PAPER, APPROX. 100 X 100 CM
TECHNIQUE: GONG-BI

The title of the painting is “The Drunk Li Bai”. Li Bai (705 – 762), courtesy name Tài-bái (literally meaning Venus), also known as Li Po, and his friend Dù Fu (712 – 770), were the two most prominent poets in the mid-Táng Dynasty that is often called the “Golden Age of China”. His poetry was introduced to Europe circa 18th-century by Jean Joseph Marie Amiot in his Portraits des Célèbres Chinois. Further translations were published by Marquis d’Hervey de Saint-Denys in his 1862 Poésies de l’Époque des Thang. The painting delineates a story, probably apocryphal, of Li Bai, during his service at the Royal Hàn-Lín Academy. Once, while drunk, Li Bai (front left) ordered Gao Lì-Shì (front right), Duke of Qí, the most politically powerful eunuch in the palace, to remove his shoes; and he asked Yáng Guó-Zhong (second to the right), a cousin of the favorite Imperial Consort Yáng Yü-Huán (back left), and the Chancellor in the reign of Emperor Xuan-Zong of Táng Dynasty, to grind ink. They took offense, and along with Consort Yáng, persuaded Emperor Xuan-Zong to send Li Bai away from the royal court.

The take-home public health message is: do not drink too much; it is not good for your health, and you may lose your job. The painting was painted à la Gong-bi on xüan paper (made of *Pteroceltis tatarinowii* tree bark et al).

HEAL At every station in a person's life healing is essential. The obstacles that we encounter force us to adapt and alter the way we think and behave. During each step we take through this life we must heal. This healing helps to revitalize us and prepare us for our next steps in life. Have you confronted the things in your life that prevent you from healing?

EMANCIPATION Be free. Free yourself from the confines of negative thinking and non-constructive criticism. Free yourself from societal pressures that prevent you from being your best and most complete self. Have you emancipated yourself from false ideals that prevent you from being your best?

ATTITUDE The way that each of us think about our circumstance is vital for our progression as individuals and as a society. A positive outlook can elevate us above some of life's most difficult challenges and lead us toward accomplishments that we once thought were beyond our reach. Where you the most positive you that you could be today?

LEARN Knowledge by far is one of the most powerful tools that we as human beings have in our arsenal. Learning allows us to make better lives for ourselves. What have you learned today and more importantly what would you like to learn tomorrow?

THOUGHTFULNESS This world is about so much more than each individual. Everything we do has some impact on others. Have you thought of how to make the world better for those other than yourself and if so when will you act on those thoughts?

HAPPINESS All of the above leads to one extremely important thing: Happiness. This is the end goal for a truly fulfilled life. How happy are you? We can all do things to improve how happy we are. If you find that you are genuinely unhappy how can you change that and how can you improve the happiness of others around you?

STEPHANIE OWUSU



KAMIL ABDULLAH

SCOPE 2015



HEALTH

PREVENTION

PAULANI MUI

SCOPE 2015

FIG

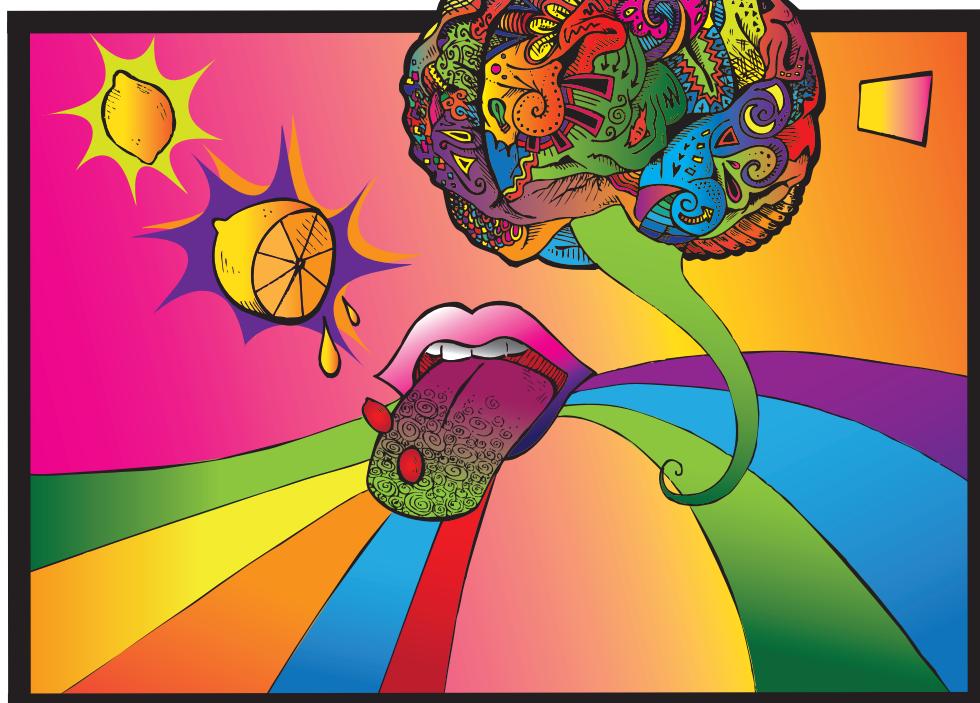
JINGRU FANG

WATERCOLOR



A dove carries a dose of vaccine and flies towards an infant, wrapped in hands and floating on a fig leaf.

TRIPPING TASTE



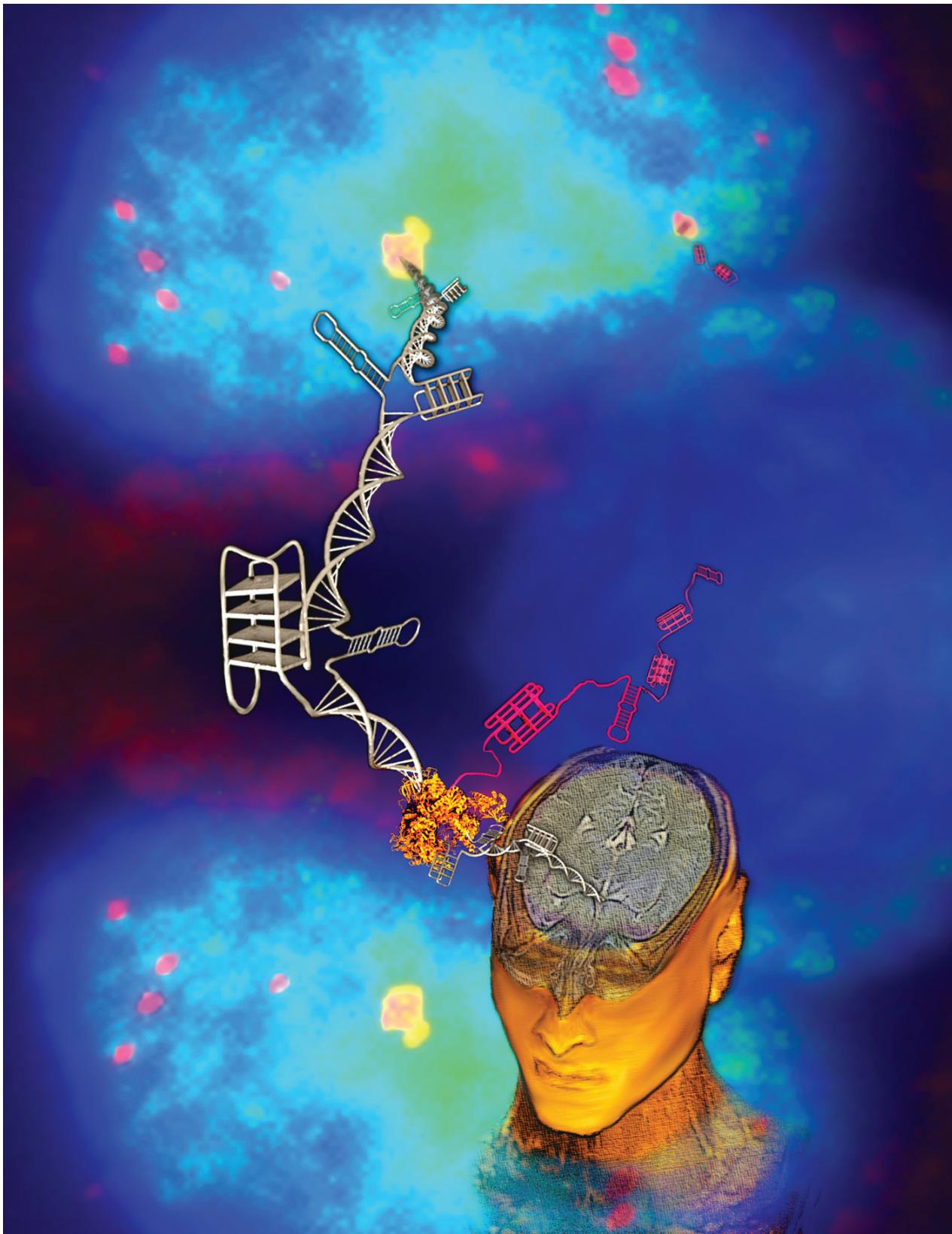


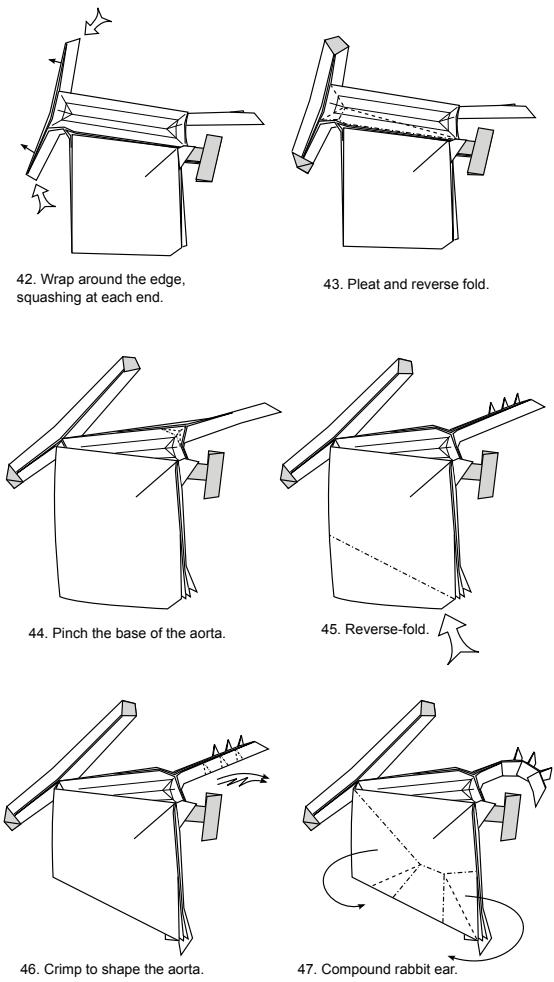
ANATOMY ANONYMOUS

C9ORF72: WHAT LIES WITHIN NEURODEGENERATION

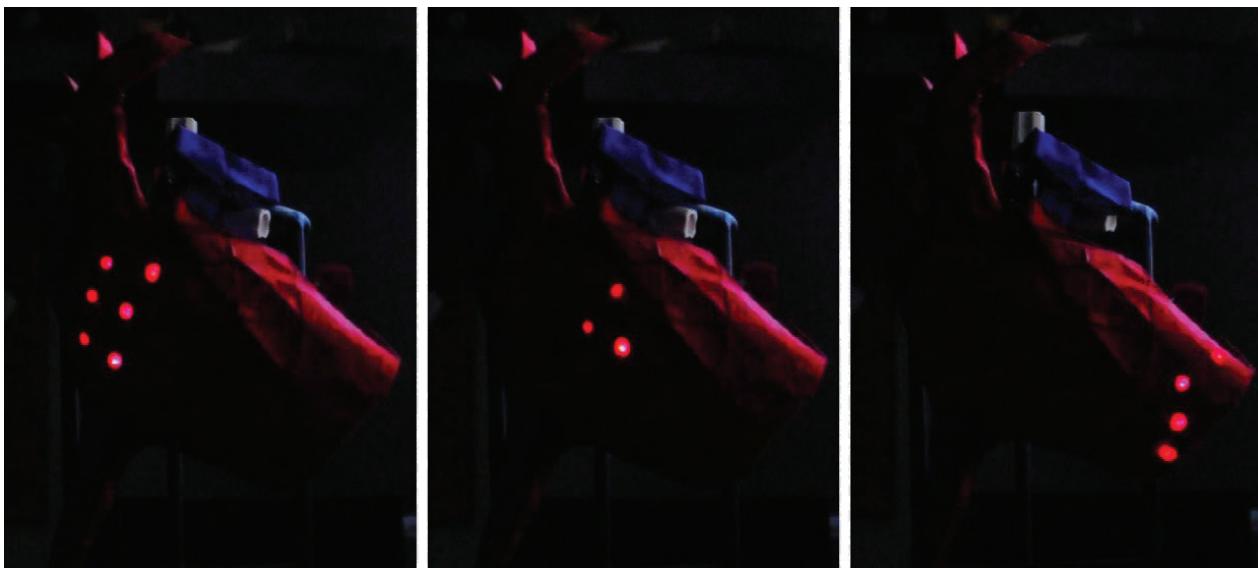
TUSHAR CHAKRAVARTY

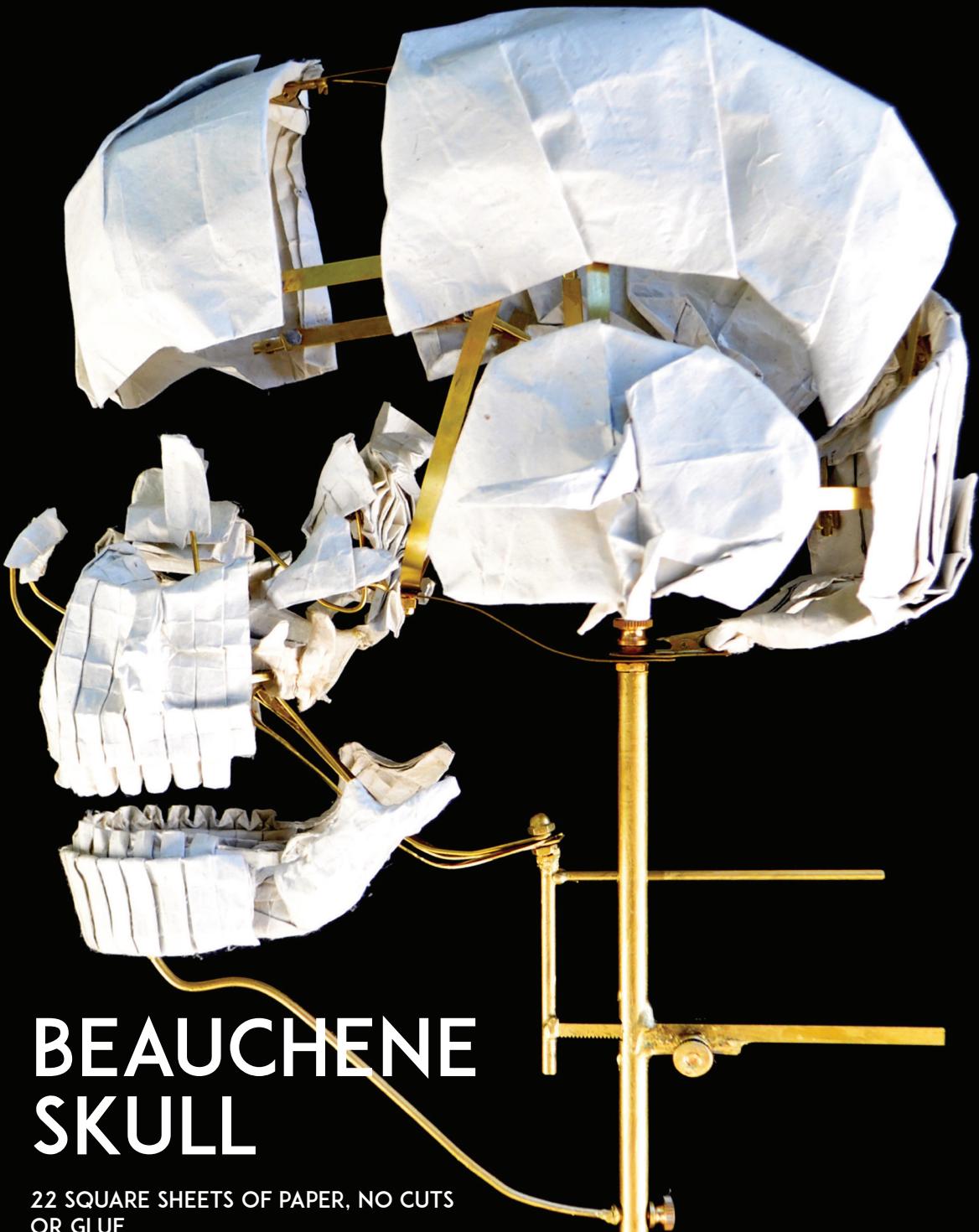
ANATOMY





This anatomical origami heart (left) is an original design. It is made with one square sheet of paper. No cuts or glue were used. Selected diagrams are shown on right. This origami heart has servos and LED lights installed to simulate muscle movement and electrophysiology of the human heart. These are controlled by Arduino, a microcontroller platform.





BEAUCHENE SKULL

22 SQUARE SHEETS OF PAPER, NO CUTS
OR GLUE

Inspired by Leonardo da Vinci and Edme Francois Chauvot de Beauchene

During the late 15th century, Leonardo da Vinci sketched an “exploded skull” to show the inner anatomy of the head. In the mid-1800s, an anatomicist named Edme Francois Chauvot de Beauchene was inspired by da Vinci’s sketches, and developed a way to display the anatomy of the head. The Beauchene Skull is a disarticulated human skull that has been reassembled on a stand, allowing for complex structures to be studied individually.

Brain 脳

Creator 制作者 Christopher Yuki Itoh
伊藤クリストファー有輝

Created 創作 2011/12 Revised 改訂 2012/7

Paper Size 使用紙 24cm x 24cm

Comments My professor, who did research on Einstein's brain, would repeatedly tell us, "no two brains are alike!" Keeping this in mind, shape carefully, and freely, during the last steps.
注釈 アインシュタインの脳の研究をした私の教授の言葉:「同じ形をした脳は二つありません」この言葉を念頭に入れて最後の工程は丁寧にそして自由に折りあげてください。

Anatomical diagram of the human brain showing various regions and structures labeled in English and Japanese:

- Cerebrum
- Frontal lobe
- Precentral Gyrus
- Central Sulcus
- Post Central Gyrus
- Parietal lobe
- Longitudinal Fissure
- Occipital lobe
- Wernicke's Area
- Temporal lobe
- Cerebellum
- Modulla Olfactoria
- Brain Stem
- Folia
- Broca's Area
- Lateral Fissure

Diagram illustrating the six steps for folding a paper brain model:

- Step 1:** Fold and unfold. 折り筋をつける.
- Step 2:** Fold along the lines connecting the circled points and unfold. ○を結んでおり筋をつける.
- Step 3:** Fold and unfold diagonals. 三角に折り筋をつける.
- Step 4:** Check the orientation of your paper. 紙の向きをチェックする.
- Step 5:** Divide the height into 1/16. 図のように1/16の幅で折り筋をつける.
- Step 6:** Divide the height into 1/32. さらに半分の幅で折り筋をつけろる.

Technical details:

- The diagram shows a large shaded area representing the Cerebrum (大脑) and a smaller shaded area representing the Cerebellum (小脳).
- A scale bar indicates 0.66 units.
- A separate diagram shows the Brain Stem (脳幹) with a cross-section.

CHRISTOPHER ITOH

SCOPE 2015

ANATOMY

17

EVERYDAY CHAOS



BRITTANY KMUSH
DHAKA, BANGLADESH
MARCH 2015

REMOVE THE HANDLE





THE POWER IS IN YOU



This is a photograph of the back of a building with compacted trash piled high in Wheaton, Maryland. A man looks beyond the heaps amidst his monochromatic surroundings. The sky is grey, which is befitting of the industrial elements in this scene. All my life I have lived in the area where I took this photograph. I have seen many changes in my surroundings since my youth. There has been a significant increase in development; in particular there is a massive recent construction project creating a bypass with Randolph Road and Georgia Avenue a few blocks from where this picture was taken. My inspiration for capturing this moment came when I was parked in the back of a strip mall. Seeing the trash piled high above this man's head struck me as a "waste." Waste in the sense of the resources society uses at the expense of its people. This is what this image portrays. This pervasive problem makes it more and more difficult to live a healthy life. On a grander scale, the precious real estate trash occupies could instead be an expansive park. The challenge for public health in this community - near the Montgomery County Johns Hopkins campus and between JHU Baltimore and DC - is to make healthful choices for ourselves as individuals and the community as a whole. Efforts such as living sustainably through composting, recycling efforts, reducing waste and other mindful behaviors can decrease the impact, whether psychological or physical, of man's detrimental actions.

WASTE ERIN COCO



YOUR HANDS

JENNIFER LE
ELIZABETH CHMIELEWSKI
FELICITY GONZALEZ
CHRIS ITOH
LIN LI
DORA LIN

Public Health:

The struggle is this.
What does public health
look like?
It means many things.

Me,

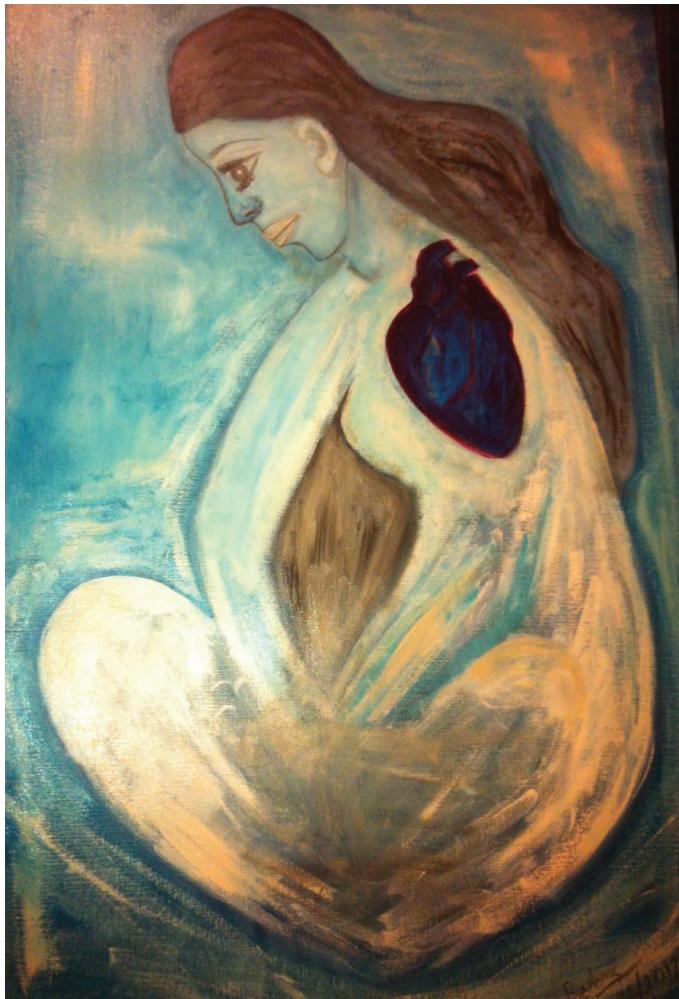
Cleaning the wheelchairs.
Beautifying a clinic.
Impacting patients.

Few,

Coordinating care.
Building strong communities.
Giving all a voice.

Millions

Many at once or
Efforts combined. Saving lives.
Millions at a time.



MY HEART

RASHIMI
SHRESTHA

ARCYLIC ON CANVAS

The purpose of this artwork is to bring awareness to cardiovascular diseases. CVDs are the number one cause of death globally: More people die annually from CVDs than from any other cause. It is also one of the major causes of death in women in the U.S. Self awareness of risk factors and life style change are key factors in preventing CVD.

He holds my heart,
and I am his.

Can this be what beauty is?

MEREDITH RAHMAN

INFANT AND MATERNAL MORTALITY IN AFGHANISTAN AND THE WORLD

MASOOUDA OMARI

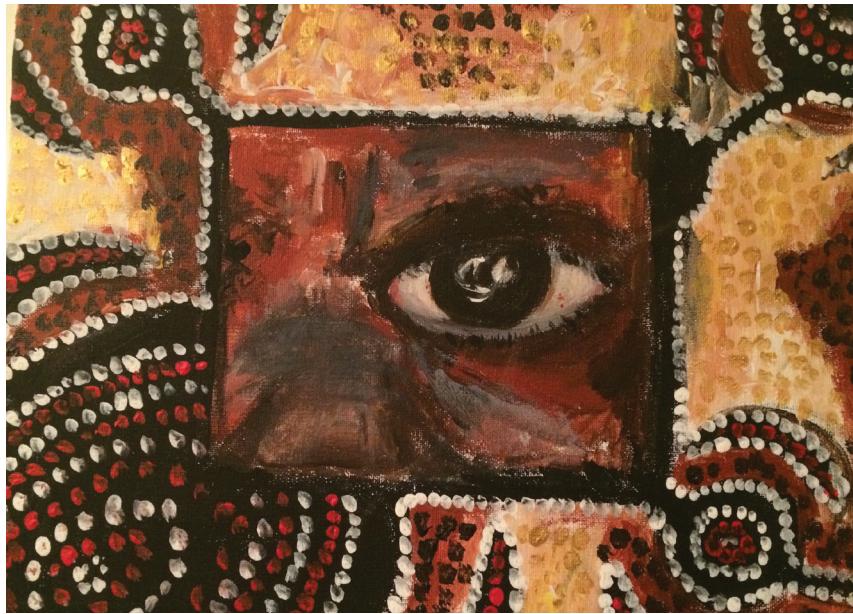


This piece of art represent the infant and child mortality rate in Afghanistan compared to the least developed countries and the least of the countries in the world. It represents the culture of the country at the same the need to spread awareness to this problem. The health of a child and a mother directly represent the health of the country.

The darkness in this art work represents the lack of education and poor health system. This is categorizing Afghanistan as the least preferable country for an infant to born and a mother to deliver. However; the candle represents the a light towards a better system. The health and education system has gotten alot better since the past 10 to 15 years. The system is changing to get better. The little boy looking at the book represent the need to educate the new generation, that is how things will get better.

ABORIGINAL CHILD XAVIOUR WALKER

In working in rural Australia and with Aboriginal people, to treat and understand them, one must understand their anthropological history and the differences in their understanding of health and well-being. The social determinants of health for Australian Aboriginal people involves the close connections to their land, culture and and historical traditions. Australian indigenous art is the oldest in the world and is a connection to their historical past and ancient stories centered on the 'dream time' period. This artwork links aboriginal artwork through the eyes of a child, which gives them health and well-being connected to an ancient past.







ER

LIN LI
ACRYLIC ON CANVAS

I woke up in the emergency room one night, numb and confused. Masked figures rushed around me.

The last memory I had was sitting in the passenger's seat of a car.

Visions of a shattered windshield. Sounds of a helicopter.

I dozed in and out of consciousness as I was told that my left eye socket and cheekbone had collapsed, collar bone had snapped, ribs had cracked, and many shards of glass had cut my face and lodged. I was lucky to be alive.

A week later I regained enough strength to sit up, I looked into a mirror to see "Two-Face" looking back. The whole right side of my face was disfigured and covered with scabs, stitches, and scars.

Over time, I visited many doctors who were able to reconstruct my face, using metal plates to restructure the bones, and revision surgeries to amend the scars. At times, hospitals felt like a second home, and doctors and nurses close kin. I was moved by the kindness and warmth, and hoped to be able to someday return the compassion as a doctor and care for patients of my own.

MEMORIAL

DIANE HORVARTH-COSPER, MD

I remember a day in the desolate winter of my third year of residency, when at 0300 I got a page alerting me to a triage patient. I had finally made it to my call room ten minutes before, brushed my teeth, and was relishing the idea of even a brief period of respite on this early Monday morning of a grueling 48-hour call weekend. I thought the text page said it all: "19 yo G1P0 at 37+3 weeks, here with cramping. Please assess." Great. Cramping. I'm sure this is someone who wants an ultrasound to find out the sex of her baby. She probably hasn't had any prenatal care, and I'm sure she'll reek of marijuana. Sometimes when you're that tired (and likely depressed), you start to deeply dislike anything that stands in the way of your very human need to sleep.

Instead of an entitled, mouthy patient who had nothing better to do at 3 o'clock in the morning than ruin my nap, I pulled aside the curtain to find a terrified woman, all alone. She looked younger than 19 but had a small engagement ring and wedding band on her left hand. Her eyes were red-rimmed from crying and she looked desperate and scared. Dog tags dangled from a ball chain around her neck.

She wasn't in labor; that wasn't even why she had come to the hospital. She had just received news that there had been an attack on her husband's base in Afghanistan, and that he had sustained minor injuries. She hadn't been able to speak with him yet,

and was sick with worry. He had been deployed when she was 8 weeks pregnant and wasn't expected to return until well after her delivery. Her family was in another state, and she had relocated to Minnesota before the deployment and hadn't made many friends.

It was obvious that she was trying to get her mind around the worst possible outcome – that her husband would return from war in a flag-draped casket, and that she would be alone. She came to us because she had nowhere else to go. Remorse and shameful tears welled up in my eyes as I deeply regretted the thoughts of a few moments before.

In military families, we are used to talking about "what happens if I don't come home". Before a deployment, my father would make sure we all knew the location of important documents and family heirlooms. He always made my brothers and me promise to take care of my mother. And then he would leave for Iraq and we would push the possibility of his mortality into the furthest, darkest recesses of our minds; otherwise, it's impossible to get on with the daily business of living while your loved one is in hostile territory. We've been fortunate enough to welcome Dad (and now my sister-in-law and both my brothers) back from multiple deployments. The scars of war are there, to be sure, but life marches onward.

Most of us know families that haven't been as fortunate. I think about empty places at the Thanksgiving dinner table, having to sort through closets full of clothes, photos, school projects, and sports trophies. There are the orphaned children who may be so young that the only memories they'll have are the ones we create for them. These are

“ He would leave for Iraq and we would push the possibility of his mortality into the furthest, darkest recesses of our minds. ”

the thoughts that flooded my mind every deployment, as I watched my father disappear through the security gate at the airport. Our eyes met one last time and I could see him struggling with same terrible images. I thought these things again the summer after he returned from his first deployment to Iraq. He had undiagnosed PTSD and was so shaken by his combat experience that he couldn't watch fireworks on the fourth of July, the sound of rocket-propelled grenades and mortar fire too fresh in his mind.

Memorial Day means more to me than it did before we became a military family. It may be a day of picnics, boat trips, and parades, but for me it will never be the carefree day off of school that it was when I was younger. Today my heart aches for every pregnant woman who will deliver without her partner by her side, and for the fathers and mothers who won't see their child's first steps or their first baseball game or ballet recital. I mourn with the parents who have had to bury their children, which is something that I will never be able to make right in my mind. I grieve the loss of life, the loss of potential, the loss of mental and physical health.

That winter night on labor and delivery, I sat with my patient for almost an hour, talking about her fears. We also spoke about her hopes – she was so in love with her baby girl and was already thinking about the amazing, accomplished person she would someday become. I wondered if my parents had done the same, thinking about my place in the world

even before I was born. In the early morning hours my patient returned to her home, and I went back to my call room. Our conversation had brought both of us a small measure of healing that night.

Memorial Day is not so much about the people we have lost, though certainly we honor those who have died in defense of the things we hold dear. This day is for the people who are left behind – the mothers and fathers, daughters and sons, husbands, wives, partners, and friends. Every parade, every tribute is so that those grieving families know that we recognize their sacrifices. We hope to never get that horrible midnight phone call, or to stand on the airport tarmac in front of a flag-draped casket, but we understand that a piece of shrapnel or a stray bullet can alter our reality in an instant. Memorial Day reminds us to hold tight to the people we love, to never postpone an opportunity for joy, and to live each day knowing that we are not promised a tomorrow.



KAMIL ABDULLAH

What's happening?
 Riots in Baltimore.
 What's happening?
 People looting.
 Why?
 Fear. Injustice. Anger.
 Hopkins, the pearl of Baltimore
 What can we do to heal?

The events that occurred on April 27th, 2015 in Baltimore, MD are startling. Some blame the people, some blame the system.

How do we heal this shattered city?

Hopkins, standing in the center of Baltimore, plays crucial roles in healing of the Baltimore community. Individually, as Hopkins employees or students, and as a community, we can make a difference and contribute to the healing process.

YUE LIU



CHRISTOPHER ITOH

HEAL THE CITY

WAR AND MEDICINE

CHRISTOPHER ITOH

CONFlict

The art of war,
Cannot be fought without soldier.
The rifle is glorified,
By the eyes of the young.

Like heros they march,
To protect their nation.
Where such images of valor entice,
Adolescents that desire independence.

Yet, the reality of war,
Is not glamourous,
Skills are gained,
And peace is lost.

Like drones they march,
And kill their enemies,
Sergeants shouting at the soldiers,
And brains become strained with blood.

After the contract is signed,
Under the name of the Bald Eagle,
What was the virtue,
For the death of a soldier?

The art of medicine,
Cannot be performed without doctors.
The scalpel is glorified,
By the eyes of the young.

Like the heros they treat,
To save their patients.
Where such images of nobility entice,
Students that desire prestige

Yet, the reality of medicine,
Is not glamourous,
Money is gained,
And humanity is lost.

Like robots they treat,
And kill their patients,
Surgeons shouting at the students,
And brains become stained with blood.

After the oath is recited,
Under the name of Hippocrates,
What was the virtue
For the death of a doctor?

PROMISES TO ETERNITY

NICHOLAS WEBER

CONFICT

The mind must listen
For education is order.

A rain to an arid expanse,
still to a transient hurricane
A birth into the past

Connection to our brother
Adopted family and kin
Sister to the sun
Her pressure and truth

Given freely to a beggar
Or in the morn to a queen.
Though death awaits
Eternal ideals never dissipate

Rehearsed, in sleepless nights of
study

Discovery
Renewal
Renaissance

Don't replace classics,
Sung upon a ship passing the
Pillars of Hercules
En route to Alexandria,
Whose flames kiss the sky
How blue, how full

For you hold the truth of Hippocrates, and Galen,
And the lost gold of Rosalind.

Your knowledge,
Awaits a child of the future

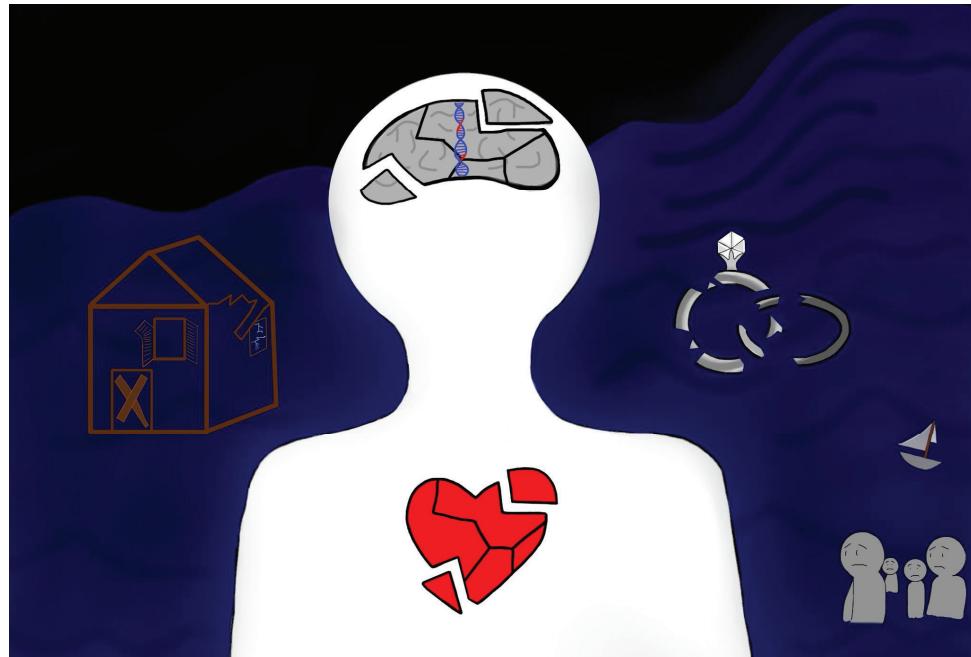
Transformation of lives shared.
Yet separated by the ages.
How life, and love linger

Given of one; guarded by the
next.

Knowledge promised to eternity.

WAVES OF THE MIND

DORA LIN



CONTRIBUTORS

Kamil Abdullah Bloomberg School of Public Health, Biochemistry and Molecular Biology. MHS 2015

Lorenzo Bertizzolo Bloomberg School of Public Health, MPH

Oliver Chen Bloomberg School of Public Health, Biostatistics. PhD

Elizabeth Chmielewski Bloomberg School of Public Health, International Health. PhD

Erin Coco School of Education, Counseling and Human Development. MS

Jingru Fang Bloomberg School of Public Health, Microbiology and Molecular Immunology. MHS 2016

Felicity Gonzalez Bloomberg School of Public Health, MPH 2015

Diane Horvath-Cosper, MD Bloomberg School of Public Health, Health Systems and Policy. MPH 2015

Christopher Itoh Bloomberg School of Public Health, Biochemistry and Molecular Biology. MHS 2015

Brittany Kmush Bloomberg School of Public Health, International Health. PhD 2016

Jennifer Le, MPH Bloomberg School of Public Health, Health Policy and Management Faculty.

Lin Li Bloomberg School of Public Health, Biochemistry and Molecular Biology. MHS 2015

Dora Lin Bloomberg School of Public Health, Biochemistry and Molecular Biology. MHS 2015

Yue Liu Bloomberg School of Public Health, Biochemistry and Molecular Biology. ScM 2016

Paulani Mui Bloomberg School of Public Health, MPH 2015

Masooda Omari Kreiger School of Arts and Sciences, Master of Biotechnology and Bioinformatics

Stephanie Owusu Bloomberg School of Public Health, Biochemistry and Molecular Biology. MHS 2015

Meredith Rahman Bloomberg School of Public Health, Biochemistry and Molecular Biology. MHS 2015

Rashmi Shrestha Bloomberg School of Public Health, MPH

Xaviour Walker Bloomberg School of Public Health, MPH

Nicholas Weber Bloomberg School of Public Health, Education. PhD



Sponsored by
 **JOHNS HOPKINS**
BLOOMBERG SCHOOL
of PUBLIC HEALTH
STUDENT ASSEMBLY