Dr. Sanjay Asthana was recently appointed Head of the Section of Geriatrics and Gerontology at the University of Wisconsin-Madison Medical School and Director of the Geriatric Research, Education and Clinical Center (GRECC) at the William S. Middleton Memorial Veterans Hospital.

Dr. Asthana is a board-certified internist and research geriatrician. He obtained his M.D. at the University College of Medical Sciences in New Delhi, India. He trained in England, the University of Saskatchewan School of Medicine in Canada, and Johns Hopkins University. He was a Senior Staff Fellow in the Laboratory of Neurosciences at the National Institute on Aging and faculty member at the University of Washington Medical School and the Seattle GRECC.

The major focus of Dr. Asthana’s translational research program is to evaluate the therapeutic potential of estrogen and related steroids for Alzheimer’s Disease (AD) and cognitive dysfunction associated with Mild Cognitive Impairment (MCI) and healthy aging. Some of his ongoing studies will establish the role of prolonged administration of estrogen for the treatment of AD, while others will evaluate the efficacy of relatively safe “designer estrogens” (e.g., raloxifene) in alleviating cognitive symptoms of AD. The majority of research studies are mechanistic and likely to provide clinically meaningful results.

One of Dr. Asthana’s major objectives is to develop a comprehensive, campus-wide research program in AD and related illnesses at the UW. The goal of this program will be to investigate all aspects of AD from understanding the neurobiology to identifying effective preventive and treatment strategies for the disease. It is expected that such a program will involve active participation and collaboration between several UW Departments and Programs including the Institute on Aging, Departments of Medicine and Neurology, and others. It is anticipated that, under Dr. Asthana’s leadership, the UW will eventually be successful in establishing a NIH-funded Alzheimer’s Disease Research Center.
Get the Lastest on Healthy Aging!

Administration on Aging: “Eldercare Locator”

“Since 1991, the Eldercare Locator, a nationwide toll-free service, has helped older adults and their caregivers find local services for seniors.

The U.S. Administration on Aging is now pleased to make part of this service available on-line so that consumers can easily link to the information and referral (I&R) services of their state and area agencies on aging. These I & R programs can help you identify appropriate services in the area where you or your family member resides.”

To use the online service:
- Go to www.eldercare.gov/about.asp
- Select a state from the list
- Enter a zip code

Eighth Annual Eloquence and Eminence Lecture Series

Eloquence and Eminence is a lecture series presented by University of Wisconsin-Madison emeritus faculty from departments across campus. This series is sponsored by UW-Madison Division of Continuing Studies and the Institute on Aging, in cooperation with UW-Extension. Lectures presented during the fall semester included “What Can We Do About Media Violence?” by Joanne Cantor, Emeritus Professor of Communication Arts and “The Illinois Connection in Wisconsin’s Prehistoric Past” by James Stoltman, Emeritus Professor of Anthropology.

Spring lectures will be held at 2 p.m. on the following Sundays:
- April 21, 2002, “Must Have Proven Grant-Raising Ability: The Effect of Research Funding on the University.” Robert Auerbach, Emeritus Professor of Zoology.

All lectures will be held at the Pyle Center, 702 Langdon St, Madison. Registration is not required, and lectures are free and open to the public. For additional information go to the web site: www.dcs.wisc.edu/lsa or contact Emily Auerbach, 262-3733, fax 265-2475, or eauerbach@dcs.wisc.edu.
New Members Join IOA Advisory Board

The Institute on Aging is pleased to announce that Roberto Freund and Suzanne Freund have joined its Advisory Board.

Roberto F. Freund was born in San Salvador, El Salvador. He attended the University of Wisconsin-Madison in 1945, where he received a BA from the School of Commerce in 1949. While in Madison, he met and married a fellow student, Suzanne Frank. They were married in 1950 and settled in El Salvador. Roberto entered his family business in El Salvador, which sold hardware, paint and building supplies. In time he became the founder and CEO of the Sherwin-Williams Paint Factory to supply the five Central American countries. Having learned first hand of the unavailability of construction loans in El Salvador, as well as of long-term mortgage financing for personal home loans, Roberto became the founder and CEO of the first Savings and Loan Association in El Salvador. In 1982, the political environment in El Salvador had joined its Advisory Board.

Members of the Institute on Aging Advisory Board are individuals known to have an interest in the cause of aging research, education, training and community outreach. They will join current members Carol Toussaint (Chair), Alma Baron, Joyce Bromley, Richard Cates, James Crow, Donald Harkness, Eugene Lehmann, Jean Lewis, Philip Lewis, Donna McDowell, Emily McKay, Marjorie Tobias, and Martha Wells Lewis.

DONATIONS & BEQUESTS

The mission of the Institute on Aging at the University of Wisconsin-Madison is to promote the well-being of the aging population in the local community, state of Wisconsin and society at large. Contributions toward meeting these goals are welcome and appreciated. If you wish to make a contribution, please direct it to:

The Institute on Aging Research, Education, and Outreach Fund
University of Wisconsin Foundation
1848 University Avenue
Madison, WI 53706

To obtain further details about the Institute’s goals, please contact David Weerts, UW Foundation, 608-262-5250 or Carol Ryff, IOA Director, 262-1818.

New Findings

Biomedical Aspects of Aging

Optimal Environments and Immune Response

Humans aren’t the only ones to age. Most animals also show a defined period of old age at the end of the life span, and we can learn a lot about the aging process by comparing the similarities and differences across species. For example, when monkeys are cared for in zoos and research laboratories, their life spans are often extended 50-100% as compared to their counterparts living in nature. Researchers at the University of Wisconsin have been studying factors associated with this extended longevity to ascertain predictors of the ultimate life span and determine conditions that can modulate the age-related process of immune senescence (i.e., the going to sleep of the immune system). Besides the possible relevance to humans, one additional goal has been to determine optimal housing conditions for old animals that may sometimes be in frail health. Perhaps they too may have preferred living conditions, which could promote their psychological and physical well-being. A recent paper describes immune responses in monkeys over 20 years of age, comparing monkeys living in different social conditions.

It appears that monkeys may have one psychological characteristic in common with us. It was not as robust in these other housing conditions. The vigor of this particular cell when monkeys were in their early 20s -- an age equivalent to 50 years in humans -- was also predictive of their ultimate life span. Thus, this type of immune measure could serve as a biomarker for the aging process in monkeys, which could then be used to evaluate the effectiveness of medical treatments.


Turn Down The Noise

Hearing loss is one of the most common chronic conditions affecting older adults. We know that exposure to noise in loud industrial settings can lead to hearing loss, but there has been little information about the impact of noisy hobbies on hearing as people age. A recent article by Dalton et al. (*Audiology* 40(1):1-9, 2001), reported on a study of the effects of leisure noise exposure on hearing in older adults in Beaver Dam, WI. The Epidemiology of Hearing Loss Study (E HLS) is a population-based, longitudinal study funded by the National Institute on Aging, which is investigating why hearing declines with age. Individuals who engaged in noisy leisure time activities, such as woodworking, were significantly more likely to have a hearing loss than those who were not involved in such activities. With the use of hearing conservation programs in noisy occupational settings and a recent shift from industrial work to less noisy occupations, noise exposure from leisure activities takes on relatively greater importance. This paper demonstrates that leisure noise exposure is significantly associated with hearing loss in older adults. People who engage in noisy leisure activities like woodworking or using other loud machinery should consider using ear plugs or ear muffs to protect their ears from the damaging effects of loud noise.

Men Who Care

A new text titled Men as Caregivers: Theory, Research, and Service Implications provides the first centralized resource of contemporary theory, research, and service-related issues relevant to men caregivers. It will improve understanding of this unique and understudied group of caregivers. The book examines the nature and extent of men as caregivers, identifies the fundamental social and demographic trends that have implications for the future, and introduces what is potentially unique about men caregivers. Theoretical and methodological issues relevant to the study of men involved in caregiving are highlighted, followed by several chapters that critique the literature and present original research on men caregivers in a variety of contexts. The work of other Institute on Aging affiliates, including Marsha Seltzer and Prof. Nadine Marks, are summaries of their research findings.

Who’s Exercising?

A recent study conducted at UW-Madison used information obtained from 3,032 men and women aged 25-74, who participated in the National Survey of Midlife Development in the United States. Among women, a higher level of earnings was associated with more likelihood of participating in vigorous exercise, and women with more education exhibited a steeper decline in exercise rates across adulthood. Among men, those with the lowest level of education had the steepest decline in physical activity across adulthood, and earnings did not affect exercise patterns.

Less participation in vigorous exercise among blacks, in contrast to nonblacks, was explained by their tendency to live in less safe neighborhoods and have more functional health problems. Work, family, and neighborhood factors independently helped predict participation in regular exercise above and beyond individual psychological characteristics. Consistent with ecological theory, the results of this study suggest that interventions to promote exercise habits among adults need to consider the independent and interactive effects of multiple contextual factors.

Study supports view that exercise affects insulin action - Edward Arias

Type II Diabetes is a widespread metabolic disease in which blood sugar is elevated and poorly controlled by the body. Normally, a carbohydrate meal leads to elevated blood glucose levels and the subsequent release of insulin from the pancreas. Acting primarily on skeletal muscle, insulin stimulates an influx of glucose into muscle cells, and blood sugar returns to a normal level. Insulin resistance is a major feature of Type II Diabetes and occurs when muscle fails to respond to insulin in an appropriate manner. Furthermore, insulin resistance is common in old age but can be diminished by physical activity.

In this study, the investigators hypothesized that aging and exercise affect insulin resistance, at least in part, through insulin-sensitive processes in muscle cells. In exercised and sedentary young and old rats, muscle proteins that respond to insulin stimulation by increasing cellular glucose uptake were studied. They found that aging and exercise affected different insulin-dependent proteins in different ways. Their findings support the view that physical activity has prominent effects on insulin action and is a useful tool for the treatment of Type II Diabetes.

Edward Arias was a postdoctoral trainee on the Biology of Aging & Age-Related Diseases Training Grant. He is now an Assistant Scientist in the laboratory of Professor Gregory Cartee, Department of Kinesiology.

Transitions to Caregiving and Psychological Well-being: the Moderating Effects of Marital Quality - Heejeong Choi

One in five middle-aged Americans are estimated to provide care for a family member or a friend during the past year. Evidence has shown that many caregivers suffer emotional distress due to the demands of caregiving. In addition to caregiving, other life circumstances also have been found to affect the emotional well-being of caregivers. This study examined how quality of caregivers’ marital relationships might influence caregivers’ health.

This study surveyed 2,755 married, middle-aged Americans, twice over a five-year period. Some of them became caregivers during the study, and some did not. Comparing changes in emotional health between the new caregivers and non-caregivers revealed an interesting pattern. Some individuals who became caregivers for elderly parents or a spouse suffered from deteriorated emotional well-being. This occurred only in caregivers who did not view their marital relationships in a positive light. No significant differences in mental health existed between caregivers and non-caregivers when caregivers were satisfied overall with their marriage.

Heejeong Choi is a graduate student in the School of Human Ecology, Department of Human Development & Family Studies. She works with Professor Nadine Marks.

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