

A complex network diagram with numerous white nodes and connecting lines, set against a teal gradient background. The network is dense and interconnected, with some nodes appearing brighter than others.

# INTEGRATE AMR – An Update

WARWICK

INTEGRATE ANTIMICROBIAL  
RESISTANCE

Chandrika Nair  
Project Ideas and Networking Meeting, Jun 9 2016

# Tackling AMR - An Interdisciplinary Approach

WARWICK

INTEGRATE ANTIMICROBIAL  
RESISTANCE



@WARWICK\_AMR

Integrating cross-  
discipline expertise to  
tackle Antimicrobial  
Resistance

[warwick.ac.uk/IWAMIC](http://warwick.ac.uk/IWAMIC)

“Diagnostics”  
“Synthetic Chemistry”  
“Natural Products”  
“Biosynthetic Pathways”  
“Phage Therapy”  
“Fluid Dynamics”  
“Microfluidics”  
“Bacterial Motility and Attachment”  
“Biofilms”  
“Predictive modelling”  
“Epidemiology”  
“Hospital-acquired infections”  
“Control and Pharmacokinetics”  
“Cell wall and protein biosynthesis”  
“Structural studies”



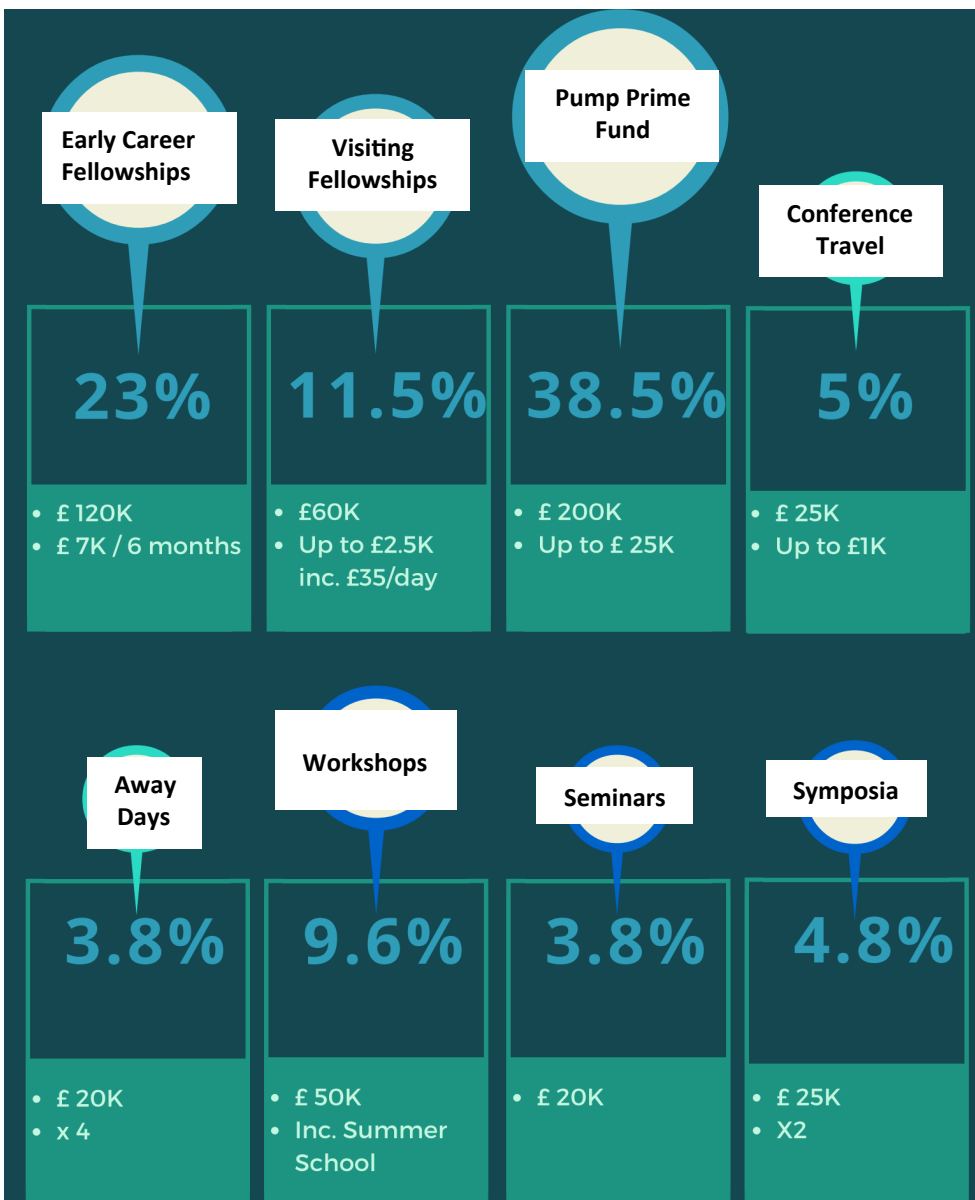
- Combining expertise in Chemistry, Engineering, Life Sciences, Medicine, Mathematics, Physics, Social Sciences...

## Tackling AMR – A Cross Council Initiative

Antimicrobial resistance (AMR), especially resistance to antibiotics, is a growing global problem. We are facing a rise in the number of bacteria becoming resistant to existing antibiotics without an increase in new antibiotics or new treatments. It is clear that an interdisciplinary approach is needed to tackle these challenges and



# INTEGRATE AMR – 2 years of funding for collaborations



- Interdisciplinary Collaborations
- Follow-on Funding
- Promotion of Antimicrobial Resistance area to EPS researchers
- Engagement with Industry and Clinicians
- Rolling Deadlines, Apply Anytime



## Early Career Fellowships— 8 (/17) funded so far



- **£7K / 6 months + £1.5K consumables**

### Assessment criteria:

- Interdisciplinary
- EPS skills training for Early Career Researchers
- Consideration of ECF future plans eg. Follow-on funding, fellowships
- Novelty of idea, relationship to the AMR research context and timeliness

[warwick.ac.uk/wamic/integrate/funding/](http://warwick.ac.uk/wamic/integrate/funding/)

**EPSRC**

Engineering and Physical Sciences  
Research Council



# Pump Priming Fund— 2(/~10) funded so far

*“Infection in a Microfluidic Channel” WMS/Physics*

Application submitted Apr 16; Funding obtained May 16

- **Up to £25K**

## Assessment criteria:

- Interdisciplinary, with a strong involvement of EPS-remit sciences
- Novelty of idea, relationship to the AMR research context and timeliness
- Appropriateness of proposed methodology and costing

[warwick.ac.uk/wamic/integrate/funding/](http://warwick.ac.uk/wamic/integrate/funding/)

# Seminars/Workshops – Funding and Help Available

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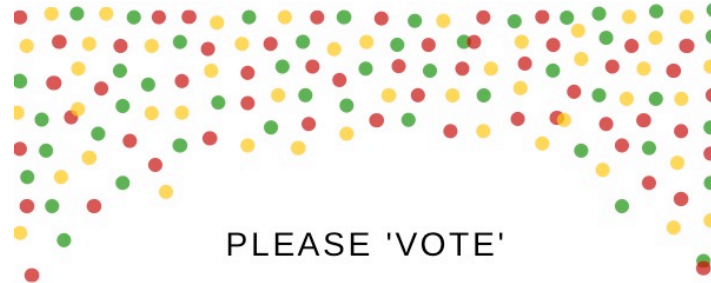
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INTEGRATE  
ANTIMICROBIAL RESISTANCE

## DO YOU HAVE AN AMR-RELATED EVENT IDEA?

Up to £1000 & admin support  
to organise workshops, seminars,  
public engagement etc.

Find out more:  
[warwick.ac.uk/WAMIC/integrate/funding](http://warwick.ac.uk/WAMIC/integrate/funding)

Queries:  
[c.nair@warwick.ac.uk](mailto:c.nair@warwick.ac.uk)



## WOULD YOU ATTEND A SEMINAR ON ANY OF THESE TOPICS?



Very  
Interested



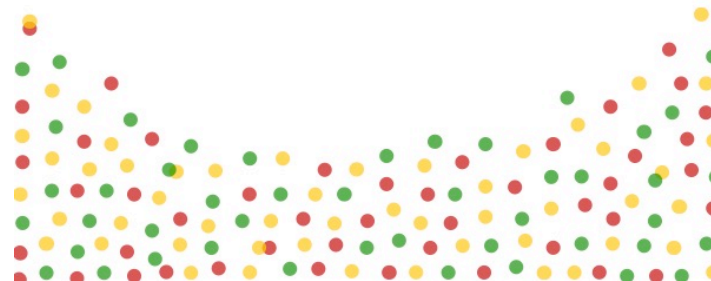
Somewhat  
Interested



Not very  
interested



Not  
Interested at all



# Thank you – Any Questions?

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Search Warwick

Warwick AMR - Warwick Antimicrobial Interdisciplinary Centre

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Shining a light on antimicrobial targets

INTEGRATE AMR Early Career Fellow Namrita Modjil is incorporating fluorescence into the bacterial cell wall.

Read more about Namrita's project

INTEGRATE

EPSC-funded project "Bridging the Gaps - EPS and AMR"; (Physics, Mathematics, Life Sciences, Engineering, Chemistry, Medicine)

SWON ALLIANCE

MRC-funded project "Mechanistic Understanding of Bacterial Cell Walls"; (Sheffield, Warwick, Oxford, Newcastle)

Researchers at the University of Warwick are tackling antimicrobial resistance (AMR) by **integrating expertise across disciplines**

Funding Opportunities

INTEGRATE AMR funding calls now open to all University of Warwick staff

Early Career Fellowships, Visiting Fellowships, Pump Priming...

Find out More

Forum

Join the discussion. Share good news, post articles, request expertise or equipment.

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Life Sciences

Life Sciences

	<b>Dr Corinne Smith</b>	Structure and mechanism of clathrin coated vesicle formation during clathrin-mediated endocytosis using a range of structural and biophysical techniques	Management Physics
	<b>Dr David Roper</b>	Structural biology, principally X-ray structural determination, in combination with molecular biology and biochemical approaches, to investigate the molecular basis of microbial physiology	Chemistry Medicine Mathematics
	<b>Dr Elizabeth Fullam</b>	<i>Mycobacterium tuberculosis</i> sugar metabolism; biochemistry, structural biology, chemistry and microbiology techniques	Life Sciences Engineering
	<b>Professor Christopher Dowson</b>	Antibiotic resistance, bacterial pathogenicity and population genetics	
	<b>Dr Yin Chen</b>	Microbial diversity, genetics and biochemistry of microorganisms involved in methylated amine and quaternary amine metabolism	
	<b>Professor Laura Green</b>	Statistical and mathematical approaches to understanding the biology and control of diseases in farmed animals; translating research into practice.	
	<b>Dr Alex Cameron</b>	Dynamic membrane proteins; X-ray crystallography in combination with other biochemical and biophysical techniques	
	<b>Dr Adrian Lloyd</b>	Antimicrobial targets	

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