

### The C. Eugene Bennett Department of Chemistry and the Eberly College of Arts and Sciences

present the

# Twenty-Seventh Annual C. EUGENE AND EDNA P. BENNETT CAREERS FOR CHEMISTS PROGRAM

Wednesday, April 12, 2023 7:00 p.m.

#### THE BENNETT FAMILY

C. EUGENE BENNETT was born in Rutherford, West Virginia, and graduated from Cairo High School in 1945 at the age of 16. He obtained a bachelor's degree in chemistry in 1949 and a master's degree in organic chemistry in 1951 from West Virginia University. While attending WVU, Dr. Bennett served as the president of the Tau Chapter of Phi Lambda Upsilon, the national chemistry honor society, and presided at the inaugural presentation of the Friend E. Clark Lecture Series in 1950. In 1954, he received his PhD in analytical chemistry from the University of Michigan.

Born in Rochester, Pennsylvania, Edna Peterson Bennett grew up in Beaver, Pennsylvania, and graduated from Beaver High School in 1949. She obtained a degree in child development in 1953 from Pennsylvania State University. Gene and Edna married on June 12, 1953, and raised six children: Karl, David, Linda, Susan, Carol and Alice.

Dr. Bennett entered the United States Air Force as a second lieutenant and was assigned to Wright Air Development Center in Dayton, Ohio, serving as a research chemist at the Aeronautical Research Laboratories, after earning his PhD. After completing his Air Force service in 1956, Dr. Bennett became a research chemist with E.I. duPont de Nemours & Co., Inc. in Wilmington, Delaware, where his area of study involved gas chromatography. Dr. Bennett and two colleagues formed F&M Scientific Corporation to produce gas chromatographs and other analytical instruments in 1959. The company merged with and became a division of the Hewlett-Packard Company in 1965. Dr. Bennett left Hewlett-Packard in 1968 to pursue other business ventures, including real estate developments; owning and managing a private country club; obtaining an MBA from the Wharton School of the University of Pennsylvania; and operating a manufacturing plant producing compact discs for the music industry. Dr. Bennett served on the Advisory Board of the WVU Eberly College of Arts and Sciences from 1990 until his untimely death in March 1996 at the age of 67.

Mrs. Edna Bennett Pierce served on the Executive Committee and the Campaign Steering Committee for the Grand Destiny Campaign for Pennsylvania State University (PSU), which was completed in 2003, and served as the honorary chair for the Grand Destiny Committee for the College of Health and Human Development at PSU. At PSU, she endowed the Bennett Family Child Care Center and the Prevention Research Center for the Promotion of Human Development. Mrs. Bennett Pierce has served on several boards of the Silverside Church of Wilmington and was the former president of the Ann Judson Society (the Women's Group at Silverside). She served on the Board of Directors of the Delaware Symphony Association and the Opera Delaware. In recognition of her extraordinary service to WVU, Mrs. Bennett Pierce received the Order of Vandalia award, the highest honor at WVU, on May 15, 2012. Mrs. Pierce passed away in July of 2022.

In 1994, the Bennetts established an endowment in the amount of \$1.6 million to create the C. Eugene and Edna P. Bennett Careers for Chemists Program and the C. Eugene Bennett Chair in Chemistry at WVU. The Bennett Program acquaints high school students, undergraduate students and graduate students in chemistry with the variety of career opportunities that are available to them. The program brings professionals from throughout the country to campus to interact with students and discuss the usefulness of an education in chemistry as the basis for career opportunities. Professor Kenneth Showalter, an internationally respected researcher in nonlinear chemical dynamics, was named the C. Eugene Bennett Chair in Chemistry in 1996. During the Building Greatness Campaign: West Virginia University, Mrs. Edna Bennett Pierce donated over \$2 million to the Eberly College of Arts and Sciences and the Department of Chemistry at WVU to establish the C. Eugene Bennett Chemistry Program Enhancement Fund, the C. Eugene Bennett Graduate Fellowship Program in Chemistry and the C. Eugene Bennett Academic Enrichment Endowment within the Eberly College. Resources were also made available to create an endowment for library acquisitions to directly benefit the Department of Chemistry. Additionally, recent gifts from Mrs. Edna Bennett Pierce and the Bennett family total more than \$2 million and will create the C. Eugene Bennett Teaching Professorship in Chemistry, an additional academic enrichment fund for chemistry majors and an undergraduate scholarship program within the C. Eugene Bennett Department of Chemistry.

In the fall of 2003, the WVU Board of Governors gave the University permission to designate the Department of Chemistry as the C. Eugene Bennett Department of Chemistry in recognition of the philanthropy of Dr. Bennett and the continued generosity of Mrs. Edna Bennett Pierce and the Bennett family. The department was named the C. Eugene Bennett Department of Chemistry on April 13, 2004. In conjunction with A State of Minds: The Campaign for West Virginia's University, Mrs. Edna Bennett Pierce provided a gift of \$200,000 in support of a project to renovate research laboratories in the department in 2013. In 2016, Mrs. Edna Bennett Pierce, together with the C. Eugene Bennett Family Foundation, provided a gift of \$1.5 million, in memory of C. Eugene Bennett, to renovate teaching laboratories in Clark Hall. The Bennett name will continue to represent an enduring philosophy of dedication and vision for future generations of chemistry students and researchers at WVU.

#### **PROGRAM**

#### WELCOME

#### **Gregory Dudley**

Eberly Distinguished Professor of Chemistry Department Chair

#### **OPENING REMARKS**

R. Gregory Dunaway

Dean
Eberly College of Arts and Sciences

#### **PRESENTATIONS**

#### Margaret Hilton, PhD

Assistant Professor

C. Eugene Bennett Department of Chemistry
West Virginia University
Morgantown, West Virginia

#### Simba Nkomo, PhD

Assistant Professor of Chemistry Oxford College of Emory University Atlanta, Georgia

#### Randy Province, PhD

Virginia Tech-Carilion Clinic Family Medicine Program Rural Medicine Physician Floyd, Virginia

DISCUSSION

**Gregory Dudley** 

RECEPTION



Margaret Hilton

Assistant Professor

C. Eugene Bennett Department of Chemistry
West Virginia University
Morgantown, West Virginia

#### Margaret Hilton

MARGARET HILTON grew up in Corpus Christi, Texas, and attended Trinity University in San Antonio, Texas, to complete her BS degree in chemistry in 2012. Margaret participated in summer research at Trinity in organic and inorganic chemistry with Professors Nancy Mills and Bert Chandler, respectively. She was also involved in TWIST, a women in science club, the Chemistry Club and an on-campus sorority. She continued her education in organic chemistry at the University of Utah under the supervision of Professor Matthew Sigman, graduating with a PhD in 2017. In the Sigman group, Margaret studied and optimized several enantioselective palladium-catalyzed reactions, focusing on understanding mechanisms and underlying origins of selectivity using classical and modern techniques. Her dissertation won the department's Cheves T. Walling Award in 2017.

For her postdoctoral studies, Margaret worked in Professor Scott Miller's lab at Yale University as a NIH postdoctoral fellow, investigating peptide catalysts for the late stage modification of natural products, namely site selective epoxidation of geldanamycin. She also participated in the Yale chemistry recreational soccer team, the Round Bottoms.

Margaret joined the Department of Chemistry at West Virginia University in fall 2020. Her lab explores catalyst design for the development of site- and enantioselective organic transformations, the derivatization of functional group-rich targets and tools for understanding reaction mechanisms and molecular recognition.



Simba Nkomo, PhD

Assistant Professor of Chemistry
Oxford College of Emory University
Atlanta, Georgia

#### Simba Nkomo

SIMBA NKOMO was born and raised in Zimbabwe. He received a Bachelor of Science with Education in Chemistry and Mathematics from Bindura University of Science Education. After obtaining his degree, he taught high school chemistry for six years and then decided to go back to school. He got his MS in Science Education at the University of Zimbabwe in 2007. Upon completion, he taught at an international high school in Malawi and then moved to the United States in 2008 to pursue graduate work at West Virginia University. His research focused in the area of physical chemistry, studying the synchronization behaviors of coupled chemical oscillators in the laboratory of Professor Kenneth Showalter. Simba received his PhD in Chemistry from in 2014. His graduate work on Chimera states was published in Nature Physics and also featured in Physics Today magazine. While at WVU, he earned an Outstanding Graduate Teaching Assistant Award. Upon completing his graduate work, he accepted a faculty position as a visiting assistant professor in the Department of Chemistry at Bowdoin College, Maine. He joined Emory University in 2016 as a visiting assistant professor at the Oxford College of Emory University campus and then transitioned to an assistant professor tenure track position in 2018. Simba teaches foundational chemistry courses in Emory's Chemistry Unbound curriculum and also mentors undergraduate research students. His primary research focus is on understanding the origins of complex dynamics of networks of coupled chemical oscillators.

In teaching, his goal is to offer support that grows a student's dreams by fostering a positive learning environment and creating opportunities for undergraduate research through collaborations. In 2019, he participated in the AAC&U Project Kaleidoscope STEM Leadership institute. He is a member of the American Chemical Society Minorities Affairs Committee for Georgia section.

Outside of his work, Simba enjoys playing chess. He and his wife Ester live in Atlanta, Georgia. They enjoy traveling around the U.S. and abroad to learn about different places and cultures.



Randy Province, PhD

Virginia Tech-Carilion Clinic Family Medicine Program
Rural Medicine Physician
Floyd, Virginia

#### **Randy Province**

RANDY PROVINCE graduated from Preston High School in Kingwood, West Virginia, and later matriculated summa cum laude from West Virginia University in 2013 with a dual major (BS in chemistry and biology. While at WVU, she held numerous teaching roles in both departments, winning the Outstanding Teaching Assistant Award in Chemistry in 2012 and being awarded membership to Phi Lambda Upsilon. Her academic roles led to her selection as a founding 4-H STEM Ambassador of WVU's Extension Service, which provides science engagement opportunities for youths of West Virginia.

A graduate-level histology class led to her application and subsequent acceptance to the West Virginia School of Osteopathic Medicine where she fell in love with anatomy and its applications to musculoskeletal and manual medicine in preventative care. She specializes in osteopathic manipulative medicine, which she practices to this day. She was an avid participant of WVSOM's Rural Health Initiative and spent her clinical years as a medical student serving in the rural communities of West Virginia. In her third year, she was awarded the position of a graduate teaching assistant in anatomy and spent two years educating WVSOM's first-year medical students in the cadaver lab.

She completed her residency at the Virginia Tech-Carilion Clinic Family Medicine Program and went on to accept a position in their organization as rural medicine physician. Her practice is located in a small Appalachian farming community in Floyd, Virginia, which is a prominent regional destination for bluegrass and old-timey music. In her clinic, she practices full-scope primary care, serving all ages with a holistic, evidence-based approach to preventative medicine that focuses on lifestyle management.

She lives on a homestead in the Appalachian Mountains with her husband, Ben, and daughter, Sophia.

#### C. EUGENE AND EDNA P. BENNETT (

Previous Speak

#### 2008

#### Norman D. Ferrari III

Senior Associate Dean

West Virginia University School of Medicine

#### Philip J. Grandinetti

Professor

Department of Chemistry

The Ohio State University

#### Ranjani Siriwardane

Group Leader

National Energy Technology Laboratory

#### 2009

#### Christopher A. Ferguson

Consultant

#### **Kelley Harris**

Supervisory Counterfeit Specialist United States Secret Service

#### Jennifer N. Sutton

Strategic Marketing Specialist Thermo Fisher Scientific

#### 2010

#### T. Brent Gunnoe

Professor of Chemistry University of Virginia

#### Aaron J. Peoples

Manager of Natural Products NovoBiotic Pharmaceuticals

#### Jan Steckel

Research Scientist

National Energy Technology Laboratory

#### 2011

#### Paul W. Jagodzinski

Dean, College of Engineering, Forestry and Natural Sciences

Northern Arizona University

#### Denis W.H. MacDowell

**Emeritus Professor of Chemistry** 

West Virginia University

#### Kelly J. Suter

Associate Professor of Computational

The University of Texas at San Antonio

#### 2012

#### **David Bem**

Global R&D Director Dow Chemical Company

#### J. Michael Gaziano

Chief, Division of Aging, Brigham and Women's Hospital Associate Professor of Medicine Harvard Medical School

#### Laura Lawson

General Surgeon

Tennessee Breast Specialists

#### 2013

#### William F. Carroll

Vice President, Industry Issues Occidental Chemical Corporation

#### **Cynthia Graves**

Assistant Professor General Surgery Resident

Program Director

Robert C. Byrd Health Sciences Center West Virginia University

#### Glen P. Jackson

Ming Hsieh Distinguished Professor of Forensic and Investigative Science West Virginia University

#### 2014

#### Anna L. Blobaum

Discovery Scientist Project Team Leader Vanderbilt Center for Neuroscience Drug Discovery Vanderbilt University Medical Center

#### T. Kevin Hitchens

**Assistant Director** 

Pittsburgh NMR Center for Biomedical Research

Carnegie Mellon University

#### Jennifer Robertson-Honecker

Assistant Professor

Science, Technology, Engineering, and Math (STEM) Specialist

WVU Extension Service

4-H Youth Development Program

#### 2015

#### Eric J. Adkins

Assistant Medical Director of Emergency Services

Assistant Professor of Emergency Medicine and Pulmonary/Critical Care Medicine

Wexner Medical Center

The Ohio State University

#### CAREERS FOR CHEMISTS PROGRAM

ers, 2008-2020

#### Jonathan W. Boyd

Assistant Professor C. Eugene Bennett Department of Chemistry West Virginia University

#### Lauren W. Morgan Swager

Director, WVU Child and Adolescent Psychiatry Fellowship Assistant Professor West Virginia University School of Medicine

#### 2016

#### Brian J. Anderson

Director, West Virginia University
Energy Institute

GE Plastics Materials Engineering Professor

Benjamin M. Statler College of Engineering and Mineral Resources West Virginia University

#### Stacy C. Confer

Director of Quality and Inspection Readiness Global Pharmacovigilance and Epidemiology Bristol-Myers Squibb Princeton, New Jersey

#### Jeff M. Wallace

Senior Director, Global API Sourcing Mylan Pharmaceuticals Canonsburg, Pennsylvania

#### 2017

#### Stephen J. Valentine

Assistant Professor
C. Eugene Bennett Department of Chemistry
West Virginia University
Morgantown, West Virginia

#### Elizabeth Cox

Associate Professor School of Medicine and Public Health University of Wisconsin-Madison Madison, Wisconsin

#### Ronald W. Clawson Jr.

Chief Science Officer and Global Technical Director RPM2/Kop-Coat, Inc. Harmar Laboratories Pittsburgh, Pennsylvania

#### 2018

#### Rip A. Lee

Primary Examiner United States Patent and Trademark Office Alexandria, Virginia

#### Kay M. Brummond

Associate Dean of Faculty Affairs
Kenneth P. Dietrich School of Arts and
Sciences

University of Pittsburgh Pittsburgh, Pennsylvania

#### **Lieutenant Colonel Matthew Moser**

Medical Toxicology Research Division Chief

U.S. Army Medical Research Institute of Chemical Defense

Aberdeen Proving Ground, Maryland

#### 2019

#### Karen S. Evans

Assistant Secretary for the Office of Cybersecurity, Energy Security, and Emergency Response U.S. Department of Energy Washington, D.C.

#### Joseph L. Kent

Intellectual Property Counsel, Bayer U.S. LLC Law, Patents and Compliance Department Indianola, Pennsylvania

#### Elizabeth A. Yates

Assistant Professor Department of Chemistry United States Naval Academy Annapolis, Maryland

#### 2020

#### Joshua M. Osbourn, PhD

Teaching Associate Professor
C. Eugene Bennett Department of
Chemistry
West Virginia University

Morgantown, West Virginia

#### Alexandria Mullins, PhD

Technology Marketing Associate Office of Licensing and Ventures Duke University Durham. North Carolina

#### Daniel A. Harki, PhD

Department of Medicinal Chemistry University of Minnesota Minneapolis, Minnesota



West Virginia University

## BENNETT CAREERS CHEMISTS

### C. EUGENE AND EDNA P. BENNETT CAREERS FOR CHEMISTS

Program Committee — 2023

Kenneth Showalter, Committee Chair
Stephen Valentine
Terry Gullion
Kung Wang
Gregory Dudley