

Welcome to the ARLG Newsletter! Here, you will receive important updates from ARLG regarding recent events, grants, publications, and the committees that help us work toward our mission: to prioritize, design, and execute clinical research that will impact the prevention, diagnosis, and treatment of infections caused by antibiotic-resistant bacteria.

Get Involved with ARLG

ARLG continuously accepts proposals for clinical studies designed to prevent, diagnose, treat, or eradicate antibiotic-resistant bacterial pathogens. We also award grants and fellowships to qualified investigators. If you are interested in getting involved with ARLG, apply now or contact us for more information.

[Submit a Proposal](#)

[Contact Us](#)

ARLG Announces New ESI Award Opportunity!

We have big news! ARLG has added a new opportunity for early stage investigators (ESI) called the **Early Faculty Seedling Award**. In addition to providing salary support and research funding, the new opportunity is open to a wide range of applicants.

The Early Faculty Seedling Award provides 50% of current salary support per year to conduct protected research for up to two years and up to \$25,000 in direct costs for research over the two years.

Infectious diseases fellows at the 4th or 5th year of fellowship are eligible to apply for the new award as well as individuals with an MD or non-MD PhD in any discipline with a faculty appointment of less than five years.

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Fellowship Named in Honor of John G. Bartlett



January 2021 brought news of the [passing of John Bartlett, MD](#), who was a mentor, colleague, and friend to many. In the initial years of our grant, he played a fundamental role in building ARLG and made significant contributions to our [mentoring program](#). As a tribute to his leadership and legacy, we have given our fellowship program a new name, the Dr. [John G. Bartlett ARLG Fellowship](#).

John's early work to design and lead the ARLG Mentoring Committee stemmed from his dedication to support early career researchers and sustain ongoing exploration into the threat of antibacterial resistance. The program has now provided development opportunities to more than 45 mentees, and it continues to grow.

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ARLG Spotlight: Daria Van Tyne

About my role in the ARLG

I received an early-stage investigator award from ARLG to isolate and characterize bacteriophages that can target antibiotic-resistant gram-negative bacteria, like *P. aeruginosa*, *Enterobacter* spp., *E. coli*, and *K. pneumoniae*. I have a PhD, which makes my role a bit different from other ARLG researchers. Even though I am not a medical doctor, I work closely with physicians on research that directly informs treatment courses for patients.



Daria Van Tyne, PhD
Assistant Professor of Medicine
Division of Infectious Diseases
University of Pittsburgh School of Medicine

About my research

The looming threat of antibiotic resistance has driven a renewed interest in the potential utility of bacteriophages (also called phages) to treat drug-resistant bacterial infections. Because phages can be very specific for the bacteria they will target, we need to find and study many different phages to find the ones that will be most useful for treating antibiotic-

resistant infections in patients.

Impact of ARLG mentoring and funding on my career

ARLG support has allowed my lab to build libraries of phages that are available for screening against clinical bacterial isolates from infected patients. We now receive periodic phage screening requests from our physician colleagues, and are working to develop tailored phage cocktails for patients we think might benefit from phage therapy. I have also become involved in the ARLG-sponsored PHAGE trial, which has given me valuable exposure to the process of planning and running a clinical trial.

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News

Herman Goossens Receives ESCMID Award and Presents Keynote on the Importance of Collaboration

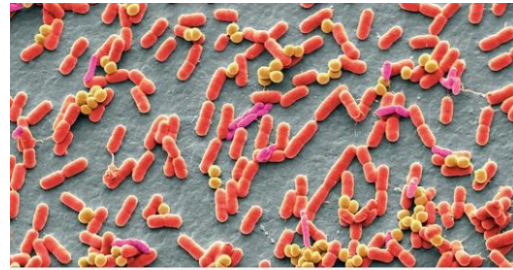
The European Society of Clinical Microbiology and Infectious Diseases (ESCMID) selected [Prof. Herman Goossens](#) (University of Antwerp, Antwerp, Belgium) to receive its most prestigious award, the ESCMID Award for Excellence in Clinical Microbiology and Infectious Diseases 2020. At the recent European Congress of Clinical Microbiology & Infectious Diseases (ECCMID) 2021 online conference, Prof. Goossens presented his keynote recipient lecture and accepted his award, which was delayed due to last year's COVID-19 cancellations.

His keynote presentation titled “Transcending European clinical research in infectious diseases through collaboration to break down traditional silos” outlined difficulties in the EU COVID-19 clinical research response and highlighted the need to focus on partnerships and clinical trial networks to streamline research. The alliance between [ARLG and COMBACTE](#) is one example of this type of collaboration and correlates to Prof. Goossens' work as vice-chair of the European Clinical Research Alliance on Infectious Diseases ([ECRAID](#))-Base and the coordinator of The Platform foR European Preparedness Against (Re-) emerging Epidemics ([PREPARE](#)).

[Read more](#)

WebMD Article Features Vance Fowler and Tori Kinamon

A July WebMD article titled “Antimicrobial Resistance Threat Continues During COVID” highlighted commentary from Vance Fowler, MD, and Tori Kinamon, MD Candidate at the [Duke University School of Medicine](#), and recipient of the [FDA Antibacterial Drug Resistance \(DOOR\) Fellowship](#).



WEBMD.COM
Antimicrobial Resistance Threat Continues During COVID
The COVID-19 pandemic may have temporarily shifted the focus away from...

The input came from an online media briefing sponsored by the Infectious Diseases Society of America (IDSA) the previous day and formed the foundation of the article’s content.

[Read more](#)

DICON Summary of Results Now Available!

SUMMARY OF RESULTS



The Antibacterial Resistance Leadership Group (ARLG) funds, designs, and conducts clinical research that will help prevent, diagnose, and treat infections caused by bacteria that are resistant to antibiotics.

The ARLG, along with the team of study doctors, scientists, and researchers, are pleased to describe the results from a study focused on antibiotic review strategies in community hospitals to prevent overuse of antibiotics.

WHAT IS THE STUDY TITLE?
Stewardship Interventions in Duke Infection Control Outreach Network (DICON) community hospitals

WHY WAS THIS RESEARCH DONE?
Community hospitals in the United States have high rates of antibiotic use. Overuse of antibiotics results in infections by drug-resistant bacteria, also called “superbugs,” which can lead to deaths and increased hospital costs. To prevent antibiotic overuse, the Infectious Diseases Society of America recommends that hospitals implement antibiotic review strategies. Community hospitals usually do not have the resources or staff training to routinely review antibiotic therapies. This study was done to understand if community hospitals could put in place an antibiotic review strategy if the appropriate training is provided to the pharmacist staff.

WHAT IS THE PURPOSE OF THE RESEARCH?
The purpose of this study was to learn if antibiotic review strategies could be put in place in community hospitals.

WHY IS THIS RESEARCH IMPORTANT?
Including an antibiotic review strategy into clinical practice can improve how antibiotics are prescribed and ultimately improve how patients with infections do.

WHEN DID THE RESEARCH TAKE PLACE?
October 2013 – October 2014

Changes to your healthcare should not be made based on information in this summary without first consulting a doctor. If you have questions about these results, speak with your doctor.



The Stewardship Interventions in Duke Infection Control Outreach Network (DICON) community hospitals summary of results is now available. The purpose of this study was to learn if antibiotic review strategies could be put in place in community hospitals. This research shows that community hospitals can implement antibiotic review strategies. These review strategies can increase the interaction between pharmacists and clinicians, which may provide additional opportunities to guide the appropriate use of antibiotics.

[Read More](#)

Events and Deadlines

ECCMID 2021 On Demand



Did you miss the [European Congress of Clinical Microbiology & Infectious Diseases \(ECCMID\) 2021](#)? On demand access is now available for all sessions. Keep an eye out for sessions from ARLG's leaders and experts discussing the latest AMR topics.

[Learn more](#)

Connect at IDWeek 2021

Stay tuned! IDWeek 2021 will be here before you know it. This year's event will happen September 29-October 3, 2021 and will offer access to networking and collaborative opportunities with ARLG thought leaders and other experts in infectious diseases. The annual meeting will give participants a chance to learn from one another, while working to improve public health and patient care.

[Learn more](#)



Study Milestones

[View recent ARLG study updates.](#)

COMBINE

AVYCAZ[®] in COMBINation
with Aztreonam

Data analysis

GENO-SMART

GENOmics, Susceptibility,
Clinical Epidemiology
and **Met**agenomics
of **Antibiotic Resistance Tool**

Data analysis

MDRO: SHREC

MDRO: **Study of Highly Resistant Escherichia coli**

Enrollment complete

PHAT

Isolation and
characterization of
lytic **PH**Ages that **T**arget
MDR bacteria

Data analysis

Go to the ARLG Studies page for more milestones and updates!

[Learn More](#)



Recent Publications

View the following recent ARLG publications.

Modlin C, Howard-Anderson J, Greer A, Marchioli C, Waller E, Mehta A, Burd E, Kraft CS, Babiker A. Photo Quiz: Strength in Numbers—a Disseminated Infection Causing Shortness of Breath. *J Clin Microbiol.* 2021 Apr 20;59(5):e01316-20. doi: 10.1128/JCM.01316-20.

Tsalik EL, Henao R, Montgomery JL, Nawrocki JW, Aydin M, Lydon EC, Ko ER, Petzold E, Nicholson BP, Cairns CB, Glickman SW, Quackenbush E, Kingsmore SF, Jaehne AK, Rivers EP, Langley RJ, Fowler VG, McClain MT, Crisp RJ, Ginsburg GS, Burke T, Hemmert AC, Woods CW; and the Antibacterial Resistance Leadership Group. Discriminating Bacterial and Viral Infection Using a Rapid Host Gene Expression Test. *Crit Care Med.* 2021 Apr 28. doi: 10.1097/CCM.0000000000005085. Online ahead of print.

King HA, Doernberg SB, Grover K, Miller J, Oakes M, Wang T-W, McFatrigh M, Ruffin F, Staman K, Sund Z, Bosworth HB, Reeve BB, Fowler VG Jr., Holland TL; on behalf of the Antibacterial Resistance Leadership Group. Patients' Experiences with *Staphylococcus aureus* and Gram-Negative Bacterial Bloodstream Infections: Results of Cognitive Interview Phase to Inform Measurement of Patient-Reported Quality of Life. *Clin Infect Dis.* 2020 May 23;ciaa611. doi: 10.1093/cid/ciaa611. Online ahead of print.

Goldberg JA, Kumar V, Spencer EJ, Hoyer D, Marshall SH, Hujer AM, Hujer KM, Bethel CR, Papp-Wallace KM, Perez F, Jacobs MR, van Duin D, Kreiswirth BN, van den Akker F, Plummer MS, Bonomo RA. A γ -lactam siderophore antibiotic effective against multidrug-resistant *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, and *Acinetobacter* spp. *Eur J Med Chem.* 2021 Aug 5;220:113436. doi: 10.1016/j.ejmech.2021.113436. Epub 2021 Apr 8.

Coming soon! Wang M, Earley M, Chen L, Hanson B, Yu Y, Liu Z, Salcedo S, Cober E, Li L, Kanj S, Gao H, Munita J, Ordoñez K, Weston G, Satlin M, Valderrama S, Marimuthu

K, Stryjewski ME, Komarow L, Luterbach C, Marshall S, Manca C, Paterson DL, Reyes J, Villegas MV, Evans S, Hill C, Arias R, Baum K, Fries BC, Doi Y, Patel R, Kreiswirth BN, Bonomo RA, Chambers HF, Fowler Jr VG, Arias C, van Duin D. Clinical Outcomes and Bacterial Characteristics of Carbapenem-Resistant *Klebsiella pneumoniae* complex among Patients from Different Global Regions (CRACKLE-2): a Prospective Cohort Study. *Lancet Infect Dis*.