

U13 AGS/NIA Bedside-to-Bench Series in Geriatrics

Urinary Incontinence in the Elderly: A Translational Research Agenda for a Complex Geriatric Syndrome

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Astellas, and Medtronic*

History of Conference Series

Grant	PI	Year	Topic
AG022361	Fried	2004	Frailty
		2005	Comorbid Disease and Multi-morbidity
		2006	Mental/Physical Activity and Cognition
AG028230	Studenski	2007	Thinking Moving Feeling
		2008	Idiopathic Fatigue and Aging
		2009	Inflammation and Nutrient Metabolism

“Revival” of the Series

PI	Co-Chairs	Year	Topic
George Kuchel	Edward Marcantonio	2014	Delirium in Older Adults
	Jeffrey Silverstein		
	Michael Vitiello	2015	Sleep, Circadian Rhythms, and Aging
	Robert Schwartz		
	Kathryn Burgio	2016	Urinary Incontinence in the Elderly
	George Kuchell		

- AGS Research Committee
- NIA Staff

Reports from Delirium and Sleep Conferences

SPECIAL ARTICLES

The American Geriatrics Society/National Institute on Aging Bedside-to-Bench Conference: Research Agenda on Delirium in Older Adults

AGS/NIA Delirium Conference Writing Group, Planning Committee and Faculty

J Am Geriatr Soc 2015.

Key words: delirium; Geriatric syndromes; cognition; measurement; pathophysiology; interventions

The American Geriatrics Society, with support from the National Institute on Aging and the John A. Hartford Foundation, held its seventh Bedside-to-Bench research conference, entitled “Delirium in Older Adults: Finding Order in the Disorder” on February 9–11, 2014, to provide participants with opportunities to learn about cutting-edge research developments, draft recommendations for future research involving translational efforts, and opportunities to network with colleagues and leaders in the field. This meeting was the first of three conferences that will address delirium, sleep disorders, and voiding difficulties and urinary incontinence, emphasizing, where possible, the relationships and potentially shared clinical and pathophysiological features between these common geriatric syndromes (Figure 1).

BACKGROUND

Delirium can be thought of as acute brain failure that occurs when stressors exceed the brain's homeostatic reserve (Figure 2). Celsus initially described delirium in the 1st century CE (c. 47 CE, Aulus Cornelius Celsus, *De Medicina*, 2.7.28), but little in the way of progress was made until the early 1980s, when delirium first appeared in the

Public Policy, American Geriatrics Society, New York, New York.

AGS/NIA Delirium Conference Writing Group, Planning Committee and Faculty members are listed in Appendix.

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Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM III). The most current definition of delirium was recently published in the 5th edition of the

DSM and includes a disturbance in attention; a change in cognition that is not attributable to a preexisting, established, or developing medical condition; and a disturbance that develops over a short period of time and that is not better explained by another mental disorder.

Although the DSM-5 definition of delirium is a step forward, it is still difficult to apply in certain settings. Although the DSM-5 diagnostic approach moves toward a more structured approach, it is still unclear how trained physician personnel can apply it in the clinical setting.

Delirium evaluation has evolved over time. The b-CAM (for “brief”) and CAM-ICU (for intensive care unit) are now in use. The CAM-ICU for intensive care unit is a validated instrument for identifying delirium in patients with various phenotypes of hyperactive, hypoactive, or mixed delirium. The incidence of delirium in ICU populations is 15% after some 2 weeks, and the incidence of poor outcomes, including long-term mortality, is increased in patients with delirium. The incidence of delirium in ICU populations has increased from fewer than 30 per year in 2007 to more than 350 per year in 2012, highlighting the need to differentiate delirium from other cognitive disorders and to develop novel treatment strategies.

DELIRIUM: INTERFACE WITH OTHER GERIATRIC SYNDROMES

The relationships between delirium and other geriatric syndromes such as sleep disorders, voiding dysfunction, and

Report and Research Agenda of the American Geriatrics Society and National Institute on Aging Bedside-to-Bench Conference on Sleep, Circadian Rhythms, and Aging: New Avenues for Improving Brain Health, Physical Health, and Functioning

Constance H. Fung, MD, MSHS, Michael V. Vitiello, PhD, Cathy A. Alessi, MD, George A. Kuchel, MD, and the AGS/NIA Sleep Conference Planning Committee and Faculty
JAGS (In Press)



“Revival” of the Series

- Better integration of the three topics
- Emphasizing bidirectional relationships, shared risks and mechanisms
- Gaps and future research priorities
- Agenda promotes
 - Large group discussion
 - Small group engagement for consensus building
 - Networking
 - Mentoring
- Outcomes
 - Innovative, cross-cutting ideas
 - New and renewed relationships
 - Report and research agenda for urinary incontinence in the elderly

Thank You

Planning Committee:



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Principal Investigator and Co-Chair
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**Francesca Macchiarini, MS,
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National Institute on Aging

Thank You

Planning Committee:



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Thank You

- **Our funders:** NIA (U13) and also Allergan, Astellas and Medtronic (unrestricted educational grants)
- **U13 Oversight Board:** Seth Landefeld, Mary Palmer, Linda Saunders, Sandra Moody, and Heather Allore
- **AGS Staff:** Anna Mikhailovich, Alanna Goldstein, Elisha Medina-Gallagher, Nancy Lundebjerg, and many others
- **Julie Robison, PhD:** Director, UConn Center on Aging Evaluation Research Core
- **Derek Griffiths, PhD and Tomas Griebing, MD, MPH:** Going the extra mile and participating long distance