ARLG
Antibacterial Resistance Leadership Group

April 30, 2020
Q2 Newsletter

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.

Apply for a Grant | Contact Us

Shape the Future of AMR Research

Please take a five-minute survey to help the ARLG, in partnership with the IDSA, identify the top research priorities in the following areas:

1) Gram-negative bacterial infections
2) Gram-positive bacterial infections
3) Diagnostics

Your input will help the ARLG prioritize questions that are most important to the ID community. We appreciate that IDSA has advocated for the creation and sustained funding of the ARLG to shape a strategic research plan on antibacterial infections—a high priority for IDSA.

Let your voice be heard before the survey closes at 12:00 PM (EST) on May 6, 2020.

Take Survey

Results of CRACKLE-2 Study Now Available

The World Health Organization (WHO) prioritizes carbapenem-resistant Enterobacterales (CRE) as one of the top three multidrug-resistant pathogens threatening global health today. A previous single-center study provided some evidence that carbapenemase-producing Enterobacterales (CPE), a subset of CRE, was linked with increased morbidity over non-carbapenemase-producing Enterobacterales (non-CPE).

In an effort to provide much needed clinical and epidemiological data, researchers designed the recently published [Epub ahead of print]. CRACKLE-2 study as an observational, multi-center study involving data from 1,040 patients with Centers for Disease Control (CDC) defined CRE. The study's primary outcome measure was desirability of outcome ranking (DOOR) at 30 days after index culture.

In addition to providing clinical and whole genome sequencing data for a cohort of CRACKLE-2 study patients, researchers identified a novel subset of CDC-defined CRE. Patient outcomes for infections of all three subsets were similar. This indicates interventional efforts directed only to CPE might be less effective than hoped.

Read More

ARLG SPOTLIGHT

Larissa Grigoryan, MD, PhD
Assistant Professor
Family and Community Medicine
Baylor College of Medicine

About my role in ARLG

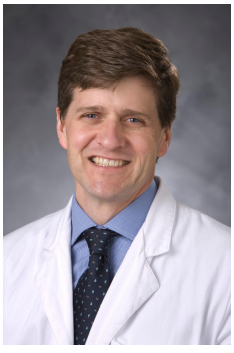
I am a recipient of an Early Stage Investigator Seed Grant from ARLG on creating an outpatient-specific antibiogram to guide treatment for urinary tract infections (UTI).

My colleagues and I have long wondered whether the antibiograms obtained based on mostly hospitalized or emergency room patients are relevant to women we see in our primary care clinics for uncomplicated cystitis. We received ARLG funding to answer this exact question, creating a strain collection from all patients walking into two of our primary care clinics with acute cystitis.

Read More

Awards

Duke University School of Medicine Honors Vance Fowler with Distinguished Professorship



Vance Fowler, MD, MHS

AAC Names Cesar Arias New Editor in Chief

Cesar Arias, MD, PhD

Duke University School of Medicine awarded Vance Fowler, MD, MHS, the Florence McAlister Distinguished Professor of Medicine in 2020.

Distinguished professorships recognize both exceptional achievement and the potential for future achievement. They are awarded to the most distinguished faculty who have demonstrated extraordinary scholarship in advancing science and improving human health.

Read more here.

The Antimicrobial Agents and Chemotherapy (AAC) journal announced that Cesar Arias, MD, PhD, will take on the role of editor in chief beginning in July 2020.

Dr. Arias is an ARLG Laboratory Consortium team member as well as an internationally-recognized researcher on antibiotic resistance.

Read more here.

News

ARLG Members Stand up to Superbugs

In February, ARLG investigators Ritu Banerjee, M.D., Ph.D., Melinda Pettigrew, Ph.D., and committee member Kerry LaPlante, Pharm.D., gathered in Washington D.C. as ambassadors of PEW Charitable Trust's annual Stand Up to Superbugs initiative.

Read more about the initiative here.

IDWeek Submissions Deadline Extended

Due to the COVID-19 outbreak, IDWeek announced that the deadline for regular abstract, case, and travel awards has been extended until Thursday, June 18, 2020. A new COVID-19 category has also been added for regular and late-breaker submissions.

For more information, visit IDWeek.org/abstracts.

Recent Publications

View the following recent ARLG publications.

van Duin D, Arias CA, Komarow L, Chen L, Hanson B, Weston G, Ostrowsky B, Cober E, Richter SS, Garner OB, Jacob JT, Satlin MJ, Fries BC, Garcia-Diaz J, Doi Y,Dhar S, Kaye KS, Desai S, Kim A, Gallagher JC, Salata RA, Han JH, Wortmann G, Abbo L, Patel R, Wong D, Patel G, Anderson DJ, Kalayjian RC, Grant M, Munoz-Price LS, Eilertson B, Farrell JJ, Eiras DP, Earley M, Lok J, Marshall S, Rudin, Domitrovic TN, Hujer AM, Hujer KM, Perez F, Dinh A, Shropshire W, Panesso D, Tran TT, Manca C, Mediavilla JR, Wang M, Paterson DL, Banerjee R, Evans S, Hill C, Arias R, Chambers HF, Fowler VG, Kreiswirth BN, Bonomo RA. Molecular and clinical epidemiology of carbapenem-resistant Enterobacterales in the USA (CRACKLE-2): a prospective cohort study. Lancet Infect Dis. 2020 Mar 6. pii: S1473-3099(19)30755-8. doi: 10.1016/S1473-3099(19)30755-8. [Epub ahead of print].

Turner N, Anderson DJ. Hospital Infection Control: Clostridioides difficile. Clin Colon Rectal Surg. 2020 Mar;33(2):98-108. doi: 10.1055/s-0040-1701234. Epub 2020 Feb 25.
Fida M, Cunningham SA, Murphy MP, Bonomo RA, Hujer KM, Hujer AM, Kreiswirth BN, Chia N, Jeraldo PR, Nelson H, Zinsmaster NM, Patel R; and the Antibacterial Resistance Leadership Group. Core Genome MLST and Resistome Analysis of Klebsiella pneumoniae Using a Clinically-Amenable Workflow. Diagn Microbiol Infect Dis. 2020 May;97(1):114996. doi: 10.1016/j.diagmicrobio.2020.114996. Epub 2020 Jan 21.

Anesi JA, Lautenbach E, Tamma P, Thorn K, Blumberg EA, Alby K, Bilker WB, Werzen A, Tolomeo P, Omorogbe J, Pineles L, Han JH. Risk factors for extended-spectrum beta-lactamase-producing Enterobacterales bloodstream infection among solid organ transplant recipients. Clin Infect Dis. 2020 Feb 28. pii: ciaa190. doi: 10.1093/cid/ciaa190. [Epub ahead of print].

Adamson PC, Pandori MW, Doernberg SB, Komarow L, Sund Z, Tran TTT, Jensen D, Tsalik EL, Deal CD, Chambers HF, Fowler VG, Evans SR, Patel R, Klausner JD; for the Master GC Study of the Antibacterial Resistance Leadership Group. Analytical evaluation of the Abbott RealTime CT/NG Assay for detection of Chlamydia trachomatis and Neisseria gonorrhoeae in rectal and pharyngeal swabs. J Mol Diagn. 2020 Apr 2. pii: S1525-1578(20)30074-X. doi: 10.1016/j.jmoldx.2020.03.004. [Epub ahead of print].

Amoah J, Stuart EA, Cosgrove SE, Han JH, Harris AD, Lautenbach E, Tamma PD. Comparing Propensity Score Methods versus Traditional Regression Analysis for the Evaluation of Observational Data: A Case Study Evaluating the Treatment of Gram-Negative Bloodstream Infections. Clin Infect Dis. 2020 Feb 18. pii: ciaa169. doi: 10.1093/cid/ciaa169. [Epub ahead of print].