**Director’s welcome**

There is an adage claiming that the number of “senior moments” we experience increases as we age. In reality, these experiences are part of an aging process that begins as early as in our thirties and may be the result of memory loss, but they may also be caused by our diminished ability to organize information in an efficient way.

Scientists, clinicians and educators at the UF Institute on Aging and the VA Geriatric Research, Education and Clinical Center (GRECC) are pursuing both behavioral and pharmacological interventions which focus on maintaining our memory as we age, while improving the quality of life.

This issue features some of our latest research, which ranges from studying nutritional supplements (such as CoQ10), to employing behavioral strategies designed to improve attention, with an eye towards ameliorating memory and preserving cognition. This has been achieved through collaboration with several colleges at the UF Health Science Center, including Nursing, Public Health and Health Professions, and Medicine.

To pursue nutritional interventions, we have also partnered with other entities including the McKnight Brain Institute and the UF Institute of Food and Agricultural Sciences (IFAS). Disseminating this information to the public through seminars and community meetings is one of our main goals.

For a list of seminars presenting our research and more, please visit our website at: www.aging.ufl.edu.

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Calorie restriction has been shown to extend lifespan and reduce age-related diseases in numerous species, and may also increase longevity in humans. In recent human studies, caloric restriction (25% energy deficit for six months) produced physiological changes that are thought to increase lifespan, such as lowered fasting insulin levels and lowered 24-hour body temperature.

Members of our research team (Christiaan Leeuwenburgh, PhD, Stephen Anton, PhD, and Bhaskar Malayappan, PhD), recently found that prolonged caloric restriction (20% energy deficit for one year) decreased damage to DNA and RNA in human white blood cells. Although these findings suggest that caloric restriction may be beneficial to humans, research is just beginning to explore the potential effects caloric restriction has on human health.

A very important area of research is exploring the effect caloric restriction has on cognitive functioning, including learning and memory. Based on animal studies, caloric restriction appears to improve cognitive functioning and reduce age-related cognitive decline; however, some human studies indicate caloric restriction may adversely affect cognitive functioning. To date, most human studies have involved self-reported dieters who may have experienced decreased cognitive functioning due to increased thoughts about food and body weight, rather than the negative effect of caloric restriction itself. Additionally, the methods these individuals used to restrict calories may also impact cognitive functioning.

To further explore the potential role caloric restriction has on cognitive functioning, Dr. Anton was involved in the first randomized controlled trial to test the effects of six months of caloric restriction on cognitive functioning in healthy men and women (age 25 to 50) who did not report dieting before entering the study. Findings from this study indicated caloric restriction did not adversely affect memory or cognitive functioning; performance on all tests was similar to a healthy diet control group. This suggests caloric restriction does not have negative effects on cognitive and memory functioning in humans, but future studies with larger sample sizes are needed to confirm these results.
Promotions: Emanuele Marzetti, MD, PhD, has been promoted to the faculty position of Lecturer with the Division of Biology of Aging. Silvia Giovannini, MD, has been appointed as a Post Doctoral Associate with the Division of Biology of Aging.

Honors and awards: Michael Marsiske, PhD, Associate Professor, is the recipient of the Audrey Schumacher Award for Teaching Excellence, Department of Clinical and Health Psychology, University of Florida. Andrea M. Boyd, RN, MA, MSN-CNS, successfully defended her PhD in Nursing Science with a Minor in Exercise Physiology April 2008. She received the “Outstanding Student Award” for the graduating doctoral Class of 2008. Constance R. Uphold, PhD, ARNP, FAAN, was elected Chair of the VA Nursing Research Advisory Group (NRAG); she will have a major leadership role in guiding the national nursing research agenda throughout the VA Healthcare System. Two GRECC associate health trainees have won the 2008 Outstanding GRECC Poster Awards: Best GRECC Research Poster for Kameron Carden, Speech Pathology Trainee; and Best Clinical/Education Poster for Ryan Patel, Optometry Trainee. The Biology of Aging trainees Darya Vorobyeva and Alex Nguyen were approved as recipients of the USB scholarship for 2008-2009.

Grants: Christy Carter, PhD, was awarded a NIH/NIA Administrative Supplement to ACE Inhibition and Physical Performance in Aged Rats - the goal of the project is to expand our examination of the mechanisms by which Enalapril treatment may improve skeletal muscle quality and function. Michael Marsiske, PhD, was awarded the NIH/NIA ACTIVE Phase III: UF/WSU Field Site - the major goals are to investigate the long-term effects of training in basic intellectual aptitudes on older adults’ abilities to perform tasks of daily living. Dr. Marsiske was also awarded the NIH/NIA Physical, Cognitive and Mental Health in Social Context grant - this training grant is designed to instruct new generations of multi-disciplinary researchers in aging. Nihal Tumer, PhD, Philip Scarpace, PhD, and Christy Carter, PhD, were awarded a VA Rehab R&D grant entitled “Obesity and Age Impaired Physical Performance; Gene Therapy Interventions”. Constance Uphold, PhD, ARNP, FAAN, Ron Shorr, MD, MS, and Rebecca Beyth, MD, MSc, were awarded a Veterans Affairs Health Services R&D QUERI Service Directed grant entitled “Web-Based Informational Materials for Caregivers of Veterans Post Stroke”.

Congratulations!
Research is the key to unlocking new discoveries that help us age more healthily and maintain a higher level of physical and cognitive independence. At the UF Institute on Aging, our scientists are intensely committed to better understanding the mechanisms of aging, to identify how we can mitigate its harmful effects and help individuals live life with good health and high function.

Through the support of alumni and friends, the Institute on Aging can sustain current research and take it into new phases, create new research endeavors ranging from identifying new discoveries at the cellular level to developing preventive and rehabilitation methods in clinical studies, and generate resources for the committed scientists needed to conduct the research now and in the future.

To learn more about how you can invest in a healthier and more independent tomorrow for us all, please contact Troy Munn, director of development, at (352) 224-8537 or tmunn@aging.ufl.edu.