

HARVARD *Brain Science Initiative*

HBI's bimonthly "PubMed Playlists" highlights new research from Harvard neuroscientists. What we hope to do is simply whet your appetite for collaboration and crosstalk—featuring ten fascinating tales from diverse arenas of brain science, all found within our community.

April/May 2017:

Basal Ganglia Outputs

[Genetically Distinct Parallel Pathways in the Entopeduncular Nucleus for Limbic and Sensorimotor Output of the Basal Ganglia](#). Neuron paper from the labs of Bernardo Sabatini and Steven McCarroll, first author Michael Wallace. April 5.

Mechanical Pain Circuits

[Identification of spinal circuits involved in touch-evoked dynamic mechanical pain](#). Nature Neuroscience paper from the labs of Qiufu Ma, Bradford Lowell and others, joint first authors Longzhen Cheng, Bo Duan & Tianwen Huang. April 24.

Evolution of Parental Care

[The genetic basis of parental care evolution in monogamous mice](#). Nature paper from the labs of Hopi Hoekstra and Catherine Dulac, first author Andres Bendesky. April 19.

Blood-Brain Barrier Permeability

[Blood-Brain Barrier Permeability Is Regulated by Lipid Transport-Dependent Suppression of Caveolae-Mediated Transcytosis](#). Neuron paper from the labs of Chenghua Gu, Clary Clish, and David Ginty, first author Benjamin Andreone. May 3.

Human Brain Organoids

[Cell diversity and network dynamics in photosensitive human brain organoids.](#)

Nature paper from the labs of Paola Arlotta, Steven McCarroll, Ziv Williams, Jeff Lichtman and others, first author Giorgia Quadrato. May 3.

Presenilin in the Aging Fly Brain

[An Evolutionarily Conserved Role of Presenilin in Neuronal Protection in the Aging *Drosophila* Brain.](#)

Genetics paper from the labs of Jie Shen and Norbert Perrimon, first author Jongkyun Kang and second author Sarah Shin. May 11.

Whole Brain Imaging in Young Zebrafish

[Whole-brain serial-section electron microscopy in larval zebrafish.](#)

Nature paper from the labs of Florian Engert, Jeff Lichtman, Wei-Chung Lee and others, first author David Hildebrand. May 18.

Injectable Electronics for the Brain

[Syringe-injectable mesh electronics integrate seamlessly with minimal chronic immune response in the brain.](#)

PNAS paper from the lab of Charles Lieber, first author Tao Zhou. May 22.

Circuit Variations in Olfaction

[Wiring variations that enable and constrain neural computation in a sensory microcircuit.](#)

Elife paper from the labs of Wei-Chung Lee and Rachel Wilson, first author William Tobin. May 22.

Complement Signaling in Alzheimer's

[C3 deficiency protects against neurodegeneration in aged plaque-rich APP/PS1 mice.](#)

Science Translational Medicine paper from the labs of Cynthia Lemere and Beth Stevens, first author Qiaoqiao Shi. May 31.