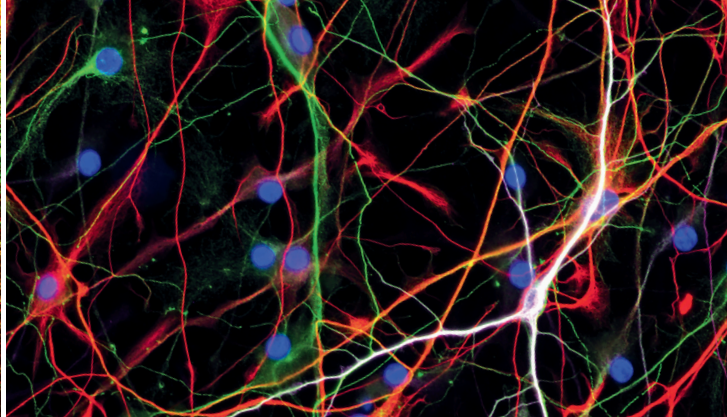
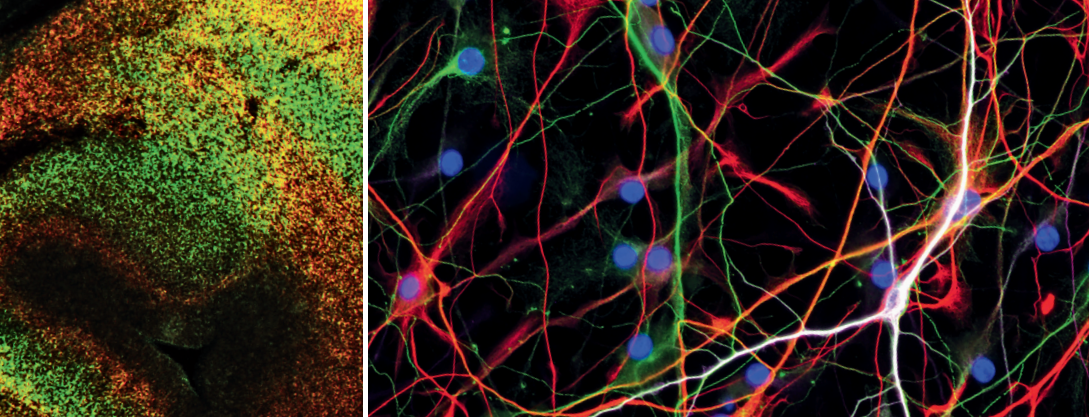


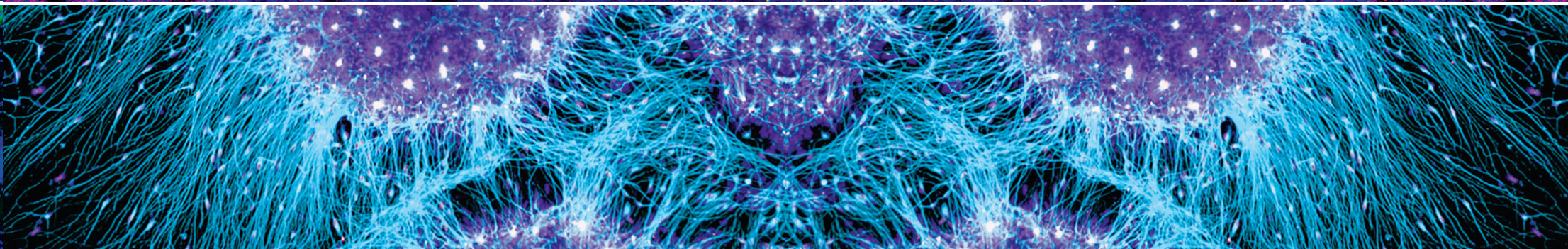
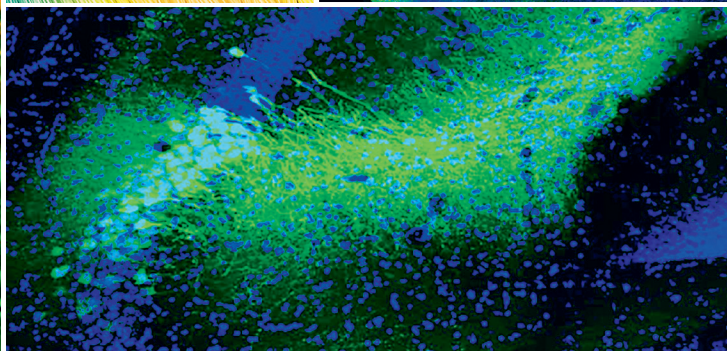
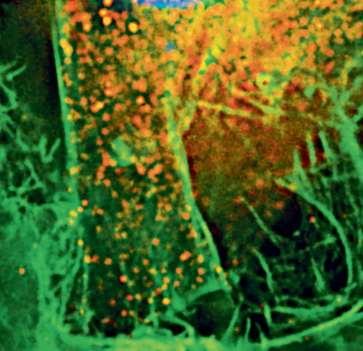
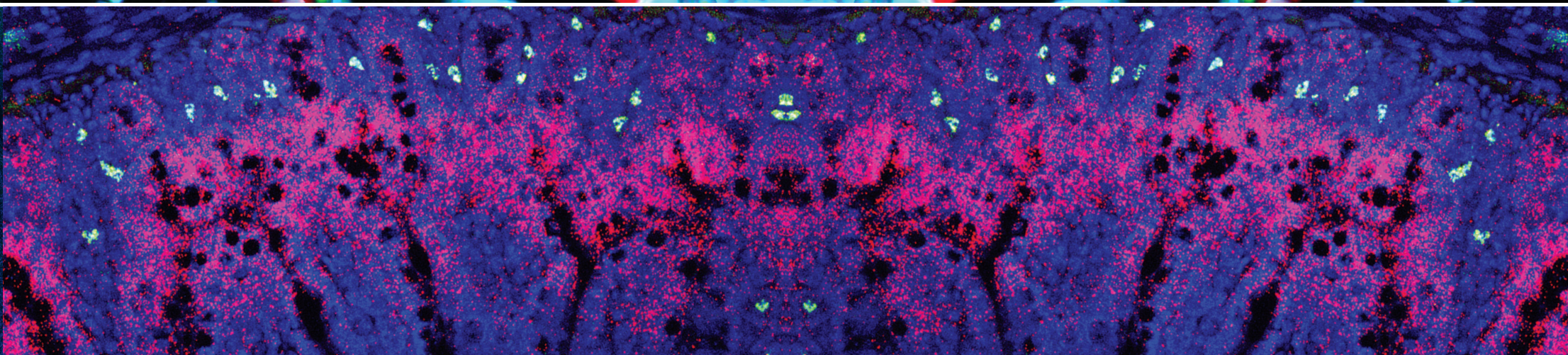
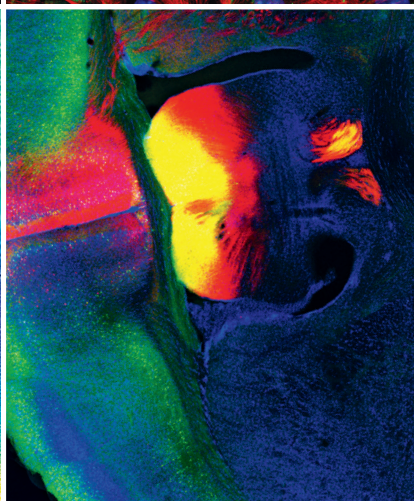
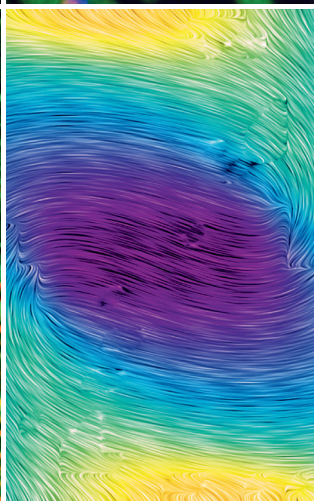
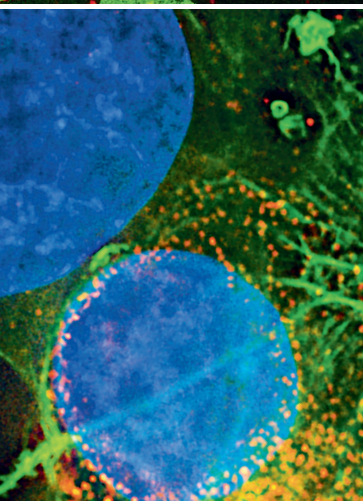
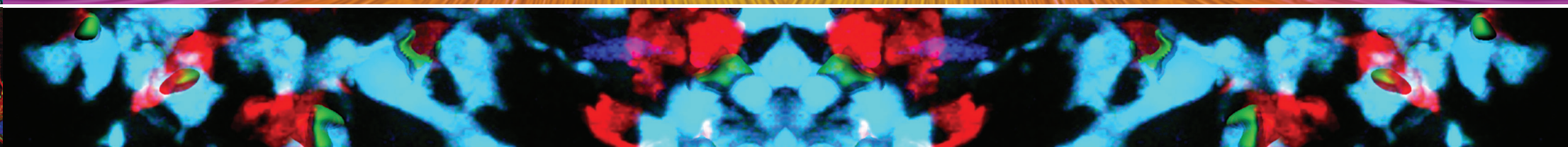
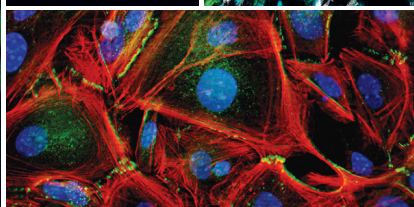
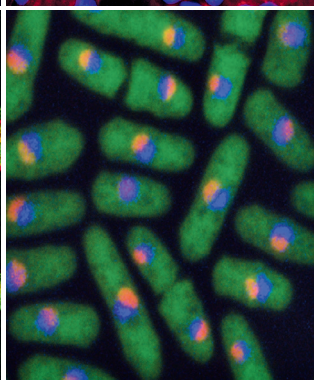
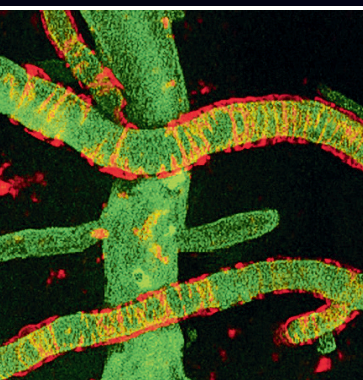
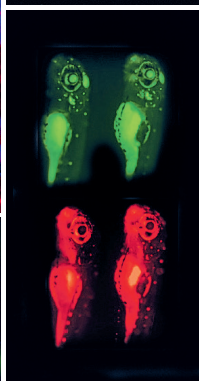
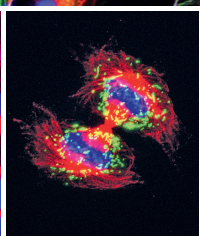
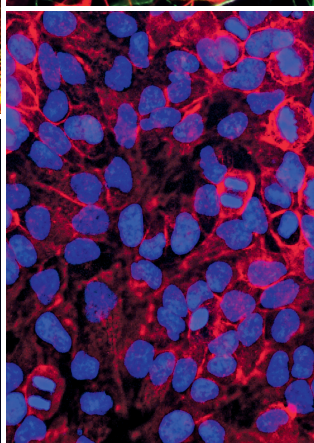
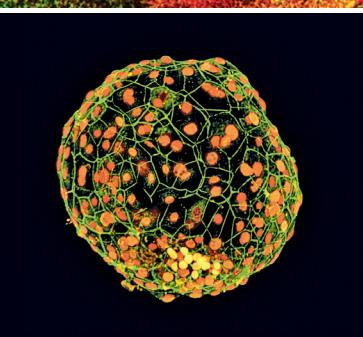
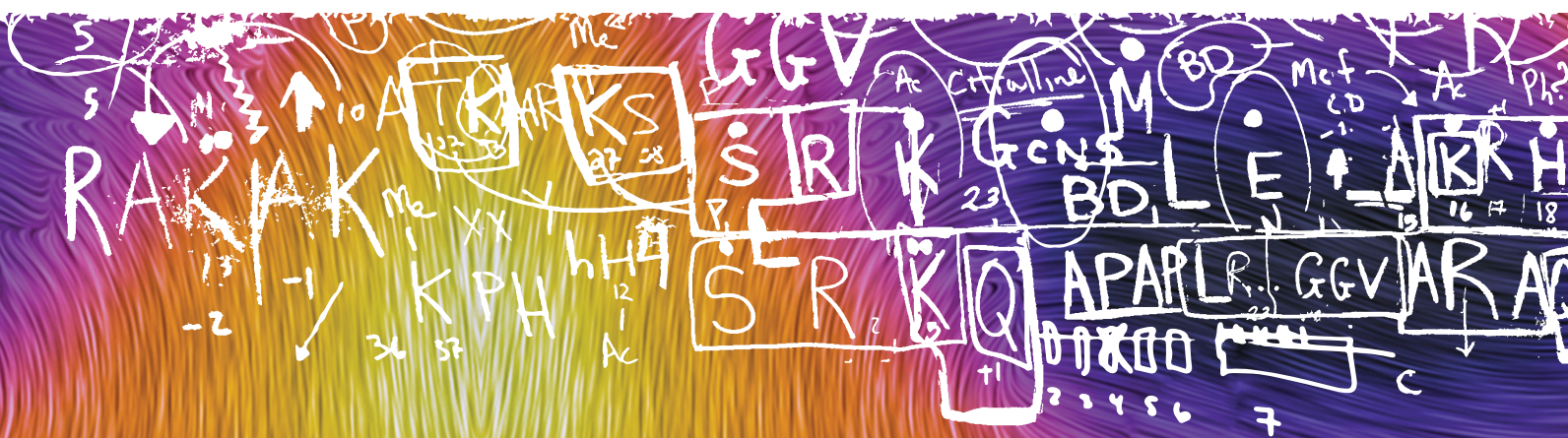


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SCIENCE FOR THE BENEFIT OF HUMANITY

THE ROCKEFELLER UNIVERSITY

Research Areas 2026–2027

Rockefeller's 74 laboratories are leading breakthroughs across the biosciences, addressing the world's most pressing scientific quandaries and health problems. Their research interests can be categorized into 10 broad areas of discovery.



Biochemistry, Biophysics,
Chemical Biology,
and Structural Biology

Gregory M. Alushin
Paul Bieniasz
Steve L. Bonilla
Sean F. Brady
Elizabeth Campbell
Brian T. Chait
Jue Chen
Paul Cohen
Robert B. Darnell
Seth A. Darst
Titia de Lange
Avi I. Flamholz
Hironori Funabiki
Tarun Kapoor
Sebastian Klinge
Stanislas Leibler
Shixin Liu
Sofia Lövestam

Jiankun Lyu
Roderick MacKinnon
Paul Nurse
Michael O'Donnell
Charles M. Rice
Viviana I. Risca
Jeremy M. Rock
Robert G. Roeder
Michael P. Rout
Vanessa Ruta
Thomas P. Sakmar
Sanford M. Simon
Tim Stearns
Sohail Tavazoie
Thomas Tuschl
Ekaterina V. Vinogradova
Thomas Walz

Genetics and
Genomics

Cori Bargmann
Kivanç Birsoy
Sean F. Brady
Ali H. Brivanlou
Junyue Cao
Paul Cohen
Barry S. Collier
Frederick R. Cross
Robert B. Darnell
Titia de Lange
Vincent A. Fischetti
Avi I. Flamholz
Jeffrey M. Friedman
Elaine Fuchs
Nathaniel Heintz
Erich D. Jarvis
Daniel Kronauer

Richard P. Lifton
Luciano Marraffini
Paul Nurse
Charles M. Rice
Viviana I. Risca
Jeremy M. Rock
Robert G. Roeder
Vanessa Ruta
Shai Shaham
Agata Smogorzewska
Sidney Strickland
Gabriel D. Victora
Leslie B. Vosshall
Lamia Wahba
Michael W. Young
Li Zhao

Mechanisms of
Human Disease

Paul Bieniasz
Kivanç Birsoy
Ali H. Brivanlou
Jue Chen
Paul Cohen
Barry S. Collier
Robert B. Darnell
Titia de Lange
Vincent A. Fischetti
Charles D. Gilbert
Nathaniel Heintz
Erich D. Jarvis
James G. Krueger

Richard P. Lifton
Sofia Lövestam
Michael C. Nussenzweig
Michael O'Donnell
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Jeremy M. Rock
Thomas P. Sakmar
Sanford M. Simon
Agata Smogorzewska
Sidney Strickland
Sohail Tavazoie
Thomas Tuschl
Ekaterina V. Vinogradova

Neurosciences
and Behavior

Cori Bargmann
Robert B. Darnell
Winrich Freiwald
Jeffrey M. Friedman
Charles D. Gilbert
Mary E. Hatten
Nathaniel Heintz
Erich D. Jarvis
Daniel Kronauer
Sofia Lövestam
Roderick MacKinnon
Marcelo O. Magnasco

Gaby Maimon
Daniel Mucida
Priya Rajasethupathy
Vanessa Ruta
Thomas P. Sakmar
Shai Shaham
Hermann Steller
Sidney Strickland
Sohail Tavazoie
Alipasha Vaziri
Leslie B. Vosshall
Michael W. Young
Jacob Zavattone-Veth

Stem Cells, Development,
Regeneration, and Aging

Ali H. Brivanlou
Junyue Cao
Joel E. Cohen
Paul Cohen
Titia de Lange
Elaine Fuchs
Mary E. Hatten
Erich D. Jarvis
Charles M. Rice
Shai Shaham
Amy E. Shyer
Eric D. Siggia
Agata Smogorzewska
Hermann Steller
Sidney Strickland

Cancer Biology

Kivanç Birsoy
Sean F. Brady
Junyue Cao
Paul Cohen
Robert B. Darnell
Titia de Lange
Elaine Fuchs
Hironori Funabiki
Tarun Kapoor
Richard P. Lifton
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Robert G. Roeder
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Hermann Steller
Sohail Tavazoie
Ekaterina V. Vinogradova

Cell Biology

Gregory M. Alushin
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Kivanç Birsoy
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Paul Cohen
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Agata Smogorzewska
Tim Stearns
Hermann Steller
Sohail Tavazoie
Thomas Tuschl
Ekaterina V. Vinogradova
Michael W. Young

Immunology, Virology,
and Microbiology

Paul Bieniasz
Steve L. Bonilla
Sean F. Brady
Elizabeth Campbell
Brian T. Chait
Jue Chen
Seth A. Darst
Vincent A. Fischetti
Avi I. Flamholz
Elaine Fuchs
James G. Krueger
Luciano Marraffini
Daniel Mucida

Michel C. Nussenzweig
Jeffrey V. Ravetch
Charles M. Rice
Jeremy M. Rock
Robert G. Roeder
Michael P. Rout
Sanford M. Simon
Alexander Tarakhovsky
Sohail Tavazoie
Thomas Tuschl
Gabriel D. Victora
Ekaterina V. Vinogradova
Thomas Walz

Organismal Biology,
Ecology, and Evolution

Ali H. Brivanlou
Joel E. Cohen
Avi I. Flamholz
Erich D. Jarvis
Daniel Kronauer
Stanislas Leibler
Marcelo O. Magnasco
Gaby Maimon
Michael O'Donnell
Vanessa Ruta
Amy E. Shyer
Leslie B. Vosshall
Lamia Wahba
Li Zhao

Physical, Mathematical, and
Computational Biology

Junyue Cao
Joel E. Cohen
Avi I. Flamholz
Erich D. Jarvis
Stanislas Leibler
Shixin Liu
Jiankun Lyu
Roderick MacKinnon
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Sanford M. Simon
Alipasha Vaziri
Jacob Zavattone-Veth
Li Zhao

1

Biochemistry, Biophysics,
Chemical Biology, and
Structural Biology

Scientists study how molecules interact to drive biological processes such as gene regulation, signal transduction, and enzymology. Their work involves delineating the properties of molecules, molecular complexes, and cells; using chemistry tools to manipulate disease mechanisms; and determining the structures of molecular assemblies at near-atomic resolution.

2

Cancer Biology

Work in this area focuses on the processes by which cancers arise, progress, and respond to therapy. Researchers seek to understand how cancer cells transform, metastasize, and interact with their microenvironment; study the mechanisms that drive disease; and develop innovative strategies to control cancer processes.

3

Cell Biology

A host of diseases are spurred by disruptions in the processes by which cells propagate, die, or perform their basic functions. Scientists working in this area dissect the genes and molecular pathways that control the cell cycle, apoptosis, protein trafficking, and many other cellular events.

4

Genetics and Genomics

Fundamental to all bioscience is the study of how genes and gene-regulatory processes contribute to development, behavior, and disease. Researchers working in this area employ genetic sequencing technology, bioinformatics, and animal models to pursue genome-wide comparisons, population genetics, functional studies, and more.

5

Immunology, Virology,
and Microbiology

Investigations into the workings of the immune system are yielding progress against diseases such as cancer, autoimmune disorders, HIV, hepatitis C, and Zika. Work in this area covers the basic mechanisms of immunity, the biology of disease-causing agents, and new treatment approaches, from vaccines and antibiotics to personalized immunotherapies.

6

Mechanisms of
Human Disease

Many labs conduct research to understand the root causes of both rare and common diseases and develop new therapies based on their insights. Having access to The Rockefeller University Clinical Research Center enables these scientists to translate basic-science discoveries into the clinic faster than might otherwise be possible.

7

Neurosciences
and Behavior

To understand how the nervous system develops and produces behaviors and cognition, neuroscientists study the brain from many perspectives, focusing on neuronal cells and circuits as well as high-level functions. In addition, labs are working on treatments for Alzheimer's, drug addiction, obesity, and other diseases.

8

Organismal Biology,
Ecology, and Evolution

In studying biological processes from the perspective of entire organisms, populations, and ecosystems, scientists seek to reveal how complex traits and behaviors develop and how diseases manifest. Their work covers the biology of vertebrate and invertebrate organisms and plants, the evolution of species, and other topics.

9

Physical, Mathematical,
and Computational
Biology

Research in this area is aimed at understanding the complex properties of biological and other systems and at applying sophisticated analytic techniques to model phenomena from biological networks to weather patterns. Areas of interest to these scientists include systems theory, biological statistics and probability, population dynamics, and sensory processing.

10

Stem Cells, Development,
Regeneration, and Aging

In researching how pluripotent stems cells differentiate, how embryos develop, how tissues replenish themselves, and how organisms age, scientists are laying the groundwork for broad progress toward tomorrow's medicines. Their work holds promise for the development of new disease models as well as innovative therapeutic interventions.