

Panelists



Cleo Caldwell

Associate professor of health behavior and health education, UM School of Public Health; co-associate director, Program for

Research on Black Americans, Institute for Social Research. PhD in social psychology, University of Michigan, 1986. Caldwell studies intergenerational family influences on adolescent health and well-being, including African-American father-son relationships and families with teenage parents. She also studies the mental health status of African-American and Caribbean black youth who are part of the National Survey of American Life. A former health policy analyst on Capitol Hill for United States Congressman J. Roy Rowland and study director at the Institute of Medicine, National Academy of Sciences, Caldwell joined SPH in 1996.



Sonja Gerrard

Assistant professor of epidemiology, UM School of Public Health. PhD in chemistry, University of Oregon, 1999. A specialist in

Rift Valley fever virus and emerging bunyaviruses, Gerrard was a fellow with the Centers for Disease Control and Prevention, Division of Viral and Rickettsial Diseases, before joining SPH in 2004.



Debashis Ghosh

Assistant professor of biostatistics, UM School of Public Health. PhD in biostatistics, University of Washington, 2000.

Ghosh works on the development of statistical methodology for computational biology, as it relates to the analysis of genomic data in cancer studies. A former postdoctoral scholar at the University of California—Los Angeles, Ghosh joined SPH in 2001. He teaches introduction to biostatistics, statistical methods in epidemiology, and biostatistical inference.



Peter Mancuso

Assistant professor of environmental health sciences, UM School of Public Health. PhD in physiology, University of Tennessee,

1996. Mancuso teaches food science, food safety, and the immunology and pulmonary sections of the school's toxicology, pathophysiology, and nutrition science courses. Prior to joining SPH in 2000, he completed a postdoctoral fellowship at the University of Michigan in pulmonary cell and molecular biology.



David Mendez

Assistant professor of health management and policy, UM School of Public Health. PhD in management science, Michigan State

University, 1995. Currently working on a study to evaluate smoking-cessation policies in the United States, Mendez has conducted research on the impact of product and service quality on demand and was involved in a project to evaluate policies regarding residential radon. He is also involved in distance-learning initiatives for the Executive Master's Program in health management and policy. Mendez joined SPH in 1997.

Next Up

ONE OF NOREEN CLARK'S

primary goals as dean of the School of Public Health has been to recruit a **new generation of public health faculty** who will help **pioneer fresh ways** of solving the world's most pressing public health problems. Last July, *Findings* asked five of these faculty members to talk about today's health challenges and tomorrow's solutions. We began by asking:

Findings: Is public health a uniquely interdisciplinary field?

Sonja Gerrard: I'm sure that most of our backgrounds are wildly different. I started out as a physical chemist. I worked in the pharmaceutical industry for a year, and now I've ended up doing basic research in tropical medicine. I really hope that my students will have backgrounds as wild as that because it brings to the table different skills, and I think they're much better scientists if they come to the lab with a wildly diverse background.

Cleo Caldwell: In my department, we have people who have backgrounds in anthropology, sociology, psychology, political science. When I think of people in engineering who are working with people in the public health field, and what that does, I think that really is unique. There is a wave toward this interdisciplinary kind of effort in general for most disciplines, but I think public health has a broader reach.

Debashis Ghosh: The criterion that I have in my mind is this, would we hire a certain person from a discipline like, say, economics? My guess is that public health is much more likely to hire someone with that background than the reverse, which would be someone from economics hiring a public health faculty.

David Mendez: We also have an interdisciplinary faculty in health management and policy, with a faculty with backgrounds in economics, law, engineering, business, sociology.

Findings: What about cross-campus collaborations?

Peter Mancuso: I go over to the Medical School at least once or twice a week to touch base with somebody or have a lab meeting.

Caldwell: I also have an appointment at the Institute for Social Research, so I have collaborations there. This Friday I have a meeting with a physician from the Medical School. I work with faculty from the School of Nursing as well.

Gerrard: When I interviewed here I talked to a number of people in microimmunology and also biological science, and when I got home, I had

an e-mail waiting for me from someone in biological science wanting to start up a collaboration, and it was like, wow!

Findings: This was your job interview?

Gerrard: That was my job interview. And so I had a collaboration before I even got here, before I even accepted the job.

Findings: What are your professional goals in the next ten to 15 years?

Caldwell: I'd like to be a full professor in the School of Public Health and director of a research program focused specifically on adolescent health and well-being.

Gerrard: I'd like to remain in tropical medicine, and I hope by that point we're making progress toward therapeutics and possibly a vaccine for bunyaviral diseases.

Mendez: Right now my research is concentrated on smoking control, and by that time I hope we'll be well on our way to a better resolution of this problem. We really don't have any good measures about what the best policies are to make people quit, so there's a lot of uncertainty. There's a lot of research now on harm reduction. The only thing that we know is that smoking rates are going down slowly. But if they continue to be like they are now, in 20 years, still over 15 percent of the U.S. population is going to be smoking.

Ghosh: The area I work on is cancer genetics, primarily. Right now there's a lot of interest in new genetic profiles that might predict who will get what kind of cancer. The goal ultimately is to develop a new screen and diagnostic test that will be more sensitive and specific than what's currently out there.

Findings: You actually see a day when we would go to our primary care physician and get a genetic screen to find out whether we're at risk for cancer?

Ghosh: That's what we're shooting toward, yeah.

Caldwell: Well, that's a perfect example of why interdisciplinary efforts are necessary. With the ability to screen, we have to be concerned with



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what it might mean—if a diagnosis is positive—for employment or insurance coverage.

Ghosh: Absolutely.

Caldwell: —and everything else along the way.

Mancuso: I study bacterial pneumonia, so that's definitely something I want to continue. And then I may get into other areas, perhaps asthma. I'd like to look at things like how cigarette smoking impacts respiratory infections, how obesity affects the regulation of certain genes that are involved in the inflammation process.

Findings: In what ways has Dean Noreen Clark helped you through her leadership of the school?

Gerrard: Well, the new building will have a huge impact on my research because right now I travel to the CDC to do my work. The building will allow us to do biocontainment work, and that will have a huge impact on my research and on recruitment in the future.

Mancuso: Currently we're limited as to the type of organisms we can work with, because we lack an in-house facility that will allow us to work with level-3 pathogens such as *Mycobacterium tuberculosis*.

Next

Mendez: Noreen has been very active in recruiting more junior faculty, and that's very important, to have new colleagues that we can collaborate with and get new ideas from. A second thing, she has been very supportive of our efforts to start a distance-learning program in health management and policy. Additionally, she deserves a lot of credit for the new building. I'm particularly excited because in the new building we'll have an information technology center that will reach communities outside the school—not just going physically there but actually trying to reach them by using different media, collecting all their experiences and having communities learn from each other at a distance.

Caldwell: That technology part, especially, is going to allow us to reach out to the entire state, not just those communities that are in close proximity to the university.

Gerrard: Another area that's growing in strength at the school is the whole idea of global health. We can no longer kid ourselves that we are far away from the developed world and the diseases that we've been ignoring forever. And maybe this new building, with its enhanced capacity to deal with biological agents, will allow us to enter the global community in a meaningful way.

Mancuso: I think we've forgotten that infectious disease is the number one cause of death worldwide.

Findings: Is that the top challenge facing public health today, or are there others?

Mancuso: Tuberculosis, AIDS, it's just horrifying.

Gerrard: Malaria.

Caldwell: When we think about it nationally, obesity is a huge problem, not only for adults but especially for children. And this has all kinds of other long-term consequences.

Mendez: Tobacco still kills nearly half a million people a year just here in the States.

Ghosh: The funding model for public health is really crummy, in that it tends to be very much a management of crisis. There's money now for bioterrorism because we're worried about

anthrax, or whatever. Whereas there are a lot of other things occurring in the world, like tuberculosis, that can bounce back to us. The same thing with obesity. I mean, right now you have all these adolescents who have high rates of obesity, but down the line they're going to be the adults who develop kidney disease, diabetes, cardiovascular disease, what have you—and then we'll have a much larger medical cost to deal with.

Gerrard: The reality is, if you want to fund your research, you have to follow the money, but that's not a sustainable solution to the funding of research on public health issues.

Findings: What about the public health infrastructure in this country?


Mancuso: There seems to be less attention paid to simple things that we were taught as children in elementary school. This basic knowledge is either ignored or it's just not presented anymore. Something as simple as telling a child what you can do to reduce your risk of getting infectious diseases by washing your hands, getting a good night's sleep, and eating a balanced diet, getting the recommended vaccines, etc.

Findings: Why has that happened?

Gerrard: I think we're more interested in technology than simple solutions. Vaccination is a prime example. My great-grandmother lost three of her children to measles in one week. We don't see that any more. And we think, oh, measles vaccines might be linked to autism—even though there's no scientific cases of that. So people are not vaccinating their children, because they don't have this reminder of their forefathers losing entire clutches of children in a short period of time. If you knew you were going to lose your baby to an infectious disease, you'd vaccinate them.

Caldwell: The media has kind of taken over as the guide for common sense and health, and that's a very bad thing because it follows trends. It likes to build news based on crises. Before, the public health workers were the leaders, and they would tell people things, and people would listen.

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Findings: So how can public health take back that role?

Ghosh: It's no longer public health professionals who are the only spokespersons on the public's health. The media has a role, business has a role, everybody now has a role, and we have to figure out how to work in partnership. I think it's public health's responsibility to make sure that the information is accurate, and perhaps it is the media who serves as the spokesperson. But it's public health's responsibility to try to work in collaboration so that the best available research is out there to support positions.

Findings: Do you see it as part of your responsibility to work with the media?

Gerrard: It's always been a responsibility of public health professors. It's not just teaching the students in your class. It's educating the public, and that is not written in any of our contracts, I'm sure.

Findings: What advice do you have for the next dean?

Caldwell: I think the new dean is going to be faced with a challenge of being able to understand, again, the breadth of research that goes on at the School of Public Health. It is so vast.

Mancuso: We need to hire more junior faculty, provide protected time for senior faculty who are very successful and well-funded, so they

can teach less and do more research. This would provide opportunities to others who may want to spend more time on teaching. The building will certainly help attract more students. The challenge is not only going to be among faculty, to continue to get funding and publish, but to maintain the number of students we get despite the rising cost of student tuition.

Gerrard: Recruitment and student funding are going to be huge issues. As more schools keep cropping up, we're going to have to start recruiting students actively, and the funding of the students is going to have to change.

Findings: Is this something the government should help fund?

Gerrard: Oh, absolutely.

Caldwell: Absolutely, because there are certain professions where they do fund. The National Science Foundation steps up to the plate to fund their professions, but nobody steps up to the plate really to fund public health students. They can't even apply for some of the other funding that other disciplines can apply for.

Mancuso: So you're going to see less and less people going into an area where there's a huge need.

Ghosh: You think of other professions in which students have to take out loans for school—business school, medical school, law school. With the salaries in those fields—

Gerrard:—you recoup your losses—

Ghosh:—pretty quickly, yeah. But that's not true for public health.

Findings: So what does the field of public health need to do?

Gerrard: Government needs to be lobbied to provide long-term support to public health projects. It can't just follow every fad, because you can't tell your student, “Well, I have funding next year—the year after that, I don't know.”

Caldwell: Public and private partnerships in some way need to try to provide funding for the work force. Because that's what we're training—the work force.

Findings: Is there anything this school needs to focus on that we're not doing now?

Caldwell: We need more parking.

Laughter.

Caldwell: I think there is an opportunity for us to really think more about how the school can work with state government, because the Michigan surgeon general now has an appointment at the School of Public Health.

Gerrard: Absolutely. Students need to come out not only with book learning, they need to come out with practical experience by doing internships in state health labs and county health departments, the CDC, what have you, to get some real-world experience.

Caldwell: Exactly. And that's what they come in expecting.

Gerrard: They should expect it. ■



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