



————— SIXTH ANNUAL —————

Global Health Symposium

FEB. 12-15, 2018

A light green world map is visible in the background of the bottom section of the page.

Sponsored by

Office of Faculty Affairs

Office of Global Health

Office of Student Life and Engagement,
Division of Student Affairs

SIXTH ANNUAL

Global Health Symposium

FEB. 12-15, 2018

EVENTS AT A GLANCE

Daily Events will be held from noon-1 p.m.

Lunch will be provided.

<div>MONDAY, FEB. 12</div> <div>Searle Conference Center</div> <div>Main Lounge</div>	<div><i>Public Health for Refugees and Immigrants Needs a Pipeline to the Public: Journalism's Role</i></div> <div>Jack C. Doppelt</div> <div><i>Al Thani Professor of Journalism</i></div> <div><i>Medill School of Journalism</i></div> <div><i>Northwestern University</i></div>
<div>TUESDAY, FEB. 13</div> <div>AAC 539</div>	<div><i>What Matters Most When There is Nothing Left: Resilience in Humanitarian Settings</i></div> <div>Tim Cunningham, RN, DrPH</div> <div><i>Director, Compassionate Care Initiative</i></div> <div><i>Assistant Professor</i></div> <div><i>University of Virginia School of Nursing</i></div> <div><i>University of Virginia Department of Drama</i></div>
<div>WEDNESDAY, FEB. 14</div> <div>AAC 539</div>	<div><i>Delivering Surgical Care to Victims of the Syrian Crisis</i></div> <div>Samer Al-khudari, MD, FACS</div> <div><i>Assistant Professor- Otorhinolaryngology</i></div> <div><i>Director Medical Student Clerkship</i></div> <div><i>Director Transoral Robotic Surgery</i></div>
<div>THURSDAY, FEB. 15</div> <div>AAC 976</div>	<div>12-12:20 p.m.</div> <div><i>Development of a Community-Based Referral-Based Surgical Continuity Care Program in Peralta, Dominican Republic</i></div> <div>*Ana Wagener-Sobrero, fourth-year medical student, Rush Medical College</div> <div>12:20-12:40 p.m.</div> <div><i>Continued Development of a Student-Led Health Education Intervention for Women Detained in a Large, County Jail</i></div> <div>*Tamara Dukich, BS, PA-S I, Student, Physician Assistant Program, Rush College of Health Sciences</div> <div>*Sara Gottlieb, first-year medical student, Rush Medical College</div> <div>12:40-1 p.m.</div> <div><i>Diagnoses from an Emergency Care Center in Rural Kenya</i></div> <div>*Lance Shaull, second-year medical student, Rush Medical College</div>
<div>THURSDAY, FEB. 15</div> <div>3-6 p.m.</div> <div>AAC 994A</div>	<div>Poster Session and Award Reception</div>

*The presenting member is listed here. For a complete listing of project members, please see poster abstract.

SIXTH ANNUAL
Global Health Symposium
FEB. 12-15, 2018

Dear Students, Faculty and Staff,

I am excited to welcome you to the sixth annual Global Health Symposium. The theme of this year's symposium is refugee medicine, a very hot topic both nationally and internationally. We are pleased to welcome accomplished speakers to share their views and experiences. One of the goals of the Office of Global Health is to expose the Rush community to global experiences and facilitate scholarly work on initiatives that benefit international communities. Many of our faculty, students, residents and staff devote their time and efforts to make an impact worldwide. The symposium provides a platform to share the results of their work.

I would like to take this opportunity to thank you for supporting the Office of Faculty Affairs and Global Health, and our co-sponsors, the the Office of Student Life and Engagement, Division of Student Affairs.

We look forward to your continued involvement.

Sincerely,



Susan Chubinskaya, PhD
Associate Provost, Faculty Affairs, Rush University

SIXTH ANNUAL
Global Health Symposium
FEB. 12-15, 2018

Dear Students, Faculty and Staff,

On behalf of the Office of Global Health at Rush, I would like to thank each of you for participating in the sixth annual Global Health Symposium. As our nation continues to face a crisis of identity regarding who and what we are, the topic of refugee medicine is timely and relevant. We are delighted to welcome three speakers with experience, thought leadership and commitment to caring for vulnerable populations in transition. We hope that you leave this week informed and energized to advocate for refugee communities within your individual spheres of influence and personal capacity.

Thanks also to all of you who have shared your scholarship in global and local health equity topics. We are looking forward to learning from and inspiring each other through the poster and oral abstract sessions.

Gratefully,



Stephanie Crane, MD
Director, Global Health

Global Health Symposium
MONDAY, FEB. 12, 2018

Noon-1 p.m. | Searle Conference Center, Main Lounge



Public Health for Refugees and Immigrants Needs a Pipeline to the Public: Journalism's Role

Jack C. Doppelt

Al Thani Professor of Journalism, Medill School of Journalism, Northwestern University

Jack Doppelt is the Hamad bin Khalifa Al Thani Professor of Journalism at Medill and principal investigator of the Robert R. McCormick Foundation-funded project on social justice reporting in Chicago (Social Justice News Nexus).

He is also publisher of Immigrant Connect (an online storytelling network for immigrants, their families and communities in and around Chicago) and a faculty associate at Northwestern's Institute for Policy Research. He has served as a Charles Deering McCormick Professor of Teaching Excellence at Northwestern and as an Open Society Fellow, working with Al-Quds University in the West Bank to develop its journalism program.

He has also served as both acting dean and associate dean and as director of the Medill global journalism program for 11 years from its inception in 1996 until 2007. His expertise is media law and ethics and the reporting of legal and immigrant affairs. He recently wrote an op-ed in *Yes! Magazine* on the selection of the next Supreme Court justice: "If Trump Makes It One Year Without Impeachment, Then Let's Talk Supreme Court Nominees."

As part of the ongoing Immigrant Connect project, he co-produced, wrote and voiced a radio documentary: "Chicago's Global Immigrants: Beyond the American Dream." He has also written stories about refugee life in Namibia's Osire camp.

Doppelt is co-author of *Nonvoters: America's No Shows*, about why people don't vote, and of *The Journalism of Outrage: Investigative Reporting and Agenda Building in America*, a book on investigative reporting and its influence on public policy.

As editor and publisher of *On The Docket*, he ran a student-driven site that offered the web's only comprehensive coverage of all pending U.S. Supreme Court cases. Doppelt has published numerous articles on libel, the media's influence on the criminal justice system and media coverage of the legal system. He has represented a group of journalists before the 7th Circuit Court of Appeals in a successful attempt to gain access to sealed court documents and has consulted as an expert witness on media practices in a number of legal cases.

A graduate of Grinnell College and the University of Chicago Law School, Doppelt clerked for Illinois Supreme Court Justice Thomas J. Moran before becoming an investigative reporter and news producer.

Global Health Symposium
TUESDAY, FEB. 13, 2018

Noon-1 p.m. | AAC 539



What Matters Most When There Is Nothing Left: Resilience in Humanitarian Settings

Tim Cunningham, RN, DrPH

Director, Compassionate Care Initiative

Assistant Professor, University of Virginia School of Nursing, University of Virginia Department of Drama

Tim Cunningham was lassoed and dragged down a dirt road in rural Chiapas, Mexico by an irate man who did not find clowns funny: That was the beginning of his global health career. First an actor, then a clown, now nurse and researcher, Cunningham has always been interested in how people connect with one another — for better or worse, with and without words.

He received his bachelor's in English at the College of William and Mary and then trained in acting at the Dell'Arte School of Physical Theatre. Since the lasso experience 15 years ago, he has worked closely with the non-profit Clowns Without Borders as a clown, board member and executive director. It was by doing clown work in Haiti that inspired Cunningham to study nursing. He finished his master's in nursing at the University of Virginia and has worked as an emergency pediatric nurse in Virginia, Washington, D.C. and New York City. He completed his doctorate in public health from the Mailman School of Public Health in 2016. Cunningham has worked as a nurse in Sierra Leone during the Ebola outbreak, and he has just returned from Bangladesh where he volunteered with the NGO, MedGlobal and worked with Rohingya refugees.

He holds a joint appointment at the University of Virginia School of Nursing and Department of Drama, where he serves as the director of UVA's Compassionate Care Initiative. As an actor or nurse, he has worked in more than 20 different countries and has witnessed profound acts of resilience, inspirations from which he hopes to share with his audiences.

Global Health Symposium

WEDNESDAY, FEB. 14, 2018

Noon-1 p.m. | AAC 539



Delivering Surgical Care to Victims of the Syrian Crisis
Samer Al-khudari, MD, FACS
Assistant Professor- Otorhinolaryngology
Director Medical Student Clerkship, Director Transoral Robotic Surgery, Rush University Medical Center

Samer Al-khudari graduated from Rush Medical College in 2007 and subsequently trained in Otolaryngology - Head and Neck Surgery at Henry Ford Health System in Detroit. He then completed a fellowship in head and neck oncology and reconstructive surgery at the Cleveland Clinic. He currently is an assistant professor at Rush Medical College in the Department of Otorhinolaryngology. Al-khudari serves as the medical student clerkship director and works closely with medical students as they pursue a career in otolaryngology.

Al-khudari is an active member of the international organization Syrian American Medical Society (SAMS). Through this organization he has served on multiple mission trips aimed at providing care to refugees who have been displaced along the borders of Turkey and Lebanon. His family originates from Homs, Syria, which is one the larger cities heavily attacked in the Syrian crisis. Al-khudari lectures often about his experiences with the Syrian refugees, and he hopes to motivate other health care providers to consider participating in global health care opportunities. His next mission trip is planned for Feb. 23.

Global Health Symposium

THURSDAY, FEB. 15, 2018

Noon-12:20 p.m. | AAC 976



Development of a Community-Based Referral-Based Surgical Continuity Care Program in Peralta, Dominican Republic
Ana Wagener-Sobrero, fourth-year medical student, Rush Medical College; Stephanie Crane, MD, Rush University Medical Center; Jay Dutton, MD, Rush University Medical Center

Since the 1960s, non-profit organizations (NPO) with cleft surgery programs in developing countries have collected quantitative data on repairs performed. However, little data has been published on subsequent revision surgeries. Within the medical mission landscape, the Rush University Medical Center (RUMC)- affiliated global health program is unique from its counterparts in that it prioritizes sustainable continuity of surgical care. During the program’s biannual surgical trips to the Peralta community over the last decade, an otolaryngology and facial plastics specialist has performed several revision surgeries, in addition to initial cleft lip and palate repairs.

This work aims to: 1) share patient experience with staged cases over time and 2) highlight the strengths of surgical continuity care in a local setting within global health service and the challenges to maintaining this model.

A patient and his mother were interviewed in their native language by a native speaker regarding the patient’s experiences with six orofacial surgeries. Verbal consent was obtained by both participants. The interviews were recorded, transcribed and translated by the bilingual interviewer.

Obtaining surgical care by the same team over a decade facilitates trust between local patients and international health professionals. The relationship is such that patients continue to seek elective revision surgeries and perceive positive outcomes, despite experiencing minor postoperative complications. The interviewed patient reports stark improvements to quality of life and self-confidence since undergoing oronasal fistula repair and lip revision through this RUMC-affiliated program. Additionally, the program’s relationship with local surgeons in nearby Azua helped the patient readily access care for suture removal and post-op infections.

In partnership with the NPO Community Empowerment and with local hospitals, the RUMC-affiliated program enables local surgical patients to benefit from staged cases over time, with the appropriate post-operative evaluation. Recently, the program in Peralta has evolved from relying on private donations and grants to achieving financial independence. While there is no shortage of skilled surgeons and ancillary human resources willing to participate, the reliability of local infrastructure is limited. Forming a local partnership able to provide surgical and personal protective equipment, medications and other perioperative needs remains a challenge.

Funding: None

Global Health Symposium
THURSDAY, FEB. 15, 2018
12:20-12:40 p.m. | AAC 976



Tamara Dukich

Continued Development of a Student-Led Health Education Intervention for Women Detained in a Large, County Jail

Jessica Vlaming, MS, PA-C, Rush University; Erin Paolini, PA-S, Rush University; Chloe J. E. Solomon, MS, Rush University; **Tamara Dukich, PA-S, Rush College of Health Sciences; Sara Gottlieb, first-year medical student, Rush Medical College**



Sara Gottlieb

Women in jail have lower educational attainment, lower socioeconomic status, higher rates of trauma, and higher rates of chronic and mental illness relative to the general U.S. population. Detained women also report barriers to accessing healthcare, negative interactions within the health care system, and avoidance of medical care due to stigmatization. Jails are thus an important interventional target for health promotion and disease prevention. The Correctional Health Initiative (CHI) allows health profession students to engage with this high-risk population by providing ongoing health education to women detained at Cook County Jail in Chicago.

CHI aims to provide pertinent and actionable health information to program participants, while fostering positive interactions between detainees and health professionals. Thus, our current goals are to refine our curriculum with input from participants and generate a deeper understanding of the criminal justice system amongst volunteers and health professionals.

Our interdisciplinary team of health profession students designed and led a 10-week health education program for women detained at Cook County Jail, including topics such as family planning, substance use, nutrition and common chronic diseases. A 40-page Women's Health Guide is distributed, containing relevant information and resources to accompany each session, along with program completion certificates, which can be used for court dates and job interviews. Given the protected status of our target population, Institutional Review Board (IRB) approval for formal statistical analysis is rigorous and time-intensive, a process we have not yet had the resources to achieve. Thus, informal feedback has been utilized for participants and post-program surveys for volunteers.

To date, volunteers have led 140 sessions with an average of 32 participants/week, showing 6.67 percent annual participant growth. Informal participant feedback has been overwhelmingly positive while also providing insights into future considerations. Volunteers submit feedback via Google Forms, and results are used for quality improvement.

Health education interventions in correctional settings provide a valuable service and build positive relationships. Future directions include obtaining IRB approval to conduct participant focus groups, assessing the impact of participation on health profession students, and developing similar programming for detained youth.

Funding: PA Foundation IMPACT Grant; Rush Community Services Initiative Program

Global Health Symposium
THURSDAY, FEB. 15, 2018
12:40-1 p.m. | AAC 976



Lance Shaul

Diagnoses From an Emergency Care Center in Rural Kenya

Sebastian Suarez, MD, MPH^a, Hiren Patel, MD^a, Joseph Owuora, Lance Shaul^a, second-year medical student, Rush Medical College, Jeffrey Edwards^a, Zaid Altawil, MD^a, Debora Rogo, JD^b, Thomas F. Burke, MD^a

^aDivision of Global Health and Human Rights, Department of Emergency Medicine, Massachusetts General Hospital, Boston

^bAfrican Institute for Health Transformation at Sagam Community Hospital, Sagam, Kenya

Emergency care is a neglected area of focus in low-resource settings. An emergency care center with a systematized triage system and the capacity to simultaneously manage multiple patients of varying acuities has not previously been described in rural Africa. The objective of this study was to report on the demographics and diagnoses of patients that presented to a rural community hospital emergency care center in western Kenya. Secondly, our team worked to understand the feasibility and unique challenges that come with integrating an electronic medical record into the local health system.

A REDCap intake form reporting demographics, mode of arrival, triage priority, chief complaints, discharge diagnoses, and dispositions was designed and integrated into workflow for triage nurses and intake staff at Sagam Community Hospital. These variables were extracted from the records of all patients that presented to the Sagam Community Hospital Emergency Care Center between October 1, 2016 and September 30, 2017.

Triage nurses and intake staff were able to effectively integrate electronic medical record data entry into the workflow at Sagam Community Hospital. There were 14,518 unique patient encounters at the Sagam Community Hospital Emergency Care Center over this one year interval. 8,931 (61.5%) were female, 5,571 (38.4%) male and median age was 32 years (interquartile range 17-55). Of the total visits, 12,668 (87.3%) were triaged as low acuity and hospital admission rate was 15.4%. The five most common disposition diagnoses were malaria (n=3,704, 18.9%), acute upper respiratory tract infection (n=1,242, 6.3%), injury (n=828, 4.2%), urinary tract infection (n=764, 3.98%), and viral syndrome (n=622, 3.17%).

Malaria, respiratory infections and acute injuries were the three most common diagnoses among patients that presented to the Emergency Care Center at Sagam Community Hospital. Emergency care and electronic data collection in rural Sub-Saharan Africa come with a unique set of challenges and this data provides a vast amount of opportunities to consider how care delivery is shaped at our hospital. As one of the first collections of its kind, this data may assist in the design of emergency care centers in areas similar to Sagam.

Funding: ^aDivision of Global Health and Human Rights, Department of Emergency Medicine, Massachusetts General Hospital, Boston, MA, USA

^bAfrican Institute for Health Transformation at Sagam Community Hospital, Sagam, Kenya

Global Health Symposium
THURSDAY, FEB. 15, 2018
3-6 p.m. | AAC 994A

POSTER SESSION & AWARD RECEPTION

1. Current Status of Rehabilitation in China

Nancy Xi Chen, MD, PhD, Department of Rehabilitation Medicine, Sun Yat-sen University, Guangzhou, China Department of Communication Disorders and Sciences, Rush University, Chicago

Emily Wang, PhD, CCC-SLP, Department of Communication Disorders and Sciences, Rush University, Chicago

Rehabilitation, as a medical specialty, started in 1980s in China. Despite development over the last three decades, there are major obstacles and problems to meet the demands.

The goal of this work was to review the current status of rehabilitation in China and the areas for future development.

Data was collected from three main databases: China Integrated Knowledge Resources Database (CNKI), China Yearbooks Full-text Database, and PubMed.

Results are summarized in three areas. 1. Type of rehab facility: There are three types of rehab facilities in China which are Rehab Hospitals, Rehab Departments in general hospitals, and Rehab Facilities in senior care communities including Independent Living Retirement Homes and Nursing Homes; 2. Types of patients seeking or receiving rehab: People with congenital disabilities, people with chronic diseases such as metabolic syndromes, and people with recent injuries such as strokes and head injuries; and 3. The major issues: Limited knowledge and awareness of rehabilitation and its impact on improving function and quality of life for both medical professionals and general public; the severe shortage of qualified Physical Medicine and Rehabilitation (PM&R) physicians; the severe shortage of trained physical therapists, occupational therapists and speech-language pathologists. In China, the rate for Physiatrists is 0.4 in every 100,000 people and for trained therapists it is 1. There are only 137,900 therapists (OT, PT and SLP) for the entire country. In comparison, there are 130,400 OTs, 239,800 PTs and 145,100 SLPs in the U.S. while the population in China (1.379 billion) is 4.27 times that of the U.S. population (323.1 million); and lastly lack of government funding and infrastructure for training programs in universities.

Currently, rehab services are still very limited. However, with over 30 years of continuous economic boom the quality of life for ordinary citizens has significantly improved. More people are seeking active rehabilitation for strokes, head injuries and neurodegenerative diseases to help their loved ones. The rehab market is huge. There are tremendous needs and opportunities for education of qualified rehab providers, investment to build rehab centers and hospitals, campaigning for public awareness, and research to develop more effective and efficient rehabilitation services.

Funding: Chinese Scholarship Council (CSC) of the Ministry of Education

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POSTER SESSION & AWARD RECEPTION

2. Cultural Immersion in Riobamba, Ecuador: Applying a Global Health Perspective to Medical Education in Chicago

Mallory Davis, third-year medical student, Rush Medical College

As the immigrant population in the United States has increased by almost 30 million people from 1980 to 2015, the number of non-English speaking patients has mirrored that rise. While there are more than 350 languages spoken in the U.S., Spanish is by far the most prevalent, followed distantly by Chinese and Tagalog. When looking at the limited English-proficient (LEP) population—coming largely from these immigrant populations—individuals with LEP have higher rates of poverty, less education, and ultimately a lower degree of health literacy, leading to a global health perspective within the confines of the United States.

Considering this within the framework of the biopsychosocial model of health allows health care providers to identify a potential area for intervention—learning to better communicate and educate patients that do not speak English as their first language. Reduction of language barriers in health care is far from a neglected topic. As such, many hospitals are utilizing telephonic or virtual videos for interpretation. Others rely on in-person interpreters.

The goal of this work has the following aims: to assess how medical students can contribute to the reduction of language barriers through their involvement in an immersion trip to a Spanish speaking country; discuss how cultural competency translates over from experiences abroad to the clinical experiences at Rush and Stroger; and to understand how medical students improve their clinical learning when working in communities outside of their typical learning environment.

Most of the information in this work is inspired by a medical student’s personal writing throughout a month-long immersion in Riobamba, Ecuador; however, discussion will be supported by a literature review that applies a more quantitative analysis of non-traditional medical student education and the implications for the vibrant communities that exist in the United States.

As evidenced by the illustrative experiences of one medical student in conjunction with quantitative analysis from the literature, early international exposure can better improve health outcomes in LEP populations by creating more culturally competent health care teams for global communities.

Funding: This experience was funded primarily by student, in addition to private donations

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POSTER SESSION & AWARD RECEPTION

3. Establishment of an Innovative Health Equity and Social Justice Leadership Elective for First Year Medical Students

David Ansell, MD, MPH, Rush University Medical Center; Stephanie Crane, MD, Rush University Medical Center; Liz Davis, Rush University Medical Center; **Ritika Dhawan, Rush University Medical Center**; Paul Kent, MD, Rush University Medical Center; Stan Sonu, Rush University Medical Center, Cook County

Despite progress in lifesaving technology and medical practices, health outcomes vary profoundly by income, place of residence, and access to healthcare services. Physicians are well-positioned to advocate for improvements community health practices and factors preventing patients from receiving care. Thus, it is imperative to equip physicians-in-training with the advocacy tools, cultural competency, and mentoring networks to navigate the structural inequities their patients face.

The Health Equity and Social Justice Leadership course aims to provide a project-based learning experience in community health equity utilizing the tools of social epidemiology, and the precepts of social medicine and community engagement, to accelerate change via their culminating community health improvement intervention.

The proposed course was met with immense positivity from faculty at Rush Medical College (RMC) and peer institutions. Physicians from diverse specialties including internal medicine, oncology/hematology, and pediatrics, amongst others, volunteered to contribute to the creation and implementation of this course. Both the students and the curriculum will be evaluated in the pilot year (2017-2018). Student success will be determined by participation, completion of mandatory assignments, and a final presentation of their work. The course will be evaluated by the students. Pre- and post- surveys, administered in both multiple choice question and narrative reflection formatting, will assess students' knowledge of course objectives, their confidence in their acquired skillset, student opinions of the course, and their thoughts for improvement.

The support of the curriculum councils to for 138 first year medical students, 5 elective courses were offered with a total of 80 available elective spots; 89 students ranked at least 1 elective. Of the 61 students who ranked the Health Equity and Social Justice Leadership elective, 82% ranked this course 1st or 2nd on their list (34 students ranked first and 16 students ranked second). Given the demand for the course, we increased our course capacity to 20 students.

With the development of the Health Equity and Social Justice Leadership course at Rush Medical College, we have learned that there is immense energy amongst practicing physicians and medical students to teach and learn about challenges and best practices in the mission to achieve health equity. Creating a space in the medical school curriculum for field experts and future practitioners to work together with the community, starting in the first year of medical school, has introduced collaboration and conversation that we are excited to nurture and expand with each subsequent year of the course.

Funding: None

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POSTER SESSION & AWARD RECEPTION

4. Oh, the Places You Will Go: Dismantling Recreational Segregation in Chicago through Asset-Based Community-Engaged Marketing

Kaitlyn Fruin, second-year medical student, Rush Medical College; David Ansell, MD, MPH, Rush Medical College

Rush University Medical Center is the largest private employer on Chicago's West Side. Because compensating Rush's 10,643 employees accounts for more than half of Rush's operating expenses (\$845,659,668; 51 percent), creating opportunities that allow employees to reinvest their earnings in the West Side can maximize the local impact of Rush's largest annual investment. However, little is known about how Rush employees invest their time and financial resources within the West Side.

We described the impact of an asset-based, community-engaged marketing approach on aggregate West Side tourism patterns among Rush employees, students, and their family and friends.

We collaborated with community partners to promote the annual 5k walk/runs in Austin, Garfield Park, Little Village, Pilsen, and North Lawndale. We conducted a pre-intervention evaluation of Rush employees, students, and their family and friends (N=364) assessing which of the twelve communities in Rush's West Side service area they had visited during the prior six months. Pre-intervention data were compared to 5k walk/run registration data to evaluate impact on local tourism patterns.

Pre-intervention, five communities (Humboldt Park, n=137; Little Village, n=142; Near West Side, n=153; Oak Park, n=166; West Town, n=131) had more than 130 visitors and seven communities (Austin, n=71; East Garfield Park, n=55; Forest Park, n=66; Lower West Side, n=66; North Lawndale, n=65; River Forest, n=59; West Garfield Park, n=63) had less than 75 visitors during the past six months. Sub-analyses of visitorship patterns by region of participants' residence reproduced the two-tier visitorship pattern. Post-intervention, visitorship increased by a factor of 3.02 in Pilsen, 1.8 in North Lawndale, 1.76 in East Garfield Park, 1.47 in Austin, and 1.22 in Little Village.

At baseline, participants demonstrated marked disparities in their tourism patterns across West Side communities. Internally marketing the annual West Side 5k walk/runs through an asset-based community-engaged approach increased visitorship to the five host communities among Rush University Medical Center employees, students, and their family and friends.

Funding: Rush Medical College Summer Research Fellowship (K.F.)

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POSTER SESSION & AWARD RECEPTION

5. Early Identification of Non-communicable Diseases in Burmese Refugees

Sarah Kosinski, RN, BSN, Rush University, Chicago

Refugees resettling to the United States may arrive with health conditions like Tuberculosis, Hepatitis B, intestinal parasites, or nutritional deficiencies. The domestic health screening is usually a refugee's first introduction to the U.S. healthcare system and provides the means for identifying and treating these diseases. However, there is no formal process to identify non-communicable diseases in this population. If left untreated, these diseases can develop into long term complications that can be detrimental to the refugee's health and costly.

The purpose of this quality based improvement project is to implement a screening process, adopted from the Minnesota Department of Health, into the DuPage County Health Department's domestic health examination that will identify refugees with non-communicable diseases when they initially resettle to DuPage County. Specific aims: increase knowledge of non-communicable diseases that occur in Burmese refugees, improve the transition for refugees with non-communicable diseases and disseminate findings to local voluntary agency.

Roughly 350 refugees arrive to DuPage County per fiscal year with majority of resettling from Burma, therefore they will be the focus population. The screening process will be incorporated into the domestic health exam and will identify non-communicable diseases like hypertension, diabetes, and disabilities. A retrospective analysis will be conducted by means of chart audits in electronic medical record. Institutional Review Board (IRB) approval was not necessary for this project.

Data collection is currently in process.

If successful, the quality based improvement project will capture the prevalence of non-communicable diseases among specific refugee populations when they initially resettle to DuPage County. This will generate opportunities for future programs to link these individuals with resources that address their long term health care needs.

Funding: There is no source of external funding for this project. Budget is minimal with approval by the DuPage County Health Department.

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POSTER SESSION & AWARD RECEPTION

6. Improved Access to Children's Oncology Group (COG) Clinical Trials for Underrepresented Minorities and Adolescents and Young Adults (AYAs) Through a Novel Tri-Institutional Program: Addressing Cancer Disparities

Nupur Mittal, MD, Rush University children's hospital; Johnathan Davidson, University of Illinois at Chicago; Mario Martinez, University of Illinois at Chicago; Paul Kent, MD, Rush University; Lisa Giordano, MD, Rush University; Dan Choi, MD, University of Illinois; Dipti Dighe, MD, Stroger Hospital; Nitin Sane, Rush University; Steve Gitelis, MD, Rush University; John G. Quigley, MD, University of Illinois; Rosalind Catchatorian, MD, Stroger Hospital; Mary Lou Schmidt, MD, University of Illinois at Chicago

Access to Children's Oncology Group clinical trials has led to significant improvements in overall survival rates; however, disparities persist, particularly among African-American and Hispanic patients, AYAs, and the inadequately insured. (Bhatia, PBC, 2011) In 2008, to improve access to this largely underserved population, two COG institutions (University of Illinois at Chicago (UIC) and Rush University Medical Center (Rush)) and a non-member hospital (John H Stroger Hospital formerly Cook County Hospital (Stroger)) created a unified COG program utilizing one lead Institutional Review Board (IRB) and one research team.

This study assesses the impact that the UIC/Rush/Stroger COG program had on minority and AYA clinical trial enrollment.

Comparative analyses was completed of tri-institutional COG enrollment data from 2002-2008 (pre-merger) and 2008-2017 (post-merger) including enrollments by race/ethnicity, age at diagnosis, insurance status, clinical trial type (biology, registry, therapeutic, epidemiology), Oncologic diagnosis and specialty of the enrolling physician were conducted. IRB approvals were obtained at all 3 sites.

The total studies open to enrollment (pre vs post-merger) increased by 100 percent. Enrollments onto COG clinical trials increased by 523 percent total and for all diagnoses by at least 100 percent, the most for Brain tumors by 140 percent, AML by 290 percent, Non-Hodgkin Lymphoma by 190 percent. There were significant increases in enrollment of ethnic minorities by 512 percent post-merger compared to pre-merger whereas a 246 percent increase in enrollments for non-Hispanic white patients was reported. A 405 percent increase in AYA enrollments was observed post-merger compared to pre-merger. 96 percent increase in enrollments for uninsured patients occurred after the merger. There were significantly more providers from a variety of oncology specialties engaged in enrolling patients across all age groups on to COG clinical trials and a consistent increase in percentile standing of the program in the country among all COG institutions has occurred as a result of the collaboration.

Significant increases in COG clinical trial enrollments, especially for under-represented minorities, AYAs and uninsured patients, were associated with the creation of this tri-institutional COG research program due to improved access to COG cancer clinical trials. The UIC/Rush/Stroger COG Program serves as a model to address cancer health disparities for these vulnerable populations.

Funding: None

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POSTER SESSION & AWARD RECEPTION

7. Race and Socioeconomic Status are Strongly Associated with Racial Disparities in Cardiovascular Health and Outcomes in Chicago

C. Ofori-Marfoh, third-year medical student, Rush Medical College, Chicago; C. Volgman, Vanderbilt University; A. Volgman, MD, Rush University Medical Center, Chicago; S. Alexander MD, Rush University Medical Center, Chicago; K. Williams, MD, Rush University Medical Center, Chicago

The unique distribution of Chicago's population along racial/ethnic lines promotes disparity in cardiovascular disease (CVD) prevalence and higher mortality in certain racial groups and neighborhoods. We sought to identify factors contributing to racial disparities in cardiovascular (CV) health, interventions initiated to address these risk factors and lastly, solutions to decrease this gap in Chicago.

We hypothesize that unique risk factors put certain racial groups, especially African Americans (AAs), at greater risk for CVD and mortality.

Literature search was performed using PubMed, Scopus and Chicago Department of Public Health Epidemiological database using the search terms health disparities, CVD, mortality, life expectancy and Chicago to identify contributing factors to racial disparities in CV health and outcomes.

Race and socioeconomic status were repeatedly significantly associated with increased prevalence of CV risk factors. One study found no association between residence in a primary care health provider-deprived area and increased prevalence of CV risk factors after adjusting for socioeconomic status (SES) and race. Elderly African Americans (AAs) had poorer control of hypertension (45 percent vs. 51 percent, $p < 0.001$) relative to Non-Hispanic Whites (NHWs) regardless of their Medicare eligibility status and after adjusting for potential confounders such as SES and obesity. Life expectancy for AAs was the lowest at 71.7; Hispanics the highest at 84.6; and NHWs at 78.8 years. CVD claims the most lives in Chicago with AAs at greatest risk for CVD mortality contributing to unfavorable longevity in this racial group. Interventions identified include city-level efforts such as the Healthy Chicago 2.0 initiative and partnerships with public, community and healthcare organizations striving to narrow the health disparities gap.

AAs in Chicago suffer the greatest burden of CVD and mortality with studies strongly suggesting that race itself and SES are leading players in this racial disparity. This awareness is necessary to effectively tackle the disproportionate burden of CVD in this subgroup.

Funding: None

Global Health Symposium
THURSDAY, FEB. 15, 2018
3-6 p.m. | AAC 994A

POSTER SESSION & AWARD RECEPTION

8. School-Aged Hearing Screening in Developing Countries: Practical and Ethical Considerations

Haley Ravndal, Rush University; Mark Partain, Rush University; Patricia McCarthy, PhD, Rush University

In this project, we developed and implemented a hearing screening protocol for school aged children in Moshi, Tanzania. The purpose is threefold: 1. to describe the planning, implementation, data recording and logistics of our humanitarian hearing screening project; 2. to present screening pass/fail rates; and 3. to review the complex ethical considerations encountered in conducting hearing screening in a country with limited healthcare resources. A summary of each section to be presented follows:

The purpose of this project was to develop and implement a hearing screening protocol aimed to not only identify children with significant hearing loss but also children with borderline to mild hearing losses that can be compensated for with classroom placement and teacher education. Scheduling, screening environment, false positive/false negative rates and reliability were considered in the planning as well as implementation stages. The need for audiologic follow-up as well as the need for medical and educational intervention were considered in planning.

316 students were screened at Stella Maris Primary school in Moshi, Tanzania. Otoscopy, tympanometry and distortion product otoacoustic emissions were completed as part of a screening protocol followed by a pure tone re-screening protocol in cases of referral on either tympanometry or otoacoustic emissions.

Of the 316 students screened, the referral rate for the first round of screenings (tympanometry and otoacoustic emissions) was 34 percent. When referrals were retested using pure tone audiometry, referral rate reduced to 2.8 percent. Due to the high referral rate when OAE screening was used independently, we concluded that OAEs may not be the most effective screening tool when used independently. When used as one stage of a larger screening protocol, it was effective for identifying at risk students.

Humanitarian hearing screenings in the developing world can create ethical complications. This screening was developed with the ethical philosophy that states: ensure the screening is necessary, helpful to the population, and responsibly designed for longevity (Wilson and Jungner, 1968). How this project adhered to these standards and the ethical challenges encountered are included.

Funding: None

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POSTER SESSION & AWARD RECEPTION

9. Investigating HIV Medication Compliance in Rwandan Boarding School

Stephanie Ross, third-year medical student, Rush Medical College

One particularly vulnerable group in Rwanda is HIV positive youth enrolled in boarding school. Due to the close quarters, tightly monitored environment and strict school schedule, it can be difficult for students to maintain daily medication compliance. Pressured by the communality of Rwandan culture, HIV positive students can worry about offending their classmates and threatening their position at school when they are forced to hide their antiretrovirals (ARVs). The primary indicator of ARV adherence rate is viral load. At the WE-ACT clinic in Kigali, an internal assessment found that only 70 percent of patients aged 13-24 are virally suppressed compared to 84 percent of patients being virally suppressed within the entire clinic population. In order to investigate this trend, small focus groups of HIV positive boarding school students were organized in Kigali, Rwanda.

The primary goal was to understand the unique challenges of boarding school environment facing Rwandan youth in addition to coping mechanisms when battling HIV stigma.

Participants were all patients at WE-ACT ranging from age 17-24. The focus groups were held over a two-week period with the assistance of WE-ACT staff including psychologists and interpreters.

The sessions revealed that having a classmate or teacher in whom the participants could confide largely impacted compliance and continued school enrollment. When participants were able to serve as an example for their peers, they were more likely to exhibit confidence, well-being and happiness. The sense of empowerment associated with serving as a leader in their school or community allowed participants to feel a stronger sense of support and greater ability to remain compliant. Serving as a role-model could lead participants' peers to feel comfortable enough to reveal their HIV status as well, further combatting the perpetuation of stigma. If participants were not ready to disclose their status, WE-ACT nurses could administer a survey of parents to help them identify adequate resources and support networks while their children are away at boarding school.

By focusing on building confidence and resilience, WE-ACT can drive boarding school students to become and remain compliant with their ARVs.

Funding: Make A Change, International; Rush University - Global Health Department

Global Health Symposium
THURSDAY, FEB. 15, 2018
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POSTER SESSION & AWARD RECEPTION

10. Trainers In Training Program: An Introduction to Athletic Training for Inner-City High School Students

Luis Soliz, MD, Rush University Medical Center; Christopher Hicks, MD, Rush University Medical Center; Tanya Lozano, Healthy Hood Chicago; Joline Lozano, Healthy Hood Chicago

Although high school sports promote camaraderie, teamwork and an overall healthy lifestyle, they put students at an increased risk for sports-related injuries. There is a clear disparity between access to athletic trainers, sports medicine physicians, and educational resources related to injury prevention and treatment between the Chicago Public School (CPS) system and the suburban school system.

The aim of the athletic training program is to expose students to potential careers in medicine as well as athletic training and to promote injury prevention in order to prolong the athletic careers of CPS athletes and improve their athletic performance by evening the playing field.

The first seminar was held April 21, 2017 at Station 23. One hundred students from Richard T. Crane (RTC) Medical Preparatory High School and Benito Juarez Community Academy attended. The students partook in a structured 3.5 hour seminar led by a team of 10 Rush University Medical Center (RUMC) Physical Medicine and Rehabilitation (PM&R) residents. This workshop included presentations on concussion, common sports injuries, and sports nutrition. The students also learned how to properly wrap an athlete's ankle before activity. The students were finally given a post-seminar survey to assess the effectiveness of the seminar. The student-trainers and student-athletes who attended the seminar subsequently took part in a week-long strength and conditioning program led by Jordan trainers. Over 350 athletes from Crane, Juarez and Collins High Schools participated. The student-trainers were supervised and assessed by RUSH PM&R residents. All the student-trainers who performed well went on to become trainers-in-training for their sports teams.

Over 80 percent of student-trainers as well as student-athletes found the material from the initial seminar to be very helpful. Ninety-three percent of participants would participate in similar workshops in the future. Ninety-five of individuals felt more confident sharing the information they learned with their teammates. Finally, over 95 percent of students reported wanting similar workshops implemented throughout the entire CPS system.

We are working with CPS representatives who would like to create a year-long elective based on strong preliminary results we obtained. Our goal is to implement mandatory training centered on basic concepts of sport injury prevention and recognition prior to any CPS high school student beginning their athletic career.

Funding: Jordan Brand; Athletico; RUMC PM&R Department

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POSTER SESSION & AWARD RECEPTION

11. A Case Study of the Māori Population of New Zealand Demonstrates the Emerging Global Health Challenge of Recognizing, Diagnosing and Caring for Individuals with Dementia as Incidence of Dementia Rises in Aging Indigenous Populations

Amelia Williams, Rush Alzheimer's Disease Center, Rush University Medical Center; Neelum Aggarwal, MD, Rush Alzheimer's Disease Center, Rush University Medical Center

By 2030 there will be an estimated 75 million people worldwide living with dementia (World Alzheimer's Report 2015). Much of this increase in prevalence is associated with ageing populations in developing countries, but increasing life expectancies amongst individuals who are largely isolated from western medicine, such as indigenous peoples, may also play a role. The Māori are the indigenous population of New Zealand and will be the focus of this paper.

In 2013 there were 5.4 percent Kaumātua (elders) over the age of 65; however the number of Māori living over age 80 has doubled in the last decade (Statistics New Zealand 2012). With the Māori population over 65 predicted to increase twice as much as non-Māori within a decade (New Zealand Medical Association 2014), the incidence of dementia would be expected to increase.

A web-based literature search of population studies, as well as New Zealand government and global health statistics was conducted.

Māori have a higher incidence of risk factors for dementia compared to Pākehā (New Zealanders "of European descent") including depression, head trauma, substance abuse disorders (Ministry of Health 2011b), diabetes and cardiovascular disorders (New Zealand Heart Failure Registry). In 2016, the Māori accounted for 5.1 percent of New Zealanders with dementia, and this is predicted to rise to 8 percent by 2038. Comparatively, Pākehā accounted for 87.5 percent of New Zealanders with dementia and this is expected to fall to 77 percent by 2038 (Dementia Economic Impact Report 2016 – Alzheimer's New Zealand).

It remains to be seen whether the lower incidence of dementia in Māori compared to Pākehā is due to resilience, shorter life expectancy, barriers in providing dementia diagnosis and collecting information from an isolated population, intergenerational and historical trauma, or some other unknown factor. The increased life expectancy and resultant increased incidence of dementia in indigenous peoples such as the Māori presents a global challenge. Understanding why dementia is increasingly visible in indigenous populations such as the Māori is an important area of research, and creating programs to implement health and support networks that are culturally sensitive to the needs of indigenous populations will be imperative in the coming years.

Funding: None

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POSTER SESSION & AWARD RECEPTION

12. Feasibility of Health Literacy Assessment of Adult Patients in Peralta, Dominican Republic

Scott Miller, second-year medical student, Rush Medical College; **Tenaya Wilson-Charles, second-year medical student, Rush Medical College**

The correlation between health literacy and favorable patient outcomes has been well established. Patients with higher health literacy are able to provide better self-care and better understand medical interventions. Since 2005, Rush University has partnered with the community of Peralta in the Dominican Republic to provide medical care to the local population on a regular basis. Formal assessment of health literacy, however, has not been established.

Our goal was to identify an appropriate tool to assess health literacy in this setting and examine the feasibility of administering the assessment during a primary care trip.

The Short Assessment of Health Literacy for Spanish-Speaking Adults (SAHLSA-50) is a Spanish language health literacy test with high reliability and validity of results based on the Rapid Estimate of Adult Literacy in Medicine (REALM). The SAHLSA-50 is translated into Spanish, can be completed in several minutes, and has been tested in Spanish speakers of different nationalities. Additionally, no medical expertise or specialized training is required to administer the assessment. On a primary care trip in June 2017, SAHLSA-50 tests were administered by two students to randomly selected adult patients in the pharmacy who verbally consented to participation in the study via electronic tablet.

Five surveys were successfully administered. Results indicated a range 21-39, while a score below 37 suggests inadequate health literacy. Multiple obstacles were identified to administering a health literacy assessment in this setting.

Preliminary results suggest a need to gather formal data on health literacy in this population. The SAHLSA-50 is a reasonable tool to use in the setting of a Spanish speaking target population. Workflow recommendations for survey administration include incorporating the SAHLSA-50 into the patient intake process rather than at pharmacy. Studies have shown that initiatives aimed at those with limited health literacy can improve some health outcomes and have called for increased initiation of these interventions. Early identification in the Peralta community could lead to intervention by local community health workers to promote health literacy, at individual or community levels.

Funding: None

OUR MISSION

To advance ongoing involvement and develop new programs with global health initiatives that could have a mutual benefit from the voluntary assistance of Rush students, residents, fellows, faculty and staff.



Susan Chubinskaya, PhD
Associate Provost, Faculty Affairs
Susanna_Chubinskaya@rush.edu



Stephanie Crane, MD
Director, Global Health
Section Director, Global Health Fellowship
Stephanie_Crane@rush.edu



Jacqueline Lagman, RN, MSN, CNL
Program Manager, Global Health
Jacqueline_m_lagman@rush.edu



Dina Rubakha, MEd
Global Health, Faculty Affairs
Dina_rubakha@rush.edu

OFFICE OF GLOBAL HEALTH

Armour Academic Center
600 S. Paulina St. Suite 1044
Chicago, IL 60612
Tel: (312) 563-0369
global_health@rush.edu

Please visit our website at:
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global_health@rush.edu

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