Our editors are always on the lookout for new applications of epidemiology and one of the more intriguing which has received headlines recently has been the monitoring of Internet Google search queries to help alert health officials and the public of upcoming influenza outbreaks. According to Gunther Eysenbach, a University of Toronto pioneer in the study of information on the Internet, outbreak alerts are only one of many potential uses for these analyses. Eysenbach has coined the term “infodemiology” to describe this field and in a recent paper defines it as “the science of distribution and determinants of information in an electronic medium, specifically the Internet, or in a population, with the ultimate aim to inform public health and public policy.” When the purpose of the monitoring is surveillance, Eysenbach has coined the term “infoveillance” to describe that activity.

As early as 2006, Eysenbach was the first to show a correlation between Internet search queries and influenza-like illness reports from sentinel physicians, suggesting that Internet queries can be used for syndromic monitoring.

ISEE President’s Newsletter Highlights New Concerns About The Pace of Climate Change And The Effects On Population Health

The latest newsletter from Australian National University’s Tony McMichael, President of the International Society for Environmental Epidemiology (ISEE), included a report from the recent international Climate Congress in Copenhagen in March. A series of six Summary Messages were developed and will be forwarded to attendees of a key national governments conference in Copenhagen in December of this year. According to McMichael, the ISEE meeting in Dublin in August of 2009 will be more ambitious than usual because “we also need to find ways of helping society understand the risks to population health from larger-scale changes to conditions, processes, and systems in the natural environment.” The six key messages from the March Climate Congress in Copenhagen are:

Key Message 1: Climatic Trends
Recent observations confirm that, given high rates of observed emissions, the worst-case IPCC scenario trajectories (or even worse) are being realized. For many key parameters, the climate system is already moving beyond the
surveillance. Engineers from Google were inspired by this work and created Google Flutrends in 2008, which received considerable media coverage.

Eysenbach’s recent paper lists a large number of potential uses for infodemiology and infoveillance studies including 1) syndromic surveillance and management of public health emergencies, 2) quality monitoring of information on the Internet, 3) knowledge translation, health communication, health marketing, and populomics, including collecting behavioral measures at a population level for public health policy and practice.

As stated in the main thesis of his recent paper, whether infodemiology indicators follow public health relevant events or predict them, “infodemiology metrics and methods are potentially useful and should be further developed and standardized.”

We contacted Dr Eysenbach to interview him about his work and this new field. Below are the answers he provided to questions from the Epi Monitor.

EPI MONITOR: Other than the idea that you are studying the distribution and determinants of health information and misinformation, are there methods or concepts from epidemiology that are useful in infodemiology? If so, can you give a couple of examples.

EYSENBACH: I am now defining infodemiology more broadly, as the emerging science of studying the "epidemiology of information", or "describing and analyzing information & communication patterns and its relationship to population health status", with the final aim to inform and improve public health. So while this includes application areas such as studying the distribution of "misinformation" on the Internet (and I first used the term infodemiology in an editorial commenting on a paper doing exactly that [1]), BUT there are other application areas, such as using the Internet for biosurveillance (an application area I call infoveillance), eg by tracking search patterns [2]. In my vision, infodemiologists will use methods and concepts from the epidemiological toolbox, e.g. multivariate regression analysis (e.g. to predict the accuracy of a specific health website from credibility cues), or time series forecasting to detect disease outbreaks from surges in health information demand (changing information seeking patterns).

The underlying idea of infodemiology is that "The Internet has made measurable what was previously immeasurable: The distribution of health information in a population, [allowing to] track health information trends over time (in real time)" [2]. Risk factors, diseases, health conditions in a population are all in one way or the other reflected on the Internet. For example, in a population where a specific condition is highly prevalent, people will "google" for that condition, post information and questions in bulletin boards and on websites, etc. The idea is that by studying these patterns we can make predictions on risk factors, diseases and conditions in a population. For example, a couple of years ago I showed that spikes in Google

Pioneer in Infodemiology, continues on page 4
Epidemiologist Wins California Peace Prize For Contributions To Youth Violence Prevention

Billie Weiss, UCLA epidemiologist and associate director of the Southern California Injury Prevention Research Center, recently won a $25,000 California prize in 2008 along with two other Californians committed to preventing violence in their communities. According to the citation for the award, Weiss has promoted a public health approach to violence prevention and has conducted pioneering public health research that has helped community based organizations become more effective in preventing violence. According to Weiss, in public health we have demonstrated that we are good at prevention, such as tobacco for example. However, we have not been able to convince people to take a similar preventive approach to violence. In general law enforcement and incarceration are the approach that is most often used to reduce violence and violent crime.

The statistics on youth violence in LA are striking and they are what led Weiss to change her career direction from infectious disease work to violence prevention. In an interview given at the time she received the prize, Weiss was asked how she came to focus on violence, guns, and injury prevention. When I finished my graduate degree, I was an intern and an epidemiologist with the county of Los Angeles and, like most epidemiologists in those days, we worked in infectious disease. I began to look more and more at the data, and I talked with my bosses and said you know, we’re looking at the wrong stuff here. Kids are not dying of infectious diseases in Los Angeles. Violence, particularly gun violence in Los Angeles County was killing more young people under the age of 35 than anything else, including AIDS, cancer, heart disease, or motor vehicle accidents. It is the leading epidemic of our time and it impacts every segment of a healthy community. Violence in Los Angeles County costs more public health dollars than any other epidemic over the past 20 years.

Weiss got her start in violence prevention in the late 1980s and in 1990 obtained a grant to start an injury and violence prevention program in the Los Angeles County Health Department. At the time, in parts of South Central LA 1 in 200 young men of color were dying every year due to homicide and guns. She helped start the Violence Prevention Coalition of the Greater LA area. To this day she has retained her focus on making her research useful. As she said in her interview, I think the people I admire most are the people who work on the ground in the neighborhoods. I feel that my role is to help them do what they do with the best information possible. The research is absolutely no good if it isn’t useful to the people working in the community. We need to get them information in a way that they can use it.

In an interview with the Epi Monitor, Weiss confided that she had won the Peace Prize more for effort in seeking to reduce violent deaths than for actual results to date. However, the coalition she helped to create has succeeded in making positive changes such as changes in gun policy. Today California is one of the few states along with Massachusetts and Maryland to have the most stringent gun safety laws.

According to Weiss, one of the most intractable challenges in promoting the prevention of youth violence is that the

- Weiss Wins Peace Prize continues on page 10
searches predicted flu outbreaks by about 1 week - a finding that has recently been confirmed by another group [3].

EPI MONITOR: Who thought of the term infodemiology and what was the main reason for choosing that term to describe what you do? I can imagine there are others like ehealth information and so forth.

EYSENBACH: It was coined by me. See http://www.jmir.org/2009/1/e11 for an explanation of the origin of the term. In a nutshell, it is a portmanteau of “information” and “epidemiology”, as we are interested in developing metrics to study the epidemiology of information.

EPI MONITOR: Is your mission one of service (which it sounds like) or one of research?

EYSENBACH: Both. The research aspect is to develop metrics and methods. The service aspect is to provide intelligence to public health professionals and researchers.

EPI MONITOR: Why is your field seemingly focused on the epi of bad information rather than on the epi of good information?

EYSENBACH: That is a complete misunderstanding of what infodemiology is. It’s like asking “why is epidemiology focused on heart disease”. It is true that I first used the term “infodemiology” in an editorial commenting on a paper where authors tried to identify predictors for “low quality” websites. In that editorial I suggested the development of measures for what is being published on the Internet (what is now called “supply-based infodemiology”). While it is important for public health professionals to detect trends on “bad” information, for example anti-vaccination websites, these “supply-based” methods also have other applications, for example to measure inequalities in the availability of information between populations, or to measure the diffusion of new knowledge. For example, after publication of a new study showing the effectiveness of a new drug, automatic infodemiology methods can detect the speed with which this information is disseminated on the Internet. Moreover, I now also use the term infodemiology for studying “demand”, i.e. trends in Internet searches and navigation patterns of people, which allows inferences on health behavior, as well as the health status of a population.

EPI MONITOR: What are really the key outcome variables which have proven to be the most relevant/feasible in this field?

EYSENBACH: Not sure how to answer this, as the “outcome variables” can be all kinds of health outcomes or behavioral outcomes.

EPI MONITOR: Have you ever thought of using all of what you have learned to create a list of the best or worst websites? If so, can you share the list with us?

EYSENBACH: No, I do not think there is such a thing as the “best” or “worst” website. Quality is in the eye of the beholder, and it is not the aim of infodemiology to make such statements. I actually avoid making any statements on “quality”. If anything, then we can talk about website or information
R, WinPepi, and OpenEpi
By Kevin Sullivan

R

A recent New York Times article “Data Analysts Captivated by R’s Power” provides information on the R program (January 7 2009). R is a free, open source statistical and graphics program which has been previously described in the Epidemiology Monitor. A link to the article can be found here:

http://www.nytimes.com/2009/01/07/technology/business-computing/07program.html?_r=1

The main website for R:
www.r-project.org

An example of R in epidemiology:
www.medepi.net/epitools

We would be interested in hearing from readers concerning their experience in using R. Write to epimon@aol.com

WinPepi

WinPepi is a Windows-based epidemiologic calculator available at www.brixtonhealth.com. The current release of WinPepi has the following new features:
• Augmented measures of association in large contingency tables (general odds ratio, general risk difference, Goodman and Kruskal’s gamma).
• Improved procedures for meta-analyses of diagnostic and screening tests.
• Appraisal of associations with multi-category (“multiple-choice”) variables.
• Improved procedures for appraising dose-response relationships and other trends.
• Drawing of forest plots for use in meta-analyses.
• Procedures for the use of incompletely paired data for appraising differences between proportions.
• Computation of Bayes factors.
• Sensitivity analysis to appraise the effect of unmeasured confounders.
• Estimation of prevalence from pooled samples.

OpenEpi

OpenEpi (www.OpenEpi.com) is a free, web-based, open source, operating system-independent series of programs for use in public health and medicine that can be run in English, French, Italian, or Spanish. The program works similar to a calculator in that the user inputs summary data and the results of calculations are presented. OpenEpi has had over 2 million hits since its inception in 2003 with over 1 million hits in 2008. The OpenEpi website has had hits from every country with the exception of 10 countries. Additional information on OpenEpi can be found at en.wikipedia.org/wiki/Openepi.

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“OpenEpi has had over 2 million hits since its inception in 2003 with over 1 million hits in 2008.”
patterns of natural variability within
which our society and economy have
developed and thrived. These
parameters include global mean surface
temperature, sea-level rise, ocean and
ice sheet dynamics, ocean acidification,
and extreme climatic events. There is a
significant risk that many of the trends
will accelerate, leading to an increasing
risk of abrupt or irreversible climatic
shifts.

Key Message 2: Social disruption

The research community is providing
much more information to support
discussions on "dangerous climate
change". Recent observations show that
societies are highly vulnerable to even
modest levels of climate change, with
poor nations and communities
particularly at risk. Temperature rises
above 2C will be very difficult for
contemporary societies to cope with,
and will increase the level of climate
disruption through the rest of the
century.

Key Message 3: Long-Term Strategy

Rapid, sustained, and effective
mitigation based on coordinated global
and regional action is required to avoid
"dangerous climate change" regardless
of how it is defined. Weaker targets for
2020 increase the risk of crossing
tipping points and make the task of
meeting 2050 targets more difficult.
Delay in initiating effective mitigation
actions increases significantly the long-
term social and economic costs of both
adaptation and mitigation.

Key Message 4 - Equity Dimensions

Climate change is having, and will
have, strongly differential effects on
people within and between countries
and regions, on this generation and
future generations, and on human
societies and the natural world. An
effective, well-funded adaptation safety
net is required for those people least
capable of coping with climate change
impacts, and a common but
differentiated mitigation strategy is
needed to protect the poor and most
vulnerable.

Key Message 5: Inaction is Inexcusable

There is no excuse for inaction. We
already have many tools and
approaches? Economic, technological,
behavioral, management to deal
effectively with the climate change
challenge that lies ahead. But they must
be vigorously and widely implemented
to achieve the societal transformation
required to decarbonize economies. A
wide range of benefits will flow from a
concerted effort to alter our energy
economy now, including sustainable
energy job growth, reductions in the
health and economic costs of climate
change, and the restoration of
ecosystems and revitalization of
ecosystem services.

Key Message 6: Meeting the Challenge

To achieve the societal transformation
required to meet the climate change
challenge, we must overcome a number
of significant constraints and seize
critical opportunities. These include
reducing inertia in social and economic
systems; building on a growing public
desire for governments to act on climate
change; removing implicit and explicit
subsidies; reducing the influence of
vested interests that increase emissions
and reduce resilience; enabling the
shifts from ineffective governance and
weak institutions to innovative
leadership in government, the private
sector and civil society; and engaging
society in the transition to norms and
practices that foster sustainability.

To read the full press release from the
Congress, visit
http://climatecongress.ku.dk/newsroom/congress_key_messages/
Epi Info™ Goes Open Source
by Jay Jones

[The following article was recommended by Kevin Sullivan who writes occasional articles on software related topics for The Epidemiology Monitor. This article is reprinted from PHIN News 2009; 3(6): 6-8.]

The Centers for Disease Control and Prevention (CDC) National Center for Public Health Informatics (NCPHI) Epi Info™ team recently released the application’s code to the public, making it the first Public Health Information Network (PHIN) application to go open source. “Because the code is out there, other developers and other entities can use the Epi Info™ code to add features, contribute enhancements, and make it a much better product,” according to Enrique Nieves, Acting Division Director for the Division of Integrated Surveillance Systems and Services responsible for the Epi Info™ open source project. Enrique adds: “Going open source will also help us grow a wider user base, and as we grow, we will attract more users who want to help with development.”

The Epi Info™ user base is already quite large, with over a million users worldwide. In its twenty-year existence, many CDC developers and contractors have worked on Epi Info™, resulting in code that needed to be updated to bring it up to today’s real-time, Internet-age standards and to make it suitable for release to the open-source community of developers. The Epi Info™ code is comprised of many components, including Visual Basic, Access, SQL, C#, etc.

To ensure a successful transition to open source, there are currently three versions of Epi Info™. Epi Info 3.5.1™ is the latest release of the application and has been deployed to the Epi Info user base. Epi Info 7™ and Epi Info Community Edition (CE) share identical code; however, Epi Info 7™ is being developed at the CDC and Epi Info CE has been posted on the Web for open-source developers to use.

- Epi Info 3.5.1™: The current version of Epi Info™ is the final version to be released to its user base using the existing code.
- Epi Info 7™: This next version of Epi Info™, is currently in the early stage of the development process (Pre-Beta version). Epi Info 7™ will replace version 3.5.1 and will include modules and other enhancements created and/or suggested by the open source community.
- Epi Info Community Edition (CE): Epi Info 7™ code that has been released to the open source community. Epi Info™ CE will be developed independently from Epi Info 7™ by the open source community, who will then submit code contributions to the CDC for consideration of inclusion in Epi Info 7™.

“.NET™ is a very difficult program to move to open source, so we created Epi Info CE outside the CDC firewall; the new code that is developed by the open source community does not cross back over the firewall to CDC,” says Nieves. The versions of Epi Info™ that are inside the CDC firewall (3.5.1. and Epi Info 7™) have to meet strenuous federal security requirements. Nieves says that they put Epi Info™ CE outside the CDC firewall so that they “could use the world as our development laboratory. Now, users who have access to Epi Info

"Going open source will also help us grow a wider user base..."
CE can develop and send us information about their contributions. We can then evaluate it and determine if it is something we can incorporate into Epi Info 7™. If it is, we then put it through CDC and other federal security requirements.” This process will ensure that CDC/NCPHI takes the best of what the open-source community offers while maintaining an application that meets federal security requirements for its Epi Info™ user base.

By design, the process is not cyclical. The Epi Info™ team will receive code enhancements from the community, but they will not update the code and return it to the open source community. This process is necessary to ensure the application continues to meet federal security requirements and is vetted by the CDC before it goes to the existing user base. Eventually, there will be a fork in the two development efforts: Epi Info CE will be one product, and CDC’s Epi Info 7™ will be a CDC-supported product that meets federal security requirements.

However during the entire process, the communication and evaluation will be ongoing and bi-directional. Nieves says that “right now, we’re working on the communication process between the users and us. We have a Web board for users to submit their enhancement ideas. There is also another board called MyEpiInfo, which is completely independent and supplies a forum for developers to collaborate.”

Though still very early in the process, Nieves’ division is currently working on a draft document that describes how they took Epi Info™ to open source, which includes the collaborative work they did with CDC’s Office of General Counsel in reviewing various open source licenses to consider the most appropriate one for CDC.

In the future, Epi Info™ may be the Microsoft Office™ of epidemiology, a suite of products for outbreak management. The major difference is that it will be created by user feedback and contributions in an open source environment.

Enrique adds: “As long as users know how to compile code, they can go and compile the Epi Info CE code, load it into their computer, and begin working. There still are some high-level statistical modules that we are now beginning to add to Epi-Info 7™. But if you want to develop a database, it’s ready to go.”

For more information:
- The current website on CDC.gov: www.cdc.gov/epiinfo (available for download Epi Info™ 3.5.1)
- User Forum: http://cms.myepi.info/
- Epi Info™ Community Edition: http://www.codeplex.com/EpiInfo
- Epi Info™ Friends Group on Google: http://groups.google.com/group/ELFriends?hl=en (Restricted to invited members. To become a member, contact the group owner at andy.dean@gmail.com)
- Epi Info™ in Italy: http://www.epiinfo.it/
- Epi Info™ in Brazil (Portuguese): http://www.epiinfo.com.br/ead/
- Epi Info™ in Spain: http://www.cica.es/epiinfo/

Utah Creates Capacity To Detect and Respond To Disease In Real Time
System Has Potential To Save Lives

A team of public and private interests in Utah has developed new software that enhances the state’s capacity to detect and respond to disease in real time, according to David Jackson, Product Manager with the Utah Department of Health Division of Epidemiology and Laboratory Services. The new software was launched in January 2009 and is now “in really good shape”, according to Jackson.

The new tool, called CSI TriSano, has been developed using open source code and is now available free of charge to local and state health agencies nationwide. It is the first open source, Web-based infectious disease tracking and management system in the country, providing public health officials with a high-value, low-cost alternative that prevents duplicate, error-prone data entry. State and local health agencies sometimes can pay up to $2M for commercial off-the-shelf software products with extra fees to customize the product for their jurisdiction.

Prior to the launch of TriSano statewide, epidemiologists in Utah were working off 15 different silo-like databases statewide, according to Jackson, and no one could be sure they were dealing with the same dataset in seeking to identify and respond to cases. Each local health department would enter a case into its own database, then print a hard copy and send it to Utah Department of Health.

"The cases would trickle in so slowly from around the state it could be weeks or months before we could detect a trend," said State Epidemiologist Dr. Robert Rolfs. He added, "Protecting the public against health threats ranging from the recent peanut butter Salmonella outbreak to an influenza pandemic requires that epidemiologists be able to track, investigate and respond to diseases across jurisdictional boundaries in real time. "We now have the advanced technology that enables us to do that."

Also, a useful feature of the program is that users can create new disease reporting forms “on the fly” as outbreaks unfold. The form-building tool can have new forms ready to go in a matter of hours to help better identify the extent of an outbreak, according to Jackson.

He cited the example of a swimming pool associated cryptosporidiosis outbreak two summers ago in Utah which resulted in more than 2,000 reported cases with 12-13% hospitalization. “We learned in retrospect that we could have picked up cases 2-3 weeks earlier, according to Jackson, and could have reduced the number of cases with earlier warning.”

According to a press release on the new product, the CSI TriSanoTM system is a secure, shared, Web-based database that can make statewide disease information available immediately to the Utah Department of Health (UDOH) and the state’s 12 local health departments (LHDs).

As soon as an LHD inputs a case, it can be securely viewed via the Web by those LHDs and the state that have the appropriate rights and that have a role in tracking, investigating and/or managing public health threats.

"We learned in retrospect that we could have picked up cases 2-3 weeks earlier..."
"We can't arrest our way out of this."

...cities should keep as many epidemiologists as possible involved in studying the case.

CSI TriSano will also electronically transmit disease data to the Centers for Disease Control and Prevention (CDC). The CDC can then use it to monitor health trends across the country.

Work on the project began in November 2007, when the State of Utah and software company Novell engaged in a public-private partnership to initiate its development. Utah's LHDs and the Utah Departments of Health and Technology Services, in turn, partnered with Portland-based software company Collaborative Software Initiative (CSI) to develop the system. Fourteen months later, CSI TriSano was launched.

The TriSano software was developed using a “lean and agile” method in which a development team creates a roadmap of what it wants the software to perform and then works in two week development cycles to produce separate features. After two weeks the new feature is brought out, examined, and tweaked to fit user needs. Developers then move on to create another set of features within two weeks and so on until the product is finished. Utah had failed to develop useful software previously using a “waterfall” method in which users define their needs upfront and than wait for months to receive and test the final product.

The “lean and agile” approach is more effective, according to Jackson, because the final product is better tailored to the needs of users. It allows for more feedback, helps avoid miscommunications, and prevents the creation of features which may not be truly needed. Overall, the lean and agile approach is more efficient and successful, said Jackson. n
attributes”, and propose models how they are related to other website attributes or health and behavior change outcomes.

**EPI MONITOR:** What categories of websites or which individual website are the best for health information even if you do not have a top ten or twenty list?

**EYSENBACH:** That’s not a question I am interested in, and I don’t think that this is an answerable question. It’s like asking “who is the best doctor”. The answer is always “it depends”.

**EPI MONITOR:** Is there an agreed upon list now of quality or credibility criteria for websites? If so, could you please share with us?

**EYSENBACH:** No, there is no such list, although there is certainly some research out there which tells us which website attributes affect “credibility” – and when I say credibility, I mean credibility as a perceptual, receiver-based variable. Simple things like typos for example.

**EPI MONITOR:** Why not just call your field “consumer health informatics”? Is infodemiology the same thing or a subset of this?

**EYSENBACH:** I’d say infodemiology is a set of quantitative methods which has applications in consumer health informatics and public health informatics.

**EPI MONITOR:** Could you please direct us to the best paper you know of giving the most recent overview of this field or topic?

**EYSENBACH:** A paper has just appeared in the Journal of Medical Internet Research -

**Eysenbach G**
URL: http://www.jmir.org/2009/1/e11

**References:**

1. G. Eysenbach. Infodemiology: the epidemiology of (mis)information. American Journal of Medicine, 2002;113(0):763-765

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**Editor’s Picks - Best Selections From www.epimonitor.net**

**Researchers Suggest Increase in California Autism Cases Is Real**

A report in a recent issue of Epidemiology suggests that the increase in autism cases in California between 1990 and 2000 from 9 per 10,000 to 44 per 10,000 is not explicable by in-migration to the state or by other artifactual elements such as the inclusion of milder cases or an earlier age at diagnosis. The report is in contrast to others by epidemiologists which have not found the increase in autism to be real. The latest report comes out of the M.I.N.D. Institute in California which has been created to help conduct research on autism. The senior investigator is well known environmental epidemiologist Irva Hertz-Picottoto was quoted in the

- **Editor’s Picks, continues on page 12**
media calling for a shift in research priorities on autism from genetic to environmental causes. She stated that currently 10-20 times more research is being carried out on genetic causes compared to environmental ones.

Decrease in Life Expectancy Tied To Political Changes In Former Soviet Countries

For several years now we have heard about the drop in life expectancy in the former Soviet Union following the political changes in that country in the late 1980’s. The life expectancy dropped from 67 to 60 years over the 23 year period from 1985 to 2008. A study published in The Lancet compared the changes in life expectancy in the Soviet Union and other countries linked to the Soviet Union and found that the death rates varied in the different countries in association with the pace of the privatization changes introduced, how the different governments responded to the unemployment caused by privatization (did they seek to mitigate increased smoking and alcoholism associated with unemployment?), and the level of support available to people through social organizations (what percentage of the population was a member of a social organization?). For example, life expectancy in Russia dropped by 5 years between 1991 and 94 whereas life expectancy in Croatia and Poland increased during the same period despite a very rapid privatization strategy implemented in Poland. Russia reportedly did little to address smoking and alcoholism, and the percentage of the population in social organizations was only 10% in Russia compared to 48% in the Czech Republic.

New York City Seeking To Cut Salt Intake By 50% Over The Next Decade

As part of a proactive public health program in New York City which has already made inroads on tobacco control and elimination of trans fats in the diet, New York City Health Commissioner Thomas Frieden has launched a voluntary program to cut salt intake among New Yorkers by 25% in five years and by 50% over the next decade. The new initiative was described in an article in the NY Times. The program is targeting packaged food and mass-produced restaurant meals because these sources account for a full 80% of the salt citizens are consuming. Perhaps surprising to some, the amount of salt added at the table accounts for only 11% of the salt citizens consume.

Because of the sources, Frieden and the Health Department have asked food company executives to voluntarily identify which foods contain the most salt and to reduce these amounts gradually so that consumers will not notice and become accustomed to the new levels. Because other health departments and the AMA are involved, the campaign is being billed as a national campaign to lower the amount of salt that Americans eat. Estimates are that lowering sodium levels by 50% would save 150,000 lives per year across the USA.
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<td>Rob McConnell *213/250-2594 <a href="mailto:rmcconne@usc.edu">rmcconne@usc.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>CA</td>
<td>Pasadena</td>
<td>Kaiser Permanente</td>
<td>Sr Research Project Manager</td>
<td>Masters or equity</td>
<td>Jan Akins *626/405-5746 <a href="mailto:Jan.B.Akins@kp.org">Jan.B.Akins@kp.org</a></td>
<td>03/11/09</td>
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<tr>
<td>CA</td>
<td>Pasadena</td>
<td>Kaiser Permanente</td>
<td>Research Scientists</td>
<td>Doctorate</td>
<td>Jan Akins *626/405-5746 <a href="mailto:Jan.B.Akins@kp.org">Jan.B.Akins@kp.org</a></td>
<td>03/11/09</td>
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<tr>
<td>CA</td>
<td>Stanford</td>
<td>Stanford U-School of Med</td>
<td>FT Ten Track Faculty (2)</td>
<td>PhD or equiv-eapi</td>
<td>Jessica Bussey *624/557-5788 <a href="mailto:bussey@stanford.edu">bussey@stanford.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>CA</td>
<td>Los Angeles</td>
<td>U of Southern CA</td>
<td>PT Lecturer</td>
<td>PhD or equiv</td>
<td>Patricia Gutierrez *805/447-1233 <a href="mailto:guatierrez@amgen.com">guatierrez@amgen.com</a></td>
<td>03/11/09</td>
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<tr>
<td>CA</td>
<td>Thousand Oaks</td>
<td>Amgen</td>
<td>PT Lecturer</td>
<td>PhD</td>
<td>Mari Fuentes *626/457-4044 <a href="mailto:pentz@usc.edu">pentz@usc.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>CA</td>
<td>Los Angeles</td>
<td>USC</td>
<td>Assoc Prof</td>
<td>PhD</td>
<td>Mari Fuentes *626/457-4044 <a href="mailto:pentz@usc.edu">pentz@usc.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>CA</td>
<td>LA</td>
<td>USC</td>
<td>Assoc Prof</td>
<td>PhD</td>
<td>Mari Fuentes *626/457-4044 <a href="mailto:pentz@usc.edu">pentz@usc.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>CT</td>
<td>New Haven</td>
<td>Yale University</td>
<td>Assoc/Assoc Prof</td>
<td>Doctorate</td>
<td>Adrianna Mironick *203/785-2914 <a href="mailto:adrianna.mironick@yale.edu">adrianna.mironick@yale.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>DC</td>
<td>Washington</td>
<td>Health Academies</td>
<td>Epidemiologist</td>
<td>PhD</td>
<td>Daniela Stricklin *202/324-2847 <a href="mailto:dstricklin@nas.edu">dstricklin@nas.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>DC</td>
<td>Washington</td>
<td>GWU</td>
<td>Asst/Prof</td>
<td>doc degree</td>
<td>Stephanie Panich *202/994-0025 <a href="mailto:spiphp@gwu.edu">spiphp@gwu.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>DE</td>
<td>Dover</td>
<td>Div of PH</td>
<td>EPH (Enviro)</td>
<td>BS/MS</td>
<td>Gerald Lewellyn *302/474-4824 <a href="mailto:gerald.lwellyn@state.de.us">gerald.lwellyn@state.de.us</a></td>
<td>03/11/09</td>
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<tr>
<td>FL</td>
<td>Tallahassee</td>
<td>FLDH</td>
<td>FL Epidemiologist</td>
<td>MD/DO</td>
<td>Christine Herrell *850/487-3729 <a href="mailto:christine.herrell@doj.state.fl.us">christine.herrell@doj.state.fl.us</a></td>
<td>03/11/09</td>
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<tr>
<td>FL</td>
<td>Tallahassee</td>
<td>FL DOH</td>
<td>FL Epidemiologist</td>
<td>MD/DO</td>
<td>Richard Hopkins *850/922-9299 <a href="mailto:richard.hopkins@doj.state.fl.us">richard.hopkins@doj.state.fl.us</a></td>
<td>03/11/09</td>
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<tr>
<td>FL</td>
<td>Gainesville</td>
<td>Univ of FL</td>
<td>Res. Ass't. Prof</td>
<td>PhD</td>
<td>Pamela Simmons *352/265-8047 <a href="mailto:pbs@epr.ufl.edu">pbs@epr.ufl.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>GA</td>
<td>Atlanta</td>
<td>Emory Univ.</td>
<td>Asst/Prof Infec. Dis.</td>
<td>PhD/MD/MPH</td>
<td>Job Ref. 2008/09 *404/727-1278 <a href="http://www.emory.edu/career.cfm">www.emory.edu/career.cfm</a></td>
<td>03/11/09</td>
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<tr>
<td>GA</td>
<td>Atlanta</td>
<td>ACS</td>
<td>Sr Epidemiologist</td>
<td>PhD/MD</td>
<td><a href="http://www.cancer.org/jobs">www.cancer.org/jobs</a></td>
<td>03/11/09</td>
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<tr>
<td>GA</td>
<td>Atlanta</td>
<td>Emory Univ.</td>
<td>Assoc Prof</td>
<td>PhD</td>
<td>Kyle Steenland *404/727-3697 <a href="mailto:nstein@sph.emory.edu">nstein@sph.emory.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>GA</td>
<td>Atlanta</td>
<td>Emory Univ.</td>
<td>Assoc Professor</td>
<td>PhD</td>
<td>Kyle Steenland *404/727-3697 <a href="mailto:nstein@sph.emory.edu">nstein@sph.emory.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>GA</td>
<td>Boston</td>
<td>Harvard Medical School</td>
<td>Pos Doctoral Fellow</td>
<td>Doc in Epi field</td>
<td>Jiali Han *617/525-2547 <a href="mailto:rhan@harvard.edu">rhan@harvard.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>GA</td>
<td>Boston</td>
<td>Harvard PH</td>
<td>Pre/Post Doc-Nutri Epi</td>
<td>Ms,MD,PhD</td>
<td>Mer Repp *617/525-2547 <a href="mailto:rhan@harvard.edu">rhan@harvard.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>GA</td>
<td>Boston</td>
<td>Boston Univ.</td>
<td>Chief</td>
<td>PhD/MD</td>
<td>Claire Winston-Wade *617/385-7256 <a href="mailto:c.winston-wade@omc.org">c.winston-wade@omc.org</a></td>
<td>03/11/09</td>
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<tr>
<td>GA</td>
<td>Boston</td>
<td>Social Sectors</td>
<td>Epi Res. Sci</td>
<td>PhD</td>
<td>Beth Daly *617/41-9046 <a href="mailto:bdaly@ssds.net">bdaly@ssds.net</a></td>
<td>03/11/09</td>
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<tr>
<td>GA</td>
<td>Boston</td>
<td>Harvard SPH</td>
<td>Res. Fellow</td>
<td>PhD</td>
<td>Li Qu *617/43-2436 <a href="mailto:rhan@channing.harvard.edu">rhan@channing.harvard.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>GA</td>
<td>Boston</td>
<td>UMASS</td>
<td>Asst/Assoc Prof</td>
<td>PhD</td>
<td>Sierra Dickson *617/432-4533 <a href="mailto:ssch@sphs.harvard.edu">ssch@sphs.harvard.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>GA</td>
<td>Boston</td>
<td>Health Effects Inslt.</td>
<td>Epi/Biostat</td>
<td>MD epbiostat</td>
<td>Teresa Fasulo *617/488-2335 <a href="mailto:tfasuolo@healtheffects.org">tfasuolo@healtheffects.org</a></td>
<td>03/11/09</td>
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<tr>
<td>MD</td>
<td>Baltimore</td>
<td>Johns Hopkins University</td>
<td>Predoc Trainee</td>
<td>PhD</td>
<td>April Lawner *410/855-0476 <a href="mailto:alawner@jhu.edu">alawner@jhu.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>MD</td>
<td>Baltimore</td>
<td>Johns Hopkins University</td>
<td>Postdoc Fellow</td>
<td>PhD</td>
<td>April Lawner *410/855-0476 <a href="mailto:alawner@jhu.edu">alawner@jhu.edu</a></td>
<td>03/11/09</td>
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<tr>
<td>MD</td>
<td>Rockville</td>
<td>FDA-CBER</td>
<td>Medical Epi</td>
<td>Doctoral Degree</td>
<td>Robert Wise *301/827-6089 <a href="mailto:robert.wise@fda.hhs.gov">robert.wise@fda.hhs.gov</a></td>
<td>03/11/09</td>
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<tr>
<td>MD</td>
<td>Rockville</td>
<td>Westat</td>
<td>Sr. Epi/Inf Stud</td>
<td>MD/PhD</td>
<td>R. Carow *301/294-2032 <a href="mailto:rcrow@westat.org">rcrow@westat.org</a></td>
<td>03/11/09</td>
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<tr>
<td>MD</td>
<td>Rockville</td>
<td>Center for Biologics</td>
<td>Epidemiologists</td>
<td>MD/MPH,equiv</td>
<td>Robert Wise *301/827-5218 <a href="mailto:robert.wise@fda.hhs.gov">robert.wise@fda.hhs.gov</a></td>
<td>03/11/09</td>
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<tr>
<td>MD</td>
<td>Rockville</td>
<td>FDA</td>
<td>PH Analyst</td>
<td>adv. epi train</td>
<td>Cheryl Reynolds *301/827-5218</td>
<td>03/11/09</td>
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<tr>
<td>MD</td>
<td>Rockville</td>
<td>FDA</td>
<td>Branch Chief</td>
<td>MD/MPH</td>
<td>Robert Wise *301/827-5218</td>
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<tr>
<td>MD</td>
<td>Bethesda</td>
<td>NIH</td>
<td>Epi Prof. Specialist</td>
<td>Bsc/Masters</td>
<td>Esther Lwanga *301/496-4006 <a href="mailto:lwangae@nih.gov">lwangae@nih.gov</a></td>
<td>03/11/09</td>
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<tr>
<td>MD</td>
<td>Bethesda</td>
<td>NIH</td>
<td>PD Fellow</td>
<td>PhD,MD+MPH</td>
<td>Jack Guralnik *301/496-1176 <a href="mailto:jguralnik@nih.gov">jguralnik@nih.gov</a></td>
<td>03/11/09</td>
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<td>MD</td>
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<td>MD/MHM</td>
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<td><a href="mailto:dimhjobs@dimh.state.md.us">dimhjobs@dimh.state.md.us</a></td>
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<tr>
<td>ME</td>
<td>Augusta</td>
<td>CE CDC</td>
<td>Epidemiologist</td>
<td>MPH</td>
<td>Virginia Rousse *207/287-6299</td>
<td>03/11/09</td>
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<td>State</td>
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<td>Institution</td>
<td>Description</td>
<td>Degree/Position</td>
<td>Contact</td>
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<td>ME</td>
<td>Augusta</td>
<td>Maine DHHS Director</td>
<td>MPH or equiv</td>
<td>Virginia Roussel</td>
<td><a href="mailto:Virginia.Roussel@maine.gov">Virginia.Roussel@maine.gov</a></td>
<td>207/287-1873</td>
<td>oao 01/19/09</td>
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<tr>
<td>MN</td>
<td>Minneapolis</td>
<td>Mpls-VAMC Statistician</td>
<td>Masters</td>
<td>Barb Clothier</td>
<td><a href="mailto:barbara.clothier@va.gov">barbara.clothier@va.gov</a></td>
<td>612/727-5699</td>
<td>oao 03/11/09</td>
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<tr>
<td>MO</td>
<td>Rochester</td>
<td>Mayo Clinic PD Fellow</td>
<td>PhD/MD</td>
<td>Gloria Petersen</td>
<td><a href="mailto:gloria.petersen@mayo.edu">gloria.petersen@mayo.edu</a></td>
<td>507/538-1565</td>
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<tr>
<td>MI</td>
<td>Detroit</td>
<td>Wayne State University PD</td>
<td>PhD/MD</td>
<td>Emily White</td>
<td><a href="mailto:Emily.White@detroit.mph.org">Emily.White@detroit.mph.org</a></td>
<td>313/876-3977</td>
<td>oao 01/19/09</td>
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<tr>
<td>WI</td>
<td>Milwaukee</td>
<td>Medical College of Wisc</td>
<td>PhD</td>
<td>Cheryl A. Maurana</td>
<td><a href="mailto:cmaurana@mcw.edu">cmaurana@mcw.edu</a></td>
<td>414/262-8430</td>
<td>oao 01/19/09</td>
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The Epidemiology Monitor • March 2009
The University of Kentucky, College of Public Health
Department of Epidemiology

Tenure Track Position - Associate Professor/Full professor

The University of Kentucky, College of Public Health, Department of Epidemiology invites applications from qualified candidates for a tenure-track faculty position at the associate professor or full professor level to fulfill the University and College missions of research, teaching, and service. The position is a full-time (12-month), regular title series tenure-track appointment in the College of Public Health with the potential for a joint appointment in the College of Medicine. Qualified candidates should have a focused area of research and may include collaborations with faculty in other divisions. Teaching responsibilities will include courses in the College of Public Health, Department of Epidemiology. The successful candidate will be expected to develop and maintain an active research program. Responsibilities also include student advising, curriculum development, and serving on thesis and doctoral committee. The individual selected must have a PhD, DrPH, or ScD in epidemiology or an MD with an MPH from an accredited school of public health or equivalent training. Candidates should have demonstrated ability in all three academic areas (research, teaching, and service). This position offers a competitive salary at a fully accredited College of Public Health and the opportunity to work with outstanding faculty in many departments including renowned clinicians at the University of Kentucky, College of Medicine. Lexington, Kentucky is ranked among the best places to live in the U.S. and provides a quiet, peaceful setting with an easy commute to work.

Applications, including curriculum vitae, one copy of at least three recent or representative publications, and contact information for three references should be sent to: Thomas C. Tucker, PhD, MPH, University of Kentucky, College of Public Health, Department of Epidemiology, 121 Washington Avenue, Lexington, KY 40536-0003. The review of applications will continue until the position is filled.
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Assistant/Associate Professor (tenure track)

The Department of Pharmaceutical Health Services Research (PHSR) at the University of Maryland School of Pharmacy seeks candidates for a 12-month, tenure track Assistant or Associate Professor position in pharmacoepidemiology. The candidate will be expected to conduct research, to participate in the PharmD and Graduate Programs, and to serve on committees at the Departmental and School levels. The successful candidate is expected to collaborate with interdisciplinary teams of faculty, research staff, and graduate students. The candidate is also expected to initiate and develop research in the fields of pharmacoepidemiology, pharmacovigilance, drug safety, health services research or related areas.

The candidate will have an earned doctorate in epidemiology or a related field with relevant postdoctoral training or experience. Preference will be given to candidates with exceptionally strong empirical skills. A background in pharmacy is desirable but not required. A strong record of peer-reviewed publications and/or a history of external research funding is desirable. The successful candidate will report to the Chair of the Department of Pharmaceutical Health Services Research. This is an excellent opportunity to join a leading, multidisciplinary faculty. Applicants should send a letter of interest, a current curriculum vitae (signed and dated), and the names of three references to:

Francis B. Palumbo, PhD, Esq
Chair, Search Committee
Pharmaceutical Health Services Research Department
School of Pharmacy, University of Maryland
220 Arch Street, 12th Floor
Baltimore, MD 21201
fpalumbo@rx.umaryland.edu

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The Division of Biostatistics and Epidemiology, a research division of Cincinnati Children's Hospital Medical Center (CCHMC), seeks a scholarly, enthusiastic, and visionary director. CCHMC is one of the top-ranked children's hospitals in the world and its vision is to be the leader in improving child health. A few of the Research Foundation’s recent accomplishments include:

- Ranked second of all pediatric centers in NIH funding ($92 million in 2007; Over $123 million in total grant revenues)
- Ranked third-best pediatric program at a medical school (U.S. News & World Report)
- New research tower opened in 2007, increasing research space to nearly 1 million square feet and making Cincinnati Children's one of the largest pediatric research programs in the country
- Investment in research by CCHMC of over $60 million above total grant revenues, including a number of internal grant programs
- Research programs integrated across a full range: basic/discovery, translational, clinical trials, health services, quality improvement/clinical effectiveness, community research

The Division of Biostatistics and Epidemiology currently includes 43 faculty and staff, conducts independent research, and collaborates on more than 75 grants worth an estimated $75 million. The division also provides collaborative support to 56 divisions of CCHMC and is allied with graduate teaching programs in biostatistics and epidemiology. The faculty and staff are located in the new, state-of-the-art research tower adjacent to the Division of Biomedical Informatics and the Clinical and Translational Research program. Faculty appointments are with the University of Cincinnati College of Medicine.

Qualified candidates must have a doctoral degree in Biostatistics, Epidemiology, or a related statistical field, and have progressed to the rank of Associate or Full Professor. The preferred candidate will have an outstanding record of independent, collaborative, and well-funded research, publication in high-impact journals, and effective written and oral communication skills. The Director will develop a strategic vision for the division to advance the role of biostatistics and epidemiology and clinical and translational research in the academic health center while providing leadership and oversight of the divisional operations and collaborations with investigators at CCHMC from across the full range of research programs. The director will be expected to mentor junior faculty and trainees, increase the success of existing programs, and successfully develop new initiatives. This position will be at the academic rank of Full Professor, with tenure in the Department of Pediatrics.

For additional information regarding the position, contact the Chairperson of the Search Committee, Scott W. Powers, PhD, Professor of Pediatrics and Director of Clinical and Translational Research, Cincinnati Children’s Research Foundation, 513-636-8106, Scott.Powers@cchmc.org

Interested candidates should send a letter describing their qualifications and interests, along with their curriculum vitae and contact information for three professional references, to: Scott W. Powers, PhD, c/o Teresa Nangle, Cincinnati Children's Hospital Medical Center, 5333 Burnet Ave., MLC 9008, Cincinnati, OH 45229 or email: Scott.Powers@cchmc.org or Teresa.Nangle@cchmc.org

Cincinnati Children’s Hospital Medical Center and University of Cincinnati are Equal Opportunity Employers.
University of Pittsburgh
Graduate School of Public Health
Epidemiology Data Center

Associate/Assistant Professor of Epidemiology

The Department of Epidemiology, Graduate School of Public Health, University of Pittsburgh invites applications for a faculty position at the Associate or Assistant Professor level in the Epidemiology Data Center (www.edc.gsp.h.pitt.edu).

A tenure stream or non-tenure stream position is available, with teaching required for a tenure stream appointment. Associate Professor candidates must have a record of external funding and peer-reviewed publications. Assistant Professor candidates should have demonstrated potential for external funding and peer-reviewed publications.

The faculty member will be expected to develop his/her own research, publish in peer-reviewed journals and collaborate with clinical investigators. The successful candidate will have excellent communication skills.

A doctoral degree in Biostatistics, Epidemiology, Bioinformatics or a related field – or a medical degree with graduate training in public health – is required. All specialty areas will be considered, but bioinformatics, clinical trials, epidemiological modeling and genetics will be given high priority. Salary and rank will be commensurate with experience. Applications will be reviewed until position is filled.

Applicants should send to Position #0124944, CV, a letter indicating area(s) of expertise and a list of three references to:

Steven Belle, PhD; Graduate School of Public Health
University of Pittsburgh; 504 Parran Hall
Pittsburgh, PA 15261

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Geisinger Center for Health Research (located on the campus of Geisinger Medical Center, Danville, PA) offers unparalleled opportunities and resources for the research. We are seeking a researcher with experience in stroke epidemiology, health services or clinical research.

Geisinger Health System provides care to a stable population of nearly 2.6 million residents through its 40 community practice locations and three hospitals across central and northeast Pennsylvania. The healthcare system uses integrated electronic health records that capture data on diagnosis, prescriptions, and lab values, as well as imaging, structured clinical notes, and supplementary patient questionnaires. In addition, the Center manages a system-wide biorepository of DNA and serum.

The successful candidate for the position will split his/her time between research and patient care. Candidates should have a track record of publications and successfully funded research, an MD or OD is required.

If you are interested in performing research that makes a difference, we invite you to contact us today:

Walter J. Stewart, PhD; Associate Chief Research Officer
c/o Jerry Foley, Staff Recruiter
100 North Academy Avenue, Danville, PA 17821-3003
geolney@geisinger.edu • Phone: 570.214.5529
# 27th Annual Graduate Summer Institute of Epidemiology and Biostatistics

## Johns Hopkins Bloomberg School of Public Health

### June 15 – July 3, 2009

### 2009 Course Offerings*

#### Two- and Three-Week Courses

- Principles of Epidemiology
- Observational Epidemiology
- Design and Conduct of Clinical Trials
- Statistical Reasoning in Public Health I
- Statistical Reasoning in Public Health II

#### One-Week Courses

- Applications of the Case-Control Method
- Methods and Applications of Cohort Studies
- Conducting Epidemiological Research
- New Perspectives on Management of Epidemiologic Studies
- Clinical Trials Management
- Comparative Effectiveness Research: Patient-Reported Outcomes
- Pharmacoepidemiology
- Introduction to the SAS Statistical Package
- Longitudinal Data Analysis
- Data Analysis Workshop I
- Data Analysis Workshop II
- Advanced Data Analysis Workshop III
- Survival Analysis
- Biostatistics Analysis of Epidemiologic Data: Logistic Regression
- Biostatistics Analysis of Epidemiologic Data II: Poisson and Conditional Logistic Regression
- Biostatistics Analysis of Epidemiologic Data III: Semiparametric Methods
- Family-Based Genetic Epidemiology
- Molecular Biology for Genetic Epidemiology
- Genetic Epidemiology in Populations
- Gene Expression Data Analysis
- Infectious Disease Epidemiology
- Public Health Dimensions of Global Tuberculosis Control
- Epilepsy Control
- Epidemiology of HIV/AIDS
- Advanced Issues in Control and Prevention of HIV/AIDS
- Social Epidemiology
- Multilevel Models
- Epidemiologic Applications of GIS
- Nutritional Epidemiology
- Introduction to Diabetes and Obesity Epidemiology
- Advanced Methods in Global Tobacco Control
- Tobacco Control Leadership
- Epidemiology in Evidence-Based Policy
- Epidemiologic Methods for Planning and Evaluating Health Services
- Ethics Issues of Human Subjects Research in Developing Countries

### One-Day Workshops

- Critical Reading of Epidemiologic Literature
- Methods for Clinical and Translational Research
- Genetic Epidemiology and Genome Wide Association Studies

### Director:

Moyses Szklo, MD, DrPH, MPH

### The Institute Will Be Held At:

Johns Hopkins Bloomberg
School of Public Health
Baltimore, Maryland

### For Information, Please Contact:

Ayesha Khan, Coordinator
Graduate Summer Institute of Epidemiology and Biostatistics
615 North Wolfe Street
Baltimore, MD 21205
410-955-7158
Fax: 410-955-0863
Email: akhan@jhsph.edu

www.jhsph.edu/summerepi

*Course offerings and faculty are subject to change. Proficiency in English language is required.

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Stay In Touch with Epidemiology!

www.epimonitor.net
The Wilmot Cancer Center seeks scientific investigators to join our expanding Center of Excellence in Cancer Survivorship. Two tenure-track positions are available for a scientific investigator with expertise and experience in the conduct of molecular epidemiologic studies and for a scientific investigator with expertise in survivorship research. Candidates for the molecular epidemiology position should have a strong background in the design and conduct of molecular epidemiologic research using cross-sectional, case-control, and/or cohort studies. Candidates should have knowledge of, and demonstrated capacity to apply state-of-the-art methods to a wide range of biomarkers. Candidates for the survivorship investigator position should have a strong background and experience in design of survivorship studies using case-control and cohort designs. All candidates must be sufficiently experienced to function independently in the development of their research efforts.

The candidate for the molecular epidemiology position must have a doctorate in epidemiology or a comparable doctoral degree, experience in conducting molecular epidemiology studies, a record of publication showing an ability to design, conduct, analyze and interpret data from molecular epidemiology studies, and a track record of external peer-reviewed funding. The candidate for the survivorship investigator position must have a doctorate in epidemiology or a comparable doctoral degree, experience in survivorship research, and a track record of external peer-reviewed funding. For both positions, a demonstrated ability to carry out effective collaborations with investigators from different disciplines is critical. Also essential is the ability to communicate effectively in speech and in writing, as demonstrated in presentations and publications. Tenure-track faculty positions at the Assistant and Associate Professor levels will be considered based on the credentials and experience of the candidate.

Interested individuals should send a cover letter, CV, brief summary of research interests and experience, copies of selected publications, and three letters of reference to:

Lois B. Travis, M.D., Sc.D.
Attn: Judy Whitney
James P. Wilmot Cancer Center
University of Rochester Medical Center
601 Elmwood Avenue, Box 647
Rochester, New York 14642

Tel: 585-275-0794
Fax: 585-275-0794

A completed application is required to be considered for these positions.

The URMC is an Equal Opportunity Employer and offers competitive salary and comprehensive benefit packages.
NJ State Cancer Registry/SEER Moving to the Cancer Institute of New Jersey

The Cancer Institute of New Jersey (CINJ) is recruiting a leadership team to shepherd the integration of the New Jersey State Cancer Registry into CINJ, NJ’s only NCI Designated Comprehensive Cancer Center.

The State of New Jersey Dept. of Health and Senior Services is working with CINJ to integrate the NJSCR with the population science, basic science, and clinical science programs at CINJ. This integration takes advantage of the world-class bioinformatics resources as well as tissue and clinical data resources at CINJ, and provides outstanding opportunities for collaboration with CINJ, New Jersey and national researchers. The following 3 positions are being recruited.

**Director, New Jersey State Cancer Registry and Principal Investigator of the New Jersey SEER**

Candidates will be expected to have Ph.D., MPH, or equivalent degree and significant leadership experience in the central registry field. Desirable candidates should have a strong interest in collaborative and interdisciplinary research efforts. Academic appointment is possible at the UMDNJ-Robert Wood Johnson Medical School with the opportunity for a joint appointment in the UMDNJ-School of Public Health and/or Rutgers University.

**Associate Director, Cancer Epidemiology Research**

The Associate Director, Cancer Epidemiology Research will oversee all operational and programmatic aspects of the epidemiology research functions within the registry. Successful candidates must possess a Master’s degree (PhD strongly preferred) in cancer epidemiology, biostatistics, or a closely related field with a minimum of 7 years of progressive experience in collaborative multi-center cancer epidemiology research.

**Associate Director, Cancer Surveillance Operations**

The Associate Director, Cancer Surveillance Operations, New Jersey State Cancer Registry will oversee all operational and programmatic aspects of data collection and quality assurance activities of the Registry. Successful candidates should possess a Master’s degree (PhD preferred) in epidemiology, biostatistics, business administration, or related field. The candidate must be a CTR (Certified Tumor Registrar) and have at least 7 years of experience in central cancer registry management and operations (preferably academic medical center-based) with research experience with SEER registries strongly preferred.

For further information, contact: Louise Burke, Faculty Recruitment Officer, The Cancer Institute of New Jersey, 335 George Street, Suite 3700, New Brunswick, NJ 08901. Email: burkels@umdnj.edu. The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer, m/f/h/v, and a member of the University Health System of New Jersey.

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**ENVIRONMENTAL EPIDEMIOLOGIST & EDUCATOR**

**FACULTY POSITION IN ENVIRONMENTAL HEALTH**

Case Western Reserve University School of Medicine
Department of Environmental Health Sciences

This tenured track position at the Assistant Professor level is for an environmental epidemiologist interested in public education, at all age levels, regarding Environmental Health issues. The candidate is required to have a Ph.D. in Environmental Epidemiology or related field; postdoctoral experience is preferred. The position workscope and support would come equally from the Cleveland Museum of Natural History (CMNH) and the Dept of Environmental Health Sciences (EHS). The faculty person’s role at the CMNH would be to serve as the Director of the Center for Environmental Health and Human Ecology where he/she would give Museum Member’s Classes and assist with the design and content of exhibits on current environmental health problems related to Cleveland and the world community. The other half of the faculty person’s activities would be to teach in graduate courses offered in the Dept of EHS and to carry out research projects as defined by his/her background, interests, and funding opportunities. Both the CMNH and the EHS activities would entail applying for grant support from local and federal agencies.

Please send curriculum vitae, a list of three references, and a cover letter describing research interests to: Dorr G. Dearborn, PhD, MD, CHm, Dept EHS, Case Western Reserve Univ School of Medicine, 10900 Euclid Avenue, WG19, Cleveland, Ohio 44106-4940 or via email to dxd9@case.edu.

In employment, as in education, Case Western Reserve University is committed to Equal Opportunity and World Class Diversity.
SUDAAN® Statistical Software for the Analysis of Correlated Data

SUDAAN is an internationally recognized statistical software package that specializes in offering tools that properly account for complex design features of a study, including unequally weighted data, stratification, multistage sample designs, repeated measures, longitudinal data and general cluster-correlation. SUDAAN is available both as a standalone statistical software tool and in SAS-callable format.

What’s new in Release 10?
The latest release of SUDAAN reflects our commitment to responding to user needs, requests, comments, and wish lists. Some of the new features of Release 10 include:

- Regression procedure enhancements, including estimation of model-adjusted risks, risk differences, and risk ratios in logistic and multinomial logistic models; and estimation of customized odds ratios useful in logistic interaction models
- Cross-tabulation procedure enhancements, including new hypothesis tests (e.g., trend), a goodness-of-fit test, and a new method for computing confidence intervals for extreme proportions
- New procedure that will generate weight adjustments, and standardized weights, using a model-based, calibration approach
- New procedure that will provide imputed values using a weighted sequential Hot Deck methodology
- Enhanced memory manager that allows SUDAAN to process very large data sets

Long known as being one of the best options for analyzing correlated data, SUDAAN 10 can accommodate all your complex data analysis needs.

2009 SUDAAN Training Schedule

Computing Weight Adjustments & Deriving Imputations
February 26-27, 2009 Washington, DC
June 11-12, 2009 Washington, DC
July 23-24, 2009 Research Triangle Park, NC
October 22-23, 2009 Washington, DC

Descriptive Procedures Course
April 20-22, 2009 Washington, DC
July 20-22, 2009 Research Triangle Park, NC
September 16-18, 2009 Washington, DC

Modeling Procedures Course
May 27-29, 2009 Washington, DC
October 14-16, 2009 Washington, DC

SUDAAN Statistical Software Center
phone: 919-541-6602
email: sudaan@rti.org

www.rti.org/sudaan

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5th Annual NICHD-IHDCYH Summer Institute in Reproductive and Perinatal Epidemiology

The Epidemiology Branch of the Eunice Kennedy Shriver National Institute of Child Health & Human Development (NICHD) and the Institute of Human Development, Child and Youth Health (IHDCYH) are jointly hosting their 5th annual NICHD-IHDCYH Summer Institute in Reproductive and Perinatal Epidemiology from July 12-18, 2009 at La Sapinière, Val-David, Quebec.

Doctoral students and clinical fellows enrolled in a graduate research degree program who are interested in a research career in reproductive or perinatal epidemiology are invited to apply. The week-long Summer Institute will provide substantive and methodologic training in human fecundity and fertility, pregnancy complications, maternal health and fetal and infant outcomes, as well as promising new approaches for studying these issues. A combined didactic and case-based curriculum will be offered by faculty affiliated with NICHD and IHDCYH.

Up to 20 qualified students will be selected. Participants will be awarded a stipend of up to $1,500 USD to cover travel expenses; in addition, lodging and meals will be covered by NICHD and IHDCYH. Eligible students and fellows are invited to submit a brief (2-page) cover letter stating their professional status and goals with regard to reproductive and perinatal epidemiology, curriculum vitae (maximum of 2 pages), and two letters of support. All documents must be received by April 1, 2009.

Applications will be reviewed by an Institute faculty committee with regard to: 1) personal statement of professional research interests and career plans; 2) evidence of graduate-level training in epidemiology and biostatistics; and 3) letters of support. Unsuccessful applicants to the 2008 Summer Institute can resubmit their 2008 letters of support (if still applicable). Priority will be given to students/fellows with demonstrated excellence in this field, including practical research experience and published peer-reviewed publications.

Selections will be made by May 15, 2009.

For more information on the 5th Annual NICHD-IHDCYH Summer Institute in Reproductive and Perinatal Epidemiology, please visit the IHDCYH website at: http://www.cihr-irsc.gc.ca/e/8688.html

Applications should be submitted electronically to: Anick Lambert or Lindsay Wallace (CIHR-IHDCYH)
E-mail address: IHDCYH-IDSEA@cihr-irsc.gc.ca; Telephone: 514-412-4414

DHHS and NIH are Equal Opportunity Employers.

Opportunities This Month

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