Published in final edited form as:

J Gerontol A Biol Sci Med Sci. 2007 May ; 62(5): 516–518.

A Year of Excellence in Geriatric Research—and Some New Dishes on the Menu

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In October, when I contemplated writing about the future of the *Journal of Gerontology: Medical Sciences*, my first thought was that 2006 had been a pretty good year. However, when I actually looked at the list of the more than 100 published articles and at those yet to be published, I was struck by the excellence of the contributions that made it onto last year's list.

We had at least one gangbuster in each issue. I would like to highlight 12 outstanding articles that I consider milestones in the geriatric literature. In January, Anne Newman and the Health ABC investigators demonstrated that muscle strength rather than muscle mass is the best predictor of mortality in older persons. This work adds to previous literature on the relationship between muscle parameters and disability and suggests that, in spite of its etymological root, sarcopenia should be defined by muscle strength and not by muscle mass (1). In February, Kiely and colleagues demonstrated that delirium resolution within 2 weeks without recurrence is associated with excellent functional recovery (2). In the March issue, investigators from the Johns Hopkins Bloomberg School of Public Health and the National Institute on Aging (NIA) provided the first solid evidence that the elements of frailty aggregate into a medical syndrome (3). In April, Béland and coworkers presented the results of a Canadian randomized controlled trial on the effectiveness of a new system of integrated care for older persons with disability (4). In May, we read findings from a postmarket analysis of the potential impact of cholinesterase inhibitors in Alzheimer patients (5). The June issue opened a new avenue for the Journal. A large section was dedicated to a series of articles focused on nutritional issues in aging. The leading article from the InCHIANTI working group provided the first empirical connection between undernutrition and frailty (6). Feedback from the readership was positive, and the idea of dedicating a section of the Journal to particularly hot topics started to grow. The work led by Jack Guralnik using the Medical Research Council 1946 National Birth Cohort survey was the highlight of the July issue. By demonstrating that childhood socioeconomic status predicts adult life physical function, the authors demonstrated that the quality of aging has very profound roots (7). In the hot August weather, we learned from Abraham Aviv about the fascinating relationship between telomeres and somatic fitness in humans (8). In September, the Washington University CALERIE Group presented original data on 1-year caloric restriction in humans, showing not only that caloric restriction is a feasible experiment but also its value for providing important insight into the mechanisms of human aging (9). My most favored article in the October issue uses the Finnish Twin Study on Aging and reports an elegant analysis demonstrating the heritability of walking performance (10). I am particularly proud that the results of the LIFE pilot study were published in the November issue (11). The LIFE pilot study creates the premises for a future large randomized controlled trial on the effectiveness of exercise in the prevention of disability. Finally, “dulcis in fundus,” a large section of the December issue was dedicated to the interface between delirium and dementia and was coordinated by Sharon Inouye, a highly recognized expert in this field (12).

What a year! Working with the long list of top scientists who published in the Journal has been exciting, stimulating, and rewarding. How can we improve on this? I struggled to think about possible future directions that may facilitate the emergence of stronger and more focused articles that may advance the field.

Building on experience gathered over the last year, we have decided to expand the use of special sections. I received many positive comments on the dalliances in this direction, both from readers and from authors. In the first part of 2007, articles selected through the traditional peer-review process will be aggregated whenever possible. However, we have also identified section themes for the second half of 2007. These sections will be cultivated by special section editors selected among the experts in the relevant fields. Following our traditional food-related nosology, these sections will be named “Il Piatto Forte,” which is Italian for “chef’s recommendation.” The preliminary list of *piatti forti* for 2007 includes:

The Recovery of Multidimensional Geriatric Assessment. *Co-editors Drs. Larry Z. Rubenstein, Andreas Stuck, Darryl Wieland, and Luigi Ferrucci* invite contributions of new primary research on MGA-based care models, as well as updated systematic reviews of the evolving literature. Particularly sought are articles reporting the results of randomized controlled trials of effectiveness and cost effectiveness. Systematic reviews that comprise substantial updates or improvements on earlier reviews of aspects of the MGA literature are also welcome. Articles focused on outcomes prediction and improvement within the context of particular MGA-based models and patient cohorts will also be considered.

Advanced Illness Care: Applying Geriatrics and Palliative Care Principles in Management of Older Patients with Life-Limiting Illnesses. *Co-editors Drs. Darryl Wieland and Christine Ritchie* seek original research articles that address the deficiencies of care for patients approaching the end of life with advanced illnesses. Systems of care will require provider and system competencies, not only in management of multimorbidity and maintenance of function and community tenure, but also in advanced illness, palliative, and end-of-life care. Examples of potential topics of interest include pain and symptom management, decision-making, and health care delivery systems for patients with advanced illness and their families.

Genetic and Environmental Determinants of Healthy Aging: Insights From Centenarians and Other Exceptional Survivors. *Co-editors Drs. Bradley and Craig Willcox and Luigi Ferrucci* seek original articles that investigate the extremes of human survival. Studies of particular interest include studies that better define the phenotype of exceptional (“healthy”) survival, genetic studies on longevity and the emerging field of gene–environment interactions, studies of healthy aging over the life span, prospective studies, and international collaborative studies of centenarians and other exceptional survivors. Such work may help provide insights into novel risk factors or protective factors for achieving a healthier old age, and could have important consequences for reducing risk for age-related diseases and disability.

Socioeconomic Status and Aging. *Co-editors Drs. George Kaplan and Eleanor M. Simonsick* seek original research articles that delve well beyond the description of SES-related health disparities in old age and attempt to identify pathophysiologic, behavioral, and/or sociocultural mechanisms for earlier onset and more rapid progression of disease processes and disablement commonly observed in disadvantaged populations across the age spectrum. Examples of potential topics of interest include education and physiologic impairments from mid- to late life, pathophysiologic mechanisms underlying health disparities, social class, health behaviors, and cognitive decline.

Cortical Function and Its Impact on Postural Control, Gait, and Falls in Older

Adults. *Co-editors Drs. Neil Alexander and Jeffrey Hausdorff* seek original and previously unpublished research articles that characterize the contribution of cortical function to postural control, gait, and falls in older adults. Based on data on vascular and white matter changes in the cortex and from the dementia, dual task, and executive function literature, there is increasing recognition of the influence of cortical function on these motor control domains and mobility. Topics of interest should specifically address its influence on postural control, gait, and falls and could include (but are not limited to) pathoanatomic and physiological studies of cortical function, cognitive impairment, blood pressure regulation, dual task protocols, new clinical or bedside tests, and/or the effect of age-related versus disease-related changes.

Aging, Frailty, and Homeostatic Equilibrium. *Co-editors Drs. Luigi Ferrucci and Linda P. Fried* seek original articles that take a fresh look at the aging process as a continuous adjustment of a complex homeostatic network toward different levels of homeostatic equilibrium that are progressively more unstable. Research on frailty, inflammation, hormonal dysregulation, nutrition, and oxidative stress is particularly appropriate for this section. This field of research is in a tremendous state of development and is creating an interface between clinicians, molecular biologists, and statisticians. Thus, novel research that addresses methodological limitations of the current statistical techniques in analyses of complex systems and proposes alternative methods is of particular interest.

Manuscripts received by September 1, 2007, will have the best chance of consideration for inclusion in these sections. As new areas of interest are identified, and based on the feedback that we receive from the readers, there will be new future “piatti forti” in the Journal. We invite you to submit to the editors challenging ideas.

We wish for manuscripts of innovative original research to be published in the context of these sections. We welcome particularly interdisciplinary and multidisciplinary work that addresses questions and encourages debate of broad theoretical and clinical significance. Manuscripts will be selected by a rigorous peer review process, based on the significance of the topic, quality of scholarship, clarity of style, and presentation. For specific questions, authors are encouraged to contact the section editors directly. I look forward to receiving your submissions and spending long evenings at home reading your manuscripts, maybe while sipping a small glass of red wine.

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