About Janelia Research Campus

The Howard Hughes Medical Institute's Janelia Research Campus in Ashburn, Virginia, is an innovative research center that cracks open scientific fields by breaking through technical and intellectual barriers.

Our integrated teams of lab scientists and tool-builders pursue a small number of scientific questions with potential for transformative impact. Since the campus opened in 2006, Janelia scientists have made a number of biological advances, including foundational analysis of the complex neural connections and computations that underlie behavior.

Research Model

Our research model includes core features shared by innovative research institutions:

- Small research groups led by lab heads who themselves actively conduct research
- An emphasis on early scientific independence
- An environment that fosters collaboration between groups, particularly tool-builders and tool-users
- Project teams that tackle experimentally challenging, transdisciplinary problems
- Highly capable scientific support teams
- An explicit goal to make progress in a small number of high-impact, challenging research areas

Current Research

Janelia operates on a 15-year research model, advancing one to three research areas at any point in time. HHMI hosts competitions to determine Janelia's future research areas. We're currently looking for a big idea that addresses a major unsolved problem in the life sciences: janelia.org/new-research-area.

Janelia by the Numbers



Approximately 600 employees



Eight group leaders are National Academy of Sciences members



One Nobel Prize winner (Eric Betzig, 2014)



\$130 million annual operating budget



20% of group leaders were recruited as early career scientists



Mechanistic Cognitive Neuroscience

Our current research area leverages and transforms Janelia's program on neural circuits and behavior, allowing us to pursue one of the biggest questions in brain science. Researchers in mechanistic cognitive neuroscience ask how the brain enables cognition. This integrated program encourages collaboration among tool-builders, biologists, and theorists to clear the technical, conceptual, and computational hurdles that have kept the most intriguing aspects of cognition beyond the purview of mechanistic investigation.

Tool Development and Theory

In addition to defined research areas, there are Tool Development and Theory teams at Janelia, including Molecular Tools and Imaging and Computation and Theory. These teams focus on developing and disseminating impactful tools to tackle fundamental biological questions. They collaborate closely with technically adventurous biologists at Janelia, ensuring that we're developing the right tools and theory for a task.



41% of Janelia postdocs have gone on to faculty and group leader positions



About 20% of our employees are hired through a work visa, representing 50 countries



Our Advanced Imaging Center provides free access to **four** cutting-edge microscopes to the scientific community



We have distributed thousands of Janelia Fluor Dyes, GCaMP calcium sensors, and GAL4 driver lines to labs worldwide



About HHMI

For 60 years, HHMI has been moving science forward. We're an independent, ever-evolving philanthropy that supports basic biomedical scientists and educators with the potential for transformative impact. We make long-term investments in people, not just projects, because we believe in the power of individuals to make breakthroughs over time. HHMI scientists have radically advanced the understanding of cells, the brain, the immune system, the development of organs, and how to treat many diseases.