Mission & Vision

Research Institute Leading Global BT Innovation

Creation of Top Brands	Fostering the Global Elite	Contribution to the Bio Economy
Five source technologies with the potential for commercialization	Five of the world's leading research groups Five world-renowned scientists	Five trillion won worth economy effect Fifty million won from royalties

Bioconvergence Technology	Biopharmaceuticals	Biomaterials	Bioinformatics	National R&D Infrastructure

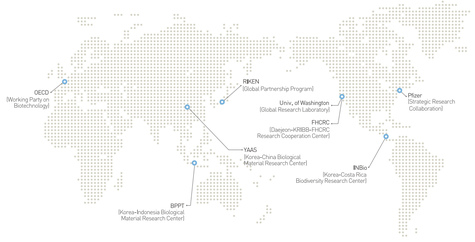
Bioconvergence Technology	Develop cutting-edge bioconvergence technology
Biopharmaceuticals	Develop next-generation biopharmaceuticals using genomics/proteomics Develop stemcell and bio-organs using regenerative cell technology
Biomaterials	Develop biomaterials with new functions using genomics Develop biomaterials with new functions for cleaner and environmentally-friendly technology
Bioinformatics	Interpret the information on the structure and functions of biomaterials




Global KRIBB

Strengthening of the global network to make the leap to becoming a globally recognized research institute

To raise its status to that of a globally distinguished research institute, KRIBB has strengthened its global cooperation with technologically advanced countries such as the U.S.A., Japan, and the U.K. by signing MOUs with 103 institutes from 28 countries. We are also busy establishing a global network for the cooperative utilization of bio-resources with four global regional bases (China, Costa Rica, Indonesia, and the Republic of South Africa).



Korea Research Institute of Bioscience and Biotechnology

111 Gwahangno, Yuseong-gu, Daejeon 305-806, Korea
Tel +82-42-860-4114 Fax +82-42-861-1759
http://www.kribb.re.kr

Korea Research Institute of Bioscience and Biotechnology

President's Message

Science of Humans and Science for Humans

As a science which embodies our hopes for a life free from disease, poverty, and natural disasters, biotechnology is raising the prospects for the future health and happiness of mankind. After experiencing striking growth, the fields of bioscience and biotechnology are now recognized for their achievements here in Korea and globally as well.

The Korean Research Institute of Bioscience and Biotechnology (KRIBB), having positioned itself at the center of the nation's biotechnological development, is striving to contribute to the improvement of public health and the development of the bio-industry by undertaking essential research to further our understanding of living phenomena. To that end, it conducts high-end biotechnological research in various fields ranging from health care and food to new biomaterials, the environment, novel energy sources, and so on.

Basing our efforts on a spirit of progressiveness, challenge and innovation, we would like to become a major progenitor of biotechnological development and national prosperity. We ask for your continuing support for all our endeavors.

Young Hoon Park, Ph.D.
President

We are boosting the power of bio-technology to assist the nation's progress and promote people's welfare.

Division of Research

www.kribb.re.kr

Division of Bioconvergence Technology

- Develop bioconverging technologies for biochip/sensor and nanomedicine applications
- Develop platform technologies in the fields of aging, brain and integrative omics researches

▸BioNanotechnology Research Center
▸Aging Research Center
▸Brain Research Center
▸Integrative Omics Research Center
▸BioMonitoring Research center

Division of Translational Research

- Develop diagnostic and therapeutic technology based on genomics and proteomics
- Focus on translational and biomedical research
- Develop platform technologies for regenerative biology through research on development and differentiation in humans and mammals

▸Medical Genomics Research Center
▸Development and Differentiation Research Center
▸Medical Proteomics Research Center

Division of Biosystems Research

- Develop platform technologies for bioenergy and investigate and commercialize plant structures and functional genomics
- Focus on industrial materials and environmental biotechnology research

▸Industrial Biotechnology & Bioenergy Research Center
▸Plant Systems Engineering Research Center
▸Bioinformatics Research Center
▸Industrial Bio-materials Research Center
▸Environmental Biotechnology Research Center

Division of Bio R&D Infra

- Establish a cooperative network for bioinformation and manage biological resources
- Develop industrial platform technology for biological processes and support business activities for the commercialization and fostering of human resources

▸Korean Bioinformation Center
▸Biological Resource Center
▸Biotechnology Process Engineering Center

Ochang Branch Institute

- Develop anti-cancer drug candidates using therapeutic antibodies and immune cell therapies
- Conduct research for natural drugs/drug candidates derived from natural resources against chronic inflammation, metabolic diseases and viral infections
- Establish a foundation specializing in technologies for genetic analysis and human/environmental risk assessment, and in specialized techniques for primate research

Bio-Therpeutics Research Institute
▸Therapeutic Antibody Research Center
▸Stem Cell Research Center
▸Immune Modulator Research Center
▸Molecular Cancer Research Center
▸Chemical Biology Research Center

Division of Bio R&D Infrastructure
▸Bio-Evaluation Center
▸Korea National Primate Research Center

Jeonbuk Branch Institute

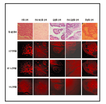
- Establish bioprocesses for the production of microbial metabolites and industrial enzymes
- Develop and support the commercialization of technology for the mass production of useful biological compounds and practical technology through field application

▸Molecular Bioprocess Research Center
▸Bioindustry Research Center

Excellent Research Cases

1. Drosophila short neuropeptide F signalling regulates growth by ERK-mediated insulin signalling
Nature Cell Biology, 10(4):468-75, 2008

3. Highly-Sensitive Tumor Marker Discovery Based on Change in Glycosylation
Molecular & Cellular Proteomics, 7(1):1-14, 2008



4. Novel bacteria isolated from Dokdo Island
Int. J. Syst. Evol. Microbiol, 58(3): 597-600, 2008

5. Roles of peroxiredoxin II in the regulation of proinflammatory responses to LPS and protection against endotoxin-induced lethal shock
Journal of Experimental Medicine, 204(3):583-94, 2007

6. Direct immobilization of protein g variants with various numbers of cysteine residues on a gold surface
Analytical Chemistry, 79(7):2680-7, 2007

7. E2-EPF UCP targets pVHL for degradation and associates with tumor growth and metastasis
Nature Medicine, 12(7):809 - 816, 2006

8. Comparative analysis of chimpanzee and human Y chromosomes
Nature Genetics, 38(2), 158-167, 2006

9. Construction, affinity maturation, and biological characterization of an anti-tumor-associated glycoprotein-72 humanized antibody
Journal of Biological Chemistry, 281, 6985-6992, 2006

Technology Transfer & Business Development

New value creation by bridging the gap between bioscience innovation and global business development

- Searching for excellent technologies & promoting technology transfer
- Technology transfer through partnerships among industry, academia, and research institutes
- Nurturing & incubating start-ups invested by the institute

Main Functions

Patent management
- Consulting patent filing strategy / managing intellectual property / searching excellent technology for transfer

Technology transfer
- Managing technology evaluation / technology commercialization / technology marketing

Business development
- Foundation of start-ups / funding investment / nurturing of tenants

Top 3 technology transfer of KRIBB

A technique to develop anti-inflammatory therapeutics from natural resources
- License fee : USD 2.6 million
- Date of Agreement : April 28, 2008
- Licensee : Shinil Pharm Ltd

A technique related to fully humanized antibody inhibiting angiogenesis
- License fee : USD 2 million
- Date of Agreement : October 30, 2008
- Licensee : PharmAbcine Inc.

Therapeutic antibody to TAG-72
- License fee : USD 1 million
- Date of Agreement : November 15, 2007
- Licensee : Viromed Co. Ltd.

Establishment of 1st Institute enterprise

- Foundation of Medicell Incorporation
- Date of establishment : January 25, 2008
- KRIBB invested its technology, and private company(Innocell Inc.) invested its cash

We are boosting the power of bio-technology to assist
the nation's progress and promote people's welfare.

KRIBB
Korea Research Institute of Bioscience and Biotechnology