The Helmholtz Association: a strong partner for international relationships

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Helmholtz Research Mission & Strategy

- Systems solutions for grand challenges based on:
  - Scientific excellence
  - Interdisciplinarity and critical mass
  - Long term research programs
- Helmholtz provides a highly attractive environment for talents and brilliant brains
- Profound expertise in large scale research infrastructure
- Helmholtz as a prime strategic partner at the local, national and international level
- Transfer of knowledge into economy and society
Facts and Figures
Personnel and Students & Budget 2017

* As of 2016, the German federal government alone is financing the pact increase so that the federal government's share is over 90%.
** Including project sponsorships
The six Research Fields of the Helmholtz Association

- ENERGY
- EARTH AND ENVIRONMENT
- HEALTH
- AERONAUTICS, SPACE AND TRANSPORT
- MATTER
- KEY TECHNOLOGIES (FUTURE: INFORMATION)
**General Aim:** To develop new evidence based approaches for prevention, (early) diagnosis, and highly effective individualized therapies to combat common diseases.

**HEALTH**

- **Cancer Research**: 39%
- **Cardiovascular & Metabolic Diseases**: 8%
- **Infection Research**: 12%
- **Diseases of the Nervous System**: 17%
- **Genes and Environment in Common Diseases**: 22%
- **National Cohort**: 2%

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**Large-scale infrastructure (LK II)**

**HelmholtzZentrum münchen**  
German Research Center for Environmental Health

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**Research Field Health**
Research Field Health

- Focus on major diseases
- Basic research on disease mechanisms
- Unravel complex systems
- **Translational research** (bench to bedside to bench)
- Close interactions with University Medicine
- Staff: 6900 talented brains
Translation Centers – Helmholtz & University Medicine

- Close interaction between Helmholtz Centers and clinical partners under one roof
- Preclinical research and development
- Early clinical evaluation of innovative tools for diagnosis, therapy and prevention
- Hub for clinician scientists
- Platform for PPP alliances
The National Center for Tumor Diseases
Helmholtz Internationalization Strategy: Facts and Figures

Helmholtz Association: Foreign scientists and visiting researchers

As of: 2016

10,164
Objective 1: Expanding international strategic partnerships

- Wide range of bilateral and multilateral cooperation projects
- Research infrastructures in Germany and abroad as magnets (e.g. XFEL, FAIR, ITER, Neumayer Station)
- Strategic alliances with selected countries
- Helmholtz International Laboratories
- Four International Offices
- Funding programs in the Initiative and Networking Fund, e.g. ‘International Labs’
Helmholtz Internationalization Strategy

Objective 2: Cooperative research at the European level

- Strengthening and shaping the European Research Area
- Leading position in acquiring European funds
- Coordination of Flagship and Collaborative Projects
- Excellence networks with a thematic focus
- Office in Brussels
- Funding program 'European Partnering': ACCC is the pilot project
Helmholtz Internationalization Strategy

Objective 3: Attracting talent from all over the world

- Strengthening the Helmholtz brand worldwide
- Attractive working environment for talent from all over the world
- Diversification as an objective (gender, internationality)
- International (guest) researchers in the ‘Helmholtz Alumni Program’
- Wide range of funding programs, e.g. International Research Schools
- New funding tool for top female talent
Helmholtz Internationalization Strategy
Objective 4: Science Diplomacy – building bridges through research

- Promote scientific ambassadorship
- Facilitate exchange and R&D interactions
- Communicate with diplomatic entities
- Research projects with a diplomatic focus, e.g. SESAME Project
- Policy advice and consultancy
- Funding program 'Helmholtz International Partnering' with emerging and developing countries
- Initiatives for the integration of refugees
Helmholtz Internationalization Strategy

ACCC as a model institution

- Research area of major strategic importance
- Complementarity between partners in Athens and in Heidelberg
- Golden opportunity for talents
- Covers 50% of Greek cancer patients
- Major benefit for cancer research, cancer medicine and for the society
- Pioneering institution for Greece
- ACCC an attractive partner for DKFZ/NCT
Thank you for your attention!

Questions or comments?
Research Field Health

Major challenges
- Personalized Medicine based on patient stratification
  Additional NCT sites; Center for Diabetes Prevention; CIIM Hannover
- From Big Data to Smart Data: data-based medicine & biomedical research
- Investment in large scale research infrastructures (omics, imaging)
- Bridge the gap in preclinical - clinical translation (PoC programs)
- Clinical Trial Platform Unit (joint activity)
- Training & education of translation experts and physician scientists

Novel priority area
- Psychiatric Disease

Future research topics
- Immunology & Inflammation
- Human cell atlas