**WEBSITE TEMPLATE**

**1. RESEARCH THEME/s; PRP; GI:**

Injection molding and additive manufacturing of drug delivery and combination medical devices

PRP: Material and Advanced Technologies for Healthcare (MATCH)

**2. PI DETAILS (Name, Pure Link, Twitter Handle & Photo)**

Dr Peter Boyd (PI)

Pure: [Peter Boyd — Queen's University Belfast (qub.ac.uk)](https://pure.qub.ac.uk/en/persons/peter-boyd)

**3. Research focus (80 words max)**

Dr Peter Boyd’s research team are dedicated to the development of controlled release drug delivery systems by additive manufacturing and injection molding.

Our group specialise in the application of advanced manufacturing technologies to the production of drug eluting devices, with a particular focus on additive manufacturing (AM), injection molding (IM) and reaction injection molding (RIM).

Our expertise in additive manufacturing focuses on Arburg Plastic Freeforming (AKF), a form of high pressure, thermoplastic, droplet deposition modelling (DDM).

**4. Research opportunities** 40 words max  
  
Open to PhD applications in the field of pharmaceutical science and engineering.

**5. Research students**

Name: Xin Shen  
PhD title:   
Years of Study: 2022 -  
Country: United Kingdom

Name: Siqi Wang  
PhD title:

Years of Study: 2020 -   
Country: UK

Name: Eugeni Guimier  
PhD title: Reducing Capsular Contracture in Breast Implants  
Years of Study: 2020 -   
Country: FRA

Name: Ying Sun  
PhD title: Wound healing – Additive Manufactured Patches  
Years of Study: 2019 -   
Country: PRC

**6. Alumni - where are they now? (3 Max)**

Name: Nicole Welsh

PhD title: Development of 3D Printed Drug Delivery Devices

Years of Study: 2015 - 2108  
Country: UK  
Current position: Formulation Scientist - Almac

Name: Vicky-Leigh Edwards

PhD title: Modular vaginal drug delivery devices  
Years of Study: 2017 - 2021  
Country: UK  
Current position: Technical Quality Manager - Almac

**7. Public Outreach/ other achievements** (media links; DNA innovation links etc; other press)

DNA of Innovation: Volume V – New Voices, New Impact

[Media,597545,en.pdf (qub.ac.uk)](https://www.qub.ac.uk/home/media/Media,597545,en.pdf)

Impact: Approval announcement for first HIV prevention vaginal ring:

[2021 | First long-acting option HIV prevention approved for use - Worlds AIDS Day | News | Queen's University Belfast (qub.ac.uk)](https://www.qub.ac.uk/News/Allnews/2021/Firstlong-actingoptionHIVpreventionapprovedforuse-WorldsAIDSDay.html)

**8. Key words**

Injection molding, additive manufacturing, thermoplastic, silicone elastomers, combination devices, vaginal rings, implants, patches, biomaterials.