



Benjamin W. Zweifach, Ph.D. (1911-1997) is considered one of the modern fathers of microcirculation research and a pioneer in the field of bioengineering. He received his B.S. in Biology from the City College of New York in 1931 and his Ph.D. in Physiology from New York University Medical College in 1936. After an early career at Cornell University (1947-1952), Professor Zweifach returned to New York University (1952-1966) where he started an illustrious career in cardiovascular physiology. He made seminal contributions to microphysiology, the lymphatic system, the inflammatory process, shock and blood rheology, hypertension and diabetes. He and Professor Y. C. Fung were the two senior founding faculty of the bioengineering program at the University of California, San Diego, where he taught from 1966 until his death in 1997. Professor Zweifach founded the Journal of Microvascular Research and in 1982 the Microcirculatory Society named its highest award for career accomplishment after him, the Zweifach Gold Medal. In 1988, the B. W. Zweifach Research Laboratory for Microcirculatory Physiology was established by the Veterans Administration Hospital in Tucson, Arizona. Included in his numerous honors are the Claude Bernard Medal, the Landis Award and the Malpighi Gold Medal. He was chosen as the inaugural keynote speaker at the First World Congress on the Microcirculation. In recognition of his great distinction The City College bestowed upon him its most prestigious alumni award, the Townsend Harris Medal, in 1994. Professor Zweifach was the author of well over 300 scientific articles, as well as several textbooks and teaching films.

Past Zweifach Memorial Lectures

2005-Robert M. Nerem, Georgia Tech

2004-Robert Langer, MIT

2003-Michael Gimbrone, Harvard Medical School

2002-James Hudspeth, Albert Einstein College of Medicine

2001-Peter Davies, U. Penn

2000-Shu.Chien, UCSD

1999-Yuan-Cheng Fung, UCSD

CCNY/MSKCC BIOMEDICAL ENGINEERING PARTNERSHIP SYMPOSIUM

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ZWEIFACH MEMORIAL LECTURE

October 25th, 2006

**Symposium
1:00 PM - 2:30 PM**

**Zweifach Lecture
3:00 PM - 4:00 PM**

**Recital Hall, Shepard Hall, Room 95
The City College of New York**

**Reception
4:00PM – 5:00PM**

Exhibition Hall of Steinman Hall

Opening Remarks By

Robert E. Wittes, M.D.
Physician-In-Chief
Memorial Sloan-Kettering
Cancer Center

Joseph Barba, Ph.D.
Dean, Grove School of
Engineering
City College of New York

Symposium

*“Preclinical and Clinical Studies of Tumor Prognosis with
Magnetic Resonance”*

Jason Koutcher, M.D., Ph.D.
Chief, Imaging and
Spectroscopic Physics Service
MSKCC

*“Resolving the Partial Volume Effect in MRSI Improves
Brain Tumor Grading”*

Lucas Parra, Ph.D.
Associate Professor
CCNY Department of
Biomedical Engineering

Collaborator: Wei Huang,
Ph.D., Department of
Medical Physics, MSKCC

*“Phase III Veterinary Clinical Trial: Enhancement of
Carboplatin Uptake to Appendicular Osteosarcoma in Large
Breed Dogs Using an Artificial Lymphatic System”*

Gene DiResta, Ph.D.
Department of Surgery
Orthopaedic Surgery Service
MSKCC

“Microvessel Permeability and Tumor Metastasis”

Bingmei Fu, Ph.D.
Associate Professor
CCNY Department of
Biomedical Engineering

Collaborator: Fillippo Giancotti,
M.D., Ph.D., Laboratory Head,
Cell Biology Program
MSKCC

“Rational Protocols for Electrochemotherapy”

Marom Bikson, Ph.D.
Assistant Professor
CCNY Department of
Biomedical Engineering

Collaborator: Ting-Chao Chou,
Ph.D., Preclinical
Pharmacology
MSKCC

*“Microfluidic and Nanotechnology-based Approaches
for Study of Tumor Dispersal”*

Maribel Vazquez, Sc.D.
Associate Professor
CCNY Department of
Biomedical Engineering

Collaborator: Eric Holland,
M.D., Ph.D., Cancer Biology
and Genetics
MSKCC

Zweifach Memorial Lecture

(Sponsored by the CCNY Biomedical Engineering Department)

*“Normalization of Tumor Vasculature and Microenvironment
By Antiangiogenic Therapies:
From the Bench to Bedside and Back”*

Rakesh K. Jain, Ph.D., Andrew Werk Cook Professor of Tumor
Biology, and
Director, Edwin L. Steele Laboratory for Tumor Biology
Department of Radiation Oncology, Massachusetts General
Hospital and Harvard Medical School