Stanford

Ifeanyichukwu Emmanuel Eke

Postdoctoral Scholar, Pathology

Curriculum Vitae available Online

Bio

BIO

I am a chemical biologist with a broad interest in defining the mechanisms-of-action of novel compounds that can be used as potential drugs or diagnostic probes for different bacterial and viral infections. In addition to my flair for research, I am passionate about teaching, mentorship, leadership, and entrepreneurship.

INSTITUTE AFFILIATIONS

- Member, Maternal & Child Health Research Institute (MCHRI)

HONORS AND AWARDS

- Dissertation Completion Fellowship, Michigan State University (2024)
- Integrated Pharmacological Sciences Training Program Fellowship, Michigan State University (2022 - 2024)
- University Valedictorian, University of Nigeria, Nsukka (2016)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, American Society for Microbiology (2016 - present)

PROFESSIONAL EDUCATION

- B.Sc., University of Nigeria , Microbiology (2016)
- Ph.D., Michigan State University , Microbiology and Molecular Genetics (2024)

STANFORD ADVISORS

- Matthew Bogyo, Postdoctoral Faculty Sponsor

LINKS

- Google Scholar Profile: https://scholar.google.com/citations?user=OpZF63UAAAAJ&hl=en&oi=ao

Publications

PUBLICATIONS

- **Defining the mechanism of action of the nitrofuranyl piperazine HC2210 against Mycobacterium abscessus.** *npj antimicrobials and resistance*
  Eke, I. E., Abdalla, B. J., Soverina, S., Olive, A. J., Cicchetti, N., Carey, A. F., Abramovitch, R. B.
  2025; 3 (1): 55
- **Identification of covalent inhibitors of Staphylococcus aureus serine hydrolases important for virulence and biofilm formation.** *Nature communications*

Upadhyay, T., Woods, E. C., Dela Ahator, S., Julin, K., Faucher, F. F., Uddin, M. J., Hollander, M. J., Pedowitz, N. J., Abegg, D., Hammond, I., Eke, I. E., Wang, S., Chen, et al
2025; 16 (1): 5046

- **Genetic and Cheminformatic Characterization of Mycobacterium tuberculosis Inhibitors Discovered in the Molecular Libraries Small Molecule Repository.** *ACS infectious diseases*
  Eke, I. E., Williams, J. T., Abramovitch, R. B.
  2025
- **Functions of nitroreductases in mycobacterial physiology and drug susceptibility.** *Journal of bacteriology*
  Eke, I. E., Abramovitch, R. B.
  2025: e0032624
- **Discovery and characterization of antimycobacterial nitro-containing compounds with distinct mechanisms of action and in vivo efficacy.** *Antimicrobial agents and chemotherapy*
  Eke, I. E., Williams, J. T., Haiderer, E. R., Albrecht, V. J., Murdoch, H. M., Abdalla, B. J., Abramovitch, R. B.
  2023; 67 (9): e0047423
- **Cattle manure as a sustainable bioenergy source: Prospects and environmental impacts of its utilization as a major feedstock in Nigeria** *BIORESOURCE TECHNOLOGY REPORTS*
  Onwosi, C. O., Ozoegwu, C. G., Nwagu, T. N., Nwobodo, T. N., Eke, I. E., Igbokwe, V. C., Ugwuoji, E. T., Ugwuodo, C. J.
  2022; 19
- **Principal component analysis reveals microbial biomass carbon as an effective bioindicator of health status of petroleum-polluted agricultural soil.** *Environmental technology*
  Onwosi, C. O., Odimba, J. N., Igbokwe, V. C., Nduka, F. O., Nwagu, T. N., Aneke, C. J., Eke, I. E.
  2020; 41 (24): 3178-3190
- **Towards effective management of digester dysfunction during anaerobic treatment processes** *RENEWABLE & SUSTAINABLE ENERGY REVIEWS*
  Onwosi, C. O., Eke, I. E., Igbokwe, V. C., Odimba, J. N., Ndukwe, J. K., Chukwu, K. O., Aliyu, G. O., Nwagu, T. N.
  2019; 116
- **Dermatophytes and dermatophytosis in the eastern and southern parts of Africa.** *Medical mycology*
  Nweze, E. I., Eke, I. E.
  2018; 56 (1): 13-28
- **Composting technology in waste stabilization: On the methods, challenges and future prospects.** *Journal of environmental management*
  Onwosi, C. O., Igbokwe, V. C., Odimba, J. N., Eke, I. E., Nwankwoala, M. O., Iroh, I. N., Ezeogu, L. I.
  2017; 190: 140-157
- **Dermatophytosis in northern Africa.** *Mycoses*
  Nweze, E. I., Eke, I.
  2016; 59 (3): 137-44