The New Pathway to Drug Discovery
Novartis Institutes for BioMedical Research

Novartis Institutes for BioMedical Research (NIBR) is Novartis’ global pharmaceutical research organization. Informed by clinical insights from our translational medicine team, we use modern science and technology to discover new medicines for patients worldwide.

With talented scientists located in eight Institutes around the world, we are committed to leveraging knowledge we gain from our own innovative research and discoveries made at leading academic institutions and biotechnology companies.

Over the past several years, Novartis has had the greatest number of new molecular entities approved by the FDA for clinical use in the US. With our ongoing focus on diseases with unmet medical needs, NIBR scientists ensure that Novartis maintains its robust pipeline and successful track record in innovative drug discovery.
Our Vision

There is no greater privilege than to work towards bettering human health, and no more exciting arena in which to do so than through discovery of new medicines. Drug discovery is today’s frontier of science. The interface of the chemical, biological, and medical universes is a difficult place to work, worthy of the best minds and most innovative scientists.

The paradigms and tools for drug discovery are still evolving, but recent advances represent unprecedented opportunities. For one, we believe that the genome will be functionalized first and best in the context of the search for new medicines. Atomic-level views of proteins provide a more rational base for chemical design than ever before. Clinical translation is facilitated by novel imaging technologies and more precise molecular assays, so medicines may be more appropriately targeted to individual patient needs.

The scientific environment at the Novartis Institutes for BioMedical Research (NIBR) is open, collegial, collaborative, and entrepreneurial. The breadth of science we encompass is tremendous, embracing the entire spectrum from fundamental to clinical investigation. Academic-, biotech-, and pharmaceutical-trained scientists all can find projects appropriate to their style and aspirations. Some projects are driven by individuals, others by teams; some depend upon advanced screening technologies, and others upon hypothesis-driven research. It is ultimately the talent of the individual that determines the project success, supported by unusual resources of NIBR.

New medicines do not appear overnight. Although Novartis has had more new medicines approved in recent years than other companies, we are not complacent. Our worldwide headquarters in Cambridge, Massachusetts, our hiring and retaining of top scientific talents, and launch of new programs all attest to our commitment to deliver new medicines effectively, reliably, and predictably. Together with academia and biotech companies, we intend to forge the new science of drug discovery and develop the paradigms for this scientific frontier.

Mark C. Fishman, M.D.
— President of the Novartis Institutes for BioMedical Research
Drug discovery requires teamwork and innovative thinking.
Our Approach to Research

At Novartis Institutes for BioMedical Research we strive to improve the drug discovery process by pursuing a comprehensive, multi-disciplinary approach that integrates novel concepts and tools across multiple disease areas.

Our areas of focus include epigenetics and developmental models of disease, pathway biology, imaging-based biomarkers, chemical diversity, and translational medicine.

We integrate new approaches and technologies into scientific discovery by creating a more entrepreneurial, collaborative, and open research environment.

Our Mission:

• Bring medicines rapidly into the clinic: Focus on tractable biological targets with excellent rationale for addressing unmet medical need

• Establish a new grammar for drug discovery: Increase access to genomic and chemical universe
A Global Network of Scientific Excellence

Emeryville, CA, USA

Disease Area
Oncology

Platform Groups
Global Discovery Chemistry
Toll-Like Receptor Chemistry

East Hanover, NJ, USA

Disease Areas
Cardiovascular
Diabetes & Metabolism

Platform Group
Genome & Proteome Sciences

Cambridge, MA, USA

Disease Areas
Cardiovascular
Diabetes & Metabolism
Infectious Diseases
Oncology
Ophthalmology
Musculoskeletal

Platform Groups
Biologics Center
Center for Proteomic Chemistry
Developmental & Molecular Pathways
Discovery Technologies
Epigenetics
Genome & Proteome Sciences
Global Discovery Chemistry

Translational Medicine

Horsham, UK

Disease Areas
Gastrointestinal
Respiratory

Platform Groups
Genome & Proteome Sciences
Global Discovery Chemistry

Translational Medicine
We focus on understanding the molecular disease mechanisms to address unmet medical need.
Meeting the Drug Discovery Challenge

At NIBR, we take a multi-faceted approach to meet this challenge:

At the scientific level: We strive to push the frontiers of science at the intersection of chemistry, biology, and medicine. We combine traditional approaches to pharmaceutical discovery with emerging tools and concepts from the chemical and biological sciences. Pathway biology and genetics are at the heart of our early discovery efforts.

At the clinical/research interface: Our translational medicine team combines mechanistic understanding of disease with clinical insights and facilitates “Proof-of-Concept” in man. Our translational medicine experts guide our discovery research, provide a smooth transition from research to the clinic, and enable potential medicines to be tested more effectively in man.

At the organizational level: We have an open, collaborative, and exciting work environment. We encourage activities across geographical, cultural, and institutional barriers and close collaborations with academia and biotech companies.

At the expertise level: We believe that the success of NIBR critically depends on the contributions of our associates. Hiring and developing top talent is therefore a key priority for us.
We are...

Dedicated to integrating clinical, biological, and molecular-level views of disease to make new and better medicines to treat diseases with unmet medical needs.

Committed to redefining and improving the drug discovery process by driving innovation at the interfaces of biology and chemistry, and biomedical and clinical research.

Dedicated to fostering a culture of openness, scientific excitement, and collaboration; our external partners are scientists from academia and biotech companies.
Committed to embracing and leveraging diverse backgrounds, cultures, and talents, and to combining traditional and novel approaches to drug discovery.

Devoted to enhancing the communities in which our sites are located by establishing strong ties through educational programs, partnerships, and philanthropy.