Biomedical Engineering
Stakeholder Forum

Warwick University, 7th July 2023

Professor Peter Gammon, Head of Research,
School of Engineering,
University of Warwick
Breadth of disciplinary range

**Faculty of Arts**
- Classics and Ancient History; English and Comparative Literary Studies; History; School of Creative Arts, Performance and Visual Cultures; School for Cross-faculty Studies; School of Modern Languages and Cultures

**Faculty of Science, Engineering and Medicine**
- Chemistry; Computer Science; Engineering; Life Sciences; Mathematics; Physics; Psychology; Statistics; Warwick Manufacturing Group; Warwick Medical School

**Faculty of Social Sciences**
- Applied Linguistics; Centre for Educational Development, Appraisal and Research; Education Studies; Centre for Interdisciplinary Methodologies; Economics; Philosophy; Sociology; Institute for Employment Research; Politics and International Studies; School of Law; Warwick Business School
International Profile

We are a leading research-intensive university with a global reputation for innovation and ambition.

• In the Research Excellence Framework (REF) 2021:
  • 92% of our research is world-leading or internationally excellent.
  • 50% awarded highest possible rating of ‘world leading’ and a further 42% ‘internationally excellent.’
  • 7th overall for ‘outputs’ reflecting the consistently high quality of our published work.
  • Top 5 (TH): Economics (2nd), Classics (3rd), Computer Science (4th), and Business & Management (5th).
  • Top 10 (TH): Mathematical Sciences (6th), Law (8th), Philosophy (8th), Politics (9th) and Sociology (10th).

• Our researchers attract prestigious prizes, some examples:
  • Prof Chater (WBS) won the David E Rumelhart Prize for cognitive sciences
  • Prof. Sadler (Chemistry) awarded the Royal Society Davy Medal.
  • In Engineering, 4x FREng + 1x FRS
Interdisciplinary Support Structures

Global Research Priorities (GRPs)
• 10 GRPs respond to complex global challenges that can only be tackled through research excellence.
• Unite academics from many different disciplines to address some of humanity’s most urgent questions - enabling us to improve the lives of people around the world.

Research Centres
• 25 Interdisciplinary Research Centres, which bring together researchers from across disciplines and faculties, around areas of our research priorities.
Warwick Health GRP – transforming healthcare through multidisciplinary research and partnerships with the NHS & Industry
A New Strategic Priority: STEM Grand Challenge – what is it?

- Enhancing Warwick’s reputation for STEM teaching and research
- Growing activity in STEM in line with the University Strategy 2030
- Engaging the wider institution in collaborative research with physical sciences and engineering
- A sustainable future for STEM at Warwick – the Science Precinct
STEM Research Themes

- Developing a research vision that will be **transformative** and enable **sustainable growth** of STEM at Warwick.

- **Themes** highlight our expertise, provide a different lens on our research, and opportunities for growth.

- Building on our **core** research, five **thematic** areas for growth have been identified:
  - AI, Digital, & Smart Applications
  - Energy & Environment
  - Frontier Science & Engineering
  - Health & Medical Technologies
  - Molecules, Materials & Structures
Creating better spaces for our researchers in the new Science Precinct will:

- Improve the environment for people and their tools
- Make it easier to collaborate
- Bring together similar equipment/facilities, in suitable environments
- Provide better access to all for shared and fully supported facilities.
- Give opportunities for researchers working on a common technique or topic to co-locate
- Enable partnerships working with industry
When will the Science Precinct arrive?

- RIBA Stage 2
  - BDP/ARUP appointed as architects
  - Consultations with research groups, RTPs, theme champions
  - Inventory & Measurements
  - Concept Design
  - Sign off by University Council – summer 2023

- First buildings 2027
Science Precinct: Enabling growth and transformation

- Workplace focussed fully refurbished existing buildings
- New research focussed buildings
- New teaching focussed building
- New showcase and collaborative space
- New public realm
The Biomedical Engineering Industry Day was a labour of love, brought together by:

- Sarah Lewis, Research Officer, School of Engineering
- Roulla Philippou, Health GRP Administrator
- Olivia Joyce, Administrative Assistant, School of Engineering
- Prof. Mike Chappell, Joint Academic Lead, Health GRP Administrator
- Prof. Christopher James, Director, UoW Biomedical Engineering Institute
- Dr Alex Darlington, RAEng Research fellow and Assistant Professor in Control and Engineering Biology
- Prof. Lawrence Young, Joint Academic Lead, Health GRP Administrator

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- Warwick’s Health GRP