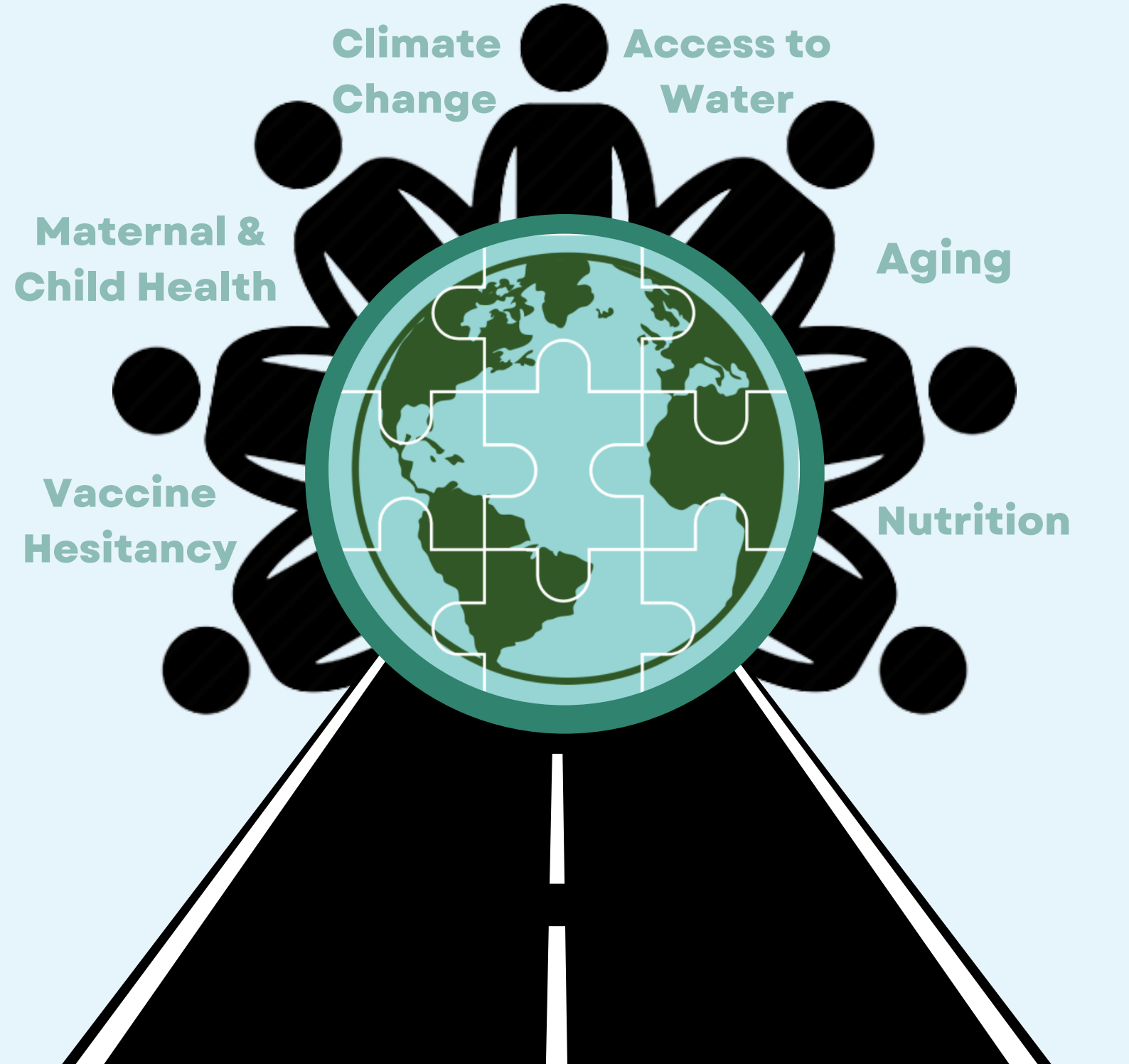
Global Health Case Competition

Participant Handbook

February 12, 2022

@vuglobalhealth | @vigh.ghcc | @vigh_ghcc #GHCC2022



Welcome Letter

Dear Participants,

Welcome to the annual Global Health Case Competition! On behalf of the Vanderbilt Institute for Global Health Student Advisory Council's (VIGH SAC) Case Competition Committee, we would like to thank you for participating in this exciting event. We have planned a meaningful, complex, relevant, and interdisciplinary case topic for you, and we look forward to hearing your solutions to such a challenging issue in global health.

With loads of participants and hard work put in by our case competition committee, advisors, and judges, this event expanded in an unexpected way this year. Despite being virtual, we hope that this Competition is an exciting learning experience for you! While developing the case, we read and researched extensively about the issue of focus and reached out to prominent researchers and experts in the country.

We hope that this Case Competition experience broadens your understanding of global health, allows you to interact with new faces and new disciplines, and opens doors of discovery to enhance your ability to see the difference you can make in people's lives. The upcoming week will challenge you in new ways as you enter into the commotion of research, team debates, proposal defense, and creative problem-solving. As you engage with the material that the Case Writing team has prepared, please remember that the Case Competition experience itself is as important as the final product that you deliver to the judges.

After the Competition concludes, if you will be a student at Vanderbilt next year, please consider joining the VIGH Student Advisory Council. Details on how to join are available on our website at **https://www.vanderbilt.edu/vigh-sac/about/join.php.**

Thank you for participating in this year's Global Health Case Competition! Your hard work and creativity will make this the best Competition we have ever had.

Best of Luck,

Noor Ali & Hilly Yehoshua
noor.ali@vanderbilt.edu | hilly.yehoshua@vanderbilt.edu
Case Competition Co-Chairs, VIGH Student Advisory Council

Table of Contents

Logistics

- Before the Case Competition, ALL team members **MUST** join the VIGH Global Health Case Competition 2022 Slack Channel. The link can be found in the **"Important Links"** section of the Handbook.
- Teams are required to upload their presentation slide deck no later than **7:00 p.m. CST on February 11th to a Google form. Teams who do not meet the 7:00 p.m. deadline will be disqualified.** Please include your team members' names and your group number on the first slide of your presentation. **SLIDES CAN NOT BE CHANGED ONCE THEY HAVE BEEN SUBMITTED.**
- Please join the **Main Zoom session** at 8:20 a.m. CST to check in on competition day. The Competition will start promptly at 8:30 a.m. CST.
- Make sure to rename yourself on Zoom in the following way: **Your Name- Team Number**
- For the preliminary round, teams will be split into four tracks. A team of three judges will judge each track, and the winner of each track will advance to the final round.
- Preliminary round judging will take place within individual Track Zoom sessions. **The Zoom links can be found in this Handbook and the designated #track Slack channel.**
- During the preliminary round, teams will present live for 10 minutes to the track judges and have a 5 minute Q&A session. This round will not be open to viewing by other teams.
- There will be 10 minutes between the end of one team's Q&A session and the beginning of the next team's presentation. Please join your Track Zoom session 5 minutes before your scheduled presentation and wait for the host (track volunteer) to let you in.
- Finalists will be announced in the **Main Zoom session**. Winning teams from Tracks 1-4 will present in random order.
- The **final round** takes place in the **Main Zoom session** and is open to the public. In this round, teams will be judged by the entire judge's panel. Identical to the preliminary round, each team will have 10 minutes to present, followed by a 5-minute question and answer session with judges. There will be 10 minutes between the end of one team's Q&A session and the beginning of the next team's presentation.
- **All teams will be given feedback from the judges' rubrics**. We hope that your team will learn from the constructive feedback and use it for professional development.

Competition Rules

- All 2022 Case Competition participants are responsible for reading and understanding all information contained in the Participant Handbook. If there are questions or concerns, participants are responsible for contacting the Competition Co-Chairs and Volunteers.
- **Teams should not discuss their case presentations or content with other teams during the competition period (February 5th-12th) until the judges have completed the final scoring.**
- Teams cannot discuss the case with members of VIGH SAC, members of the Case Competition Committee, or the competition judges. Furthermore, participants may not communicate with judges until the final judging has concluded on Saturday.
- Vanderbilt faculty and advisors and external experts that are not serving as judges are permitted to provide feedback on ideas and proposals. Still, the students should be prepared to defend the ideas in their presentation as their own. **Participants should cite all sources, including personal communications, appropriately.**
- The VIGH Case Competition is a student competition and should reflect the ideas and work of the students participating.
- Teams are encouraged to use various resources, including the library, the Internet, course notes, experts in the field, and texts in the research and preparation of their case.
- **All participants are expected to be at the Competition on February 12th from 8:30 a.m. - 3:00 p.m.**
- VIGH and VIGH SAC have permission to use any photographs and videos captured during Case Competition events. This year, due to the virtual format, we will not have a photographer, and we will only be capturing pictures of the virtual event with advance notice. If you do not want your video on for a photo, you are permitted to turn it off. **Otherwise, we expect your video to be on during the live portions of the event.**
- During the live Q&A, you must keep your camera on, and **if you make it to the live final rounds, you must keep your cameras on.**
- All participants must digitally sign the Honor Code Pledge and upload it to the Honor Code Form. **The link for the form can be found in the "Important Links" section of this Handbook.**
- VIGH has permission to make team presentations created for the Competition available to educators as a teaching tool, upon request. Appropriate credit will be given to team members.
- **Vanderbilt students on the winning team will represent Vanderbilt University at the Emory Morningside Global Health Case Competition in Atlanta, GA on March 11th - 19th, 2022.** Registration fees will be covered and the event is virtual. If the winning team is unable to compete at Emory, the 2nd Place team will represent Vanderbilt University.

Important Links

- Slack Channel
- Honor Form
- Presentation & Honor Form Upload
- Research Resources
- Competition Main Zoom (Used for Introduction and Final Rounds)
  - Passcode: 952552
    - Track 1 Zoom Meeting ID: 934 9225 8026
    - Track 2 Zoom Meeting ID: 920 4078 3649
    - Track 3 Zoom Meeting ID: 987 8166 6602
    - Track 4 Zoom Meeting ID: 914 6234 7849

Teams

Track 1		Track 2	
Judges: Dr. Gilbert Gonzales, Dr. Ralf C Habermann, & Dr. Carolyn Audet		Judges: Dr. Douglas Heimburger, Dr. Wahfeld, Dr. Xiao-ou Shu	
Team #	Name	Team #	Name
1	Shanay Desai Peyton Hinojosa Abbie Carr Bella DeBerghes	6	Xianduo Zhao Joanna Zheng Marilyn Wanning Wen Yilan Xu Robert Yang
2	Soumya Vytla Mert Sekmen Neeraj Namburu Ushang Uke Morgan Heath-Powers Dzifa Dumenyo	7	Maya Reddy Josanda Addo Nikkie Dutta Allison Ahern Parwan Ahmed Machingal
3	Aashi Gurijala Leo Huang Brina Ratangee Morrigan Dunlap-Loomis Kurt Emrich Jessie Zimmermann	8	Dora Obodo Harsimran Khan Nandita Dey Nia Brown Zewei Tian
4	Habeeb Kazimuddin Peter Novak Gianluca Tondo Ian Smith Cameron Stockwell James King	9	Corinne Hunnicutt Rebekah Zenaye Sianna Xu David Cohen Chaewon Kim Devan Wiley
5	Allie Reichert Rocío Posada-Castaneda Maria Catalina Padilla Azain Kai Gardner Uday Suresh Miguel Cuj	10	Geneghee Kim Williams Criley Trent Charlton Juliana Yang Minh Tran Rachael Yonek

Please Join the Slack Channel!

Teams

Track 3

Judges:
Dr. Kimberly Beiting, Victoria Umatoni,
& Dr. Danxia Yu

Team #	Name
11	Kush Chaudhari Vivek Kumar Qiuchen Li Wenitte Apiou Priya Bhatt Dena Liu
12	Jana Yan Pragnya Adapa Rosana Alfaro He Wang Megan Davis Lilian Baker
13	Shamel Basaria Adrian Wong Ryder Li Sam Kwon Connie Hu Ugonna Adugba
14	Veeraj Shah Basim Naim Kearra Haynes Ekta Anand Emily Qian
15	Jeanette Hurwitz Alisha Rao Pietra Bruni Zul Norin Rishik Bethi Makala Desargent

Please Join the Slack Channel!

Track 4

Judges:
Dr. Marie Martin, Dr. Xiu Chen Cravens,
& Alexandria Luu

Team #	Name
16	Nicolás Prada-Rey Gabrielle Curran Wesley Dong Rincon Jagarlamudi Rohan Nigam Alexander Burkett
17	Megan Croly Anyssa Francis Olivia Noell Megan McDonald Rachael Holly
18	Layan Ibrahim Inae Valerio Kalika Likhi Emilio Hadjisotiriou Matthew Geleta Dannielle Gibson
19	Esther Park Matt Zgombic Kieran Nehil-Puleo Rishik Bethi
20	Chaewon Kim Leen Alabdalla Erin Johnston Yajuan Shi Olivia Henry Madison Goldsborough
21	Xinyi Bian Claire Umstead Barbra chelangat Taylor Carty Mengling Hu Alisa Hill

Keynote Speaker

Elizabeth S. Rose

Ed.D., M.P.H., M.Ed.

Elizabeth is the Co-director for the Global Health track in the Master of Public Health (M.P.H.) Program, instructor for medical student international clinical rotations and research immersions, and a Global Health Education Specialist at the Vanderbilt Institute for Global Health (VIGH). Her professional passion lies at the intersection of education and health in helping others enhance their skills to lead their communities to improved health outcomes.

At Vanderbilt, Elizabeth has shepherded global health education initiatives including the Graduate Certificate in Global Health; School of Medicine Global Health Integrated Science Course, Advanced Elective, and Research Immersion; M.P.H. Global Health track mentoring committees and courses; M.P.H. Career Development series; Global Health Case Competition and Research Symposium; and GlobalVU Global Health column. She has been a member of multiple working groups including IMPH Education and Career Development, Vanderbilt Global Education, and VIGH Diversity, Equity, & Inclusion. Elizabeth advises the VIGH Student Advisory Council, Friends of MSF – Vanderbilt Chapter, Global Health Organization – School of Medicine, MEDLife, and Project RISHI. Internationally, Elizabeth works with the VIGH Education & Training team to develop training programs for a variety of learners. She has co-led teams to create and implement training programs including an online research methodology course for Kenyan nurse anesthetists and multiple faculty development programs in educational pedagogy, leadership, and mentorship for faculty in Ethiopia, Nigeria, Tanzania, and Zambia. Working with University of Zambia faculty, she helped develop a Ph.D. curriculum and a Post-doctoral training program.

Elizabeth holds a Doctorate in Education (Ed.D.) with a concentration in Organizational Leadership Studies. Her dissertation focused on the experiences of sub-Sahara African academic biomedical researchers' experiences of and leadership in international grants.

Judge Biographies

Dr. Gilbert Gonzales

Assistant Professor of Medicine, Health & Society

Dr. Gilbert Gonzales, Ph.D., MHA, is an Assistant Professor in the Department of Medicine, Health & Society, the Department of Health Policy, and the Program for Public Policy Studies at Vanderbilt University. Professor Gonzales' research examines how public policies affect health outcomes, access to care, and health disparities for lesbian, gay, bisexual, and transgender (LGBT) populations. He also studies the role of health care reforms on vulnerable populations. Professor Gonzales teaches courses in health policy and research methods to undergraduate students at Vanderbilt. He also mentors undergraduate, graduate, and medical students interested in health equity research. In 2016, he was awarded the Chancellor's Award for Research on Equity, Diversity, and Inclusion for his research on LGBT health at Vanderbilt University.

Judge Biographies

Dr. Kimberly Beiting

Dr. Kimberly Beiting received her BA in Comparative Human Development from the University of Chicago and her MD from the University of Illinois at Chicago. She completed her residency at McGaw Northwestern Family Medicine Residency Program at Humboldt Park and went on to complete her clinical Geriatric Medicine Fellowship at the University of Chicago with an additional research year in Geriatrics through the University of Chicago Postdoctoral Program in Clinical Research and Medical Informatics (TL1). Her primary clinical and research interests center around providing high-quality primary care for older adults, improved care models and transitions of care in skilled nursing facilities, and the care of older adults with opioid use disorders and the impact of the opioid epidemic on an aging population. She also has a passion for medical education and the teaching of geriatric principles to all levels of learners.

Judge Biographies

Dr. Douglas C. Heimburger
MD, MS, Professor of Medicine, VIGH

Dr. Heimburger is a Professor of Medicine at the Vanderbilt Institute for Global Health (VIGH). As VIGH's Associate Director for Education and Training from 2009 to 2019, he directed VIGH's education and training programs for Vanderbilt students and trainees as well as research training opportunities for doctoral and postdoctoral trainees from low- and middle-income countries. These included co-creation and co-direction of the Global Health Track in Vanderbilt's Master of Public Health Program and the Vanderbilt Training Program in Molecular and Genetic Epidemiology of Cancer (MAGEC). He still co-directs the UNZA-Vanderbilt Partnership for HIV-NCD Research (UVP) and the Vanderbilt-Emory-Cornell-Duke Consortium for Global Health Fellows (https://www.vumc.org/vecd/). His principal research interests are nutritional influences on HIV treatment outcomes, including non-communicable conditions, in African adults, and global health education and training.

Judge Biographies

Dr. Carolyn Audet
Associate Professor

Dr. Audet is an Associate Professor in the Department of Health Policy and the Institute for Global Health at Vanderbilt University and an Honorary Associate Professor at MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), in the School of Public Health, Faculty of Health Sciences, at the University of the Witwatersrand, in Johannesburg, South Africa. Dr. Audet's focuses on three main lines of research: 1) male partner engagement in HIV care and treatment of their pregnant wives/partners to increase uptake of testing and treatment while promoting empathy and support, 2) collaboration with traditional healers and traditional birth attendants to increase testing, linkage, and treatment adherence among people living with HIV, and 3) evaluation of comprehensive community-based programs designed to increase treatment uptake among those with substance use disorder.

Dr. Audet is the PI on a K01 (2015-2020), an R34 (2021-2024) and an R01 (2017-2022) from NIMH, an R21 (2020-2022) from NIAID, an MPI on a U01 from the CDC, and several Bureau of Justice grants in collaboration with the Tennessee Department of Mental Health and Substance Abuse Services. She received her Ph.D. from Vanderbilt University, where she studied Anthropology, an MSci in Epidemiology from the London School of Hygiene and Tropical Medicine, and completed a Fellowship in Implementation Science from Washington University in St Louis.

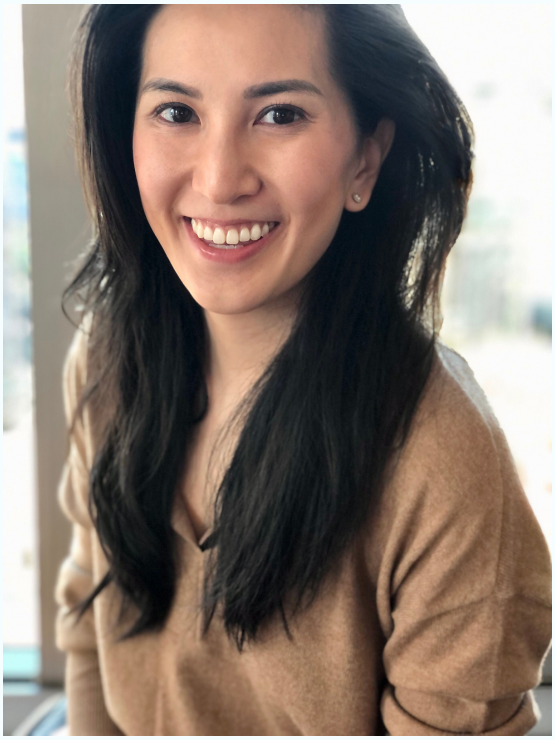
Judge Biographies

Dr. Xiu Cravens
Associate Dean, Associate Professor

Dr. Xiu Cravens serves as the associate dean for international students & affairs and the program director of the International Education Policy and Management M.Ed. program at Peabody College of Education and Human Development. Since 2008, she has led Peabody's institutional efforts in working with universities and institutions worldwide in research, faculty and student exchange, and professional development for school administrators. Dr. Cravens is an associate professor of the practice in education policy. Her scholarly work focuses on the analysis of educational reform policies that are particularly related to the organizational and cultural contexts of schools in the United States and other countries in the world. Her academic work has been devoted to understanding the role of instructional leadership and teacher development in a changing policy environment, and addressing the conceptual and methodological challenges of cross-cultural translation and adaptation of effective practices. Recently, she participated in research studies on developing teacher capacity through shared instructional leadership in Shanghai and Tennessee, charter school effects with the National Center on School Choice, the development and validation of the Vanderbilt Assessment of Leadership in Education® (the VAL-ED), and the cross-cultural validity and reliability of the VAL-ED in Chinese urban schools. She has authored or co-authored research articles that appear in academic journals such as the Comparative Education Review, Educational Administration Quarterly, Journal of Educational Administration, Elementary School Journal, Leadership and Policy in Schools, and American Journal of Education.

Judge Biographies

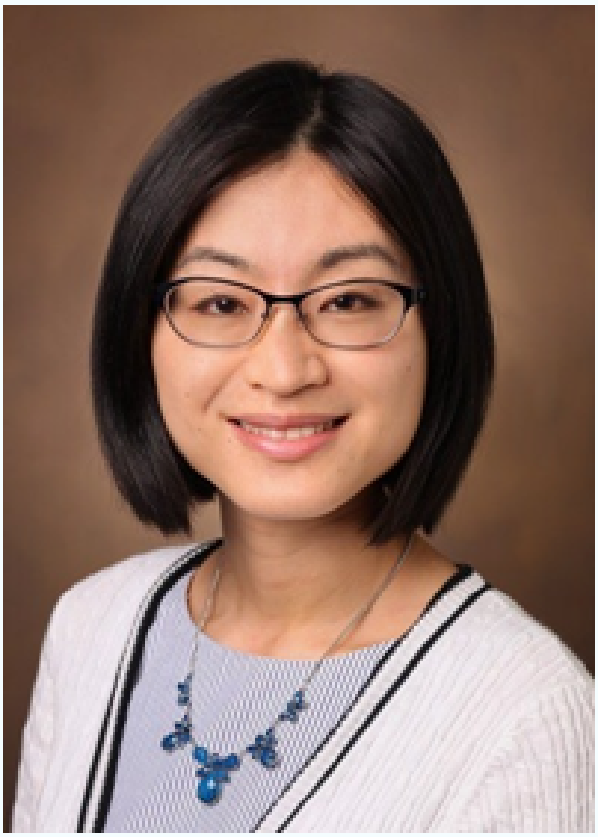
Alexandria Luu
MPH



Alexandria is the co-founder of The Real Estate Physician and chief strategist supporting over $1B of assets under management and 42 commercial estates coast-to-coast. As a graduate of the global health track, her experiences have taken her through community program management to international development with organizations such as the International Rescue Committee, Peace Corps, and WHO.

Judge Biographies

Dr. Danxia Yu
Assistant Professor of Medicine/Epidemiology



Dr. Yu's research focuses on 1) epidemiology and prevention of major chronic diseases through healthy diets and lifestyles and 2) diet-gut microbiota interactions and novel biomarkers for cardiometabolic diseases. Using large prospective cohort studies, Dr. Yu has identified dietary factors and biomarkers predictive of the risk and mortality of major chronic diseases, including heart disease, stroke, type 2 diabetes, lung cancer, and dementia, among populations from diverse racial/ethnic backgrounds and geographic regions.

Judge Biographies

Dr. Christopher Wahlfeld
PhD, MPH, Epidemiologist, MPHD

Dr. Wahlfeld received his BA in Anthropology and Religion from Cornell College and his MA in Anthropology from the University of Montana. He went on to earn his Ph.D. in Anthropology from the State University of New York at Buffalo. His doctoral studies took him to the Indian Himalaya, where he researched birth weight and reproductive health at high altitudes. After several years working as a Senior Qualitative Researcher with Ethnographic Solutions, a medical marketing research company, Dr. Wahlfeld returned to graduate school, earning his MPH in Global Health at Vanderbilt University. Christopher enjoys exploring the boundaries and permeability of health and human adaptability within cultural, biological, and ecological contexts. He is particularly interested in the health issues faced by remote populations, and the local innovations employed to mitigate such problems. He is currently a member of the epidemiology team at the Metro Public Health Department, investigating COVID-19 clusters in Davidson County.

Judge Biographies

Dr. Ralf Habermann
MD, MMHC

Ralf Habermann, MD is a geriatric medicine specialist in Nashville, TN, and has been practicing for over 18 years. He graduated from Freie Universitaet Berlin, Medizinische Fachbereich in 1989 and specializes in geriatric medicine.

Judge Biographies

Dr. Marie H. Martin
PhD, MEd / Associate Director, VIGH

Dr. Marie Martin is the Associate Director for Education and Training at the Vanderbilt Institute for Global Health (VIGH) and Assistant Professor in the Department of Health Policy in the Vanderbilt School of Medicine (VUSM). At VIGH, Dr. Martin is responsible for curricular and academic program development in global health at Vanderbilt and abroad. She co-directs the Global Health track of the Vanderbilt MPH Program, teaches multiple courses in global health across the university, and chairs the Vanderbilt University Medical Center's (VUMC) Global Health Education Committee. Dedicated to building local and regional capacity for future practitioners and leaders in the field, Dr. Martin partners with universities in multiple countries to build robust training and educational programs. Her current grant-funded work in Zambia, Liberia, and Ethiopia is focused on faculty development, mentorship, and medical education strengthening. She was inducted into the Academy of Excellence in Education (AEE) at the Vanderbilt University School of Medicine in 2017 and was awarded the 2021 Consortium of Universities in Global Health (CUGH) Velji Global Health Award for Teaching Excellence.

Judge Biographies

Dr. Xiao-ou Shu
M.D., MPH, Ph.D.

Dr. Xiao-Ou Shu is an Ingram Professor of Cancer Research, Professor in the Department of Medicine at the Vanderbilt University School of Medicine, co-leader for the Cancer Epidemiology Program, and Associate Director for Global Health at the Vanderbilt-Ingram Cancer Center. She has been consistently funded by US National Institute of Health since 1996, serving as the principal investigator for more than 23 major research grants and 3 training grants. Dr. Shu has over 35 years of experience in conducting large-scale epidemiological studies on cancer and other chronic diseases. She is the PI of the Shanghai Men's Health Study (SMHS) and a leading investigator of the Shanghai Women's Health Study (SWHS), two cohorts that contribute over 130,000 participants to the Asia Cohort Consortium (ACC). She is a founding member of several large epidemiologic consortia, including the After Breast Cancer Pooling Project (ABCPP; N=18,000), the Asian Genetic Epidemiology Network for Obesity-Related Traits (AGEN-Obesity; N=134,500) and the Calcium and Lung Cancer Pooling Project (N=1,900,000), for which she is the lead investigator. Dr. Shu has more than 1000 publications in peer-reviewed life science journals, with a H-index of 134. She was recognized by Thomson Reuters/Clarivate Analytics as a "Highly Cited Researcher" in 2015, 2016 and 2018. Her research has contributed immeasurably to our understanding of genetic, lifestyle and clinical determinants of breast, ovarian and endometrial cancer risk and prognosis, and her research findings have lead change of national recommendations.

Judge Biographies

Victoria Umatoni
MPH

Victoria is a Public Health/Global Health analyst with experience in public health surveillance and data analysis. She is currently working as a research analyst with the Emerging Infections Program. Her focus is on COVID-19 and Influenza surveillance. Her past experiences include working on projects regarding HIV/AIDS, reproductive health, HPV and cancer epidemiology.

Competition Schedule

Case Competition - Saturday, February 12 (CST)

8:30 AM	Participants arrive and check in	Main Zoom
8:45 AM-9:00 AM	Welcome address by Co-Chairs of the Case Competition	
9:10 AM-11:30 PM	**Preliminary Rounds** • 10-minute presentation by the team (please arrive in your Zoom room 5 minutes before your scheduled time) • 5 minutes for Q&A, 10-minute transition	Track 1 Track 2 Track 3 Track 4
11:30 AM-12:00 PM	Lunch Break	
12:00 PM-12:10 PM	Keynote Speaker: **Elizabeth Rose, Ed.D., M.P.H., M.Ed.**	Main Zoom
12:10 PM-12:15 PM	Finalists Announced	
12:20 PM-2:15 PM	Final five teams present to the judge's • Finalist round: Teams present to the judges. Teams will be picked in random order. • Note: Please enjoy this opportunity to learn about the approaches to the case from other teams.	
2:45 PM-3:00 PM	Closing and Award presentations - 1st, 2nd, and 3rd places	

Track 1 Schedule

Click Here for the Zoom Link

9:10 AM-9:25 AM	**Team 1** Present & Judges Q&A
9:25 AM - 9:35 AM	Judges Meet
9:35 AM- 9:50 AM	**Team 2** Present & Judges Q&A
9:50 AM - 10:00 AM	Judges Meet
10:00 AM - 10:15 AM	**Team 3** Present & Judges Q&A
10:15 AM - 10:25 AM	Judges Meet
10:25AM - 10:40 AM	**Team 4** Present & Judges Q&A
10:40 AM - 10:50 AM	Judges Meet
10:50 AM - 11:05 AM	**Team 5** Present & Judges Q&A
11:05 AM - 11:15 AM	Judges Meet

Track 2 Schedule

Click Here for the Zoom Link

9:10 AM-9:25 AM	**Team 6** Present & Judges Q&A
9:25 AM - 9:35 AM	Judges Meet
9:35 AM- 9:50 AM	**Team 7** Present & Judges Q&A
9:50 AM - 10:00 AM	Judges Meet
10:00 AM - 10:15 AM	**Team 8** Present & Judges Q&A
10:15 AM - 10:25 AM	Judges Meet
10:25AM - 10:40 AM	**Team 9** Present & Judges Q&A
10:40 AM - 10:50 AM	Judges Meet
10:50 AM - 11:05 AM	**Team 10** Present & Judges Q&A
11:05 AM - 11:15 AM	Judges Meet

Track 3 Schedule

Click Here for the Zoom Link

9:10 AM-9:25 AM	**Team 11** Present & Judges Q&A
9:25 AM - 9:35 AM	Judges Meet
9:35 AM- 9:50 AM	**Team 12** Present & Judges Q&A
9:50 AM - 10:00 AM	Judges Meet
10:00 AM - 10:15 AM	**Team 13** Present & Judges Q&A
10:15 AM - 10:25 AM	Judges Meet
10:25AM - 10:40 AM	**Team 14** Present & Judges Q&A
10:40 AM - 10:50 AM	Judges Meet
10:50 AM - 11:05 AM	**Team 15** Present & Judges Q&A
11:05 AM - 11:15 AM	Judges Meet

Track 4 Schedule

Click Here for the Zoom Link

9:10 AM-9:25 AM	**Team 16** Present & Judges Q&A
9:25 AM - 9:35 AM	Judges Meet
9:35 AM- 9:50 AM	**Team 17** Present & Judges Q&A
9:50 AM - 10:00 AM	Judges Meet
10:00 AM - 10:15 AM	**Team 18** Present & Judges Q&A
10:15 AM - 10:25 AM	Judges Meet
10:25AM - 10:40 AM	**Team 19** Present & Judges Q&A
10:40 AM - 10:50 AM	Judges Meet
10:50 AM - 11:05 AM	**Team 20** Present & Judges Q&A
11:05 AM - 11:15 AM	Judges Meet
11:15 AM-11:30 AM	**Team 21** Present & Judges Q&A
11:30 AM-11:40 AM	Judges Meet

Global Health
Case Competition
2022 Case Document

Development and Challenges of Hospice and Palliative Care in China

Vanderbilt Institute for Global Health
Student Advisory Council
Global Health Case Competition

Introduction

Introduction

The average age of the world population is increasing, due primarily to the increasing number of elderly patients [1]. Since the 19th century, life expectancy has steadily increased globally from 40 to 72.6 years in 2019 [3]. As of 2019, 703 million people are over 65, accounting for 9% of the global population [1]. By 2030, 1 in 6 people in the world will be over the age of 60 (nearly 1 billion people), and by 2050, the world's population of people aged 60 years and older will double. The number of persons aged 80 years or older is expected to triple between 2020 and 2050 to reach 426 million [2]. Population aging is known as the shift in the distribution of a country's population towards older ages. While this process first began in high-income countries such as Japan, where 30% of the population is already over 60 years old, it is now driving the most rapid change in low and middle-income countries. By 2050, two-thirds of the world's population over 60 years will live in low and middle-income countries.

Challenges of Aging

At the biological level, aging results from accumulating a wide variety of molecular and cellular damage over time, leading to a gradual decrease in physical and mental capacity, a growing risk of disease, and ultimately death. These changes are neither linear nor consistent, and they are only loosely associated with a person's age in years. The diversity seen in older age is not random.

Common conditions in older age include hearing loss, cataracts, refractive errors, back, and neck pain and osteoarthritis, chronic obstructive pulmonary disease, diabetes, depression, and dementia. As people age, they are more likely to experience compounded difficulty in daily life due to the synergistic effects of multiple health issues [Figure 1]. Older age is also characterized by the emergence of several complex health states commonly called geriatric syndromes. They are often the consequence of multiple underlying factors, including frailty, urinary incontinence, falls, delirium, and pressure ulcers. Other common afflictions associated with age include Alzheimer's, cardiovascular diseases, cancer, and osteoporosis, among many others.

Beyond biological changes, aging is often associated with other life transitions such as retirement, relocation to more appropriate housing, and the death of friends and partners. The consequences of living in isolation for the elderly can be dangerous, especially for those with health conditions, as it may accelerate or cause the development of physical or mental health problems. Senior citizens are also less likely to take advantage of social or health services, leading to further isolation [15]. Extended social isolation can result in late-life depression, a major depressive episode occurring for the first time in an individual over sixty years of age.

Therefore, the assessment of "quality of care for the elderly" has remained an essential question in many areas of the world to account for the increasing number of older citizens. Many countries do not have access to standards for hospice patient communities as it is not often culturally considered a government issue, nor do they have sufficient national financial resources to provide such services.

Country Profile

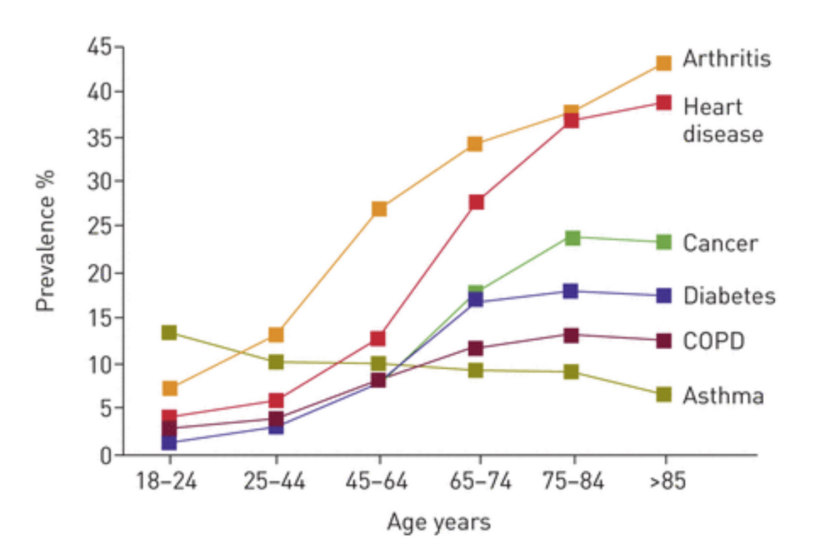


Figure 1: Prevalence of selected chronic conditions as a function of age. COPD: chronic obstructive pulmonary disease. [4]

Country Profile

China, known officially as the People's Republic of China, is home to over 1.4 billion people, comprising roughly 18.47% of the world's population [1]. It is the world's single most populous country and one of the largest, bordering 14 different countries. China is officially split into 23 provinces, five autonomous regions, four direct-controlled municipalities (Beijing – capital city, Chongqing, Shanghai – largest city, and Tianjin), and two special administrative regions.

As of 2020, about 12% of the population is 65 and above [Figure 2], meaning over 167 million people comprise China's elderly population. With such a significant portion of its citizens aging, China requires the resources necessary to care for some of its most vulnerable people. China was ranked 71 out of 80 countries on palliative care in 2015 [6]. With a rapidly aging population, certain diseases are becoming more and more common. Vascular diseases and heart disease have become leading causes of death, placing strain on the Chinese health system as it shifts from acute to chronic care [Figure 3] [8]. Currently, over 180 million people of China's elderly population suffer from chronic diseases, and over 75% suffer from more than one [9].

Shifts in the needs of the growing elderly population have highlighted the overwhelming lack of hospice and social resources available to these citizens. The idea of hospice care was first introduced in China during the 1980s, with the first nursing homes established during the latter half of the decade. Initially, care in hospices and palliative care facilities were provided by experts; however, the establishment of the Committee of Rehabilitation and Palliative Care of China Anti-cancer Association (CRPC) in 1994 has become a "national voice" for senior care in China, raising attention to this pressing issue [7]. Since the creation of the CRPC, there has been an increased need for care professionals well-versed in palliative and hospice care, which has necessitated more educational opportunities. However, more teaching and curriculum are necessary to develop a properly trained workforce.

Country Profile Cont.

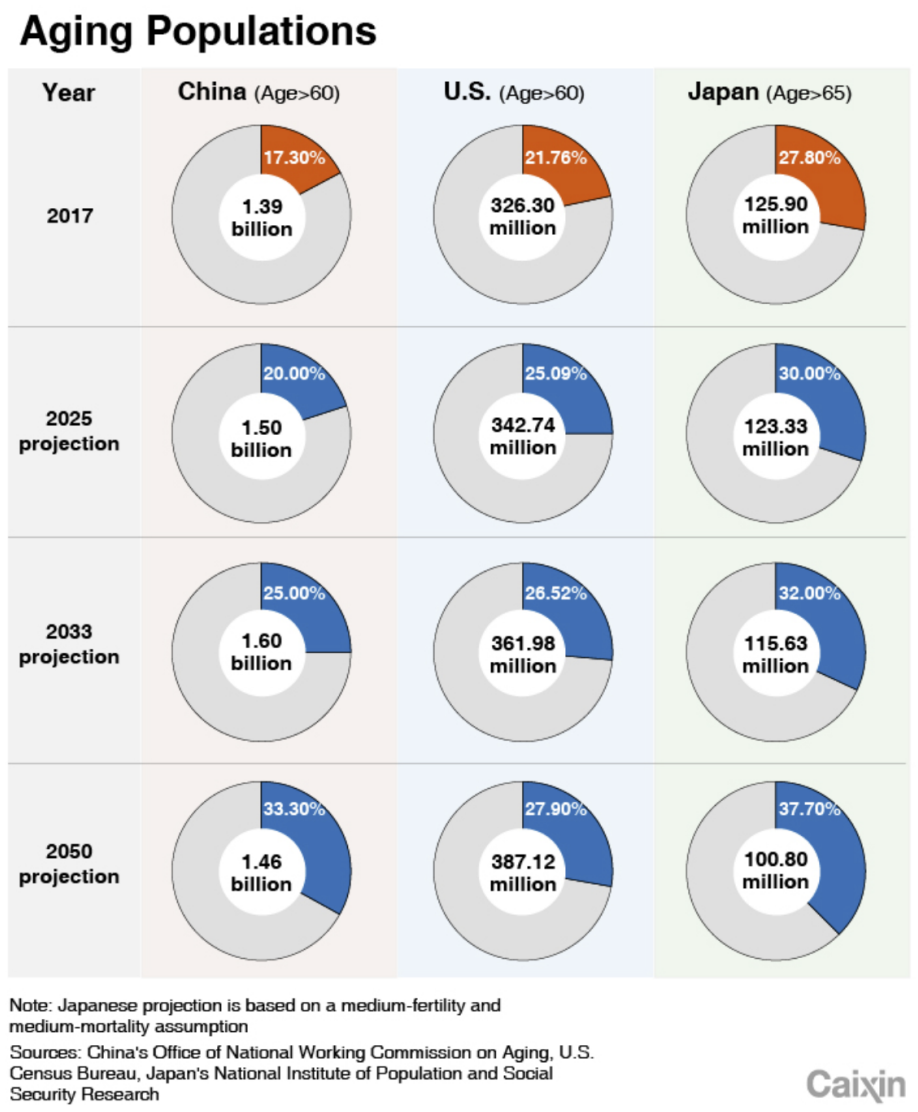


Figure 2: Projection of what percentage of the population will be individuals over 60 for China, the US, and Japan.

One crucial factor to look at when examining the health of China's aging population is the spread of the SARS-CoV-2 virus. The COVID-19 pandemic has hit China particularly hard. The disease originating in Wuhan, China, quickly spread throughout the country before crossing national borders. The pandemic has taken over 5,000 lives, but due to the Chinese government's quick response and cohesive efforts to vaccinate citizens, COVID's immediate health toll has been comparatively reduced in China. However, this does not downplay the pandemic's effect in other aspects of the Chinese healthcare system.

Resource Allocation

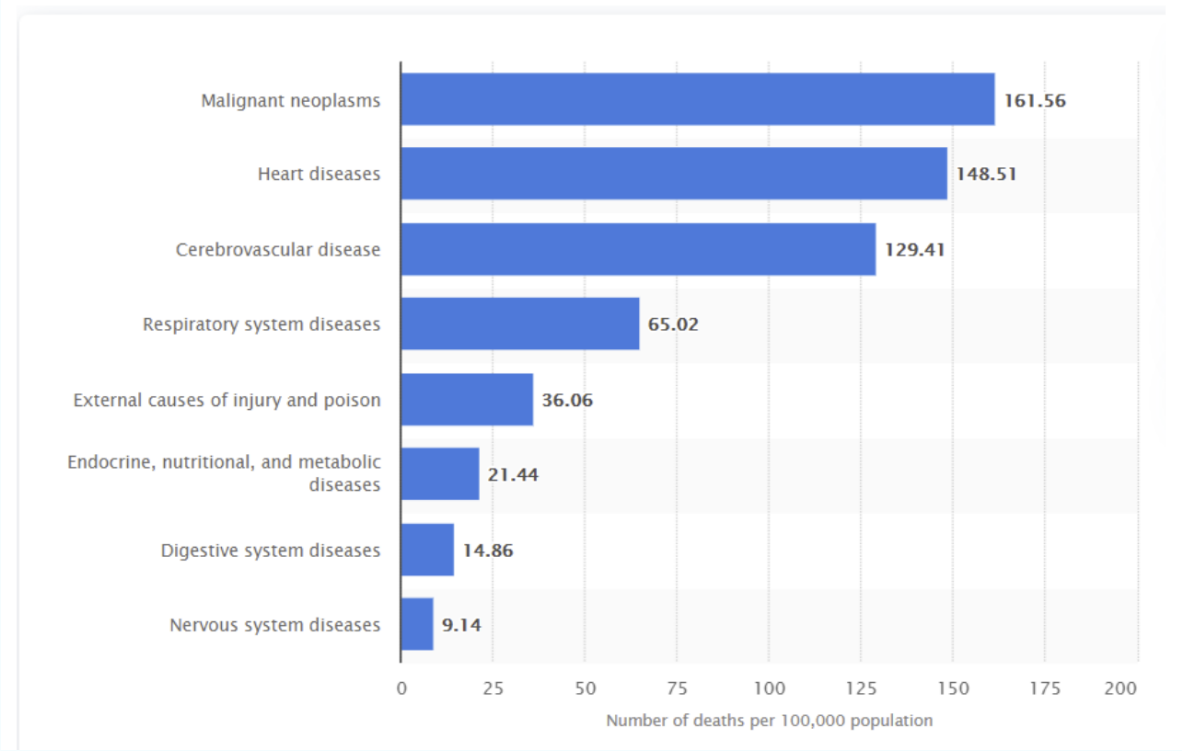


Figure 3: Deaths rates of most common chronic diseases in Urban China in 2019

Resource Allocation

The fundamental issue that China's current medical and health services face is meeting the growing demand of the people. Hospice care is tightly linked to this. The lack of medical and health resources makes it difficult for ordinary people to see a doctor. China's population accounts for about 17-18% of the world's population, but the total health expenditure only accounts for 3% of the world's total. At the same time, the imbalance in the allocation of the resources and services between China's regions and institutions has also exacerbated the difficulty of seeing a doctor. From a geographic perspective, medical and health resources are mainly concentrated in the eastern region, whereas the western region is relatively scarce. Furthermore, the urban-rural divide is prevalent, requiring patients to travel much further to receive medical attention. Looking at the finite amount of resources among medical and health institutions, the allocation of supplies among all levels and types of health institutions also remains unequal. This unequal distribution has caused a "magnet" crisis meaning medical institutions with a more extensive collection of resources attract more patients, further exacerbating the cycle of needing more supplies. Thus, rural communities have difficulty competing against larger hospitals for resources and experience poor attendance.

Chinese Culture Surrounding Death

Chinese Culture Surrounding Death

Confucianism, Taoism, and Buddhism strongly influenced Chinese culture surrounding death. People's views on death are also affected by these religions and cultures. They always adopt a negative and deceitful attitude toward death, such as "it is a symbol of misfortune and fear" [12]. It was nearly forbidden to talk about death during daily conversations in the past. However, this situation had improved after the "Reform and Opening-up" led by Deng Xiaoping in the 20th century when international economic and trade exchanges promoted the integration of Chinese and Western ideas. Even in this case, Chinese people in many areas still feel that sending their parents/elderly family members to nursing homes or palliative care is an unfilial thing, seen as relegating them to die outside the home.

Problem Statement & Your Task

Problem Statement
While no culture is genuinely enthusiastic about death, the subject of one's aging and various illnesses remains taboo in China. Even the mention of hospital care or the suggestion of a helper/aid for the elderly is considered unlucky, to the point that dying persons are reluctant to discuss arrangements with their families or even to make wills.

Your challenge for this competition is to determine and propose an effective healthcare system for the aging population in the various regions of China, with a particular focus on improving existing hospice care and end-of-life healthcare support systems and forming relationships between hospice care institutions and hospitals.

Additional questions you may wish to consider include: How can doctors communicate with family members of the patients if they want to refer patients to the hospice care services? Should there be more non-profit or for-profit hospice agencies? What kinds of patients are suitable for hospice care? Is there a specific time they should be in hospice care?

Your Task
Your team should prepare a 10-minute oral presentation with supporting slides outlining your plan for the National Health and Family Planning Commission of the People's Republic of China (NHFPC) to encourage the implementation of government-supported health care systems and hospice care for the elderly.

Strong presentations will include many or all of the following elements:

A timeline or Gantt chart,
A logistical framework or SWOT analysis,
A potential partner or organization
A budget

Effective presentations likely will NOT exceed ten presented slides (excluding citations). Additional appendix slides may be included for judges' reference but should not be presented orally. All members of your group must be present for the final presentation and should be prepared to respond to questions from the judging panel, though it is not a requirement that all group members speak. There will be 5 minutes of Q&A immediately following your presentation. Remember to cite all sources at the end of your presentation. No late entries will be accepted.

Glossary

Cataracts: An opacity of the eye's crystalline lens, or the lens's capsule, or both, producing impairment of sight, but never complete blindness.

Chronic obstructive pulmonary disease: A chronic inflammatory lung disease that causes obstructed airflow from the lungs. Symptoms include breathing difficulty, cough, mucus (sputum) production, and wheezing. It's typically caused by long-term exposure to irritating gases or particulate matter, most often from cigarette smoke.

Geriatric Syndromes: Common clinical conditions that don't fit into specific disease categories but have substantial implications for functionality and life satisfaction in older adults. Besides leading to increased mortality and disability, decreased financial and personal resources, and more prolonged hospitalizations, these conditions can substantially diminish the quality of life.

Hospice Care: Compassionate comfort care (as opposed to curative care) for people facing a terminal illness with a prognosis of six months or less, based on their physician's estimate if the disease runs its course as expected. Usually requires that two physicians certify that the patient has less than six months to live if the disease follows its usual path.

Late-life depression: A major depressive episode occurring for the first time in an individual over sixty years of age.

Osteoarthritis: The most common form of arthritis, affecting millions worldwide. It occurs when the protective cartilage that cushions the ends of the bones wears down over time.

Osteoporosis: Bone loss causes bones to become weak and brittle so that mild stresses such as bending over or coughing can cause a fracture. Bone is a living tissue that is constantly being broken down and replaced. Osteoporosis occurs when the creation of new bone doesn't keep up with the loss of old bone. Osteoporosis-related fractures most commonly occur in the hip, wrist, or spine.

Palliative Care: Compassionate comfort care relieves the symptoms and the physical and mental stress of a serious or life-limiting illness. Palliative care can be pursued at diagnosis, during curative treatment and follow-up, and at the end of life. Unlike hospice care, palliative care can begin at the discretion of the physician and patient at any time, at any stage of illness, terminal or not.

Urinary Incontinence: Loss of bladder control in which a person leaks urine by accident. Urinary Incontinence can have causes that aren't due to underlying disease. While it may happen to anyone, Urinary Incontinence is more common in older people, especially women, and can have differing levels of severity.

Bibliography

[1] United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Ageing. 2019: Highlights (ST/ESA/SER.A/430).

[2] Max Roser, Esteban Ortiz-Ospina and Hannah Ritchie (2013) - "Life Expectancy". Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/life-expectancy' [Online Resource]

[3] World Health Organization. (2021, October 4). Aging and health. World Health Organization. Retrieved November 2, 2021, from https://www.who.int/news-room/fact-sheets/detail/ageing-and-health.

[4] Harris RE, ed. Epidemiology of Chronic Disease Global Perspectives. Massachusetts, Jones and Bartlett Learning, 2013.

[5] Lu, Y., Gu, Y., & Yu, W. (2018). Hospice and Palliative Care in China: Development and Challenges. Asia-Pacific journal of oncology nursing, 5(1), 26–32. https://doi.org/10.4103/apjon.apjon_72_17

[6]Yan, Y., Zhang, H., Gao, W., Liu, D., Endo, M., Deshpande, G. A., Uehara, Y., Watanabe, D., Yoshikawa, S., & Mizushima, A. (2020). Current awareness of palliative care in China. The Lancet Global Health, 8(3). https://doi.org/10.1016/s2214-109x(20)30006-1

[7] Lu Y, Gu Y, Yu W. Hospice and Palliative Care in China: Development and Challenges. Asia Pac J Oncol Nurs. 2018 Jan-Mar;5(1):26-32. doi: 10.4103/apjon.apjon_72_17. PMID: 29379830; PMCID: PMC5763435.

[8] Yan Guo, Xinghua Liu, Mengyao Deng, Pulin Liu, Fang Li, Nianhua Xie, Yanhui Pang, Xiaoxia Zhang, Wen Luo, Ying Peng, Yaqiong Yan, Gang Li, Mei Yang, Epidemiology of COVID-19 in older persons, Wuhan, China, Age and Ageing, Volume 49, Issue 5, September 2020, Pages 706–712, https://doi.org/10.1093/ageing/afaa145

[9] Zhou M, Wang H, Zeng X, Yin P, Zhu J, Chen W, Li X, Wang L, Wang L, Liu Y, Liu J, Zhang M, Qi J, Yu S, Afshin A, Gakidou E, Glenn S, Krish VS, Miller-Petrie MK, Mountjoy-Venning WC, Mullany EC, Redford SB, Liu H, Naghavi M, Hay SI, Wang L, Murray CJL, Liang X. Mortality, morbidity, and risk factors in China and its provinces, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet. 2019 Sep 28;394(10204):1145-1158. doi: 10.1016/S0140-6736(19)30427-1. Epub 2019 Jun 24. Erratum in: Lancet. 2020 Jul 4;396(10243):26. PMID: 31248666; PMCID: PMC6891889.

Bibliography

[10] http://www.xinhuanet.com/english/2019-07/30/c_138269946.html

[11] Sun, Y., Gregersen, H., & Yuan, W. (2017). Chinese health care system and clinical epidemiology. Clinical epidemiology, 9, 167–178. https://doi.org/10.2147/CLEP.S106258

[12] International End of Life Doula Association. (2021, October 4). The Chinese approach to death and dying. Inelda. Retrieved December 1, 2021, from https://www.inelda.org/the-chinese-approach-to-death-and-dying/.

[13] Oxford University Press. (n.d.). Discover the story of Englishmore than 600,000 words, over a thousand years. Home : Oxford English Dictionary. Retrieved December 1, 2021, from https://www.oed.com/.

[14] Mayo Foundation for Medical Education and Research. (n.d.). Mayo Clinic. Retrieved December 1, 2021, from https://www.mayoclinic.org/.

[15] Rowland, D., & Lyons, B. (1996). Medicare, Medicaid, and the elderly poor. Health care financing review, 18(2), 61–85.

Judging Rubric 2022 Competition

Category	Possible Points
Justification (data and evidence) The proposed intervention... • Accounts for education, economic, political, and cultural factors • Is evidence-based • Includes relevant data to support the project • Analyzed strengths, weaknesses, opportunities, and threats/challenges (SWOT analysis)	20
Creativity and Innovation The proposed intervention... • Integrates multiple disciplines • Uses resources creatively considering virtual constraints • Reflects "outside-the-box" thinking • Is culturally acceptable and relevant • Is feasible with regard to financial, human resource, and time constraints • Has potential for expansion and growth	25
Clarity and Organization The proposed intervention has... • Clear definition of the problem • Outcomes are specific, measurable, achievable, realistic, and time-bound (SMART objectives) • Plan for assessment and evaluation of goals and outcomes • Logical implementation of activities	20
Case-Specific Information The proposal addresses ... • How it will alleviate the critical global health issue • How it will impact education, economics, politics, and culture of the location and the surrounding region. • Feasibility of implementation • Sustainability beyond the funding period • Cultural acceptability and involvement of local communities and leaders	25
Delivery (voice, body, eye contact) Presenters... • Effectively use visual aids (PowerPoint, Prezi, etc.) • Have a clear voice, enthusiasm, and make eye contact with judges • Demonstrate knowledge and command during Q & A session. • Technical difficulties will not count against the team • Students might choose to keep their videos off during the **pre-recorded presentation** depending on format and privacy concerns. This should not count against the team. • All students must have their camera on during the live Q&A session and in the live final rounds	10
Total Possible Points	100

HELPFUL HINTS FOR A STELLAR PRESENTATION

- Your time is limited, so be strategic about how to cover all of the critical components of your proposal, such as SWOT analysis, SMART objectives, a sustainability plan, cultural context, budget, and proposed impact.
- Focus on a few major strategic issues and do not get caught up in details.
- Not every member of the team is required to speak during the presentation. Therefore, choose people who can effectively and confidently convey the main points of your proposal on the day of the event. Those who do not present your solution should be available for the Question and Answer portion of the competition.
- Be sure to summarize your project goals, rationale, tools for measurement, and financial justification. Emphasize your intervention's potential for sustainability and its balance of innovation and proven reliability.
- Use the presentation as visual support of your message, not as a crutch. Be mindful of your time and the number of slides. All presentations will be stopped at the 10-minute mark in compliance with Case Competition rules.

GLOBAL HEALTH CASE COMPETITION CODE OF CONDUCT AND HONOR CODE

The Vanderbilt Honor System was instituted in 1875 with the first final examinations administered by the University. Dean Madison Sarratt summarized the system as follows,

“Let every individual who contemplates entering Vanderbilt University ask himself[/herself] first this important question: ‘Am I strong enough to give my word of honor and then live up to it in spite of every temptation that may arise?’”

Throughout the Case Competition, students are expected to create original presentations, cite all sources appropriately, and follow the provisions of the Vanderbilt University Honor System. Honor Code violations and failure to adhere to the rules of the Case Competition will result in automatic disqualification.

CASE COMPETITION COMMITTEE

Leadership:

Hilly Yehoshua, Case Competition Co-Chair
Noor Ali, Case Competition Co-Chair

Committee Members:

Jeremy Chiang, Case Writing Chair

Jiayue Liu, Case Writing Committee Member
Chidimma Ndubuisi Oluavu, Case Writing Committee Member
Varun Reddy, Case Writing Committee Member
Grace West, Case Writing Committee Member

Kevin Nguyen, Logistics & Coordination Chair

Shahar Hartman, Logistics & Coordination Committee Member
Dev Patel, Logistics & Coordination Committee Member
Anisa Haffizulla, Logistics & Coordination Committee Member
Ryan Dalforno, Logistics & Coordination Committee Member

Bethlehem Daniel, Sponsorhip & Marketing Chair

Duretti Ahmad, SponsorshipTeam Lead
Janet Mariadoss, Marketing Team Lead
Nitya Kari, Sponsorship & Marketing Committee Member
Shalini Thinakaran, Sponsorship & Marketing Committee Member

VIGH Student Advisory Council Advisors:

Dr. Elizabeth Rose
Dr. Marie Martin