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LINKS: *Minority Research & Training*

Culture, Health Care, and Aging Collide With Rise in U.S. Immigrant Population



Raynard S. Kington, M.D., Ph.D.

Fundamental shifts in United States immigration are forcing scientists to focus on how race and culture influence aging and health, says Raynard S. Kington, M.D., Ph.D., Associate Director of the Office of Behavioral and Social Sciences Research at the National Institutes of Health (NIH). Dr

Kington is also an alumni of the National Institute on Aging's Summer Institute.

Today, the United States hosts the largest number of immigrants as a percentage of population since the 1930s, he said. Among African Americans, 10 percent are foreign born or one parent is foreign born. There are dramatically increasing numbers of Asian and Hispanic immigrants, Kington said.

"I'm trying to determine if immigrants' acculturation process is distinct from non-immigrant groups and how that affects their health. For example, Black

immigrants are much less likely to smoke even when they've lived in the U.S. for 15 years. Studying immigrants' health will help scientists identify fundamental processes of health and determine the health care needs of the future," Kington said.

To identify immigrants' health processes, scientists need to disentangle the subgroups among immigrants, he said. "One of the important errors in health research is underestimating the heterogeneity of broad groups such as African Americans," Kington says. Science in this area is advancing but Kington says better data and increased publications are needed.

Working with his colleagues at the National Center for Health Statistics (NCHS), Kington is now completing an analysis of health insurance patterns of Black immigrants from places like the West Indies and Sub-Saharan Africa. Before joining NIH, Kington directed the NCHS Division of Health Examination Statistics, part of the Centers for Disease Control and Prevention.

Preliminary findings of the NIH/NCHS study show that Black immigrants are better educated, have higher status jobs, better health and possibly less hypertension than African Americans, Kington told Links. On the other hand, immigrants are less likely to have health insurance than native born African Americans.

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Race, Androgens, and the Risk of Prostate Cancer

Scientists have found that several characteristics can increase a man's chance of developing prostate cancer. One is having a family history of the disease, and a second is being over age 65. James L. Mohler, MD, University of North Carolina at Chapel Hill (UNC-CH), is trying to find out why a third factor—being African American—also increases risk for this disease.

Prostate cancer is the second leading cause of cancer deaths, after lung cancer, in American men. During 2001, according to the American Cancer Society (ACS), almost 32,000 men died of prostate cancer. Just over 6,000 of those were African American. The National Cancer Institute estimates that African Americans are 60 percent more likely to develop this disease than are Caucasians.

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“What I did last summer:” Six Young Researchers Talk About Their 2002 NIA Summer Institute Experience

By early March each year, Mrs. Nenomie Palmer, at the National Institute on Aging (NIA), receives applications from new researchers avid to attend the NIA's Summer Institute on Aging Research. Of those who apply, J. Taylor Harden, R.N., Ph.D., the Summer Institute Director and Assistant to the Director for Special Populations and her colleagues, choose 40 to attend the “Summer Institute.”

The new researchers travel to the historic Airlie House nestled in the Virginia countryside for a week of lectures, seminars, and discussions on the biology of aging and health and behavior and aging as they have since 1987. In addition to receiving advice on research design and grant applications, NIA scientists lecture on the latest findings and ongoing challenges of ethnic and minority aging research.

Six young researchers who attended the 2002 Summer Institute laud this career-enhancing retreat, described by some as a scientific “bootcamp with good food.”



Carmen R. Green, M.D.

Carmen R. Green, M.D., University of Michigan, Department of Anesthesiology, wants to conduct comparative research on the influence of ethnicity and gender on chronic pain among older people as well as the role of physician variability. She wants to examine the impact of chronic pain on overall health status, quality of life, and quality of care.

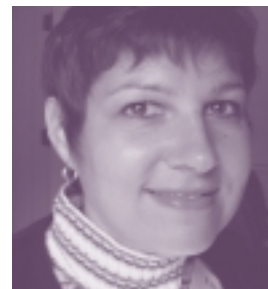
“I’m an anesthesiologist and a pain physician so patients drive my research agenda. I want to raise awareness about pain and the fact that African Americans and other minorities have less access to pain management. Prior to [the Summer Institute],

I never thought of looking at people with Alzheimer’s disease and pain. Few investigators looked at pain in this population.

“At the Summer Institute, you stop seeing the limitations of your work and you see the possibilities instead. I’ve always had a passion for research and have learned pieces here and there. The Institute will help me to be more successful at getting grants. My hope is that I will be able to resubmit my research proposal to further my long-term research and policy interests, and receive funding.

“This is a conference where people from many different fields are talking in an interdisciplinary way. I connected with a couple of people who I expect to know for a lifetime. I want to continue to get that shot in the arm and get enthused about aging research.

“J. Taylor Harden, Jean Flagg-Newton, Ph.D., NIA Office of Research on Minority Health, and Judy Salerno, M.D., NIA deputy director, talked about their careers and they are really great role models. Through the Summer Institute, the NIA is developing a whole new generation of ‘Salernos’ and others committed to aging work.”



Kimberlee A. Gretebeck, Ph.D., R.N.

Kimberlee A. Gretebeck, Ph.D., R.N., University of Michigan, School of Nursing, is conducting research using the Theory of Planned Behavior to develop an intervention to increase physical activity among minority elders.

“I’m pumped up. The Summer Institute is very motivational. You’re secluded out here for a week. It gets you excited about your research. When you are back at the university, you’re just one of many researchers.

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“The Summer Institute allowed me to find out from NIA staff what grants are available to advance my research to the next stage, as well as research ideas, NIA priorities, and how my research fits in with these priorities. Sid Stahl, Ph.D., the Health Science Administrator in the NIA’s Behavioral and Social Research Program, suggested funding mechanisms for my research and ways that I might want to develop my research ideas. I also met with Taylor and talked with her about how I can effectively include minorities in my research—not as an afterthought—but as the group I want to work with.

“I would recommend the Summer Institute to others just as two past participants recommended it to me. I’d tell potential attendees that, ‘You’ll have a great time, the food is very good, but it’s a boot camp.’ Your brain is working overtime, well into the evening. By the end, you’re mentally tired. When the Summer Institute is over, the relationship with NIA staff doesn’t end. Taylor let us know that NIA wants us to be successful and encouraged us to contact them with any questions or ideas, and email our CVs once a year. We’ll get together with other Summer Institute alumni at the Gerontological Society of America meeting annually. Attending the NIA Summer Institute on Aging was an excellent professional experience and I am glad that I was selected to attend.”



T.J. McCallum, Ph.D.

T.J. McCallum, Ph.D., Case Western Reserve University Department of Psychology, is interested in comparing the mental and physical health of African American and Caucasian caregivers and non-caregivers.

“Attending the Summer Institute demystified the grant process and gave me more confidence that I can get on the NIA grant track. I didn’t know there were so many minority supplements and how they compared to RO3s. There are more options than I thought. Learning the grant mechanisms and their true uses was invaluable to conducting my own studies, which will help me get in shape for tenure.

Sid Stahl’s feedback on the NIA’s grant program was great. Now I’ll be able to call and connect with him. It was helpful to see NIA people as people, especially in informal settings like mealtimes. Most of the presenters gave a history of how they came to the NIA and gave me the sense that they were once just like us.

“As valuable as the grant information was, getting to know other participants was just as valuable. Several people are interested in aspects of my work and we’ve made plans to work together. For example, a quirk of minority research is the need to validate measures for minority populations. This requires a separate and often difficult study, so several of us, including Kimberlee Gretebeck, will each do a piece of this and share our work.”



Sean X. Leng, M.D., Ph.D.

Sean X. Leng, M.D., Ph.D., Johns Hopkins University School of Medicine, Division of Geriatric Medicine and Gerontology, proposes research on the aging immune system and its potential contributions to the development of frailty.

“It’s great. First, you have the opportunity to learn the NIH funding mechanisms and attend didactic sessions from national leaders in aging research. But the best part is the informal interactions with the presenters and NIA staff.

“The Summer Institute increased my knowledge of the NIH grant application process and the likelihood of getting my applications right. It broadened my knowledge about aging research. I’m a geriatrician doing research in immunology and aging. I got to know a lot about the Behavioral and Social Research program and it gave me a broader picture. I also got to know researchers from around the country who are from different specialties and disciplines. Successful aging research requires not only disease-specific investigations but also ways of integrating disciplines. We need to build up our network nationally, through the NIA and the aging research community. The NIA Summer Institute is a great place to start.

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Summer Institute 2002

Apply Now for 2003 Summer Institute (See page 8)

“One thing people say is that NIH funding is like a black box but the NIA Summer Institute helped demystify the funding mechanisms and provided a unique networking opportunity. I strongly recommend it.”



Steve M. Handler, M.D.

Steve M. Handler, M.D., University of Pittsburgh Medical Center, Department of Medicine, Division of Geriatric Medicine, wants to conduct research on electronic mail as a means of maintaining and strengthening the social ties of frail, community-dwelling, older adults.

“Unless your mentors know the ins and outs of the NIA grants process, it can be overwhelming. I got a better understanding of the grant mechanisms in an interactive and low stress setting. I also got an idea of how each grant interrelates with each other like the RO3 relative to the RO1. RO3s are grants that are more suited to a junior investigator with an innovative idea. I got more out of grabbing people at lunch or at the barbecue when I could get individual attention. I got statistical advice from John Sorkin, M.D., Ph.D., medical research officer at NIA’s Gerontology Research Center, Baltimore, and clarification of grants from Sid Stahl, and MD Kerns, health science administrator for Office of Extramural Activities.

“This is a unique opportunity to interact with my peers. When else are we going to have people from the fields of medicine, psychology, nursing, and sociology? The Institute’s very clear message is that we need to be focused on including minorities in our research. It’s a mandate and it should be.”

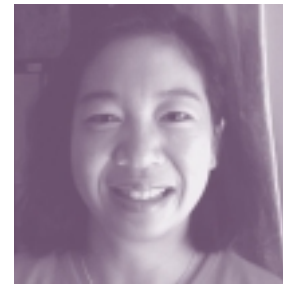
Sabrina T. Wong, R.N., Ph.D., University of California, San Francisco, Medical Effectiveness Research Center and pilot investigator with the Center for Aging in Diverse Populations, wants to use a model of social support to evaluate the relationship between social support and general well-being.

“As we move into research that involves diverse populations such as Asian elders, we need to first examine whether the meanings of social support and

general well-being are similar to traditional definitions. The meaning of these concepts has been uncontested in past research.

“While I am relatively new to the field of aging, I feel like the field is wide open in terms of studying diverse populations and so much work needs to be done. My research focuses on how social and behavioral factors influence healthy aging and how these factors intersect with the biological process of aging.

“Meeting people from different disciplines and hearing about how people involved in bench science are working with scientists who examine populations and communities was exciting. For example, Hugh Hendrie’s study used a community-screening tool for dementia. I got a lot from talking to people like Hendrie about looking at data across different racial/ethnic populations.



*Sabrina T. Wong, R.N.,
Ph.D.*

“Coming to this Summer Institute really energized me to push forward with my pilot study grant that focuses on Asian Americans. I found it especially helpful to talk with people from NIA such as MD Kerns, one of the program officers at NIA. Based on my focus

on Asian Americans and diverse populations, he was very good at helping me think about which grants to apply for next, such as a K-award. Meeting NIA staff face-to-face is an enormous benefit.

“The Summer Institute was eye opening in helping me understand what actually happens when a grant leaves your institution. The message was very clear: to become successfully funded, one needs to have clear and succinct writing, to pay attention to detail, to write a cover letter AND propose good science. It was helpful to meet others in the field of aging and find out what other scientists in other disciplines are working on in terms of diverse populations, especially in the area of Asian Americans.”

For more information on the Summer Institute, go to <http://www.nia.nih.gov/news/summer/index.htm> or contact Mrs. Nenomie Palmer at palmern@nia.nih.gov.

The study confirms that there are substantial differences in ethnicities, he said. Among Hispanics, for example, Puerto Ricans fared significantly worse than Cubans or Mexicans on a number of health indicators, according to a report that Kington co-authored with his NCHS colleagues.

The 2000 report, "Health Outcomes Among Hispanic Subgroups: Data from the National Health Interview Survey, 1992–95" analyzed data focused primarily on four groups: Mexican Americans, who make up 63 percent of the U.S. Hispanic population, Puerto Ricans, who make up 11 percent, Cuban Americans, who make up 4 percent, and "other Hispanic," who constitute 22 percent of the Hispanic population. The report found:

- More than 20 percent of Puerto Ricans reported an activity limitation, compared with about 15 percent of the Cuban and Mexican groups.

- Eighteen percent of Puerto Rican individuals reported being in fair or poor health, compared with 14 percent of Cubans and 12 percent of "other Hispanic" groups.

"We need to get a better understanding of how aging is influenced by culture, which I define as the traditions, behaviors, language, beliefs, and relationships that characterize a community of people," Kington said. "We need researchers who can answer the question of 'how does culture get under the skin,'" says Kington who mapped out "Future Directions for the NIH Office for Behavioral and Social Sciences Research" at the 2002 Summer Institute.

For a copy of the Hispanic health report, please go to <http://www.cdc.gov/nchs/data/ad/ad310.pdf>. ❖

Race, Androgens, and the Risk of Prostate Cancer
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Mohler, associate professor of surgery at UNC-CH, hopes to understand better why this happens. "The only thing we know about African Americans that could explain these differences is that in young adulthood their serum testosterone is higher than in Caucasians by a small but probably meaningful amount," he explained. His group will explore how levels of androgens (male hormones such as testosterone) differ between racial groups.

Mohler's group also will investigate the role male hormones play in the recurrence of prostate cancer. "For prostate cancer to grow, androgens must be present, and the same is true for benign prostate enlargement," said Mohler. "If you take testicular androgens away from a man with an enlarged but benign prostate, the prostate shrinks and stays small for the rest of his life," he continued. "With prostate cancer, however, if you take these androgens away, the tumor goes into remission but will come back after several years having acquired the ability to grow again even without testicular androgens."

Androgen receptors (AR) may be partly responsible for such recurring prostate cancers. ARs are found in cells that are sensitive to the effects of male hormones. When an androgen molecule attaches to the AR in one of these cells, genes controlled by the AR

then turn on specialized activities in that cell. One of these activities is cell growth. In recurring prostate cancer this cell growth occurs even in the relative absence of male hormones. Mohler's group will try to gain a better understanding of the role of androgen receptors in such cell growth and whether this role differs by racial group.

One part of this study will attempt to explain such tumor recurrence by exploring whether prostate tumors contain stem-like cells that begin to grow in the presence of androgens, but do not die when androgens are removed. Such a presence could explain why the tumors recur even after androgens are no longer present.

In the 1940s, scientists learned that removing male hormones puts prostate cancer into remission. Today, prostate cancer treatment still centers around hormone manipulation. Mohler hopes that his study will contribute to more effective treatment for prostate cancer patients in addition to an improved understanding of why certain groups are at increased risk.

Mohler is principal investigator for this \$5 million, 5-year grant to study prostate cancer that was awarded to UNC-CH by NIA and the National Cancer Institute in 1999. ❖



Apply
Now!

Summer Institute on Aging Research 2003

The National Institute on Aging (NIA) announces the annual Summer Institute on Aging Research, a weeklong workshop for investigators new to aging research, focused on current issues, research methodologies, and funding opportunities. The program includes consultations on the development of research interests. The 2003 Summer Institute will be held June 21–June 27 in Airlie, VA. Support is available for travel and living expenses.

Applications are due February 28th. To increase the diversity of participants, minority investigators

are strongly encouraged to apply. The applicant must be a U.S. citizen, non-citizen national, or permanent resident. For additional information and application form, contact: Office of the Director, Office of Special Populations, National Institute on Aging, National Institutes of Health, Building 31, Room 5C-35, 31 Center Drive MSC-2292, Bethesda, Maryland 20892-2292. Telephone: (301) 496-0765, Fax: (301) 496-2525, E-Mail: Hardent@nia.nih.gov or see the “What’s New” section of the NIA Web Page: <http://www.nia.nih.gov>. ❖

Correction: The nuns pictured in the last issue of Links are with The Oblates Sisters of Providence.

Eight

LINKS: MINORITY RESEARCH & TRAINING

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