

Curriculum Overview

UW Global Emergency Medicine & Rural Health Fellowship Program 10/15/18

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The Global Emergency Medicine Fellowship program at University of Washington in Seattle has two unique pathways to prepare future leaders in Global Emergency Medicine. Our program is unique, flexible, and allows more international and field based time than most others, with a robust and fully funded curriculum including MPH, DTMH and formal coursework in humanitarian response in addition to funding for educational endeavors of the fellow's choosing.

There is a **Rural health pathway** with collaboration from *Partners In Health (PIH)*, and a planned program in **Humanitarian Emergencies focused pathway** based with partnership from *Medecins Sans Frontieres (MSF)*.

For the RURAL HEALTH PATHWAY

The Global EM and Rural Health fellowship is designed to prepare trainees for a career in global emergency medicine and rural health. Fellows in the Rural Health Pathway will:

1. Through an experiential and didactic curriculum, develop an understanding of the unique needs and challenges to providing emergency care within the Alaskan Tribal Health Consortium. This will include experience in the direct delivery of care as well as the opportunity to learn the role of tele-health for remote care and training in extremely rural settings. The trainee will work directly with community health aides and develop cultural competence in caring for Alaskan Natives.
2. Through an experiential and didactic curriculum, learn how to effectively advance the implementation of emergency medicine in an international, resource limited setting by partnering with an internationally renowned health care non-profit organization, PIH.
3. Develop the skills necessary for effective program development and implementation in resource limited settings (rural and international). This will include acquisition of knowledge and skills related to the performance of a needs assessment, program evaluation, and principles related to humanitarian field work (food security, water and sanitation, personal security and refugee health).
4. Develop research skills and conduct a research project culminating in academic publication or presentation to add to the growing body of literature focused on global emergency medicine and rural health.
5. Understand domestic and international public health issues, relationships between non-governmental and governmental organizations in disaster response, and the relationship between human health and human rights.

For the Humanitarian Emergencies focused pathway, the objectives are tailored to meet this focus:

1. Through an experiential and didactic curriculum, develop an understanding of the unique needs and challenges in providing emergency care within the Alaskan Tribal Health Consortium. This will include experience in the direct delivery of care as well as the opportunity to learn the role of tele-health for

remote care and training in extremely rural settings. The trainee will work directly with community health aides and develop cultural competence in caring for Alaskan Natives.

2. Advance the implementation of emergency medicine in the global arena.
3. Learn the principles governing effective humanitarian relief and disaster response including field experience with an internationally renowned disaster relief agency, for example MSF.
4. Learn techniques for evaluation of global health projects including needs assessments and program evaluation and skills necessary for humanitarian field work including knowledge in the fields of food security, water and sanitation, personal security and refugee health.
5. Develop research skills and conduct a research project culminating in academic publication or presentation to add to the growing body of literature focused on global emergency medicine.
6. Understand international public health issues, relationships between non-governmental and governmental organizations in disaster response, and the relationship between human health and human rights.

In addition to coursework towards the MPH degree, the fellow will be encouraged to participate in a unique curriculum to introduce concepts of social medicine and rural health, in addition to key components of international emergency medicine.

Fellowship Structure and Timeline

The fellowship program will be conducted over 2 years, starting July 1. The fellow will work clinically throughout the fellowship, for a total of 12 months in Alaska and 12 months internationally. The fellow will work quarterly in either location, with ideal sequencing as one quarter internationally in the first year, and 3 quarters internationally in the second year. Coursework towards the MPH and additional curriculum will be completed by the fellow throughout the 2 year timeline. The curriculum below outlines the learning goals for the fellow within both the Rural Health focused pathway and the Humanitarian Emergencies pathway (unless specifically stated), and is meant to prepare the fellow for fieldwork and a career in global emergency medicine and rural health.

The most robust portion of the curriculum will be in the form of rigorous coursework towards the **MPH**, which will be completed either as a distance learning degree through the London School of Tropical Medicine and Hygiene or equivalent. The degree will include specific coursework focused on global public health issues and fellowship leadership will assist the fellow in choosing courses within the MPH degree to focus on global health. If an incoming fellow already has an MPH, the funding may be put towards additional educational endeavors that fit within the learning goals for the fellowship.

Further learning objectives and curricula are described below:

Curriculum Objective (RURAL HEALTH PATHWAY ONLY): To introduce principles of Social Medicine, Social Theories for Global Health and to develop an understanding of the social determinants of health including incorporation of cultural, social, political and economic factors into the practice of medicine.

This will be accomplished throughout the fellowship, beginning with a Partners In Health sponsored course "Introduction to Global Health and Social Medicine". During this 10 day summer immersion course in Haiti, the fellow will join other PIH affiliated fellows and residents to gain familiarity with the work of PIH, the above mentioned principles, skills building including clinical training in treatment of chronic disease, TB and HIV in resource-poor settings, and gain experience with home visits and a mobile clinic.

During the first year the fellow will work with the Fellowship faculty to choose an appropriate international field placement with PIH or their partner organizations. The fellow will spend 12 months of the 24 months in their international placement with continued educational opportunities in social medicine through their clinical fieldwork.

Curriculum Objective: To lay a broad foundation in global emergency medicine including education in human rights, food aid and nutrition, water/sanitation, refugee health, and a unique opportunity for a field experience simulation exercise.

This will be accomplished by attending one of the following two courses at some point during the fellowship:

The HELP (Health Emergencies in Large Populations) course which is a 2 week intensive course offered by Johns Hopkins Bloomberg School of Public Health in joint collaboration with the International Committee of the Red Cross (ICRC) and the Johns Hopkins School of Nursing. This course focuses disaster management, food security, and specific health needs of populations made vulnerable by conflict and disaster.

http://www.jhsph.edu/research/centers-and-institutes/center-for-refugee-and-disaster-response/education_training/HELP/

and/or*

HHI Course Humanitarian Response Intensive Course (April Annually). The fellow is invited to a reserved student position in this course offered by Harvard University. The course is offered annually to health professionals to gain familiarity with the primary frameworks for humanitarian work: human rights, livelihoods, Sphere standards, international humanitarian law) and will focus on practical issues arising in the field including security, rapid assessments, and applications of the minimum standards for food security, shelter, WASH (Water/Sanitation/Hygiene) and operational approaches to relations with military and media in humanitarian settings. The class culminates in a 3 day field simulation exercise in rural Massachusetts.

Prior to attending either course, the fellow will be required to read the Sphere handbook. The Sphere Handbook is one of the most widely known and internationally recognized sets of common principles and universal minimum standards for the delivery of quality humanitarian response. Because it is not owned by any one organization, the Sphere Handbook enjoys broad acceptance by the humanitarian sector as a whole.

In addition, the fellow will be encouraged in their first year to complete this free online resource which provides basic education on water and sanitation if they feel this was not completely explored in either of the above two courses .

<http://ocw.jhsph.edu/index.cfm/go/viewCourse/course/WaterSanitation/coursePage/index/>

Curriculum Objective: Develop a cultural competence for care of native populations in Alaska including an understanding of challenges of care delivery within the rural United States, unique health issues of Native Americans living in Alaska, and the unique features of the health system including tele-medicine and the work of health aides.

This will be accomplished during the fellow's clinical time in Alaska including through orientation programs conducted with other UW Global Medicine fellows working in Alaska including review of the geography of Alaska, a visit to Alaska Native Heritage Center and review of materials on alaskanative.net

The Fellow may have a unique opportunity to teach clinicians within the aeromedical transport program, Airlift Northwest.

The fellow will have the opportunity to learn directly from WWAMI medical school faculty about the specific social determinants of health that affect Native Alaskans, including their communication styles, nutrition and traditional food preparation methods, beliefs regarding traditional healing methods and end-of-life rituals. They may audit the Circumpolar health course offered through the University of Alaska at Anchorage MPH program throughout the first year of their fellowship. This course description can be found at: <https://www.uaa.alaska.edu/healthsciences/mph/curriculum/courses.cfm>

Other learning resources include:

<http://dhss.alaska.gov/dph/Epi/Pages/default.aspx>

<http://www.epi.alaska.gov/id/botulism/Botulism.pdf>

The ANMC Site Director will assist in providing education on the role telemedicine, opportunities in tele-education for our fellows to teach the clinicians working in the village outposts, opportunities or ideas for quality improvement projects for the fellows to begin thinking about (Eg. building protocols for treatment of trauma etc.), and overview of the role/training of the Community Health Aides - Fellows will be messaged for how communities use Community Health Aides and how they provide much of the emergent local care and day to day screening that occurs at the village level. The fellow will be encouraged to review the Handbook describing this program <http://www.akchap.org/html/home-page.html> and shadow during a telemedicine call.

Curriculum Objective: The fellow will be encouraged to develop a broad understanding of the organizations, non-profit, governmental, and political which play a key role in humanitarian emergency response. This will be initiated during the fellows first year, and continue throughout the two year fellowship. The fellow will be encouraged to approach this goal via joining a specific organization, using social media such as twitter for up to date announcements/conflict reports/response opportunities, or by attending conferences. Below is a brief listing of opportunities for the fellow to explore:

Organizations/National & International

<http://physiciansforhumanrights.org/>

Conferences/Events

<https://www.cugh.org/events/2016-annual-cugh-global-health-conference>

<http://www.worldhumanitarianaday.org/>

Twitter feed

Fellows will be encouraged to follow social media as a potential source of early information in the event of a humanitarian disaster or as ongoing educational content. Example feeds include:

@unocha, @UNrightswire, @WFP (world food program), @refugees (UN Refugee agency), @UN_Spokesperson, @MSF, @ICRC, @reliefweb, @UWGHRC (UW Global Health), CDC @CDCgov, World Humanitarian Day [@dayhumanitarian](http://dayhumanitarian.org), Humanitarian News@HumanityNews or @humanitarian, IOM Office at the UN@IOMatUN, EU Humanitarian Aid@eu_echo

Curriculum Objective: Personal and Team Security: Prior to the initiation of any global travel, the fellow will be required to learn how to maximize their personal safety and that of their team. In addition to PIH specific security procedures, the fellow will complete the training below (4 hours online)

Fellow will learn the fundamentals of team and personal security needed for work in humanitarian crisis situations. This free course is offered online after registration as a UN consultant.

training.dss.un.org

Curriculum Objective: The fellow will have the opportunity to complete coursework towards a Degree in Tropical Medicine and Hygiene (DTM&H) with the goal of learning clinical tropical medicine to improve their clinical practice in tropical low- and middle-income countries.

This may be accomplished by courses taken through the London School of Tropical Medicine and Hygiene, or the GORGAS course in Peru, or through an equivalent online program of the fellows choosing. This will be conducted during the international portion of the fellow's second year. The GORGAS program is 8 weeks, and requires a separate application in advance, so planning must start early in fellowship to register.

Curriculum Objective: Research: The fellow will be encouraged to pursue an academic focus during their fellowship, and mentorship towards this will begin even prior to the start of fellowship through discussions with the FD. In the first month of fellowship, the fellow will meet in person with members of our UW Global health community to learn about their research focus, as well as have an introductory discussion of prior research experience, as well as identification of any specific areas of weakness (e.g., statistics, research design, mentorship) and areas of strength and focus.

The MPH will offer research methods including epidemiology and statistics, as a core foundation to the conduction of research.

The fellow will be encouraged to purchase and review the text, *Designing Clinical Research*, by Stephen Hulley et al, in the first 6 months of fellowship as an introduction to various research design methods.

In an effort to stimulate discussions and learning around conducting research in limited resource settings internationally, the fellow will be encouraged to attend the CUGH (Consortium of Universities in Global Health) research forum in April of their first year, as well as have quarterly review sessions with the FD of the Global emergency medicine literature review series (2011-2014 annual, published in *Acad Emerg Med*).

The fellow will work with the FD, mentors within our Division of EM and Department of Global Health, as well as MSF mentors, to develop a research project (either clinical or quality assurance) that will meet the MPH standard requirements for degree as well as field work. The project should be identified as early as possible, and the fellow will work with the FD to create the IRB, develop the research methods, and then carry out the research during the second year of fellowship.

Additional readings will be selected by the fellow as needed to stimulate research experience and ideas will include examples of published research in the field of humanitarian response.

Curriculum Objective: Wellness

We are working to develop a wellness curriculum for the fellow including skype based community journal clubs to connect the fellow to other global health fellows worldwide, an annual retreat, and participation in some of the ACEP wellness week activities.

Curriculum Objective: Ultrasound

Given the expertise of our faculty in the use of ultrasound in limited-resource settings, the fellow will have access to a strong component of ultrasound support from the Fellowship Director, including opportunities to teach/learn point of care ultrasound skills in Alaska and internationally. There will be ultrasound available at all the fellow's clinical sites, as well as a hand-held machine specifically only for the fellow during the program. The

fellowship director will provide timely QA and feedback on difficult scans, review with the fellow specific ultrasound content beyond usual Emergency Ultrasound skills which are pertinent to practice in limited resource settings, and the fellow will have the opportunity to teach others in point of care ultrasound at the clinical sites in Alaska and abroad.

Clinical Emergency Medicine

The fellow will work clinically as an attending physician in Alaska Native Medical Center's Emergency Department in Anchorage Alaska, and in at least 1 rural emergency department within the Alaska Native Tribal Health Consortium.

<http://anthc.org/>

The fellow's clinical experience as an attending physician will include clinical shifts in the Emergency Department at ANMC, as well as shifts in at least one rural emergency department at an outlying hospital, including Nome, Bethel and Barrows. The shifts will be split roughly 50% urban and 50% rural, though this is flexible based on clinical needs of the participating facilities and consideration of the fellow's prior experience and interests. When the fellow is at work in rural Alaska, efforts will be made to integrate the fellow into the rural community and engage in cultural events. The fellow will be given a Senior Fellow/Clinical Instructor title within the University of Washington School of Medicine. Fellows clinical duties will include 130 shifts over 12 months (Average 10-11 shifts of 9-13 hours each) for 12 months of the 2 year fellowship when they are not working internationally. On average fellows will work 32-33 shifts per quarter Annum spent in Alaska during the fellowship.

Alaska Native Medical Center (ANMC) is an award-winning, busy, urban 150-bed hospital in Anchorage and serves as a Level II trauma referral center (there is no Level 1 center in AK). Annual volume is 60,000 per year. It is a regional pediatrics center, with pediatric patients comprising approximately 10% of the total ED visits. ANMC is also a magnet hospital for nursing excellence. ANMC is a world-leader in tele-health and providers often work in outlying health centers to provide care in remote parts of Alaska.

The rural sites are remote, serving as critical access facilities for communities of 5000-10,000. The fellow will frequently be the only ED attending and only physician in the hospital overnight with a large degree of independence. The state of Alaska has a robust referral system for medical care to serve the entire state. Housing, vehicle and travel will be provided while working at the rural sites.

Evaluation Process

We are actively seeking fellows to assist us in continual improvement and evolution of the fellowship, and will accomplish this through regular opportunities for feedback and formal evaluation processes. Fellows meet with the Fellowship Director and Site Director regularly, including initial monthly meetings via Skype, and then quarterly meetings after the first 6 months. Fellows will receive a formal written evaluation every six months. The Chief of Emergency Medicine, Dr. Patti Paris, reviews fellows' clinical performance with Fellowship Leadership and the Fellow. International fieldwork is evaluated by field personnel and fellowship faculty. The fellowship curriculum is reviewed every six months by the Fellowship Director to ensure relevance to fellowship goals. The fellow will have the opportunity to review clinical, academic, and field experiences regularly with the Fellowship Director.

Global Health Faculty

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