THE Biomedical Engineering Institute (BMEI)

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Prof. of Biomedical Engineering & Director, BMEI
The BMEI is a Centre that brings together strong and broad research capabilities in the School of Engineering in the field of biomedical engineering. Staff at BMEI work on a breadth of cross-cutting problems underpinning real-world applications in the field of biomedicine, across a spectrum of perspectives from fundamental science to technological device development. Whilst primarily concerned with basic research the work also crosses into applications and products in certain application domains.

BMEI staff from the SoE collaborate across the University (with existing contacts and projects joint with WMS, SLS, Psychology, WMG, Chemistry, Physics, Maths, Computer Science and Social Sciences). Much of the BMEI work also reaches out to Hospital based research groups across the Midlands, in particular UHCW, UHB and Nottingham, and beyond whilst also encompassing strong and close collaborations with industry.
A spectrum of perspectives

Biomedical Engineering Research

Real-world applications

Cross-cutting problems

A spectrum of perspectives

Fundamental Science

Basic Research

Tech device development

Applications & Tech

Soc Sci

Comp Sci

Maths

Phys

Chem

SoE

WMS

SLS

Psych

WMG
A spectrum of perspectives

Real-world applications

Cross-cutting problems

A spectrum of perspectives

Fundamental Science

Basic Research

Tech device development

Applications & Tech

Biomedical Engineering Institute

SoE

WMS

SLS

WMG

Psych

SoE

Soc Sci

Comp Sci

Maths

Phys

Chem
BMEI aims:

- Create a clear visible focus for BME research undertaken in the SoE linking existing strengths within the SoE and further within Warwick
- Create a base for BME current and future research taking place with clinical and industrial partners, aligning with the University’s GRP for Health;
- Forge new external collaborations with regional, national and international partners across the varied areas of research within the field of BME;
- Create a base from whence to apply for strategic funding to National Research Councils and beyond;
- Create a base from whence to apply for future Centres for Doctoral Training (CDT) in BME, as well as the potential for apprenticeships at the postgraduate level.
What we do

- PGR (PhDs)
- MSc in BME
- Multi-centre Projects
- Clinical/Hospital Research
- Connect with Industry
- Ugrad teaching
### Biomedical Engineering Institute

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<th>Area</th>
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<tr>
<td>Assistive Technology and Rehabilitation</td>
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<tr>
<td>Systems Pharmacology &amp; Systems Medicine</td>
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<td>Chronic &amp; Degenerative Diseases</td>
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<td>Applications in resource poor settings &amp; developing Countries</td>
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#### Cross-cutting capabilities

- Biomedical Devices, Sensors and Sensing technologies
- Biomedical Systems Modelling and Synthetic Biology
- Biomedical Signal Processing
- Biomedical Imaging & Nanotechnology
- Cellular and Medical Biomechanics
BMEI laboratories: 8 BME specific labs
BMEI membership

- Exec committee
- Core members
- Associate members
- PGR/ MSc students
- Ugrad elective
- Director
- BMEI

Biomedical Engineering Institute