**WEBSITE TEMPLATE**

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

**Pharmaceutical Technology, Drug delivery, Nanotechnology**

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

Dr Alejandro J. Paredes

Pure link: <https://pure.qub.ac.uk/en/persons/alejandro-paredes>

Twitter: <https://twitter.com/paredesaj>

A person in a suit

Description automatically generated with medium confidence

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

Our Group’s work focuses on the design of novel materials for controlled drug delivery. Our aim is to develop novel formulations for improving the treatment of diseases that are incurable to date or challenging to treat. To this purpose, we use a wide variety of technological tools including nanoparticles and polymeric materials combined together in order to deliver drugs to their targets in a more efficient manner. We have a strong focus on infectious diseases, but we are also interested in psychedelic drugs, gene therapy, wound healing, and food science, among others.

**4. Research opportunities** 40 words max

Open to PhD applications in the field of:

* Drug nanosuspensions
* Mucosal drug delivery
* Bioadhesive materials for drug delivery and patient monitoring
* 3D-printed dosage forms
* Nose-to-Brain drug delivery
* Delivery of therapeutics for neglected diseases and HIV

**5. Research students**

Name: **Elise Catlin**  
PhD title: Nanosized antileishmanial drugs delivered to lymphoid tissues

Years of Study: 2  
Country: England

Name: **Yushi Tao**  
PhD title: Targeting Plasmodium parasites in the brain using drug nanocrystals

Years of Study: 2  
Country: China

Name: **Iris Wang**  
PhD title: Development of antileishmanial drugs nanocrystals for transdermal delivery  
Years of Study: 3  
Country: China

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

Name:

PhD title:

Years of Study: -  
Country: --  
Current position: -

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

Production of drug nanocrystals using top down approaches:

* <https://www.sciencedirect.com/science/article/pii/S2590006422002691>
* <https://www.sciencedirect.com/science/article/pii/S0378517320304853>
* <https://www.sciencedirect.com/science/article/pii/S0168365922001225?via%3Dihub>
* <https://www.tandfonline.com/doi/full/10.3109/03639045.2016.1151036>
* <https://www.sciencedirect.com/science/article/pii/S0032591020305441>

**8. Key words**

Nanocrystals, pharmacokinetics, HIV, mucosal drug delivery