



Biomedical Engineering Stakeholder Forum

Warwick University, 7th July 2023

Professor Peter Gammon, Head of Research,
School of Engineering,
University of Warwick



WARWICK
THE 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

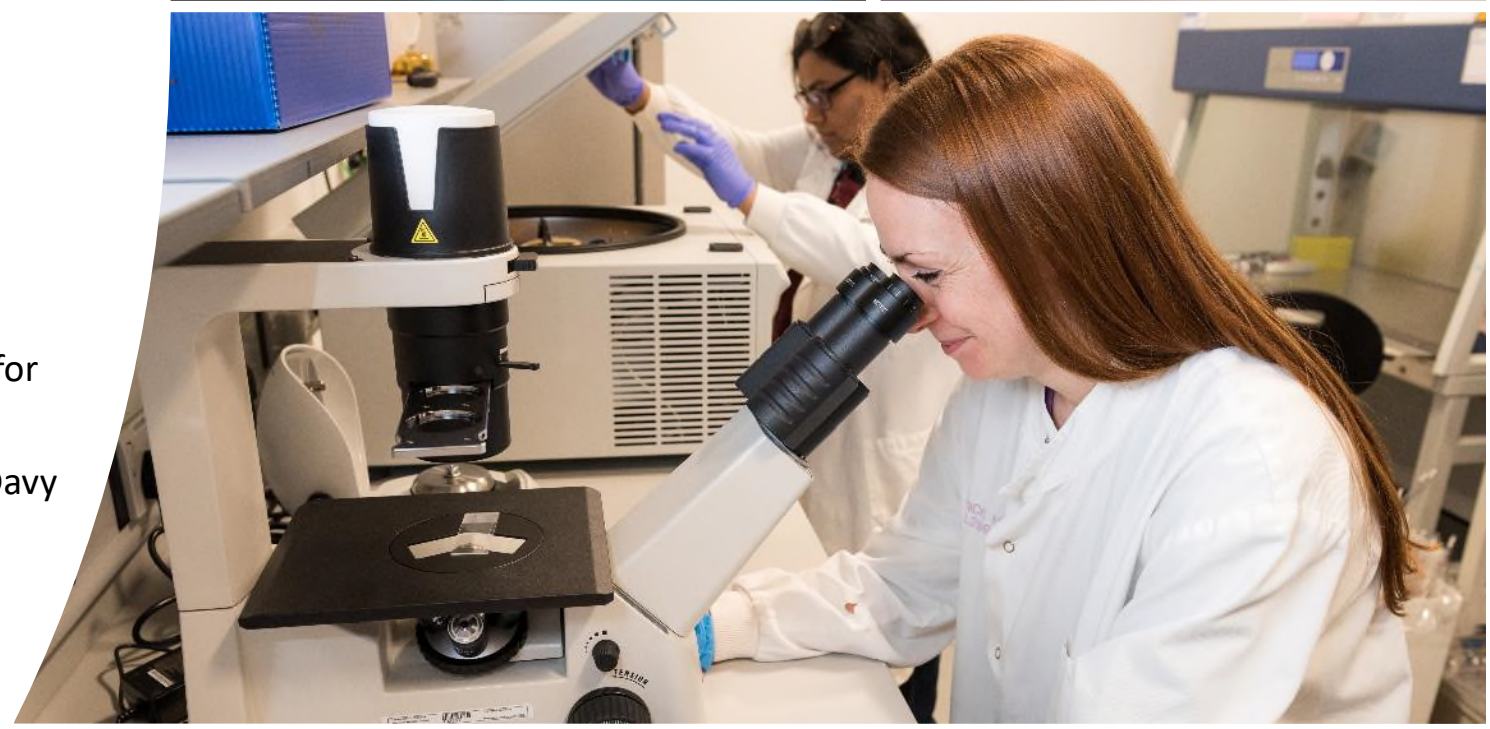
- Applied Linguistics; Centre for Educational Development, Appraisal and Research; Education Studies; Centre for Interdisciplinary Methodologies; Economics; Philosophy; Sociology; Institute for Employment Research; Politics and International Studies; School of Law; Warwick Business School



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

WARWICK

GLOBAL RESEARCH PRIORITIES
HEALTH



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



STEM Research Transformation

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

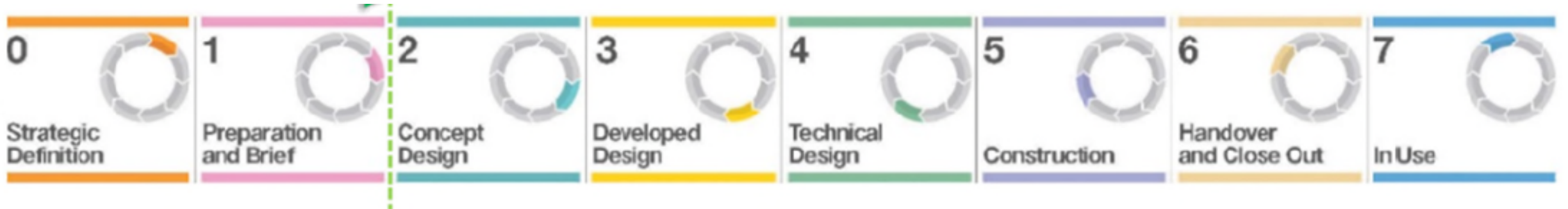


When will the Science Precinct arrive?

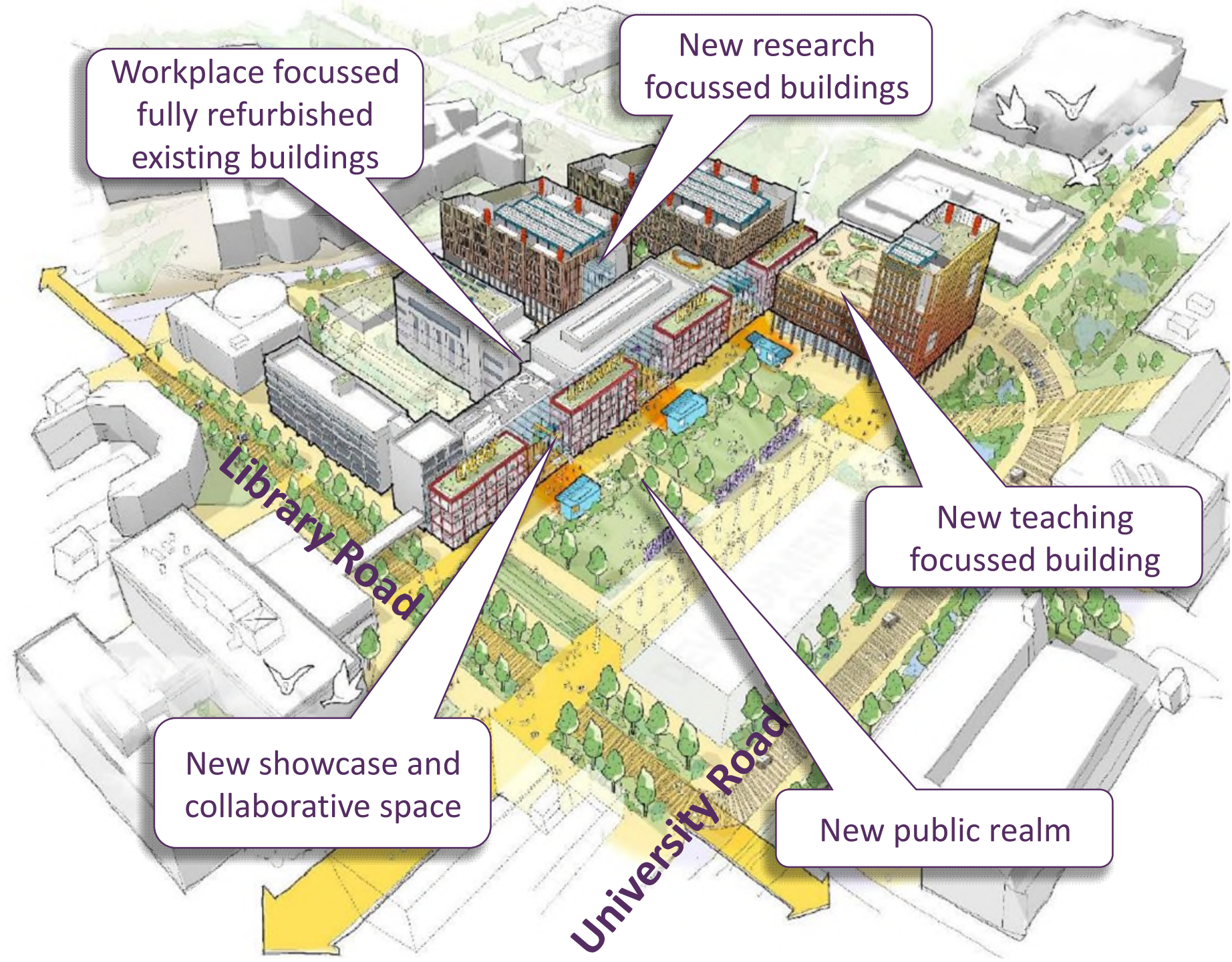
☐ RIBA Stage 2

- 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



A Big Thank You to...

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 Industry and Stakeholder Forum
- ❑ Warwick's Health GRP

SUPPORTED BY

**INDUSTRY AND
STAKEHOLDER
FORUM**

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GLOBAL RESEARCH PRIORITIES
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