**WEBSITE TEMPLATE**

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

Research theme: Nanomedicine and Biotherapeutics

Areas of activity:

* Anticancer therapeutics
* Nano-delivery of macromolecules

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

Dr. Emma McErlean

Pure: <https://pure.qub.ac.uk/en/persons/emma-dynes>

Twitter: <https://twitter.com/dremmamcerlean?lang=en>

Email: E.McErlean@qub.ac.uk

Photo:

A person wearing glasses

Description automatically generated with low confidence

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

Dr McErlean’s research focuses on the design and development of cell penetrating peptide delivery systems for gene therapy targeting neurological diseases and for ex vivo adoptive cellular therapies. Her work brings together a unique combination of expertise in nanomedicine, drug delivery, biotechnology and biopharmaceuticals.

Open to PhD applications in the field of nano-drug delivery, biopharmaceutics, nucleic acid therapies and ex vivo cellular therapies.

* Development of nanomedicines for cancer and neurological diseases
* Design of non-viral delivery systems

**4. Research opportunities (40 words max)**

Dr. McErlean is currently offering a fully funded PhD studentship focusing on the development of non-viral delivery systems for ex vivo genetic modification of natural killer cells for adoptive cellular therapies.

**5. Research students**

Name: Ashley Levickas  
PhD title: SILENT: Stealth-Like Internalisation of Genetic Cargo for Ex vivo Natural Killer Cell Therapies  
Years of Study: 2022-2025  
Country: Northern Ireland

Name:   
PhD title:

Years of Study:   
Country:

Name:   
PhD title:   
Years of Study:   
Country:

Name:   
PhD title:   
Years of Study:   
Country:

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

Name:

PhD title:

Years of Study:   
Country:   
Current position:

Name:   
PhD title:   
Years of Study:   
Country:   
Current position:

Name:

PhD Title:

Years of Study:

Country:

Current Position:

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

Recent articles:

* [10.1016/j.jconrel.2020.11.037](https://doi.org/10.1016/j.jconrel.2020.11.037)
* <https://doi.org/10.1016/j.ijpharm.2021.120223>
* <https://doi.org/10.1186/s12951-021-00856-x>
* <https://doi.org/10.1016/j.ijpharm.2021.120366>

**8. Key words**

Cell Penetrating Peptides

Gene Delivery

Gene Therapy

Nanomedicine

Targeted Treatments

Ex vivo Adoptive Cell Therapies