GRECC AdVAnces

Veterans Health Administration – Geriatrics Center of Excellence
Research and Innovations for Older Veterans – *Summer 2023*

From the Director

Welcome to the summer 2023 edition of **GRECC AdVAnces**. This edition highlights updates on:

- **Research** – about the impact of aging on stroke recovery, led by Dr. Jun Chen from the Pittsburgh GRECC
- **Clinical Innovation** – about an inpatient consult program at the Madison GRECC
- **Education** – about competencies for interprofessional video telemedicine with older adults from the San Antonio GRECC

Congratulations to Jennifer Moye, PhD, ABPP, Associate Director for Education and Evaluation at the New England GRECC and Professor, Department of Psychiatry, at Harvard Medical School and Adjunct Professor at the Boston University School of Medicine upon receiving the M. Powell Lawton Award for Distinguished Contributions to Clinical Psychology, given for exceptional lifetime contributions.

Please share this edition with colleagues and we'll be back with more next winter.

Subscribe to **GRECC AdVAnces** – available via email bi-annually.

Impact of Aging on Stroke Recovery Mechanisms in Mice (Pittsburgh GRECC)

Dr. Jun Chen and his team used high-throughput RNA-sequencing at the single-cell level to explore molecular and cellular mechanisms underlying age-related impairments in post-stroke brain repair.

The major findings of their study include:

1. Unique subsets of proliferating endothelial cells and oligodendrocyte progenitors emerged 3 days after stroke in young mice but displayed weakened pro-regenerative transcriptomic features in aged mice
2. The transcriptomics revealed age-related impairments in OPC proliferation and OL differentiation after stroke
3. Mechanistically, MG/MΦ in aged mice displayed lower levels of paracrine pro-repair molecules that target ECs and OL lineage cells
4. Permanent depletion of MG/MΦ impeded angiogenesis and oligodendrogenesis and hindered long-term stroke recovery in young and aged mice
5. Transplantation of MG/MΦ from young brains into aged stroke brains partially restored angiogenesis and oligodendrogenesis and neurological functions.

These results suggest that loss of homeostatic functions of aging MG/MΦ contribute to the age-related decay in post-stroke brain repair and long-term functional recovery. See the article published in Proceedings of the National Academy of Sciences. To learn more, contact Jun Chen, MD.

Competencies for Video Telemedicine with Older Adults (San Antonio GRECC)

Many curricula have been developed to teach general and specialty specific video telemedicine skills. However, a lack of defined best practices for translating comprehensive interprofessional geriatric care to the virtual setting presents a unique challenge to educators and clinicians.

An interprofessional group of clinicians and educators who had expertise in telemedicine formed a competency development workgroup. Their aim was to draft competencies for interprofessional video telemedicine with older adults while not duplicating existing competencies in geriatrics, interprofessional care, or general telemedicine.

Draft competencies were circulated among experts in geriatric telemedicine and geriatric education for two rounds of comments. Revisions were made to incorporate comments from 41 clinicians representing 7 professions.

Twenty-three competencies were created spanning 6 domains, including:

1. Overarching considerations
2. Pre-visit preparation
3. Beginning of the visit
4. History taking and communication
5. Exam during the visit (organized by the 5 Ms: Mind, Mobility, Medication, Multi-complexity, and Matters Most)
6. Post-visit coordination

These newly developed competencies fill a gap left by those developed for specific disciplines or that do not address considerations for older adults. Essentially, they lay the groundwork for curriculum development and the development of virtual Age-Friendly care. A longer article was recently published in the Journal of the American Geriatrics Society.

To learn more, contact Becky B. Powers, MD.

www.va.gov/GRECC

Elder Veteran Prevention Program (Madison GRECC)

The Elder Veteran Prevention Program (EVP) is an inpatient geriatric consult service led by nurse practitioners and designed to guide nurses and other team members to:

- Identify risk early
- Employ Veteran-centered interventions that focus on prevention and/or prompt treatment of active geriatric syndromes

EVP prioritizes those inpatients with cognitive impairment, working to identify key strategies such as engagement activities like music, books, use of animatronic pets, and a walking schedule to improve their stay and reduce risk of functional decline and delirium.

The EVP model is founded on the use of experiential learning to disseminate evidence-based practice and quality gerontological nursing care. Focused comprehensive geriatric assessments are done, including a thorough family and social history that highlights the Veteran as a unique individual. EVP team members work in sync with the Veterans nurse, educating and modeling at the bedside, and providing feedback on the care plan.

EVP aligns with both VA's I CARE Values through consistent interaction with the Veteran, family, and care team and VA's efforts to become the largest Age-Friendly health system in the U.S.

To learn more, contact Steven Barczi, MD.

VA | U.S. Department of Veterans Affairs
Veterans Health Administration