

Iannis Aifantis  
*New York University*

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PRIMARY DISCIPLINE

**Immunology**

SECONDARY DISCIPLINE

**Cancer Biology**

RESEARCH FOCUS

**Control of hematopoietic stem cell  
differentiation and transformation**



Luís A. Amaral  
*Northwestern University*

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PRIMARY DISCIPLINE

**Computational Biology**

SECONDARY DISCIPLINE

**Bioengineering**

RESEARCH FOCUS

**Computational systems biology**



Peter Baumann  
*Stowers Institute for Medical Research*

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PRIMARY DISCIPLINE

**Molecular Biology**

SECONDARY DISCIPLINE

**Cell biology**

RESEARCH FOCUS

**Telomeres and genome instability**



James E. Bear  
*University of North Carolina at Chapel Hill*

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PRIMARY DISCIPLINE

**Cell Biology**

SECONDARY DISCIPLINE

**Cancer biology**

RESEARCH FOCUS

**Actin dynamics and cell motility**



Bradley E. Bernstein  
*Massachusetts General Hospital*

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PRIMARY DISCIPLINE

**Cell Biology**

SECONDARY DISCIPLINE

**Genomics**

RESEARCH FOCUS

**Epigenetic mechanisms that  
underlie pluripotency, differentiation  
and commitment**



Daniel I. Bolnick  
*University of Texas at Austin*

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PRIMARY DISCIPLINE

**Evolutionary Biology**

SECONDARY DISCIPLINE

**Genetics**

RESEARCH FOCUS

**Ecology and genetics of evolutionary divergence among speciesa**



Sean F. Brady  
*Rockefeller University*

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PRIMARY DISCIPLINE

**Chemical Biology**

RESEARCH FOCUS

**Characterization of small molecules  
produce by uncultured bacteria**



Martin D. Burke  
*University of Illinois at Urbana-Champaign*

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PRIMARY DISCIPLINE

**Chemical Biology**

SECONDARY DISCIPLINE

**Medicine**

RESEARCH FOCUS

**Molecular Prosthetics: small molecules  
with higher-order, protein-like functions**





Howard Y. Chang  
*Stanford University*

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PRIMARY DISCIPLINE

**Genetics**

SECONDARY DISCIPLINE

**Developmental Biology**

RESEARCH FOCUS

**Functional genomics**



Martin J. Cohn  
*University of Florida*

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PRIMARY DISCIPLINE

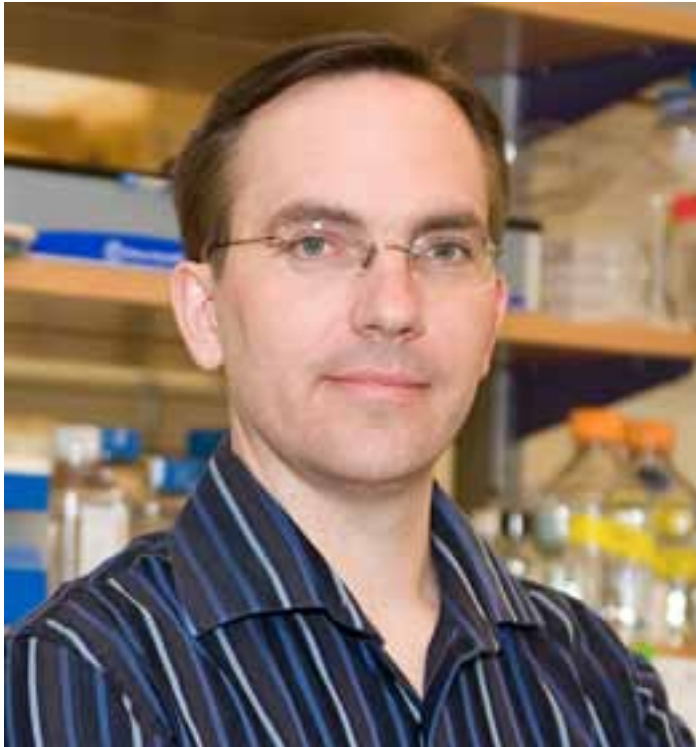
**Developmental Biology**

SECONDARY DISCIPLINE

**Genetics**

RESEARCH FOCUS

**Development and evolution of  
vertebrate appendages**



Jeremy S. Dasen  
*New York University*

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PRIMARY DISCIPLINE

**Neuroscience**

SECONDARY DISCIPLINE

**Developmental Biology**

RESEARCH FOCUS

**Genetic control of  
neural circuit assembly**



Russell A. DeBose-Boyd

*University of Texas Southwestern Medical Center at Dallas*

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PRIMARY DISCIPLINE

**Biochemistry**

SECONDARY DISCIPLINE

**Molecular Biology**

RESEARCH FOCUS

**Sterol-accelerated, ER-associated  
degradation of HMG CoA reductase**



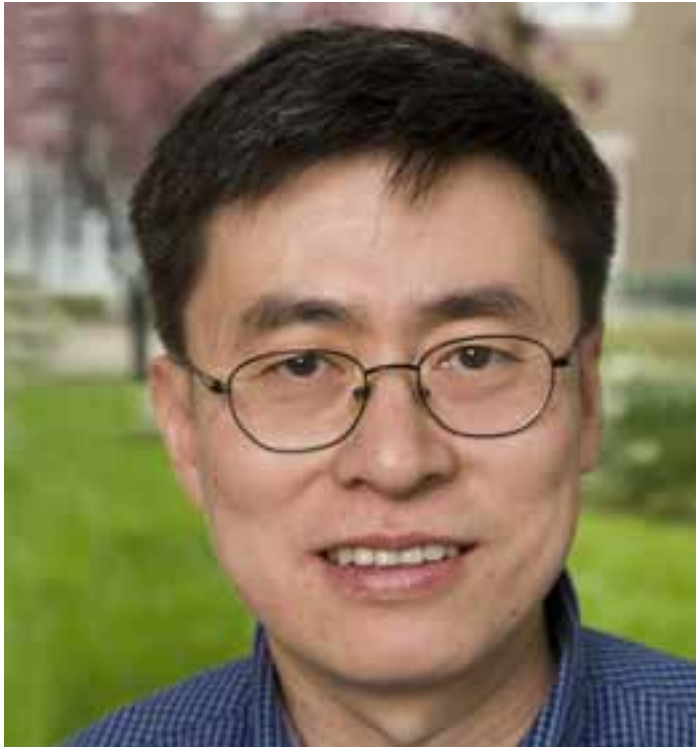
Karl Deisseroth  
*Stanford University*

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PRIMARY DISCIPLINE  
**Neuroscience**

SECONDARY DISCIPLINE  
**Bioengineering**

RESEARCH FOCUS  
The development and application  
of fast optical tools for interrogating  
neural circuitry

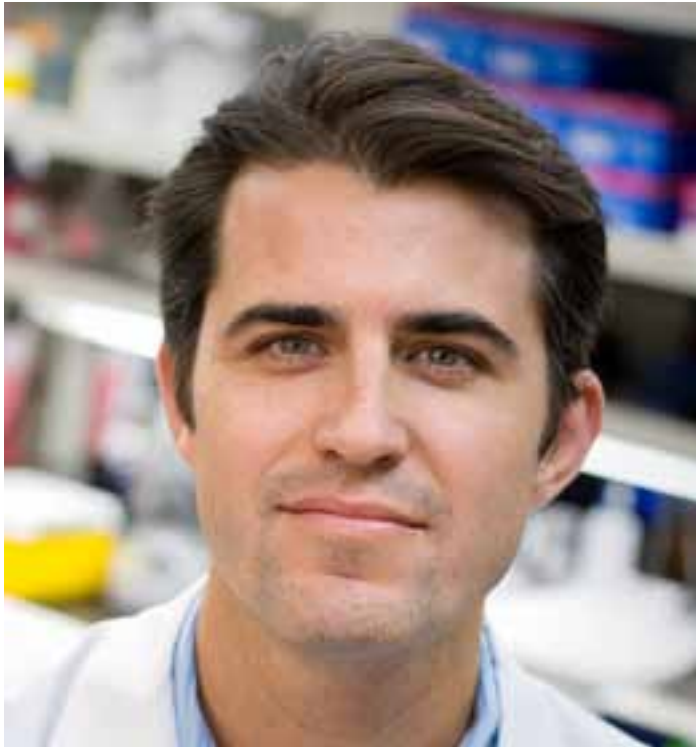


Xinzhong Dong  
*Johns Hopkins University*

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PRIMARY DISCIPLINE  
**Neuroscience**

RESEARCH FOCUS  
**Molecular and cellular mechanisms  
of somatosensation of pain, itch, and  
pleasure**



Michael A. Dyer  
*St. Jude Children's Research Hospital*

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PRIMARY DISCIPLINE

**Developmental Biology**

SECONDARY DISCIPLINE

**Neuroscience**

RESEARCH FOCUS

**Coordination of proliferation and  
differentiation during neurogenesis**



Kevin Eggan  
*Harvard University*

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PRIMARY DISCIPLINE

**Developmental Biology**

SECONDARY DISCIPLINE

**Neuroscience**

RESEARCH FOCUS

**The leveraging of stem cells and reprogramming to understand neurodegeneration**





Joaquin M. Espinosa  
*University of Colorado*

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PRIMARY DISCIPLINE

**Molecular Biology**

SECONDARY DISCIPLINE

**Cancer Biology**

RESEARCH FOCUS

**Gene expression control, cancer biology,  
and gene networks**



Marc R. Freeman

*University of Massachusetts Medical School*

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PRIMARY DISCIPLINE

Neuroscience

SECONDARY DISCIPLINE

Neuroscience

RESEARCH FOCUS

Glial cell biology, and neuron-glia interactions in development and disease



Mark A. Frye  
*University of California, Los Angeles*

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PRIMARY DISCIPLINE  
**Neuroscience**

SECONDARY DISCIPLINE  
**Neuroscience**

RESEARCH FOCUS  
**Cross-modal sensory fusion, sensory-motor integration, and neural circuits**



Tamir Gonen  
*University of Washington*

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PRIMARY DISCIPLINE

**Biochemistry**

SECONDARY DISCIPLINE

**Structural Biology**

RESEARCH FOCUS

**High-resolution electron cryo-microscopy  
of membrane proteins, transporters and  
molecular machines**



Eric C. Greene  
*Columbia University*

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PRIMARY DISCIPLINE

**Biochemistry**

SECONDARY DISCIPLINE

**Surface Chemistry and Nanotechnology**

RESEARCH FOCUS

**High-throughput single molecule technology  
and DNA damage recognition/repair**



Konrad Hochedlinger  
*Harvard Medical School*

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PRIMARY DISCIPLINE

**Developmental Biology**

SECONDARY DISCIPLINE

**Genetics**

RESEARCH FOCUS

**Pluripotency and nuclear reprogramming**



Neil Hunter  
*University of California, Davis*

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PRIMARY DISCIPLINE

**Genetics**

SECONDARY DISCIPLINE

**Cancer biology**

RESEARCH FOCUS

**The mechanism and regulation of  
homologous recombination**



Susan M. Kaech  
*Yale University*

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PRIMARY DISCIPLINE

**Immunology**

SECONDARY DISCIPLINE

**Developmental biology**

RESEARCH FOCUS

**Immunological memory**





Jeffrey S. Kieft  
*University of Colorado*

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PRIMARY DISCIPLINE

**Structural Biology**

SECONDARY DISCIPLINE

**Biochemistry**

RESEARCH FOCUS

**The structure and function of  
RNAs involved in viral infection  
and pathogenesis**



Rob Knight  
*University of Colorado*

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PRIMARY DISCIPLINE

**Computational Biology**

SECONDARY DISCIPLINE

**Molecular Biology**

RESEARCH FOCUS

**Microbial community evolution  
and bioinformatics**



Michael T. Laub  
*Massachusetts Institute of Technology*

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PRIMARY DISCIPLINE

**Microbiology**

SECONDARY DISCIPLINE

**Genetics**

RESEARCH FOCUS

**Regulatory networks and  
signal transduction**



Ming Lei  
*University of Michigan*

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PRIMARY DISCIPLINE

**Structural Biology**

SECONDARY DISCIPLINE

**Cancer Biology**

RESEARCH FOCUS

**The structure and mechanism  
of telomere regulation and protection**



Harmit S. Malik  
*Fred Hutchinson Cancer Research Center*

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PRIMARY DISCIPLINE

**Genetics**

SECONDARY DISCIPLINE

**Virology**

RESEARCH FOCUS

**Genetic conflicts within and  
between genomes**



Joshua T. Mendell  
*Johns Hopkins University*

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PRIMARY DISCIPLINE

**Molecular Biology**

SECONDARY DISCIPLINE

**Cancer Biology**

RESEARCH FOCUS

**The roles of microRNAs in  
normal physiology and disease**



Tirin Moore  
*Stanford University*

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PRIMARY DISCIPLINE  
**Neuroscience**

SECONDARY DISCIPLINE  
**Neuroscience**

RESEARCH FOCUS  
**The neural basis of visual perception and cognition in the visual and prefrontal cortex**



Kenneth D. Poss  
*Duke University*

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PRIMARY DISCIPLINE

**Developmental Biology**

SECONDARY DISCIPLINE

**Genetics**

RESEARCH FOCUS

**Dissecting organ regeneration  
in zebrafish**





Molly Przeworski  
*University of Chicago*

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PRIMARY DISCIPLINE

**Genetics**

SECONDARY DISCIPLINE

**Evolution**

RESEARCH FOCUS

**Population genetics**



Peter W. Reddien  
*Massachusetts Institute of Technology*

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PRIMARY DISCIPLINE

**Developmental Biology**

SECONDARY DISCIPLINE

**Genetics**

RESEARCH FOCUS

**Genetic regulation of regeneration and stem cells in planarians**



Aviv Regev  
*Massachusetts Institute of Technology*

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PRIMARY DISCIPLINE

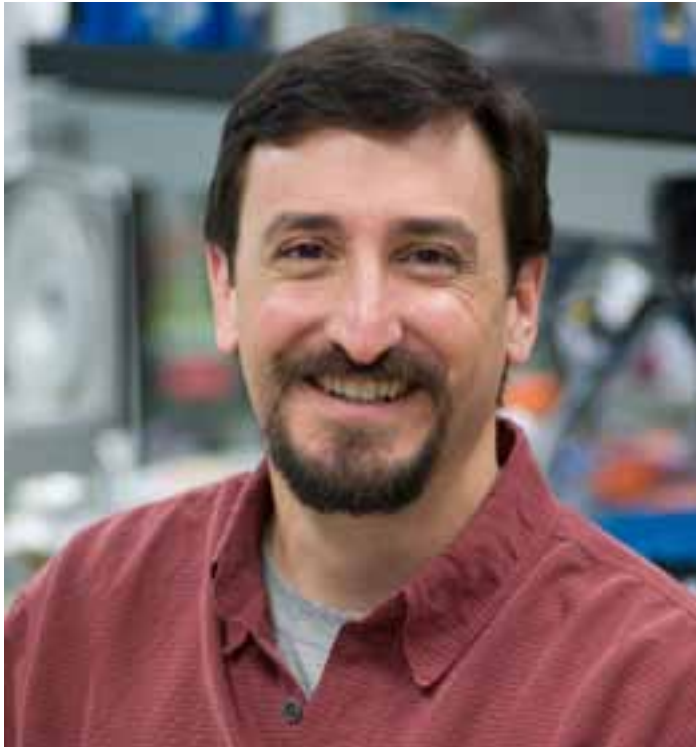
Computational Biology

SECONDARY DISCIPLINE

Genomics

RESEARCH FOCUS

Systems biology



Christopher M. Sassetti  
*University of Massachusetts Medical School*

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PRIMARY DISCIPLINE

**Microbiology**

SECONDARY DISCIPLINE

**Genetics**

RESEARCH FOCUS

**Tuberculosis: pathogenesis, latency,  
and treatment**



Kristin Scott  
*University of California, Berkeley*

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PRIMARY DISCIPLINE  
**Neuroscience**

RESEARCH FOCUS  
**Taste recognition from sensory  
detection to behavior**



Reuben J. Shaw  
*Salk Institute for Biological Studies*

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PRIMARY DISCIPLINE

**Cell Biology**

SECONDARY DISCIPLINE

**Cancer Biology**

RESEARCH FOCUS

**Signaling pathways in cancer  
and metabolism**



Anita Sil

*University of California, San Francisco*

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PRIMARY DISCIPLINE

**Molecular Biology**

SECONDARY DISCIPLINE

**Microbiology**

RESEARCH FOCUS

**Microbial pathogenesis  
and host response**



Maria Spies  
*University of Illinois at Urbana-Champaign*

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PRIMARY DISCIPLINE

**Biochemistry**

SECONDARY DISCIPLINE

**Biophysics**

RESEARCH FOCUS

**DNA helicases: molecular mechanisms and  
integration into DNA repair pathways**





Brent R. Stockwell  
*Columbia University*

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PRIMARY DISCIPLINE

**Chemical Biology**

SECONDARY DISCIPLINE

**Cell Biology**

RESEARCH FOCUS

**Defining new cell death pathways  
using small molecules**



Hui Sun

*University of California, Los Angeles*

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PRIMARY DISCIPLINE

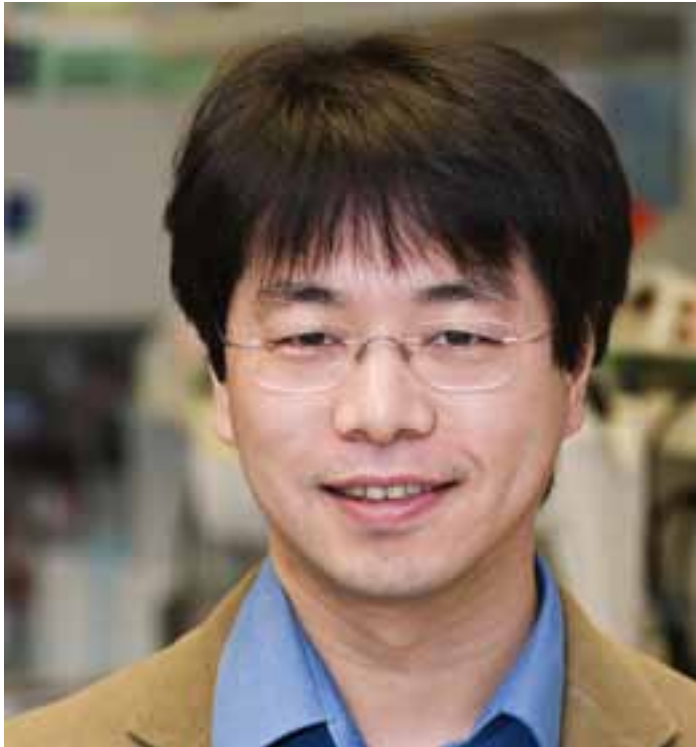
**Biochemistry**

SECONDARY DISCIPLINE

**Medicine**

RESEARCH FOCUS

**Novel biochemical pathways for retinoids;  
mechanisms of blinding diseases**



Toshiyasu Taniguchi  
*Fred Hutchinson Cancer Research Center*

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PRIMARY DISCIPLINE

**Cancer Biology**

SECONDARY DISCIPLINE

**Genetics**

RESEARCH FOCUS

**DNA repair and chemosensitivity/  
resistance of cancer**



Joseph W. Thornton  
*University of Oregon*

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PRIMARY DISCIPLINE

**Molecular Biology**

SECONDARY DISCIPLINE

**Genetics**

RESEARCH FOCUS

**The evolution of protein structure  
and function**



Sinisa Urban  
*Johns Hopkins University*

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PRIMARY DISCIPLINE  
**Biochemistry**

SECONDARY DISCIPLINE  
**Microbiology**

RESEARCH FOCUS  
**Charting the function and evolution  
of intramembrane proteolysis**



Amy J. Wagers  
*Harvard Medical School*

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PRIMARY DISCIPLINE

**Stem Cell Biology**

RESEARCH FOCUS

**Systemic regulation of tissue-specific  
stem cell function during aging**



John B. Wallingford  
*University of Texas at Austin*

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PRIMARY DISCIPLINE

**Developmental Biology**

SECONDARY DISCIPLINE

**Cell Biology**

RESEARCH FOCUS

**Morphogenesis; developmental control  
of cell behavior in embryos**



Rachel I. Wilson  
*Harvard Medical School*

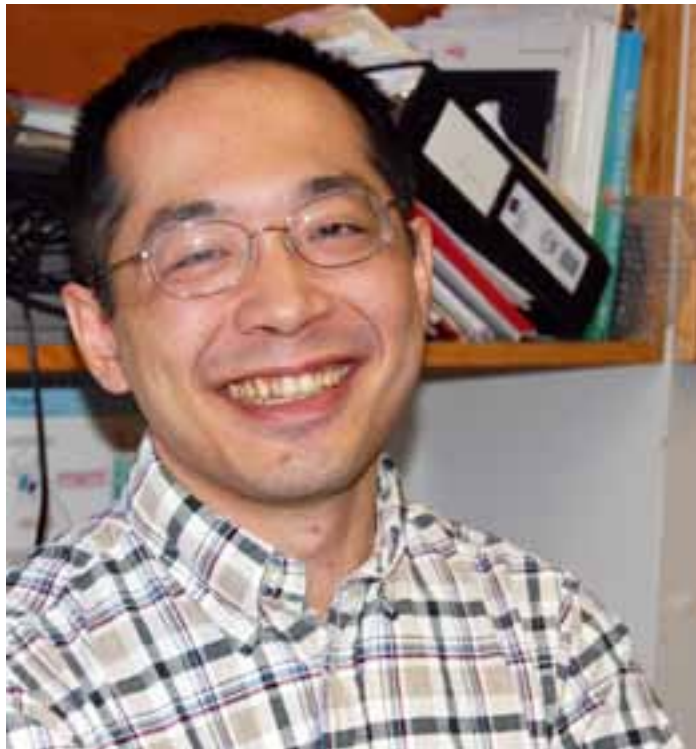
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PRIMARY DISCIPLINE  
**Neuroscience**

SECONDARY DISCIPLINE  
**Neuroscience**

RESEARCH FOCUS  
**Sensory processing in the  
Drosophila brain**





Ryohei Yasuda  
*Duke University*

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PRIMARY DISCIPLINE  
**Neuroscience**

SECONDARY DISCIPLINE  
**Cell Biology**

RESEARCH FOCUS  
**Signal transduction in single synapses  
during synaptic plasticity**



Jennifer A. Zallen  
*Memorial Sloan-Kettering Cancer Center*

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PRIMARY DISCIPLINE

**Genetics**

SECONDARY DISCIPLINE

**Cell Biology**

RESEARCH FOCUS

**Molecular control of polarized  
cell behavior in the *Drosophila* embryo**