**WEBSITE TEMPLATE**

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

Infection and antimicrobial resistance

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

Dr Timofey Skvortsov

Pure: <https://pure.qub.ac.uk/portal/en/persons/timofey-skvortsov(deaeaaae-e6f9-47d6-a762-8511cb685dbd).html>

Twitter: (@timskvortsov)

<https://twitter.com/timskvortsov>

LinkedIn: <https://www.linkedin.com/in/timofey-skvortsov-5826b443/>

E-mail: [t.skvortsov@qub.ac.uk](mailto:t.skvortsov@qub.ac.uk)

A person wearing glasses and a suit

Description automatically generated with medium confidence

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

Dr Skvortsov’s team studies bacterial viruses and bacteriophage-derived antimicrobial agents for the detection, control and elimination of pathogenic bacteria and their biofilms.

Other areas of interest include:

1. Environmental viromics;
2. Metagenomics and metatranscriptomics of complex microbial communities;
3. Horizontal gene transfer of antimicrobial resistance and virulence determinants;
4. Synthetic microbiology.

**4. Research opportunities** 40 words max

Open to PhD applications in the following areas:

* Synthetic biology and genetic engineering of bacteriophages and their proteins
* Structural biology of phage enzymes with antibacterial and antibiofilm properties, including endolysins and depolymerases
* Phage therapy
* Viromics and mobilomics
* Microbiome analysis and manipulation
* Microbial bioinformatics

**5. Research students**

Name: Akash Shambharkar

PhD title: *Investigation of phage therapy approaches as an attractive alternative to antibiotics for bio-control of genitourinary infections*

Years of Study: 2021 – 2024

Country: India

Name: Xinyao He

PhD title: *Liposome loaded phage cocktail to enhance the potential of phage therapy against intracellular bacteria*

Years of Study: 2021 – 2024

Country: China

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

Name: Cormac Rice

PhD title: *Investigation of novel biocontrol agents against biofilms formed by human pathogens*

Years of Study: 2018 – 2021

Country: Northern Ireland

Current position: Senior NGS Bioinformatician & Microbial Genomics Team Lead, Randox, NI

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

Member of:

* Royal Society of Biology (RSB NI branch committee member)
* Microbiology Society
* Society for Applied Microbiology
* International Society for Viruses of Microorganisms
* COVID-19 Genomics UK Consortium

Visiting Scientist:

* San Diego State University, CA, USA (2019)
* Quadram Institute Bioscience, England (2018)

Interviews and blog contributions:

* NI Healthcare (<http://nihealthcare.com/a-world-of-opportunity/>) (2019)
* How to manage and influence the skin microbiome (National Biofilms Innovation Centre) (<https://www.biofilms.ac.uk/manage-and-influence-skin-microbiome/>)
* Bacteriophage and biofilms (National Biofilms Innovation Centre) (<https://www.biofilms.ac.uk/bacteriophage-and-biofilms/> )

**8. Key words**

Bacteriophages, antimicrobial resistance, genomics, bioinformatics, protein modelling, microbiomes, genetic engineering, biofilms, protein evolution, synthetic biology, endolysins, depolymerases