

INTEGRATE AMR Project Ideas and Networking Meeting

Who's Who

COMBINING OUR
AMR EXPERTISE
AND
EPS STRENGTHS
TO DEVELOP
WARWICK'S
POTENTIAL TO BE
A CENTRE OF
WORLD-LEADING
RESEARCH IN AMR

Engineering

Engineering		
E	Dr James Covington	Novel chemical sensors, sensing materials and micro-systems
	Professor Michael Chappell	Modelling and analysis of biomedical, pharmacokinetic and biological processes
	<u>Dr Neil Evans</u>	Systems modelling, analysis and control of drug kinetic, epidemiological and biomedical processes
3	Professor Peter J. Thomas	Experimental fluid dynamics, with emphasis on: Rotating Flows, Two-Phase Flows, Granular Flows, Boundary-Layer Transition, Fluid-Flow Compliant-Wall Interactions
	Dr Weisi Guo	The intersection between mobile big data, signal processing, and network theory
Physics		
	<u>Dr Vasily</u> <u>Kantsler</u>	Dynamics of fluid vesicles and semi-flexible biopolymers in external flows, mixing in suspensions of green algae, motility and surface interactions of swimming cells
	Professor Rudolf Roemer	Solid state physics, theoretical solid state physics, computational physics, disordered materials, quantum Hall effect, transport problems in quantum systems, meso- and nanoscopic physics, exact solutions, mathematical physics, biological physics
	Dr Marco Polin	Biophysics of microorganisms, how they interact with the physical world and with each other, from the workings of individual organelles to the behaviour of populations
9	Professor Matthew Turner	Biological and Soft Matter Physics
Physics Physics	Dr Vasily Kantsler Professor Rudolf Roemer Dr Marco Polin Professor Matthew	Dynamics of fluid vesicles and semi-flexible biopolymers in external flows, mixing in suspensions of green algae, motility and surface interactions of swimming cells Solid state physics, theoretical solid state physics, computations physics, disordered materials, quantum Hall effect, transport problems in quantum systems, meso- and nanoscopic physics, exact solutions, mathematical physics, biological physics Biophysics of microorganisms, how they interact with the physical world and with each other, from the workings of individual organelles to the behaviour of populations



Professor Steven Brown

Solid-State NMR, structural and dynamic investigations, particularly hydrogen bonding and supramolecular systems

Medicine

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	Dr Meera Unnikrishnan	Mechanisms underlying persistent infections
	<u>Dr Nick</u> <u>Waterfield</u>	Insect infection models, fundamental microbiology, bioinformatics, functional genomics, natural and synthetic product antibiotics and bio(nano)technology
	Dr Esther Robinson	Bacteriology; antibiotic resistance; mobile genetic elements; transcriptomics; next-generation sequencing; Haemophilus influenzae; phylogenetics
	Professor Mark Pallen	Bioinformatics and laboratory-based molecular bacteriology
	Professor Matthew Gibson (Joint Chemistry)	Organic, polymer and carbohydrate chemistry to address global healthcare issues
	Professor Andrew McAinsh	Understanding the mechanisms by which kinetochores power chromosome segregation and how the mitotic spindle is self-assembled and positioned during mitosis in human cells
	Professor Jonathan Millar	Fundamental mechanisms that regulate the cell division cycle
	<u>Dr Chrystala</u> <u>Constantinidou</u>	Clinical epidemiological studies within a hospital setting and elucidating bacterial pathogenesis using high-throughput sequencing technologies

	Dr Kelly Schmidtke	Understanding the context and consequences of behaviour. Improving communication of quantitative information (e.g., graphs) to hospital decision makers
	<u>Umar Taj</u>	Doctoral Researcher in the Behavioural Science Group. Behavioural insights solutions, barriers to behaviour change
WMG		
	Professor Tony McNally	Polymer Science, Processing and Nanocomposites, Biomimetics
Research &	& Impact Services	
	Katie Irgin	Impact Officer for the SLS, Systems Biology Centre, WMS, and Psychology. Interested in accelerating the outcomes of research, and specifically improving the wider impact of research.
Mathemat	ics	
0	Professor Matt Keeling	Modelling of infectious diseases in humans and animals.

Professor Matt Keeling (Joint Life Sciences)	Modelling of infectious diseases in humans and animals. Optimal targeting; Spatial spread and Networks; Stochasticity and persistence of infection
Dr Deirdre Hollingsworth (Joint Life Sciences)	Transmission dynamics of HIV stages. Dynamics and control of malaria. Prediction and optimal control of helminth infections
<u>Hajnal Farkas</u>	Project manager, Neglected Tropical Diseases Modelling Consortium

NIHR Clinical Research Network/UHB/UHCW

With Clinical Research Network, Orib, Oriev		
	<u>Dr Miruna</u> <u>David</u>	Consultant Microbiologist at University Hospitals Birmingham. Special interests in antimicrobial prescribing and infections in immunocompromised. As the clinical service lead for laboratory microbiology, her focus is primarily on continually developing a responsive modern microbiology laboratory service
	Susie Harrison	Division 6 Regional Research Delivery Manager. Member of various national groups advising on national policy and processes. These include the R&D Forum: Primary Care Working Group, the national NIHR CSPSteering Group, and was a Department of Health "Champion for Research Support". She is still a member of the R&D Forum: Research Management Working Group
	Priya Bagga	Division 6 Research Portfolio Facilitator, main focus is to liaise with research active/interested investigators to develop the Infectious Diseases and Microbiology portfolio and to build capacity and capability to bring in new commercial and non-commercial research into the West Midlands
	Carolyn	Researcher at UHCW NHS Trust and Warwick University exploring
	<u>Dawson</u>	Hand Hygiene and wider Infection Prevention challenges.
	Satyajit Das	Medical Lead, Consultant Physician, Coventry & Warwickshire Partnership Visiting Professor of Sexual Heath & HIV Medicine, Coventry University Speciality Lead for Infectious Disease & Microbiology, West Midlands. Clinical research on effect of disease and treatment of HIV infection through different clinical trial set up collaborating with different National and International teams.
	Bernadette Baretto	Antibiotic pharamacist
	Kate Prevc	Modern Matron Infection Prevention and Control

Chemistry

	Professor Peter Scott	Metallo-organic chemistry, particularly the design of self- assembling chiral systems; their applications as medicines for challenging diseases
	Professor Peter Sadler	Chemistry of metals in medicine (bioinorganic chemistry, inorganic chemical biology and medicine)

Professor Matthew Gibson (Joint Medicine)	Organic, polymer and carbohydrate chemistry to address global healthcare issues
Professor Alison Rodger	Biomacromolecule structure and function including DNA, membrane proteins and fibrous proteins including application to bacterial cell division
Professor Greg Challis	Natural products chemistry and biology
Jozef Lewandowski	Developing and applications of NMR (primarily but not exclusively solid state) methodology for studying structure and dynamics of proteins and nucleic acids
Professor Tim Bugg	Enzymes involved in bacterial cell wall peptidoglycan biosynthesis, as targets for the development of novel antibacterial agents
<u>Dr Andrew</u> <u>Marsh</u>	Combining organic chemistry and molecular design in the synthesis of functional molecules
Professor Martin Wills	Synthetic chemistry and asymmetric catalysis

Life Sciences

Life Sciences		
Dr Corinne Smith	Structure and mechanism of clathrin coated vesicle formation during clathrin-mediated endocytosis using a range of structural and biophysical techniques	
Dr David Roper	Structural biology, principally X-ray structural determination, in combination with molecular biology and biochemical approaches, to investigate the molecular basis of microbial physiology	
<u>Dr Elizabeth</u> <u>Fullam</u>	Mycobacterium tuberculosis sugar metabolism; biochemistry, structural biology, chemistry and microbiology techniques	
Professor Christopher Dowson	Antibiotic resistance, bacterial pathogenicity and population genetics	
Professor Matt Keeling (Joint Mathematics)	Modelling of infectious diseases in humans and animals. Optimal targeting; Spatial spread and Networks; Stochasticity and persistence of infection	
Dr Deirdre Hollingsworth (Joint Mathematics)	Transmission dynamics of HIV stages. Dynamics and control of malaria. Prediction and optimal control of helminth infections	
Professor Alfonso Jaramillo	Engineering organism-specific virus-like antibiotics. Engineering synthetic RNA circuits in living cells	
<u>Dr Freya</u> <u>Harrison</u>	a) Bacterial evolution, ecology & AMR in chronic infections, especially in cystic fibrosis; b) developing realistic lab models of chronic infection; c) antimicrobial discovery using pre-modern European medical texts	
	Dr David Roper Dr Elizabeth Fullam Professor Christopher Dowson Professor Matt Keeling (Joint Mathematics) Dr Deirdre Hollingsworth (Joint Mathematics) Professor Alfonso Jaramillo	

	Professor Elizabeth Wellington	Ecological roles for specific bacterial activities including antibiotic production, resistance and exoenzyme production
	Dr Antonia Sagona	Mechanisms of bacterial infection and phage therapy inside the mammalian cell environment
	Dr Christophe Corre (Joint Chemistry)	Bacterial signalling: new chemical keys to unlock the production of novel microbial antibiotics
	Tania Page	Communications Officer, School of Life Sciences
	Jessica Gaudy	Lameness control protocol for sheep flocks
	Dr Teja Sirec	Multicellularity. Bacterial differentiation. Bacteria-host interactions
	Dr Rika Nair	Project Manager, INTEGRATE AMR Contact for Warwick Antimicrobial Interdisciplinary Centre
(C)	<u>Dr Yin Chen</u>	Microbial diversity, genetics and biochemistry of microorganisms involved in methylated amine and quaternary amine metabolism
	Dr Munehiro Asally	Bacterial community behaviour, biofilms