## HELMHOLTZ

The Helmholtz Association: a strong partner for international relationships

Prof. Otmar D. Wiestler

President of the Helmholtz Association

# **Helmholtz Research Mission & Strategy**

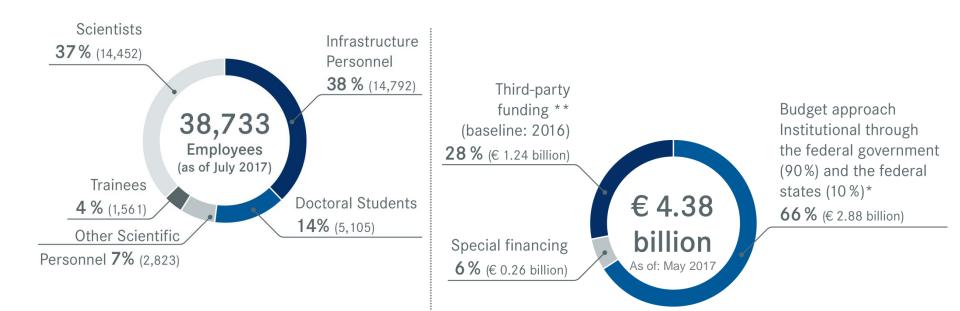
- Systems solutions for grand challenges based on:
  - Scientific excellence
  - Interdisciplinarity and critical mass
  - long term research programs
- Helmholtz provides a highly attractive environment for talents and brilliant brains
- Profound expertise in large scale research infrastructure
- Helmholtz 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



<sup>\*</sup> As of 2016, the German federal government alone is financing the pact increase so that the federal government's share is over 90%.

<sup>\*\*</sup> Including project sponsorships

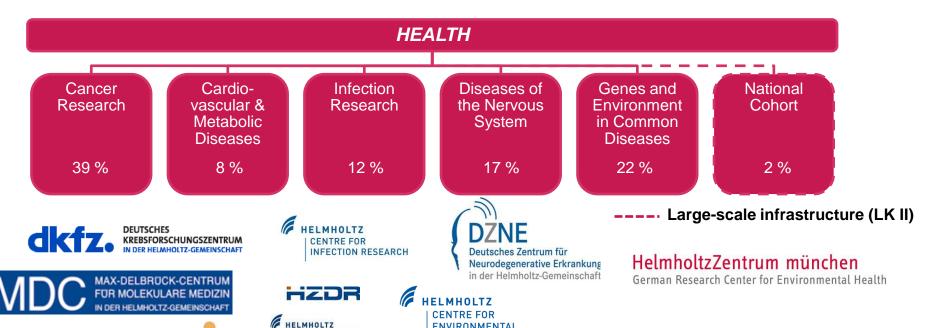
## The six Research Fields

### of the Helmholtz Association



#### **Research Field Health**

**General Aim:** To develop new evidence based approaches for prevention, (early) diagnosis, and highly effective individualized therapies to combat common diseases



ENVIRONMENTAL RESEARCH - UFZ

ROSSENDORF

## **Research Field Health**





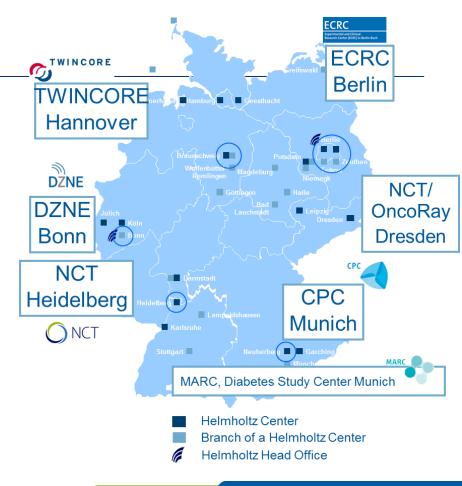
Drug research, Helmholtz Institute for Pharmaceutical Research Saarland (HIPS)/HZI

- Focus on major diseases
- Basic research on disease mechanisms
- Unravel complex systems
- Translational research (bench to bedside to bench)
- Close interactions with University Medicine

Budget : € 690 Mio. p.a.
 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















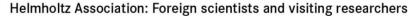


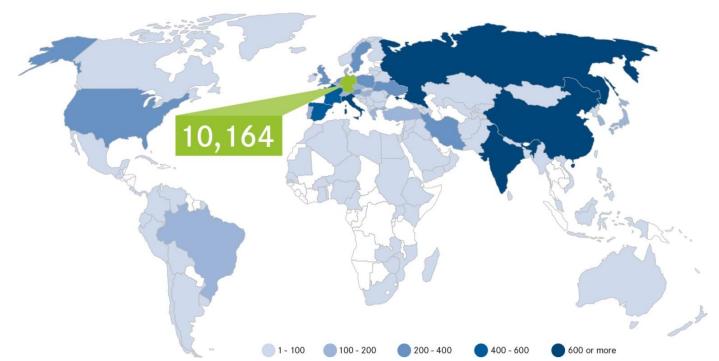




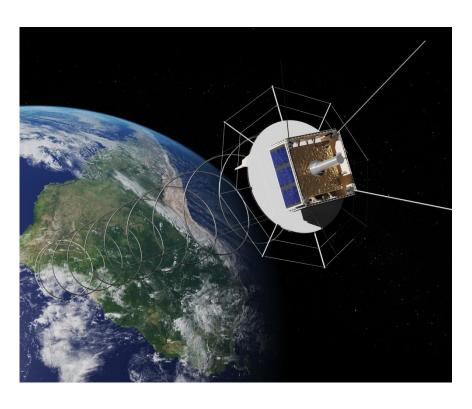


# Helmholtz Internationalization Strategy: Facts and Figures





# 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'

## 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

## 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

# Objective 4: Science Diplomacy – building bridges through research



- Promote scientific ambassadorship
- Facilitate excahnge 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

#### 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



