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

News

Helen Boucher Awarded IDWeek 2022 Maxwell Finland Lecture

ARLG investigator, Executive Committee Member, and Innovations Working Group Chair, Helen Boucher, MD, FACP, FIDSA, presented this year’s Maxwell Finland Lecture during IDWeek 2022 in Washington, D.C. Her presentation, “Running to Stand Still: Progress and Perils with AMR”, highlighted the key drivers of antimicrobial resistance and the potential incentives of drug and diagnostic development to treat and detect antimicrobial-resistant infections.

Dr. Boucher is the director of the Tufts Center for Integrated Management of Antimicrobial Resistance and the director of the Infectious Diseases Fellowship Program at Tufts Medical Center.

The Maxwell Finland Lecture is awarded annually to experts who have contributed to the areas of bacterial pathogenesis, antimicrobial agents, emerging infections, and hospital-acquired infections. Dr. Boucher's lecture is available OnDemand now through March 2023.
ARLG Mentee Spotlight: Maria Fernanda Mojica

Maria Fernanda Mojica, MSC, PhD
Senior instructor
Dept. of Molecular Biology and Microbiology
Case Western Reserve Univ. School of Medicine

About my role in the ARLG

I received an Early Stage Investigator (ESI) Seed Grant to define the mechanisms of resistance to a novel carbapenem, by providing fundamental biochemical and microbiological information about the interaction of this carbapenem with relevant β-lactamases.

Receiving the ESI Seed Grant bolstered my confidence and reinforced my desire to continue on the academic path. It has been a terrific learning experience on all fronts. Being the PI of a grant trained me in the administrative duties you are seldom aware of when you are not in that position. This award also helped me transition to a faculty position. In my role as an operational representative, I work to reinforce the importance of ethical clinical research practices in all stages of the project lifecycle, from planning to execution, participate in literature reviews, and develop and implement tools to be used at the operational level.

About my research

Antimicrobial resistance (AMR) is a major public health threat that requires coordinated efforts to counteract its spread and development. These efforts include antimicrobial stewardship, developing novel agents, and global surveillance of resistance mechanisms.

In line with these efforts and the ARLG’s scientific agenda and mission, this project evaluates a novel carbapenem, against the most common β-lactamases in the United States. It also assesses the efficacy of this agent, combined with different β-lactamase inhibitors, as potential treatments for infections caused by multidrug-resistant Gram-negative bacilli.

Why is this research important?

β-lactams are the cornerstone of antibiotic therapy, and β-lactamases are the main resistance mechanisms to these antibiotics. Antimicrobial resistance is a natural process; hence, the emergence of β-lactamases with improved characteristics that confer better chances of survival to the bacteria is expected.

In this scenario, the development of β-lactamase inhibitors has been instrumental in preserving the efficacy of otherwise obsolete molecules. By studying the mechanism by which these enzymes interact with β-lactams, we can design sturdier β-lactams and, importantly, more efficient inhibitors.
2022 Bartlett ARLG Fellowship Deadline

Don’t miss your chance! The Dr. John G. Bartlett ARLG Fellowship is currently open for submission, but the December 31 deadline is just around the corner.

This opportunity includes salary for up to two years, mentoring from ARLG senior leaders, and training in epidemiology or statistics from the Duke University School of Medicine Clinical Research Training Program or an equivalent program at another institution. Fellows also receive training in confidentiality, patient safety, and regulatory affairs as well as access to ARLG’s Biorepository bacterial strains to support research initiatives.

Fellows interested in training with leading infectious diseases experts for a career in AMR research can get more information at arlg.org/fellowships. Use the “Apply Now” button to submit your application before the deadline on December 31.

From Data to Delivery ARLG Has You Covered

As part of our mission to support research and combat the threat of antimicrobial resistance, ARLG provides resources that may help researchers improve their data, access specific bacterial strains, or secure funding for innovative study ideas. Learn more about each type of resource below.

Concept Proposal
ARLG accepts proposals for novel clinical studies that require funding or other resource support. Investigators who have some external funding available may submit requests for partial funding.

Proposed studies must prioritize gram-negative infections, gram-positive infections, and/or diagnostics. Ideal candidates for concept proposals:

- Have the potential to transform medical practice by improving use of antibiotics
ARLG Study Data Request
ARLG advances clinical research and scientific knowledge by sharing final data generated from NIH-supported studies with researchers to help further their study initiatives. The data can include information from single or combined studies.

Data Analysis Request
Researchers with a novel research idea can request to have the Statistical Data Management Center (SDMC) perform an analysis on data from an ARLG study or studies.

Bacterial Strain Request
ARLG’s Laboratory Center manages a biorepository of clinical study isolates and well-characterized gram-positive and gram-negative bacterial isolates from published manuscripts. Researchers can request bacterial isolate strains to develop diagnostic tests and novel antimicrobial compounds or to conduct studies evaluating mechanisms of resistance.

Get more information about these resources and how to request them.

Learn more

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STAR Study Summary Now Available!

A lay summary of results has been posted for the Short-course Therapy and the Antibiotic Resistome (STAR) research study.

The goal of the STAR study was to learn more about the side effects and duration of antibiotic treatment for community-acquired pneumonia (CAP) in children. Because CAP is one of the most common serious infections in children, it is typically treated with 10 days of antibiotics. Researchers would like to learn whether shorter treatment plans are as effective. If so, this could potentially help decrease and combat the problem of antibiotic resistance.

Read More

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Events
ARLG at IDWeek 2022

On October 19, IDWeek 2022 officially kicked off another great event that featured 140 scientific sessions on a variety of interesting subjects. Many of ARLG’s top leaders and experts were on hand discussing the latest AMR topics.

You can view sessions, abstracts, or exhibits you may have missed with OnDemand access available now through March 2023.

Be sure to see this year’s Maxwell Finland Lecture delivered by ARLG investigator, Executive Committee Member, and Innovations Working Group Chair, Helen Boucher, MD, FACP, FIDSA. Use the ARLG guide to find more exciting sessions and posters you won’t want to miss.

Learn more

ARLG Grand Rounds 2022

Tune in for ARLG’s 2022 upcoming Grand Round Series. This year will feature an exciting variety of speakers and topics. Don’t miss the next event:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
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<tbody>
<tr>
<td>November 4, 2022</td>
<td>Considerations for the Clinical Use of Phage Therapy, a Report from the ARLG Phage Task Force</td>
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You can check out ARLG’s event page for ongoing updates about each session and how to attend.

Learn more
### Study Milestones

View recent ARLG study updates.

<table>
<thead>
<tr>
<th>Study</th>
<th>Description</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOTS</td>
<td>Dalbavancin as an Option for Treatment of S. aureus Bacteremia</td>
<td>&gt;50% Enrolled</td>
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<tr>
<td>REPORT-ABC</td>
<td>Rapid REPORTing of Antimicrobial resistance from Blood Cultures</td>
<td>Analysis Complete</td>
</tr>
<tr>
<td>SCENE</td>
<td>Screening for Colonization with Resistant Enterobacterales in Neutropenic Patients with Hematologic Malignancies</td>
<td>Analysis Complete</td>
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<td>MASTER RADICAL</td>
<td>Master Protocol-Rapid Diagnostics in Categorizing Acute Lung Infections</td>
<td>75% Enrolled</td>
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<tr>
<td>RADICAL 510(k)</td>
<td>Rapid Diagnostic in Categorizing Acute Lung Infections</td>
<td>Study Design</td>
</tr>
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Go to the ARLG Studies page for more milestones and updates!

### Recent Publications

View the following recent ARLG publications.


Moore K, Lautenbach E, Blumberg EA, Han J, Heun Lee D, Clauss H, Hasz R, Bilker WB,


