B. Frank Gupton, Ph.D.

Floyd D. Gottwald, Jr. Chair in Pharmaceutical Engineering; Chair, Professor, Department of Chemical and Life Science Engineering at VCU College of Engineering

Engineering West Hall, Room 403A, Richmond, VA, US

Professor Gupton's research is focused on the development of new technologies that will streamline organic synthesis

Biography

CEO, co-founder | Medicines for All Institute (M4ALL) Floyd D. Gottwald Junior Chair of Pharmaceutical Engineering | Virginia Commonwealth University College of Engineering Chair and Professor | Department of Chemical and Life Science Engineering, VCU College of Engineering B. Frank Gupton, Ph.D., is an internationally recognized scholar and industry expert. After attending the University of Richmond on a basketball scholarship, he received his master?s degree from Georgia Tech. He earned his doctorate in chemistry at Virginia Commonwealth University. His 31-year industry career included senior positions with the Hoechst-Celanese Corporation and Boehringer-Ingelheim. In 2007, Gupton retired as executive director of process development for Boehringer-Ingelheim Pharmaceuticals. Gupton then joined the VCU College of Engineering faculty and became the Floyd D. Gottwald Junior Chair in Pharmaceutical Engineering in 2016. His research focuses on improving global health care by making pharmaceutical production cleaner and more cost-effective. To help advance these goals, he founded the Medicines for All Institute (M4ALL) with a simple idea: expand global access to lifesaving medications by producing them more efficiently. An inventor on multiple patents, including one for his work to produce nanoparticle catalysts supported on graphene, Gupton is a National Academy of Inventors Fellow. He received the Billy R. Martin Award for Innovation in 2017. For his efforts with M4ALL to develop cost-saving methods to produce the anti-HIV drug nevirapine, he won the 2019 Peter J. Dunn Award from the American Chemical Society (ACS). For that work, he and M4ALL chief technology officer D. Tyler McQuade, Ph.D., also won the 2018 ACS Green Chemistry Challenge Award and the 2018 ACS Award for Affordable Green Chemistry. The institute is working with a manufacturer in South Africa and partnering with the government of Ivory Coast to bring these advances to the places they are most needed.

Industry Expertise

Education/Learning, Research

Areas of Expertise

Cross-Coupling Catalysis, Flow Chemistry / Continual Chemical Processing, Organic Synthesis in Pharmaceutical Applications

Affiliations

American Chemical Society Organic Division : Member, Flow Chemistry Society : Member, American Institute of Chemical Engineers : Member

Event Appearances

Streamlining Pharmaceutical Processes,
University of Richmond,

The Medicines for All Initiative
SelectBio Flow Chemistry Congress

A New Approach in Pharmaceutical Process Development
Virginia Polytechnic Institute and State University

A New Low Cost Approach for the Production of AIDS Drugs
University of Mainz

The Medicines for All Initiative
CPAC Annual Meeting

Education

Virginia Commonwealth University
Ph.D. Chemistry

Georgia Institute of Technology
M.S. Biochemistry

University of Richmond
B.S. Chemistry

Accomplishments

Person of the Year Honoree, Richmond Times-Dispatch
2019

Lifetime Achievement Award, Richmond Joint Engineers Council
2015

American Chemical Society Award for Industrial Innovation
2001

Hoechst Schultheis Fellow
1991

Merle E. Kise Award for Excellence in Industrial Research
1989, 1990
