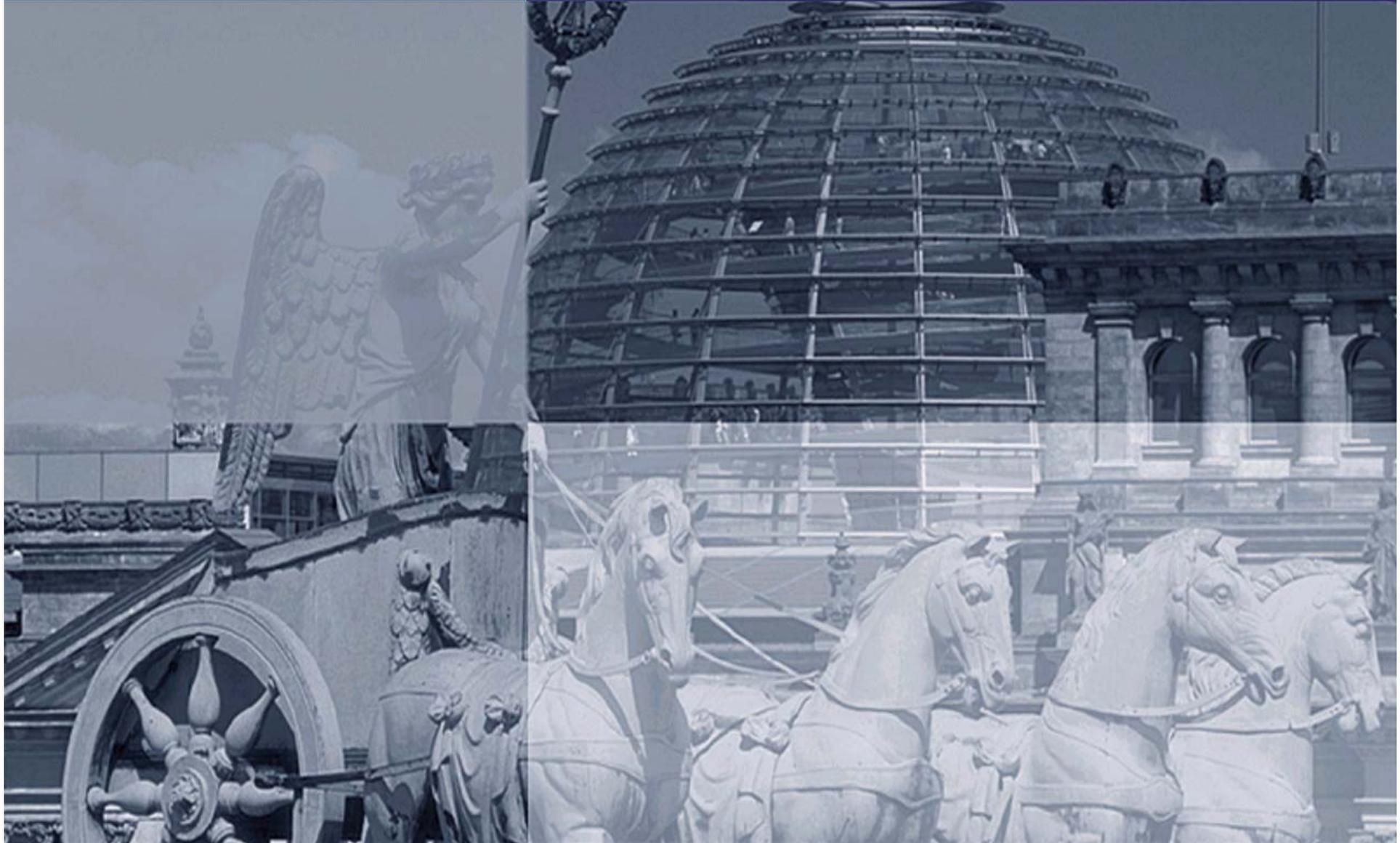


BioCapital Berlin:



BioCapital Berlin-Brandenburg



Berlin-Brandenburg – Top Location for Biotech

Long tradition in science and
medicine

Located in the center of the
new European Union

Capital Region of Germany

Interface between East and
West



Berlin - Brandenburg



The German Biocapital

- Capital of Germany
- 6 Million Inhabitants
- > 170.000 Students
- 5 Universities
- > 20 Colleges for higher Education
- > 20 Independent Research Institutes (Max-Planck-Leibniz-, Helmholtz- and Fraunhofer Societies)
- Pharma (Schering, Sanofi-Synthelabo, Altana)
- > 150 Biotech Companies
- > 150 Medtech Companies
- Nr. 1 German Biotech Cluster
- Europe´s strongest university clinic: Charité

Origin of Success (I)



1990: Germany's Re-Unification

- Berlin-Brandenburg as the „Werkstatt der deutschen Einheit“
- Scientific potentials of East and West resulted in Germany's landscape with the highest density of clinics and research
- All technologies needed for modern life sciences were available - All In One-Location

Origin of Success (II)



1996: BioRegio-Contest of the BMBF

- Defined 3 model regions for the commercialisation of biotech
- Gave a strong pulse for the biotech development in Germany
- Berlin-Brandenburg was not among the winners - all potentials, but lack of an efficient networking
- But: Berlin-Brandenburg was highly motivated to develop the biotech location

Origin of Success (III)



1996-2007: Political support

- The governments of Berlin and Brandenburg focus on a common strategy of the regional development
- Biotech is a major field of technological policy

1996-2007: Engagement of key persons

- Top level scientists organized international outstanding network
- Innovative entrepreneurs established an amazing and powerful start-up atmosphere

BioCapital Berlin-Brandenburg



BioTOP Berlin-Brandenburg



Has been founded during the German BioRegio competition and is the regional one stop agency for all biotech related topics

Is financed by:

Contributions by the federal states of Berlin und Brandenburg (**contract since 1998**), by the regional industry, the TSB as well as the federal government

Mayor topics are:

The development of Berlin-Brandenburg towards an international leading life science center:

- Networking between science and SME´s
- Identification and implementation of projects
- Development of strategic concepts
- Support of SME´s (education, finance und business development)

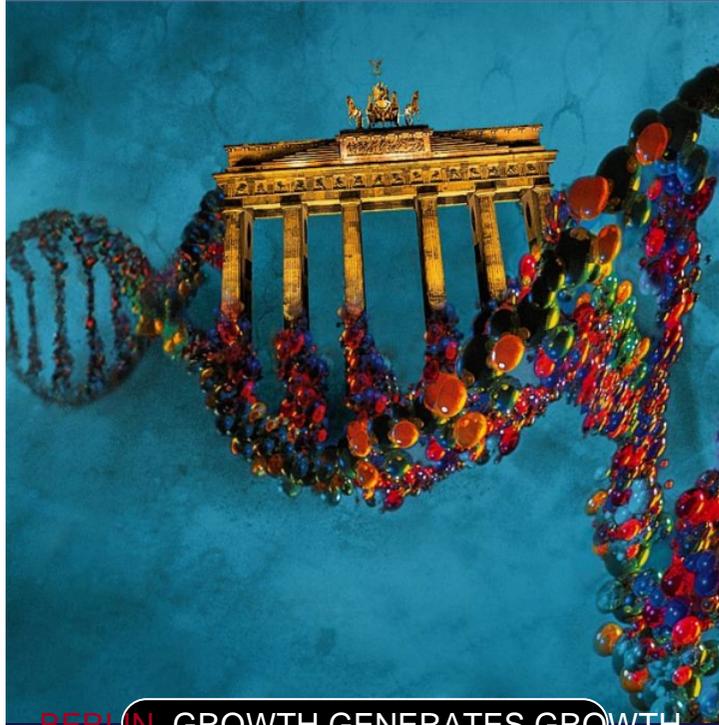
Berlin - Brandenburg



The Structure

- **Quadriga Team**
Senate for Economics, Senate for Science,
IBB (Structure Bank), Berlin Partner (EDC), IHK
- **BioTOP Advisory Board**
12 Experts from Science and Economy
- **BioScience Network**
Network of 12 focused networks
- **BioCampus Network**
Network of 6 Biotechparks and economic
development corporations

BioCapital Berlin-Brandenburg



BERLIN. GROWTH GENERATES GROWTH.

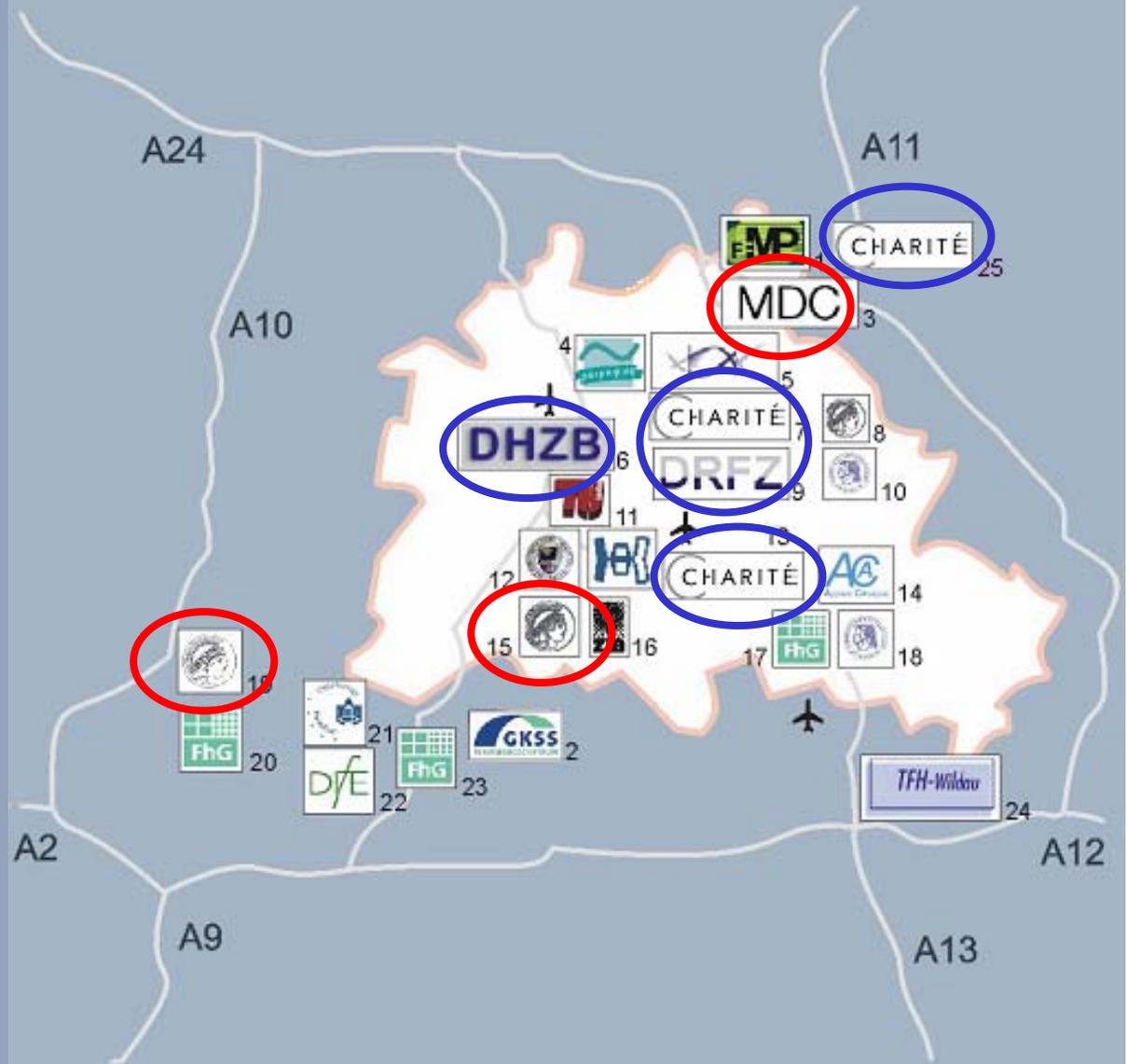
Excellent Science

BioCapital Berlin-Brandenburg



A unique hotspot in Life Sciences

- 1 Forschungszentrum für Molekulare Pharmakologie
- 2 GKSS Forschungszentrum
- 3 MDC für Molekulare Medizin
- 4 TFH Berlin
- 5 Robert Koch Institut
- 6 Deutsches Herzzentrum Berlin
- 7 Charité Campus Mitte
Charité Campus Virchow-Klinikum
- 8 MPI für Infektionsbiologie
- 9 Deutsches Rheuma Forschungszentrum
- 10 Humboldt Universität Berlin
- 11 Technische Universität Berlin
- 12 Freie Universität Berlin
- 13 Charité Campus Benjamin Franklin
- 14 Institut für angewandte Chemie e.V.
- 15 MPI für Molekulare Genetik
- 16 Konrad-Zuse-Zentrum für Informationstechnik
- 17 FHG für angewandte Polymerforschung
-AG chromogene Polymere
- 18 Humboldt Universität Institut für Chemie
- 19 MPI für molekulare Pflanzenphysiologie
MPI für Kolloid- und Grenzflächenforschung
- 20 FHG für Angewandte Polymerforschung
- 21 Universität Potsdam
- 22 Deutsches Institut für Ernährungsforschung DIFE
- 23 FHG für Biomedizinische Technik
-AG Molekulare Bioanalytik
- 24 TFH Wildau
- 25 Charité Campus Berlin Buch



Charité - University Medicine Berlin

- largest university clinic in Europe
- 75 clinics, 3,000 beds, 4 campuses
- 500 clinical studies initiated annually



Main Research areas:

- Oncology
- Tumor medicine
- Neurosciences
- Immunology/ Transplantation/ Infectious diseases
- Pneumology
- Cardiovascular diseases/ kidney
- Genetics and Genomics
- Infectious diseases
- Experimental und clinical Endocrinology
- Musculo-skeletal diseases

www.charite.de



**Max Delbrueck Center
for molecularMedicine
(MDC)**



The MDC combines basic research in molecular biology and genetics with clinical research.

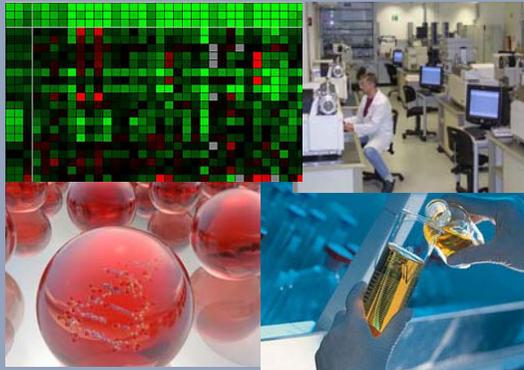
Main Research Areas:

- **Cardiovascular research**
- **Cancer research**
- **Genetics, bioinformatics and structural biology**
- **Cell growth and differentiation**
- **Molecular Therapy**
- **Molecular Neurosciences**

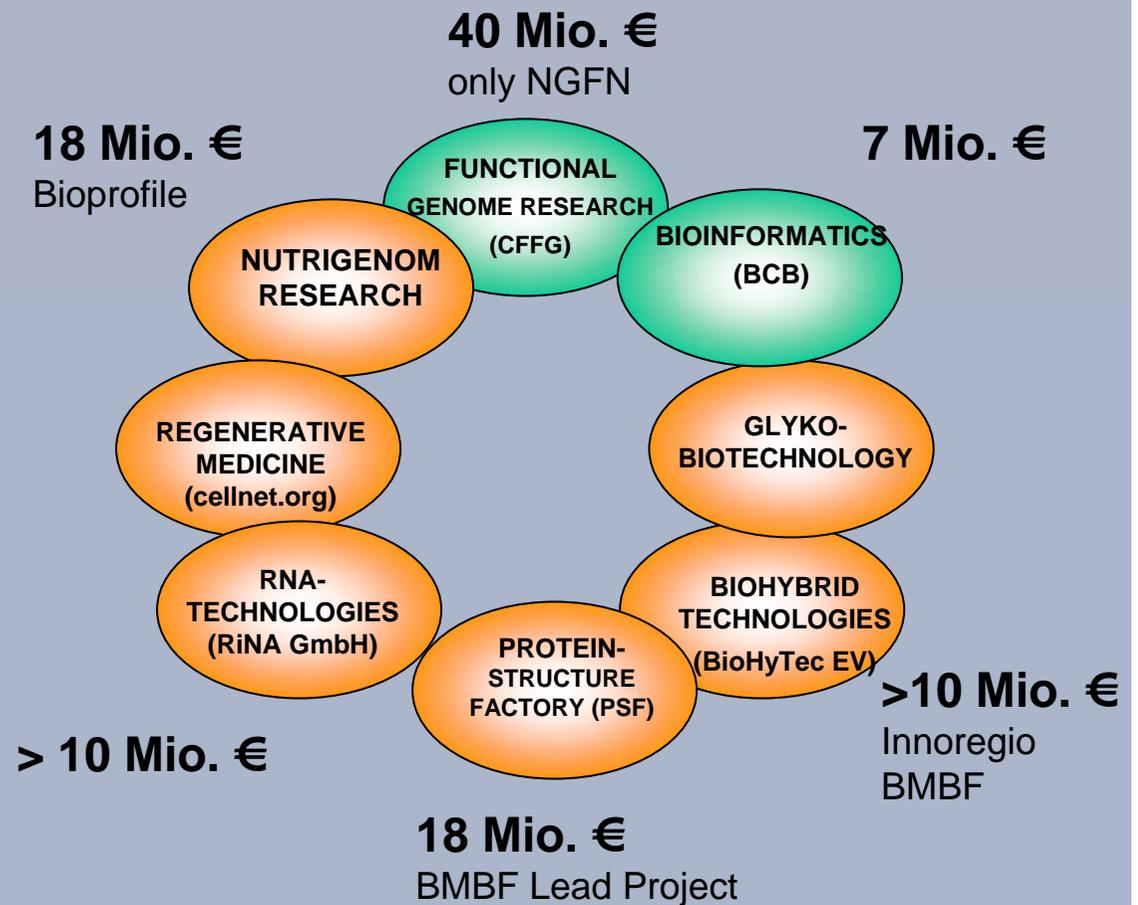
Researchers from the MDC collaborate closely with the clinicians at the Helios Kliniken AG to develop new methods for the diagnosis and treatment of important diseases.

New initiative in translational medicine with Charité (ECRC)

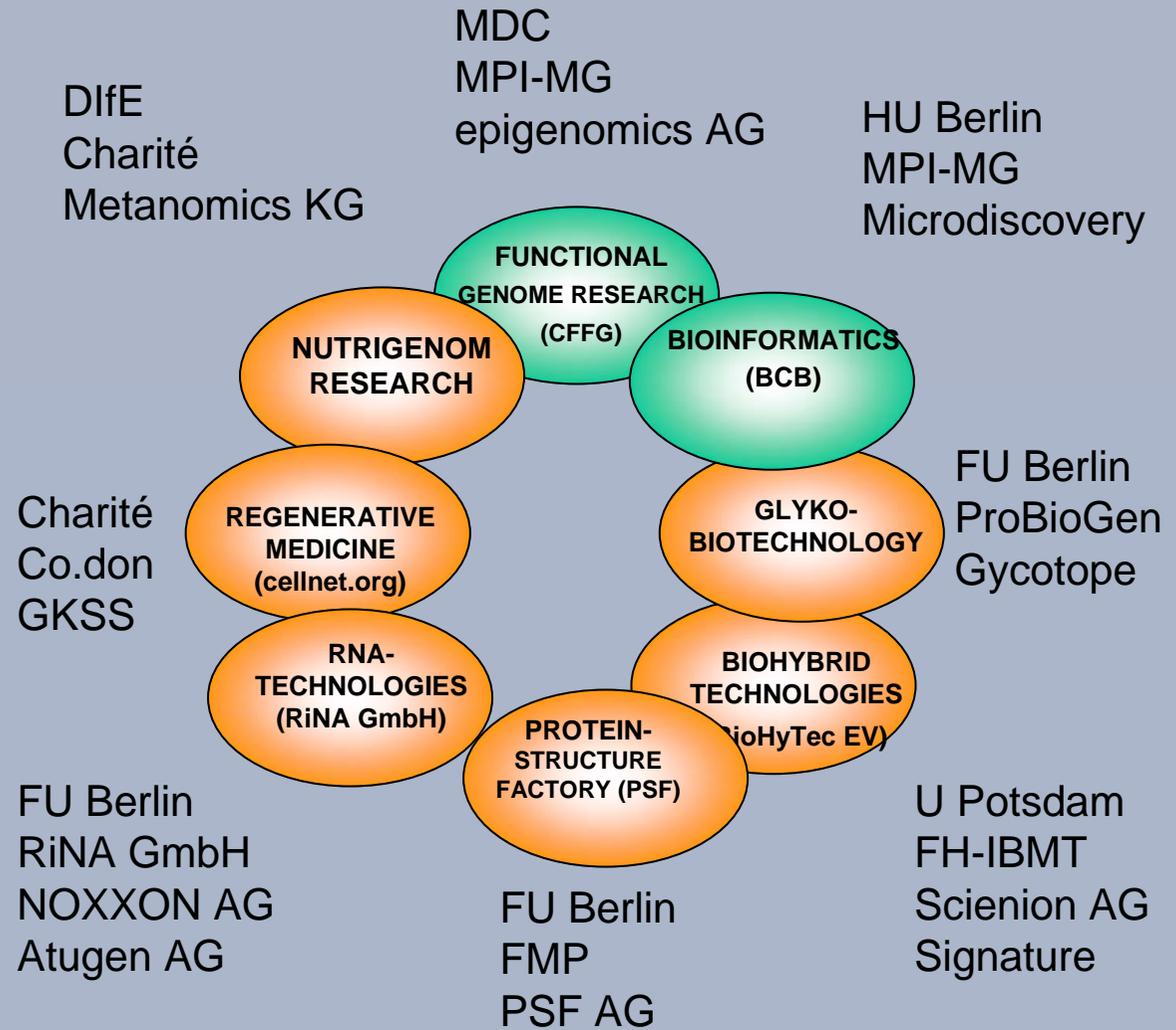
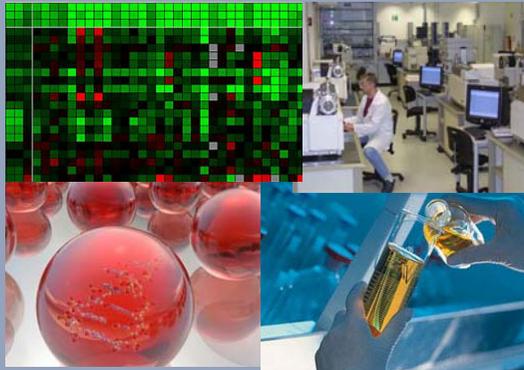
Successful Networking



More than 100 Mio €
for project funding have
been acquired



Key Network Driver



Nutrigenomics in Berlin-Brandenburg

Diseases

- Obesity, Heart/Circulation, Diabetes
- Cancer
- Allergies

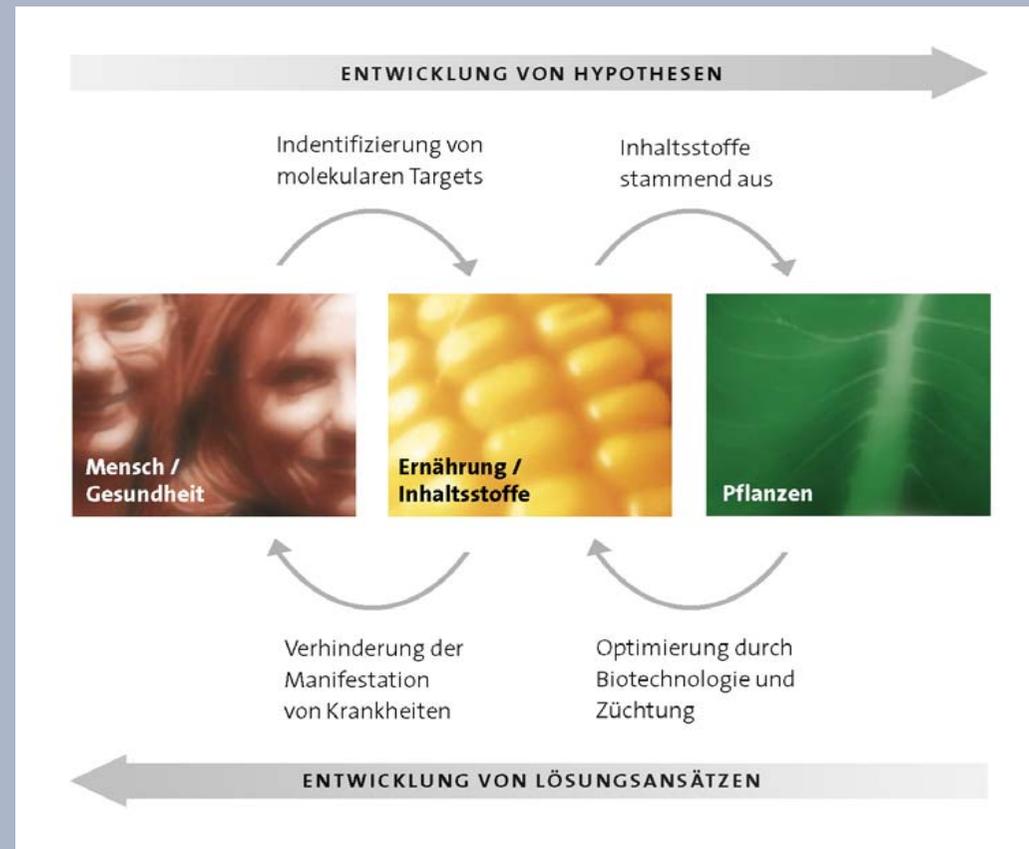
Genome Research

- Chip Technology
- Expression Profiling
- Metabolic Profiling
- High-Throughput-Methoden
- Bioinformatics

Plant Biotechnology

- Bioreactor
- Nutritional Ingredients
- Safety Monitoring

Genome Research and Plant Biotechnology for Diagnosis, Prevention and Therapy of Nutrition related Diseases



Universities

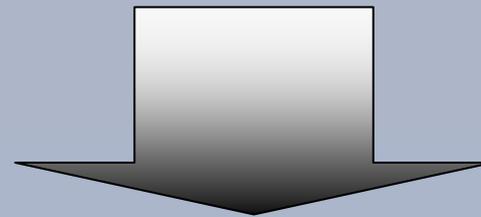
+

Research
Institutes

+

Industry
Partners

Collaborations in Research & Development Projects



Selection, Administration
and Coordination
of Projects



Applied Research
Know-How Transfer
Production (small-scale)
Services

Technology - Transfer

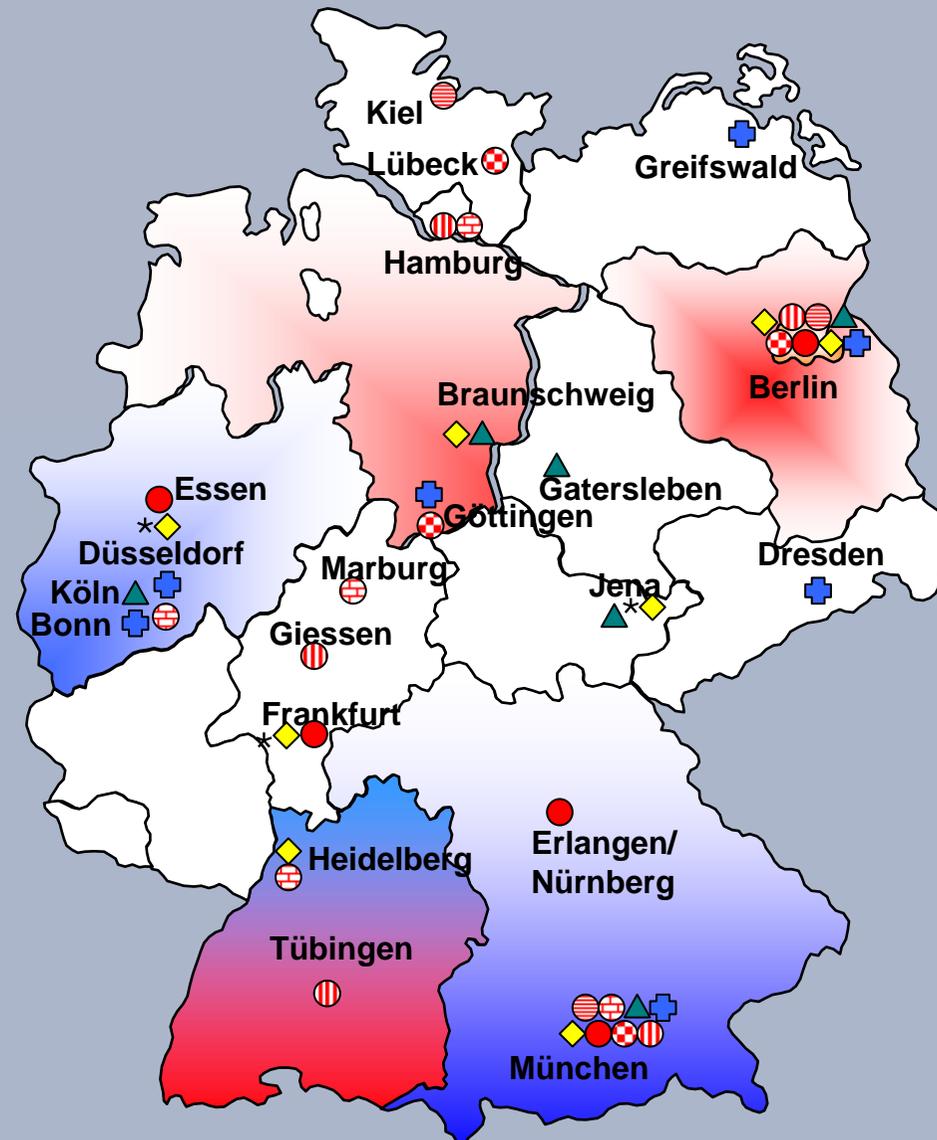
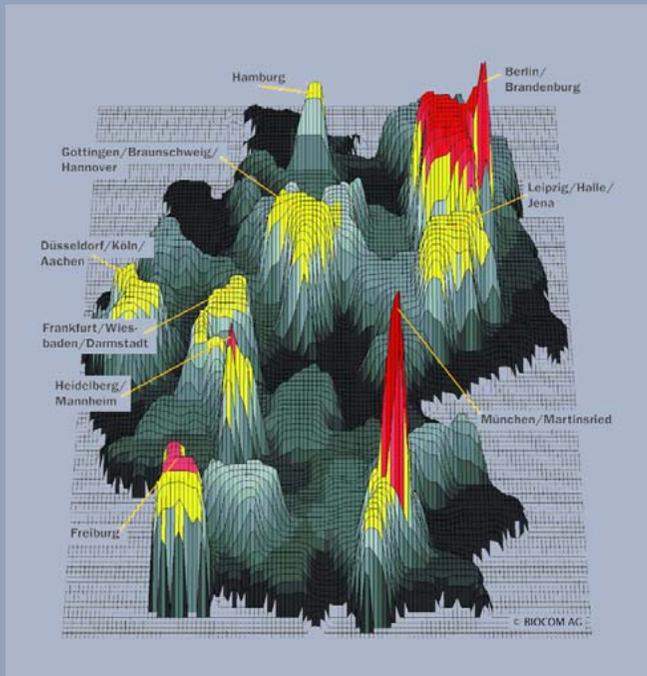


Markt

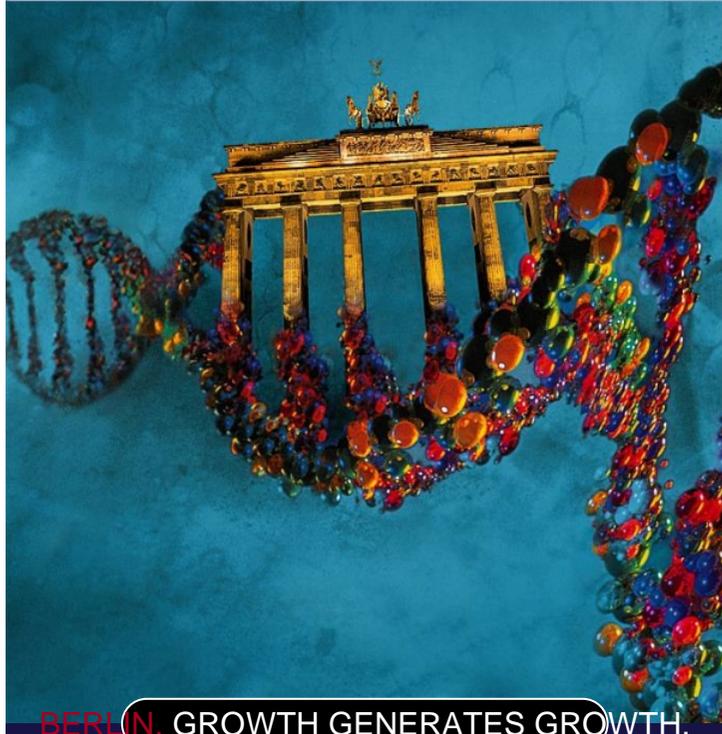
BioCapital Berlin-Brandenburg



A Life Science Cluster
with Critical Mass



BioCapital
Berlin-Brandenburg



BERLIN. GROWTH GENERATES GROWTH.

**Excellent
Infrastructure**

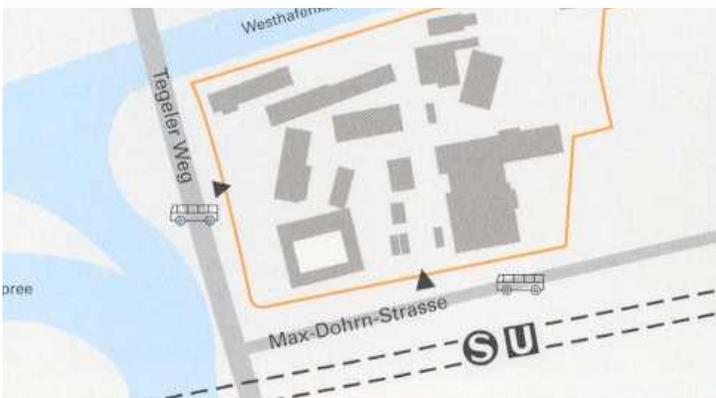
BioCapital Berlin-Brandenburg



A unique Infrastructure

- 1 > 100.000 qm lab space at 7 Biotechparks
- 2 GMP Production Facilities
- 3 S3 Laboratories
- 4 900 MHz NMR (FMP/Buch)
- 5 Bessy Synchrotron
- 6 Kryo-Microscope (MPI Dahlem)
- 7 Animal Facilities





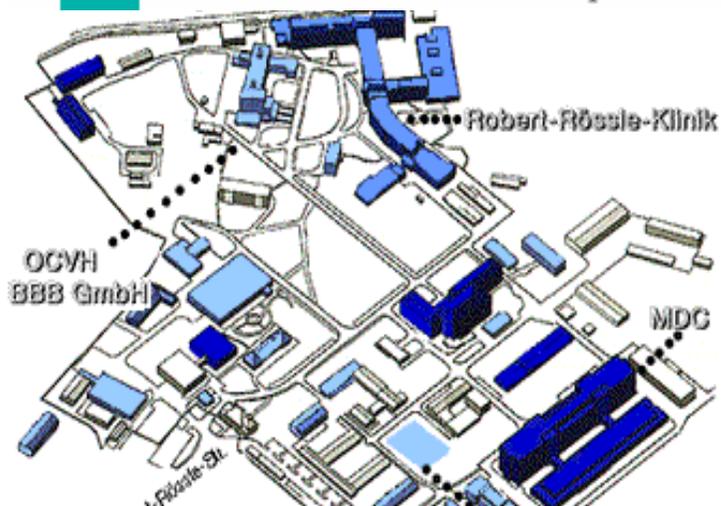
berlinbiotechpark Charlottenburg

- Former production site of Schering AG
- Focus:
 - biotechnology companies (i.e. Metanomics, Noxxon)
 - pharmaceutical development and production (Schering)
- Major advantages:
 - Production media available
 - Clean room space available
 - Very centrally located
- Access to the airport: 2.5 km to the international airport Tegel (TXL)
- www.berlinbiotechpark.de



Campus Berlin-Buch

Der Gesundheit verpflichtet



Campus Berlin-Buch

- Biotech park and innovation center with more than 40 biotechnology companies
- Research institutes on site:
 - Max Delbrück Center for Molecular Medicine
 - Research Institute for Molecular Pharmacology
- Main Focus:
 - Biomedical and clinical research
 - Biomedicine (gene therapy, diagnostics)
- Adequate lab and office space available, labs equipped with extractor hoods
- www.bbb-berlin.de

**In total more than 1.2
Bill. € have been
invested in
Biotechnology**

Region Berlin-Brandenburg
1996 -2005

Region:



Fed.Gov.:



VC:



Stock Market:



Industry:



Total:



Government Funding:

A mixture of regional,
German and European
Instruments is available

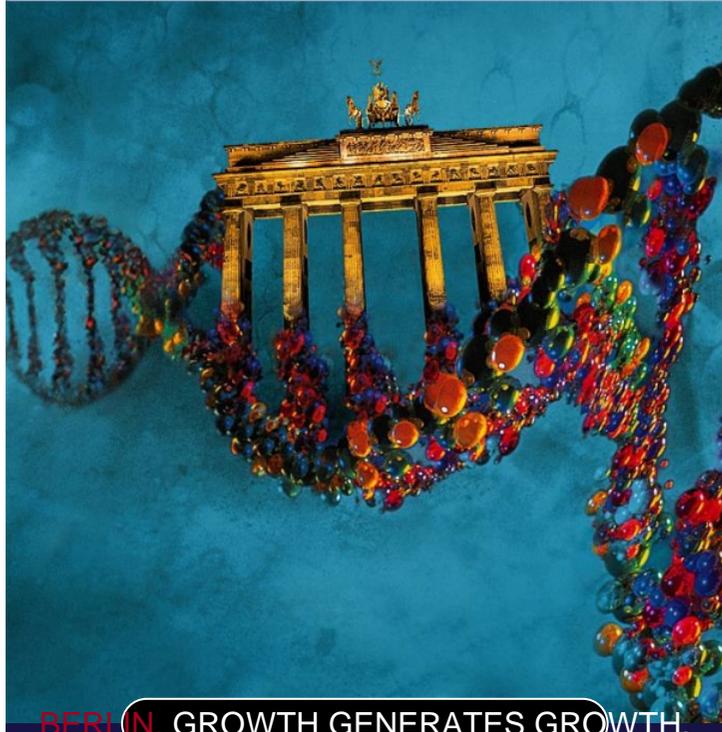
Infrastructure & Investment (Regional and EC;
Incubators & Instrumentation)

Pre-Seed GO-BIO (BMBF)

Venture Capital (Regional Funds and Matching
Funds by Germany and EC;
Roof Fund of EIF)

Project Funding (BMBF – Excellence;
BMBF – Creation of Networks
Regional – Job Creation)

BioCapital
Berlin-Brandenburg



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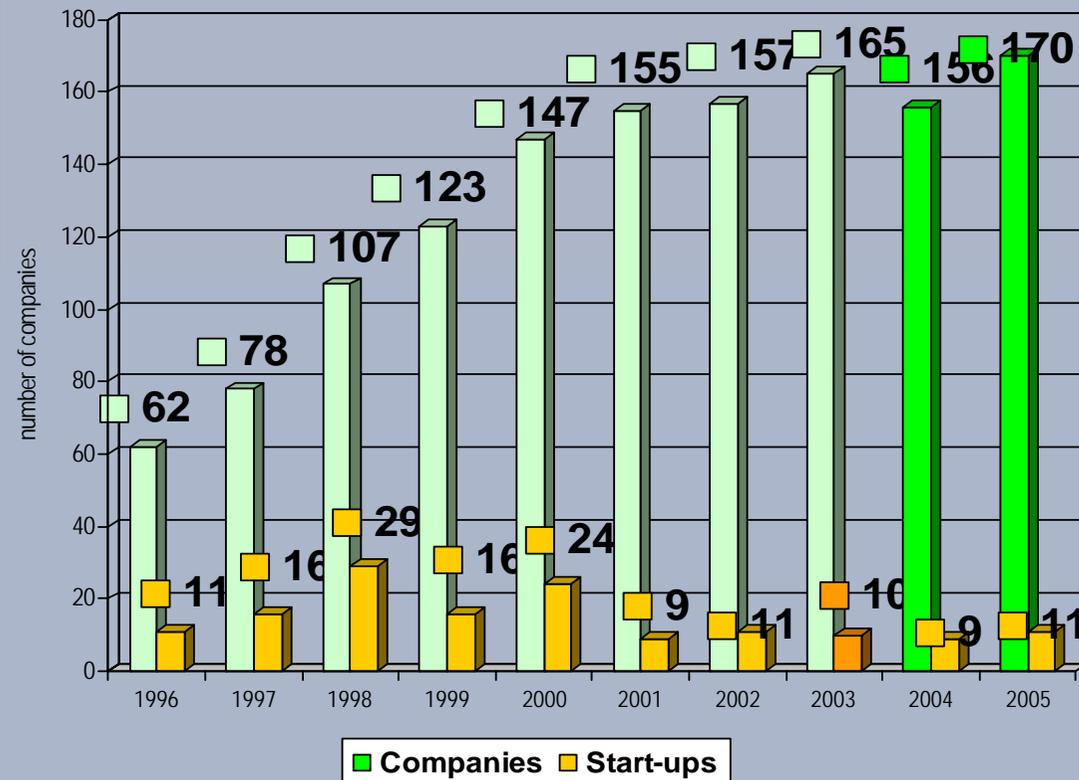
Top Companies

BioCapital Berlin-Brandenburg



More Than 170 Biotech
Companies In Berlin/Brbg.

Seedmoney is Limited



BioCapital Berlin-Brandenburg



Strong Technology
Platforms



Spiegelmer-Technologies

Gene Therapy

DNA-Methylation

HT – Metabolomics

Gene silencing

Microarray – Technologies

Combinat. Biosynthesis

Peptides to Drugs

Natural Products to Drugs

NOXXON

Mologen

Epigenomics

metanomics

Atugen

Scienion

CombiNATURE

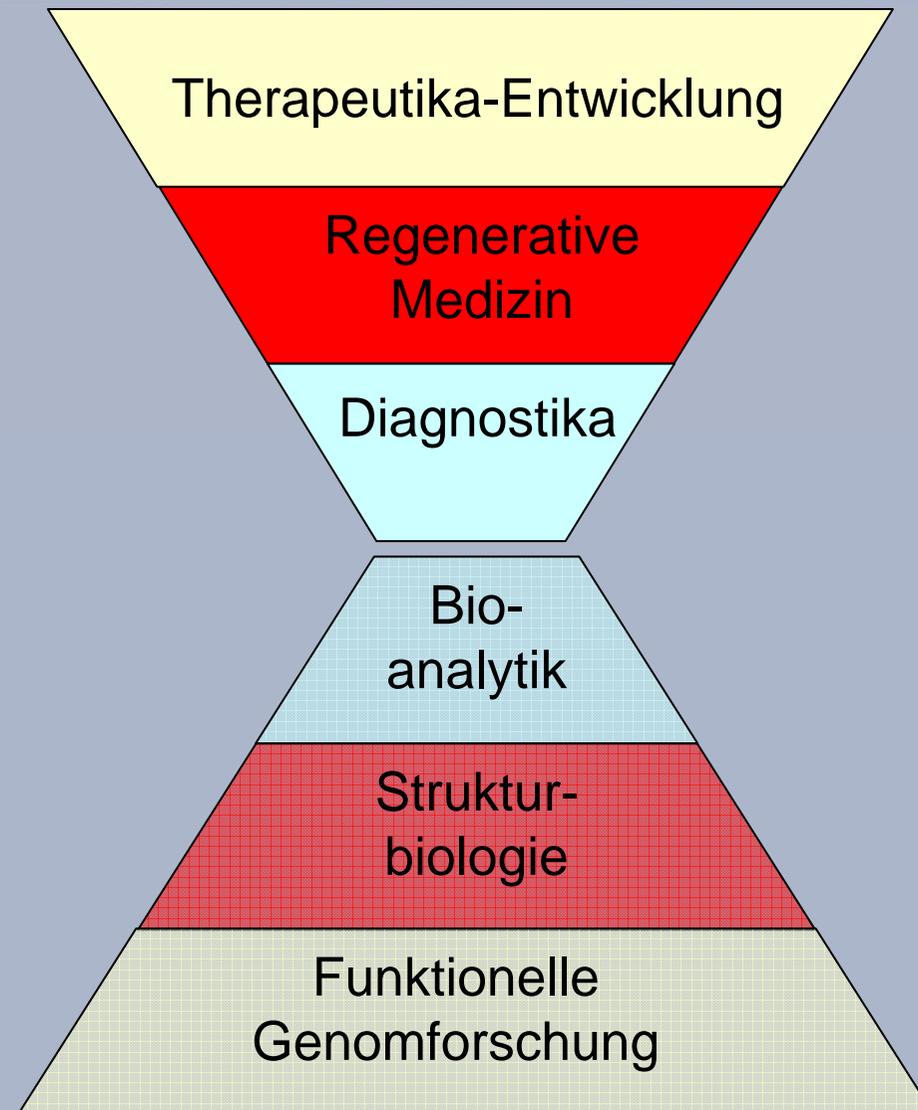
Jerini

AnalytiCon

BioCapital Berlin-Brandenburg



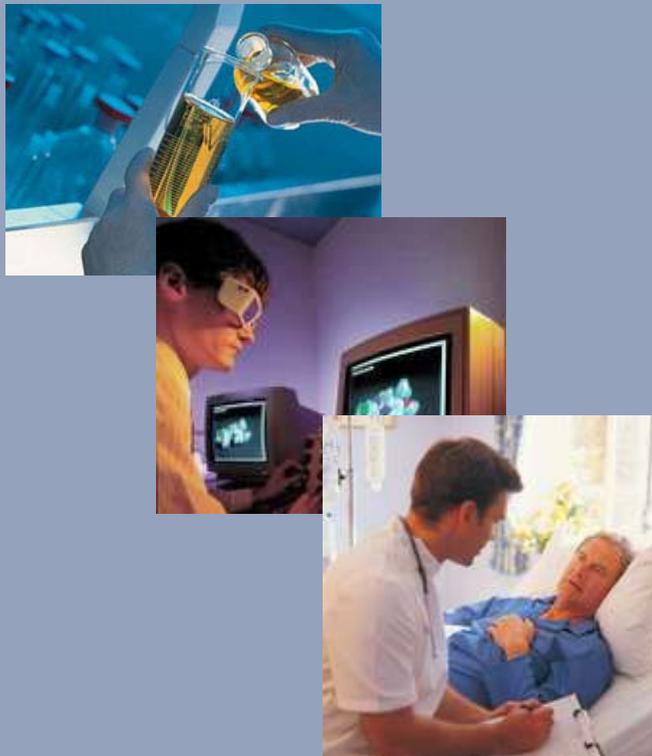
Biotechnologie:
Konzentration auf drei
Handlungsfelder



BioCapital Berlin-Brandenburg



The Entire Value Chain





CEO: Alex OLEK

Origin: MPI f. Molecular Genetics

Founded: 1998



Employees: Ca. 120

Location: Berlin-Mitte

Fields: Identification of genes corresponding to the manifestation of complex diseases (e.g. breast cancer)

Status:

- > 50 Mio € VC-Kapital
- Several Deals (Roche 100 Mio. €)
- IPO 2004 (> 50 Mio. €)

metanomics
The Functional Plant
Genomics Company

Founded as joint venture in 1998

Max-Planck-Institute
for Molecular Plant Physiology

BASF Plant Science

Focus

Discovery of new plant gene functions
and biomarkers by means of high-
through-put analysis

Status

- > 90 Employees
- > 50 Mio. € Investment in
Technology



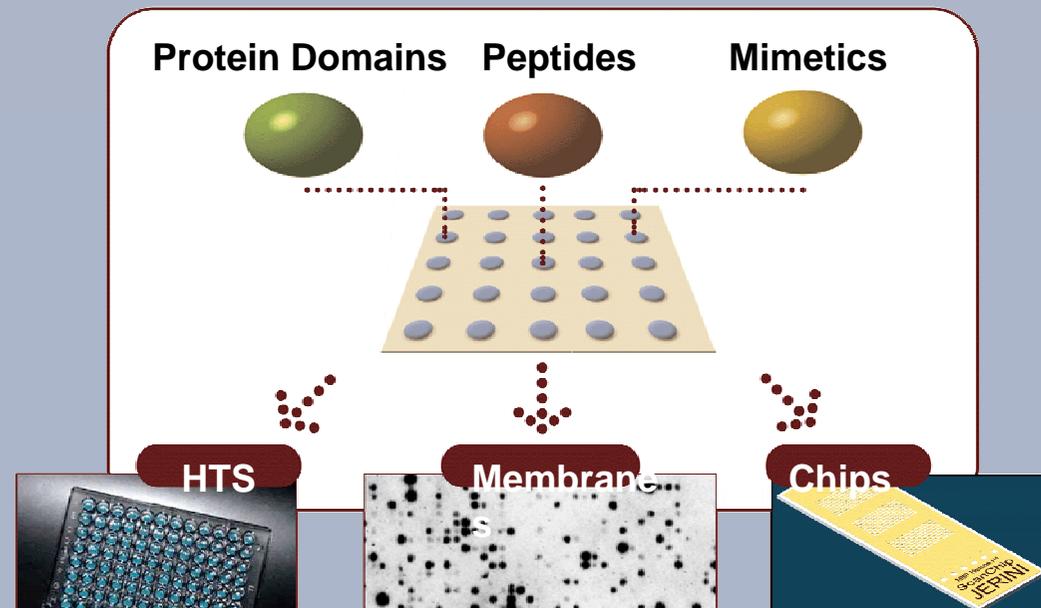
JPT Peptide Technologies
Berlin-Adlershof

Origin: Charité



- Founded in 2004
- 25 Employees
- The Technology:

Fully automated, high-throughput parallel synthesis and screening of peptides, mimetics or small molecules (2,000 – 20,000) on flat surfaces.



AnalytiCon Discovery
(Potsdam)

Founded in 2000

60 Employees

Leading in natural product
based drug discovery

