



NIDUS NEWS

Official Newsletter of the Network for
Investigation of Delirium across the U.S.

NIDUS Updates

Announcing NIDUS – Joint publications in AGS and JGN

Donna Fick and the NIDUS team jointly published an overview of NIDUS in the Journal of Geriatric Nursing and Journal of the American Geriatric Society. Read the full text [online](#).

NIDUS participates in 2017 American Delirium Society Annual Meeting

NIDUS recently participated in the 6th Annual American Delirium Society Meeting, June 4-6 in Nashville, TN. NIDUS hosted two sessions: a plenary session by NIDUS investigators announcing new NIDUS initiatives, and a breakout session featuring 6 scientific presentations. Read more about the [ADS Meeting on our blog](#).



Pratik Pandharipande & Sharon Inouye at ADS 2017

Upcoming Events

Aug 15, 2017 – Call for Pilot Awards (\$50,000 X2), applications due 8/15/17

NIDUS Pilot Grants will include two categories: 1) Junior Investigator awards, 2) Established Investigator pilot awards. The Junior Investigator award is intended new investigators who plan to dedicate a significant portion of their professional effort to delirium.

- Applicants in the **Junior Investigator** track should be no more than 10 years from completion of their final degree, have an appropriately qualified mentor and mentorship plan, not have significant extramural funding (e.g. NIH R-awards, K23, K08, etc.) and have at least 50% protected time for research.
- The **Established Investigator** track is intended for experienced researchers seeking pilot funding which will support new grant proposals. One grant will be awarded per category each year.

For more detailed information about this year's pilot grants and how to apply, please view the instructions through the link below.

- deliriumnetwork.org/pilots/2017-pilot-grant-information/

Nov 1-3, 2017 – Intensive Delirium Research Training Bootcamp, Longwood Inn, Boston, MA

The annual Delirium Boot Camp began in 2013 through a K07 grant from the NIH to fund the Center of Excellence for Delirium in Aging: Research, Training and Educational Enhancement (CEDARTREE), with the goal of advancing research and training in delirium. Now in its 5th year, the Delirium Boot Camp will be co-hosted by CEDARTREE and NIDUS. The Chairs for this year's event are Donna Fick, PhD, MSN, Pennsylvania State University, and Wes Ely, MD, MPH, Vanderbilt University, the NIDUS Mentorship Task Force Leaders.

- Includes mock grant review, CAM training, didactic sessions
- **Applications due June 23, 2017**
- Limited travel awards available
- Details and application available:
 - deliriumnetwork.org/2017-delirium-boot-camp/

Applicants should have previous training in the fundamentals of clinical research, at least 1-2 years of previous research experience, hold an MD, PhD, or other doctoral level degree, have an interest and passion for delirium research, and be able to devote 8-10 hours of advance preparation time for the Bootcamp.



Featured NIDUS Blogger and NIDUS Mentee – Annie Racine PhD, MPA

Annie Racine PhD, MPA, is a Postdoctoral Research Fellow at Harvard Medical School/Institute for Aging Research, Hebrew Seniorlife and a member of the NIDUS dissemination and social media team. She recently finished the Neuroscience & Public Policy Program at the University of Wisconsin-Madison, earning a Master of Public Affairs and a PhD in Neuroscience. In graduate school she studied biomarkers for preclinical Alzheimer’s disease. As a postdoc, her main research projects focus on the intersection of Alzheimer’s disease and delirium.



Annie writes compellingly about emerging data on the complex connections between delirium and cognitive impairment, and how the two act in a synergistic fashion to produce both longer duration delirium but also worsening long term cognitive decline. Read her excellent blog post in its entirety at the NIDUS website (<https://deliriumnetwork.org/interaction-of-delirium-and-dementia-on-cognitive-decline/>)

NIDUS Resources

NIDUS provides a number of highly useful resources for those doing research on delirium, or who want to improve their ability to care for patients with delirium. This month we are highlighting the excellent Delirium Bibliography to update your knowledge (and reference lists): <http://www.hospitalelderlifeprogram.org/for-clinicians/bibliography/>

Research Resources Core: Delirium Research Catalog

The NIDUS Delirium Research Catalog is a database of completed or ongoing studies that include delirium as an outcome or predictor. The catalog will include study metadata (like a “table of contents”) such as study design, sample characteristics, collected biospecimens, neuroimaging tests, neuropsychological testing and pharmacologic intervention. The purpose of the catalog is to allow researchers to search studies on delirium, facilitating collaboration, secondary data analyses and pilot studies to enable advances in the field of delirium research. Each study entry includes contact information for the relevant study staff, allowing researchers to develop connections and seek out existing data, resources, or information that can complement their own research.

Thus far the Research Resource Core (RRC) has successfully undertaken 3 main activities, consistent with the project timeline:

- Development of inclusion criteria: the inclusion criteria will be used to determine eligibility of studies for entry to the database. Initially, the database will be limited to human subjects research, excluding qualitative studies, with a minimum sample size of n=50 except in the case of neuroimaging or advanced biomarker studies, which have a minimum sample size of n=20.
- Developing a systematic indexing system: the RRC has developed a comprehensive and user-friendly form for entering studies to the database. The form is based in Google Forms and all data is stored securely in servers at Hebrew SeniorLife. This form has been developed and beta-tested by the Core Leaders and other NIDUS coinvestigators.



- Developing a standardized, user-friendly database system: The RRC has also created a searchable browser to display studies from the database. This application was developed specifically for this database and will be accessible on the NIDUS website.

The Research Resource Core will continue to test and refine the data entry form and database browser. Once finalized, it will be published on the NIDUS website and accessible through a password-protected portal. The database is now populated with studies submitted by NIDUS co-investigators, but will soon be expanded to additional studies. The study database will be publicized at the American Delirium Society meeting in June, 2017 and through subsequent communications. The Research Resource Core will reach out to other delirium researchers to invite them to enter their studies to the database as appropriate.

Selected 2017 publications by NIDUS Investigators and Members:

1. Storer TW, Basaria S, Traustadottir T, et al. Effects of Testosterone Supplementation for 3 Years on Muscle Performance and Physical Function in Older Men. *J Clin Endocrinol Metab* 2017;102:583-93.
2. Rice KL, Bennett MJ, Berger L, et al. A Pilot Randomized Controlled Trial of the Feasibility of a Multicomponent Delirium Prevention Intervention Versus Usual Care in Acute Stroke. *J Cardiovasc Nurs* 2017;32:E1-E10.
3. Rasulo FA, Bellelli G, Ely EW, Morandi A, Pandharipande P, Latronico N. Are you Ernest Shackleton, the polar explorer? Refining the criteria for delirium and brain dysfunction in sepsis. *J Intensive Care* 2017;5:3.
4. Pisani MA, Albuquerque A, Marcantonio ER, et al. Association Between Hospital Readmission and Acute and Sustained Delays in Functional Recovery During 18 Months After Elective Surgery: The Successful Aging after Elective Surgery Study. *J Am Geriatr Soc* 2017;65:51-8.
5. Lopez MG, Pandharipande P, Morse J, et al. Intraoperative cerebral oxygenation, oxidative injury, and delirium following cardiac surgery. *Free Radic Biol Med* 2017;103:192-8.
6. Kim DH, Lee J, Kim CA, et al. Evaluation of algorithms to identify delirium in administrative claims and drug utilization database. *Pharmacoepidemiology and drug safety* 2017.
7. Hshieh TT, Saczynski J, Gou RY, et al. Trajectory of Functional Recovery After Postoperative Delirium in Elective Surgery. *Ann Surg* 2017;265:647-53.
8. Hshieh TT, Dai W, Cavallari M, et al. Cerebral blood flow MRI in the nondemented elderly is not predictive of post-operative delirium but is correlated with cognitive performance. *Journal of cerebral blood flow and metabolism : official journal of the International Society of Cerebral Blood Flow and Metabolism* 2017;37:1386-97.
9. Han JH, Vasilevskis EE, Chandrasekhar R, et al. Delirium in the Emergency Department and Its Extension into Hospitalization (DELINEATE) Study: Effect on 6-month Function and Cognition. *J Am Geriatr Soc* 2017.
10. Geller EJ, Dumond JB, Bowling M, et al. Effect of Trospium Chloride on Cognitive Function in Women Aged 50 and Older: A Randomized Trial. *Female Pelvic Med Reconstr Surg* 2017;23:118-23.
11. Duggan MC, Wang L, Wilson JE, Dittus RS, Ely EW, Jackson JC. The relationship between executive dysfunction, depression, and mental health-related quality of life in survivors of critical illness: Results from the BRAIN-ICU investigation. *J Crit Care* 2017;37:72-9.
12. Dinglas VD, Friedman LA, Colantuoni E, et al. Muscle Weakness and 5-Year Survival in Acute Respiratory Distress Syndrome Survivors. *Crit Care Med* 2017;45:446-53.
13. Dillon ST, Vasunilashorn SM, Ngo L, et al. Higher C-Reactive Protein Levels Predict Postoperative Delirium in Older Patients Undergoing Major Elective Surgery: A Longitudinal Nested Case-Control Study. *Biol Psychiatry* 2017;81:145-53



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14. Devore EE, Fong TG, Marcantonio ER, et al. Prediction of Long-term Cognitive Decline Following Postoperative Delirium in Older Adults. *The journals of gerontology Series A, Biological sciences and medical sciences* 2017.
15. Davis DHJ, Muniz-Terrera G, Keage HAD, et al. Association of Delirium With Cognitive Decline in Late Life A Neuropathologic Study of 3 Population-Based Cohort Studies. *JAMA Psychiatry* 2017;74:244-51.
16. Bouaziz W, Vogel T, Schmitt E, Kaltenbach G, Geny B, Lang PO. Health benefits of aerobic training programs in adults aged 70 and over: a systematic review. *Arch Gerontol Geriatr* 2017;69:110-27.
17. Boehm LM, Vasilevskis EE, Dietrich MS, et al. Organizational Domains and Variation in Attitudes of Intensive Care Providers Toward the ABCDE Bundle. *American journal of critical care : an official publication, American Association of Critical-Care Nurses* 2017;26:e18-e28.
18. Barnes-Daly MA, Phillips G, Ely EW. Improving Hospital Survival and Reducing Brain Dysfunction at Seven California Community Hospitals: Implementing PAD Guidelines Via the ABCDEF Bundle in 6,064 Patients. *Crit Care Med* 2017;45:171-8.
19. Wildes TS, Winter AC, Maybrier HR, et al. Protocol for the Electroencephalography Guidance of Anesthesia to Alleviate Geriatric Syndromes (ENGAGES) study: a pragmatic, randomised clinical trial. *BMJ Open* 2016;6:e011505.

Join NIDUS

Please join NIDUS! We also encourage your mentees and colleagues to sign up on the website—become a NIDUS member, sign up to receive announcements/newsletter, and access all of our resources.

<https://deliriumnetwork.org/about/register-for-nidus-membership/>

Email: NIDUS@hsl.harvard.edu

Follow NIDUS on Twitter: [@nidus_delirium](https://twitter.com/nidus_delirium)

Like us on Facebook: [Facebook.com/NIDUSDelirium](https://www.facebook.com/NIDUSDelirium)

Take our survey on delirium instrument use: deliriumnetwork.org/delirium-instrument-survey/

About NIDUS

NIDUS is a collaborative research network dedicated to spurring innovation and new advances in delirium research through development of new research and measurement resources, training opportunities, pilot funding and dissemination of information. It is funded through an award from the National Institutes of Health/National Institute on Aging (grant no. R24AG054259). You can learn more at the NIDUS website: <https://deliriumnetwork.org>.