

# epinonitor THE EPIDEMIOLOGY MONITOR

A monthly update covering people, events, research and key developments

### Samet Delivers NIH Gordon Lecture On "Big Epidemiology for Big Problems"

### Talk Could Have Been Labeled "The Times They Are A-Changin"

Big Epidemiology for Big Problems is the attention-grabbing title used by <u>Jonathan Samet</u>, USC epidemiologist, in delivering the 17th annual <u>Robert Gordon</u> Lecture at NIH. Without being too specific about the definition of big, he described big problems as those with a heavy disease burden, a high percentage of the population exposed, a high relative risk, extensive costs to society, or posing a big future disease risk. On the Big Epidemiology side, Samet included studies with large sample sizes, large amounts of data, a

large budget, and/or conducted by a multidisciplinary team.

### Main Purpose

Actually, Samet's main purpose in the talk was to provide his perspective on the future directions of epidemiology as the field continues to change in pursuit of its overall goal to understand what drives human health. An alternative title for Samet's talk could have been taken from one of his slides, "The Times

-Samet Lecture, continues on page 2

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-Samet Lecture, con't from page 1 They Are A-changin"

"a new era dawned at the millennium."

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### **Earlier Era**

In the earlier era, according to Samet, "...epidemiologists carried out small studies that answered big questions. They found that smoking caused lung cancer and heart disease and that reproductive patterns determined breast cancer risk. One investigator, driven by curiosity, could start and end one study."

The classic example of the successful lone investigator is the story of John Snow and the London cholera outbreak. For other triumphs in epidemiology such as smoking and lung cancer, the number of investigators per study remained relatively small.

### A New Era Now

According to Samet, "a new era dawned at the millennium. We entered a time of technology-driven change, large data sets, and genomics. The age of clinical/translation research began." During this period, the growth of multiauthored papers has been significant with increases in papers written by 50, 100, and 200 authors. The most striking increase in recent years has involved the rise in papers authored by more than 500 persons!

### **Other Trends**

Among the other changes noted by Samet are 1) the growth of health systems based research and electronic medical records, 2) the use of systems approaches to tackle problems, 3) increased data sharing and access, 4) a view of research as a public good with its associated demand for greater

accountability, 5) the emergence of new disciplines like bioinformatics, and 6) an increase in the creation of networks and networking to address problems.

Samet called these changes a paradigm shift and illustrated each from his own career. For example, he admitted he was not keen on data sharing after working hard for ten years to collect data for his first study. However, he stated he has changed his mind on this issue and now supports data sharing.

### Model of a Public Health Problem

Also, Samet described the use of a model depicting the pathways from experimentation to disease to assess the impact of menthol cigarettes on public health. The model, recently described in the NEJM was helpful in pointing out the actual places in the pathway where epidemiology could be useful, while at the same time illustrating that epidemiology was not by itself the whole answer to solving this public health problem.

### Impact on Epi Careers

According to Samet, these paradigm changes have implications for the careers and training of epidemiologists. Right now, he said, "...we are training epidemiologists the way we used to," and he believes that the time has come to rethink this training. Is it necessary for students to carry out their own cohort study or is best for them to learn to download data to be used as part of a larger undertaking? How can young scientists become independent scientists in this environment? Should they become team members or team leaders? And how do scientists gain credit for their contributions?

-Samet Lcture, continues on page 8

### **Investigation Recap:**

### A Behind The Scenes Look At The Worst Lead Poisoning Outbreak On Record

Last month we reported on an investigation of an unprecedented lead poisoning outbreak in Nigeria (Epi Monitor April 2011) which won the Singal award at CDC's recent Epidemic Intelligence Service Conference in Atlanta. Since then the Epi Monitor has learned that the organizations investigating and responding to the outbreak have been named the 2011 winners of the Green Star awards for "environmental heroes working in disasters and emergencies". What remained unclear from that initial report are the details of how the outbreak was actually detected, a topic of special interest to epidemiologists and others conducting disease surveillance.

### Assumptions

Whenever outbreaks happen they are by definition a departure from the usual rate at which disease occurs and thus may be readily detected or reported via routine surveillance activities, perhaps by an observant clinician, or by members of the affected population. And the events in this outbreak were certainly unusual since the death rate was as high as 30% of all children under five years of age in some villages, according to Jane Greig from Médecins Sans Frontières (MSF) or Doctors Without Borders.

In fact, it appears that none of these pathways produced an early or effective alert, and the behind the scenes story of how the outbreak came to be detected and the response carried out reveals much about the incredibly harsh conditions and complex public health problems in some poorer areas

of developing countries.

The following account has been pieced together from documents and interviews with MSF epidemiologists Jane Greig and Todd Swarthout, and fact checked with other MSF staff working on the outbreak (Lauren Cooney (health advisor for the emergency desk), Natalie Thurtle (current health advisor for the project), and Leslie Shanks (medical director). MSF was the first group of public health professionals to identify and respond to the outbreak which the British Medical Journal called the worst heavy metal contamination incident on record worldwide.

"...organizations investigating and responding to the outbreak have been named the 2011 winners of the Green Star awards for 'environmental heroes working in disasters and emergencies'".

### **Origins**

The outbreak came to attention of MSF at the end of March 2010 when a team doing regular "emergency surveillance" for meningitis visited villages in the area of northern Zamfara state. These teams are fielded regularly by MSF looking for early signs of epidemic-prone diseases such as meningococcal meningitis. The team was informed of sick children, and a large number of deaths were reported to them, however, the symptoms did not fit clearly with likely local causes of illness such as meningitis or malaria, and the onset of cases predated the usual onset date of the seasonal meningitis cases. Furthermore, treating the sick children for these conditions had no impact.

### **More MSF Investigation**

MSF and Ministry of Health (MoH) teams provided 24hr medical care in

- Lead Poisoning, continues on page 4

"Furthermore, treating the sick children for these conditions had no impact." -Lead Poisoning, con't from page 3

"...lead was clearly the problem, with all samples having levels far exceeding the threshold for urgent treatment."

"MSF knew that no other organization was likely to neither respond quickly enough nor have the operational ability to work in such a difficult environment, so they decided they had to do it."

the villages from the start of April, and on April 8, an MSF epidemiologist, medical coordinator and assistant medical coordinator visited two villages, saw children at the local health posts, and talked with villagers. Investigators began to suspect the illnesses were linked to the observed crushing and grinding of rock going on in village households as part of mining activities in the area, with heavy metal poisoning a strong differential diagnosis. Suspicion centered initially on mercury poisoning since it is used in the process of gold mining and inhabitants doing the mining had evidence of mercury on their hands. In agreement with the MoH, the investigators took blood samples which had to be sent to a laboratory in Germany for heavy metal testing. Although mercury poisoning was considered, the clinical picture pointed more to lead intoxication. The blood test results, which were delayed for days because of ash clouds over Europe from a volcano in Iceland, showed that lead was clearly the problem, with all samples having levels far exceeding the threshold for urgent treatment.

### **Important News**

The diagnosis of lead poisoning was important news because the team now knew that chelation therapy is an effective medical intervention.

However, it was not readily available in this part of the world, so all that the MSF physicians could provide at this early stage was supportive care for symptoms such as fever and convulsions. In effect, they were working long hours, but only buying time for children who were likely to die until chelation therapy could be obtained. And this was hard on the doctors, said Greig and Swarthout.

A New Mission

Discussions within MSF headquarters ensued about what should be the MSF response. The organization has an "Emergency Desk" to manage the critical phase of emergency interventions, and this clearly was a situation where more children would die without treatment. However, what to do was not an easy decision. MSF had never provided such therapy before and knew little about it. The advice of organizations such as CDC / WHO and toxicologists would be critical to making an effective response. However, MSF knew that no other organization was likely to neither respond quickly enough nor have the operational ability to work in such a difficult environment, so they decided they had to do it. In early May, MSF worked out what scope their response should have.

As soon as MSF had results, they sought, and encouraged the Nigerian Ministry of Health to seek support from the USA Centers for Disease Control and the World Health Organization. Chelation therapy was sourced and the Ministry of Health had to give permission to import the drug into Nigeria.

### Logistics

MSF has strong logistics capacity, but the challenges involved in providing such therapy under the harsh conditions found in the villages were daunting. For example, MSF could not administer treatment in the villages where the patients lived since these dwellings were still contaminated and would result in ongoing exposure to lead. So they had to set up special treatment centers in 2 local government hospitals in areas provided by the local government in the big towns nearest the first 2 villages found to be affected. MSF

-Lead Poisoning, continues on page 6

### Mississippi Epidemiologist Loses 58 Lbs And 22% Of Body Weight To Win Fitness Challenge

The well-known Nike slogan "Just do it" might best explain Mississippi epidemiologist Larry Smith's decision to join the Fit 4 Change Fitness Challenge in his home town of Jackson Mississippi. Smith, a staff officer in the Division of Medicaid in the Office of the Governor, received an email last year inviting him to apply for a slot in an annual event in January designed to get legislators and others to lose weight as an example for others. Mississippi ranks high in the United States for having the most obese residents.

Smith told the Epi Monitor that he had struggled with his weight for many years and decided that at age 63 and weighing 262 lbs at 5'10", he could just not put off losing weight any longer. He said he felt miserable, and worn out, especially after playing with his three grandchildren. I wanted to feel better about myself, he told the Monitor, live longer and be around to see my grandkids achieve their life milestones.

### **Secret To Success**

When asked about his secret to success, Smith replied "I just did what they told me to do." Well he did that much and more to win the competition which included approximately 200 other contestants. For one thing, he persevered despite feeling like he was going to die after the first day's exercise and thinking "there's no way I can finish this."

### Schedule

Beginning in January, Smith arose at 4am five days a week to drive to a boot-camp like exercise session beginning at 5 am for one hour. In

addition, he spent an hour on a treadmill every evening. Also, he learned to like new foods. "My weakness, he told the Monitor, is mayonnaise. I like to smother my sandwiches with it. However, since January I have learned to substitute fat free Greek yogurt and found that very acceptable."

### **More Loss**

Smith's success did not end after 12 weeks. In the last month and a half, he has continued to lose weight and how has lost a total of 70 lbs. According to Smith, he runs 6 miles per day about every day, does aerobic step exercises, and even some kick boxing. Overall, he estimates that he exercises about two hours per day on average. On the food side, he eats more vegetables, and white meat such as chicken and fish, and he has largely cut out red meat. I learned he said that it takes a combination of both increased exercise and a better diet to lose weight.

Smith has objective evidence of improving his health. His blood pressure in now in normal range (120/80), his glucose is normal, and his cholesterol dropped by 50 points, he said.

### **Epi Perspective**

Asked if being an epidemiologist gave him any advantage in his fitness challenge, he said no. Although he knew what to do for a long time, he said that did not make it any easier for him. However, he admitted that understanding what was happening to him and why his plan was working

-Epi Weight Loss, continues on page 16

"...he felt miserable, and worn out, especially after playing with his three grandchildren."

"...he persevered despite feeling like he was going to die after the first day's exercise..."

-Lead Poisoning, con't from page 4

had to resolve issues of providing adequate power and water, finding additional staff and adequate housing for them, and obtaining food and accommodations for the caregivers and other siblings who accompanied the sick children to the therapy site.

### **Testing and treatment**

CDC was able to bring in portable machines to test blood lead levels of children in large numbers locally. They also brought a team from TerraGraphics who confirmed the source and extent of the exposure, as well as provided emergency plans for remediaton, which is a key contributor to recovery of children. Some of the initial blood levels were "astronomically" high, according to Greig. This provided an extra challenge to in-field testing, since almost all levels were above the upper limit of the portable machines capacity, so a dilution protocol had to be devised and validated by the field team and experts at CDC headquarters. In Europe, children might get 4-5 rounds of treatment for much lower lead levels over a course of a couple of years. In Nigeria, some of the children have needed more than 10 rounds of treatment already, in less than 1 year! And family support was required for many days since the initial course of treatment given by MSF was for 28 days as an inpatient. The magnitude of the challenge was considerable since essentially every child under five in the first-known affected villages was at risk, and there were hundreds of sick children to treat.

Rapid impact

One positive aspect of the episode was the quick impact of treatment: some children came to the treatment center in a coma or no longer able to walk and showed rapid improvement with treatment, starting to walk again within just a few days. However, this posed additional challenges since it was a huge burden on families to send children to the treatment centers, and the caregivers wanted to return to their villages when children appeared much improved even though their treatment was not complete. However, some children remain with severe neurological sequelae.

### **New Protocols**

This challenge of maintaining patient compliance has been reduced since, in collaboration with an expert panel, MSF has been able to innovate and modify its treatment protocols from what they were in the early days. Inpatient treatment has been replaced largely by outreach teams that are able to go to the villages and give children oral tablets for a standard course of 19 days.

#### **Data For Action**

During the early outbreak investigations, routine patient line lists were recorded to review symptoms of the unknown condition and develop a case definition, and "quick and dirty" survey data was collected to obtain a rough estimate of death rates, which even if somewhat inaccurate were still "ridiculously" high, according to Greig. Once the cause was identified and chelation therapy was available the death rates dropped dramatically. A database was set up to record treatment information, which has improved over time to meet changing project needs. Information about the personal characteristics of patients, treatment courses, and blood sample results at different times during treatment has been collected. With this information, MSF has been able to make informed

-Lead Poisoning, continues on page 8

machines began appearing in the villages as more households took on mining activities late in 2009."

"...grinding

"...some of the children have needed more than 10 rounds of treatment..."

### McMaster's Stephen Walter Selected To Write Essays About Epidemiology For the General Public

The People's Epidemiology Library (PEL) has selected Stephen Walter, professor in the Department of Clinical Epidemiology and Biostatistics at McMaster University in Hamilton Ontario Canada, as the winner of its essay contest to write short essays explaining to a wider public the main topics of epidemiology methods and concepts. Walter beat out other entrants in the contest on the basis of his credentials and experience in epidemiology, a brief outline conveying the general approach he would take in writing the essays, and a sample of his writing style.

Other applicants included a faculty member from Saint Louis University School of Public Health, a medical doctor with a PhD in epidemiology working at NIH, an assistant scientist from the Johns Hopkins Bloomberg School of Public Health, and an assistant professor in the University of Minnesota School of Medicine.

The prize for winning the contest is \$4,000 to cover travel expenses to the IEA World Congress of Epidemiology in Edinburgh Scotland in August 2011. Sponsors of the PEL expect to officially launch the Library website at that meeting and to publish a first draft of the essays at that time (see related interview in this issue).

We contacted Walter to ask him his thoughts about the contest and his plans for writing the essays. Here is what he told the Epidemiology Monitor:

**EM:** How did it make you feel to learn you were selected to write the essays?

Walter: I was surprised and delighted to hear that I had won. Because this is the first competition of its type that I had heard of, I had no idea of the level or amount of competition that might be out there. By coincidence, I did my graduate studies at the University of Edinburgh, so being able to re-visit one of my favorite cities was an added bonus.

**EM:** What motivated you to want to do this in the first place?

Walter: I saw the announcement in the Epidemiology Monitor, and was attracted by the idea of writing about Epidemiology for the general public. This is an area that many of us in academic epidemiology do not often do, but I think it is a very important thing to pursue.

**EM:** What made you think you might be good at doing this?

Walter: I have worked in various domains of epidemiology during my career, including risk factor etiology, public health, and, more recently, clinical epidemiology. I thought that experience would give me a broad base to comment on our discipline.

As part of the competition process, applicants were asked to provide an example of their writing aimed at a general audience. I happen to be a member of a local symphony orchestra, and I write the concert program notes for it. The audience members reading those notes range considerably, from people who know the music in great

-Stephen Walter, continues on page 14

"The prize for winning the contest is \$4,000 to cover travel expenses to the IEA World Congress of Epidemiology..."

"...I think it is a very important thing to pursue."

Samet noted that this latter point is becoming more of an issue in academia where promotion letters highlighting team contributions are being read by bench scientists on promotion committees who do not share the same appreciation for "team science". Such science has not yet drilled down very deep into the way many scientists think, according to Samet.

### **Optimism**

Samet was careful in his talk to make sure that listeners did not interpret his stance on epidemiology to be a pessimistic one. He said he is optimistic about epidemiology and would not want any young persons to change their mind about such a career path based on his assessments. He brought up a favorite quote from former Governor Richard Lamm of Colorado to buttress his point. He stated in 1986 that "the major factors that brought health to mankind were epidemiology, sanitation, vaccination, refrigeration, and screen windows."

Samet closed his talk by noting further that epidemiology's appeal is its potential to save lives, not one at a time, but millions at a time. To view a video cast of Samet's Gordon Lecture, visit <a href="http://videocast.nih.gov/pastevents.asp?c=0&s=21">http://videocast.nih.gov/pastevents.asp?c=0&s=21</a>

Join the discussion online at Talking Epidemiology (www.epimonitor.net) about the implications and impact of these changes on the careers of epidemiologists in academia and in other sectors.

decisions about patient management and protocol modifications. The data permit not only retrospective analysis, but help manage daily treatment and follow-up activities.

### **Current Status**

As of this point, the magnitude of the problem in Nigeria is unknown for sure, however, children in the seven villages first known to be affected have been screened, children who need treatment are offered it, and the environment has been remediated by teams led by the international organizations TerraGraphics & Blacksmith Institute. There remains at least one large village which has high environmental lead levels but has not yet been remediated.

### Cause of the Outbreak

The outbreak occurred because of very high lead content, sometimes >10% lead, in the rocks being crushed to extract gold, but the reasons the outbreak occurred last year and not earlier are not fully understood. It does appear that the problem happened quickly and thus could have been caused by a new gold strike or discovery in the area, a change in the source of rocks used for mining since the percent lead in these rocks varies, or some other precipitating factor. One thing that appears certain is that more grinding machines began appearing in the villages as more households took on mining activities late in 2009.

### **Long Term Solution**

Despite the encouraging aspects of the response to the outbreak itself, a solution to the longer term problem of

- Lead Poisoning, continues on page 16

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### An Exclusive Interview With Creators Of The People's Epidemiology Library

**Goal Is Improving Public Understanding To Help Reduce Anxiety About Early Health Findings** 

The People's Epidemiology Library (PEL), a website devoted to using the history of epidemiology to tell the story of epidemiology for the public, is scheduled to launch officially in August 2011 at the International **Epidemiological Association World** Congress in Edinburgh Scotland. Its creators, Alfredo Morabia from City University of New York and Columbia University, and **Jan Vanderbroucke** from the Leiden University Medical Center and the Royal Academy of Arts and Sciences in the Netherlands, recently conducted an essay contest in the epidemiology community to identify an epidemiologist/writer who could prepare six essays explaining in simple straightforward language key concepts of epidemiology. The contest winner was McMaster University's Stephen Walter (see related story in this issue) who will travel to Edinburgh in August to help unveil these essays and participate in the official launch of the PEL at a special symposium to be held in conjunction with the Congress.

Because the vision for the PEL is expected to have a wide appeal across the epidemiology community, we conducted an exclusive interview with Vandenbroucke and Morabia in advance of the upcoming Congress to get a preview of their vision for the PEL and their future plans following its launch in August.

**EM:** What is the basic idea behind the PEL?

**Morabia:** We had several ideas in mind. The PEL is an extension of the James Lind Library (JLL) which is all about

the history of fair trials or the evaluation of treatments using randomized trials. The JLL needed to expand because there were observational methods that were used to develop evidence during the history of medicine that did not fit the criteria of randomized trials yet were important advances that were called for in light of the circumstances at the time. Thus, the PEL was created to focus on the history of observational methods.

Secondly, we wanted the PEL to be rigorous and academic, that is, we wanted the website to contain both historical documents describing innovative approaches while at the same time including the work of current scholars who could comment on the context of the times and point out the strengths and weaknesses of the historical advances.

Thirdly, we wanted the PEL to be accessible for the public. We are strong believers that history is a good way to explain the roles of epidemiology in our societies. We believe this is so because when a need arises and an advance in public health is made in a specific historical situation, this event is favorable to explaining epidemiology. That is, we can use history to familiarize the public with the role and importance of epidemiology.

**EM:** Is it not a conflict to want to create a rigorous, academic website while at the same time wanting to make the site accessible to the public?

-Interview with PEL, continues on page 10

"...the PEL was created to focus on the history of observational methods."

"We are strong believers that history is a good way to explain the roles of epidemiology in our societies."

- Interview with PEL, con't from page 9

"...epidemiologists trying to reach a wider public try to leave the jargon behind."

Morabia: It could be viewed that way. Admittedly, there is a tension. However, epidemiologists trying to reach a wider public try to leave the jargon behind. Because history is a good domain from which to tell stories, we can tell stories, remove jargon, and explain things in an understandable way. I think the tension you point out in our goals is resolvable.

**EM:** What did you think about the submissions you received for the essay contest?

Morabia: We wanted to be surprised by them and we were. We received five high quality entries. The quality was awesome. We received applications from teachers in different parts of the world who gave evidence of thinking deeply about how to transmit epidemiology theory in a simple, common sense way. We were extremely pleased by the submissions.

And I want to acknowledge the help from The Epidemiology Monitor. We are absolutely convinced that we would not have been able to obtain such a great response in such a short time for a high investment application process without the help of the Epi Monitor. Our success is a reflection of the wide audience of the Epi Monitor.

**EM:** Thank you for the compliments. What are your goals and hopes for the PEL in its first year after it is officially launched at the Scotland Congress?

**Morabia:** We have four goals for the first year.

1) We want to post the essays on the web by the end of July and be able to upload the final versions in the fall. We are planning to conduct an internal review after the essays are received and then to conduct a review process. We

have not yet discussed how this review process will be carried out, but it might be conducted as an open process during which the epidemiology community and others would be invited to comment.

- 2) We want to add ten new commentaries to the PEL.
- 3) We want to create a final version of the website.
- 4) We want to gain more visibility by increasing visitors to the site.

**EM:** Can epidemiologists who are sympathetic to your vision and mission participate in the PEL?

Vandenbroucke: For the majority of epidemiologists, the principal way of participating will be to use the materials on the PEL for teaching and provide feedback to us. For a minority of epidemiologists, writing commentaries for the PEL will be a viable means of participating in the PEL. And finally, for a handful of colleagues, a seat on the advisory board may be possible to help in the guidance and management of the site.

Morabia: Other ways to get involved are to acknowledge the use of materials from the PEL when they are used in publications or otherwise, and helping us to translate the materials on the site into other languages.

**EM:** Where does the funding for the PEL come from, and what are your plans for attracting future funding?

Vandenbroucke: For now we are proceeding without full funding. The funding we do have is from our respective institutions which are paying our salaries and permitting us to devote some time to the PEL. We have received a small but very helpful support from the American College of Epidemiology

-Interview with PEL, continues on page 14

"The quality was awesome."

### Epidemiologist-Judges For The Young Epidemiology Scholars Program Continue To Laud The Program and Its Participants

The Young Epidemiology Scholars Program announced the winners of this year's competition in April 2011(see Epi Monitor April, 2011). Several of the judges were contacted by The Epi Monitor to ask for their assessments of the program, now entering its 9th year of operation. Below are excerpts of the comments we received from West Virginia University's <u>Ian Rockett</u>, the University of California Berkeley's <u>Lee</u> Riley, the University of Southern California's Jonathan Samet, the University of Puerto Rico's Jose Cordero, and the CDC's Ralph Cordell and Denise Koo.

### Ian Rockett

"The 2010-11 YES Competition was imbued with all of the anticipation and excitement of prior competitions. Believe me, the judges were also infected as always.

To be expected, many students researched topics from their everyday lives, such as the health effects of texting, consuming energy drinks, skipping meals, cheerleading, and smoking hookah. "One of the two top student winners literally exemplified shoe-leather epidemiology by investigating the relative injury risks associated with running barefoot versus in shoes and transitioning between the two."

Illustrating the hazards of epidemiologic prediction, I do continue to be surprised with the paucity of case-control studies. This research design would seem to lend itself nicely to a seriously time-constrained project, while presenting students with numerous and rich opportunities. That

said, there is no question that the general degree of sophistication of projects has increased markedly since the inception of YES in 2004. The best projects were always excellent, but now there is a far greater depth of high-quality ones. Among markers for this transformation are proportionally more publishable papers and student affiliations with universities and other research institutions, including NIH.

The presenters are also reflecting ever greater poise and self-assurance in their presentations." Successes of past students speaks volumes about the quality of the competitors."

### Lee Riley

"My feeling is that this program really needs to be continued. It has finally reached a stage where the impact of the program is just beginning to be felt and it will be a shame for this impact to be abruptly interrupted. Because of this program, there are many college and post-graduate students who are beginning to launch a career in epidemiology and public health. This was one of the goals of the YES program--to fill a gap in the US of professionals trained in epidemiology to address many of our nation's health problems at the population level. The program has clearly shown that it can do this by the approach it has developed. The Intel Science Fair program encourages high school students to enter a career in science and it has been highly successful. In fact, it's programs like this that keep the US ahead in innovation in science. YES can do the same with epidemiology."

-YES Judges, continues on page 12

"Successes of past students speaks volumes about the quality of the competitors."

-YES Judges, con't from page 11

### **Jonathan Samet**

"I have been a judge from the outset and have returned every year because of the very interesting work done by the participants. Every year, there are a few remarkably creative projects and the participants are already on very productive trajectories. Perhaps the major failing of the program is that the participants, not surprisingly, come from leading high schools with motivated teachers. It would be great if there were a more diverse pipeline of participating schools, a goal shared by RWJ, I suspect."

Jose Cordero

Being a judge at the YES competition gives me great hope for the future of public health in America. Seeing so many talented young students learning what epidemiology and public health can do to improve the lives of people is heart warming.

Even better that many are choosing a career in public health. It is the best sign that this is a very important program for the Nation. We need programs like YES that inspire high school students to see the public health challenges in their community, generate key questions, seek advice, and conduct studies to answer their questions. In the process, they may find new answers to the problems we face and discover what a career in public health can be.

One example is a Scholar who was concerned with the suicides and suicide attempts in her high school. She designed a study to find out the risk factors and in the process discovered a new way students were harming themselves that required a new approach to be addressed and prevented.

YES is unleashing the imagination of our young students in America and

bringing them into the realm of epidemiology and public health.

### Ralph Cordell

"YES brings epidemiology to the forefront of math and science education, providing students the opportunity to learn the skills epidemiologists utilize in public health. Those of us at CDC who have participated as YES judges are glad to contribute to the success of the program. Bringing the YES winners to CDC allows us to introduce these young people to CDC and encourage them to consider public health as a career opportunity."

### Denise Koo

I have enjoyed being a YES judge each year for the past 8 years. Over that time, I have been delighted to find the focus of YES finalists increasingly centered on health issues relevant to their age group. These presentations provide a window into the issues important to them personally, and unsurprisingly, have been the most compelling. And the poise with which they answer questions from us judges is astounding.

YES has had a longlasting impact on the competitors; now they have been deliberately introduced to the excitement of epidemiology and public health, and many of them are choosing public health as a career. Today's generations are interested in doing good and making a difference, and they find that this field fulfills such interests. This is so exciting to introduce them early to public health, given that so many of our generation found public health only by chance at later stages of our careers. What has most impressed me are the YES winners who have gone beyond the contest to ensure implementation of their findings. Several have kept in touch with me with questions about public health careers or ideas for how they could get internships. ■

"And the poise with which they answer questions from us judges is astounding."

"Being a judge at

competition gives

me great hope for

public health in

the future of

America."

the YES

### **Notes On People**

Died: David Sencer, 86, MD, former Director of the CDC and the New York City Health Department, on May 2, 201. He was lauded as a "giant of public health" by current CDC Director Thomas Frieden who noted Sencer's contributions to the eradication of smallpox and the creation of the Emory School of Public Health.

Awardee: <u>Harvey Fineberg</u>, MD, PhD, President of the Institute Of Medicine, for the \$15,000 Frank Calderone Prize in Public Health given by Columbia University's School of Public Health for a "transformational contribution in the field of public health". The prize will be presented in October 2011.

Awardee: Margaret Becklake, McGill University epidemiologist, for the Ordre du Quebec, the province's most prestigious honor, on June 15 in Quebec City.Becklake received the highest honor of Grand Officer in the Ordre.

**Appointed:** <u>Jill Norris</u>, PhD, MPH, professor of epidemiology, as new chair of the Department of Epidemiology at the Colorado School of Public Health. Dr. Norris was section head of the Epidemiology and Community Health Section in the former Department of Preventive Medicine and Biometrics at Colorado.

Awardee: Pamela Rist, MSc, Harvard School of Public Health, for the Abraham Lilienfeld Student Prize Paper in General Epidemiology at the Congress of Epidemiology in Montreal for her work on "Migraine and Functional Outcome From Ischemic Cerebral Events in Women" published in Circulation in 2010.

**Awardee:** Shirley Wang, MS, Phd, Brown University, for the Reuel

Stallones Student Prize Paper in Epidemiology Methods at the Congress of Epidemiology in Montreal for her work "Future-cases as present controls to adjust for exposure-trend bias in case-only studies".

Awardee: Maria Argos, Columbia University, for the Carol Buck Student Prize Paper in International Health at the Congress of Epidemiology in Montreal for her work "Arsenic exposure from drinking water, and all cause and chronic diseas mortalities in Bangladesh (HEALS): a prospective study" published in Lancet in 2010.

Awardee: NCI's Division of Cancer Epidemiology and Genetics Training Program, for the Alexander Langmuir award at the Congress of Epidemiology in Montreal for Training Program Excellence and Innovation.

Awardee: Margaret Spitz, MD, MPH, MD Anderson Cancer Center and Baylor College of Medicine at the Congress of Epidemiology in Montreal for the Abraham Lilienfeld Award for Overall Excellence in Epidemiology including teaching, research, and service.

Awardee: Stephen Walter, PhD, McMaster University, for the Bernard Goldberg award for Excellence in Methods Development and Application at the Congress of Epidemiology in Montreal.

Awardee: John Pierce, PhD, University of California San Diego Moores Cancer Center, at the Congress of Epidemiology in Montreal for the Harold Dorn Award for Translation of Epidemiologic Evidence Into Public Health Policy and Practice with

- Notes on People, continues on page 14

- Notes on People, con't from page 13 measurable impact.

Awardee: Noel Weiss, MD, DrPH, University of Washington, at the Congress of Epidemiology in Montreal for the Alfred S Evans Award for Excellence in Teaching and Mentoring in Epidemiology.

Awardee: Marc Lipsitch, Harvard School of Public Health, at the Congress of Epidemiology in Montreal for the Best Manuscript published in Epidemiology in 2010, aka the Kenneth Rothman Prize. His paper is entitled "Negative controls: A tool for detecting confounding and bias in observational studies. Co-authors were Eric Tchetgen and Ted Cohen.

"I will also try to convey my enthusiasm for the discipline, and to indicate why epidemiology is so important in contemporary society."

Awardee: <u>Tuula Oksanen</u>, Finnish Institute of Occupational Health, at the Congress of Epidemiology in Montreal for the Best Manuscript published in Annals of Epidemiology in 2010. The paper is entitled "Self-Report as an Indicator of Incident Disease" with coauthors <u>Mika Kivimaki</u>, <u>Jaana Pentti</u>, <u>Marianna Virtanen</u>, <u>Timo Klaukka</u>, and <u>Jussi Vahtera</u>

Awardee: Jack Siemiatycki, PhD, University of Montreal, at the Congress of Epidemiology in Montreal for the Canadian Society of Epidemiology and Biostatistics Geoffrey Howe Distinguished Contributions award.

Awardee: Colin Soskolne, PhD, University of Alberta, at the Congress of Epidemiology in Montreal for the Canadian Society of Epidemiology and Biostatistics Distinguished Service Award ■

Stephen Walter, con't from page 7

detail, to people who have never heard of it before. I included an extract of my program notes from a recent concert as my example for the competition.

**EM:** What feature do you think stands out in the approach you will use to complete the essays?

Walter: The challenge in writing the essays will be to be selective from the huge range of topics that might come under discussion, but at the same time make the essays accessible to readers with a wide variety of backgrounds. I will try to avoid technical jargon as much as possible, and make the text accessible to the lay reader. I will also try to convey my enthusiasm for the discipline, and to indicate why epidemiology is so important in contemporary society.

-Interview with PEL, con't from page 10

which enables us to hire an assistant from time to time to work on the website material and which will help fund the prize for the essay contest. I have a grant from the Netherlands Royal Academy of Arts and Sciences which also gives some support for the prize and the activities. For the most part, we are unfunded externally and we are hoping to attract funds from the professional associations of epidemiologists.

**EM:** Do you know of other ventures similar to the PEL that have been successful?

**Vandenbroucke:** Only the James Lind Library really.

**Morabia:** We would like to reach out to those who are teaching epidemiology to

- Interview with PEL, continues on page 15

-Interview with PEL, con't from page 14 undergraduates in high schools and colleges. It would be a benefit to interact more with those colleagues.

**EM:** What do you consider to be the greatest need that epidemiology has in the area of public understanding of epidemiology?

Vandenbroucke: It is very important for the public to understand that the greatest strength of epidemiology is also its greatest weakness. Its greatest strength is that it examines the exposures that people have in real life. It looks at the diseases they develop in the actual communities they live in, not in a lab or in artificial conditions. What epidemiologists study is "true to life".

At the same time, and for the same reason, epidemiologists can usually not completely isolate or separate out the specific exposures of interest from other exposures occurring in real life. This public realization, that epidemiology works like this, that on the one hand it can reach very important conclusions while on the other hand it is always at risk of being challenged, that public understanding would be very important.

I say this because almost all health actions people take are based on medical evidence that is almost always epidemiological evidence. Understanding this would be immensely important. This is the theme in Alfredo's new book which translated into English is "Health—Distinguishing Beliefs From Knowledge"

**EM:** But what difference would this understanding actually make in what people do or how they act?

Vandenbroucke: It would help people

to understand how evidence develops and that it is normal to have a diversity of opinion. It takes time for questions to be resolved. For example, with smoking and cancer, it has taken more than fifty years to reach the current situation where one can go outside of public places and read a sign which says "No Smoking Inside". Disputes about drug treatments are not settled in a few days. Increased public understanding would bring with it increased public patience with the science.

Morabia: Before scientific breakthroughs in understanding occur, people have beliefs about causality which generate anxiety. Take cholera or pellagra. People saw threats everywhere. Epidemiology helped to focus on one. Increased public understanding of epidemiology would reduce artificial threats and make people less anxious. Thus, epidemiology is important for differentiating beliefs from knowledge in everyday life.

**EM:** Thank you both for answering our questions. We will publish this interview online and make it possible for readers to comment and carry out further discussion if colleagues are interested in doing that. We wonder if readers will agree with you about the value of increasing public understanding of epidemiology and the strengths and weaknesses of its findings. Certainly other epidemiologists such as Geoffrey Kabat who has written a book entitled "Hyping Health Risks" about overblown health hazards shares your concern for reducing needless anxiety and public confusion about which risks to act on and which to ignore. We invite reader comments at www.epimonitor.net

"It is very important for the public to understand that the greatest strength of epidemiology is also its greatest weakness."

"Increased public understanding of epidemiology would reduce artificial threats and make people less anxious."

- Interview with PEL, continues on page 13

-Epi Weight Loss, con't from page 5

was a good thing. Also, he acknowledged learning that successful weight loss is not an event but a behavior change, and epidemiology reinforced that concept.

"...he mentioned the importance of the team concept or herd mentality in losing weight..." An obvious question for Smith is what his long term weight loss goal is and what he thinks about maintaining what he has achieved. He told the Monitor he would like to be in the 170-175 lbs range and live a life that does not feel deprived. He said he does not miss things he used to eat. "I don't get up asking what can I eat today," he said. "I believe it is what you get used to," he added.

### Message

Asked what he would tell his fellow epidemiologists about his weight loss, he mentioned the importance of the team concept or herd mentality in losing weight, and he also profited from the experience to create a new friendship with a person he now runs with each week. He has also had his 15 minutes of fame since he was interviewed on CNN and was congratulated by people at work and former colleagues in the health department.

**Tenacity** 

Smith's tenacity it turns out has been on display not only from his participation in the fitness program, but also in relation to his graduate education.

Smith worked as an environmental engineer for the first half of his career and then decided to pursue a doctoral degree at age 50. He was disillusioned with the focus on the almighty dollar in the environmental engineering area, he said, and went on to earn his PhD in the Division of Epidemiology at the

University of Mississippi Medical Center. He graduated and obtained his current position as the first ever epidemiologist in the Division of Medicaid. His work involves examining trends, preparing reports, and doing statistical analyses for the program.

-Lead Poisoning, con't from page 8

preventing recontamination of the soil after villages have been remediated remains challenging. As long as a financial incentive to mine rock exists, then the risk of exposure will persist in the absence of safe mining practices. Villages themselves made efforts to move the mining activities out of the main area of the villages, but this presents other challenges of secure storage of equipment and travel distances. Implementation of safer mining practices is crucial to ensuring villages are no longer lead contaminated.

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"He was disillusioned with the focus on the almighty dollar in the environmental engineering area..."

### **EPI Job Bank**

No of jobs: 40+

The Epi Job Bank provides capsule listings of all known job opportunities currently available in epidemiology. Any employer may list one or more available jobs free of charge until filled. Listings are revised and updated monthly. To add new listings or to notify us when vacancies have been filled, please call the Epi Monitor: 770/594-1613 or fax: 770/594-0997. Bullets (\*) before state indicate new listings. Asterisks (\*) indicate fax numbers. Oao=open as of (the date listed). Cd=closing date of (the date listed).

Sta	te City	Institution	Description	Degree	Contact	Phone/*Fax	Email/Fax	oao/cd
AL	Birmingham	UAB	Cardio Dis Epi	PHD,MD	Joanna Carson	205/934-8665	jcarson@uab.edu	oao 05/22/11
AR	Little Rock	Boozman PH	Chair, Dept of Epi	Doctoral in epi	Paula Roberson	501/526-6726	epichairsearch@uams.edu	oao 05/22/11
CA	Davis	UC Davis	Faculty Position	PHD	Susan Warren-Alef		swarrenalef@ucdavis.edu	09/15/2011
CA	Oakland	Kaiser Permanente	Genetic Epi	PHD	Judith Millar		judith.a.millar@kp.org	
CA	Stanford	Stanford University	Ass't/Assoc Prof	PHD	Jessica Negrette		jnegrette@stanford.edu	oao 05/27/11
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HI	Honolulu	Univ of HI CRCH	PostDoc Fellow - Cancer	Phd,DrPH,ScD,MD	bKarin Koga	808/441-7704	kkoga@crch.hawaii.edu	oao 05/22/11
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ΜА	Boston		Epidemiologist	Doc-epi	Meir Stampfer		stampfer@hsph.harvard.edu	oao 05/22/11
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			PD in HIV	Doctorate	Alethea McCormick		amccormi@hsph.harvard.edu	oao 03/08/11
				MPH		410/767-1251	dhmhjobs@dhmh.state.md.us	oao 03/08/11
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			Predoc Trainee, Cardio Dise		Lauren Camarata	410/955-0476	Icamarata@jhu.edu	oao 05/22/11
	Rockville			adv. epi train	Cheryl Reynolds		cheryl.reynolds@fda.hhs.gov	oao 05/22/11
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				PHD			Idecher@vdh.state.vt.us	oao 05/22/11
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### **EPI Job Bank** Foreign Listings

Counti	y City	Institution	Description	Degree	Contact	Phone/*Fax	Email/Fax	oao/cd
•Canada	Calgary	AHS	Job Opportunities	PHD	Yingxin Quo		yingxin.quo@albertahealthservices.ca	oaa 05/27/11
•Canada	Calgary	AHS	Epidemiologist	Phd in epi or ph	Yingxin Guo	*403/270-8003	yingxin.quo@albertahealthservices.ca	oao 05/27/11
<ul><li>Canada</li></ul>	Calgary	AHS	Research Assoc.	Master's in epi, ph	Yingxin Guo	*403/270-8003	yingxin.guo@alberahealthservices.ca	oao 05/27/11
<ul><li>Canada</li></ul>	Calgary	AHS	PD Fell, Cancr Epi	PHD in epi	Yingxin Guo	*403/270-8003	yingxin.guo@albertahealthservices.ca	oao 05/27/11
Canada	Montreal	McGill University	Postdoctoral Pos.	PHD/equiv	Eduardo Franco	*514/398-5002	eduardo.franco@mcgill.ca	oao 05/27/11
•France	Lyon	IARC	Scientist	PHD in epi	Maud Bessenay	*+33 4 72 73 83 8	5 bessenay@iarc.fr	oao 05/27/11
Switzerl	and	Fearn Associates	Molecular Epidemiologist	PhD-biostat or epi	Information		info@fearn-associates.com	oao 05/27/11
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### IEA WORLD CONGRESS OF EPIDEMIOLOGY

7-11 AUGUST 2011 EDINBURGH, SCOTLAND

www.epidemiology2011.com

Registration Open Registration for the XIXth IEA World Congress of Epidemiology is open.

### **Programme Highlights!**

The Congress programme is exciting and diverse, we are delighted to have an exceptional range of speakers presenting throughout the five days. To view the full programme please visit the congress website, here are just a few of the highlights to give you a taste of what's to come.

### Sunday 7th August John Snow Lecture

Professor George Davey Smith, UK
Professor of Clinical Epidemiology, and Scientific Director of ALSPAC & MRC CAiTE
Centre at the University of Bristol.

### Monday 8th August Plenary VIII - Size Matters in Epidemiology

Professor Sir Richard Peto, UK

Professor of Medical Statistics & Epidemiology at the University of Oxford, Co-Director of the Clinical Trial Service Unit and Epidemiological Studies Unit, UK

### **Tuesday 9th August**

Robert Cruikshank Lecture - The Multicenter AIDS Study: 28+ Years of Collaboration, Collegiality and Science - Sponsored by the IEA

Professor Roger Detels, USA

Professor and Chair of the Department of Epidemiology at the UCLA School of Public Health, University of California, Los Angeles

### Wednesday 10th August

Epidemiology: Can it be more relevant for Policy? Sponsored by the Chief Scientists Office – The Scottish Government

Professor Robert Beaglehole, New Zealand

Professor of Community Health at the University of Auckland, New Zealand. Between 2004 and 2007. Now co-director of International Pubic Health Consultants and an Emeritus Professor of the University of Auckland.

### Thursday 11th August INCLEN Session

Convergence of Economics with Health: A Case for Chronic Diseases Prevention in Low and Middle Income Countries

Dr Narendra K Arora, India

MD FAMS Executive Director, INCLEN and CHNRI, India will deliver a plenary session on Convergence of Economics with Health: A Case for Chronic Diseases Prevention in Low and Middle Income Countries

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### The Course AT-A-GLANCE Part II

New! <u>David Hunter</u> will present on lessons learned from genome-wide association studies for epidemiology, including the concept that very large sample size studies are going to be required to publish work in the future.

New! <u>Arthur Reingold</u> will present on emerging infections, including the experience with H1N1, how it was managed by the World Health Organization, and the implications of these for the future use of expert advisors in decision making.

New! <u>Douglas Weed</u> will discuss the potential benefits and challenges of creating a registry of epidemiology studies.

New! George Davey-Smith will present on the use of a Mendelian randomization framework in epidemiology.

#### ++++++ PLUS! +++++

### Will Epidemiologic Methods and Concepts Cease To Evolve?

Alfredo Morabia will present on four phases of epidemiologic evolution during which there were qualitative leaps in theory and practice brought about by the increasing complexity of the studied issues. He will discuss whether or not a fifth phase will arise and what it might look like.

### Epidemiologic Research Designs to Support Prevention

Graham Colditz will present on how applying appropriate epidemiologic study design and methods to chronic disease risk factors can speed understanding of which exposures we should change, by how much, among whom, at what age, and for how long to better inform public health policy and practice.

#### New Causal Inference Applications in Epidemiology

Randomization has long been used in therapeutic and intervention trials to form the basis of causal inference regarding treatment or intervention effects. Nicholas Jewel will present on the issues which arise when there may be inadvertent causal effects of treatment due to the role of other post-randomization factors.

### Effect Modifiers That Are Also Confounders: How To Treat In Analysis

Sander Greenland will present an overview of conceptualizations and analysis approaches to confounding and effect modification phenomena that allow researchers to deal with both in a unified fashion, with special focus on modern methods.

#### Tyranny Of Evidence-Based Medicine In Cancer Prevention

Eduardo Franco will present his plea for more sensible and judicious assessment of the entire evidence base whether from randomized clinical trials or from observational studies in order to achieve more rational cost-effectiveness analyses of cancer control interventions.

### Opening The Box: Biomarker Measurement Errors

Enrique Schisterman will present on creative study designs for addressing biases caused by errors in measuring biomarkers, including the emerging and exciting pooling designs.

### Advocacy in Epidemiology: Experience in Air Pollution and Tobacco Control

Jonathan Samet will describe the examples of tobacco and air pollution to consider the role of epidemiologists in countering the tactics of those who seeking to undermine epidemiology generally as well as the epidemiological evidence pertaining to the issues. The lessons learned from both examples are parallel.

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> **Contact: Cynthia Wright, Director of Operations**

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email: epimon@aol.com web: www.epimonitor.net Stanford University School of Medicine Division of Epidemiology, Department of Health Research & Policy

Assistant Professor / Associate Professor (Tenure Line)

The Stanford University School of Medicine seeks highly qualified candidates for a full-time tenure line faculty position in the Division of Epidemiology, Department of Health Research & Policy. The pre-

Department of Health Research & Policy. The predominant criterion for appointment in the University Tenure Line is a major commitment to research and teaching. We seek outstanding applicants with demonstrated research excellence in population-based or clinical epidemiology. We invite applications from early and mid-career applicants, appropriate for appointment at the Assistant or Associate Professor level, depending on qualifications and experience. The successful candidate will develop a nationally recognized program of research and participate in the graduate teaching of epidemiology. Qualified applicants should send (1) a letter that describes research and career interests, (2) a curriculum vitae, and (3) three letters of reference to:

Chair, Epidemiology Search Committee c/o Jessica Negrette, Department of Health Research & Policy 259 Campus Drive, HRP-Redwood Building, mc 5405 Stanford University School of Medicine Stanford, CA 94305-5405 incorrect of edu jnegrette@stanford.edu

Stanford University is an equal opportunity employer and is committed to increasing the diversity of its faculty. It welcomes nominations of and applications from women and members of minority groups, as well as others who would bring additional dimensions to the research, teaching and clinical missions of the university.

#### ASSISTANT, ASSOCIATE, OR FULL PROFESSOR / INFECTIOUS DISEASE EPIDEMIOLOGY UNIVERSITY OF MINNESOTA, SCHOOL OF PUBLIC HEALTH

The Division of Epidemiology and Community Health, School of Public Health, University of Minnesota seeks a full-time tenure-track Assistant or Associate Professor, or tenured Associate or Full Professor with research expertise in infectious diseases to join a growing program in infectious disease epidemiology. The Division of Epidemiology and Community Health (http://www.sph.umn.edu/epi/) provides a rich and collaborative environment for the investigation of the etiology, prevention, and control of chronic and infectious diseases. It has 54 primary faculty who bring in over \$30 million annually in sponsored research grants, 80+ adjunct faculty, and enrolls over 500 students in its 6 degree programs leading to MPH, MS, and PhD degrees.

Primary responsibilities include: 1) contributing to developing a strong academic program in infectious disease epidemiology, including epidemiologic methods for the design, conduct and analysis of infectious disease epidemiologic studies; 2) collaborating with faculty within the Division as well as with faculty at the Academic Health Center and other research centers; 3) serving as a Principal Investigator of research grants and author manuscripts for peer-reviewed journals and presentation at scientific meetings; 4) participating in the teaching program in infectious disease epidemiology; and 5) advising master's, doctoral and post-doctoral students.

Specific requirements include: 1) previous training in epidemiology or a related field with a degree of (a) PhD, DrPH, ScD or equivalent; or (b) MD or equivalent with MPH or MS or equivalent in epidemiology or related field; 2) research experience in human infectious disease epidemiology, with a proven track record of securing external grant funding; 3) evidence of a publication record in relevant peer-reviewed journals; and 4) graduate level or other comparable teaching experience. Applicants for the Assistant Professor level must have at least 4 years of relevant experience since completion of their doctoral degree. Applicants with evidence of an interest and experience in developing programs with a global health focus are encouraged to apply. We are particularly seeking candidates who have existing grant funds to help support the position. Rank of appointment will depend on level of experience. Primary criteria for evaluation are training background, relevant research experience, record of successful grant funding, publications in peer-reviewed journals, and evidence of successful graduate level or other teaching.

Please see our full job description on the EpiMonitor Online website. The position is available immediately and will remain open until filled. To apply for the tenured position, please submit a cover letter, CV including publications list, and a list of at least three referees on-line using the following link: http://employment.umn.edu/applicants/Central?quickFind=93690. Reference requisition number 171030. To apply for the tenure-track position, follow this link: <a href="http://employment.umn.edu/applicants/Central?quickFind=93685">http://employment.umn.edu/applicants/Central?quickFind=93685</a>. Reference requisition number 171027.

The University of Minnesota is an equal opportunity educator and employer.



### **Job Opportunities**

Alberta Health Services-Cancer Care In Calgary, Alberta, Canada

The Department of Population Health Research of AHS-Cancer Care conducts large-scale, multidisciplinary research projects in cancer epidemiology, prevention and screening research that has received national and international recognition. We are currently seeking motivated and qualified individuals for the four following openings.

#### **E**PIDEMIOLOGIST

We are seeking experienced individuals who can provide leadership in our Epidemiologic Research Unit as well as support for the design, conduct and reporting of our cancer epidemiologic research studies.

#### Qualifications:

- PhD in Epidemiology, Community or Public Health with at least five years experience in a research setting or MSc in same fields with 10 or more year's experience
- Previous supervisor or management experience would be an asset

#### RESEARCH ASSOCIATE (2 POSITIONS)

We are seeking individuals who can provide support to activities related to obtaining and conducting external peer-reviewed cancer epidemiologic research studies.

#### Qualifications:

- Master's degree in Epidemiology, Community or Public Health.
- Preference will be given to those candidates with two or more years' experience in a research setting.
- Experience writing literature reviews, participating in the planning and execution of research projects is essential.

#### POSTDOCTORAL FELLOW IN CANCER EPIDEMIOLOGY

We are seeking individuals to do postdoctoral training focusing on studies on the role of **physical activity in cancer control** under the supervision of Dr Christine Friedenreich (Christine. Friedenreich@albertahealthservices.ca)

### Qualifications:

- Recently graduated with a PhD in Epidemiology
- Excellent academic credentials
- Interest and experience in physical activity research
- Excellent oral and written English communication skills
- Experience in cancer epidemiology would be an advantage.

Interested in applying? Please submit your curriculum vitae and the names of three references to:

Department of Population Health Research - AHS, Cancer Care Room AE173, 1331 – 29 Street NW Calgary, AB CANADA T2N 4N2 E-mail: <a href="mailto:yingxin.quo@albertahealthservices.ca">yingxin.quo@albertahealthservices.ca</a>



### EPIDEMIOLOGY FACULTY POSITION Childhood Cancer Epidemiology

Applications are being accepted for a faculty position in cancer epidemiology at the rank of Assistant or Associate Member in the Department of Epidemiology and Cancer Control at St. Jude Children's Research Hospital. St. Jude, an NCI-designated Comprehensive Cancer Center and the largest freestanding pediatric cancer center in the U.S., has an established research program in cancer prevention and control through the Department of Epidemiology and Cancer Control. The Department has a large multidisciplinary team of epidemiologists, biostatisticians, behavioral scientists, exercise scientists, health outcomes researchers, molecular/genetic researchers, physician scientists, clinical researchers, and survey methodologists engaged in etiologic-, outcomes- and intervention-based research. The Department has a strong emphasis on survivorship and long-term effects of treatment, with ongoing studies in children, adolescents, and adult survivors of childhood cancer.

Applicants must have a Ph.D. in epidemiology or a closely related discipline, or M.D. with advanced training and experience in epidemiology, biostatistics and/or clinical research methods. Successful candidates will be expected to conduct independent and collaborative research on pediatric cancer patients and/or cancer survivors. Applicants must demonstrate excellent oral and written communication skills and be proficient in computing. Faculty rank will be commensurate with previous training and experience, including publications in peer-reviewed journals and demonstrated success in, or potential for, securing nationally-based research funding.

Located in Memphis, TN, St. Jude Children's Research Hospital is a private nonprofit hospital and academic research institution that supports a range of programs with the aim of finding the causes and cures for children with catastrophic diseases through research and treatment. Faculty positions include a generous startup allowance, an ongoing commitment of research support and space, laboratory resources (as needed), and support positions. Compensation is very competitive and commensurate with experience.

The Department of Epidemiology and Cancer Control is dedicated to providing a strong mentoring environment for junior faculty. Interested candidates should submit by email a current CV and a cover letter that includes a statement of research interests to the search committee chair: **James G. Gurney, Ph.D., at james.gurney@stjude.org**.

St. Jude is an Equal Opportunity Employer and a Drug Free Workplace. Candidates receiving offers of employment will be subject to pre-employment drug testing and background checks. Applications will be accepted on a continuing basis.

www.stjude.org

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Position: Genetic Epidemiologist/Statistical Geneticist Research Program on Genes, Environment and Health (RPGEH)

The Division of Research (DOR) in Oakland, California is seeking a junior or mid-career researcher with expertise in genetic epidemiology and/or statistical genetics. The successful candidate will be appointed as a Research Scientist I or II within the DOR, which corresponds to an academic faculty position (assistant or associate professor, respectively).

The successful applicant will work with DOR investigators to further develop and effectively use a large scale resource for genetic epidemiologic studies (RPGEH), a research resource that will include linked survey and EMR data and biospecimens from 500,000 KP members. This resource includes biospecimens collected from 170,000 survey respondents and genome-wide association study data from 100,000 participants. S/he will help develop the RPGEH resource and provide expert consultation for, and collaborate with, DOR investigators in genetic epidemiologic studies of specific diseases or outcomes. S/he will develop and lead a program of research in genetic epidemiology of specific diseases or conditions, or in development of methodology for genetic epidemiologic studies tied to background and interests.

Minimum requirements include a doctoral degree (PhD or equivalent), training in human genetics, epidemiology, statistical methods, conducting genetic epidemiologic studies, and knowledge of methodology for analysis of complex traits.

The position is open until filled. EEO / AA / Committed to diversity. Send LOI, CV and three references to Genetic Epidemiologist Search Committee c/o Judith Millar: DOR, 2000 Broadway, Oakland, CA 94612 -- Judith.A.Millar@kp.org



### Tenure-Track Assistant Professor in Women's Health

The Center for Interdisciplinary Research in Women's Health at UTMB invites applications for a tenure-track position at the assistant professor level. Applicants in all areas of research related to women's health will be considered. UTMB has strong research programs in reproductive health, aging, infectious disease, adolescent health and preventative medicine, among others. A strong publication record and experience with grant writing is preferred.

The successful candidate will be provided with a competitive salary and benefits package and given a minimum of 85% protected time for research. They will also be given the opportunity and assistance to establish and maintain an independent, externally funded research program.

Applicants should have a PhD or equivalent degree, a record of conducting research in women's health, and no more than 6 years of research experience following their degree.

Send electronic curriculum vitae, statement of research interests and goals, and the names of three references to:

Abbey Berenson, MD, MMS
The University of Texas Medical Branch
301 University Blvd.
Galveston, Tx 77555-0587
abberens@utmb.edu

UTMB is an equal opportunity affirmative action institution that proudly values diversity.

Candidates of all backgrounds are encouraged to apply.

### University of California, Davis

### Social Determinants of Health and Disease **Faculty Position**

Full-time academic position at the Associate / Full Professor level (100% FTE-tenured) with an emphasis on social determinants of health and disease in the Department of Public Health Sciences. Applicants must possess an M.D./MPH and/or a doctoral degree in a relevant field. Experience and expertise in social and behavioral sciences research is required with a particular interest in social determinants of health and disease. Responsibilities include development of an independent research program and teaching.

Send a cover letter, curriculum vitae and the names of five references to Ellen B. Gold, Ph.D., c/o Susan Warren-Alef, swarrenalef@ucdavis.edu University of California, Department of Public Health Sciences, One Shields Avenue, Med Sci IC Building, Room 149B, Davis, CA 95616-8638.

For full consideration, applications must be received by **September 15, 2011**. However, the position will remain open until filled through July 1, 2012.

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> **Contact: Cynthia Wright, Director of Operations**

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### Director of Population Health Research

The Mayo Clinic Department of Health Sciences Research and the Mayo Clinic Center for Translational Science Activities (CTSA) are seeking a Director of Population Health Research for their Rochester, Minnesota location. The Director of Population Health Research will gain immediate, broad exposure identifying and implementing the best approaches to measure population health in the eight-county region of southeastern Minnesota centered around Olmsted county (home of Mayo Clinic). The successful applicant will be expected to develop an applied research program that systematically measures population trends and the outcomes of strategies designed to improve the health of entire populations, cultivates statewide and regional collaborations, and develops methodological approaches for population health research.

Qualified candidates will have broad experience with methods in epidemiology, health services research, social and behavioral health sciences, public health and related disciplines. A strong background in the analysis of large local, state, regional and federal datasets (administrative and survey data) and methodological skills in survey methodology are desired; although, support in this latter area is also available. Minimum qualifications include possession of a doctoral degree in a field relevant to population health research, a demonstrated track record in directing research projects, collaborating with others in a multidisciplinary setting and securing extramural funding. The candidate should have strong organizational, planning and leadership skills and solid team orientation, capable of effectively communicating with clinical investigators, academic researchers and community groups. Experience in working with community-based organizations as collaborators are highly desirable. Specific responsibilities will include development of a program of population health measurement, publishing research in peer-reviewed journals, graduate teaching and advising, obtaining extramural research funding and providing national leadership in population health research.

The Mayo Clinic CTSA is the academic home for clinical and translational research at Mayo Clinic. As part of a national consortium of NIH-funded research institutions, the Mayo Clinic CTSA trains the next generation of clinical/translational research teams and provides research facilities, staff, support services and community engagement programs to help translate medical research discoveries into better health for all. It is in this latter aspect where the key responsibilities for this position fall. For more information, visit http://ctsa.mayo.edu and www.ctsaweb.org.

This position will be in the Mayo Clinic Department of Health Sciences Research (http://mayoresearch.mayo.edu/hsr/). Salary and academic rank will be

Applications, including curriculum vitae and bibliography, summary of past experience, and the names and email addresses of three references, should be

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equal opportunity

Timothy J. Beebe, Ph.D. Associate Professor of Health Services Research Vice Chair, Division of Health Care Policy and Research Department of Health Sciences Research Mayo Clinic

200 First Street SW · Rochester, Minnesota 55905 · Email: beebe.timothy@mayo.edu

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