

## **Michael A. Marletta, Ph.D.**

CH and Annie Li Chair in the Molecular Biology of Diseases  
Professor of Chemistry  
Professor of Molecular and Cell Biology  
University of California, Berkeley

Michael A. Marletta was born in Rochester New York on February 12, 1951. He graduated from the Aquinas Institute in 1969. After an A.B. degree in biology and chemistry from Fredonia, State University of New York (1973), he received a PhD in 1978 from UCSF with George L. Kenyon followed by a 2-year postdoctoral appointment at MIT with Christopher Walsh.

In 1980 was appointed Assistant Professor in the Department of Applied Biological Sciences and was promoted to Associate Professor in 1986 at MIT. In 1987 he moved to the University of Michigan as Associate Professor of Medicinal Chemistry and Associate Professor of Biological Chemistry. In 1991 he was promoted to Professor and appointed the John G. Searle Professor of Medicinal Chemistry. In 1997 he became an Investigator in the Howard Hughes Medical Institute. Marletta moved to the University of California, Berkeley in 2001 as Professor of Chemistry, Department of Chemistry and Professor of Biochemistry, Department of Molecular and Cell Biology. He was appointed the Aldo DeBenedictis Distinguished Professor of Chemistry in 2002. He served as Chair of the Department of Chemistry at Berkeley from 2005-2010. In July 2011 he joined the faculty of The Scripps Research Institute, served as President and CEO, and then returned to his present position in Berkeley in 2015.

Awards he has received include the George H. Hitchings Award for Innovative Methods in Drug Discovery and Design (1991) sponsored by the Burroughs Wellcome Fund; Faculty Recognition Award from Michigan (1992); Outstanding Alumni Achievement Award from SUNY Fredonia (1993); MacArthur Fellowship awarded by the John D. and Catherine T. MacArthur Foundation (1995); elected Senior Fellow in the Michigan Society of Fellows and elected to the SUNY Honor Role (1996); elected to the Institute of Medicine (now the National Academy of Medicine) (1999); Distinguished Faculty Lectureship Award in Biomedical Research University of Michigan Medical School (2000). In 2000 he was selected for Distinguished Faculty Achievement Award at Michigan. In 2001 he was elected to the American Academy of Arts and Sciences and also a fellow of the AAAS. He was elected to the National Academy of Sciences in 2006. He was elected a Fellow of the Royal Society of Chemistry in 2009. He was elected to the American Philosophical Society in 2016. He received the Harrison Howe Award (2004) of the American Chemical Society, and in 2007 the Repligen Award, Biological Chemistry Division of the American Chemical Society and the Kaiser Award from the Protein Society and the Esselen Award for Chemistry in the Public Interest, Northeastern Section of the American Chemical Society, the Murray Goodman Memorial Prize (2009), and the Alfred Bader Award for Bioinorganic or Bioorganic Chemistry (2015). In 2014 he received the American Association of State Colleges and Universities AASCU Distinguished Alumnus Award. He was awarded a Doctor of Science honorary degree by SUNY in 2018.

He is a member of the American Chemical Society and the American Society for Biochemistry and Molecular Biology. He serves on the editorial board of *PNAS*, *Biochemistry* and *eLife*. He is a consultant for a number of pharmaceutical companies and serves on the scientific advisory boards of several others. He is a co-founder of Omnix, Inc. He is a member of the Fredonia College Foundation Board of Directors and is serving a 2-year term as chair (2018-2020). He also serves on the advisory board of a number of university departments and centers.

Marletta's primary research interests lie at the interface of chemistry and biology with emphasis on the study of protein function and enzyme reaction mechanisms. Marletta has made fundamental discoveries concerning the biological action of nitric oxide. His studies have provided the basis for understanding at the molecular level of this unique cell signaling pathway and the function of nitric oxide in the immune system. He has uncovered several novel structure/function relationships in nitric oxide synthase and guanylate cyclase. His continued studies on NO signaling have recent led to a molecular understanding of general gas sensing mechanisms in biology. A new research direction involves novel oxidative enzymology of cellulose degradation with application to biofuel production.

Marletta is married to Margaret Gutowski and they have a son Matthew.