



# International Agenda

Volume 18, Number 2 Fall 2019

Magazine of the Schoolcraft College International Institute (SCII)

## *On a Mission for Global Health*



Yuyang Liu for *The New York Times*, Jan. 4, 2018

A scientist conducts tests in a cell culture lab at I-Mab Biopharma, a pharmaceutical firm based in Shanghai, China. With the industry now globalized, the relation between drug firms in the West and East is marked by both competition and collaboration.

*See pages 8-37 for coverage of the 2019 Focus project,  
“Exploring Physical & Mental Health Issues in a Global Environment”.*

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**p. 5**

## International Agenda

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The mission of the Schoolcraft College International Institute is to coordinate cross-cultural learning opportunities for students, faculty, staff, and the community. The Institute strives to enhance the international content of coursework, programs, and other College activities so participants better appreciate both the diversities and commonalities among world cultures, and better understand the global forces shaping people's lives.

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The survey can be accessed at this URL:

<https://www.surveymonkey.com/r/N23JRV7>



## SCII Meeting Schedule

International Institute meetings are open to all who want to learn or to help out. New folks are always welcome. Meetings are on Fridays at 12-2 pm in Liberal Arts Bldg, room LA-200:

- September 20, 2019
- October 18, 2019
- November 15, 2019
- January 17, 2020
- February 21, 2020
- May 8, 2020.

## GlobalEYEzers

GlobalEYEzers, a group affiliated with SCII, meets over lunch for discussions of international/intercultural issues. Faculty and staff, as well as students and community members, are welcome. Meetings are on Fridays at 12-2 pm in LA-200:

- November 8, 2019
- March 20, 2020.

For more information, contact English Prof. Anna Maheshwari at [amaheshw@schoolcraft.edu](mailto:amaheshw@schoolcraft.edu) or 734-462-7188.



## Campus News & Kudos

At the Annual Meeting of the Association of American Colleges and Universities (AAC&U), held at the Hyatt Regency Atlanta on Jan. 23-26, SCII Co-Director **Helen Ditouras** and several colleagues from the Univ. of Michigan and Central Michigan Univ. presented a panel discussion about promoting global initiatives on college campuses. The theme of this year's gathering was "Raising Our Voices: Reclaiming the Narrative on the Value of Higher Education", and Helen reports that it was an outstanding conference, one of the best that she has ever attended.

SCII Co-Director **Helen Ditouras** also took the lead in assembling a proposal for a \$10,000 U.S. Dept. of Education Title VI International/Intercultural grant. If approved, the grant would support new curriculum infusions and campus programming related to human rights.

**John Brender**, Director of the Confucius Institute at Wayne State Univ., gave a Feb. 5 talk on our campus about the music, history, and culture surrounding the lunar New Year celebration. In June he offered free Beginning and Intermediate "Chinese Language Boot Camps" here and at WSU. Dr. Brender can also be asked to make a classroom presentation on a selected topic related to East Asia.

The **Native American Club** hosted a Mar. 14 campus talk by Jasmine Pawlicki, a Univ. of Michigan staff member who be-

longs to the Sokaogon Band of Lake Superior Chippewa (Ojibwe), whose homeland is in northern Wisconsin. Ms. Pawlicki spoke about "Race and Representation: Making Memes to Challenge Stereotypes". Prof. **Karen Schaumann-Beltrán** (Sociology) is faculty advisor for the club.

Roughly 2,300 visitors attended Schoolcraft's 18<sup>th</sup> annual **Multicultural Fair**, held in the VisTaTech Center on Mar. 28. The fair featured 20 display tables of dress, artifacts, and language from around the world; in collaboration with Wayne State Univ., performances by 12 visiting troupes such as the Mariachi Jalisco Band, the Floreo Flamenco Dance Group, the Philippines Kulintang Ensemble, and the Association of Chinese Americans; ethnic food samples; and more. India was voted the Best Display Table of the Fair. Kudos to the Fair organizing committee: **Helen Ditouras** (English), **Kim Lark** (History), **Kyla Lahiff** and **Laura Leshok** (Academic Advising and Partnerships), **Josselyn Moore** (Anthropology), **Lynda Shimbo** (alumna), and **Todd Stowell** (Student Activities Office).

**Anita Süess Kaushik** (Foreign Languages) led a May 25 – Jun. 3 Discover Peru educational tour with stops in Lima, the Indian Market in Pisac, the ancient Incan capital of Cuzco, the Sacred Valley of the Incas, Machu Picchu, and Lake Titicaca. This was the 12<sup>th</sup> overseas study tour that Dr. Süess has led, with logistics handled by Explorica. Dr. Süess reports, "We were a group of 13, and it was an absolutely extraordinary trip! After the tour, I stayed on for three weeks in Lima, attending an intensive 6-hours-per-day Spanish course while living with a Peruvian family. It was full immersion—great memories!" •



Above, Psychology professor **Padmaja Nandigama** (standing at center in white gown) with some of the students and staff at St. Francis College for Women, in Hyderabad, India. Dr. Nandigama traveled to Hyderabad for three weeks in late July and early August, giving a series of motivational lectures to young college graduates and professionals. Her appearance at St. Francis was part of the school's Student Leadership Development Programme. Her other talks included Hyderabad Central University, Sri Sai Jyothi College of Pharmacy, the global digital services firm ProKarma Inc., and the pharmaceuticals firm SP Accure Labs. Dr. Nandigama spoke about setting and prioritizing goals in life and about leadership, teambuilding, motivation and positive thinking, communication and organizational skills, emotional intelligence, and achieving work-life balance.

# Students!



## Enter the Fall 2019 *International Agenda* Writing and Artwork Contest

First Prize: \$250 Scholarship  
Second Prize: \$150 Scholarship

...in each of the two categories, writing and artwork.

### Winners from Winter 2019

Jim Karell: First Prize, Artwork (see p. 41)

Mariam Ahmad: Second Prize, Artwork (see p. 6)

Marie Chantal Nyirahategekimana: First Prize,  
Writing (see p. 42)

Gabriel Pereira: Second Prize, Writing (see pp. 40-41)

Prize funds are provided by Schoolcraft's Office of Instruction.

**Submission Deadline: November 11, 2019**

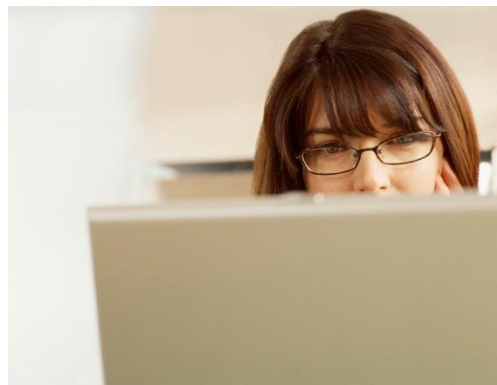
### Guidelines:

1. Students (or their faculty mentors) may enter essays, research papers, persuasive writing, creative writing, poetry, or 2D or 3D artwork suitable for publication in *International Agenda*.
2. Works may deal with any topic of international or cross-cultural interest.
3. Submit a digital version of the writing or artwork as an e-mail attachment to the address below.
4. Submissions will be judged by a panel of faculty and staff volunteers based on content, originality, and aesthetics.
5. Entrants will be asked to sign a form affirming that the work is their own and permitting it to be used in the magazine.

For copies of the entry form and the complete set of rules, go to <http://www.schoolcraft.edu/scii/international-agenda> or else contact:

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# Readers!



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# Cafés of the World

by Mariam Ahmad

*Schoolcraft College student Mariam Ahmad of Canton, MI, created this triptych by selecting three pieces from her series of artworks depicting international cafés. Those shown here (top to bottom) are in Prague, Czech Republic; Paris, France; and Izmir, Turkey. The series was part of her classwork in Art 221 (Watercolor Painting 1), taught by Prof. Sarah Olson in Winter 2019. Mariam explains more below.*



I'm a graphic designer by my field of study and career, but I've been doing traditional art for a few years on my own. It was my love for art which made me choose the graphic design field as it is art in digital form. Watercolor is my favorite medium, and I always enjoy adding mixed media elements to really make the paintings "pop" or come to life. The works in my "Cafés of the World" series are primarily in watercolor on canvas, with a few 3D elements here and there like moss, flowers, and buttons.

I am from Pakistan and I've visited a number of different places around the world, such as Izmir, on the Aegean coast of Turkey. Every place is different and has its own beauty. Each place has its own cultures and customs and way of life, which I really wanted to portray in my paintings. Hence, I chose to make a series of paintings showing the various designs and set-ups of cafés from different countries.

My main goal is to start my own art business in which I will be making custom art pieces, cards, invitations, and decorations for my clients as well as art from different cultures. I really want to spread my art around the world, and I'm really thankful that this contest allowed me to share my artwork with others.

# R U READY 4 THE WORLD?

*In today's world, you can get a lot further if you're knowledgeable about other peoples, countries, and cultures. We asked a few successful people to write brief summaries of how international awareness has figured into their lives and careers. Here's what they sent us...*

I was only a few months old when I took my first plane flight— and I've loved traveling ever since. I've recently visited Sweden, Norway, Austria, Hungary, and I've studied Japanese and lived and worked in Japan. Not bad for someone who has lived in the same small town most of my life! With the technological advances made in the last 10 years, experiencing other cultures is easier than ever before. I can't imagine my life without all of the connections I've made, and all of the wonderful people and places I've experienced. I currently work for a large global company; I get to work with colleagues in China, Germany, Romania, India, and more every day! It's a great fit for me, and I love the collaboration and innovation that diversity brings. So, get out there and see the world! The skills you develop through experience will enrich your life.

— Saundra Dilley, Engineering Learning and Development Specialist,  
HARMAN International (Novi, MI)



When I was younger, my parents felt it was important that I be exposed to many different types of people, not just those I grew up with in North Carolina, California, and Virginia. They always reminded me to suspend judgment of other cultures, and we took road trips around the U.S. and to Mexico and Canada to widen our understanding. I loved noticing the similarities and differences we shared. Now that I'm a venture capitalist, being able to meet with entrepreneurs from all over the world without having so many preconceived notions about them has allowed me to connect more naturally. It also led me to explore my roots by traveling to Ghana and Nigeria last Christmas. When I was there it felt like home. I was surprised, but realized that being around my people was a way of healing through heritage. After that trip I decided to join the board of Birthright AFRICA, a non-profit that helps send youth of African descent on heritage-based trips.

— Mercedes Bent, venture capitalist at Lightspeed Venture Partners  
(Menlo Park, CA), with expertise in virtual-reality startups

Working for General Motors has exposed me to diverse populations over the years, and cultural awareness is something that we engineers require in our daily work environment. Global diversity in the workforce is not a new concept in the automotive industry. Since a vehicle assembled in the U.S. has parts and subcomponents that are designed and/or outsourced overseas, collaboration with international companies is key. This involves mutual respect and strong cultural awareness for one another. For example, I need to take international holidays and traditions into account in my planning process. If there's an upcoming holiday in Korea, let's say, I would not schedule a meeting or plan major events during that week. Over the years, I have travelled to Germany, Austria, Canada, and Mexico for work and have fortunately interfaced with different cultures and points of view that truly make my job rewarding.

— Toan Lam, Subsystem Architect for Advanced Infotainment and  
Telematics, General Motors Corp. (Auburn Hills, MI)







Rebecca E. Rollins / Partners In Health

Dr. Patrick Ulysse (center) and Dr. Regan Marsh (right) visit 21-year-old patient Fadacia Mirriam in her home in Pleebo, Liberia, in 2017 in the wake of an Ebola epidemic there.

In Sri Lanka, the government has hired a small number of traveling psychotherapists who go village-to-village, even door-to-door, treating the widespread mental health problems that were left by a bloody civil war that raged in the country from 1983 to 2009. To help overcome the stigma of seeking help, they are billed as “the doctor” rather than “the psychiatrist”. One man, 67, asked the “doctor” to help him because he thought he was having a heart attack.

When the therapist found nothing wrong physically and asked him what he was worrying about, the man insisted that he was worried about nothing. Then his wife volunteered that they had lost two of their sons in the civil war, and the anniversary of one of the deaths had just passed. “He always lapses into grief at this time”, she told the therapist. “He keeps it all bottled up and denies feeling upset or unhappy.” In Sri Lanka, there are 100-150 suicide attempts *every day*, often using a pesticide; about 10% are successful. The government estimates that over 2 million people (about 10% of the population) suffer from mental disorders, including about 800,000 cases of depression.<sup>1</sup>

Understanding issues like these, and gearing some of our education around them, has been the aim of the Schoolcraft College International Institute’s campus-wide focus during calendar year 2019, “Exploring Physical and Mental Health Issues in a Global Environment”. The project encourages a broad exploration of factors affecting health in regions around the world, including the impact of culture, nationality, class, economics, politics, gender, diet, and the urban/rural divide; women’s health and reproductive health; the use of new technologies in reaching underserved populations; the battle to control infectious diseases; the work of medical organizations, foundations, and NGOs; the importance of cultural awareness among health professionals; and the global history of medicine.

### Epidemic as Social Protest

Physical and mental health care are subjects that need to be thought about on a global level. That is why, two years ago in Detroit, the Wayne State University School of Medicine inaugurated a Global Health Alliance (WSUGHA), including international experiential learning programs in countries such as

## On a Mission:

Laos. The WSUGHA co-directors, Ijeoma Nnodim Opara and Kristiana Kaufmann, point out in their article on page 13 that today’s health care professionals need training not only in traditional medical skills but also in “cultural competency, systems-based critical thinking, skills in capacity strengthening, program management, and working as part of inter-professional teams.”

The struggle to contain epidemics such as Ebola, Zika, malaria, SARS, and MERS is a striking example of the need for such skills. What makes populations vulnerable to life-threatening infectious diseases is, in general, the effects of poverty, oppression, or war—whether it be malnutrition, a stark lack of adequate housing, sanitation, and health care, gross racial or gender inequality, or the need to flee from danger as refugees. An epidemic is like a protest against such social conditions, and these underlying conditions can be redressed only with an all-around social response. In today’s world, the social response that’s required is a multicultural, and often an international, one. The resources of literally hundreds of agencies and non-governmental organizations are deployed all over the world in the battles against these outbreaks.

Dr. Sheria Robinson-Lane and her colleagues outline the basic principles of culturally responsive health care in their article on pages 16-17. This is also why cultural diversity is a key ingredient within the workforces of health care systems and organizations; Stacy Terrell of the U.S. Agency for International Development addresses this issue in her article, “Bringing Diverse Voices to Global Health” (pp. 14-15).

A physician with the World Health Organization (WHO) described the “culture shock” that he went through this past Spring as part of a WHO laboratory team responding to the Ebola outbreak in the Democratic Republic of Congo (DRC). The outbreak is centered on the eastern edge of the DRC, where a complex civil war has been smoldering for 20 years, and where two Ebola treatment centers run by Doctors Without Borders had been violently attacked just a couple of weeks before the team’s arrival. After their flight from Geneva, Switzerland in a small United Nations plane, and a quick meeting with medical officials in the capital, Kinshasa, the WHO team entered the hot zone in bullet-proof vests, convoyed behind a UN armored personnel carrier.

The team doctors needed to deploy their medical knowledge and technical skills; for example, they genome-sequenced Ebola viruses drawn from victims in order to discover the social pathways along which the disease has spread in the region. But they also needed to learn about the country’s medical infrastructure and about the life and culture of its remote cities and villages. They had to try to convince the villagers to change their traditional burial practices to ones that would not encourage the spread of the virus. They had to argue for the importance of such measures—to people who are understandably more fearful of armed soldiers and rebels than they are fearful of invisible microbes. They saw up-close the effects of poverty, misery, brutality, and unpredictable violence.

In this issue of *International Agenda* we carry reports that



# Dealing with Global Health

update readers on the status of three other global campaigns against epidemics and pandemics: polio, where the disease is nearly totally eradicated (see p. 18); AIDS, where a benchmark of “epidemic control” is foreseeable in 10 years (see p. 19); and Neglected Tropical Diseases, where in most cases the campaigns are just getting underway (see p. 32).

## The Promise of I.T. in Health Care

Several years ago the Indian government, with assistance from BBC Media Action and the Bill & Melinda Gates Foundation, began to provide midwives and social health activists in Bihar, India with a Mobile Kunji system for pregnancy counseling. Bihar is one of the most impoverished states in India and has very high rates of illiteracy and of maternal, neonatal, and infant mortality. Mobile Kunji (*kunji* means “guide” or “key” in Hindi) is an Interactive Voice Response (IVR) system using speech recognition, accompanied by a printed deck of illustrated cards held on a ring, which together provide essential audio-visual information on pregnancy and newborn health. A midwife or activist visiting a patient’s home can place a free call to Mobile Kunji and allow the patient to interact with the voice of a computer doctor, “Dr. Anita”. The voice is authoritative yet sympathetic, engaging and conversational, answering questions and providing information that reinforces the health messages pictured on the cards. In a study of pregnant Bihari women exposed to Mobile Kunji, the number who actively prepared for birth (arranged transport, identified a hospital in case of emergency, saved critical phone numbers, saved money) increased by 28 percentage points compared to those without Kunji.<sup>2</sup>

Deep Medicine is the generic term being used for such uses of information technology and artificial intelligence in health care. Some other examples:

- Britain’s National Health Service this Summer became the first in the world to use the Amazon Alexa virtual assistant for dispensing official health advice.
- The London-based group Peek Vision developed the Portable Eye Examination Kit (PEEK), a retinal camera attachment for smartphones that has made detailed vision checks affordable and highly effective for optical professionals traveling in rural and remote locations in Kenya.
- The Connecticut-based firm Butterfly Network markets a \$2000 handheld ultrasound device, The Butterfly, to doctors and nurses who want to have medical imaging capability in remote villages in Uganda and other parts of Africa.
- GeneXpert, developed at a medical school in New Jersey, is a cartridge-based DNA analysis machine that is revolutionizing tuberculosis control in nearly 100 countries by allowing rapid identification of the TB bacterium and its drug-resistant mutations.
- Neural networks and other forms of artificial intelligence (AI) have been trained as experts in analyzing medical images to diagnose diabetic retinopathies in India, gastrointestinal diseases in China, lung cancer in the U.K. and U.S., skin cancer in Spain, etc.
- In collaboration with Memorial Sloan Kettering Cancer



Gates Foundation

A health worker in Bihar, India, uses a Mobile Kunji device during a routine prenatal visit.

Center (New York), doctors in India’s Parkway Pantai hospital network get advice from the IBM Watson AI system about how to treat certain cancers.

The occasionally poorly-targeted use of these fancy systems, and the high price being charged for some of them by private companies, has come under criticism. Sachin H. Jain, President and CEO at the California-based CareMore Health System, sounded a note of caution:

Digital technology will solve many problems in healthcare— only if applied to the right patients. Patients with rising risk and high-risk who we *know* will benefit should be our priority. We ideally wouldn’t give medicines or screening tests to patients who would derive little benefit from them. We should not invest in wide application of digital screening tools and therapeutic apps unless we can confidently know they will do more good than harm (LinkedIn post, Jan. 2, 2019).

## Mental Illness: A Looming Global Crisis

We know that physical and mental health are closely intertwined. For example, research by Dr. Sylvia F. Kaaya in Tanzania has shown that women there are much more likely to suffer perinatal (post-delivery) depression if they’re infected with HIV/AIDS. Dr. Kaaya, who teaches in the medical school at Muhimbili University of Health and Allied Sciences in Dar es Salaam, is one of only about 60 mental health specialists in the entire nation of Tanzania.

In the relation between physical and mental health, a global shift is occurring. By 2030, WHO forecasts, depression will be the number one cause of disability around the world— more than heart disease, cancer, and HIV. *Forbes* magazine predicts that during 2018-28, approximately 344 million people in Asia alone will require mental health assistance. Already today, more than 13% of the global burden of disease is due to mental illness, including mental, neurological, and substance abuse disorders.

The British medical journal *The Lancet* reported that mental health is the least funded area in all of global health, receiving just 0.4% of all development assistance money. Nearly half of

*continued on next page*

## On a Mission

*continued from page 9*

the world population lives in countries where, on average, there is only one psychiatrist to serve 200,000 or more people. There are only about 50 autism experts in the entire continent of Africa. In addition to such resource shortages, a person who is poor and dealing with psychological challenges often faces other conditions that compound the problem, such as an additional disease, the trauma of having lived through a war or other calamity, or the stigma of seeking mental health assistance.

Alongside conventional therapy, prescription drugs, and ongoing research, novel approaches and therapies are being tried in various parts of the world, like the traveling psychotherapists of Sri Lanka described above. The Program for Improving Mental Health Care, or PRIME (<http://www.prime.uct.ac.za>), was a successful six-year project (2011-17) to train nurses and community health workers in improved diagnosis and treatment of psychological disorders. Based at the Univ. of Cape Town in South Africa, PRIME was supported by a consortium of research institutions and ministries of health in South Africa, Uganda, Ethiopia, India, and Nepal, with partners in the UK and WHO. Most of the countries in which it operated have less than one psychiatrist or nurse for every 100,000 people.

In Zimbabwe, which has a total of only 12 psychiatrists and 15 clinical psychologists among its 16 million people, The Friendship Bench is a mental health intervention funded since 2010 by the Government of Canada through a nonprofit, Grand Challenges Canada. Lay health workers, known as community “Grandmothers”, are trained to listen to and support patients suffering from anxiety, depression, or other common mental disorders. The Grandmothers (median age 53) work from simple wooden seats called Friendship Benches, situated on the grounds of health clinics in the major cities. They lead patients in problem-solving therapy, role-playing, and behavior activation, and they have mobile phones and tablets to link to specialist support and a cloud-based platform of resources. A study of the program, based on a randomized controlled trial, compared patient outcomes to similar patients receiving standard treatment. Six months after completing six weekly 45-minute sessions on the Friendship Benches, patients were more than three times less likely to have depression symptoms, four times less likely to have anxiety symptoms, and five times less likely to have suicidal thoughts than with standard care. About 86% of the patients were women, over 40% were HIV positive, and 70% had experienced domestic violence or physical illness.<sup>3</sup> As of last year, the Friendship Bench idea had expanded to four countries in southern Africa.

In Zimbabwe a lay health worker, called a “Grandmother”, conducts a problem-solving therapy session with a patient on the Friendship Bench.

A number of other programs make use of meditation, mindfulness, spiritual practices, or regular exposure to nature as measures to help restore and safeguard mental health:

- The British government this year launched a two-year experiment at over 350 public schools in England, where mental health experts are teaching children techniques of meditation, mindfulness, relaxation, breathing exercises, and other methods to “help them regulate their emotions”.
- The Monitor of Engagement with the Natural Environment Survey, a 2014-16 study involving 20,000 British people, found that those who spend two or more hours per week outdoors report being in better health and having a greater sense of well-being than those who don’t get out at all. In 2018, a national hospital system in Scotland began allowing certain categories of doctors to prescribe outdoor nature activities to their patients. The South Korean government has established 40 “healing forests” since 2009, which provide over 500 trained forest-healing instructors, nature-driven therapy programs for more than 1 million visitors annually, and a National Forest Healing Center that carries out interdisciplinary research on forest-medicine.
- Hindu-inspired *yoga*, Buddhist *vipassanā*, Taoist *tai chi*, and Chinese *qigōng* and *falun gong* are meditative practices that have become internationally popular. See also George Valenta’s article, “Hatha Yoga Nourishes the Mind/Body Connection” (p. 25) in this issue of the magazine, and Eric Wilkins’s article, “Zen Buddhist Meditation in Psychotherapy”, in the Fall 2018 issue. Dr. E. Anthony White, who teaches criminal justice and mental health certification classes at Illinois Central College, comes to Schoolcraft this Sep. 25 to make a guest presentation on the use of Tibetan Buddhist practices in relieving stress and anxiety (see speakers listed on p. 12).



Grand Challenges Canada / Zimbabwe AIDS Prevention Project



### Private Ownership vs. Medical Progress

Abraham Lincoln once wrote, “The patent system added the fuel of interest to the fire of genius.” As the argument goes, entrepreneurs develop technologies mainly out of self-interest: they can patent the knowledge and it becomes “proprietary”, i.e., their own private property. They can sit on the patent and do nothing with it— thereby preventing competitors from using the technology— or they can capitalize on the patent by wielding the exclusive right to make and market the invention.

But the patent system, in the U.S. and elsewhere, is stunting the growth of certain areas of biomedical research. Companies have the legal right to patent individual genes and research tools, such as gene sequencing processes. Yes, you read that correctly: a person or company is allowed to turn their knowledge about a gene that everyone is born with into their own private property! Already by 2005, patents in the U.S. alone covered approximately 20% of known human genes, and an untold number of the genes of microbes and other organisms. More than 15 years ago, researchers were already noticing that such patents can stifle the development and deployment of molecular diagnostic tests in medicine.<sup>4</sup>

Earlier this year, three Chinese-American senior research scientists at M. D. Anderson Cancer Center (Univ. of Texas-Houston) were fired from their jobs because their collaboration with scientists in China allegedly leaked “proprietary/ privileged information”. Threats to punish such “patent infringement” happen all the time.

The profit motive is also responsible for price-gouging in the pharmaceutical industry. For example, what diabetics need to spend for their insulin injections, and arthritis patients for their Humira injections, has gone “through the roof”. This year, Catalyst Pharmaceuticals (Coral Gables, FL) raised the price of Firdapse, its drug for Lambert-Eaton myasthenic syndrome (LEMS), to an annual price of \$375,000 per patient, when it was previously free of charge through an FDA compassionate use program. Now there is fear that patient access to the promising new technology of fecal transplants might be limited because of corporate greed among the newly formed “poop-drug cartel”.

Greed also helps explain why dangerous or fraudulent drugs and medical devices appear on the market. In the late 1950s, the West German drug company Chemie Grünenthal developed and sold a sedative, Thalidomide, as a claimed cure for all sorts of conditions including morning sickness in pregnant women; soon, about 6,000 babies with malformed limbs were born in the country, and most of them died. To cite a more recent example, the U.S. and U.K. manufacturers of Oxycontin and other opioid pain-killers, as well as some of the drugstore chains that sold them, are currently being prosecuted because they hid the dangers and fraudulently marketed the drugs to consumers and physicians; they’re also accused of unduly influencing the formulation of WHO guidelines about their use. Theranos, a Palo Alto, CA health technology startup, was disgraced and shut down due to its fraudulent claims of having a blood-testing device that needed only a tiny amount of blood; its billionaire founder is on trial for wire fraud and conspiracy (see John Carreyrou, *Bad Blood: Secrets and Lies in a Silicon Valley Startup*, 2018).

*continued on next page*

## The Culture of Menstrual Shaming is Shameful

In South Asia and other world regions, there is a whole shame culture around women’s menstrual periods that is a holdover from ancient times. It drags down women’s health, and is a barrier to social progress.

In Hindu tradition, a menstruating woman is considered ritually impure and must follow certain rules, called *chhaupadi* (pronounced CHOW-pa-dee) in Nepalese. She cannot touch a man, for fear that he will fall ill; she cannot enter the family home, for fear that a tiger will come and attack them; she cannot touch a tree, for fear that it will never again bear fruit; she cannot drink milk, for fear that the cow will never give milk again; she cannot read, for fear of angering Saraswati, goddess of knowledge.

Even today, in some rural areas, every month when a woman begins to bleed she is sent off to a tiny hut, and cannot participate in normal life until her bleeding stops. Women die in those huts. Since last year, in western Nepal alone, several fatalities have been reported in the international press: one dead from a snake bite (Jun. 2018), and five dead from inhaling the smoke of indoor fires desperately used to ward off the Winter cold (Jan. 2018 and Jan. and Feb. 2019).

British Duchess Meghan Markle was moved to comment about the problem as part of a panel discussion on International Women’s Day last Mar. 8. She noted that the taboos surrounding menstruation harm women in many developing countries. Girls can be yanked from school, she said, or forced to use “old rags, literally” since they cannot get menstrual pads. She continued:

At the end of the day, we’re doing our part just to normalize the conversation. That’s the first step. This is 50% of the population that’s affected by something, that can also end up creating the most beautiful thing in the world. So it’s a strange one that it’s ended up becoming so stigmatized.

Actually, this is not a modern but an ancient taboo. Like many other superstitions— including fearing certain diseases as wrathful deities— it arose in prehistory and reflects customs that once had some social utility, but have long since outgrown their purpose. Based on field research observing the custom of menstrual huts and surrounding beliefs among the Dogon people in Mali, Dr. Beverly I. Strassmann, an anthropologist and evolutionary biologist at the Univ. of Michigan, believes that menstrual taboos arose in traditional societies as a way to make a woman’s fertility obvious to all, thus serving reproduction. Specifically, the onset of menstruation in an unwed girl was taken as a sign that she was ready for marriage, while a married woman’s bleeding was used by her husband as a cue that she was in her menstrual phase and her fertility would peak about a half-month later.



## On a Mission

*continued from page 11*

In 1998—during a period in which a quarter of a million people were dying of AIDS *every year in South Africa alone*—39 drug companies sued the South African government when it legalized the suspension of patents on HIV drugs, a measure that had allowed the importation of less expensive generics made by Indian manufacturers. But three years later, in the face of an international outcry, the lawsuit was dropped. And in a hopeful trend, today a few of the same drug firms grant licenses to the “pirate manufacturers” that allow them to make copycat generics for treating HIV, hepatitis C, and other diseases. “The situation is still fragile”, cautioned Jayasree K. Iyer, executive director of the Access to Medicine Foundation (Amsterdam, Netherlands). “A retreat by one company, or a drop in health care investments, will jeopardize the progress made so far.”<sup>5</sup>

Among other hopeful signs, several of the drug companies now offer certain pharmaceuticals at steeply reduced prices in low- and middle-income countries. Pfizer Inc., for example, makes a brand-name antibiotic, Zithromax, that is highly effective in preventing a widespread blinding disease, trachoma, in children. In 1988 Pfizer co-founded the International Trachoma Initiative (Decatur, GA) to wage a campaign against this neglected tropical disease, eliminating it in eight countries so far. In 2016, the French firm Essilor and several other eyewear manufacturers helped launch the aid group Our Children’s Vision; it has tested the vision of over 30 million children in dozens of countries, and distributed about 2 million pairs of glasses to them (see the article in our last issue by Courtenay Holden, “A Global Campaign for Children’s Vision Services”). Similar foundations established by billionaires such as Bill and Melinda Gates have been on the front lines of many battles for global health. These efforts are noble causes—ones to which our own students could devote their careers!

### How You Can Participate

Faculty, students, and other readers can participate in this Focus project in a variety of ways.

Instructors can integrate relevant topics directly into coursework and campus programming by developing presentations, course readings and assignments, or student projects. Use the concepts and resources contained in this and previous issues of the magazine as a jumping-off point. With a little creativity, instructors in many disciplines can participate fully.

SCII Faculty Co-Chair Helen Ditouras has played the lead role in organizing a free, year-long speaker series on the Schoolcraft College campus for students, staff, and the general public. The talks scheduled for this Fall are as follows (all are in room LA-200, Liberal Arts Bldg.):

- Wed., Sep. 25 at 12:00 pm: Dr. E. Anthony White, “The Convergence of Tibetan Buddhism and Science”
- Tue., Oct. 8 at 8:30 am: Dr. Mark Huston, “Debunking Global Medical Conspiracies”
- Thu., Oct. 31 at 10:00 am: Dr. Ijeoma Nnodim Opara, “Global Health Challenges”
- Thu., Nov. 14 at 12:00 pm: Dr. Daniel Yezbick, “Immigration and Mental Health Challenges”
- Tue., Nov. 19 at 10:00 am: Dr. Jamey Snell, “Unintentional Harm Through Volunteerism and

Humanitarian Aid”.

These annual Focus Presentation Series have been hugely educational and popular, helping to spread global awareness on campus and in the surrounding communities. For example, about 80 people attended the presentation last Feb. 1, “Explaining the Mediterranean Diet Today”, given by Prof. Emily Camiener (Nutrition and Food Science, Schoolcraft College). The entire faculty is urged to recommend this series to students as an excellent way to gather insight and information. Some instructors might want to bring a whole class to a given event in the Focus Series (contact Helen at 734-462-7263 or by e-mail at [hditoura@schoolcraft.edu](mailto:hditoura@schoolcraft.edu)). Others might want to fold these into extra-credit opportunities for selected students.

There are also free public events in our community:

- Fri., Sep. 6: Introduction to Tai Chi and Yoga. At 5:30 pm., Detroit Symphony Orchestra bassoonist and contrabassoonist and certified Tai Chi instructor Marcus Schoon leads a class in Yang Family-style Tai Chi accompanied by live music performed by Xiao Hottman. At 7:00 pm., Detroit Yoga Lab leads a yoga session for people of all skill levels. Courtyard opens one hour prior to each scheduled program; choose your favorite or enjoy both! Guests are encouraged to bring lawn chairs and blankets. DSO Sosnick Courtyard, 51 Parsons St., Detroit. For more info, e-mail [cubefellow@dso.org](mailto:cubefellow@dso.org).
- Fri., Sep. 27: “Artificial Intelligence, Personalized Technology, and Mental Health”, a talk by experts from the Univ. of Michigan Artificial Intelligence Program. 7-8:30 pm. Ann Arbor District Library, 343 S. Fifth Ave., Ann Arbor. For more info, see <https://aadl.org>.

To supplement these events and the articles in this magazine, you can extend your learning using materials from the Bradner and Radcliff Libraries on our campus. The library staff can help you locate a wide variety of books, videos, and other resources.

If you have relevant expertise or experience, offer to write an article for this magazine or to be part of our speaker series.

Let us know how you and your colleagues bring some global and multicultural perspective into your coursework this year!

### Endnotes

1. Mujib Mashal, “A Long Struggle to Heal the Invisible Scars of War”, *New York Times*, Dec. 5, 2018.
2. Sara Chamberlain, “A Mobile Guide Toward Better Health: How Mobile Kunji is Improving Birth Outcomes in Bihar, India”, *Innovations: Technology, Governance, Globalization*, 9:3-4 (Summer-Fall 2014), pp. 43-52.
3. Dixon Chibanda, et al., “Effect of a Primary Care-Based Psychological Intervention on Symptoms of Common Mental Disorders in Zimbabwe: A Randomized Clinical Trial”, *Journal of the AMA*, 316:24 (Dec. 27, 2016), pp. 2618-2626.
4. Mildred K. Cho, et al., “Effects of Patents and Licenses on the Provision of Clinical Genetic Testing Services”, *Journal of Molecular Diagnostics*, 5:1 (Feb. 2003), pp. 3-8.
5. Donald G. McNeil, Jr., “Drug Companies Focus on the Poor”, *New York Times*, Jun. 25, 2019.

# In Detroit, a Global Health Alliance Bonded by GLUE

by Ijeoma Nnodim Opara and Kristiana Kaufmann

*Drs. Ijeoma Nnodim Opara and Kristiana Kaufmann of the Wayne State University School of Medicine are Co-Directors of the Global Health Alliance (WSUGHA). The Nigerian-born Dr. Nnodim Opara, MD, FAAP, is a graduate of the Univ. of Michigan and of the WSU School of Medicine, where she is currently Asst. Prof. of Internal Medicine/ Pediatrics; she will be speaking at Schoolcraft College on “Global Health Challenges” on October 31 (see speakers listed on p. 12). Dr. Kaufmann, MD, MPH, is also a graduate of the Univ. of Michigan and of the WSU School of Medicine, where she is currently Program Director in the Dept. of Emergency Medicine.*

Global health is the field of study, education, research, and practice concerned with achieving health equity for people everywhere regardless of geographical boundaries or any socially-determined status.

The world continues to “grow smaller”, and evidence of global interdependence becomes more apparent with each passing day. In fact, when one part of the globe catches a cold, another part sneezes. Vaccination hesitancy in Europe affects measles epidemiology in Oakland County, Michigan. Climate change effects in Niger, West Africa drive the refugee crisis in Europe. An outbreak of Middle East Respiratory Syndrome (MERS) in Saudi Arabia results in death in South Korea. The current Ebola outbreak in the Democratic Republic of Congo (DRC) has far-reaching sociopolitical and economic ramifications throughout the world.

As a result, global health challenges are becoming increasingly complex despite progress and advances on many fronts. Social and structural determinants of health are increasingly recognized as exerting a greater impact on the health outcomes of individuals and populations.

The discipline of Global Health has evolved beyond a disease-centered approach or a charity model of “mission trips”. Today, it focuses on building community-led partnerships that are equity-centered, systems-based, inter-professional, bidirectional, sustainable, and long-term. The skill set that is required of today’s global health practitioners has evolved in a corresponding way. It must emphasize cultural competency, systems-based critical thinking, skills in capacity strengthening, program management, and working as part of inter-professional teams.

In 2017, this awareness motivated a diverse, multidisciplinary group of faculty at Wayne State University School of Medicine to come together in the creation of the Global Health Alliance (WSUGHA, <https://www.wsugha.org>). The mission of WSUGHA is to disrupt the culture of “silos” (excessive compartmentalization) in global health throughout the University and to create a collaborative community of best practice in global health. We developed a free, open-access, certificate-granting global health curriculum for multi-professional learners. Our curriculum, titled “Global & Urban

Health & Equity” (GLUE), is a robust, competency-based, multidisciplinary, longitudinal (2 years) certificate program consisting of monthly interactive seminars, a research/ service

capstone project, and local and international experiential learning programs. The curriculum is free of tuition charges because we want to ensure that it is available to all learners.

The monthly seminar series utilizes innovative andragogical [adult education] strategies, including blended and place-based learning, and is mapped to the Consortium of Universities for Global Health (CUGH) inter-professional competencies and the Accreditation Council for Graduate Medical Education (ACGME) competencies. Each monthly seminar is 2 hours long and facilitated by multidisciplinary faculty using the CUGH global health education competencies toolkit to address issues around health disparities, equity, social justice, and emerging global trends.

Local and international service-learning opportunities emphasize that global health is also local health, and focus on understanding the social determinants of health in the care of vulnerable populations in the city of Detroit as well as in multiple sites all over the world. These experiences— which involve focus areas of refugee health, homelessness, community first-aid training, and residency training development, among others— were developed using an asset-based framework. We were deliberate in emphasizing community leadership and equitable, ethical practices throughout the process.

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Mittaphab (“Friendship”) Hospital, situated in the prefecture of Vientiane, Laos, is the site of one of WSUGHA’s international experiential learning programs.



# Bringing Diverse Voices to Global Health

by Stacy Terrell

*Stacy Terrell is employed at the U.S. Agency for International Development (USAID) in Washington, DC, where she is the Diversity and Inclusion Manager for its Global Health Technical Professionals (GHTP) program. GHTP offers early- to mid-career global health professionals the opportunity to advance their careers by helping to implement USAID-funded health projects in communities around the world. Earlier, Ms. Terrell worked in personnel and operations management in USAID's Office of Transition Initiatives. She received her MA in International Affairs from American Univ., and her BA in International Development from The George Washington Univ., where her research focused on inclusion of Afro-Latino populations in political spaces. Outside of work, she serves as the Director of Human Capital for a local mentorship program for young girls.*



Stacy Terrell at a USAID outreach event in Manhattan.

When we think about a fulfilling career in global health, many of us immediately picture travel around the world. We think about how we can be of service to eradicate global pandemics and how we can provide new medical technology in countries to assist in better health outcomes abroad. What we often don't think about is the impact that one's first overseas experience can have on one's ability to even break into a career in global health. What if you are the first in your family to travel overseas and have never had a passport before? What if your part-time work helps support your family expenses and you will be unable to contribute income while abroad? What if you're very interested in a great program but the city it takes place in is not wheelchair friendly?

These are the types of questions that my work centers upon as Diversity and Inclusion Manager in the field of Global Health. How can we broaden opportunities for people from diverse

backgrounds to enter the field of global health, knowing that prior experience overseas is often a requirement for even entry-level jobs? Diversity in the field of Global Health won't change if we aren't making efforts to start early to give opportunities for that kind of experience to as many different groups as possible.

My entry into the field was propelled by my formative experiences overseas. I studied abroad in the Dominican Republic as an undergraduate and didn't even have a passport before I applied for the program. I was 20 years old and had been on an airplane only one other time in my life. My family was supportive despite having no idea what I was really getting myself into. While living with a family overseas, I interned at a Women's Health Collective. There, I got to learn more about health disparities within the country, particularly focusing on women and youth. I learned how to navigate the city even without having all of the vocabulary that I needed to express a feeling or a need.



Stacy Terrell making a USAID presentation to health aid workers assembled in Rabinal, central Guatemala.



Living in the Dominican Republic— a country with people who looked like me— I also learned that my experience and my identity had been colored by my upbringing and culture as a Black American woman. Dominicans did not necessarily have the same experiences or identification with their blackness as I did. Living in a new environment and gaining empathy for others who have a different background can be transformative for undergraduate students and working professionals alike. When I returned to the United States I graduated with a degree in International Development and later pursued a Master's Degree in International Affairs with a focus on International Development. Even after a late start, I've since traveled personally and professionally to four continents and almost a dozen countries.

In my most recent roles working at USAID and in the outreach and recruitment efforts to bring new talent to the agency, I think back to how important it is to gain those experiences early on, perhaps even before you have a career and are still studying and trying to figure it all out. In particular, the soft skills that you acquire in an environment different from your own are skills that you can apply in a work setting, and they are often more important than the technical skills themselves.

Many of the interpersonal challenges faced by early-career global health professionals result from a lack of understanding of another culture and its norms, from unfounded assumptions about cultures or people, and from young professionals' self-confidence that they already know what they need to know about a given group. It is critical to understand one's own unconscious biases in order to navigate interactions with others, particularly for the work in small groups that is common in global health assignments overseas.

I have since had the privilege to travel to rural Guatemala to share communications best practices in Spanish with non-governmental organizations (NGOs) that focus on health in various countries in Latin America. Many of the same practices that I had learned in the Dominican Republic— observing cultural norms, listening first and not assuming that I know the answers— remained key practices in this new setting. That approach helped me to deliver training that was more conversational and interactive, allowing the staff members from the various NGOs to share their own communications experiences and approaches that were unique to the context of their own respective countries.

As I meet young professionals at outreach events, and they discuss their unique experiences representing a variety of ages, educational backgrounds, and geographic origins, I often think about the budding global health professionals who are missing, who maybe just didn't have the opportunity to get that first experience abroad. Imagine what creative interventions and unique approaches could exist in the global health field if more diverse perspectives were brought to the table! This is the possibility that fuels my work each day to widen the possibilities for future global health professionals. •

## Wayne State Univ. *continued from page 13*

In May 2019, we graduated our first cohort of 25 scholars who are going on to do great things, including acquiring Masters in Public Health (MPH) degrees in the U.S. and at the London School of Hygiene and Tropical Medicine, medical residency programs, and global health jobs. In addition to certificates, all our graduating scholars receive a letter of commendation highlighting the competencies they have achieved as a result of their successful completion of GLUE. The letter is written to a supervisor of their choice in order to contribute to their career development and promotion. We have received outstanding feedback from our scholars, and post-course evaluation demonstrates significant improvement in knowledge, awareness, and confidence as it relates to critical domains in global health education.

The future is bright for WSUGHA and GLUE. We are currently accepting our incoming cohort for 2019-2021 and will be launching our Global Health Research Training Center and Summer Institute in 2020. We continue to build new and strengthen old relationships throughout the metropolitan Detroit area and all over the world. As global health challenges continue to grow increasingly complex, we will grow in our capacity to respond by equipping global health students, researchers, educators, advocates, and all who have interest or curiosity to collectively create transformative solutions. Through an equity-centered comprehensive paradigm, we empower scholars to impact the health and wellbeing of every child, adult, animal, and the planet.



## Study and Explore Italy Next June!

This 12-day educational tour is offered to all Schoolcraft College students who register for the Spring 2020 3-credit-hour course Humanities 203 (Art and Music in Western Civilization: Field Study— Italy). Stops include Venice, Florence, Rome, Assisi, and Ravenna. Dr. James Nissen is the Professor and Tour Leader.

HUM 203 is a humanistic study of the arts, culture, and history in concentrated form through field study. The course includes art forms and functional styles of historical periods as they relate to universal principles. It includes studies in Italian history, culture, and geography, and concludes with the stay in Italy to facilitate a live, first-hand encounter with Italian arts and culture. Enroll by November.

For costs and other info, contact the Liberal Arts Division at [LiberalArts@schoolcraft.edu](mailto:LiberalArts@schoolcraft.edu) or 734-462-4435.

# Addressing Health Disparities through Culturally Responsive Care

by Sheria G. Robinson-Lane, Armaan Patel,  
and Jarrod Eaton

*All three authors are affiliated with the Univ. of Michigan in Ann Arbor. Sheria Grace Robinson-Lane, PhD, RN, is a gerontologist and an Asst. Professor in the Dept. of Systems, Populations and Leadership at the UM School of Nursing. She has focused her career on the care and support of older adults with cognitive and functional disabilities, and is widely published on the topics of pain management and health disparities in the treatment of African American, Mexican American, elderly, and disabled patient populations. Armaan Patel is an undergraduate student at the UM College of Literature, Science, and the Arts, and Jarrod Eaton, MPH, is a graduate student at the UM School of Public Health.*

There are over seven and a half billion people in the world, from approximately 195 different countries. As the global population continues to grow and become increasingly diverse, health disparities have also continued to increase in prominence. Health disparities are preventable differences among specific cultural groups in how people are affected by diseases, illnesses, and injuries.<sup>1</sup> Often, health disparities occur in situations where one's care experience does not necessarily differ based on their condition or health needs, but rather based on a demographic characteristic, such as race/ethnicity, gender, sexual orientation, income, level of education, or geographical residence.

Throughout the globe, bias in health care is well-documented, as many health outcomes including population disease rates (morbidity), population death rates (mortality), life expectancy, care expenditures, health status, and functional limitations vastly differ between groups.<sup>2</sup> Although health disparities can exist in any health care system, culturally responsive care can potentially lessen the gap in health outcomes between populations and improve the quality of health-related care.

Culturally responsive care is the provision of health care services in a manner that recognizes the importance of culture in health behaviors and decision-making, and as a result, actively works to integrate important cultural values and beliefs into practice. Interestingly, many individuals might not readily identify as belonging to a particular cultural group; still, learning patterns of behavior, beliefs, and values to deal with problems one might face in the world is a universal experience.<sup>3</sup> Culture works its way into many different aspects of health and health care, but in any scenario, integrating the unique contributions that an individual, group, or community is able to bring to their health services is an empowering means of both patient-centered and patient-directed care. Moreover, culture is an important determinant of health for both the patient and the health care provider.

For the patient, culture defines how they view their health or illness, what they believe about the origin of the illness, which treatments they view as culturally acceptable, how the illness or injury is experienced or expressed, where and how they seek

help, and their degree of understanding and compliance with various treatments. The health care provider must also consider all of these things, but should also take into account their own personal beliefs and practices, and how their own views may influence patient interactions.

To reiterate, culturally responsive care emphasizes the capacity of healthcare organizations to respond to patients' cultural beliefs and behavior systems by actively engaging patients in care, integrating their cultural values into the plan of care, and adapting care to align with their cultural values.<sup>4</sup> Within the framework of culturally responsive care, a key concept is *cultural congruency*. Culturally congruent care is the process by which clinicians and patients can effectively communicate despite differences in values, beliefs, perceptions, and expectations about care. Cultural congruence is achieved by creating positive care environments based on knowledge of patients' social communities. Additionally, it involves harnessing the four-step approach of Schim and Doorenbos<sup>5</sup>—appreciation, accommodation, negotiation, and explanation—to achieve a culturally inclusive and desirable care environment.

*Appreciation* is acknowledgement and acceptance of the personal beliefs, values, and life patterns of patients. Appreciation can be accomplished by working to understand differences by making observations and asking open-ended, related questions. Along with appreciation, *accommodation* is another term within cultural congruence used to describe a convenient arrangement, settlement, or compromise. When providing culturally congruent care, health care professionals should accommodate patients by changing aspects of care as necessary so that the care is in alignment with patients' beliefs, values, and preferences. Next, *negotiation*, or the act of reaching an agreement in culturally congruent care, means finding a common ground where the professional standard of care can be maintained while specific cultural behaviors are recognized and accommodated as much as possible. Negotiation with a patient is essential in order to find a culturally appropriate common ground. *Explanation*, or statements to make actions more clear and justified, is the final component of culturally congruent care. Explanation is required when a culturally responsive health professional is unable to accommodate a patient and their family's wishes regarding care. This process of effective communication and patient engagement falls within the guidelines established by the U.S. Department of Health and Human Services.

The U.S. Department of Health and Human Services' (HHS) Office of Minority Health (OMH) has developed national standards related to providing culturally and linguistically appropriate services (CLAS).<sup>6</sup> These standards were developed with input from a variety of stakeholder groups including hospitals, community-based clinics, and home health agencies, among others. The intended utilization of these standards extends beyond that of traditional health care organizations to that of educators, policymakers, as well as individual providers themselves. The standards provide guidelines for multiple areas of care, including the following list.

*continued on p. 22; see also sidebar on next page*

## An Example: Black Older Adults' Attitudes about Pain

Edited excerpts from Sheria G. Robinson-Lane and Staja Q. Booker, "Culturally Responsive Pain Management for Black Older Adults", *Journal of Gerontological Nursing*, 43:8 (2017), pp. 33-41.

Culturally responsive care emphasizes the capacity to respond to patient's cultural beliefs and behavior systems by engaging patients in care, integrating cultural values into the plan of care, and adapting care to align with their culture. In the context of pain, this entails understanding the reasons why Black American older adults may not have the ability, or willingness, to self-report pain and positively counter this with respect, rapport building, dispelling misconceptions about pain reporting, and using culturally-sensitive communication and culturally-valid and preferred pain intensity tools. For example, despite intense pain, Black older adults are hesitant to report or openly talk about pain. This reluctance may be related to the common cultural perception that talking about pain or "claiming pain" (acknowledging/ declaring pain/ putting it in the atmosphere) is spiritual taboo, in that talking about pain increases its intensity and power in one's life.

When one Black older adult was asked why he chose not to talk about his pain, he said, "I don't talk about it a lot because I believe that words have a lot of power and you have to be careful what you speak out into existence." This comment, and the related behavior, is consistent with research which shows that Black American older adults minimize pain and may serve as a cultural-specific coping phenomenon.

With this knowledge, culturally responsive nurses will be proactive in asking Black older adults about their pain concerns in ways that convey respect and use relatable language. Nurses can establish rapport and engage in culturally-sensitive communication with all patients by considering the words they choose to use and how they address older adults in relaying information. Special attention should be paid to tone of voice, body language, use of formal names— unless directed otherwise by the patient— and use of language that is reflective of the language the patient is using to describe a health concern. For example, rather than simply saying to a familiar patient, "Hi, Mary. Are you having any pain this morning?" or "Would you like a pain pill?", the culturally responsive nurse might begin with, "Hi, Mrs. Smith. How are you feeling today?" as a means to engage with the patient and build rapport. Then, after allowing time for the patient to respond, the nurse might follow-up with, "Are you feeling sore or uncomfortable (can substitute other words such as 'aching' or 'paining')?" Appropriate reassessment would then follow as necessary. If the Black older adult appears hesitant to report pain, it may be necessary to examine other dynamics of the patient-nurse relationship. For example, research indicates that Black and Hispanic long-term care residents have a greater sense

of comfort reporting pain to female providers than male providers. These types of actions, and other similar culturally adaptive interventions, support cultural congruency and promote cultural humility.

Religious beliefs and spirituality are highest among Black American individuals compared to other cultural groups, and prayer is a common pain management technique used by Black older adults. One research participant, Adam, who uses prayer to manage his pain, explained why it was important to also pray with others in pain, saying, "Pray with them and let them know that when they are in that pain to never be forgetful that Jesus promised us healing. And by his stripes we are the healed." Nurses who visit patients in pain might find them with their eyes closed and quietly talking to themselves. After notifying patients of his/her presence and waiting a few moments to be acknowledged, the nurse might say, "I'm sorry, were you praying?" Then, if answered affirmatively, he/she might respond, "I didn't mean to interrupt your prayers. It seems like you aren't very comfortable right now and I would like to get you some medication that will work along with your prayers to relieve your pain." Although many Black American older adults find prayer to be a helpful and important part of their care and recovery, it is important to communicate with them, in a respectful way, that prayer alone may not sufficiently control high levels of pain. In fact, engagement in more prayer has been associated with lower pain tolerance in Black American individuals. Despite the noted contrast in the cultural belief and expected clinical outcome, showing appreciation means recognizing the importance of this practice for many and making reasonable accommodation to integrate it into care.

Although most Black older adults want to know the source of their pain, others may fear knowing the cause of pain. They may fear expensive or potentially painful tests and generally want to avoid "probing" or "looking for something". There may also be a fear that pain is the result of cancer or other serious conditions. Nurses and health care providers can establish rapport and engage in culturally-sensitive communication by first addressing any fears Black older adults may have regarding their pain and encourage self-report by informing them that "if you feel something, say something." Nurses should make it explicit that reporting pain is not complaining of pain, nor is it an inconvenience for the nurse, but rather, it is important information to be related that aids in the reduction of discomfort and suffering. This reassurance is necessary as complaining is often viewed as a negative attribute in Black culture.



# We Are This Close: End Polio Now!

by Neil McBeth

*Neil McBeth of Essex, Ontario, is Zone Coordinator for End Polio Now, a global initiative of The Rotary Foundation. He was Governor of Rotary's District 6400 during 2009-10.*

Rotary is an international community that brings together leaders who take on the world's toughest challenges, locally and globally. There are over 1.2 million Rotarians globally who describe themselves as people of action. Rotary focuses on six areas of service worldwide: promoting peace, fighting disease, providing clean water, sanitation, and hygiene, saving mothers and children, supporting education, and growing local economies. Among these areas of service, Rotary's signature project—ending polio forever—is nearly complete.

The eradication of polio has been one of Rotary's most long-standing and significant efforts. In 1979, Rotary was a founding partner of the Global Polio Eradication Initiative (GPEI). Along with global partners like the Bill and Melinda Gates Foundation, the World Health Organization (WHO), and UNICEF, among others, we have spent billions of dollars to eradicate the disease. The first project was an effort to vaccinate 6 million children in the Philippines (1979). Other projects included vaccinating 165 million children in China and India in one week (1995) and synchronized immunization days in 23 African countries which targeted 80 million children for vaccination (2004).

Since its formation, the GPEI has trained and mobilized millions of volunteers and health workers, gained access to homes not reached by other health initiatives to immunize children, brought health interventions to underserved communities, and standardized timely global monitoring for polio cases and poliovirus, a process also known as surveillance. The results have been monumental. Over the 40 years, we have vaccinated 2.5 billion children in 122 countries, reducing polio by 99.9% worldwide.

Poliomyelitis is caused by a virus that attacks the central nervous system and can lead to permanent paralysis. In 1916, a major polio outbreak of this infectious disease in New York City killed 2,000 people and left more than 6,000 permanently paralyzed. Just 30 years ago, the paralyzing disease affected 350,000 children worldwide in one year.

There is no cure for polio, but it is preventable. One of the major breakthroughs of the 20<sup>th</sup> Century was the development in 1955 of the first safe and effective vaccine to prevent infections by the paralytic poliovirus, through the efforts of a team led by Dr. Jonas Salk at the Univ. of Pittsburgh. Today there are two types of polio vaccine in use: Oral Polio Vaccine (OPV) and Inactivated Polio Vaccine (IPV). The

OPV, which uses an attenuated (i.e., alive but weakened) form of the poliovirus, is administered to children orally in droplet form. This not only protects the child who takes the vaccine, but also protects the people around the vaccinated child. The IPV, which uses an inactivated (i.e., killed) virus, is administered via injection. It is effective in protecting the immunized child from infection, but the response to it by the child's immune system is weaker than with a live virus, so the IPV is ineffective in protecting others in communities where polio continues to circulate. In order for any vaccine to work, it is necessary for all children to be vaccinated.

While these vaccines have reduced the frequency of poliovirus by 99.9% worldwide, the World Health Organization characterized the persistent existence of polio as a global public health emergency. The disease, which was endemic in 125

*continued on page 22*

Administering the oral polio vaccine to a pair of Nigerian children as they canoe across their village, Makoko, in July 2019. Makoko is a riverine shanty town located on the coast of mainland Lagos city in southwest Nigeria.

Photo © UNICEF/Peter Idowu



# The Global HIV Epidemic: Prospects of Epidemic Control

by Salim S. Abdool Karim

*Dr. Salim S. Abdool Karim, a Fellow of the Royal Society, is Director of the Centre for the AIDS Programme of Research in South Africa (CAPRISA), which is based at the Univ. of KwaZulu-Natal in Durban. He is also a Professor of Epidemiology at the Mailman School of Public Health, Columbia University, New York.*

According to the most recent estimates from the Joint United Nations Programme of HIV/AIDS (UNAIDS), there were about 38 million people living with HIV, 770,000 deaths, and 1.7 million new HIV infections in 2018. To translate the scale of the HIV epidemic into a single measure: there are about 4600 new cases of HIV infection in the world each and every day. The African region bears a disproportionate burden of the epidemic, accounting for about 70% of all people living with HIV and 65% of all new infections. There are 1.1 million people living with HIV in the U.S., and about 40,000 new cases occur there each year (see Figure 1).

The acceleration of the AIDS response globally over the past decade, particularly increased access to antiretrovirals for treatment and for prevention of mother-to-child transmission of HIV, has resulted in a 33% reduction in AIDS-related deaths between 2010 and 2018. Several countries have declared their elimination of HIV infection in infants. However, HIV continues to spread in vulnerable populations such as young women, sex workers, men who have sex with men (MSM), transgender individuals, and people who inject drugs (PWID).

Approximately one third of all new HIV infections in regions outside of sub-Saharan Africa occur amongst PWID. Collectively, China, Russia and the U.S. account for 50% of all PWID worldwide and contribute the most to HIV infections in this group. Eastern Europe and Central Asia also have high burdens of PWID, with half of all new HIV infections in these regions occurring amongst PWID. Access to proven prevention

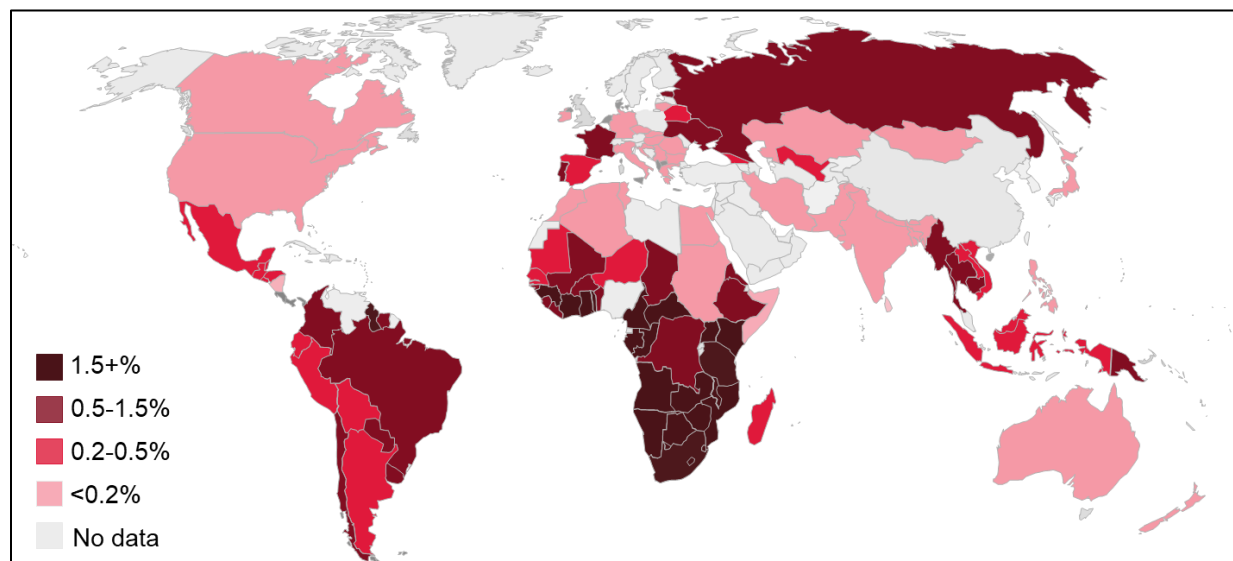
options for PWID in Eastern Europe and Central Asia is extremely limited. As a result, the epidemic continues to grow in these regions.

New diagnoses among MSM are increasing in some regions, with a 17% rise in Western and Central Europe and a rise of 8% in North America between 2010 and 2014. In 2017, MSM accounted for more than half of new HIV infections in Western Europe and North America, 40% in Latin America and the Caribbean, 30% in Asia and the Pacific, 22% in the Caribbean, 22% in Eastern Europe and Central Asia, 18% in the Middle East and North Africa, and an estimated 17% in western and central Africa.

In Africa, the magnitude of the HIV epidemic varies considerably between individual countries; of the 10 countries contributing two-thirds of all HIV infections globally, seven are in Eastern and Southern Africa. In this region, women account for 59% of all people living with HIV, and adolescent girls and young women aged 15 to 24 years are particularly vulnerable. Despite comprising just 10% of the population, 25% of all new HIV infections in 2017 occurred in this group. In South Africa, the country with the most number of people living with HIV, 1500 adolescent girls and young women between the ages of 15 and 24 are infected with HIV every week.

While the cause of this vulnerability has not been fully elucidated, it is compounded by a complex interplay of biology, gender-power disparities, social, political, and economic factors. In sub-Saharan Africa, adolescent girls and young women tend to acquire HIV infection at a much earlier age than their male peers. This age-sex disparity in infection rates is a consequence of young girls partnering with men who are about 8–10 years older than them, and who may have recently acquired HIV or who are already living with HIV but are not on treatment with antiretroviral medicines. Understanding the drivers of this partnering pattern and learning more about these male partners is critical for addressing the prevention needs of adolescent girls and young women.

*continued on next page*



**Figure 1:** Global HIV prevalence. Source: UNAIDS 2019





At a Partners In Health (PIH) clinic in the township of Boucan-Carré, in the Central Plateau of Haiti, medical worker Dieuline Louis tests blood samples for the presence of the human immunodeficiency virus (HIV), the virus that causes AIDS. Due to extreme poverty, Haiti has the highest number of cases of HIV/AIDS in the Caribbean, but the number is dropping as a result of a strong healthcare system and a vigorous HIV/AIDS awareness program, with support from UNAIDS, non-governmental organizations such as PIH, and private donors.

Photo: Rebecca E. Rollins / PIH

## HIV Epidemic

*continued from page 19*

The high HIV incidence rates in young women are particularly concerning and present a distinct challenge to achieving the UNAIDS goal of “ending AIDS as a public health threat” by 2030. The concept of ending AIDS as a public health threat refers to the epidemiological notion of epidemic control, which is defined as the reduction of disease incidence, prevalence, morbidity, or mortality to a locally acceptable level as a result of deliberate intervention measures. Epidemic control does not refer to HIV eradication or elimination, both of which would require a vaccine and/or a cure.

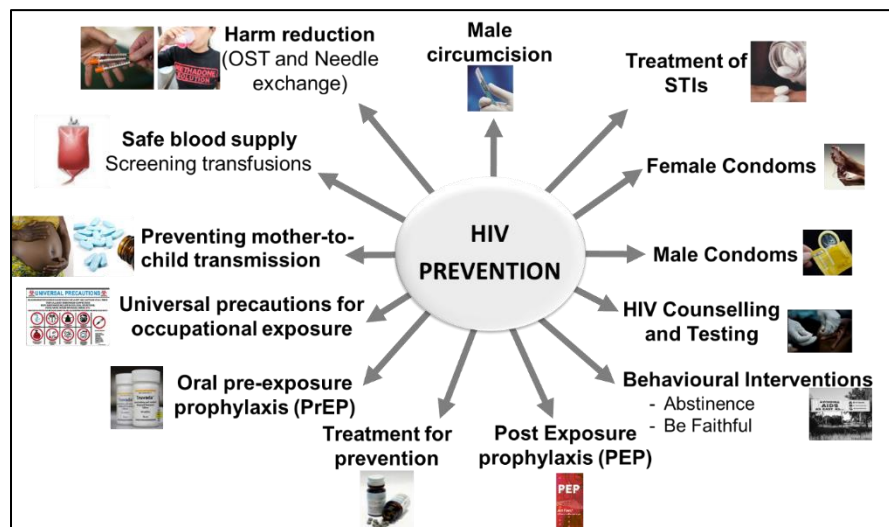
The global public health objective of epidemic control is set out in the UN’s “Political Declaration on HIV and AIDS: On the Fast-Track to Accelerate the Fight Against HIV and to End the AIDS Epidemic by 2030” (adopted on June 8, 2016 by the United Nations General Assembly). The current global strategy for achieving epidemic control, developed by UNAIDS in its report “Fast track, Ending the AIDS Epidemic by 2030” is focused principally on the scaling up of antiretroviral therapy (ART) to achieve the 90-90-90 targets by 2020. The 90-90-90 strategy refers to 90% of people living with HIV knowing their HIV status, 90% of people who know their status receiving treatment, and 90% of people on HIV treatment having a suppressed viral load.

prevent the onwards transmission of HIV. Taken in conjunction with observational data from rural South Africa showing that increasing treatment coverage reduces both mortality and HIV incidence and mathematical models demonstrating that the implementation of a universal “test and treat” strategy could reduce HIV incidence and mortality to less than one case per 1000 people per year within 10 years of full implementation, it was thought that the scale-up of such an approach at a community level would result in huge declines in HIV incidence.

Although four large-scale community-based “test and treat” trials, conducted in Botswana, Kenya, South Africa, Uganda, and Zambia and involving almost 240,000 individuals, have shown that it is possible to increase viral suppression at a community level, these trials resulted in modest or no reductions in HIV incidence. It is therefore unlikely that a test-and-treat strategy alone will result in epidemic control.

To realize the goal of ending the AIDS epidemic as a public health threat by 2030, test-and-treat strategies will need to continue and proven HIV prevention strategies— such as condoms, medical male circumcision, and oral pre-exposure prophylaxis (see Figure 2)— will need to be rapidly scaled-up

**Figure 2:** Behavioral and biomedical tools against sexual transmission of HIV.





and focused on the populations and locations in greatest need. At the same time, research on new long-acting HIV prevention technologies, a vaccine, and a cure will need to continue in earnest.

The estimated resources required to achieve the ambitious goal of ending the AIDS epidemic as a public health threat by 2030 are substantial. UNAIDS estimates that domestic and international investment in HIV programmes will need to increase from an estimated US\$19.2 billion available in 2014 to US\$26.2 billion by 2020. While there has been substantial progress made in the fight against HIV, much remains to be done to realise the UNAIDS goal of ending HIV as a public health threat. •



Gates Foundation

Outside Durban, South Africa, a medical field worker from the Bill and Melinda Gates Foundation tells residents about a clinical trial of microbicides that are designed to reduce rates of HIV transmission. The microbicides, which represent an experimental new prevention strategy, are compounds that can be applied inside the vagina or rectum to protect against sexually transmitted infections such as HIV.

### For Further Reading

1. Joint United Nations Programme on HIV/AIDS (UNAIDS), "Miles to Go: Closing Gaps, Breaking Barriers, Righting Injustices" (Geneva, 2018).
2. United Nations General Assembly, "Political Declaration on HIV and AIDS: On the Fast Track to Accelerating the Fight Against HIV and to Ending the AIDS Epidemic by 2030" (2016). Available at [http://www.unaids.org/sites/default/files/media\\_asset/2016-political-declaration-HIV-AIDS\\_en.pdf](http://www.unaids.org/sites/default/files/media_asset/2016-political-declaration-HIV-AIDS_en.pdf).
3. UNAIDS, "Fast Track: Ending the HIV Epidemic by 2030" (Geneva, 2014). Available at [http://www.unaids.org/en/resources/documents/2014/JC2686\\_WAD2014report](http://www.unaids.org/en/resources/documents/2014/JC2686_WAD2014report).
4. UNAIDS, "Global AIDS Update 2019—Communities at the Centre" (Geneva, 2019). Available on the Internet at <https://www.unaids.org/en/resources/documents/2019/2019-global-AIDS-update>.
5. Abdool Karim, Salim S., "HIV-1 Epidemic Control—Insights from Test-and-Treat Trials", *New England Journal of Medicine*, 381:3 (2019), pp. 286-288.

### Language & Communication is 2020 Theme

Get ready for "Language and Communication Around the World", the International Institute's chosen focus project for calendar year 2020. The theme encourages a broad exploration of spoken and written languages as well as sign language, symbolic and nonverbal communication, and digital media.

How do languages arise, spread, and intermingle in the world today? What are the current best practices for language teaching and learning, and for cross-cultural communication in business or other settings? How far should nations go in encouraging or requiring immigrants to learn/ speak an "official" language? Is human culture moving toward linguistic homogeneity and the eventual emergence of a single language? What is lost and what is gained when we read literature translated from the original language into another? Do automatic translation devices mean the end of translation and interpretation as occupations?

Ideas and volunteers for writing or speaking on such questions are welcome. Put on your thinking caps and make a suggestion!

## End Polio Now! *continued from page 18*

countries in 1988, now persists in just three: Pakistan, Afghanistan, and Nigeria. In 2014, there were 306 reported cases in Pakistan. By 2017, there were only 8 cases. The approach to train community health workers to earn trust and vaccinate children is effective.

However, cultural and religious mistrust, rural geography, and war have thwarted this work. So far in 2019, there are 44 reported cases of polio in Pakistan. One “no” by a hesitant or suspicious parent can undo a generation and billions worth of committed work. Pakistan targets over 39 million children under 5 years old with 260,000 frontline workers. These frontline workers (62% are women) go door-to-door asking parents to vaccinate their children. They employ 2,100 local social mobilizers who work to communicate amid the cultural and religious fears. Their success rate of vaccine acceptance is 95%.

Last Fall, Lea Hegg, senior program officer of the vaccine delivery team at the Gates Foundation, gave an update on polio around the world. Despite tremendous progress, challenges remain before we can claim victory, she said in a video interview with Mark Wright, news host at an NBC television station in Seattle, WA. “The fact is in Pakistan and Afghanistan, where we are still seeing cases, we have tremendous challenges that we’re facing: conflict and insecurity”, Hegg said. “We have to come up with new ways to solve those problems.” She praised the brave polio workers who go to insecure areas to vaccinate children, and also noted the importance of vaccination sites at transit posts outside these areas. Hegg added, “We still have the tools, we have the persistence, and we’re still really confident that we’ll get there.”

It is essential that we solve this problem. Not only is it a matter of ending polio in the countries where the disease is considered endemic, but beyond that, as long as the disease exists it is crucial to continue our efforts to keep the rest of the world polio-free. If all eradication efforts stopped now, within 10 years polio could paralyze as many as 200,000 children! While it costs about \$3 to fully protect a child against polio, it costs about \$100 million annually to conduct polio surveillance around the world.

Fortunately, there is a sincere global commitment to completing the eradication of polio. It would be only the second vaccine-preventable disease to be eradicated in human history; the first was smallpox, eradicated thanks to a WHO-led global campaign in 1967-80. With polio, we are this close!

## Culturally Responsive *continued from page 16*

1. culturally competent healthcare
2. staff diversity
3. staff education and training
4. qualified language assistance services
5. notices to patients of the right to language assistance services
6. qualifications for bilingual and interpreter services
7. translated materials
8. organizational framework for cultural competence
9. organizational self-assessment
10. collection of data on individual patients
11. collection of data on communities
12. community partnerships for CLAS
13. compliance and grievance resolution
14. general information for the public.

Despite the comprehensive nature of the standards, there remains a lack of consistency with respect to their implementation. Many standards are overlooked or undervalued when care is provided.

The work of reducing health disparities begins with recognizing the critical role of culture on health behavior and decision-making. Health care leaders, in all capacities, have a social imperative to actively engage the populations they work with in a manner that not only seeks to understand important care beliefs and priorities, but also recognizes the care recipient as an equal care partner. Healthcare providers must also consider the specific ways in which they encourage open communication about how outcomes are addressed and prioritized. Further, individual practitioners, organizations, and health systems must conduct honest self-assessments about how they prioritize care and related health outcomes and how these value might, or might not, be in alignment with the priorities and values of the local population. Together we can make a sizeable difference in reducing health disparities.

### Endnotes

1. U.S. National Library of Medicine, National Institutes of Health, “Health Disparities”, *MedlinePlus*, <https://medlineplus.gov/healthdisparities.html>.
2. Kendal Orgera and Samantha Artiga (Henry J. Kaiser Family Foundation), “Disparities in Health and Health Care: Five Key Questions and Answers” (Aug. 8, 2018), *Disparities Policy*, <https://www.kff.org/disparities-policy>.
3. Sheria G. Robinson-Lane and Staja Q. Booker, “Culturally Responsive Pain Management for Black Older Adults”, *Journal of Gerontological Nursing*, 43:8 (2017), pp. 33-41.
4. Marcia Carteret, “Culturally Responsive Care” (Oct. 19, 2010), *Dimensions of Culture* <https://www.dimensionsofculture.com/2010/10/576>.
5. Stephanie Myers Schim and Ardith Z. Doorenbos, “A Three-Dimensional Model of Cultural Congruence: Framework for Intervention”, *Journal of Social Work in End-Of-Life & Palliative Care*, 6:3-4 (Jul. 2010), pp. 256-270.
6. Office of Minority Health, U.S. Dept. of Health and Human Services, *National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care* (Washington, DC, 2016), available at <https://thinkculturalhealth.hhs.gov/pdfs/CLASCompendium.pdf>.

# Pharma East and West: Competition and Collaboration

If you watch any TV at all, you've probably seen dozens of airings of ads for the Salonpas transdermal patch. The ads always end with a one-second, four-note ditty to ring out the name of the Japanese manufacturer: “♪♪ Hi-sa-mit-su ♪”. When we think of the drug industry, we tend to think of firms in Europe and North America, but **Hisamitsu Pharmaceutical** (HP) was founded in Saga Prefecture, in the far south of Japan, in 1847—making it one of the oldest drug firms in the world. In 1903 Hisamitsu introduced the *asahi mankinko*, a poultice consisting of rubbing ointment pasted onto Japanese paper. From there the group developed a whole line of transdermal patches for local analgesics and anaesthetics. Now Hisamitsu has developed the HP-3000, a patch for Parkinson's disease, and anticipates receiving approval to market it in Japan this February.

There was a time when most of the Asian pharmaceutical industry merely imitated developments overseas. In fact, the generic drug industry was born in India, when the nationalist leader Gandhi in 1935 suggested to a patriotic chemist that he start copying Western drugs in order to make them affordable for the masses. The resulting firm **Cipla** (in Mumbai), and others like it such as **SP Accure Labs** (in Hyderabad), for decades have supplied life-saving medicines to Third World communities at a fraction of the cost of their name-brand counterparts.

Today, however, the pharma sector in Asia, while still dwarfed in size by that of the West, is growing rapidly and standing on its own two feet, developing innovative, path-breaking drugs instead of just aping those from the West.

As the drug industry becomes truly globalized, the relation between Western and Eastern firms is marked by both competition and collaboration. For example, **Takeda Pharmaceutical Co.** in Japan has ongoing research and development partnerships with such U.S. firms as BioMotiv (Cleveland) and MacroGenics (Rockville, MD). Its joint work with Abbott Laboratories (Chicago) led to the blockbuster drugs

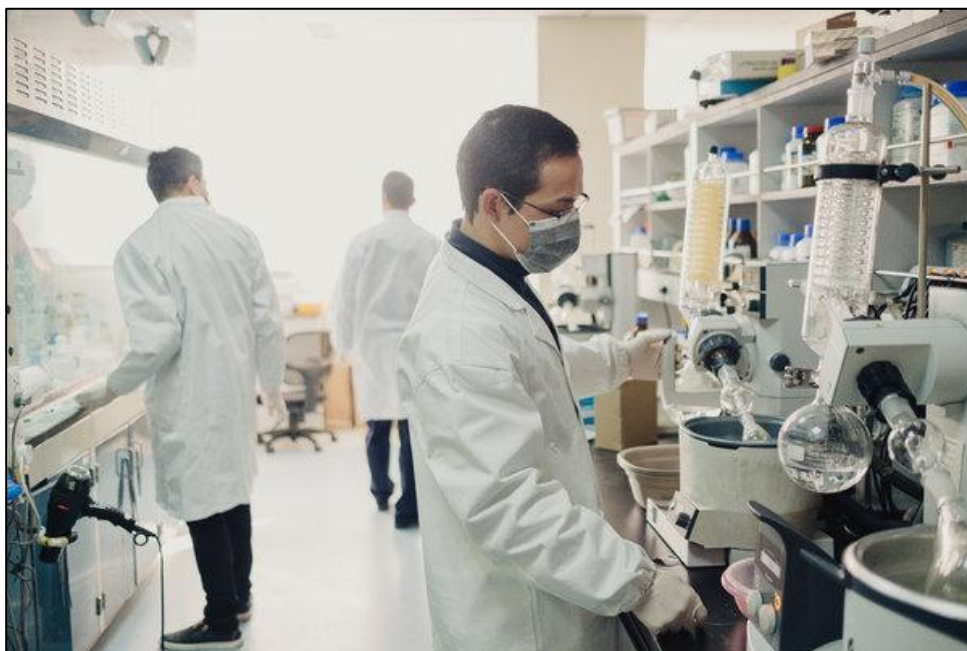
Lupron and Prevacid. Takeda, founded in Osaka way back in 1781, is the largest drug firm in Asia, with 30,000 employees and \$16.5 billion in annual revenue.

In China, the Shanghai-based **WuXi AppTec Co.** specializes in supporting overseas drug companies with research, development, and marketing; its annual profits are on the order of \$600 million. Hutchison China MediTech (known as **Chi-Med**), a firm of about 400 scientists and staff based in Hong Kong, is working with the British-Swedish firm AstraZeneca to develop a drug for lung, kidney, gastric, and colorectal cancers. Chi-Med has similar collaborations with Eli Lilly and Nestlé. The firm plans to double the size of its 20-person U.S. team by mid-2020.

Citing the benefits of competition, an FDA official has encouraged Chinese firms to sell their own drugs in the U.S. Chi-Med's CEO has noted that it's cost-effective to develop the drugs in China—where salaries are lower—before testing them in the U.S. with clinical trials to meet FDA approval.

The American operations of Chinese drug firms are often headed by executives who have been lured away from U.S. counterparts. For example, to supervise its U.S. clinical trials Chi-Med hired Marek Kania, formerly Vice President at Indianapolis-based Eli Lilly. Eric Hedrick, formerly with the San Francisco-based Genentech, Inc., is now the Chief Medical Officer for U.S. operations of **BeiGene**, a much smaller, 10-year-old firm headquartered in Beijing and focused on cancer medicine. When Hedrick joined BeiGene as its first American employee, he had never visited China, but, as he explained to the *Wall Street Journal*, he wanted to be on the front lines of that country's biotech boom without having to move his family there. BeiGene has about 1,300 employees at offices in Asia, Australia, and the U.S. A few months from now, its new drug for leukocyte malignancies is likely to be the first Chinese non-generic cleared for sale by the FDA.

— RKS



A Shanghai chemistry laboratory owned by Chi-Med, a Hong Kong pharmaceutical company that is working with AstraZeneca to develop a drug to treat cancer.

Photo:  
Yuyang Liu,  
*The New York Times*,  
Jan. 4, 2018



# Schoolcraft Graduate Works for Japan-Based Medical Firm

by Reneh Araj

*Since Jun. 2018 Reneh Araj has been employed as a production chemist at Terumo Cardiovascular Group in Ann Arbor, MI. She graduated in May 2015 from Schoolcraft College, where she was founder and President of the Chemistry Club, served as Chair of the Honors in Action project for the PTK Honor Society chapter, and worked as a Writing Fellow, an English tutor, and an academic assistant in the Communication Arts Dept. She then transferred to Wayne State Univ. (Detroit), where she completed a bachelor's degree in chemistry in 2018. Reneh and her older sister, Ruby, who also graduated from Schoolcraft, are originally from Fuheis, an Arab Christian town just northwest of Amman, Jordan.*



bypass surgeries. Another device that we manufacture is the CDI Blood Parameter Monitoring (BPM) System 550, which is used during such surgeries to continuously monitor and report 12 critical blood parameters and to alert any serious changes in patient status. A few of the other medical products manufactured at TCVS are the CAPIOX FX Advance Oxygenator, Cannulae, autotransfusions, and vascular grafts.

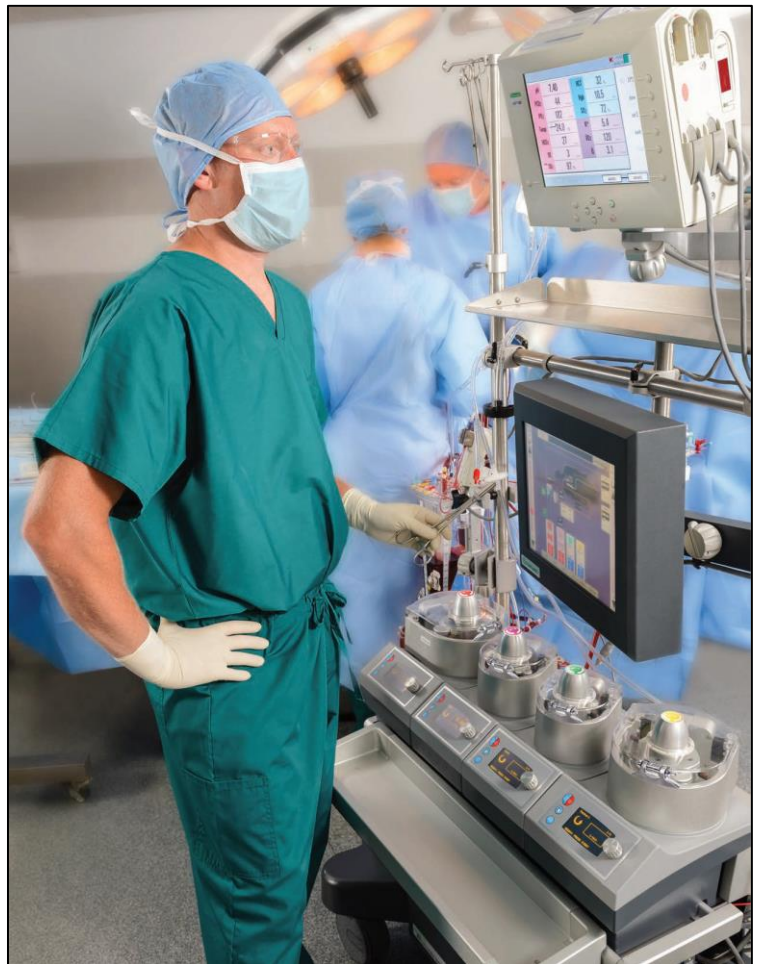
Medical devices in the U.S. are FDA-regulated. As a result, protocols are followed to assure patient safety. This is where I come in. As a chemist in the Electromechanical Division, my team and I work on the fluorescing chemistries of the BPM's shunt sensors. In the Production Chemistry laboratory, we start by building the specific chemistries, CO<sub>2</sub>, O<sub>2</sub>, K<sup>+</sup>, and pH, according to the manufacture work instructions given. These chemistries are then inspected and tested to assure efficiency and productivity of the shunt sensors.

Terumo Corporation in Japan focuses on hospital products and health care, as well as overseeing all Terumo companies internationally. Terumo Cardiovascular Systems is committed to provide lifesaving technology. As a team, our actions and decisions help save thousands of lives daily. We provide superior healthcare products that positively impact patients around the world with exceptional customer care. •

At Terumo Cardiovascular Systems (TCVS), located at 6200 Jackson Road in Ann Arbor, we manufacture and distribute medical devices for cardiac and vascular surgery. Our primary commitment is patient safety and product quality. Our mother company, Terumo Corporation, is a medical device manufacturer headquartered in Tokyo, Japan. The first product manufactured there was a clinical thermometer in 1920. Since then, Terumo Corp. has continued to grow globally, with company sites all over the world.

TCVS at Ann Arbor focuses on cardiopulmonary bypass surgery. The heart-lung machine, one of the manufactured devices, is used on-site to simulate open-heart surgery in order to train perfusionists, the specialized healthcare professionals who operate that machine during

The Terumo Advanced Perfusion System 1, a heart-lung machine.



# Hatha Yoga Nourishes the Mind/Body Connection

by George J. Valenta, Jr.

*George Valenta is a retired speech pathologist and audiologist in Ann Arbor, MI. He has been teaching hatha yoga for over 40 years, the last 15 of them as an adjunct instructor in the Dance Program at Washtenaw Community College. He wrote and appeared in more than 225 half-hour episodes of the “Yoga for Today” TV series, which are still shown on Tuesdays at 11-11:30 am on Ann Arbor’s local cable access station CTNPB. He has also appeared in, directed, or produced over 200 musicals, plays, and other theatrical productions. George received the Otis Award for public service broadcasting on radio, and the Grosse Pointe Theater’s Clarence Award for acting. He holds a bachelor’s degree in German from the Univ. of Michigan, and a master’s degree in speech pathology, also from UM. His many other abilities and teaching interests include art, photography, poetry, lip reading, and contract bridge.*



Photo: gotovan.com via Wikimedia Commons

A hatha yoga session at Semperviva Yoga Centre in Vancouver, BC, in March 2010.

Yoga, a practice or discipline that emphasizes the centrality of a sound mind in a sound body, originated about 5000 years ago in the Indian subcontinent. Its earliest advocates believed that nourishing the mind/body connection allowed them to access the higher inner self for serenity and peace. Practicing yoga leads one into additional Eastern disciplines such as meditation, Taoism, working with the systems of *chakras* (centers of spiritual power in the body), reflexology (the therapeutic application of pressure to body zones), and acupuncture. These arts help nourish the mind/body connection for health, and they also lead the way to spiritual development for other kinds of enrichment.

The Sanskrit word *yoga* means “union, connection”, as in the mind/body connection. *Haṭha* (pronounced ha-ta) means “effort, force, exertion”. As used today on the West, *haṭha yoga* simply refers to the physical aspects of yoga (poses, postures, exercises, and deep breathing); it does not represent a separate school or philosophy of the yoga discipline. Having said that, I should add that the Taoist philosophy permeates all of my yoga teaching and practice, even though I’m not explicit about it. In fact, I believe that everyone is a Taoist.

To put it whimsically, yoga might just as well be spelled YOGA, because yoga is all about you—you here, and you in the now moment. Yoga feels good while you are doing it, and it feels good after you have completed a session. Beneficial results and improvements come immediately. It has worked for thousands of years, and provides what you need for a good life experience.

Many years ago my mother had spinal surgery followed by physical therapy, which the entire family liked to practice with her. It was only years later that I recognized that this regimen was based entirely upon yoga. In 1980 I took some Summer classes at Wayne State University, including dancing. The warm-up routine was taken directly from yoga, and it is since that time that I have practiced hatha almost daily.

Now at age 86, I still teach yoga at Washtenaw Community College three days a week. Classes include the seven-part routine that I shall outline for you. I believe that yoga is what keeps me going at a pace that mystifies my friends of the same age, who are using canes and walkers and leg braces. Many of them experience difficulty just getting up from a chair or out of a car.

## Yoga Sessions

A well-planned yoga routine will explore at least seven areas:

1. stretching
2. inversion
3. twisting
4. abdominal toning
5. one-footed weight-bearing poses
6. relaxation
7. meditation

These poses and postures can be achieved while standing, sitting, kneeling, lying down, or even on a chair if there is limited mobility. Since there are no fixed standards or minimum goals to reach, yoga practitioners are always in a zone of comfort, responding to the varying limitations of any given day.

Each of the seven facets listed above has a purpose, as follows:

- Stretching lengthens muscles and tests ligaments to promote circulation.
- Inversion poses provide an exchange of oxygen-rich blood to the brain. Simple forward bends are an example of this.
- Twisting poses release tension and increase energy flow along the spine.
- Abdominal toning promotes a favorable balance between the powerful tendons up the entire back of the body and

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# Dr. Paul Unschuld on Reconciling Chinese and Western Medicine

interview by Ian Johnson

*This interview with Paul U. Unschuld was conducted for the New York Times “Sinosphere” blog (October 13, 2015) when the Chinese scientist Tu Youyou was awarded a Nobel Prize in Physiology or Medicine. Dr. Unschuld is a leading scholar of the history and ideas that underlie Chinese medicine. He formerly taught at Johns Hopkins Univ., and since 2006 has headed an institute at the Charité Hospital in Berlin that studies the theories, history, and ethics of Chinese life sciences. He is the author of several of the West’s most influential books on the subject, including *Medicine in China: A History of Ideas, What Is Medicine? Western and Eastern Approaches to Healing*, and *The Fall and Rise of China: Healing the Trauma of History*.*

**Q:** In *The Fall and Rise of China* you write: “From the very start [of the reform movement in the early 20<sup>th</sup> Century], Chinese medicine was at the center of criticism. That is hardly surprising. Nowhere within a culture are fears and optimism expressed as swiftly and existentially as in the attitudes toward one’s own illness.”

**A:** The Chinese Empire was subject to a series of humiliations beginning with the First Opium War, 1839-42. The sovereignty of China over its territory appeared to have reached its lowest point exactly 100 years ago, in 1915, when Japan made its 21 Demands [extending its control in China]. These exceeded anything the Western powers had ever demanded from China and marked the beginning of decades of Japanese annexation efforts, a large-scale invasion, including the most appalling war crimes against the Chinese people. Many Chinese intellectuals saw their country as ill, and writers like Ba Jin and Lu Xun identified Chinese medi-

cine as a symbol of China’s illness. Reformers and revolutionaries were in complete agreement that it should have no future. Naturally, conservatives raised their voice, too, warning against elimination of such a central element of Chinese culture, but, in general, ideas like yin and yang or the Five Phases [the interaction among the five elements: wood, earth, water, fire and metal] were denounced as obsolete.

**Q:** And eventually the government shifted on Western medicine?

**A:** The turning point was the Manchurian plague of 1910-11. The population burned vinegar and set off fireworks to drive out demons, but such traditional measures didn’t stop the plague. Finally, the authorities turned to an ethnic Chinese from Malaysia, Wu Lien-teh, a Western-trained microbiologist. He quickly brought the plague under control with basic public health policies unknown before in Chinese medicine. This was a big signal to the Chinese government: We have to get closer to Western medicine, or we’re finished.

**Q:** And China did move quickly.

**A:** Once the superiority of such public health measures had been recognized, a very rational attitude towards Western science and medicine was adopted that may be characteristic of China. A victim needs to look at himself to realize why he was put down. If the West can do this to us, they must have something we don’t have. We’ll get it, and in the next round we shall see. There’s an old saying: *Wo ming zai wo, bu zai tian*—My fate is in my hands, not heaven’s. This principle has been applied in China both in politics and in health care for the past 2,000 years.

**Q:** In terms of Chinese medicine, do you see this continuing today?



Pharmacists preparing traditional Chinese medicine potions at the Chinese Academy of Medical Sciences in Beijing.

Gilles Sabrie,  
*The New York Times*,  
2015.





*The New York Times*, Oct. 14, 2015

### Dr. Tu Youyou, a Nobel Prize winner in 2015

A: Certainly. In 2007, the government invited politicians and experts from 50 countries to draft the Beijing Declaration on Traditional Chinese Medicine and declared T.C.M. to be part of biomedicine. The future of T.C.M. was seen in molecular biological legitimation. I was the German delegate, and one high-ranking Chinese politician voiced amazement to me that some Westerners, exposed to modern science for centuries, believe in the Five Phases theory. You see, political decision makers in China can't understand this because the Five Phases doctrine won't make your mobile phone work. It won't shoot a rocket to the moon. The government is not interested in promoting yin and yang and the Five Phases because it is convinced that people who believe in that are lost for the strengthening of China vis-à-vis the West. And we do see that young Chinese people are less and less open to these ideas. T.C.M. colleges in China have problems finding competent students.

Q: What about the Nobel Prize and Chinese medicine?

A: I met Prof. Tu Youyou in the 1970s. She was a modern pharmacological researcher, working on harnessing certain herbs. She's a perfect example for the successful modernization of Chinese medicine. Her successes are unrelated to yin and yang or the Five Phases. She had a great education in Western science, and she and her team searched through ancient literature for medications recommended to cure malaria. She used modern science to analyze *Artemisia annua*, figured out the active ingredient of the plant and modified it until it exerted an antimalaria effect never achieved in China before. That is what Mao Zedong had asked for: the unification of historical Chinese and modern Western medicine.

Q: These views contradict how many in the West see Chinese medicine.

A: Professor Tu's discovery had nothing to do with what most Westerners define as traditional Chinese medicine, except that the substance she examined is described in ancient pharmaceutical literature. The Chinese authorities are trying to strip historical Chinese medicine of superstition and nonsense. What is left can exist with molecular biology. That

## Turning an Ancient Herb into a Modern Anti-Malarial

Chinese pharmaceutical chemist Tu Youyou was awarded one of the three 2015 Nobel Prizes in Physiology or Medicine for her discovery, over 40 years earlier, of a plant-derived pharmaceutical that kills the parasite responsible for malaria infections. This plant derivative, which was given the name artemisinin, remains today the most effective drug used by doctors worldwide in the treatment of patients infected with malaria.

The way in which artemisinin was discovered in China is an interesting episode in history, and it reflects the potential future value to be found in folk medicine. During the Vietnam War, malaria was plaguing liberation fighters on the battlefields and in secret underground tunnels used by guerillas. In 1967, North Vietnam's leaders asked their counterparts in China whether an effective treatment for the illness could be found. One of the teams formed in China to take on this task was at the Academy of Traditional Chinese Medicine in Beijing. Integrating traditional Chinese medicine with Western medicine was one of the four guiding principles of public health that had been set down in 1952, three years after the founding of the People's Republic of China.

Dr. Tu— who had already gained experience earlier in her career investigating the use of lobelia, a Chinese traditional medicinal herb, as a possible cure for schistosomiasis— was appointed to head the team. Working from a pharmacopeia of nearly 5,000 herbal medicines, the scientists began to clinically test natural substances for their anti-malarial properties. In 1972, they were able to isolate an effective anti-microbial agent from *Artemisia annua* (sweet wormwood), a culinary and medicinal plant that Chinese herbalists had been using to treat malaria and other fevers for more than 2,200 years.

Because of hostility between Red China and the West, the discovery didn't become known to the outside world until after 1979, when relations had begun to thaw. The Swiss drug company Novartis bought the Chinese patent and began producing artemisinin in the 1990s.

— RKS

*continued on next page*

## Chinese Medicine

*continued from page 27*

disappoints those in the West who see T.C.M. as an alternative to biomedicine. These people don't understand why the Chinese authorities act like this. The trauma of the 19<sup>th</sup>- and early-20<sup>th</sup>-Century humiliation is still present. For 100 years, China has been struggling on many fronts to catch up with the West. Professor Tu's Nobel Prize is proof of the success of this policy.

Q: And yet many people in China opt for traditional medicine.

A: Western medicine can't achieve miracles, and there are many everyday health problems it cannot solve. Many Chinese—and Westerners—know that there are recipes in Chinese medicine that work, regardless of whether there is scientific evidence. It is a characteristic common to all societies with a coexistence of modern and traditional health care options. Patients are aware of the strengths and weaknesses of the alternatives and oscillate between modernity and tradition accordingly.

## Hot Off the Presses

Among the notable books published last year by local faculty members or local presses:

Translator Brian Bruya (Prof. of Philosophy, **Eastern Michigan Univ.**) and illustrator C. C. Tsai, *The Art of War: An Illustrated Edition* (Princeton Univ. Press, 2018), is a version of Sunzi's classic accompanied by delightful cartoon drawings.

Christina Gerhardt and Sara Saljoughi, eds., *1968 and Global Cinema* (**Wayne State Univ.** Press, 2018), examines the political films of 1968 in relation to global events, and puts them into dialogue with one another across national boundaries.

Ed Sarath (Prof. of Jazz, **Univ. of Michigan** School of Music, Theatre and Dance), *Black Music Matters: Jazz and the Transformation of Music Studies* (Nation Books, 2018), is a textbook that relocates jazz and Black music from the periphery to the center of contemporary American musicology, treating its relation to creativity, consciousness, spirituality, transculturalism, and educational reform.

Scott Ickes and Bernd Reiter, eds., *The Making of Brazil's Black Mecca: Bahia Reconsidered* (**Michigan State Univ.** Press, 2018), explores the African legacy and cultural status of the northeastern Brazilian state.

Hashim M. Al-Tawil (Prof. of Art History, **Henry Ford College**), *History of Arab Art* (Linus Learning, 2018) is a textbook covering four millennia, and unusual in highlighting the diverse pre-Islamic aspects of the region's culture. Dr. Al-Tawil wrote "Historical Islamic Architecture: Transforming Space into Oratory" in our Fall 2018 issue.

Juan R. Cole (Prof. of History, **Univ. of Michigan**), in *Muhammad: Prophet of Peace Amid the Clash of Empires* (Nation Books, 2018), examines the origins of Islam and counters the misconception that it is inherently extreme or violent.

## Hatha Yoga

*continued from page 25*

the smooth muscles on the front.

- One-footed balance poses increase bone density, possibly helping to delay or preclude hip or knee replacement surgery.
- Relaxation to restore energy is certainly something that everyone needs following a period of intense activity, including a work-out.
- After mind and body chatter have been minimized during a yoga routine, meditation provides access to the higher inner self—the personality, the spirit, the soul, the real person deep within, which is the true essence of who you are.

Yoga is non-competitive, so pain and unease are never part of a workout. Thus, yoga complements all other regimens of physical improvement. The ultimate goal is to enhance the mind/body connection, promoting serenity and leading to deeper exploration of the spirit.

There are many variations of modern yoga, but all are based upon hatha. North American versions tend to emphasize speed and activity. There are other disciplines that promote heavy sweating in overly heated rooms. Pilates is a yoga-like program that often requires equipment and seems to test the limits of comfort; it was devised about 100 years ago and has gained in popularity among those who like strenuous activity. Traditional yoga focuses instead upon quality time in any given pose to achieve a fuller result, using as few muscles as needed to achieve the desired goal.

Although there are many CDs and TV offerings, yoga is best experienced with an instructor. Traditional hatha yoga is presented as an organized system designed to foster an integrated mind/body/spirit connection.

### Bits of Yoga are Everywhere

It can be difficult to find time to initiate regular yoga sessions. On the other hand, bits of yoga can be done anywhere and everywhere. Our usual activities can be part of this quest merely by applying yoga principles to sitting, standing, walking, or driving.

Walking is a marvelous way to start any healthful activity practice. Erect posture will place emphasis upon abdominal toning. When standing in a checkout line, it is possible to perform a modified one-foot weight-bearing pose. Bending over to pick something up can be a yoga-type experience by using proper technique. Furniture is often ergonomically designed to assist in healthful sitting—for instance, the adjustments available in car seats. Office furniture can promote upright posture leading to less fatigue at work.

Finding applications of yoga in daily living is merely a matter of looking for moments when any activity can improved by using efficient movements to complete it. Yoga is natural to our bodies. Our bodies will reward our efforts with newly found vigor, strength and serenity.

There are over 50,000 named poses to discover. Please feel now welcomed into the ageless world of hatha yoga.

# Doctor Xiabo

by Lina Chartrand

Radar fingertips  
on my wrist.  
*Tongue please.*

Green tea  
from her kitchen  
before treatment.

Xiabo says:  
*many English words sound  
the same.  
Could you please explain.*

*What is affection?*

Like our talks,  
friendship, I reply.  
She gives me advice:  
*don't always wear black.*

*What means tenderness?*

Like Chinese herbs,  
a warm potion  
that heals the body.

*When we came here,*  
Xiabo says,  
*my husband abandoned me.  
I walked three hours  
daughter small  
on my back,  
no money.*

*What is passion?*

Like acupressure



This portrayal of a visit to a Chinese-immigrant doctor was written by Lina Chartrand (1948-1994). The poem is reprinted from the literary journal of the Saskatchewan Writers Guild, *Grain*, 21:4 (Spring 1994).

Even though the doctor is an acupuncturist, she begins by examining the patient's tongue. For those practicing traditional Chinese medicine, analyzing the tongue and the pulse, along with observing the patient and listening to their thoughts, are the key aspects of diagnosis.

Born in Timmins, Ontario, Lina Chartrand settled in Toronto and worked there as a professional playwright, screenwriter, and poet in both French and English. Her writing was often shaped by her work as a community activist; an opponent of racial and gender discrimination, she fought to improve conditions for poor people, women workers, and the disabled, and to secure legal services for them. Chartrand, who had been stricken with polio as a child, died from complications of liver disease.

points. Deep.  
Electric.  
By the door  
my discarded birkenstocks  
make a face-down shelter  
over her pretty shoes.

*Love?*

Like acupuncture,  
I think,  
the pain of the needle  
is the best cure.



# Extracting Modern Medicines from the Ancient Chinese Pharmacopeia

by Randy K. Schwartz (Editor)

The phrase “snake oil” is a widely known pejorative, but how many people know that it also refers to some real medical knowledge? In the 1800s, Chinese indentured laborers in the American West, including those who built railroads there, treated their aches and pains with a traditional ointment made from a fatty extract of the Chinese water snake (*Enhydra chinensis*). Known as snake oil, the ointment is rich in Omega-3 fatty acids and is effective for treating joint inflammation. Unfortunately, shyster American “patent medicine” salesmen started using simple mineral oil to make a phony version of snake oil that had zero usefulness, giving real snake oil a bad name.

Since real Chinese snake oil turns out to be an effective topical analgesic, and since an ancient Chinese medicinal herb turns out to have a powerful anti-malarial ingredient (see p. 27), it’s natural to wonder: How many other useful medicines might be recovered from Chinese folk traditions? And could some of them be earth-shaking?

Last year, China began to require that each local government establish an institution of Traditional Chinese Medicine within every medical center. It increased funding for such institutions, and it correspondingly broadened career tracks in the educational system. This year, the World Health Organization (WHO) added Traditional Chinese Medicine to its International Statistical Classification for reporting diseases and health conditions.

CNN this Summer examined the potential of Chinese medicines in treating cancer. Godfrey Chan, a pediatric oncologist at Queen Mary Hospital in Hong Kong, showed the reporter some of his patients who use ancient biological medicines, such as ginseng or *lingzhi* mushrooms, alongside conventional Western treatments. Dr. Chan, whose father practiced Traditional Chinese Medicine (TCM), wants to tap into it to create treatment combinations that are more effective than standard therapies. “It’s like a treasure mine”, he told CNN. “We already have a lot of information from history that we know that some of this formula works [and] some of this formula does not work.”

Ginseng beverages seem to help Dr. Chan’s patients to regain their strength after chemotherapy sessions. Capsules of dried, powdered *lingzhi*, also called red reishi mushrooms, appear to enhance the functioning of cancer patients’ immune systems. This type of wood conch mushroom has been used medicinally in China for over 2000 years, and commercial sales worldwide are currently on the order of \$2 billion annually.

Qihe Xu, co-director of the King’s Centre for Integrative Chinese Medicine in London, told CNN that he, too, favors integrating the wisdom and approaches of conventional Western medicine and traditional Chinese medicine, which is more holistic and preventative in orientation. “The value of Chinese medicine lies in its different means for diagnosis and interven-

## A Wild Scramble for Ginseng

Ginseng, a word derived from the Chinese *jīn-sim*, is a plant that was indigenous to both Eastern Asia and Eastern North America. In China the fleshy roots have long been sliced, dried, and used as an herbal medicine. The plant’s genus name *Panax* (“panacea”) was assigned by the Swedish botanist Carl Linnaeus, who knew about the use of the roots as a muscle relaxant in traditional Chinese medicine.

A recent review of published clinical studies concluded, “Both American and Asian ginseng may be viable treatments for fatigue in people with chronic illness” such as cancer patients, and it called for further research (N. M. Arring, et al., “Ginseng as a Treatment for Fatigue: A Systematic Review”, *Journal of Alternative and Complementary Medicine*, 24:7 [Jul. 2018], pp. 624-633).

The wild ginseng plant is now extinct in China and endangered globally. In 2012, Chinese health regulators reclassified ginseng root as a dietary herb that can be used in health foods without prior approval, as long as no specific health claims are made for it; previously, it had been classified as an herbal drug whose inclusion in health foods required prior approval and licensing. Ginseng-infused teas and energy drinks are consumed today in China and neighboring countries as a kind of tonic for vitality, especially by men age 50 and older, who might use them on a daily basis. Sliced bits of the dried root are also used in soups and other hot dishes.

Ginseng root was also a traditional medicinal herb in North America, where considerable tribal ecological knowledge surrounds its harvest. The plant is known as *mamaceqtasah* (“little person”) in Menominee, and *jiisens* in the Ojibwe language. In 2012, the Menominee Nation in eastern Wisconsin became the first tribe in the U.S. to gain authorization to export the roots of the endangered plant internationally.

Wild and cultivated ginseng roots were harvested by European settlers in North America starting in the 1700s. The town of Ginseng, Kentucky, was named after the valuable plant. Today, U.S. and Canadian ginseng is mostly exported to Asia, where it is esteemed for its superior quality. The industry is highly regulated, but “Appalachian Outlaws” (History Channel, 2014-15), a popular reality TV show still in re-runs, focused on the poaching of wild ginseng in West Virginia and Tennessee. One episode stated that \$70 million of ginseng is exported from the U.S. yearly.

*continued on page 39*

# Farewell to the God of Plague

by Mao Zedong

## I

So many green streams and blue hills, but to what avail?  
This tiny creature<sup>1</sup> left even Hua To<sup>2</sup> powerless!  
Hundreds of villages choked with weeds, men wasted away;  
Thousands of homes deserted, ghosts chanted mournfully.  
Motionless, by earth I travel eighty thousand *li* a day,  
Surveying the sky I see a myriad Milky Ways from afar.  
Should the Cowherd<sup>3</sup> ask tidings of the God of Plague,  
Say the same griefs flow down the stream of time.

## II

The Spring wind blows amid profuse willow wands,  
Six hundred million in this land all equal Yao and Shun.<sup>4</sup>  
Crimson rain<sup>5</sup> swirls in waves under our will,  
Green mountains turn to bridges at our wish.  
Gleaming mattocks fall on the Five Ridges heaven-high;  
Mighty arms move to rock the earth round the Triple River.<sup>6</sup>  
We ask the God of Plague: "Where are you bound?"  
Paper barges aflame and candle-light illuminate the sky.<sup>7</sup>



This poem was written on July 1, 1958 by Mao Zedong, Chairman of the Chinese Communist Party, when the Party newspaper reported that the nation's campaign to defeat schistosomiasis had scored its first county-wide victory. The translated poem is from Mao Zedong, *Poems* (Beijing: Foreign Languages Press, 1976).

Schistosomiasis is ranked by the World Health Organization as the world's second most socioeconomically devastating parasitic disease, after malaria. It is known as "snail fever" because freshwater snails are responsible for spreading the schistosomes (parasitic flatworms) to humans. The years-long mass mobilization campaign in China's rural areas scored successes through a multi-pronged approach: enlisting droves of peasant volunteers to dig snails out of the mud that lined waterways (see above detail from propaganda poster); chemical pesticides; irrigation channel re-routing and other agricultural and water conservation projects; and assigning urban physicians and public health personnel to work in the countryside, assisted by rural educated youth.

1. The parasitic flatworm infects humans during its larval stage, when it is only a couple of millimeters long.
2. Hua To (ca. 140–208 CE) was a famous doctor skilled in herbal medicines, surgery, acupuncture, moxibustion, and *tao yin*, a Taoist physical discipline similar to yoga. He was the first in China to practice surgical anaesthesia, using a general anaesthetic made with wine and *mafeisan*, a powdered form of hemp (cannabis).
3. The Cowherd is a tragic figure in Chinese folklore. He is stricken with grief when his wife, the Weaving Maid, turns out to be a granddaughter of the God of the Heavens, who orders her to abandon her family and come back home.
4. That is, the 600,000,000 citizens of People's China are as worthy of admiration as Yao and Shun, two mythical kings who were revered for their wisdom and accomplishments.
5. "Crimson rain" refers to falling red peach-blossoms, a sign of Spring.
6. The Five Ridges and the Triple River refer to the most famous peaks and rivers of China. Metaphorically, the verse expresses how the people are resourceful enough to turn blankets of petals into waves, and tall mountains into bridges; they are mighty enough with their own arms and mattocks (pickaxes) to reshape haughty peaks and rivers.
7. It is a Buddhist and Taoist tradition to honor the ghosts and spirits of the dead by setting lit candles and lanterns afloat on toy boats made of paper.

Other examples of public health advances in China during this period include:

- In a seven-year project (1958-65), a team of chemists at Beijing University synthesized crystalline bovine insulin, the world's first complete chemical synthesis of insulin or of any functional crystalline protein.
- Beginning in 1965, rural cooperative medical systems were established throughout the countryside, relying on young peasant paramedics known as *chijiǎo yīshēng* ("barefoot doctors").
- In a five-year project (1967-72), a team at the Academy of Traditional Chinese Medicine in Beijing developed artemisinin, the world's most effective pharmaceutical for malaria infections (see page 27).

For further reading:

- Miriam Gross, *Farewell to the God of Plague: Chairman Mao's Campaign to Deworm China* (Univ. of California Press, 2016)
- Joshua S. Horn, *Away With All Pests: An English Surgeon in People's China, 1954-1969* (Monthly Review Press, 1969).

# Mathematics as a Weapon against Tropical Diseases

by Randy K. Schwartz (Editor)

Massive resources are rightly being devoted internationally to fight the “big three” infectious diseases— malaria, AIDS, and tuberculosis. But in tropical regions of Asia, Africa, and Latin America, impoverished people are also victimized by a whole array of deadly contagions that are less publicized and receive many fewer resources for treatment and research. The World Health Organization (WHO) currently includes 21 of these on its list of Neglected Tropical Diseases, or NTDs (see box on next page). And due to climate change, some of these illnesses—including the two discussed below, Chagas disease and dengue fever—are beginning to spread to subtropical and even temperate regions.

Because of the phenomenon of *co-infection*, NTDs are even more harmful than their mortality rates suggest. This means that infection with an NTD can make another disease that strikes the same patient more deadly. For example, worm infections (schistosomiasis and soil-transmitted helminthiasis) weaken the immune system, making a person more vulnerable to malaria, AIDS, and tuberculosis.

Medical foundations and drug companies often look past NTDs when they decide which treatment or cure to work on next. There are often no vaccines for these diseases, and drugs used to treat them tend to be outdated or impractical. The main treatment available for trypanosomiasis (African sleeping sickness), for example, is itself fatal to 1 out of 20 patients to whom it is given! In other cases there are safe, effective, and very inexpensive measures, but the challenge is to administer them to literally billions of people. A course of treatment with the antibiotic Zithromax that would cost only \$4 in the U.S. can keep a child safe from the blinding disease of trachoma, and has the side effect of dramatically decreasing infant mortality. An annual dose of Praziquantel, which costs 20¢ in the U.S., can prevent infection by schistosomiasis (snail fever) and treat those already infected.

In some cases, the key missing ingredient in combating an NTD is a strategy for controlling insect populations that carry infectious microbes. Below, we discuss two Michigan teams that have used mathematics to help develop such strategies.

## The Perilous Kiss of Chagas Disease

At Oakland Univ. (Rochester, MI), mathematician Anna Maria Spagnuolo and her colleagues developed an analytical model of the spread of Chagas disease, which she described in a talk at Schoolcraft College in March 2010.

Chagas disease is the leading cause of heart disease in Latin America. At any given time, the illness infects over 6 million people living in poor villages in Mexico, Brazil, and elsewhere. The initial symptoms, including swelling around the eyes, are so mild that they are usually not even noticed until years after the microbe invades the body. When the illness is left untreated, it eventually leads to gross enlargement of the intestines and of the heart ventricles. Many victims die prematurely of cardiac failure.



Muhammad Mahdi Karim, via Wikimedia Commons

This female *Aedes aegypti* mosquito is sucking blood from the finger of a person in Dar es Salaam, Tanzania. Such mosquitoes can carry dengue fever, yellow fever, and Zika.

The protozoan that causes Chagas, *Trypanosoma cruzi*, thrives in humans and their pets and animals. The vector that spreads it between them is a species of bloodsucking insect called the “kissing bug”, *Triatoma infestans* (the term *vector* is used in medicine to refer to insects or other organisms that transmit the microbes that cause an infection). The bug penetrates the thatched roofs of houses, lodging in the muddy crevasses there. Chickens, which are commonly kept near these houses, are not susceptible to the disease but provide the most favored blood source for the insect. The insect is nocturnal; if it attacks a human, it generally lands on the lips while they are asleep, and inserts its short, curved, powerful proboscis into the skin there to suck blood, defecating at the same time. When the victim awakens from the painful bite, they invariably wipe their lip and smear the parasite-laden feces into the wound, thereby becoming infected.

To understand the dynamics involved in the spread of Chagas disease, Dr. Spagnuolo developed a model in the form of a system of *differential equations*. The equations express the rate at which the population of vectors (insects) is increasing at any given time as a function of such variables as the insects’ natural birth and death rates, the frequency of their biting, and the frequency of insecticide spraying to combat them. Another important factor is the season, since the insects’ longevity increases during the Summer.

The equations are too complex to solve exactly, so a simulation is carried out with the help of a high-speed computer program that does the necessary calculations for one small time increment after another, and then plots the results in the form of a graph. While a real-world experiment would imperil lives and



## Neglected Tropical Diseases

(World Health Organization)

|   |   |
|---|---|
| Buruli ulcer                              | lymphatic filariasis (elephantiasis)        |
| Chagas disease (American trypanosomiasis) | mycetoma and deep mycoses                   |
| chikungunya                               | onchocerciasis (river blindness)            |
| cysticercosis                             | rabies                                      |
| dengue fever                              | scabies and other ectoparasites             |
| dracunculiasis (Guinea-worm disease)      | schistosomiasis (snail fever)               |
| echinococcosis (hydatid disease)          | snakebite envenoming                        |
| fascioliasis                              | soil-transmitted helminthiasis              |
| leishmaniasis                             | trachoma (granular conjunctivitis)          |
| leprosy                                   | trypanosomiasis (African sleeping sickness) |
|   | yaws  |

take years, the mathematical model provides a relatively quick and easy tool for understanding the spread of the vectors and the effect of various parameters.

Dr. Spagnuolo's results indicated that suggestions by some biologists to try to curtail Chagas disease by introducing more chickens—in hopes of attracting the kissing bugs away from humans and pets—would have backfired. It also indicated that even after 20 years of spraying insecticides, if the spraying efforts are halted then the insect population can rebound within five years. She and her Research Experiences for Undergraduates (REU) students used the model to determine the optimal spraying schedule to combat the disease. Her website allows anyone—including investigators in Latin America—to submit parameters, and the simulation results will be mailed back to them.

### Infecting the Mosquitoes that Carry Dengue

At Michigan State Univ. (East Lansing, MI), mathematician Mo-Xun Tang and his colleagues developed models for a biocontrol strategy against dengue fever, a strategy that was subsequently field-tested in southern China. In Oct. 2018 I heard Dr. Tang present this work at the annual Fall meeting of the Central Section of the American Mathematical Society, held at the Univ. of Michigan in Ann Arbor.

When a person is bitten by a mosquito carrying the virus for dengue (pronounced DENgee), they typically suffer headache, fever, muscle and joint pains, and skin rash for up to a week. But a small fraction of cases give way to a life-threatening *hemorrhagic fever*, which is characterized by internal bleeding and low levels of blood platelets, blood plasma, and/or blood pressure. Dengue fever became a global problem during World War 2, and in the 1960s it spread dramatically in tropical and subtropical regions, especially in Asia and South America. Today, dengue is a *pandemic* (a worldwide epidemic) and the most widespread mosquito-borne viral disease, common in more than 110 countries. Every year, it infects on the order of 100 million people and kills 10,000 – 20,000.

The vectors carrying the dengue virus are mosquitoes within the genus *Aedes*, primarily *A. aegypti*, the same species

that carries the yellow fever and Zika viruses. There are five different types of the dengue virus. People get infected when a female mosquito bites them and feeds on their blood; male mosquitoes feed on plant nectar instead, and do not transmit the disease.

No effective and commercially available vaccines or other medical treatments exist yet for dengue fever. (One vaccine was developed several years ago, but it's effective against only one of the five virus types, and counter-effective against the others!) In the meantime, efforts to control dengue outbreaks have focused on (1) limiting people's exposure to mosquito bites, and (2) reducing the number of mosquitoes by eliminating their breeding habitats or by indoor spraying with insecticides. But elimination of wetlands and other habitats can harm ecosystems, and spraying isn't a long-term solution either, since mosquitoes can develop genetic resistance to chemical insecticides.

To develop a different strategy, one based on biocontrol instead of chemical control, Dr. Tang worked with colleagues at MSU and with former students of his who now live in the port city of Guangzhou (Canton), in southern China. Guangzhou has the highest rate of dengue transmission of any city in China. In 2014, an outbreak there struck over 11,000 people in one month alone; five died in the epidemic.

The biocontrol strategy used by the team is to release mosquitoes into the wild that have been deliberately infected with *Wolbachia pipientis*, a symbiotic bacterium. Infection with *Wolbachia* reduces the female mosquitoes' ability to transmit the dengue virus, making them relatively harmless to humans. In addition, the bacterial infection gives a relative reproductive advantage, since uninfected females lay non-viable eggs when they mate with infected males. This fitness advantage of the infected mosquitoes is key because it opens up the possibility of creating a stable, self-sustaining population of them in the wild—instead of repeatedly having to release swarms of mosquitoes artificially infected in laboratories.

Unfortunately, in certain other respects the *Wolbachia* infection reduces the fitness of the female mosquitoes. In particular, they have a reduced lifespan (higher death rate) and

*continued on page 39*

Book Review

# When Filipino Nurses Were Accused of Murder

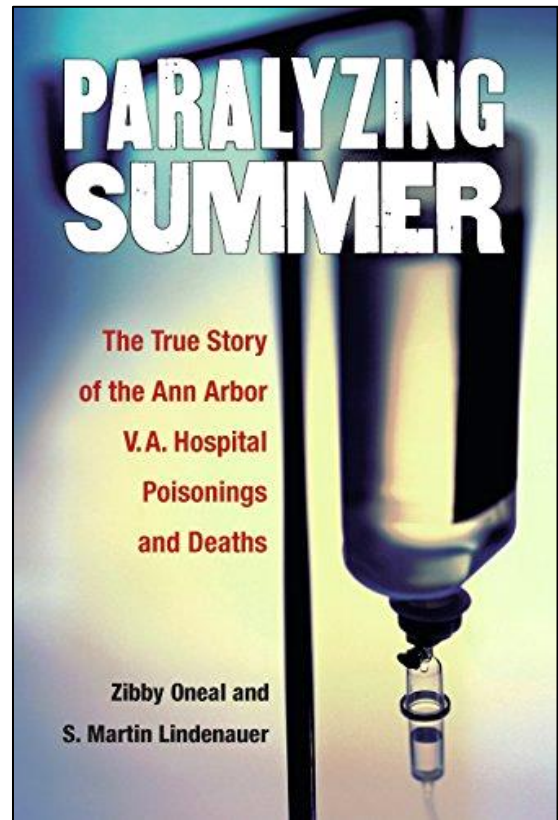
Elizabeth (Zibby) Oneal and S. Martin Lindenauer,  
*Paralyzing Summer: The True Story of the Ann  
 Arbor V.A. Hospital Poisonings and Deaths*  
 (Ann Arbor: Univ. of Michigan Press, 2016).

by Cynthia Jenzen (SC Anthropology Dept.)

An intense fear stalked the Veterans Administration Hospital in Ann Arbor, Michigan, in the Summer of 1975. In just six weeks, between July 1 and August 15, more than 40 patients experienced respiratory failures in the Intensive Care Unit (ICU) and on other floors, and 10 of them died as a result. The scare prompted massive media coverage in newspapers such as the *Detroit Free Press* and the *Ann Arbor News*, which is exactly what the hospital administration had wanted to avoid; it led to the hospital being closed to new admissions, and guards being posted on several floors.

The respiratory failures were believed to have been triggered by the muscle relaxant Pavulon, a curare-type drug that results in loss of physical control, especially in the respiratory system. Investigation revealed that Pavulon had been a contaminant in each of the victims' intravenous drip bags. The powerful drug, which disrupts signaling between nerves and muscle receptors, is normally used in small doses to aid in the insertion of patient breathing tubes before surgery. One of the scariest aspects of the poisonings was the fact that the V.A. patients were left conscious but unable to cry out!

This would not be the last time that Pavulon would be used deliberately to harm and kill patients. In 1987, nurse Richard Angelo used it to kill 10 patients at Good Samaritan Hospital on Long Island, NY. During 1988-98 a respiratory therapist, Efren



Saldivar, used Pavulon in the murders of at least six patients at Adventist Medical Center in Glendale, CA.

## Twists and Turns in the Search for Justice

The investigation at the Ann Arbor V.A. Hospital began in earnest when the FBI was called in. Early on, fingers were pointed at a pair of well-liked Filipino nurses employed in the ICU, Filipina Narciso and Leonora Perez. Both defendants were recent immigrants to the United States from the Philippines.



Accused nurses Filipina Narciso (far left) and Leonora Perez answer reporters' questions during an interview at Holy Trinity Chapel in Ypsilanti, MI, in September 1976.

© Ann Arbor News,  
 October 5, 1976.

Hospital staff and patients' family members had made some questionable identifications, and there was considerable speculation in national media that ethnocentrism and racism had played key roles in leading law enforcement authorities to zero in on the two Filipinas as the leading suspects. The U.S. Attorney's Office in Detroit formulated charges of murder against the two, and led the prosecution of the case. The jury trial occurred in the Summer of 1977.

This interesting book recounts the story from a number of different viewpoints, bolstering its credibility. Co-author Zibby Oneal is a freelance writer in Ann Arbor, while S. Martin Lindenauer is Professor Emeritus of Surgery at the Univ. of Michigan. He was Chief of Staff at the V.A. Hospital during 1974–81, when these events occurred. The Ann Arbor case will be especially interesting to those curious about the workings of the criminal justice system. The authors rely extensively on court documents, news clippings, and interviews with participants at the time. They chronicle the grand jury's decision to indict the two nurses and the subsequent trial.

Most of the evidence presented in court was circumstantial. There was a lack of physical evidence of the nurses' guilt. Eyewitness testimony was presented, but it was generally very shaky and was called into question by defense attorneys. Furthermore, the prosecution was unable to present a motive for the murders. Nevertheless, on July 13, after a trial that lasted for more than a year, the jury pronounced both nurses guilty of three

counts of conspiracy and poisoning, while acquitting them of outright murder.

The days following the guilty verdicts saw an outpouring of protest by nurses' associations, the Filipino government, and members of the V.A. hospital staff. Demonstrations were organized, and the two nurses gave several speeches. One protest right outside the hospital drew about 700 people.

After a defense motion for a mistrial was entered, presiding judge Philip Pratt set aside the verdicts, citing prosecutorial misconduct by the U.S. Attorney's Office in Detroit. He ordered a new trial because "the interests of justice and judicial conscience demand it" (p. 205). The federal attorneys made the decision not to retry, and the charges against the nurses were dismissed.

Both nurses continued to work in Detroit-area hospitals, and became U.S. citizens in early 1980. Whoever was actually responsible for the V.A. hospital murders was never brought to justice.

#### Ethnic Factors in Criminal Identification

A study by Torun Lindholm and Sven-Ake Christianson, published in the *Journal of Social Psychology* (Dec. 1998), focused on cognitive and motivational factors in the police identification process.

*continued on next page*

## Why So Many Filipino Nurses?

During the 20<sup>th</sup> Century, the Philippines became the leading "exporter" of professional nurses to the United States. The cultural and economic factors underlying this process were described by UC-Berkeley Ethnic Studies professor Catherine Ceniza Choy in her award-winning book, *Empire of Care: Nursing and Migration in Filipino American History* (Duke University Press, 2003).

Under Spanish colonial rule, only small numbers of Filipino girls received any elementary education in the Catholic charitable schools. Midwife was one of the few specialized occupations that were open to Filipino women. During the subsequent period of U.S. colonization (1898-1946), the establishment of an Americanized nursing curriculum and an Americanized system of nurse training hospitals paved the way for the creation of a Filipino nursing labor force that was ready and willing to work in the U.S. itself. In the 1950s and 1960s, the U.S. Exchange Visitor Program (EVP) brought many Filipinos to work and study in New York and other cities for a maximum of two years. In occupations such as nursing, the EVP played a role that was analogous to the *bracero* program, which brought millions of Mexican farmhands into 24 states in the U.S. as guest workers (contract laborers) during 1942-64.

In addition, the U.S. Immigration Act of 1965 liberalized the granting of visas, especially to Asian people, and it also designated nursing as an occupational preference category. Many Asian participants in the EVP began to return to their home countries after their two-year stay, then apply for an entry visa and emigrate back to the U.S. to seek more permanent positions as nurses. Between 1965 and 1988, more than 70,000 foreign nurses entered the U.S., the majority of them Asian, with the Philippines overwhelmingly in the lead.

Some U.S. hospitals actively recruited nurses from such countries. An example of such an immigrant nurse is Patricia "Peachy" Hain, who was recruited in 1976 out of St. Paul College of Nursing in Manila. She recalled for a *Wall Street Journal* profile last year that she was placed at the Kansas City College of Osteopathic Medicine, and after graduating there in 1979 was hired by Cedars-Sinai Hospital in Los Angeles. In the Philippines at the time, she said, a nurse's salary "wouldn't buy you a pair of shoes", whereas Cedars-Sinai paid \$7 to \$8 per hour (equivalent to \$24.75 to \$28.25 per hour in 2019 dollars). She added, "There was such a shortage [of nurses in the U.S.] that hospitals were willing to promise the sun, moon and stars." Despite the fact that stories of labor exploitation in U.S. hospitals were making their way back to the Philippines, employment as a nurse in the States was, and still is, considered a prestigious job. As of 2018, nearly one-half of the nurses at Cedars-Sinai are Asian, many of them Filipino; Peachy herself is Executive Director of Nursing there (Lucette Lagnado, "A Sisterhood of Nurses", *Wall Street Journal*, Aug. 13, 2018).

Prof. Choy's book gives a sense of the exploitation and discrimination faced by many of the immigrant Filipino nurses. In the Ann Arbor poisonings case, for example, she shows that the trial was marred by accusations of racism. Many of the patients at the V.A. hospital in Ann Arbor were Vietnam veterans. A man who was at one point scheduled to be the lead prosecution witness described the two accused nurses as "slant-eyed bitches", and claimed that there was a coast-to-coast conspiracy among Filipino nurses to murder U.S. military veterans (p. 152).

— RKS



# Mental Health Research Partnership between Schoolcraft and Atma Jaya

by Dr. Colleen Pilgrim (SC Dept. of Psychology)  
and Dr. Theresia Indira Shanti (Prof. of Psychology,  
Atma Jaya Catholic University of Indonesia)

For almost two years now, we have been collaborating on a project to explore attitudes among U.S. and Indonesian college students toward individuals with mental health problems. The study aims to better understand the obstacles that play a role in people delaying or avoiding mental health treatment options.

Our collaboration began when the research project was funded with a 2018-19 Fellowship from the American Institute for Indonesian Studies (AIFIS). As psychologists we are concerned about the increase in mental health issues among college students, particularly related to depression and anxiety. Even though we have successful treatment protocols for mental health issues, the stigma and other perceptions surrounding mental illness persists as a major obstacle— even more so for students in Indonesia. Psychological and cultural concerns about seeking treatment need to be better understood so as to provide effective care for those suffering from mental health issues.

In August 2018, Dr. Pilgrim traveled to Jakarta, Indonesia, for 10-11 days to visit Atma Jaya Catholic University and to meet with psychology faculty, counselors, and other mental health professionals there. We developed a questionnaire about attitudes toward the mental health stigma and administered it to over 400 students in Indonesia and the U.S., as described in the article “Mental Health Attitudes: Global and Collaborative Research” (*JA*, Winter 2019). Along with colleague Nancy Wrobel at the Univ. of Michigan-Dearborn, we are currently working to analyze and publish the results.

During the Winter 2019 term, our focus shifted to a more specific examination of access to mental health treatment on college campuses, and we were given additional funds to support Dr. Shanti as a visiting scholar at Schoolcraft in April. She gave lectures to students and faculty there, and collaborated with members of our International Institute (SCII) and the Kalamazoo-based Midwest Institute for International and Intercultural Education (MIIE). Atma Jaya, which launched a campus mental health system a couple of years ago, is seeking ways to enhance or expand programs. The additional funds allowed us to conduct interviews with counseling staff and faculty members at Kalamazoo Valley Community College, the Univ. of Michigan-Dearborn, the Univ. of Detroit Mercy, and Wayne State Univ. Dr. Shanti gained useful insights that will help her develop initiatives at Atma Jaya.

Currently, we are analyzing data from a new questionnaire that maps more specifically the access that college students have to mental health treatment on their campuses and in the larger community. We are always happy to hear from other colleagues or students interested in research on global mental health issues! •

## Filipino Nurses

*continued from page 35*

It found that there is a greater tendency for people to identify as a criminal perpetrator an individual who is ethnically dissimilar to themselves than one who is ethnically similar. A corresponding tendency is seen during the judicial process, in which accused members of minority groups are more frequently judged as guilty and are given more severe sentences on average. Lindholm and Christianson go on to state:

Theories on intergroup perception typically emphasize one of two major forces, cognitive mechanisms or motivational factors, to account for intergroup biases in social perception. According to the cognitive view, these biases occur as the result of cognitive mechanisms serving to simplify the perceiver's processing task. Specifically, these theories argue that with limited cognitive resources, perceivers need to simplify information processing by grouping people into categories on the basis of their similarities and differences. Through the process of categorization perceivers often develop stereotypes, that is, structured sets of knowledge and beliefs about the characteristics of members of various social groups. When encountering a person belonging to a particular group, perceivers can bypass the effortful task of forming an individual impression of that person by relying on stereotypes about the target group, and the individual group member is perceived and evaluated in terms of these preexisting “theories”.

I posit that the phenomenon of judicial discrimination that is outlined above could account for spurious indictments and guilty verdicts in the Ann Arbor V.A. case. The evidence against the nurses was so circumstantial that I believe that the only plausible conclusion is that the authorities had focused on the wrong people as suspects.

[Editor's Note: “That Strange Summer” (2016) is a documentary about the Ann Arbor case that was directed by Geri Alunit Zeldes, Assoc. Prof. in the School of Journalism at Michigan State Univ. Prof. Zeldes spoke about the film at a screening for the SCII's Focus Southeast Asia series on Oct. 5, 2015.]

Dr. Theresia Indira Shanti speaking to Social Psychology students at Schoolcraft College last April about mental health issues.



Photos courtesy of Steven L. Berg and Jessica Worden-Jones

About 90 students enrolled in English Composition classes last Winter worked together to research and create the pieces. The exhibit itself was curated by instructors Steven L. Berg (English and History) and Jessica Worden-Jones (Anthropology), with funding from many donors and professional framing by Miller's Artist Supply Co.



Even artifacts from long ago shed light on contemporary issues in global health. For example, the exhibit includes an item (left) that shows an 1862 artwork by the Japanese artist Taiso Yoshitoshi, “Shinto God from Izumo Province for Preventing Measles”. The current resurgence of measles in the U.S. and Europe has resulted, in part, from members of certain religious groups objecting to vaccination because they feel that it represents the effort to ward off plagues by relying on science instead of faith in gods. In 1796, when Edward Jenner in England pioneered immunization against smallpox using the world’s first vaccine, there was a backlash by clergy members who argued that vaccination goes against “God’s will”. But other prominent theologians countered that it was God who has given man this life-saving vaccine, and we would go against His will if we did *not* use it.



# Sustainable Development Gains Foothold in Rural Guatemala

by Monika Goforth

*Monika Goforth has worked with the Appropriate Technology Collaborative since 2013, and has been its Guatemala Program Director since 2014. Raised in Latin America and Asia, she earned a bachelor's degree in International Relations from Mount Holyoke College in Massachusetts, and a master's degree in Social Change and Development from the Univ. of Newcastle, Australia. Before joining ATC, she worked with Central American eco-communities, orphanages, and permaculture farms.*

This age of globalization has linked the social issues of billions of people who speak thousands of different languages. Worldwide, we all face similar problems of contamination, unemployment, and social inequality, and we all have our own rich, unique experiences and perspectives on them. We can join the global conversation and serve people across international borders by listening, learning, and taking action together to create a sustainable, healthy society.

The Appropriate Technology Collaborative or ATC ([www.apptechdesign.org](http://www.apptechdesign.org)) is a cutting-edge training and technical assistance organization that incubates environmentally sustainable microbusinesses in rural communities in Guatemala and Nicaragua. This international non-governmental organization was founded in 2007 and has its main office in the Mayan village of San Marcos La Laguna, in western Guatemala, while the U.S. office is located in Ann Arbor, MI.

The ATC brings people together to design, develop, and distribute sustainable, affordable solutions that can be built and implemented by anyone in the world. With technical assistance from Engineers Without Borders, as well as teachers, trainers and



Above, a solar power training workshop organized by ATC's Mayan Power and Light in Guatemala.

micro-entrepreneurs based overseas, we connect engineering students from the U.S., Mexico, and Guatemala to work on real-world development problems like clean water, clean energy, and recycling to create dignified work and improve public health in marginalized areas.

Mayan Power and Light (MPL), one of our key projects, is a technical training program that educates women in electrical circuitry, solar power, sales, and marketing, and prepares students to install solar power systems and run microbusinesses. MPL is a highly successful project that in 2016 was named a Global Top



Left, in rural Guatemala, Monika Goforth (center) leads a workshop on how to use the newly developed passive-solar food dehydrator. Above, a tray of veggie chips made with the device.



100 Sustainable Enterprise by Sustainia, and this year it won the prestigious Energy Globe Award. Nearly one-third of the women completing the MPL training program operate their own enterprises, serving more than 10,000 people by producing and selling solar lanterns, permanent multi-panel systems, fuel-efficient cook stoves, water filters, etc.

In June 2018, I was able to lead the ATC in responding to the powerful eruption of Volcano Fuego in mountainous southern Guatemala, which buried several villages and killed over 100 residents. Our Guatemala team was on-site within a day or two of the eruption and responded with solar power and water filters that served thousands of displaced people.

This year, international engineering students are working with ATC communities in Guatemala to make our newest prototype of a passive-solar food dehydrator, which creates a value-added income for agricultural communities. The dehydrators produce unique products (herbal teas, granola bars, and veggie chips) without energy costs, and provide safe, dignified work for people of all ages and abilities. This is just one of our many practical, green solutions born from international collaboration.

## Tropical Diseases *continued from page 33*

decreased fecundity (lower egg-laying rate). The task, then, is to analyze under what conditions the bacterial infection's reproductive benefit to the mosquitoes outweighs its fitness costs—a mathematical problem.

To study the rate of female transmission of the bacteria in a mosquito population, Dr. Tang's team developed a system of differential equations, whose parameters they estimated using real-world data. Their analysis found that for fastest results, the ratio of introduction would need to be quite high: about 5 mosquitoes released per 1 wild mosquito. Still, the feasibility of the strategy for a much lower ratio was dramatically demonstrated in an actual field trial in Guangzhou in 2016: the local *Aedes* mosquito population was reduced by 97% in one season!

### For Further Reading

Anna Maria Spagnuolo, Meir Shillor, and Gabrielle A. Stryker, "A Model for Chagas Disease with Controlled Spraying", *Journal of Biological Dynamics*, 5:4 (2011), pp. 299-317.

Mitch Leslie, "Drug Developers Finally Take Aim at a Neglected Disease [Chagas]", *Science*, 333 (Aug. 19, 2011), pp. 933-935.

Mu-Gen Huang, Mo-Xun Tang, and Jian-She Yu, "Wolbachia Infection Dynamics by Reaction-Diffusion Equations", *Science China Mathematics*, 58:1 (Jan. 2015), pp. 77-96.

Zhuolin Qu, Ling Xue, and James M. Hyman, "Modeling the Transmission of *Wolbachia* in Mosquitoes for Controlling Mosquito-Borne Diseases", *SIAM Journal on Applied Mathematics*, 78:2 (2018), pp. 826-852.

## Chinese Pharmacopeia *continued from page 30*

tion," he said, "emphasizing nurturing health, preventing disease, defending capacity in health and disease, and function-oriented wellbeing of a person as a whole." The diagnostic process handed down from Chinese practice has four stages: observation, tongue analysis, listening to a patient's thoughts, and analyzing their pulse.

In clinical trials at the Yale Univ. School of Medicine, Yung-Chi Cheng and colleagues have found a mixture of four Chinese herbs effective in enhancing patients' immune response following chemotherapy for colorectal, liver, or pancreatic cancer. The mixture, called PHY906, is made from jujube fruits and the roots of licorice, peony, and skullcap (*Scutellaria baicalensis*). If any one of these four components is removed, the effectiveness suffers.

The world-famous hemp plant (*Cannabis*) originated in Central Asia and has been cultivated in China for medical and other uses for thousands of years. One of its active chemicals, cannabidiol or CBD (not to be confused with tetrahydrocannabinol or THC, which is hemp's mind-altering substance), is being internationally marketed for a range of ailments. For example, the FDA has ruled that CBD is effective in preventing seizures in certain forms of epilepsy. China permits the regulated production and export of CBD products. In Yunnan Province alone, several Chinese drug companies including Huaren Pharmaceutical, Hanma Investment Group, and the Conba Group, are growing hemp on more than 36,000 acres for this purpose.

China SXT Pharmaceuticals, Inc., based in Jiangsu province, is focused on developing, manufacturing, and selling drugs based on Traditional Chinese Medicine. China Jo-Jo Drugstores, incorporated in 2006 with headquarters in Hangzhou, is a leading online and offline retailer and wholesaler of pharmaceutical and other healthcare products, including the cultivation and sale of herbs used in TCM.

Certain other traditional Chinese biologics made from plants (such as *Ginkgo biloba* and *yartsa gunbu*, or "caterpillar fungus") or from animals (such as the horns of rhinoceroses and the meat and scales of pangolins) are most likely instances of superstition, since modern medical studies have been unable to confirm any therapeutic value to them.

### For Further Reading

Miranda Brown, *The Art of Medicine in Early China: The Ancient and Medieval Origins of a Modern Archive* (New York: Cambridge Univ. Press, 2015).

Shwu-Huey Liu and Yung-Chi Cheng, "Old Formula, New Rx: The Journey of PHY906 as Cancer Adjuvant Therapy", *Journal of Ethnopharmacology*, 140 (2012), pp. 614-623.

Meera Senthilingam, "Chinese Medicine: The Next Step in Cancer Recovery?", *cnn.com*, Jun. 19, 2019.

Hildebert Wagner and Gudrun Ulrich-Merzenich, eds., *Evidence and Rational Based Research on Chinese Drugs* (Springer Vienna, 2013).

# One Year Out of My Country Venezuela

by Gabriel Pereira

*Gabriel Pereira Hernandez is a business major at Schoolcraft College. He is in the U.S. on a student visa and currently living in Northville. In preparing this essay he thanks, as a mentor, Prof. Christa Fichtenberg, his instructor in English as a Second Language.*

I was born in a country called Venezuela, and grew up surrounded by amazing people. But little by little my country fell into a crisis of lack of food and medicine, problems of delinquency, problems in schools and universities, etc. My life changed starting on March 19, 2018. That is the day when I was approved for my student visa to study in the United States. From that day on, I have had challenges in my life that have not been easy, but with the support of many people I have managed to continue my dream.

I remember that day when the embassy told me that my visa was approved, and I knew that this was the first step to have an incredible future. I knew that I would have many challenges like learning the language, adapting to a different climate, meeting new people, and many other things. Now I have lived a year in Michigan, and I think it was one of the best decisions I could make in my life.

Because the situation in my country is getting worse, I want this essay to help people understand why so many people look for a better future in other countries. Each immigrant has their own story, and from some we can learn and know where they come from.

One of the hardest things leaving my country was to leave my family and friends behind. Many know that Venezuela is going through a very strong crisis. I still have family and friends there who talk to me every day about what is happening. Two of these people are my parents— my mother and my dad who still

live there. I would like to talk to them every day, but I can't because for a whole month they have been having electricity

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*I want this essay to help people understand why so many people look for a better future in other countries. Each immigrant has their own story, and from some we can learn and know where they come from.*

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problems. My parents have spent days without electricity and this causes them to not have clean water, not be able to charge their phones, and have spoiled food and many other bad things.

My best friend from school had the opportunity to leave the country, but she stayed in Venezuela because she was afraid to go to another country. So she started university in Venezuela. Two days ago I talked to her and she told me that she had five days without class because the university did not have electricity. She was supposed to finish the semester but they had to lengthen it three times, because the teachers cannot teach nor give assignments when there is no electricity.

My family are also immigrants— both my dad and my mom. My dad is from a Portuguese island called Madeira, and due to crisis problems and the wars, he emigrated to Venezuela. He did not know the language, but little by little he was learning. Nowadays, he has done well with work, but the crisis in Venezuela still affects him. My mom is from the Canary Islands, an island group of Spain, but she also migrated because of the crisis where she was living in Spain at that time and for the wars that were happening. She came to Venezuela with my grandmother, and when they arrived they had nothing. My grandmother started working in a factory cleaning floors, and my mom helped her. It was a difficult start for both of my parents, but little by little they succeeded.

Today my mother is a lawyer and my father is a businessman. My dad inspired me to study business and commerce. He was

*continued on next page*



Venezuelans lining up at a soup kitchen in Los Teques, south of Caracas, in December 2017.

Meridith Kohut/ New York Times





# Displaced

by Jim Karell

Artist and Schoolcraft College student Jim Karell of Plymouth, MI, painted the above watercolor, “Displaced”, as a project in Art 221 (Watercolor Painting 1) taught by Prof. Sarah Olson in Winter 2019. The work portrays a group of Rohingya Muslim women who have fled from Myanmar (Burma) to what has become the largest refugee camp in the world, in neighboring Bangladesh. Karell, who is now retired after working 30 years for General Motors Corp., has taken several art courses at Schoolcraft but is largely self-taught as an artist. He is a member of the National Portrait Society and has worked in acrylics, charcoal, ink, pencil, oils, and watercolors.

The government of Myanmar, aided by Buddhist ultra-nationalist leaders and paramilitary forces, claim that the Rohingya of western Rakhine State do not belong in the country. They have subjected them to persecution and ethnic cleansing, including the violent expulsion of about 730,000 villagers in August 2017 (see Anique Newaz, “The Rohingya Muslims: Denial of Identity and Genocide”, *IA*, Winter 2018). •

## Venezuela

*continued from page 40*

one of the people who taught me things in the world of commerce. With this I want you to understand that going to another country is difficult— but over time we are learning a lot of things, including language, and little by little we will adapt.

This year, I have learned about the culture of Americans. I have also met people from different countries such as Korea, Turkmenistan, China, and other amazing countries. I have learned about different cultures, and have improved my English. I started in English as a Second Language (ESL) level 2. At the beginning I was very scared, but when I went to my first class it was very fun. They also had many activities that made us talk with others, which was amazing because it helped me to develop my English. Now I am already in the last level of ESL, level 4, and my development has been incredible and remarkable. I can comment in class, talk with my friends. I have new friends which has been an amazing experience. The next semester I will start studying for my career in business and commerce, and I am very excited to continue with Schoolcraft College.

When I arrived in the United States I did not know anything about English— I only knew how to say hi and bye. It is incredible that after a year I am writing an essay for a competition in the college. This shows that everything can be achieved over time.



# Born Without Borders

by Marie Chantal Nyirahategekimana

## WHERE ARE YOU FROM?

I could say Rwanda,  
That is where my parents were born  
Where they spent their childhood  
They taught me the language  
They tried to pass down their customs  
But...  
I was never there.  
Rwanda is the mysterious country in which two tribes could not  
co-exist so they used machetes  
If I was ever to go back, I would be put to death.

## WHERE ARE YOU FROM?

Central African Republic  
I was born in Central African Republic  
I was born in a refugee camp  
I used to speak their language  
But that quickly went away as we escaped to other countries  
I do not remember much but what I know is that they did not want  
us, the refugees, in their country  
Refugees meant disease, war, poverty, trouble.

## WHERE ARE YOU FROM?

Senegal  
The land of heat and fish  
That is where my first childhood memories were made  
That is the last country in which I saw my best friend, Claudine  
Maman could not handle Senegal  
The heat was too unbearable for her.

## WHERE ARE YOU FROM?

Tchad  
The only thing I remember from Tchad is the accident.  
It was in the middle of the night.  
We were traveling, escaping, running.  
We were in a small truck full of other refugees.  
I was sitting on my father's lap  
My mother was next to us, holding my brother.  
I had to pee, I tell my father "I have to pee"  
He takes me out the truck,  
It's loud, busy, city life  
Obviously there are no restrooms around  
My father brings me to a big truck,  
He says just go under the big wheel  
I crouch down to relieve myself as my father stands watch.  
Next thing I remember is I'm eating sand, screaming  
The truck had started moving  
I'm gasping for air under the weight of the wheel  
My father is trying to pull me out.

## WHERE ARE YOU FROM?

Cameroon  
The country that felt most like home.  
It is there that my mother was able to reunite with her mother again

*Marie Chantal Nyirahategekimana of Garden City, MI, is a Schoolcraft College student majoring in biomedical engineering and minoring in international relations. Born in a refugee camp in Central African Republic, she speaks three languages: French, Kiyarwanda, and English. She and her Rwandan parents and her two younger siblings lived as exiles in several different African countries before eventually settling in Portage, MI (near Kalamazoo), where Marie Chantal graduated from high school. At Schoolcraft she is a member of the Scholars Honors Program, the International Student Organization, and the Black Student Union, and serves as a staff writer for The Schoolcraft Connection as well as a writing consultant at the Writing Support Studio. Outside of school, Marie Chantal has also worked with the Model United Nations and with Planned Parenthood.*

It is where I started school  
My father had a boutique  
We were going to private school  
Life was good  
The food even better  
Our neighbors did not like Rwandans however,  
Always finding time to start a quarrel  
Which they made sure they ended with "that's why no one wants you  
here. Go back to where you came from".

## WHERE ARE YOU FROM?

America  
I'm American  
"Nooo I hear an accent"  
But I am American, my passport says so  
"You don't look American"  
Okay I guess I'm not

"Why don't you feel American though?"  
Maybe the fact that America was involved in the Rwandan Genocide  
for shiny rocks,  
For blood diamonds  
Or the fact that my black brothers and sisters are being killed by  
officers, with no justice in sight.  
I cannot call home a place that consistently brings about war and  
poverty to other nations on the pretense of promoting democracy

This is not home.

## WHERE ARE YOU FROM?

I am from Africa,  
Just like the rest of the world.  
My land is where my people are.  
Borders have only been an excuse for men in boardrooms to create  
division between us.

## I AM A GLOBAL CITIZEN

The type that makes decisions for the people, not the money  
I have made wonderful friends in each country I had the privilege to  
pass through.  
Born a refugee, born without borders.



Marie Chantal at the State Capitol in Lansing, MI,  
for the Women's March on Jan. 21, 2018.

## Pageturners Reads

Among the books being read this Fall by the Pageturners Book Club at Schoolcraft College:

- *"Master Harold" ... and the Boys* by Athol Fugard, a coming-of-age play set in apartheid South Africa in 1950.
- *SEPARATE: The Story of Plessy v. Ferguson, and America's Journey from Slavery to Segregation* by Steve Luxenberg, the 1896 "separate but equal" Supreme Court decision through the eyes of the people caught up in the case.
- *I Was Their American Dream: A Graphic Memoir* by Malaka Gharib, reflections of a daughter of Filipino and Egyptian parents who chased their ideals while trying to be an all-American kid.

For more info, contact Prof. Ela Rybicka at [erybicka@schoolcraft.edu](mailto:erybicka@schoolcraft.edu) or 734-462-7191.

# Reign of Ash

by Marissa Letizio

Girl of Fire  
you've come far from home.  
Perhaps not yet knowing  
the roads of which you roam.

To a town of Ice,  
filled with Those of Snow.  
You're different and they've noticed,  
they won't leave you alone.

It does not take much to succumb  
to Ice so sharp, so cold,  
you are far too strong to trade that Flame—  
although perhaps alone.

They try to cut you down and  
The Winter Wind will tear and howl.

And yet you must hold firm  
So go ahead and scowl.

Melt this abyss of ice.  
Spread your Flame with arms open wide.  
Shatter the Empire of Cold thoughts.  
Leave no space where Ice would hide.

And you WILL shatter the world.

"Reign of Ash" is written by Schoolcraft College student Marissa Letizio, who goes by the nickname Rissa Renee. A resident of Garden City, MI majoring in elementary education, she works as a Peer Consultant at our Learning Center and credits mentorship by Writing Support Coordinator Stephanie Reynolds. Rissa Renee writes:

This poem is inspired by the past of one of Schoolcraft's own international students, Marie Chantal Nyirahategekimana— what she had to go through, and is still struggling with, as she has come to America. When writing this, I wanted to write a message to anyone who might be going through a similar experience. In this poem, the Ice represents the negative mentality of pushing assimilation onto peoples with different cultures to conform to the mass mentality. The person containing the Fire in the poem represents a person who is struggling to retain their cultural identity. The main expression of this poem is for the person with the Fire to not give in and change who they are to match the Ice mentality.



# An Uncertain Life in Rhino Camp

photos by Chris Cavaliere

These are a few of the photos taken by professional photographer Chris Cavaliere last January when he was part of a mission trip among South Sudanese refugees in Uganda. The OCEA Baptist Church hosted the group's visit to the Rhino Camp Refugee Settlement, a vast stretch of thatched-roof huts as seen in these views. It is one of the many refugee camps in northern Uganda near the South Sudan border. Chris has generously shared his photos from around the world for many previous issues of this magazine. Last year, he retired his business, Greater Love Photography (Farmington Hills, MI), and began to study journalism at the Univ. of Cincinnati.

South Sudan, which lies just to the north of Uganda, gained independence from Sudan in 2011 but has been plagued by an internal civil war almost continuously since Dec. 2013, including bloody atrocities. Ugandan troops intervened against the anti-government rebels. The conflict dragged down the economy, contributing to the humanitarian crisis as hospitals closed and doctors were forced to flee. An estimated 400,000 South Sudanese have been killed and more than 4 million displaced in the six years of civil war, including 1.8 million internally displaced and about 2.5 million seeking refuge in neighboring countries, especially Uganda to the south and Sudan to the north. According to the International Mission Board, in Uganda alone there are 1.5 million refugees in camps like this one, 85% of them women and children under the age of 18.





# In a Land of Opportunity, They Stood Up for the Marginalized



**Doris Lee Hedler**

Sep. 18, 1918 – Jan. 20, 2019

Doris Lee Hedler devoted her life to the education of underprivileged and vulnerable populations in Toledo, Ohio. She inspired thousands of people with her enthusiasm for teaching and civic involvement, her constant curiosity, and her boundless energy. Much of her professional career was at her alma mater, the Univ. of Toledo (UT).

The first Chinese woman ever born in Toledo, she was given the name Gum Fa (“Golden Lily”) as well as the English name Doris. Her family, the Sings, lived downtown, and even while attending public school Doris helped her mother, Jung See Sing, run their laundry store there and raise her six siblings. She completed a bachelor’s degree in education with a minor in mathematics at UT in 1940.

Doris sensed that education was her life’s calling, and began by teaching special-needs pupils. After marrying her high-school sweetheart, Bob Hedler, during World War 2, she took a break from teaching to raise their seven children (Schoolcraft student Nikolai Hedler is one of Doris’s three grandchildren), while also volunteering with the Church Committee for China Relief, a charitable group for victims of the Sino-Japanese War.

At age 50 Doris returned to UT to embark on a master’s program in education. She helped launch Head Start in Ohio, developed special-education programs at the Penta Skill Center, co-founded the UT Eberly Women’s Center, and taught GED classes to women at the Lucas County Jail. She was employed as Academic Advisor at UT University College, and helped launch the UT program in Institutional Health Care Management.

After retiring from UT, Doris helped found FOCUS (now called Leading Families Home), an interfaith organization supporting Toledo’s homeless. She also helped lead the local chapter of Pi Lambda Theta, an honor society and professional association for educators.



**Damon J. Keith**

Jul. 4, 1922 – Apr. 28, 2019

A path-breaking jurist from Michigan, the Honorable Damon J. Keith fought for racial equality, civil rights, and immigrant rights. His service included appointment as a judge on the U.S. District Court for eastern Michigan (1967-77) and the Sixth U.S. Circuit Court of Appeals (1977-2019), which has jurisdiction in Michigan, Ohio, Kentucky, and Tennessee.

As a lawyer in private practice during 1950-67, Damon Keith helped found one of Detroit’s first African-American law firms and led the Michigan Civil Rights Commission. Later, as a judge, he reached landmark decisions that attacked racial segregation in housing, employment, and education, and measures that had curtailed African-American voting rights. In 1971 Keith ruled against unauthorized FBI wiretapping and other surveillance of antiwar activists. In 2002 he ruled against secret government hearings to deport immigrants suspected of ties to terrorism, writing, “Democracy dies behind closed doors.”

Damon had grown up in poverty in Detroit, but went on to earn a bachelor of arts degree at West Virginia State College, a bachelor of laws degree at Howard Univ. in Washington, DC, and a master of laws degree at Wayne State Univ. in Detroit. The WSU Law School honored him in 2010 by establishing the Damon J. Keith Center for Civil Rights.

Mr. Keith’s life is the subject of a book by Peter J. Hammer and Trevor W. Coleman, *Crusader for Justice: Federal Judge Damon J. Keith* (Wayne State Univ. Press, 2013), and of a film documentary by Jesse Nesser, “Walk with Me: The Trials of Damon J. Keith” (2016).

# It's a Multicultural World—Right in Our Backyard!

*See also page 12 for a listing of programs in the Schoolcraft College Focus Series on global health.*

**Feb. 17, 2019 – Feb. 9, 2020:** “Color and Comfort: Swedish Modern Design”, an exhibit of mid-20<sup>th</sup>-Century textiles, ceramics, and glass. Cleveland Museum of Art, 11150 East Blvd. For info, see <http://www.clevelandart.org> or call 216-421-7350.

**Mar. 9, 2019 – Mar. 8, 2020:** “Global Conversations: Art in Dialogue”, an exhibit of contemporary works engaging with issues of world urgency: identity, migration, the digital revolution, and more. Toledo Museum of Art, 2445 Monroe St. For info, see <http://www.toledomuseum.org> or call 419-255-8000.

**Mar. 16 – Oct. 27, 2019:** “Tillirnanngittuq: The Power Family Program for Inuit Art”, an exhibit of art from the Canadian Arctic from the 1950s to the present. Univ. of Michigan Museum of Art, 525 South State St., Ann Arbor. For info, see <http://www.umma.umich.edu> or call 734-764-0395.

**Jun. 22 – Oct. 6, 2019:** “Landlord Colors: On Art, Economy, and Materiality” displays works by more than 60 contemporary artists from five locales that have experienced economic and social upheaval over the last 50 years: Detroit, Greece, Korea, Cuba, and Italy. Cranbrook Art Museum, 39221 Woodward Ave., Bloomfield Hills. For more information, see <http://www.cranbrookartmuseum.org> or send an e-mail message to [artmuseum@cranbrook.edu](mailto:artmuseum@cranbrook.edu) or call 248-645-3323.

**Jun. 26 – Oct. 13, 2019:** “Humble and Human: Impressionist Era Treasures from the Albright-Knox Art Gallery and the Detroit Institute of Arts”, displays more than 40 Impressionist and post-Impressionist works. Detroit Institute of Arts, 5200 Woodward Ave., Detroit. For info, see <https://www.dia.org> or call 313-833-7900.

**Jul. 1 – Dec. 31, 2019:** “Kindertransport: Rescuing Children on the Brink of War”, an exhibit about the rescue of thousands of Jewish children from Nazi Europe to Great Britain in the late 1930s. Holocaust Memorial Center, 28123 Orchard Lake Rd., Farmington Hills. For info, see <http://www.holocaustcenter.org> or call 248-553-2400.

**Jul. 27, 2019 – Jan. 5, 2020:** “The Inside World: Contemporary Aboriginal Australian Memorial Poles”, an exhibit of beautiful totems by Australian Aborigines. Charles H. Wright Museum of African American History, 315 E. Warren Ave., Detroit. For info, see <http://www.chwmuseum.org> or call 313-494-5800.

**Aug. 17, 2019 – Jan. 5, 2020:** “Copies and Invention in East Asia”, an exhibit of ancient to contemporary art from China, Korea, and Japan, where copying has long been considered a valuable act of imaginative interpretation. Univ. of Michigan Museum of Art, 525 South State St., Ann Arbor. For info, see <http://www.umma.umich.edu> or call 734-764-0395.

**Aug. 26, 2019 through Fall 2021:** “Pan-African Pulp”. In this commissioned exhibit, Botswana-born artist Meleko Mokgosi explores the history of Pan-Africanism with large panels inspired by African and Pan-Africanist posters and literature.

Univ. of Michigan Museum of Art, 525 South State St., Ann Arbor. For info, see <http://www.umma.umich.edu> or call 734-764-0395.

**Sep. 6-8, 2019:** “Orestes”, the famous tragedy by Euripides. Varner Recital Hall, Oakland Univ., 371 Varner Dr., Rochester, MI. For info and tickets, see <https://www.oakland.edu/smt> or e-mail [smt@oakland.edu](mailto:smt@oakland.edu) or call 248-370-2030.

**Sep. 6 – Oct. 7, 2019:** “The Frogs”, a hilarious yet poignant musical based loosely on the ancient comedy by Aristophanes, and featuring music and lyrics by Stephen Sondheim. Dionysos and his slave Xanthias journey to Hades and meet Shaw, Chekhov, Congreve, Ibsen, Brecht, Shakespeare, and of course, the chorus of frogs. Slipstream Theatre Initiative, 460 Hilton Rd., Ferndale. For info and tickets, see <https://www.slipstreamti.com> or e-mail [insidetheslipstream@gmail.com](mailto:insidetheslipstream@gmail.com) or call 214-748-3647.

**Sep. 14, 2019:** “Deported”, a tour by Toronto-born Anglo-Indian comedian Russell Peters, who is famous for “Almost Famous”. 8 pm. Fox Theatre, 2211 Woodward Ave., Detroit. For info and tickets, see <https://www.313prese> or <https://www.ticketmaster.com> or call 313-471-6611.



**Sep. 14-15, 2019:** Seventh annual Ann Arbor Russian Festival, featuring authentic culture, food, and shopping. 1-7 pm. St. Vladimir Orthodox Church, 9900 Jackson Rd., Dexter. For info, see <http://www.annarborrussianfestival.org>.

**Sep. 15, 2019:** Festival of India, a day of free music and dance. 11 am – 6 pm. Summit Banquet Hall, 46000 Summit Pkwy., Canton. For info, see <http://www.miindia.com> or e-mail [events@miindia.com](mailto:events@miindia.com).

**Sep. 20, 2019:** *Antar Yatra*, a musical by 11 professional Indian dance artists with live English narration, depicts the inner journey of an Apsara (celestial dancer) in five different languages using classical dance forms (Bharatanatyam, Kuchupudi, and Odissi) and classical music styles (Carnatic, Hindustani, and folk). Presented by Aim for Seva, this Admission Free/ Donations Welcome event benefits children from rural India. 7 pm. Ford Community and Performing Arts Center, 15801 Michigan Ave., Dearborn. For info, e-mail Sriniv. Raman at [srini.seva@gmail.com](mailto:srini.seva@gmail.com).

**Sep. 21, 2019:** Second annual Detroit China Festival, presented by Detroit Chinatown LLC. 11 am – 5 pm. Hart Plaza, Downtown Detroit. For info and tickets, see <http://www.detroitchinatownllc.com/event> or e-mail [dcf@detroitchinatownllc.com](mailto:dcf@detroitchinatownllc.com).

**Sep. 21, 2019:** Rasa Festival. Dozens of artists perform classical, folk, and ritual dances from India, plus a concert that unites Indian and Western music traditions. Produced by Akshara Arts. 4 – 6:30 pm. Towsley Auditorium, Washtenaw Community College, 4800 E. Huron River Dr., Ann Arbor. For info and tickets, see <https://rasafestival.org/fall-festival>.



**Sep. 22, 2019 – Jan. 5, 2020:** The exhibit “Michelangelo: Mind of the Master” is the U.S. premiere of a group of Michelangelo drawings from the Teylers Museum (Haarlem, Netherlands), joined by others from the CMA and the Getty Museum. See also the Oct. 13 entry on the next page. Cleveland Museum of Art, 11150 East Blvd. For info, see <http://www.clevelandart.org> or call 216-421-7350.

**Sep. 25 – Nov. 20, 2019:** “Bialik: King of Israel”, a class on the life and work of Israeli poet Chaim Nachman Bialik. Selected Wednesdays at 7-8 pm. Jewish Community Center of Metro Detroit, 6600 W. Maple Rd., West Bloomfield. For info and to register, e-mail Fran Menken at [fmenken@jccdet.org](mailto:fmenken@jccdet.org) or call 248-432-5546.

**Sep. 27, 2019:** *Les Misérables* in Concert stars countertenor Terry Barber as Jean Valjean. 7:30 pm. Macomb Center for the Performing Arts, 44575 Garfield Rd., Clinton Twp. For info and tickets, see <http://www.macombcenter.com> or call 586-286-2141.

**Sep. 28, 2019:** Concert by popular music duo Mika Singh from India and Iulia Vantur from Romania. 8 pm. Pease Auditorium, Eastern Michigan Univ., 494 College Pl., Ypsilanti. For info and tickets, see <http://www.palaceconcertsmi.com> or call 586-506-0043.

**Sep. 28 – Nov. 10, 2019:** “Ofrendas: Celebrating *el Día de Muertos*”. On the Day of the Dead, Latino/a people honor their ancestors by placing foods and mementos on elaborate *ofrenda* altars. Detroit Institute of Arts, 5200 Woodward Ave., Detroit. For info, call 313-833-7900 or see <https://www.dia.org>.

**Sep. 29, 2019:** Lebanese singer, songwriter, and composer Marwan Khoury performs his all-time hits. 7:30 pm. Michael A. Guido Theater, Ford Community and Performing Arts Center, 15801 Michigan Ave., Dearborn. For info and tickets, see <http://www.dearborntheater.com> or call 313-943-2354.

**Oct. 4, 2019:** Navratri Garba celebration with live music and catered dinner. Schoolcraft’s version of the Hindu festival that marks the beginning of Autumn and celebrates the goddess Durga. All proceeds go to the Schoolcraft College Food Pantry to help students in need. 7 pm – midnight. VisTaTech Center, Schoolcraft College, 18600 Haggerty Rd., Livonia. Tickets \$15 in advance, \$20 at the door. For info, e-mail [sao@schoolcraft.edu](mailto:sao@schoolcraft.edu) or call 734-462-4422.

## Northville Library Films

One Monday night each month, the Northville District Library presents a free film in a foreign language with English subtitles. The screenings are at 6:30 pm at 212 West Cady St., Northville, MI. For info, see <https://northvillelibrary.org> or call 248-349-3020.

**Aug. 26, 2019:** “The Rocket” (Laotian)

**Sep. 23, 2019:** “Everybody Knows” (Spanish)

**Oct. 28, 2019:** “A Bag of Marbles” (French)

**Nov. 25, 2019:** “3 Faces” (Farsi)

## Detroit Film Theatre

Among the films at the DFT this season, the following are set in the countries indicated. This venue is located at the John R. Street entrance to the Detroit Institute of Arts, 5200 Woodward Ave., Detroit. For info and tickets, see <https://www.dia.org/visit/detroit-film-theatre> or call 313-833-4005.

**Aug. 30 – Sep. 1, 2019:**

“The Third Wife” (Vietnam, 2018)

**Sep. 13-15, 2019:**

“The Chambermaid” (Mexico, 2019)

**Sep. 21-22, 2019:**

“Christ Stopped at Eboli” (Italy, 1979)

**Oct. 5-6, 2019:**

“Asako I & II” (Japan, 2018)

**Oct. 13, 2019:**

“Michoacán to Michigan” (migrants from Mexico, 2019)

**Nov. 23-24, 2019:**

“Tia and Piujuq” (migrants in Canada, 2018)

## University Musical Society

International music, dance, and theatre are featured in the following selections from the UMS season, scheduled at various venues mostly in Ann Arbor. For info and tickets, see <http://www.ums.org> or call 734-764-2538.

**Oct. 5-6, 2019:** Grupo Corpo (Brazilian dance troupe)

**Oct. 16-20, 2019:** Isango Ensemble (South African theater company)

**Oct. 24-25, 2019:** Zauberland (a story of migration from Syria to Germany)

**Nov. 15-16, 2019:** *Loch na hEala* (“Swan Lake” with Nordic and Irish folk music)



## Multicultural Calendar *continued from page 47*

**Oct. 13, 2019 – Feb. 23, 2020:** “Master/Apprentice: Imitation and Inspiration in the Renaissance”, an exhibit of prints that traces Michelangelo’s influence on artists in the Renaissance and beyond. See also the Sep. 22 entry on the previous page. Cleveland Museum of Art, 11150 East Boulevard. For info, see <http://www.clevelandart.org> or call 216-421-7350.

**Oct. 19-27, 2019:** “Don Giovanni”, Mozart’s comedy that follows a notorious philanderer as he faces the consequences of messing with the wrong people. Detroit Opera House, 1526 Broadway, Detroit. For info and tickets, see <http://www.motopera.org> or call 313-237-7464.

**Oct. 19, 2019 – Jan. 26, 2020:** “Northern Narratives: Cape Dorset Prints”, an exhibit that includes print images from 17 Inuit artists from the late 1950s and into the 1970s, exploring themes of hunting, travel, wildlife, and the spiritual power of Canada’s North. Art Gallery of Windsor, 401 Riverside Drive W., Windsor, ONT. For info, see <https://www.agw.ca/exhibition/501> or call 519-977-0013.

**Oct. 20-22, 2019:** National Immigrant Integration Conference. Cobo Center, 1 Washington Blvd., Detroit. For info and to register, see <https://niicnewamericandreams.org> or e-mail Christine Sauve at [csauve@michiganimmigrant.org](mailto:csauve@michiganimmigrant.org).

**Oct. 31 – Nov. 3, 2019:** Youmacon Comic Convention celebrates Japanese popular culture and its influence on American culture via anime, video games, artwork, comics, music, and the Internet. Renaissance Center (400 Renaissance Dr.) and Cobo Center (1 Washington Blvd.), downtown Detroit. For information and to register, see <https://www.youmacon.com>.

**Nov. 1, 2019 – Jan. 26, 2020:** “The Art of Weeping”, a series of drawings based on artist Mary Hazboun’s traumatic experiences in occupied Palestine. Hazboun, a folk singer, writer, and artist born and raised in Bethlehem, now lives and works in Illinois. Arab American National Museum, 13624 Michigan Ave., Dearborn. For info, see <http://www.arabamericanmuseum.org> or call 313-582-2266.

**Nov. 2-13, 2019:** 68<sup>th</sup> annual Jewish Book Fair, oldest and largest of its kind in the U.S., with authors from Michigan and around the world regaling more than 20,000 visitors. Jewish Community Center of Metro Detroit, 6600 W. Maple Rd., West Bloomfield. For info, see <https://bookfair.jccdet.org> or e-mail [brobinson@jccdet.org](mailto:brobinson@jccdet.org) or call 248-661-1900.

**Nov. 7-10, 2019:** *La Bohème*, Puccini’s opera re-set in stylish post-WW2 Paris. A poor poet from the Latin Quarter meets his charming neighbor, and they’re both completely smitten. Performed by UM Opera Theatre and UM Symphony Orchestra. Power Center, Univ. of Michigan, 121 Fletcher St., Ann Arbor. For info and tickets, see <https://smt.d.umich.edu> or call 734-764-0583.

**Nov. 8-10, 2019:** 26<sup>th</sup> annual Ann Arbor Polish Film Festival. Michigan Theater, 603 E. Liberty St., Ann Arbor. For info, see <https://www.annarborpolishfilmfestival.com>.

**Nov. 9, 2019:** Raas 2019, an evening of Indian music and dance with dinner included. Produced by Volunteering Together Seva Detroit to benefit visually challenged schoolkids. 5-9 pm. Detroit Lithuanian Cultural Ctr., 25335 W. Nine Mile Rd., Southfield. For information and tickets, see <http://www.vtsworld.org/detroit> or send an e-mail message to [detroit.director@vtsworld.org/detroit](mailto:detroit.director@vtsworld.org/detroit) or call 213-399-2315.

**Nov. 12-16, 2019:** “Jitney”, the eighth play in August Wilson’s Pittsburgh Cycle, is set in a gypsy-cab station in 1977 during the period of “urban renewal”. Directed by Ruben Santiago-Hudson. Music Hall Center for the Performing Arts, 350 Madison St., Detroit. For information and tickets, see <http://www.musichall.org> or call 313-887-8500.

**Nov. 12, 2019 – Mar. 1, 2020:** “Detroit Collects: Selections of African American Art from Private Collections”, an exhibit featuring works by Romare Bearden, Al Loving, Charles McGee, and Alison Saar. Detroit Institute of Arts, 5200 Woodward Ave., Detroit. For info, call 313-833-7900 or see <https://www.dia.org>.

**Nov. 23, 2019:** “Dancing Identities/ Defining Place: An Evening of Dance”. Dancers Audrey Johnson (Detroit) and Leila Awadallah (Minneapolis) share an evening of work focused on identity, place, and imagination. 8 pm. Arab American National Museum, 13624 Michigan Ave., Dearborn. For info and tickets, see <http://www.arabamericanmuseum.org> or call 313-582-2266.



**Nov. 30, 2019:** “Lira Ensemble, a Polish Celebration” features carols, spirited Polish folk songs, and dances in colorful regional costumes. 7:30 pm. Macomb Center for the Performing Arts, 44575 Garfield Rd., Clinton Twp. For info and tickets, see <http://www.macombcenter.com> or call 586-286-2141.

**Dec. 5, 2019:** The film “Flesh Out” (2019, dir. Michela Occhipinti) follows a Mauritanian woman as she seeks an identity outside of the suffocating pressure to conform. 7-8:30 pm. Arab American National Museum, 13624 Michigan Ave., Dearborn. For information and tickets, see <http://www.arabamericanmuseum.org> or call 313-582-2266.

**Dec. 14, 2019 – Aug 30, 2020:** Bruegel’s “The Wedding Dance” Revealed. Marking the 450<sup>th</sup> anniversary of the death of Dutch artist Pieter Bruegel, this exhibit celebrates his famous painting of 1566, which was a sensational 1930 acquisition by the DIA and a source of inspiration for Diego Rivera’s “Detroit Industry” murals. Detroit Institute of Arts, 5200 Woodward Ave., Detroit. For info, see <https://www.dia.org> or call 313-833-7900.