



Chidi Akusobi

- Affiliate, Department Funds
- Fellow in Peds/Clinical Informatics

Bio

BIO

Dr. Chidi Akusobi is a physician-scientist completing dual fellowship training in Infectious Diseases and Clinical Informatics at Stanford University School of Medicine. He holds an MD and a PhD in Microbiology from Harvard Medical School and completed internal medicine residency at Massachusetts General Hospital. His research sits at the intersection of AI and infectious diseases, with a focus on developing and evaluating AI-enabled tools that strengthen infectious disease practice. Current project interests include clinical decision support for infection prevention and control, AI-backed electronic consultation for infectious diseases, and the application of ChatEHR to ID-specific chart review.

CLINICAL FOCUS

- Fellow
- Infectious Disease
- Clinical Informatics

HONORS AND AWARDS

- SHEA Early Career Abstract Award, SHEA (2026)
- Top Featured Poster Abstract, SHEA National Conference (2026)
- Grant Recipient, Amrita Jagadeesh Digital Health Collaboratory (AJDHC) (2026)
- Top 40 Under 40 Leaders in Health, National Minority Quality Forum (2024)
- Awardee, Ruth L. Kirschstein Predoctoral Individual National Research Service Award (2020)
- Fellow, Paul and Daisy Soros Fellowship (2016)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, SHEA (2026 - present)
- Member, AMIA (2025 - present)
- Member, AsMA (2021 - present)
- Member, IDSA (2021 - present)

PROFESSIONAL EDUCATION

- Fellowship, Stanford University, Clinical Informatics
- Fellowship, Stanford University, Infectious Disease
- Board Certification, American Board of Internal Medicine, Internal Medicine (2025)

- Residency, Massachusetts General Hospital (2025)
- MD, Harvard Medical School (2022)
- PhD, Harvard Medical School (2020)
- MPhil, University of Cambridge (2013)
- BS, Yale University (2012)

Publications

PUBLICATIONS

- **Efflux pumps and membrane permeability contribute to intrinsic antibiotic resistance in *Mycobacterium abscessus*.** *PLoS pathogens*
McGowen, K., Funck, T., Wang, X., Zinga, S., Wolf, I. D., Akusobi, C., Denking, C. M., Rubin, E. J., Sullivan, M. R.
2025; 21 (4): e1013027
- **Durlobactam in combination with β -lactams to combat *Mycobacterium abscessus*.** *Antimicrobial agents and chemotherapy*
Shin, E., Dousa, K. M., Taracila, M. A., Bethel, C. R., Nantongo, M., Nguyen, D. C., Akusobi, C., Kurz, S. G., Plummer, M. S., Daley, C. L., Holland, S. M., Rubin, E. J., Bulitta, et al
2025; 69 (2): e0117424
- **Transposon-sequencing across multiple *Mycobacterium abscessus* isolates reveals significant functional genomic diversity among strains.** *mBio*
Akusobi, C., Choudhery, S., Benghomari, B. S., Wolf, I. D., Singhvi, S., Ioerger, T. R., Rubin, E. J.
2025; 16 (2): e0337624
- **Efflux pumps and membrane permeability contribute to intrinsic antibiotic resistance in *Mycobacterium abscessus*.** *bioRxiv : the preprint server for biology*
McGowen, K., Funck, T., Wang, X., Zinga, S., Wolf, I. D., Akusobi, C. C., Denking, C. M., Rubin, E. J., Sullivan, M. R.
2024
- ***Mycobacterium abscessus* Cluster in Cardiac Surgery Patients Potentially Attributable to a Commercial Water Purification System.** *Annals of internal medicine*
Klompas, M., Akusobi, C., Boyer, J., Woolley, A., Wolf, I. D., Tucker, R., Rhee, C., Fiumara, K., Pearson, M., Morris, C. A., Rubin, E., Baker, M. A.
2023; 176 (3): 333-339
- **Biotin-dependent cell envelope remodelling is required for *Mycobacterium abscessus* survival in lung infection.** *Nature microbiology*
Sullivan, M. R., McGowen, K., Liu, Q., Akusobi, C., Young, D. C., Mayfield, J. A., Raman, S., Wolf, I. D., Moody, D. B., Aldrich, C. C., Muir, A., Rubin, E. J.
2023; 8 (3): 481-497
- **Unusual prophages in *Mycobacterium abscessus* genomes and strain variations in phage susceptibilities.** *PloS one*
Amarh, E. D., Dedrick, R. M., Garlena, R. A., Russell, D. A., Gauthier, C. H., Aull, H. G., Abad, L., Jacobs-Sera, D., Akusobi, C., Rubin, E. J., Hatfull, G. F.
2023; 18 (2): e0281769
- **Transposon mutagenesis in *Mycobacterium abscessus* identifies an essential penicillin-binding protein involved in septal peptidoglycan synthesis and antibiotic sensitivity.** *eLife*
Akusobi, C., Benghomari, B. S., Zhu, J., Wolf, I. D., Singhvi, S., Dulberger, C. L., Ioerger, T. R., Rubin, E. J.
2022; 11
- **Modeling Site-Specific Nucleotide Biases Affecting Himar1 Transposon Insertion Frequencies in TnSeq Data Sets.** *mSystems*
Choudhery, S., Brown, A. J., Akusobi, C., Rubin, E. J., Sassetti, C. M., Ioerger, T. R.
2021; 6 (5): e0087621
- **Audio Interview: Delivering Covid-19 Vaccines to Minority Communities.** *The New England journal of medicine*
Rubin, E. J., Baden, L. R., Del Rio, C., Akusobi, C., Morrissey, S.
2021; 384 (13): e60
- **Reporter Assays for Ebola Virus Nucleoprotein Oligomerization, Virion-Like Particle Budding, and Minigenome Activity Reveal the Importance of Nucleoprotein Amino Acid Position 111.** *Viruses*

Lin, A. E., Diehl, W. E., Cai, Y., Finch, C. L., Akusobi, C., Kirchdoerfer, R. N., Bollinger, L., Schaffner, S. F., Brown, E. A., Saphire, E. O., Andersen, K. G., Kuhn, J. H., Luban, et al
2020; 12 (1)

- **Parallel Evolution of Host-Attachment Proteins in Phage PP01 Populations Adapting to Escherichia coli O157:H7.** *Pharmaceuticals (Basel, Switzerland)*
Akusobi, C., Chan, B. K., Williams, E. S., Wertz, J. E., Turner, P. E.
2018; 11 (2)
- **The bacterial Type III toxin-antitoxin system, ToxIN, is a dynamic protein-RNA complex with stability-dependent antiviral abortive infection activity.** *Scientific reports*
Short, F. L., Akusobi, C., Broadhurst, W. R., Salmond, G. P.
2018; 8 (1): 1013
- **Environmental T4-Family Bacteriophages Evolve to Escape Abortive Infection via Multiple Routes in a Bacterial Host Employing "Altruistic Suicide" through Type III Toxin-Antitoxin Systems.** *Frontiers in microbiology*
Chen, B., Akusobi, C., Fang, X., Salmond, G. P.
2017; 8: 1006