

## Bartke awarded med school's largest federal grant

*Multiple-institution project to examine growth hormone and aging*

**Andrzej Bartke, Ph.D.**, professor and SIUC distinguished scholar of internal medicine and physiology, has received an \$8.6 million, five-year grant from the National Institute of Aging, a division of the National Institutes of Health. This is the largest NIH grant ever received at SIU School of Medicine.

The grant will fund a project to study the effects of growth hormone (GH) on aging and longevity. Dr. Bartke is the lead investigator for the project, "The Somatotrophic Axis and Healthy Aging: A Search for Mechanisms," which includes collaborators at four other institutions: John J. Kopchick, Ph.D., Ohio University in Athens; Richard A. Miller, Ph.D., University of Michigan in Ann Arbor; James Kirkland, Ph.D., Mayo Clinic in Rochester, Minn., and Yuji Ikeno, Ph.D., University of Texas Health Science Center at San Antonio.

Studies have shown that GH deficiency and insensitivity in mice are associated with an increase in longevity. The mice not only live longer but are healthier — less likely to get cancer, with better memories and learning capacities. "Our collaborative studies and the work of other investigators defined a series of mechanisms that might, in principle, link growth hormone signaling with longevity," Dr. Bartke says.

Findings from this study could help scientists understand that the connection and control aging and improve cognitive and physical function as we age. "This information is also needed to develop a rational basis for exploring or discouraging the use of human growth hormone as an anti-aging agent," Dr. Bartke says.

This is the 15th grant Dr. Bartke has received at SIU for his research



Dr. Bartke has received numerous awards, including the Senior Scholar in Aging Award by The Ellison Medical Foundation, the inaugural Methuselah Prize for his contributions to life extension research resulting in the longest-lived mouse (2003), the Phi Kappa Phi Outstanding Scientist Award (1997), the Carl G. Hartman Award of the Society for the Study of Reproduction (1995), the American Society of Andrology's Distinguished Service Award (1995), and the Sigma Xi Kaplan Research Award (1991).

on longevity. His research funding totals \$19.4 million. His previous external research has been funded by the National Institutes of Health, the Ellison Medical Foundation, the U.S. Department of Agriculture, the North Atlantic Treaty Organization and the Rockefeller Foundation.

Dr. Bartke's research on aging is world-renowned. In 2003, he was noted for research that resulted in the longest-lived mouse, which lived 1,819 days, roughly the equivalent of a human being living 180-200 years.

He is a past president of the American Aging Association. He chairs the NIA/NIH Biological Aging Review Committee and serves on the editorial boards for *Aging Cell*, *Animal Reproduction*, *Mechanisms of Aging and Development*, and as associate editor of the *Journal of Gerontology/Biological Sciences*. He has published more than 500 journal articles.

"This major research award is a

tribute to Dr. Bartke's stature in the field and his ability to pull other experts together for this important aging research effort," said Dr. J. Kevin Dorsey, SIU's dean and provost. "With this program project award, the NIH has shown it believes that the work of the collaborative group he has organized could make major progress in our understanding of aging. Together, we hope these scientists will move our knowledge ahead more quickly than if they worked separately."

Dr. Bartke joined the SIU faculty in 1984. He earned his doctorate in zoology genetics from the University of Kansas in Lawrence (1965) and magister degree (equivalent of a master's) from Jagiellonian University in Krakow, Poland (1962). ●●●

