



# the Center Report

## Faculty & Fellows Present Research at AGS

Over fifty Center faculty & fellows presented results from their research at the Annual Scientific Meeting in Orlando, FL, May 12-15.

C. Colon-Emeric, K.W. Lyles, C.F. Pieper, S. Boonen, G. Su, P. Mesenbrink, J. Magaziner, C. Bucci-Rechtweg, & J.D. Adachi presented a poster on **“Clinical Risk Factors for Recurrent Fracture after Hip Fracture.”** They concluded that risk factors for subsequent fracture may differ slightly from risk factor for incident fracture. Zoledronic acid treatment does not appear to modify the risk associated with these factors.

L. Gwyther was a co-author of a poster on **“Multidisciplinary Community Care Strategies for Older Adults with Dementia.”** Her presentation was on **“Nurse Practitioner House Calls for Dementia Symptom Management”**.

J.T. Hanlon, R.J. Sloane, C.F. Pieper, & K.E. Schmader presented a poster on **“Adverse Drug Reactions (ADRs) are Associated with both Drug-Drug and Drug-Disease Interaction in Frail Elderly Outpatients.”** They concluded that ADRs are common in elderly veteran outpatients and are particularly associated with drug interactions.

M.T. Heflin, E.S. McConnell, S. Pinheiro, E. Edgerton, D. Thornlow, H. White, & T.R. Konrad presented a poster on **“Design and Evaluation of an Interprofessional Course on Improving Care Transitions.”** They concluded that participation in

an interprofessional course for advanced pre-licensure students improved student self-efficacy in knowledge and skills related



to care transitions and quality improvement methods.

C. Horney, K. Schmader, L. Sanders, M. Heflin, L. Ragdale, E. McConnell, M. Hocker, & N. Hastings presented a poster on **“The Relationship between Health Care Utilization Before and After an Outpatient Emergency Department Visit in Older People.”** They concluded that simply providing additional access to care may not improve outcomes for these vulnerable individuals; rather, interventions to promote coordination of care are needed.

K.S. Johnson, M.N. Kuchibhatla, & J.A. Tulsy presented a poster on **“Intercounty Variability in Hospice Use: Does Race Matter?”** They concluded that for blacks, cultural values and

preferences may be more important than traditional predictors of hospice use such as age, gender, wealth or diagnosis.

K. Unroe, M. Greiner, A. Hernandez, K. Schulman, E. Peterson, & L. Curtis presented a poster on **“Resource Use in the Last Six Months of Life among**

**Medicare Beneficiaries with Heart Failure, 2000-2007.”** They concluded that there have been increasing costs to Medicare, with consistently high rates of hospitalization, increasing use of the ICU and dramatically

increasing use of hospice services.”

H. Whitson was a co-author of a poster on **“Effects of musculoskeletal pain and exhaustion on mobility and physical activity in the Cardiovascular Health Study.”** They concluded that both musculoskeletal pain and exhaustion are important, potentially modifiable factors associated with lower physical activity.

H. Whitson, D. Ansah, L.L. Sanders, D. Whitaker, G. Potter, S.W. Cousins, D.C. Steffens, L.R. Landerman, C.F. Pieper, & H.J. Cohen presented a poster on **“Comorbid Cognitive Impairment and Functional Trajectories in Low Vision Rehabilitation.”** They concluded that many older low vision rehabilitation patients have subtle cognitive deficits



# The Epidemiology of Substance Abuse in Later Life

Dan Blazer MD, PhD, JP Gibbons Professor and LiTzy Wu, ScD, Associate Professor of Psychiatry and Behavioral Sciences have recently published results from three studies of the epidemiology of substance use disorders derived from a large national survey. These studies augment a paucity of studies of substance use in later life

Blazer and Wu based their study on data from the public use files of the 2005–2006 National Survey of Drug Use and Health (NSDUH). This annual survey provides population estimates of substance use and health status of the civilian, non-institutionalized population aged 12 years or older in the United States. Target participants were selected for participation utilizing multistage area probability sampling methods of household residents; residents of shelters, rooming houses, college dormitories, migratory workers' camps, and halfway houses; and civilians residing on military bases. Participants were interviewed in private at their places of residence. The data collection method involved the combination of computer-assisted personal interviewing and audio computer-assisted self-interviewing (ACASI) to increase the validity of respondents' reports of drug use

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**Dan Blazer, MD, PhD**  
JP Gibbons Professor

behaviors. 68,308 respondents completed the survey in 2005 and 67,802 respondents completed the survey in 2006. Weighted response rates for interviewing were 76% in 2005 and 74% in 2006. They combined the public use data files from the two survey years, analyzed data from the same questionnaire items of the 2 years, and restricted our analyses to the 10,953 subjects age 50 years and older.

They found that illicit substance use was very low, 2.6% marijuana, and 0.41% cocaine. Drug use was far more frequent in subjects age 50–64 years old, among men, among those not married and among those with major depression. The prevalence of drug abuse or dependence (not simply use) in the 50+ age group was very low (only 0.33% for any abuse or dependence, 0.12% for marijuana abuse or dependence, and 0.18% for cocaine abuse or dependence). Nevertheless, the use of marijuana approached 4% in the 50–64 age group in comparison with 0.7% in the 65+ age group. Though the prevalence of drug use among the 65+ age group is very low,



**LiTzy Wu, ScD**  
Associate Professor of Psychiatry  
and Behavioral Sciences

the greater prevalence in the 50–64 age group could be a portent of much higher use of these drugs as the baby-boom cohort ages. The good news is that most of the subjects who were users did not present evidence of abuse.

Non-prescription use of prescription pain medications has become an area of increased interest among middle aged adults because recent findings suggest that suicide rates have increased significantly in this age group and one possible cause of the increase is overdose with these drugs. A small proportion of the sample (1.4%) reported nonprescription use of prescription pain relievers during the previous year. Combinations of acetaminophen and hydrocodone or propoxyphene were the most commonly used drugs. Use was associated with younger age, being an American Indian or Alaska native, and use of marijuana. Fewer than 10% of nonprescription users were abusing these medications or dependent upon them. As with illegal substance use,

**Continues on page 5**



# Anti-Aging vs. Anti-Ageism

These two concepts are easily confused because they sound somewhat alike. However, they are actually quite different from each other. Anti-aging attempts to prevent or at least retard the “symptoms” of aging. Anti-ageism attempts to prevent or reduce the prejudice and discrimination against older people.

Anti-aging is practiced by specialists and drug companies who promise to keep people “young” (i.e. healthy) through special diets, drugs, potions, creams, operations, exercises, meditations, spirituality, etc. Unfortunately, despite countless commercials for these so-called anti-aging nostrums, there is little or no evidence that any of them can actually prevent or even retard aging. Not garlic, nor yogurt, nor gerovital, nor queen bee jelly, nor monkey glands, nor ginkgo have been proven to retard aging or extend longevity. It is still true that “the only alternative to aging is death.”

Yet billions of dollars are spent each year on attempts to remove or hide the signs of aging, such as wrinkles, gray hair, or baldness. This is because in our society looking old is equated

with all kinds of negative things such as senility, infirmity, and disability.

Anti-ageism in contrast, attempts to reduce the prejudice against old people and the negative associations of growing old. It does this by trying to counteract the negative stereotypes of old people, trying to make people aware of the ageism reflected in many birthday cards and jokes about old people; trying to educate people about the many advantages of old age such as greater maturity, wisdom, freedom from work and child care, guaranteed income and pensions. Anti-ageism, like anti-racism and anti-sexism, is based on the principle of non-discrimination and equal opportunity for all.

In summary, anti-aging is basically a hopeless enterprise while anti-ageism is a cause with growing success.

—Erdman Palmore, PhD

*The opinions in this editorial are those of the author and not necessarily those of the Duke Center for the Study of Aging.*

## Racial Differences in Hospice Use

By Kimberly S. Johnson, MD, MHS

Approximately 40% of older adults enroll in hospice prior to death. However, there is both demographic and geographic variation in hospice use. Blacks use hospice at lower rates than Whites, and rates of hospice use vary across regions, states, and even counties within states. We examined racial differences in hospice use among White and Black Medicare beneficiaries who died in the Carolinas in 2004.



**Kimberly S. Johnson**  
Assistant Professor of  
Medicine, Geriatrics

Of the 71,545 decedents in 124 counties, 20.6% were Black. Whites were more likely than Blacks to use hospice (28.9% vs. 20.4%). The proportion of older adults who used

hospice ranged from a low of 6.5% in one county to a high of 54.5% in another county for Whites, and from 0% to 60% for Blacks. This variability in hospice use was greater among Blacks than Whites.

Healthcare market factors (i.e. number of hospices, hospital beds, nursing home beds, rurality) and demographics (i.e. age, income, cause of death) explained only 15% of intercounty variability in hospice use among Whites and 14% among Blacks. These findings suggest that other potentially modifiable factors, such as the marketing and community outreach practices of individual hospice providers, may explain a substantial proportion of intercounty variability in hospice use.

## Zeng Yi Honored by Netherlands

Professor Zeng Yi, a Senior Fellow at the Center for the Study of Aging, was recently elected as a Foreign Member of the Royal Netherlands Academy of Arts and Science (KNAW). The appointment is for life and is given solely for academic reasons. The appointment recognizes Zeng Yi’s “impressive achievements as a world renowned demographer and his longstanding and intensive co-operation with demographers from the Netherlands.”



## Cognition, not age, key to decision making\*

Senior citizens are just as able as younger adults to make sound decisions according to a new study, which finds that cognitive ability, not age, is what matters.

“Once we accounted for cognitive abilities like memory and processing speed, age had nothing to do with predicting whether an individual would make the best economic decisions on the tasks we assigned,” says Scott Huettel, associate professor of psychology and neuroscience at Duke University and director of the Center for Neuroeconomic Studies.

Duke researchers assigned a variety of economic tasks that required different types of risky decisions, so that participants could gain or lose real money.

They also tested subjects’ cognitive abilities—including both how fast they could process new information and how well they could remember that information. They worked with 54 older adults between 66 and 76 years of age and 58 younger adults between 18 and 35 years of age.

The researchers used path analysis, a statistical method of finding cause-and-effect relationships, to determine whether age affected the economic decisions directly or whether it had indirect effects, such as age influencing memory, which in turn influenced decisions.

“The standard perspective is that age itself causes people to make more risky, lower-quality decisions—independent of the cognitive changes associated with age,” says Huettel, who is also with the Duke-UNC Brain Imaging and Analysis Center. “But that isn’t what we found.”

The study was published in the journal *Psychology and Aging*.

The path analyses showed that age-related effects were apparently linked to individual differences in processing speed and memory. When those variables were included in the analysis, age was no longer a significant predictor of decision quality, Huettel says.

On a bell curve of performance, there was overlap between the younger and older groups. Many of the older subjects (aged 66 to 76) made similar decisions to many of the younger subjects (aged 18 to 35).

“The stereotype of all older adults becoming more risk-averse is simply wrong,” Huettel says. “Some of the older subjects we studied were able to make better decisions than younger subjects who scored lower on tests of their cognitive abilities.

“If I took 20 younger adults and 20 older adults, all of whom were above average on these measures, then on average, you could not tell them apart based on decisions. On the whole, it is true, more older people process slowly and have poorer memory. But there are also older people who do as well as younger people.”

Huettel says the findings suggest strategies to assist people, such as allowing more time for decisions, or presenting data in certain ways to assist people in making decisions.

“Decision scaffolding is the concept that you can give people structure for decision-making that helps them,” Huettel says. “We should try to identify ways in

which to present information to older adults that gives them scaffolding to make the best choices.

“If we can reduce the demand on memory or the need to process information very quickly, that would be a great benefit to older adults and may push them toward making the same economically beneficial decisions as younger adults.”

In reality, younger adults more often work to obtain credit cards with lower interest rates and lower interest rates on mortgages, for example. Huettel says that using surveys that track real-world behavior might help to identify who would benefit from getting information in one manner versus another.

“Some younger adults, too, may benefit from getting their information in a slow, methodical way, while others may not,” Huettel says. “We may be able to predict that based on cognition.”

Self-recognition is important, too, so that if someone knows they process things well over time, they might ask for more time to make a decision rather than making an impulsive decision on the spot, he concludes.

\*By Mary Jane Gore in **Futurity.org**

## We Are Still #4!

Our Geriatrics Division remained ranked as the fourth best in the nation, according to the recent *U.S. News and World Report*. The Duke Medical School as a whole was ranked as sixth best. It is the only school of medicine in the Southeast ranked in the top 10.

The rankings were determined by the feedback of medical school deans and senior faculty at peer schools.



## Interns Selected

The Duke Leadership in an Aging Society Program (LASP) is pleased to announce that four Duke students have been selected to be interns for 2010. The program, directed by Deborah T. Gold, PhD, funds summer learning experiences related to leadership in aging for Duke undergraduates and graduate students. Interns will work closely with a faculty mentor, complete internships or research projects, and present their experiences to their peers and to leaders in research on aging connected with the Center for the Study of Aging and Human Development. Congratulations to the 2010 Leadership in an Aging Society Interns!

The 2010 Interns are:

**Lea Bromell**, a graduate student pursuing a PhD in Developmental Psychology. Under the guidance of her mentor, Keith Whitfield, Lea will conduct survey-based research examining the potential mediating role of perceived stress in the relationship between neighborhood context and health across the life course.

**Sunita Saith**, an undergraduate student pursuing a BA in Biology. Under the guidance of her mentor, Ornit Chiba-Falek, she will conduct mentored genetic research investigating expression of the SORL1 gene, which may be a genetic determinant of late-onset Alzheimer's Disease.

**Simon Weschle**, a graduate student pursuing a PhD in Political Science. Under the guidance of his mentor, Herbert Kitschelt, he will conduct survey-based comparative research investigating the impact of "graying population" on voters' spending preferences toward social policies and education.

**Margaret Wilkinson**, an undergraduate student pursuing a BA in Public Policy. She will participate in an internship at MPRO, Michigan's Quality Improvement Organization, where she will assist mentors in the program with research examining interventions to reduce hospital readmissions for Medicare recipients.

CONTINUED FROM PAGE 2

## The Epidemiology of Substance Abuse in Later Life

the frequency of nonprescription use of prescription pain medications in people aged 65 and older is low. However, the much greater prevalence of use in those aged 50 to 64 could be a portent of much higher nonprescription use of these drugs as the baby boom cohort ages.

The findings for alcohol use, however, suggest more immediate problems. 66% of male respondents and 55% of female respondents reported alcohol use during the past year. At risk and binge drinking were more frequent in respondents 50-64 than the older age group. In the 65+ age group, 13% of men and 8% of women reported at risk use and over 14% of men and 3% of women reported binge drinking. Binge drinking among men was associated with higher income and being separated, divorced, or widowed; and among women with being employed and nonmedical use of prescription drugs; and with the use of tobacco and illicit drugs in all respondents.

Among alcohol users, being black and less educated were associated with binge drinking among female users, but race/ethnicity and educational level were not associated with binge drinking among

male users. At risk and binge drinking was prevalent among middle aged and elderly adults. The prevalence of middle aged and elderly women reporting at risk (11%) and binge drinking (6%), though lower than the rate in men, is of public health concern. The potential adverse consequences of at risk and binge drinking increase as individuals age. The elderly are more susceptible to health problems, yet problem drinking may be overlooked by clinicians. For example, the CAGE questionnaire often used to screen for alcohol problems is of little value in identifying people who binge.

In summary, the current frequency for illicit substance use and of non-prescription pain medications is low. Yet the significantly higher frequencies in middle aged adults compared to those 65+ years of age suggests that frequencies will increase as this cohort ages. In contrast, binge drinking is a concern today and is likely to be overlooked in the office of a health care provider if that provider does not specifically ask.

CONTINUED FROM PAGE 1

## Faculty & Fellows Present Research at AGS

which are associated with steeply declining function. Enhanced low vision programs that account for comorbid cognitive impairments may be beneficial.

M. Yanamadala and G. Buhr presented a poster on "**Quality Improvement Project: Vitamin D Supplementation in Nursing Home Residents.**" They concluded that multiple Vitamin D daily supplementation and a multidisciplinary approach helped

achieve the target adherence rate.

M. Yanamadala & G. Buhr presented a poster on "**Can geriatric fellows learn Continuous Quality Improvement (CQI) principles within a structured curriculum?**" They concluded that through a didactic and mentoring intervention, fellows demonstrated improvement in self-efficacy in CQI principles.



## “HIGHLY RECOMMENDED”

### —International Handbook on Aging Review

*The International handbook on aging: current research and developments, edited by Erdman B. Palmore, Frank Whittington, and Suzanne Kunkel, with Elizabeth Lokon and Samuel M. Mwangi,\* was reviewed in the April, 2010, issue of CHOICE magazine. The reviewer, R. L. Rubin from Western Illinois University, concluded that the book was “Highly recommended for upper-level undergraduates and above.”*

The full review follows:

The third edition of this handbook—both the previous edition, *Developments and Research on Aging* (1993), and the first edition (CH, Feb’81) were edited by Palmore—is an introduction to the aging populations in 47 countries ranging from Argentina to Zimbabwe and including the US and four regions worldwide. Authoritative information is organized into 8-12-page readable accounts of the demography and socioeconomic characteristics of aging populations globally, educational and training

programs in gerontology and geriatrics, and the social policy issues designed to deal with identified challenges of older adults in each country. The 1993 edition introduced readers to research and data on aging adults in 25 countries. Information unique to this edition can be found in the following sections of the handbook: the African, Asia-Pacific, European, and Latin American regions, “International Nongovernmental Organizations (NGOs) Related to Aging,” “International Directory of Gerontological and Geriatric Associations,” and “Aging in the Global Century.” This is an excellent resource for institutions with research programs or graduate/undergraduate students interested in gerontology, as well as faculty and professionals in the fields of adult care and geriatrics. Users of this resource also may want to review information on aging adults worldwide that is accessible through AARP International <http://www.aarpinternational.org/> and data published by the UN that is accessible at <http://www.un.org/en/databases>. Summing Up: Highly recommended. Upper-level undergraduates and above.

\*R. L. Ruben, emerita, Western Illinois University

\*Praeger, 2009. 705p bibl. index afp; ISBN 9780313352300, \$54.95.

## Did You Know?

Which is the best answer to the following questions?

1. **When the last child leaves home, the majority of parents**
  - a. Have serious problems of adjustment.
  - b. Have higher levels of life satisfaction.
  - c. Try to get their children to come back home.
  - d. Suffer from the “empty nest” syndrome.
2. **The proportion of widowed among elders**
  - a. Is gradually decreasing.
  - b. Is gradually increasing.
  - c. Has remained about the same in this century.
  - d. Is unrelated to longevity.
3. **Severe mental illness among persons over 65 afflicts**
  - a. The majority.
  - b. About half.
  - c. About 15% to 25%.
  - d. Very few.

### Answers:

1. **b.** When the last child leaves home, the majority of parents do not have serious problems adjusting to their “empty nest.” In fact, the parents whose children have left home tend to have higher life satisfaction and happiness than those whose children have not left home.
2. **a.** The proportion of widowed is gradually decreasing because of decreasing mortality rates. Apparently, increasing longevity increases the average age at widowhood and thus increases the proportion of years beyond age 65 in which the couple survives as a couple.
3. **c.** Only 15% to 25% are severely mentally ill (depending on the survey and definitions used). Up to three-fourths have normal mental health.

\*Adapted from *The Facts on Aging Quiz*, 2nd Ed. by Erdman Palmore, NY: Springer Publishing Co., 1998.



Photo courtesy of Anita Aiken

## Coming Events

### July 19–23 or August 16–20

Duke University's Spirituality & Health Research Workshops in Durham, NC. Contact: [Koenig@geri.duke.edu](mailto:Koenig@geri.duke.edu).

### October 5–8

18th International Congress on Palliative Care at the Palais des Congres in Montreal, Canada. Contact: [www.pal2010.com](http://www.pal2010.com) or 1-450-292-3456.

### November 19–23

"Transitions of Care Across the Aging Continuum." 63rd Annual Scientific Meeting of the Gerontological Society of America (GSA) at New Orleans, LA. Contact: [www.geron.org/2010](http://www.geron.org/2010).

### March 17–20, 2011

"Living the Old Age We Imagine: Higher Education in an Aging Society." 37th Annual Meeting of the Association for Gerontology in Higher Education (AGHE) at the Hilton Cincinnati Netherland Plaza, Cincinnati, OH. Contact: [meetings@aghe.org](mailto:meetings@aghe.org).

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