

EPIDEMIOLOGY NEWS

January 2010

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STUDENTS AND FACULTY VISIT FRENCH SCHOOL OF PUBLIC HEALTH

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MSPH and EHESP students in Paris

Psychiatric Epidemiology Training fellow Katherine Keyes was among the inaugural group of Mailman students to visit the Ecole des Hautes Etudes en Santé Publique (EHESP) in Paris. Ms. Keyes, Emma Benn of Biostatistics and Ephraim Shapiro of Sociomedical Sciences, traveled to Paris with Epidemiology faculty members Drs.

Ezra Susser and Habib Ahsan to participate in the EHESP's Doctoral Network in Public Health Conference. The conference showcased outstanding and innovative research projects by both students and faculty, with the aim of encouraging the sharing of data, perspectives, and methods, and building new opportunities for research collaborations between the schools. The EHESP doctoral students were generous and gracious hosts, treating the Mailman students to meals, city tours and an outing to the historic cathedral at Reims. Ms. Keyes, Ms. Benn, and Mr. Shapiro came away very impressed by the EHESP students' work, and equally impressed by their hospitality.

ABOUT THIS NEWSLETTER

This monthly newsletter is part of the chair's office effort to improve departmental communication. It complements weekly emails from the Chair. The aim of the newsletter is to familiarize us with each other's work, to share ideas, and to build new opportunities for collaboration. Each month it will feature news, profiles of faculty, staff and students, and information about upcoming events and initiatives. This inaugural issue is a work in progress -- we will be refining the format in the coming months. Your input will make it a better newsletter, so please send feedback, ideas, and contributions to bpa2001@columbia.edu.



Columbia University
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EPIDEMIOLOGY NEWS

MESSAGE FROM THE CHAIR



Welcome to the first issue of our monthly newsletter. As we note on the first page, this newsletter aims to complement other communication from the Chair's office and aims to feature the achievements of Department faculty, students, and staff. In my first month on the job I have enjoyed meeting with many of you, learning from you, and brainstorming about how to make this great department the best it can be. Reaching that goal will take time, and it will take all of us working together. The chair's office will make ongoing clear communication one of the core elements of our work and we aim to make sure you have the information, resources, and opportunity to excel in your work.

There are two items I would like to highlight in this month's note. First, and centrally, please join me in thanking Bill Friedewald for his outstanding service to the department as Interim Chair from October 2008 through December 2009. I am delighted to announce that Dr. Friedewald has agreed to continue in the role of Vice Chair. In this capacity he will serve as a key member of the Chair's leadership team and, in particular, lead our junior faculty mentoring program and work directly with the curriculum committee on a planned revisiting of our course offerings. More details on both initiatives will be coming soon. We will be having a celebration in honor of Dr Friedewald on March 19. Details to follow.

Second, this month we will inaugurate the Columbia University Epidemiology Grand Rounds (CUEGR) with a talk by Sally Blower on February 10. CUEGR is designed to bring leaders in epidemiology to present their work to the department, develop links between the department and global leaders in the field, and create opportunities for academic exchange around key issues in epidemiology. The Epidemiology Seminar Series is also kicking off this month, with a talk by Fulbright scholar Wim Veling on the 26th. The series will provide a forum for departmental faculty, post-docs, and occasionally visiting faculty to present their research to colleagues.

I hope you find the information in the newsletter interesting. We are still working on format and aesthetics and hope to have a much more elegant newsletter unveiled over the next few months. But we wanted to hit the ground running with the January edition to have us on track for monthly newsletters in the coming year. Please send any and all feedback and thoughts about newsletter content to Barbara Aaron at bpa2001@columbia.edu.

Warm regards,

**Save
the
Date**

**Epidemiology and Biostatistics Faculty Mixer
Friday, May 7, 2010
4:00—6:00 Coogan's**

FACULTY PROFILE: RYAN DEMMER

Ryan Demmer is an Associate Research Scientist in Epidemiology. He's currently completing the first phase (K99) of a NIH career development award, and will embark on the second phase (R00) in August of this year as an Assistant Professor of Epidemiology.

Dr. Demmer has a general research interest in chronic disease risk factor epidemiology with specific focus on chronic infection and immuno-phenotype as a risk factor for cardiovascular disease and diabetes development. He has been particularly involved in methodological work regarding optimal methods for modeling periodontal infection (a chronic, diffuse, infectious disease) as an exposure for coronary and cerebrovascular disease as well as type 2 diabetes mellitus. He also has molecular epidemiological expertise in the context of gene expression microarray research methods.



Dr. Demmer has been involved in several collaborative projects domestically and internationally and is currently initiating a collaborative NIH funded cohort that will study whether baseline exposure to known periodontal pathogens is associated with progression of diabetes risk factors longitudinally. This research will assess the longitudinal trends in fasting glucose, insulin resistance and beta-cell dysfunction among individuals with varying degrees of exposure to pathogenic bacterial colonization. This research promises to advance the scientific knowledge regarding the well-known association between infection and type 2 diabetes mellitus through its provision of an appropriate epidemiological study design appropriate for addressing temporality. An additional aim of this research is to initiate transcriptomic and proteomic studies in PBMCs for the development of novel diabetes risk algorithms.

Within the Department of Epidemiology, Dr. Demmer serves as a co-investigator on The Oral Infections and Vascular Disease Epidemiology Study (INVEST), an ongoing NIH funded cohort study investigating the role of oral infection in the initiation and progression of carotid artery atherosclerosis and subsequent development of clinical cardiovascular disease. Dr. Demmer is also engaged in collaborative research with colleagues in the College of Dental Medicine, Division of Periodontics, which explores novel gene expression signatures relevant to oral infection, inflammation and atherosclerotic vascular disease risk. In addition, he is actively collaborating on projects in the College of Physicians and Surgeons, Division of Cardiology, investigating the interplay between venous congestion and the immuno-inflammatory phenotype of the vascular endothelium in the context of acutely decompensated heart failure.

He is also working to develop a centralized infrastructure for collaborative multidisciplinary analysis and publication of The Nation Health and Nutrition Examination Survey (NHANES) data sets. The ongoing collaborations are focused on testing population-based hypotheses relevant to novel risk factors for the initiation and progression of chronic vascular and metabolic diseases.

Dr. Demmer has taught both introductory and advanced epidemiology methods courses with a focus on applied analytical methods. He teaches the Applications of Epi Research Methods course (P8483) offered in the spring semester.

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STUDENT PROFILE: DANA MARCH



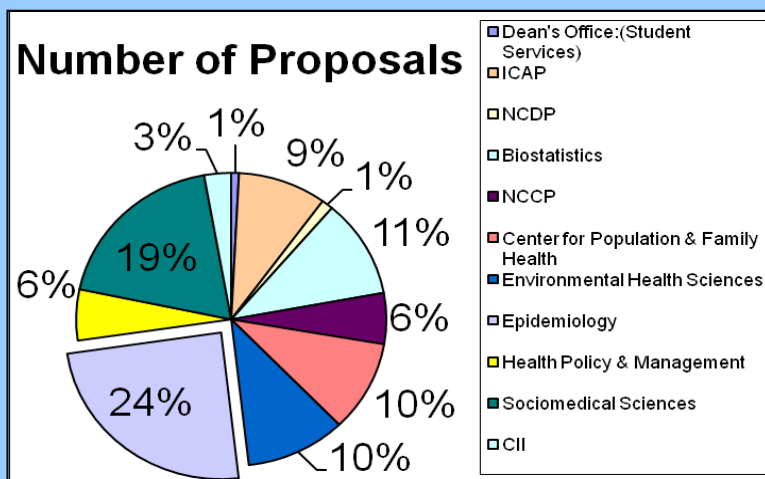
Dana March will be defending her dissertation, "Place, Race, and Psychosis" in the coming weeks, but as usual, she has a lot more going on. She's a core member of the Center for the Study of Social Inequalities and Health and co-investigator on two health disparities R01s with Bruce Link. As of this writing she is a finalist in the Robert Wood Johnson Health & Society Scholars program. And she has just joined the Office for Special Populations and the Office of Global Mental Health at the National Institute of Mental Health, where she'll be characterizing the impact of mental health disparities research, and helping to shape a nascent program in global mental health.

Ms. March received the 2009 William Farr Award in Epidemiology in recognition of her commitment to understanding social inequalities in health. Her work addresses the role of place in mental health, and she has examined the intersection of race and place of birth and risk of schizophrenia in adulthood. Her preliminary research shows that 1) those born into more densely populated neighborhoods are at twofold to threefold greater risk of schizophrenia in adulthood compared to those born in less dense areas, irrespective of race, and 2) blacks born into racially diverse neighborhoods are about ten times more likely to remain free of schizophrenia later in life, compared to blacks born into predominantly black neighborhoods and blacks born into predominantly white neighborhoods. Ms. March says, "Place matters for schizophrenia, and perhaps race matters because of structural forces that locate minority populations in specific contexts or expose them to deprivation and discrimination, or alternatively, protective aspects of diversity."

Dana has also been engaged in the Center for History and Ethics of Public Health and has co-taught the History of Epidemiology course. She's also been an instructor in the Introduction to Epidemiology core course and the Reading Seminars in Psychiatric Epidemiology. Dana's work has been published in *Epidemiologic Reviews*, the *International Journal of Epidemiology*, the *American Journal of Psychiatry*, and *Psychological Medicine*. She recently co-authored an opinion piece in *Newsweek* with Laurie Garrett on the long term consequences of failing to immunize for the H1N1 virus. We wish Dana well and look forward to working with her in the future!

EPIDEMIOLOGY LEADS SCHOOL IN PROPOSALS SUBMITTED

During the first six months of the fiscal year, the Department of Epidemiology submitted 61 grant proposals requesting \$36,245,065 (\$26,432,662 direct costs and \$9,812,403 indirect costs) in funding for sponsored research. This represents a 49% increase in the number of proposals by Epidemiology faculty (excluding CIDER and CII) over the same period last year. Once again, Epidemiology lead the Mailman School of Public Health in total number of proposals submitted; our grant submissions accounted for 24% of all proposals during this period.



FEATURED ARTICLES



First author Parisa Tehranifar, DrPH, assistant professor of Epidemiology

Cancer Survival Disparities for Most Minority Populations Increase as Cancers Become More Treatable

Racial and ethnic disparities in cancer survival are greatest for cancers that can be detected early and treated successfully, including breast and prostate cancer, according to a study by investigators in Epidemiology, the Center for the Study of Inequalities and Health, and the Herbert Irving Comprehensive Cancer Center. Disparities are small or nonexistent for cancers that have more limited early detection and treatment options, such as pancreatic and lung cancer. The findings, published in the October 2009 issue of [*Cancer Epidemiology, Biomarkers, and Prevention*](#), highlight the need to develop specific health policies and interventions to address social disparities.

Exposure to Tobacco Smoke in Childhood Home Associated with Early Emphysema in Adulthood

Children regularly exposed to tobacco smoke at home were more likely to develop early emphysema in adulthood. This population-based research is the first to examine the association of childhood ETS with early emphysema by CT scan in nonsmokers. The finding suggests that the lungs may not recover completely from the effects of early-life exposures to tobacco smoke (ETS). The study is published in the December 2009 [*American Journal of Epidemiology*](#).



First author Gina Lovasi, PhD, MPH, assistant professor of Epidemiology

BRIEF MENTIONS

Preventing Pedestrian Injuries and Deaths

Dr. Charles DiMaggio wrote to the New York Times to draw attention to the neglected problem of pedestrian injuries and fatalities in suburban areas, noting that the poorest and most densely populated communities suffered the most. <http://www.nytimes.com/2010/01/31/opinion/lweb31suburb.html?>

Passing of a colleague in the field

Lawrence Garfinkel, a leader in cancer epidemiology, Columbia alumnus, and friend and colleague of several of our faculty members, passed away in January. Dr. Garfinkel helped to design the earliest studies linking smoking with lung cancer.

<http://www.nytimes.com/2010/01/27/health/27garfinkel.html?ref=obituaries>

FEATURED GRANT: PREDICT

Stephen S. Morse Named Director of USAID Early Warning Project**Initiative will monitor diseases that move between animals and people to prevent next pandemic**

A new project -- PREDICT -- has been created with up to \$75 million in funds over five years from the U.S. Agency for International Development's (USAID) Emerging Pandemic Threats Program to develop a global warning system for newly emerging diseases and to anticipate and prevent emerging infectious diseases that move between animals and people in order to prevent the next global pandemic. Stephen S. Morse, Ph.D., professor of clinical Epidemiology and former director of the Center for Public Health Preparedness at the Columbia University Mailman School of Public Health, was named director of the PREDICT program.

PREDICT is being funded by USAID to help prepare the world for infectious diseases like H1N1 flu, avian flu, SARS and Ebola. The program is a major component of USAID's overall Emerging Pandemic Threats (EPT) program, which builds on the successes of USAID's long-standing efforts in developing global health capacity and disease surveillance, training, and outbreak response, particularly those addressing avian and pandemic influenza.

The PREDICT program that Dr. Morse will direct includes a consortium of organizations led by the School of Veterinary Medicine of the University of California Davis. The other organizations in the PREDICT consortium include the Wildlife Conservation Society, Wildlife Trust, Global Viral Forecasting, Inc., and the Smithsonian Institution. The concept of 'One Health' -- that human, animal, and environmental health are inextricably linked and should be considered holistically -- is a core principle of the PREDICT effort.



UPCOMING: FEBRUARY AND MARCH 2010

February 10	CUEGR: Sally Blower
February 19	Epi Faculty Meeting: Finances
February 17	Dean's Grand Rounds: Kristi L. Ebi
February 26	Epi Department Seminar: Wim Veling
March 10	CUEGR: Sonia Hernandez-Diaz
March 12	Epi Faculty Meeting: Vision and strategic direction
March 19	Epi Social: Honoring Bill Friedewald
March 24	Dean's Grand Rounds: Michael Marmot