**Visitors**

- **Professor Uwe Siebert gives series of Advanced Research Seminars.**
  
  Uwe Siebert is Professor of Public Health and the Chair of the Department of Public Health, Medical Decision Making and Health Technology Assessment at the University of Health Sciences, Medical Informatics and Technology in Hall/Innsbruck, Austria. His current research focuses on cancer, cardiovascular disease, hepatitis C, HIV, inflammatory bowel disease, and neurological disorders. This April, he gave a series of Advanced Research Seminars for our PhD students about Causal Inference, marginal structural models and g-estimation (structural nested models).

- **Ursula Rochau spends the month of April at CHDS.**
  
  Ursula is a senior scientist at the Institute of Public Health, Medical Decision Making and Health Technology Assessment at the University for Health Sciences, Medical Informatics and Technology in Austria. She is a MD by training and has been working with Prof. Uwe Siebert for almost two years on policy models e.g., for chronic myeloid leukemia.

- **Emily Burger spends three months at CHDS.**
  
  Emily was visiting from the University of Oslo in order to work with the cervical team on a policy analysis for Norway. More specifically, the Norwegian government is currently considering cervical cancer screening strategies which utilize HPV testing for older women. She is working with the team to determine the optimal screening strategy within the context of the current vaccine program.

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**CHDS Welcomes**

**New Appointments**

- Zachary Ward has been appointed programmer at the CHDS. Zach joined the Center at May 1 after completing his MPH from the L’Ecole des Hautes Etudes en Sante Publique (EHESP) in Paris, France. His research interests are in programming simulations of disease in human populations, including mathematical modeling of infectious diseases and spatial analysis of chronic disease. His work will mainly focus on two projects: modeling cost-effective approaches to reduce maternal mortality and the development of an U.S. gastric cancer natural history model.

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Stephen Resch and Sue Goldie are part of the team led by Atul Gawande and Jonathan Spector that was awarded a grant from the Bill and Melinda Gates Foundation to conduct a large-scale randomized trial of the World Health Organization’s Safe Childbirth Checklist. The trial will be conducted in Uttar Pradesh, India. Using a computer model previously developed at the Center, the researchers will simulate the impact of health system interventions on pregnancy and childbirth related events over the course of women’s reproductive lives. Drs. Resch and Goldie will use the trial data to conduct cost-effectiveness analysis of the checklist intervention.

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**HSPH Comparative Effectiveness Initiative’s Faculty Retreat**

On April 27th, the HSPH Comparative Effectiveness Initiative held a faculty retreat at the American Academy of Arts and Sciences in Cambridge, MA. Faculty from 6 academic departments at HSPH, as well as Harvard faculty from the Medical School and the Faculty of Arts and Sciences gave short presentations on their research and discussed how these projects relate to the new national focus on comparative effectiveness research, stimulated by the passage of federal health care reform. Milton Weinstein chairs the HSPH CER Initiative established by Dean Julio Frenk in 2010. The other two initiatives are Women and Health, coordinated by Ana Langer, and From Genes to the Globe, for which the coordinator has yet to be determined.

Harvard college undergraduate, Nigel Deen, travelled to Sierra Leone this summer as part of the team investigating the burden of maternal mortality, specifically evaluating the quantity and quality of care that pregnant mothers receive in the country. Sierra Leone has one of the highest maternal mortality ratios (MMR) in the world, recently estimated at 2,100 deaths per 100,000 live births. Nigel is examining the cost-effectiveness of uterotonic drugs such as Misoprostol and other interventions. In Sierra Leone, he conducted a survey of health facilities and interviewed women in order to quantify the availability of maternal health resources. He hopes that conducting locally relevant research and gathering data will help the team critically evaluate potential policy options. Nigel and the rest of the team hope to link their research to the Sierra Leonean Ministry of Health’s maternal health objectives, which include: recruiting additional MCH aides, nurses, community health assistants and midwives; increasing the number of deliveries with skilled attendance; and improving the supply and affordability of basic essential drugs. Overall, Nigel hopes that the research will help illuminate why maternal mortality remains such an entrenched issue in Sierra Leone, and what viable changes can make a genuine difference.

Jane Kim has been invited to give a presentation at the International Papillomavirus Conference (IPV) 2011, which will take place in Berlin, Germany this October. Her talk is entitled “Cost-Effectiveness of HPV Vaccination and Screening in Developed Countries” and will provide a brief overview of models used for economic evaluation of cervical cancer prevention strategies, as well as key themes about the appropriate target population for HPV vaccination, optimal screening approaches, and the influence of uncertainties on policy conclusions.

Gathering Data on Maternal Services in Sierra Leone

Joshua Salomon was in attendance and presented his latest research on new quantitative tools for priority setting. On behalf of the Disability Weights Measurement Collaboration, Dr. Salomon explained the ongoing research on disability weighting as it relates to the Global Burden of Disease study. This landmark report was one of the first to take into account non-fatal outcomes as they related to the burden of disease and injury. The proper weighting of these outcomes is of the utmost importance if the burden measurements are to have any validity amongst investigators, policy makers and the general public. Dr. Salomon and his colleagues used personal interviews and internet-based questionnaires from several countries in which the participants were provided with two hypothetical persons of which they had to pick which one appeared healthier. They found that estimates of disability weights were for the most part lower than what had been found in prior studies. In addition, the weights chosen by participants between the different countries did not significantly vary, contradicting previous held theory that a cultural environment can have a large effect of disability weighting.

Overall, the conference proved illuminating, an opportunity for lively debate. It provided a framework and foundation for future interdisciplinary collaboration as health investigators from a myriad of background will hopefully continue their collaboration with a solid foundation of health methods and metrics.

Innovations in Measuring Disability Presented

The 2011 Global Health Metrics & Evaluation Conference, hosted by the Institute for Health Metrics and Evaluation, was held from March 14 to March 16 in Seattle, Washington. With a spotlight on “controversies, innovation and accountability,” the conference brought together over 600 academics and policy makers. The forum focused on issues related to the collection, analysis and dissemination of global health data as well as evaluation of the impact of various health measures.

As a conference with a central focus on interdisciplinary interaction, it hosted a range of important figures from across the global health spectrum, including the current Dean of HSPH Julio Frenk. The conferences covered key topics including optimization tools for priority setting and the need for more high-quality primary data in many developing countries. In addition, a focus on health inequalities was highlighted by presentations and posters which examined maternal and child health, as well as gaps in cancer survival.

"Sierra Leone has one of the highest maternal mortality ratios in the world."
In recognition and appreciation of her support of young scholars in their intellectual and professional development, Sue Goldie received the second annual Junior Faculty Mentoring Achievement Award. The award was given by Julio Frenk, Dean of the Faculty of Public Health, and her nominators Jane Kim, Matthew Miller, and Meredith Rosenthal. Professor Goldie was honored for her unusual generosity, not only with her time but in her commitment to treating junior colleagues as equals and selflessly promoting their success. She has been of particular help to those balancing the demands of work and family, encouraging their passion to pursue careers in public health.

Djøra Soeteman, postdoctoral research fellow at the CHDS mentored by Jane Kim, received the 2011 Travel Award from the Postdoctoral Research Association of the HSPH. She received $1,500 to attend the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) conference on comparative effectiveness research in Baltimore, MD. At the conference she presented her poster on risk-benefit analysis of depression treatment for children and young adults.

Dan Hogan, a student in the Decision Sciences concentration of the Harvard PhD Program in Health Policy, successfully defended his dissertation “Modeling Health Outcomes in Resource-limited Settings” at the end of the spring semester. His committee members were Professors Joshua Salomon (chair), James Hammitt, and Alan Zaslavsky. In his dissertation, Dan developed a new scaling method for deriving health-state valuations from ordinal response data, proposed improvements to the current UNAIDS projection model for HIV/AIDS epidemics, and generated revised estimates of national HIV prevalence for countries in Sub-Saharan Africa that are corrected for selection bias due to unobserved factors. Dan will work with Dr. Salomon as a post-doctoral fellow this coming year, continuing his work on HIV epidemic modeling, among other projects.


Burned Once but Looking Again: Decision analyst on rebound from crashed hard drive seeking clustered computing environment for local network runs. I’m fluent in the romantic languages (SAS, TreeAge, STATA, and R). Take this chance, debug my heart, the outcomes will be significant.

Missed Connection: Individual 3458 from lifetime chronic disease model seeking Individual 8210. We had made an emotional connection over several cycles in the disease-free state, until fate [random numbers] intervened as you moved to the mild adverse event state. When I arrived in that state 10 cycles later, you were gone. If we meet in a future sensitivity analysis, you will recognize me as the hypothetical patient with the real heart.
The Global Burden of Non-communicable Diseases

Despite the overwhelming burden of non-communicable diseases (NCDs) globally, there has been a dearth of research and lack of general concern regarding economic burden of NCDs. CHDS’s Thomas Gaziano and Cara Weinstein have joined the team of Harvard School of Public Health researchers under Professor David Bloom’s direction. The team is working towards a large scale report, Global Economic Burden of Non-Communicable Diseases for the General Assembly of the United Nations 66th Session and its summit on non-communicable disease in September 2011. The report will focus on five areas of non-communicable diseases, including cardiovascular disease, diabetes, chronic respiratory disease, cancer and mental health. The purpose of this timely report, supported by The World Economic Forum, is to gain the attention of world economic leaders by expressing the burden of non-communicable diseases globally, there has been a dearth of research.

CHDS Investigators Research Interventions to Reduce and Prevent the Global Burden of Hypertension

The UnitedHealth (UH) and National Heart, Lung and Blood Institute (NHLBI) Collaborating Centers of Excellence (COE) network is comprised of eleven centers spread across the globe in low and middle income countries (LMIC). The Centers in the network engage in collaborative work that addresses both individual, country-specific challenges and common, network-wide challenges, related to all aspects of combating chronic diseases. Recently, Tom Gaziano, together with Shafika Abrahams-Gessel and Cara Weinstein, has been working in collaboration with the COE network to access the cost of treatment and potential cost-savings interventions for treating and preventing hypertension in 33 low and middle income countries. The research set out to evaluate country specific treatment gaps and the upper limit of drug treatment costs to achieve improved blood pressure control, as well as the potential cost-savings in treatment for three widely promoted population-level interventions (i.e., salt reduction, increasing physical activity, and dietary changes through increased produce consumption). The implications for policy changes through this research are significant as the cumulative sample of countries in this study makes up approximately 80 percent of the developing world’s population and about 75% of the world's burden of both non-communicable diseases and cardiovascular diseases.


The IOM report. Promoting Cardiovascular Health in the Developing World, can be downloaded on the Institute of Medicine’s website.

CHDS Most Recent Publications


Haninger K, Hammit TK. Diminishing willingness to pay per quality-adjusted life year: Valuing acute foodborne illness. Risk Analysis 2011 [Epub ahead of Print].


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Sue Goldie Receives 2011 Junior Faculty Mentoring Achievement Award

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**CHDS Researcher Wins HSPH Teaching Award**

Jesse Ortendahl received the HSPH Teaching Assistant Award as part of the 2011 Commencement. Jesse, a researcher and distributive computing coordinator at the Center, was one of four teaching assistants conferred the award for his quality of teaching and overall effectiveness.

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**CHDS Updates**

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