



ALS Research Forum e-Newsletter Vol. 185

November 15, 2017

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This week, we are attending the 47th annual meeting of the Society of Neuroscience in Washington, D.C. We are covering the latest advances in ALS, including emerging drug targets, potential therapies and the latest insights into the underlying mechanisms of the disease. Stay tuned for our meeting coverage!

Research News

[Looking ALS In the Eye](#)

A simple eye test, known as optical coherence tomography (OCT), is emerging as a potential tool to help diagnose, forecast the prognosis and even, develop treatments for at least some neurodegenerative diseases. But what about ALS? Experts weigh in.

[To Reduce Trial Size Use Muscle, ALS Scientists Say](#)

A simple blood test may help scientists detect potential treatment effects in fewer people with the disease according to a retrospective analysis led by University Medical Center Utrecht's **Leonard van den Berg** in the Netherlands. The surrogate outcome measure, originally proposed in 2005 by physicians at the Hôpital de la Pitié-Salpêtrière in Paris, France, determines the levels of creatinine, a biomarker that reflects total muscle mass. The approach builds on previous studies, which suggest that the levels of creatinine in the blood may help forecast the prognosis of people with ALS (see [October 2014](#) news). The study is published online on October 30 in the *Journal of Neurology, Neurosurgery and Psychiatry*.

[SOS Signals from Neurons to Astrocytes Muffled in ALS](#)

Astrocytes contribute to motor neuron toxicity in ALS (see [February 2014](#) news). But according to a growing number of studies, astrocytes may also contribute to ALS by failing to support motor neurons affected by the disease (see [August 2017](#) news; [Hall et al., 2017](#)). Now, a research team led by University of Cambridge's **András Lakatos** and University College London's **Rickie Patani** in England report that astrocytes may lose the ability to respond to motor neuron ephrin B1 receptor-mediated "help-me" signals in ALS. The findings may help scientists develop potential therapies, targeting astrocytes, that protect motor neurons against the disease. The study is published on October 27 in *Nature Communications*.

To learn more about how astrocytes may contribute to ALS, check out [Astrocytes in ALS: A Toxic Withdrawal?](#)

To Model ALS, Scientists Dive In With One FUS

A new mouse model of ALS may help scientists elucidate the earliest stages of the disease. The knock-in mouse, developed by **Elizabeth Fisher** and colleagues at University College London in England, exhibits key signs of ALS including motor deficits and progressive motor neuron loss. The mice, harboring an ALS-linked frameshift mutation in exon 14 in one copy of its own FUS gene, develop symptoms at about one year of age. And at 18 months, about 20% of the motor neurons of these mice degenerated - at least in the spinal cord. No FUS aggregates could be detected. The findings build on previous studies, which suggest that motor neuron loss occurs in FUS-linked ALS due to a toxic gain of function mechanism (see [February 2016](#) news). The study is published on November 1 in *Brain*.

To obtain these mice for further investigation in your laboratory, contact the [European Mouse Mutant Archive](#).

Check out [our website](#) to read more of the latest research advances in ALS.

Funding Opportunities:

Applications are now being accepted by Fight MND for funding for the development of ALS therapies at the preclinical and Phase 1 stage. Researchers globally are invited to apply! Check out [their website](#) for details! Deadline: April 1, 2018.

December 2017

[MDA Venture Philanthropy Program](#). LOI due by December 1, 2017.

[Clinical Scientist Development Awards](#). Doris Duke Charitable Foundation. Pre-Proposal due by December 1, 2017.

[Technological Innovations in Neuroscience Awards](#). McKnight Foundation. LOI due by December 4, 2017.

[NeuroNEXT Clinical Trials](#). NINDS. Applications due by December 6, 2017.

[Transformational Research: Canada 2018](#). Weston Brain Institute. LOI due by December 7, 2017.

January 2018

[Altman Award in Developmental Neuroscience](#). Japan Neuroscience Society. Application due by January 31, 2017. Scientists worldwide are invited to apply.

Check out our [updated list](#) of grants and awards.

Job Opportunities:

[Assistant, Associate or Full Professor, Neurobiology](#). Barrow Neurological Institute. Phoenix, AZ.

[Assistant Professor](#). University of Massachusetts. Amherst, MA.

[Junior Group Leader](#), Psychiatry & Neuroscience. Paris-Descartes University. Paris, France.

[Postdoctoral Fellow, Xia Lab](#). University of Central Florida. Orlando, FL.

[Graduate Studentship, Ning and Ramesh Labs](#). University of Sheffield. Sheffield, England.

[Senior Research Project Manager](#). Columbia University. New York, NY.

[Senior Technician, Project ALS Preclinical Core Facility](#). Columbia University. New York, NY.

Hiring someone onto your team? Contact us to add your listing to [our updated job board](#): ALSjobs@prize4life.org.

[Full List of Job Opportunities >>](#)

Upcoming Meetings:

November 2017

November 21-23, 2017. Trieste, Italy. [Atypical Dementias: From Diagnosis to Therapies](#). FTD.

December 2017

December 2, 2017. Philadelphia, PA. [Cell Biology of Neurodegeneration and Repair in the Nervous System](#).

December 7, 2017. Boston, MA. [ALS/MND Allied Professionals Forum](#).

December 8-10, 2017. Boston, MA. [International Symposium on ALS/MND](#).

March 2018

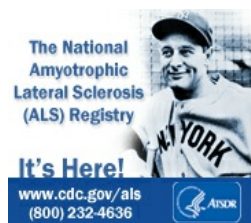
March 11-14, 2018. Arlington, VA. [MDA Clinical Conference](#).

March 18-21, 2018. EMBL. Heidelberg, Germany. [Microglia 2018](#). Abstracts due: February 15, 2018.

March 22-24, 2018. Melbourne, Australia. [Australasian Motor Neurone Disease Symposium](#). Abstracts due: December 18, 2017.

Organizing an ALS meeting? Contact us to add your conference to [our updated calendar](#): ALSmeetings@prize4life.org.

[Full List of Upcoming Meetings>>](#)



[Download the Working with ALS Mice Manual Here](#)

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