

2012 Application for New Faculty Fellowship in Department of Anesthesiology

Fellowship Name	Global Health and Anesthesiology Faculty Fellowship
Fellowship Program Director	Anthony M. Roche MB ChB
Fellowship Faculty List and Expertise in Area*	<p><u>Peter Dunbar, MB ChB, MBA</u> Title: Associate Professor and Director of Finance – UW Dept. of Anesthesiology & Pain Medicine, Adjunct Associate Professor – UW Dept. of Health Services Research Interest / Expertise: 1) Deliverable Surgical Box: Shipping Container as a Platform to Increase Low and Middle Income Countries Access to Essential Surgical Care</p> <p><u>Adrian T. Bosenberg, MB ChB</u> Title: Professor and Director of Regional Anesthesia – UW Dept. of Anesthesiology & Pain Medicine Research Interest / Expertise: 1) Anesthetic challenges in a developing world environment, 2) Regional anaesthesia in neonates and infants 3) World Federation of Societies of Anesthesiologists (WFSA) - Member Pediatric Anesthetic Sub Committee, 4) Operation Smile Volunteer</p> <p><u>Anthony M. Roche, MB ChB</u> Title: Associate Professor – UW Dept. of Anesthesiology & Pain Medicine Research Interest / Expertise: 1) Duke Anesthesiology Global Health Initiatives Program, leading teams to Mulago Hospital in Kampala, Uganda</p> <p><u>David E. Liston, MD, MPH</u> Title: Acting Instructor/Senior Fellow – UW Dept. of Anesthesiology & Pain Medicine Research Interest / Expertise: 1) MPH in Global Health, Yale School of Public Health, 2) Prior global health research projects on Maternal- Fetal Health, children’s nutrition and pediatric health systems in Nigeria, China and Costa Rica respectively</p> <p><u>Nicholas Kassebaum, MD</u> Title: Pediatric Anesthesiology Fellow – UW Dept. of Anesthesiology & Pain Medicine Research Interest / Expertise: 1) Researcher - Institute for Health Metrics and Evaluation (IHME)</p>

	<p><u>Ryan J. Jense, MD</u> Title: Assistant Professor – UW Dept. of Anesthesiology & Pain Medicine, Adjunct Professor – UW Dept. of Global Health Research Interest / Expertise: 1) Systems design to improve health-care delivery, access, efficiency and quality to low income populations, 2) Defining resident physician level of interest in the delivery of care and education in low to middle income countries</p> <p><u>Satish Bhagwanjee, MBChB</u> Title: Professor- UW Dept. of Anesthesiology & Pain Medicine Research Interest/Expertise: 1) Critical care for vulnerable populations, 2) Sepsis management in low resource settings</p>
<p>Educational activities proposed (name, frequency and benefit to trainee)***</p>	<p>University of Washington, Department of Global Health <u>Contact:</u> Julie Brunett (Lead Graduate Advisor) Phone: (206) 543-7424 Email: jbrunett@uw.edu</p> <hr/> <p>The 1 Year Program UW Dept. of Global Health - Graduate Certificate in Global Health <u>Program Overview</u> A graduate certificate program is a linked series of credit bearing graduate courses that constitutes a coherent body of study and culminates in a capstone project. The Global Health curriculum emphasizes the sociopolitical, economic, and geographic factors that, in addition to biomedical factors, have an impact on health in developing countries. A hands-on experience in global health as it relates to the practice of anesthesiology is required. This 1 year program results in a graduate certificate in global health. For admission to this program prior international experience is not required, but strongly encouraged.</p> <p><u>Requirement Overview</u> Students will qualify for certificate upon completion of the following requirements. 1) COURSEWORK 15 credits of approved coursework - 7-8 Core credits taken from the Global Health Core Course List (see below)</p>

- 7-8 **Elective** credits taken from the Global Health Graduate Course Catalog

2) **WORK EXPERIENCE**

A global health experience (in anesthesiology)

3) **CAPSTONE PROJECT**

A culminating capstone project

Requirement Detail

1) **COURSEWORK**

Core Course List:

(4 quarters/year: AU/WI/SP/SU)

- **GH 500** Global Health Program Seminar (1credit) – AU/WI/SP (3 quarters total)

- **GH 511** Problems in International Health (3 credits) – AU only

1 of the following qualitative methods courses:

- **GH 531/EPI 539** Research Methods in Developing Countries (3-4 cr) – WI only

- **GH 537/HSERV 536** Qualitative Research Methods for Public Health (4 cr) – WI

- **GH 538/HSERV 521** Seminar in Advanced Qualitative Research Methods (3 cr) – SP

Elective Course List:

7-8 credits must be taken from the list of Global Health Graduate Courses

2) **WORK EXPERIENCE**

- A minimum of four weeks will be spent working in the field of anesthesiology in a low or middle income country. The main goal of this experience is to learn about the unique challenges involved in providing safe anesthetic care in these challenging settings. A portion of this experience will also involve the building of a sustainable exchange of knowledge through the use of lectures and small group discussion of anesthesiology topics headed by the faculty fellow. Each fellow will be supervised by a UW attending anesthesiologist during their international experience. The details (location, duration, etc) will be decided after agreement from the applicant and fellowship program director.

3) **CAPSTONE PROJECT**

- All participants must complete a culminating capstone project: a service or research project integrating aspects of global health that impact developing country populations. All students completing the certificate are required to present their capstone projects, typically at a special Capstone presentation session in the Spring quarter.

60/40 Split

60% of the fellowship year will be devoted to the above educational opportunities and 40% of the fellowship year will be devoted to time as a junior attending with clinical, supervisory and call commitments.

The 2 Year Program

UW Department of Global health, MPH – General Track

Program Overview

The core curriculum develops competencies in the basic tools of public health, including epidemiology, biostatistics, global health systems, environmental health, and social behavioral sciences. Courses in research methods and management are also required. An extensive hands-on experience in global health as it relates to the practice of anesthesiology is required. This two year program culminates in a master's thesis and results in an MPH in Global Health. For admission to this program, prior international experience is required. (This is a prerequisite by the Dept. of Global Health for admission into the MPH Global Health Track)

Requirements Overview

1) **COURSEWORK**

63 credits of approved coursework

- at least 18 credits taken from the Global Health Core Course List

2) **WORK EXPERIENCE**

A global health experience (in anesthesiology)

3) **MASTER'S THESIS**

Requirement Details

1) **COURSEWORK**

1st year

3 sequential quarters (AU-WI-SP) – *from Sept. to Mid June*

Total Credit Requirement: 63 credits (at least 18 from Global Health Curriculum)

Required Courses

GH 511 Problems in Global Health (4 credits)

GH 521 International Program Management and Evaluation (3 credits)

GH 500 Global Health Seminar (each in-residence quarter) (1 credit)

GH 593	Workshop (1 st three quarters in program) (1 credit)
ENVH 511	Intro. To Environmental and Occupational Health (3 credits)
HSERV 510	Society and Health (3 credits)
GH 595	MPH Practicum n(3-6 credits)
GH 700	Master's Thesis (9+ credits)

One of the following Assessment Courses

GH 531/EPI 539	Research Methods for Developing Countries (3-4 credits)
GH 532/EPI 586	Responsible Conduct in International Research (3 credits)

One of the following Biostatistics Courses

BIOSTAT 508	Biostatistical Reasoning for the Health Sciences (4 credits)
BIOSTAT 511	Medical Biometry (4 credits)
BIOSTAT 517	Applied Biostatistics (4 credits)

One of the following Epidemiology Courses

EPI 511	Introduction to Epidemiology (4 credits)
EPI 512, 513	Epidemiologic Methods I & II (8 credits)

Elective Courses

3 additional credits

2) WORK EXPERIENCE

- Between 2 and 6 months will be spent working in the field of anesthesiology in a low or middle income country. The main goal of this experience is to learn about the unique challenges involved in providing safe anesthetic care in these challenging settings. A portion of this experience will also involve the building of a sustainable exchange of knowledge through the use of lectures and small group discussion of anesthesiology topics headed by the faculty fellow. Each fellow will be supervised by a UW attending anesthesiologist during their international experience. The details (location, duration, etc) will be decided after agreement from the applicant and fellowship program director.

3) MASTER'S THESIS

The knowledge obtained from the course work and the experience obtained from the international work will culminate in the completion of a MPH thesis by the end of the second year. It is strongly encouraged that the applicant reside in Seattle during the final Spring quarter of the second year (March – June) in order to complete their thesis prior to graduation.

	<p><u>60/40 Split</u> 60% of the fellowship year will be devoted to the above educational opportunities and 40% of the fellowship year will be devoted to time as a junior attending with clinical, supervisory and call commitments. This split of educational and clinical duties will be averaged over a two year period with the first year being more class room based and the second year more clinically based. At a minimum 2 calls per month will be required during the three quarters that the applicant is enrolled in MPH classes.</p> <hr/> <p>Alternative Programs 1) If interested, an MPH degree in <u>Epidemiology</u> with electives classes in global health may be an alternative to the above program. 2) Applicants with an interest in <u>Health Metrics</u> and graduate-level training in quantitative methodology in one of the following areas: health policy, economics, mathematics, computer science, statistics, biostatistics, epidemiology, health service, demography, engineering, physics and medical sciences may be eligible for a post graduate fellowship at the Institute for Health Metrics and Evaluation (IHME). This would involve a 1 year fellowship at the IHME followed by a 1 year global health experience. The clinical commitments of a faculty fellow will also apply. Please refer to the program’s website for details: http://www.healthmetricsandevaluation.org/education-training/post-graduate-fellowship</p> <p>Other Resources <u>UW Residents and Fellows in Global Health (RFGH)</u> - The RFGH aims to connect UW residents and fellows to the expansive opportunities, programs and events related to global health in Seattle as well as nationally and abroad. This is partly accomplished with a Global Health Educational Training – International Topics Curriculum. http://depts.washington.edu/rfgh</p>
<p>Describe need for this fellowship in Anesthesiology?</p>	<p>In December of 2005 the WHO launched the Global Initiative for Emergency and Essential Surgical Care (WHO-GIEESC) program to address the lack of adequate surgical capacity as a global public health issue. The problem can be defined by the following statistic: 4 billion people undergo, 96.5% of all surgical procedures, whereas the poorest 2 billion people undergo only 3.5% of all surgical procedures.¹ The lack of access to surgical care in low and middle income countries is astounding. This issue is in large part because of a lack of adequately trained anesthesia providers in these countries.</p>

	<p>(The GIEESC program is chaired by Dr. Meena Cherian, a WHO appointed anesthesiologist.)</p> <p>The momentum in this field has also been evident by the formation of the Alliance for Surgery and Anesthesia Presence (ASAP). Their mission statement clearly states that their goal is “to help eliminate the disparities in premature death and disability that are amenable to surgical care through appropriate, sustainable and cost effective surgical solutions in low and middle income countries. These goals will be accomplished when emergency and essential surgery is considered a necessary component of global public health, and is available to those in need throughout the global community.” (ASAP was founded by Kelly McQueen, MD – an anesthesiologist and fellow of the Harvard Humanitarian Initiative.)</p> <p>These are two powerful examples of the reshaping of our global view of anesthesia and surgical care. If the University of Washington is to continue to produce some of the best and brightest anesthesiologists, developing a program that teaches fellows how to become leaders in this evolving field is a logical step. Furthermore, anesthesiology residents are continually attaining a more worldly view of their chosen profession and will be looking for training programs that will prepare them for a career in global health and anesthesiology.</p> <p><u>Reference:</u> 1. Abdullah, F. Troedsson, H., Cherian, M. The World Health Organization Program for Emergency Surgical, Obstetric, and Anesthetic Care. <i>Arch Surg.</i> 2011; 146(5):620-623.</p>
<p>What is innovative about this program?</p>	<p>Only a few anesthesiology programs (ie Stanford, Duke) are offering fellowship programs in anesthesiology and global health. There appears to be an emerging trend that the University of Washington is perfectly positioned to take advantage of given its resources and location. This type of program may serve as a recruiting tool for some of the countries top anesthesiology graduates looking for fellowships.</p>
<p>Why will this fellowship be successful at UW?</p>	<p>The University of Washington has long had a respected global health department within its School of Public Health. However, the formation of the UW Department of Global Health in 2007 through a \$10 million startup grant and \$20 million endowment from the Bill and Melinda Gates Foundation has helped to solidify its future and its standing in the global health community. This funding made it possible to bridge the schools of Medicine and Public Health into a unified Department of Global Health.</p> <p>The interest in global health as a profession has exploded in the last 10 years and has emerged as an entirely new academic field. The University of Washington has helped to foster this interest - most recently by</p>

	<p>hosting the third annual CUGH (Consortium of Universities for Global Health) Meeting. The interest in the UW Global Health program is so strong that currently 10 applicants apply for every 1 position in the global health MPH program. Furthermore, undergraduate students recently petitioned to have a global health minor added to the universities offerings. This increasing interest in global health has resulted in the department becoming the second largest at the University in terms of funding for research and training programs. Seattle is fast becoming a hub for global health with a number of NGOs and academic institutions that offer extensive expertise and experience in global health. This list includes the Bill and Melinda Gates Foundation, PATH, the Institute for Health Metrics and Evaluation, the Fred Hutchinson Cancer Research Center, the Infectious Diseases Research Institute, and the Washington Biotechnology and Biomedical Association just to name a few.</p>
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