Health and medical research links between Germany and Australia

Faculty of Health and Medicine
The University of Newcastle

Professors Bob Callister and Alan Brichta
Deputy Head of Faculty (Research), Head of Anatomy
Research Field: Neuroscience – sensory physiologists
Australia is a big country – opportunities and challenges

24.2 vs. 82.7 million people
Newcastle and the Hunter Region

- Newcastle centre of the **Hunter Valley region** (coal, wine & race horses)
- Former Steel centre of Australia (BHP Billiton)
- Worlds largest coal port
- Ranked ‘5th most liveable city in the world’ by Lonely Planet (2011)
Undergraduate Education in Health & Medicine

• Australia’s most comprehensive health faculty
• Innovative and inspiring approach to teaching and learning
• Ongoing commitment to world-leading research

DEGREES
14 undergrad
19 postgrad

STUDENTS
~7600

COUNTRIES
50+

ACADEMICS
>300
Research in Health and Medicine

The University of Newcastle continues to be recognised nationally and internationally as a leader in medical and health science research.

- Biochemistry and Cell Biology
- Cardiovascular Medicine and Haematology
- Cognitive Sciences
- Genetics
- Human Movement and Sport Science
- Immunology
- Neurosciences
- Nursing
- Nutrition and Dietetics
- Oncology and Carcinogenesis
- Paediatrics and Reproductive Medicine
- Pharmacology and Pharmaceutical Sciences
- Public Health and Health Services
The “Research Landscape” has changed!

- Research priorities – curiosity vs. problem-driven
- University strategic plan - NeW Futures 2015-2025
  - The FOUR “I”s in research:
    - Interdisciplinary
    - Industry
    - Innovation
    - International
Priority Research Areas & HMRI

Hunter region = 1 University, 1 Hospital, and 1 Research Institute

- Asthma and Respiratory Disease
- Cancer
- Neuroscience and Mental Health
- Physical Activity and Nutrition
- Public Health
- Reproductive Science

- Recently awarded: *NHMRC “Centre for Innovation in Regional Health Care”*
Innovation HUBS in the Hunter

• Government ‘Boosting Business’ grant scheme
• Create a network of Innovation HUBS in Hunter
• HUBS are catalyst spaces for Faculty & students to work with SMEs where “ideas can be turned into products”
  • Hunter Innovation project (HIP)
  • Three76 (Newcastle)
  • DaSH (Charlestown)
  • Defence Hub (Williamtown – defence base)
  • Upper Hunter Innovation Precinct (Muswellbrook)
• Recruited a PVC for Industry Engagement - Innovation
Research Links with Germany

PhD Students:
*Drs Sue Herman* (public health) *Maximillian Plank* (GSK)

Research Collaborations:
*Prof Alan Brichta* - Dr Julia Dlugaiczyk at UKS Hamburg, Vestibular physiology
*Prof John Attia* - with collaboratory in UK, US, and Germany (Munich), Stroke genetics
*Laureate Prof John Aitken* – Andreas Meinhardt at U Giessen – Male fertility
*A/Prof Tracy Burrows and Dr Marc Adams* – Freiburg and Karlsruhe – Bill Gates grant on use of technology for dietary assessment to fight obesity
We are keen to form links with German biomedical research organizations

- 5 targeted PhD scholarships in 2018
- Dual Award Doctoral Degrees (DADDS) — testamur from two Universities. >1 year at UON