

# Christopher D. Doern, MD, PhD

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Director of Clinical Microbiology  
Associate Professor of Pathology  
Department of Pathology  
Virginia Commonwealth University

## Licenses & Certifications

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### *Certification*

2010 – Present      American Board of Medical Microbiology

## Education

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### *Postdoctoral Education*

Medical and Public Health Microbiology Fellowship  
Washington University in St. Louis, School of Medicine, St. Louis, MO

### *Graduate Education*

PhD, Microbiology and Immunology  
Wake Forest University School of Medicine, Winston-Salem, NC

### *Undergraduate Education*

Wake Forest University, Winston-Salem, NC

## Hospital Appointments

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2018 – Present	Director of Clinical Microbiology, VCU Medical Center, Richmond, VA
2016 – Present	Consultant Director of Clinical Microbiology, Hunter-Holmes McGuire Veterans Administration Hospital, Richmond, VA
2013 – 2017	Associate Director of Clinical Microbiology, VCU Medical Center, Richmond, VA
2010 – 2013	Director of Clinical Microbiology, Children’s Medical Center of Dallas, Dallas, TX

## Academic Appointment History

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2018 – current	Affiliate appointment as Associate Professor of Pediatrics at Virginia Commonwealth University Medical Center on the Medical College of Virginia Campus, Richmond, VA
2018 – current	Associate Professor of Pathology at Virginia Commonwealth University Medical Center on the Medical College of Virginia Campus, Richmond, VA
2013 – 2018	Assistant Professor of Pathology at Virginia Commonwealth University Medical Center on the Medical College of Virginia Campus, Richmond, VA
2010 – 2013	Assistant Professor of Pathology with a joint appointment in Pediatrics at the University of Texas Southwestern Medical Center, Dallas, TX (Clinical Tenure Track)

## Visiting Professorships

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- 2021 PennState Health, Milton S. Hershey Medical Center, Hershey, PA
- 2012 Washington University School of Medicine, St. Louis, MO
- 2014 University of Pennsylvania, Children's Hospital of Philadelphia, Philadelphia, PA

## VCU Service

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<b>Year(s)</b>	<b>Name of Committee</b>	<b>Institution/Organization</b>
2021 – Present	CAUTI Working Group	VCU Medical Center
2020 – Present	EPIC Microbiology Integration Committee Chair	VCU Medical Center
2020 – Present	Julie Reznicek – Promotion and Tenure Committee	VCU Medical Center
2020 – Present	COVID-19 Task Force	VCU Medical Center
2017 – 2019	Co-Chair – Clinical Pathology Research Committee	VCU Medical Center Pathology
2018	Associate Director for Microbiology Position Search Committee	VCU Medical Center Pathology

## Professional Organizations

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American Society for Microbiology

Southwestern Association for Clinical Microbiology

## Professional Service (current)

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2020 – Present	Virginia COVID-19 Testing Committee, Co-chair; Virginia Health and Hospital Association (VHHA)
2020 – Present	Virginia Governor’s COVID-19 Testing Advisory Council, Member
2020 – Present	Virginia Governor’s COVID-19 Testing Advisory Council Testing Technology Subcommittee, Co-chair
2020 – Present	Virginia Governor’s COVID-19 Testing Advisory Council Analytics and Reporting Subcommittee, Co-chair
2020 – Present	Virginia Governor’s COVID-19 Testing Advisory Council – Testing Capacity Subcommittee, Co-chair
2019 – Present	Antibacterial Resistance Leadership Group (ARLG), Pediatric Working Group
2019 – Present	Antibacterial Resistance Leadership Group (ARLG), Diagnostics Committee
2015 – Present	American Board of Medical Microbiology Board, Member; American Society for Microbiology
2015 – Present	CLSI M02-M07 Document revision committee, Recording Secretary; Clinical and Laboratory Standards Institute
2014 – Present	CLSI M58 MALDI-TOF MS Working Group, Member; Clinical and Laboratory Standards Institute
2012 – Present	Clinical Laboratory Practices Committee, Member; American Society for Microbiology
2011 – Present	Clinical Chemistry Trainee Council Executive Board, Member; American Association of Clinical Chemistry

## Recent Invited Presentations

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### *International*

2017 Advancing Clinical Microbiology with MALDI-TOF MS: From implementation to Beta-Lactamase Testing, Symposium, Laboratory Medicine Congress and Expo, Korean Society of Laboratory Medicine 58th Annual Meeting; Seoul, Republic of Korea

### *National*

2021 Diagnostic Clinical Cases, Expert Panel, Infectious Disease Society of America (IDSA) Annual Meeting (ID Week), Virtual

2021 Test Your Clinical Laboratory Smarts: Question of the Day Returns! – Part 1 and Part 2 Symposium, World Microbe Forum – ASM Annual Meeting, Virtual

2021 Micro-management: Using Diagnostic Stewardship to Improve Pediatric Care, Symposium, Pediatric Academic Societies Annual Meeting: Virtual

2020 Diagnostic Clinical Cases, Expert Panel; Infectious Disease Society of America (IDSA) Annual Meeting (ID Week), Virtual

2019 Battle of the Brains: Clinical Microbiology and ID Trivia Competition, Symposium; Microbe – ASM Annual Meeting, San Francisco, CA

2019 Moderator: Understanding Changes in Multiplex Testing  
Reimbursement: The Ship has sailed, how do we move forward?  
Symposium; Microbe – ASM Annual Meeting, San Francisco, CA

2019 Connecting Industry to the Clinical Laboratory for Improved Patient Care, Symposium; Microbe – ASM Annual Meeting, San Francisco, CA

2019 Phenotypic Antibiotic Susceptibility Testing: From Monte-Carlo to the Bedside, Symposium; Next Generation Diagnostics Summit, Washington, DC

2019 Diagnostic Clinical Cases, Expert Panel; Infectious Disease Society of America (IDSA) Annual Meeting (ID Week), Washington, DC

- 2019 Putting Analytics to Useful Work, both in the Lab and in Collaborations with Caregivers: Successes, Some Setbacks, and Lessons Learned Symposium  
Laboratory Quality Confab, Atlanta, GA
- 2019 American Society for Microbiology Sponsored Lecture – Connecting Industry to the Clinical Laboratory for Improved Patient Care, Symposium; World Antimicrobial Resistance Congress, Washington DC
- 2019 Evaluating novel diagnostics for hospital use and uptake in the clinic– considerations for cost, personnel training, and microbiologist collaboration, Expert Panel; World Antimicrobial Resistance Congress, Washington DC
- 2019 Diagnostic Stewardship: Because you can't do everything for everyone, all the time. Symposium; Illinois Society for Microbiology, Chicago, IL

*Regional/Local*

- 2020 COVID-19: What we learned: Supply Chain and Laboratory Services; Symposium, Central Virginia Healthcare Executive Group, Virtual Event
- 2020 Microbiology Update: COVID-19 Testing and Future Directions; Grand Rounds, VCU Infectious Diseases, Grand Rounds, Richmond, VA
- 2020 COVID-19 Testing at VCUHS; Grand Rounds, Community Memorial Hospital, South Hill, VA
- 2019 Diagnostic Stewardship: Because you can't do everything for everyone, all the time; Symposium, Southwestern Association for Clinical Microbiology, Oklahoma City, OK
- 2019 Diagnostic Stewardship: Because you can't do everything for everyone, all the time; Symposium, Southeastern Association for Clinical Microbiology, Myrtle Beach, SC
- 2019 Cases in Emerging Infectious Diseases; Symposium, EG Scott Annual Microbiology Meeting, Newark, DE
- 2019 Implementation of C. difficile two-step algorithm testing Grand Rounds; VCU Infectious Diseases, Grand Rounds, Richmond, VA

- 2018 Expert Panel Symposium; VCU Health 3rd Annual Infection Prevention Conference
- 2018 Uphill both ways: The History of Clinical Microbiology; Symposium, Virginia Society of Clinical Laboratory Sciences Annual Meeting, Richmond, VA
- 2018 Antimicrobial Resistance and Susceptibility Testing: Pre-Ramble to the Ramblings of an Older Microbiologist; Symposium, First Coast IC/CM: 25th Annual Meeting, Jacksonville, FL

## Recent Publications

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### *Peer Reviewed Publications*

1. Sann KZ, Vissichelli NC, Bryson AL, **Doern CD**, Mochel MC, Bearman G, Sastry S. Diffuse skin nodules in an oyster farmer: Disseminated Mycobacterium marinum. 2021. Am J Med. Jan. 134(1)
2. Doll ME, Pryor R, Mackey D, **Doern CD**, Bryson A, Bailey P, Cooper K, Godbout E, Stevens MP, Bearman G. Utility of retesting for diagnosis of SARS-CoV-2/COVID-19 in hospitalized patients: Impact of the interval between tests. 2020. Infect Control Hosp Epidemiol. July. 41(7)
3. Lau AF, Walchak RC, Miller HB, Slechta ES, Kamboj K, Riebe K, Robertson AE, Gilbreath JJ, Mitchell KF, Wallace MA, Bryson AL, Balada-Llasat JM, Bulman A, Buchan BW, Burnham CD, Butler-Wu S, Desai U, **Doern CD**, Hanson KE, Henderson CM, Kostrzewa M, Ledebouer NA, Maier T, Pancholi P, Schuetz AN, Shi G, Wengenack NL, Zhang SX, Zelazny AM, Frank KM. Multicenter Study Demonstrates Standardization Requirements for Mold Identification by MALDI-TOF MS. 2019. Front Microbiol. Sep 20. 10:2098
4. Bryson AL, Hill EM, **Doern CD**. Matrix-Assisted Laser Desorption/Ionization Time-of-Flight: The Revolution in Progress. Clin Lab Med. 2019. 39 (3): 391-404
5. Osei-Bonsu K, Masroor N, Cooper K, **Doern C**, Jefferson KK, Major Y, Adamson S, Thomas J, Lovern I, Albert H, Stevens MP, Archer G, Bearman G, Doll M. Alternative doffing strategies of personal protective equipment to prevent self-contamination in the health care setting. 2019. Am J Infect Control. 47(5). 534-539

6. Abbas S, Bernard S, Lee KB, Pakyz A, **Doern CD**, Doll M, Bearman G, Stevens MP. Rapid Respiratory Panel Testing: Impact of Active Antimicrobial Stewardship. 2019. *Am J Infect Control*. 47(2), 224-225
7. Gomez EJ, Roberts AL, Robinson DP, Alby K, Ledebor NA, **Doern CD**, Lander DW, Bearman G, Sullivan KV. 2107. Impact of Organism Identification Method on Central Line- Associated Bloodstream Infection Designation. *Infect Control Hosp Epidemiol*. Aug; 38(8)
8. Doll M, Masroor N, Major Y, **Doern C**, Stevens M, Flemming M, Cooper K, Bearman G. 2017. Patient level risk factors for Carbapenem-Resistant Enterobacteriaceae at a low prevalence tertiary care center in the United States. *Int J of Infect Dis*. December; 53
9. Nottingham M, Peterson G, **Doern C**, Doll M, Masroor N, Sanogo K, Stevens M, Bearman G. 2017. Ultraviolet-C light as a means of disinfecting anesthesia workstations. *American Journal of Infection Control*. April. In press
10. Campigotto A, Richardson SE, Sebert M, McElvania TeKippe E, Chakravarty A, **Doern CD**. 2016. Low Utility of the Pediatric Isolator Blood Culture System for the Detection of Fungemia in Children: A Ten Year Review. *J Clin Microbiol*. Sep;54(9):2284-7
11. Brown MK, Forbes BA, Stitley K, **Doern CD**. 2016. Defining the Clinical Significance of *Alloscardovia omnicolens* in the Urinary Tract. *J Clin Microbiol*. Jun;54(6):1552-6
12. Park JY, Dunbar KB, Mitui M, Arnold CA, Lam-Himlin DM, Valasek MA, Thung I, Okwara C, Coss E, Cryer B, **Doern CD**. 2016. *Helicobacter pylori* clarithromycin resistance and treatment failure are common in the United States. *Digestive Diseases and Sciences*. Aug;61(8):2373-80
13. **Doern CD**, Park JY, Gallegos M, Alspaugh D, Burnham CD. 2016. Investigation of Linezolid Resistance in Staphylococci and Enterococci. *J Clin Microbiol*. May;54(5):1289-94



*Editorials, Reviews, Commentaries, Invited Published Papers in Peer Reviewed Journals*

1. **Doern CD**. 2021. Review of AmpC Beta-Lactamases in the Enterobacterales – Answers to Common Questions
2. **Doern CD**. 2019. Fosfomycin Susceptibility Testing. Clinical Microbiology Newsletter. 42(4)
3. **Doern CD**. 2019. Implementation of Disk Diffusion Susceptibility Testing for Novel Antimicrobials. ASM Clinical Laboratory Practices Committee White Paper
4. Kraft A, Wiles A, **Doern CD**. 2018. Acid-Fast Bacteria in Disguise: Mycobacterium avium Complex in Purulent Exudate; Ultrasound Correlation. AJSP: Reviews and Reports. 23: 194- 196
5. **Doern CD**. 2018. The Slow March Toward Rapid, Phenotypic, Antimicrobial Susceptibility Testing: Are we there yet? J. Clin Microbiol. Feb 7. [Epub ahead of print]
6. Stultz JS, **Doern CD**, Godbout, E. 2016. Antibiotic Resistance in Pediatric Urinary Tract Infections Current Infectious Disease Reports. Dec;18(12):40
7. **Doern CD**. 2016. The Confounding Role of Antimicrobial Stewardship Programs in Understanding the Impact of Technology on Patient Care. Journal of Clinical Microbiology. 54(10), 2420-2423
8. **Doern CD**, Dunn JJ, McAdam AJ. 2016. Pediatric Clinical Microbiology: It's the Little Things. J Clin Microbiol. Jun;54(6):1412-3
9. **Doern CD** and Butler-Wu SM. 2016. Emerging and Future Applications of MALDI-TOF Mass Spectrometry in the Clinical Microbiology Laboratory: A Report of the Association for Molecular Pathology. Journal of Molecular Diagnostics. Nov;18(6):789-802
10. **Doern CD** and Richardson SE. 2016. Diagnosis of Urinary Tract Infections in Children. J Clin Microbiol. Sep;54(9):2233-42

### *Published Abstracts or Proceedings*

1. Direct-from-Urine AST: A comparison of MH and MacConkey Agars for Cefazolin, Nitrofurantoin, Trim-Sulfa, and Ciprofloxacin. M. Ribbon, J. Randolph, S. Hedrick, N. Taylor, L. Matthews, A. L. Bryson, **C. D. Doern**. ASM Microbe. San Francisco, CA, 2019
2. Evaluation of Microbiology Workflow without TLA: Bench Arrangement, Incubation Times, and Weekend Workflow. **C. D. Doern**, A. Ellis, K. Wieditz, H. Bateman, N. Taylor, A. L. Bryson. ASM Microbe. San Francisco, CA, 2019
3. Differentiating Non-Lactose Fermenting E. coli and Shigella spp. by XLD, Motility, and Lysine Decarboxylase Broth. N. Taylor, G. Weldearegay, E. Hill, C. Bender, **C. Doern**, A. Bryson. ASM Microbe. San Francisco, CA, 2019
4. Evaluation of Management Changes Associated with Direct Viral Respiratory Pathogen Panel Testing in Chronic Respiratory Diseases. Krones A, Vissichelli N, **Doern CD**, Orndahl C, Sima A, De La Cruz, O. Annual Chest Meeting. October 2018
5. Evaluating the Utility of Repeat Testing of Multiplex Respiratory Pathogen Panels from Nasopharyngeal Swabs: What is An Appropriate Cutoff? C. Salmon, C. Bender, **Doern CD**. 118th ASM Microbe Meeting. Atlanta, GA, 2018
6. Performance Evaluation of the Stomacher for Automated Grinding of Tissues for Bacterial and Fungal Culture. C. Muhumuza, A. Hill, **Doern CD**, R. Reed-Warren, S. Kannady, B. Forbes. 118th ASM Microbe Meeting. Atlanta, GA, 2018
7. Does the Antimicrobial Susceptibility Profile Change in Gram-Negative Bacteria Recovered from Patients Who Have Repeatedly Positive Blood Cultures? W. Lainhart, I. Shyu, C-A. D. Burnham, **Doern CD**. 118th ASM Microbe Meeting. Atlanta, GA, 2018

### *Books, Book Chapters & Monographs*

1. **Doern CD**. 2018. The Pocket Guide to Clinical Microbiology: 4th Edition. ASM Press. Pending publication
2. **Doern CD** Revell P. 2017. The Dark Art of the Blood Culture Textbook: Chapter: Pediatric Blood Cultures. ASM Press. Pending publication.
3. **Doern CD** and Forbes BA. 2016. Fundamentals of Bacteriology. Tietz Textbook of Clinical Chemistry and Molecular Diagnostics, 6th edition. Chapter 74. Pending publication.
4. **Doern CD**, Jerris RC, Gonzalez MD. 2016. Matrix Assisted Laser Desorption Ionization Time-of-Flight Mass Spectrometry for the Clinical Laboratory. MALDITOF in Microbiology and Molecular Biology. Pages 9-31. Horizon Scientific Press and Caister Academic Press.
5. **Doern CD** and Burnham CD. 2016. Selective Reporting and Antimicrobial Stewardship. Antimicrobial Stewardship: Principles and Practice. CAB International. Pages 110-123. Edited by LaPlante KL, Cunha CB, Morrill JH, Rice LB, Mylonakis, E.
6. **Doern CD**, Holfelder M. 2014. Automation and Laboratory Design. Manual of Clinical Microbiology 11th Edition. ASM Press. Pages 44-53. Edited by Jorgensen JH, Pfaller MA, Carroll KC, Funke G, Landry ML, Richter SS, Warnock DW.
7. **Doern CD**. 2013. Charting Uncharted Territory: A Review of the Validation and Implementation Process for Matrix Assisted Laser Desorption Ionization Time of Flight Mass Spectrometry (MALDI-TOF MS) for Organism Identification. Clinical Microbiology Newsletter. May; 35(9): 69-78
8. Burnham CD, **Doern CD**, Binder SR. 2013. Immunoassay Handbook, 4th Edition – Chapter 9.19: Viral Diseases. Elsevier Science. Edited by Wild D.
9. Burnham CD, **Doern CD**, Binder SR. 2013. Immunoassay Handbook, 4th Edition – Chapter 9.20: Bacterial Diseases. Elsevier Science. Edited by Wild D.
10. Glen T. Hansen, **Doern CD**. 2012. Management of Point of Care Testing,

2nd Edition. Clinical Laboratory Management. ASM Press. Edited by Garcia LS.

11. **Doern CD**, Sullivan K. Pediatric Microbiology. Pediatric Laboratory Medicine. McGraw Hill Education. 2017. Edited by Jones P, Dietzen D, Haymond S, Bennet M.

*Lay Press Interviews or Publications*

2021 – VCU News [VCU Medical Center lab testing for new strain of COVID-19](#)

2020 – VCU News [VCU Health Develops In-House Test COVID-19](#)

2020 – NBC12 [VCU Health develops test for COVID-19](#)

2020 – CBS6 News [VCU Health develops test for COVID-19](#)

2020 – ABC8 News [VCU Health develop in-house COVID-19 test](#)

2020 – Newsleader [VCU independently develops COVID-19 test](#)

2020 – The Daily Progress [UVA, VCU on front line of virus testing expansion in Virginia, but lack of supplies a hurdle](#)

2020 – Virginia Business [VCU Health develops COVID-19 test kit](#)

2020 – The Commonwealth Times [VCU Health administering in-house independently developed COVID-19 test](#)

2020 – VCUHealth News [VCU Health develops in-house test for COVID-19](#)

2020 – VCU Health [News Video](#)

2020 – NBC12 [Virginia Strong Video](#)

2020 – Virginia Mercury [In the race to develop coronavirus testing, Virginia universities are stuck on hold](#)