

2012

**K.T. Wang Bioorganic Chemistry
Lectureship**

王光燦生物有機化學講座發表會

Tuesday, Oct 30

14:30 **Novel Enzymology in Cellulose Degradation**
Prof. Michael A. Marletta

Thursday, Nov 01

14:00 **Building Selective Gas Sensors: Nature's Way**
Prof. Michael A. Marletta

15:20 **When the Universe is Working in Your Favor**
– Right People, Right Place, Right Time 天時地利人和
Dr. Jane H. Hsiao

16:30 **Q & A Session with Dr. Jane H. Hsiao**

Academic Speaker—Professor Michael A. Marletta



Michael A. Marletta, Ph.D.

President and CEO

Cecil H. and Ida M. Green Professor of Chemistry

The Scripps Research Institute

Michael A. Marletta was born in Rochester, New York on February 12, 1951. After an A.B. degree in biology and chemistry from SUNY, College at Fredonia in 1973, he received a PhD in 1978 from the University of California, San Francisco with Prof. George L. Kenyon. He then joined Prof. Christopher Walsh at M.I.T. for a 2-year postdoctoral appointment. Marletta then joined the faculty at M.I.T. as an Assistant Professor of Toxicology in the Department of Applied Biological Sciences. He was promoted to Associate Professor in 1986. In 1987 he joined the faculty at the University of Michigan as Associate Professor of Medicinal Chemistry in the College of Pharmacy and in 1989 Associate Professor of Biological Chemistry in the Medical School. In 1991 he was promoted to Professor and was 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 where he assumed the positions of Professor of Chemistry, Department of Chemistry and Professor of Biochemistry and Molecular Biology, Department of Molecular and Cell Biology. He also held appointments as Professor of Cellular and Molecular Pharmacology at UCSF and Faculty Scientist at the Lawrence Berkeley National Lab. He was appointed the Aldo De Benedictis 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 and was named President-Elect. He assumed the presidency in January 2012.

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 and a Faculty Recognition Award from the University of Michigan (1992). He was awarded the Outstanding Alumni Achievement Award from SUNY Fredonia in 1993. In 1995 he received a MacArthur Fellowship awarded by the John D. and Catherine T. MacArthur Foundation. He was elected Senior Fellow in the Michigan Society of Fellows and elected to the SUNY Honor Role in 1996. He was

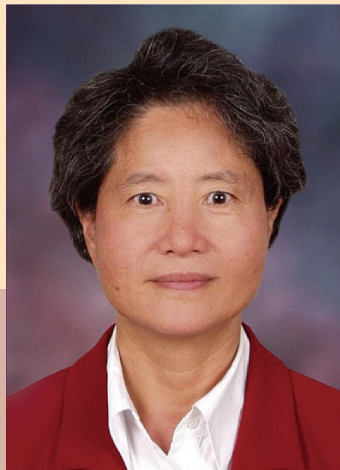
ected to the Institute of Medicine in 1999. He was awarded the Distinguished Faculty Lectureship Award in Biomedical Research by the University of Michigan Medical School for 2000 and honored as the Michigan Scientist of the Year (2000) by the Impression 5 Science Museum. Also in 2000 he was a Lecture Plat form Speaker at the Chautauqua Institution and selected for Distinguished Faculty Achievement Award at the University of Michigan. In 2001 he was elected to the American Academy of Arts and Sciences and also a fellow of the American Association for the Advancement of Science. 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 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. He was awarded the Murray Goodman Memorial Prize in 2009.

He is a member of the American Chemical Society and the American Society for Biochemistry and Molecular Biology. He currently serves on the Board of Editors of *ACS Chemical Biology* and on the editorial board of *PNAS* as well as a number of other journals. He is a consultant for a number of pharmaceutical companies and has served on the scientific advisory boards of NitroMed, Inc. and Oxon Medica, Inc. He is a co-founder of Omniox, Inc. He is a member of the Fredonia College Foundation Board of Directors and Chair of Science Advisory Council at Fredonia. He is also 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 recently led to a molecular understanding of general gas sensing mechanisms in biology.

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

Industry Speaker –Dr. Jane H. Hsiao



Jane H. Hsiao, Ph.D.

**Vice Chairman,
OPKO Health, Inc.**

Jane Hsiao received her B.S. in Pharmacy from the National Taiwan University in 1969, and in 1973, she was awarded a Ph.D., in Medicinal Chemistry from the University of Illinois. In 1994, she obtained a M.B.A. from Nova Southeastern University.

Dr. Hsiao's professional experience includes a variety of top-level executive positions in the biotech and pharmaceutical industries including that of Founder and President of Innotech Laboratories; Vice President of Baker Norton Pharmaceuticals, Chief Regulatory Officer; Co-Founder, Vice Chairman of IVAX Corporation in Miami; and Chairman and Chief Executive Officer of IVX Animal Health (a subsidiary of IVAX Corporation). IVAX was sold to TEVA Pharmaceuticals in 2006.

Jane Hsiao currently is Co-Founder and Vice Chairman Technical Affairs and Board of Director of OPKO Health, Inc, a public company with focus in new drug development. She also serves on the Board of Directors and as Chairman of two public companies, SafeStitch Medical and Non-Invasive Monitoring System which are involved in the research, development and manufacturing of medical devices.

Dr. Hsiao is also a director of Prolor Biotech, Inc., a development stage biopharmaceutical company (NYSE AMEX: PBTH) and Neovasc, Inc., a company developing and marketing specialty vascular devices (TSXV:NVC).

Academician Kung-Tsung Wang & K-T Wang Bioorganic Chemistry Foundation

From polyamide thin layer chromatography in the sixties, solid phase synthesis of snake venom proteins in the seventies, to application of microwave on chemical reaction in the eighties, Dr. Kung-Tsung Wang's substantial achievements greatly influence the whole Bioorganic Chemistry community.

On October 19, 1999, Dr. Wang, who was 70 years old, gave a moving speech in his honorable retirement ceremony planned by all the attendees, good friends and students of his, who were at the scene to pay him respect. In order to honor Dr. Wang and carry over the mission to nourish the Bioorganic Chemistry Research in Taiwan, a group of the Taiwanese scientists including Dr. Y.T. Lee and Dr. C.H. Wong organized and helped the founding of "K-T Wang Bioorganic Chemistry Educational Foundation" in October 2000.

The K-T Wang foundation enables more students and young scholars to have the opportunity to meet with world-renowned scientists face-to-face. Once a year the foundation awards a world-famous scholar to give talks on his/her research experiences. The purpose is to inspire the youth in this field and thus speed up the progress of Bioorganic Chemistry research in Taiwan.

Dr. Wang passed away on December 19, 2010.

王光燦院士及王光燦生物有機化學教育基金會

王光燦院士，1929 年出生於台灣台北市。1952 年台灣大學化學系畢業，1962 年獲日本東北大學博士學位。

1966 年是一個物資缺乏的年代，他用老師家中一件舊的尼龍襯衫，發明了聚醯胺 (polyamide) 薄膜色層分析 (TLC)，此技術被廣泛應用於天然物的分離與鑑定，尤其應用於蛋白質胺基酸定序，該論文被引用超過千次，被稱譽為「窮人的薄膜層析法」。1969 年他加入美國加州大學李卓皓教授的研究室，從事蛋白質化學合成研究工作。1972 年加入中央研究院生化所擔任研究員，1978 年完成全世界首次固相全合成台灣眼鏡蛇心臟毒蛋白。在 1980 年至 1986 年期間，他擔任中央研究院生化所所長，積極推動國內生物化學的學術研究。他更應用酵素進行有機化合物不對稱合成反應，發明以微波爐加速胜肽水解及合成反應的方法。於近半世紀之教學研究生涯中，王院士治學態度嚴謹，研究專注執著，作育英才無數；至今王院士於國內外著名學術期刊發表論文超過兩百篇，並且獲得行政院傑出研究科技榮譽獎、國科會研究傑出獎、侯金堆文教基金會傑出榮譽獎、台美基金會科技工程獎等多項榮譽及獎章，更於 1994 年當選中央研究院院士。

為了促進台灣生物有機化學的蓬勃發展，並繼續推展台灣有機化學的研究，中央研究院李遠哲院士、翁啟惠院士等人共同發起，於 2000 年 10 月 18 日成立「財團法人台北市王光燦生物有機化學教育基金會」(The K-T Wang Bioorganic Chemistry Foundation)，每年頒獎給一位對生物有機化學有重大貢獻的國際知名學者，並邀請他到國內演講、與產學座談提供研究心得及建議，以促進國內生物有機化學的發展。

王光燦院士於 2010 年 12 月 19 日辭世。

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歡迎認同基金會宗旨的各界人士踴躍捐款，以便基金會持續推動台灣生物有機化學之研究和教育，並提供青年學子更多學習的機會。各界的支持鼓勵與熱心參與是對基金會最好的肯定。

基金會戶名：財團法人台北市王光燦生物有機化學教育基金會
帳號：107004090642（臺灣銀行南港分行）