

CENTER FOR GLOBAL HEALTH

1. Notable Accomplishments

Founded in 2001 as one of the nation's first pan-university Centers for Global Health (CGH), the University of Virginia's CGH builds on a 27-year program in Geographic Medicine. The Center's accomplishments and programs are in four areas:

- International collaborative research
- Training fellowships
- UVA student scholar projects abroad
- Global health curricula, speakers, and conferences at UVA

Collaborative research

- Continuing one of the country's longest sustained international collaborations in Northeast Brazil, through the 4th \$2.2 million competitive renewal of our NIH International Collaboration in Infectious Diseases Research UO1 funding for genetics and novel therapeutics to mitigate developmental impairment and address "Long-term Impact and Intervention for Diarrhea in Brazil." (This program started in 1989 and will now continue through April 2010; it is the only program in the country to exceed 2 cycles).
- Receiving a 2.8 percentile ranking on a new \$1.25 million 5-yr RO1 to elucidate the protective effects of APOE4 (the "Alzheimer's gene") against the cognitive impairment from heavy childhood diarrhea burdens (a new "balanced polymorphism" analogous to that of sickle cell-malaria). This grant involves collaborations with Dr. Peter Patrick at the Kluge Children's Rehabilitation Center.
- Building and sustaining international collaborations with institutions and sister Centers for Global Health in Philippines, Ghana, Haiti, Uganda and South Africa as well as Brazil.
- Publishing 4 new textbooks of Tropical Infectious Diseases and Parasitology (in addition to more than 200 collaborative publications with international colleagues).

Training

- Continuing our \$750,000 NIH Fogarty GIDRT (Global Infectious Diseases Research Training) grant.
- Sponsoring and mentoring 8 international CGH research fellows annually for training at UVA (more than 80 have trained here so far with a 100 percent return rate of CGH fellows to become leaders in their home countries and institutions after training).
- Dr. W. M. Scheld's \$2 million grant from the Pfizer Foundation to expand CGH training of US and international physicians and trainees in infectious diseases at UVA and in Africa and other developing areas.

Student scholar projects

- Renewing our \$810,000 Ellison Medical Foundation grant supporting UVA's Center for Global Health model to extend CGH scholar, fellow, and curricular opportunities from the SOM throughout the University (potentially \$1,458,000 if extended for 5 years).
- Sponsoring more than 50 UVA medical and university student scholars in 2005 in mentored global health research and service projects abroad.

- Engaging faculty from the schools of Medicine, Nursing, Arts and Sciences, Engineering, Education, Law, and Commerce as mentors to UVA students conducting projects abroad and international researchers training here.

Global health curricula and speakers

- Launching our 3-year \$405,000 Fogarty Global Health Framework grant enabling new course development in the medical school and across the University, including J-term courses, an undergraduate interdisciplinary global public health minor, a Global Health track in our MPH program, and an outstanding new speaker series in Global Health.
- Awarding 6 global health course development grants to faculty through a competitive university-wide selection process, and planning the first global health Common Course.
- Bringing outstanding visiting speakers for CGH lectures and seminars, including UVA Nobel Laureate (and CGH collaborator), Dr. Ferid Murad.

Other accomplishments

- CGH faculty serving as presidents of the American Society of Tropical Medicine and Hygiene and of the Infectious Diseases Society of America and serving on the Board on Global Health of the IOM.
- Launching our CGH endowment with an initial Brace contribution of \$41,000 and a commitment to raise \$250,000 over the next 5 years.

Planned but not accomplished and why

- Matching endowment efforts with Glenn and Susan Brace following a July 2005 meeting in New Orleans at Kate and Jim Rareshide McPhaille's home were not accomplished this year because of Hurricane Katrina which soon followed on August 29.
- Obtaining a \$20 million-\$30 million donation to name the Center/Institute for Global Health has not been accomplished because we have not yet identified the major donor(s).

2. Two-year Goals and Metrics for Success

Models for all of US

Our goal is to provide a model pan-university CGH that is based in the Health Sciences but engages all disciplines relevant to global health. It builds sustained collaborations across the entire University as well as with sister Centers for Global Health in developing areas abroad. Our purpose is to create a model that shows how top universities can dynamically address global health issues where responses are needed. Our specific goals for the next two years are to:

- Formalize the structure by which faculty from around the University have an association with the Center for Global Health that contributes to CGH's goals, helps them to incorporate global health into the academic teaching, research, and service missions of their respective disciplines and schools, and has the agility to respond to new crises or opportunities where they emerge.

- Link the Center for Global Health with the complementary Master's in Public Health track in Global Health by sharing teaching responsibilities and providing opportunities for mentored student global health research.
- Engage at least 10 UVa faculty in international collaborative research or global health related courses at UVa.
- Initiate a program where all fourth-year medical students have the opportunity to participate in a yearly "class project" in an underserved country.
- Assist our international collaborators in submitting at least 4 NIH or other grant applications to continue research based in their own institutions.
- Help UVa faculty submit at least 3 proposals for grants to build sustained collaborations in research, teaching, or service addressing health disparities.
- Continue the CGH interdisciplinary speaker series as a forum to bring together faculty and students from across the University.
- Share our model with other institutions by presenting at least annually at national conferences.
- Publish at least two articles on UVa global health programs in peer-reviewed journals.
- Host a symposium at UVa to showcase our model for a university-wide program in global health and provide information for other institutions wishing to emulate it.

Improving rankings

UVa's longstanding international collaborations have contributed to the success of our fellowship training program in infectious diseases and international health, which has attracted top fellows from Stanford, Duke, Cornell, Hopkins, Harvard, Yale, and other institutions. More recently, undergraduate and graduate student demand for our global health research and course opportunities have also increased. Comments from students, residents, fellows, faculty, and Deans of Admission to the School of Medicine and the College confirm that UVa's reputation in international health is an important draw and distinguishes us from other institutions. While there is no national ranking for programs in global health, UVa is perceived as a leader. Many of our former US fellows are now leading global health programs in other institutions.

To maintain or improve our standing, however, will require the ability to compete with the other global health programs now gaining prominence around the country. Hence, our goals include:

- Building the number of faculty involved in global health at UVa by engaging current faculty and attracting top new junior faculty.
- Ensuring an ongoing funding source for global health scholars (students designing and conducting projects in developing countries, under faculty mentorship).

- Ensuring an ongoing funding source for training fellowships at UVa for international collaborating researchers.
- Increasing the number of curricular pathways available to undergraduate, graduate, and professional students who wish to pursue global health.
- Strengthening the institutional structure that allows faculty and students from many schools and disciplines to collaborate with each other to address global health issues through research, curricula, symposia, mentoring, and international collaborations.

Two-year metrics for the above goals include:

- Hiring 2 junior faculty who may have joint appointments in the Center for Global Health and another department such as Public Health Sciences, who will serve as mentors to students or visiting fellows focusing on global health and whose research includes international collaborations in developing countries.
- Creating a global health track for medical students.
- Creating a global health track for the MPH program.
- Sponsoring the inclusion of cultural competency training in the undergraduate and graduate medical student curricula to support the development of health professionals with an increased ability to effectively treat international and culturally diverse populations.
- Developing an intensive research experience in global health for UVa Health System residents.
- Creating and implementing an undergraduate minor in global public health with 10-20 undergraduate students each year.
- Adding at least 5 regularly offered courses related to global health to the offerings for undergraduate, graduate, and professional students.
- Formally defining the privileges and obligations of membership in the Center for Global Health, open to faculty from any UVa department or school.
- Identifying funding sources to increase the endowment for scholars and fellows to engage across disciplines in global health.
- Increasing the number of global health scholars by 10 percent each year.
- Increasing the number of global health fellows by 10 percent each year.
- Supporting inclusion of global health curricula into 3 existing study abroad programs.
- Instituting mentor support as part of scholar and fellow awards (i.e., \$3,000 for the student; \$1,000 for the faculty mentor).

Improving operations

To improve operations and accomplish the above, we must strengthen the administrative structure necessary to retain the quality of our growing University-wide programs. This involves:

- Promoting and retaining existing staff and faculty whose experience provides critical administrative leadership as the program grows.
- Hiring at least one additional full-time staff member to manage communications and coordination of faculty, fellows, and student participation from across the University.
- Recruiting new junior faculty in the School of Medicine who can reach across the University and collaborate with faculty in other schools in mentoring students, teaching courses, and conducting international research.
- Raising sufficient endowment to support the actions listed in the above sections when current grant funding expires.

3. Five-year Goals and Metrics for Success

In addition to continuing work and expansion of the two-year goals, our five-year goals include:

Models for all of US

- Hosting an annual symposium at UVa, modeled after the one mentioned earlier, to provide a forum for university-based Centers for Global Health to present and discuss experiences and most productive approaches.
- Providing technical assistance to other universities and international collaborating sites through site visits and invited evaluation.
- Creating a fifth year global health opportunity for the undergraduate degree.

Improving rankings

Formal rankings in global health do not yet exist, but in order to maintain our reputation for excellence and opportunities in this area, we must:

- Further expand the number of CGH collaborating faculty by 50 percent.
- Create an undergraduate major in global public health. Expand global public health minor opportunities to other schools such as Commerce, Engineering, Nursing, and Education.
- Refine and increase enrollment in the global health curricular offerings for medical students and residents described above.
- Continue to ensure support for the growing scholars and fellows programs.

Improving operations

Over the next 5 years, to improve operations and accomplish the above, current space will become severely limiting. Further institutionalizing the Center for Global Health will require dedicated space in the new Carter-Harrison Research Building contiguous with the core strengths in Infectious Diseases and International Health.

In keeping with the principle that addressing global health problems involves more than medical disciplines, the Center for Global Health's effectiveness will depend on cross-fertilization with colleagues across UVa. For example, faculty in laboratory sciences such as infectious diseases, immunology, and microbiology may work closely with colleagues in engineering, economics, epidemiology, or cultural anthropology. Similarly, public health policy, law, and ethics bring vital perspectives on global health. Thus, our Center/Institute should evolve beyond our core in Infectious Diseases and International Health with satellites in Arts and Sciences, Nursing, Engineering, Law, Darden, and other departments and schools. To accomplish these goals we must:

- Double the space for CGH faculty, fellow, and scholar research in the new Carter-Harrison Research Building.
- Double the CGH space in the Corner Building to link medical and University-wide programs in global health.
- Endow 2 new professorships, including one for a new Institute for Global Health director.

4. Resources Needed and Barriers to Success

- Our ideas and model structure for a pan-university Center for Global Health are recognized and emulated by other universities as well as by the NIH Fogarty International Center (in their RFP for Framework Programs in Global Health). CGH faculty have been invited to visit or work with programs at Duke, Vanderbilt, Harvard, University of Washington, Boston University, and Emory, where Centers or Institutes of Global Health are being developed. Several of these institutions have raised endowments of \$30 million to \$100 million.
- We need to establish an endowment of at least \$20 million to \$30 million to create a named Institute for Global Health that can perpetuate what we have begun with ingenuity and grant funding and to retain our leadership position.