## Interface between Engineering and Biology and its Impact on the Human Condition

# Symposium/Regional Meeting of the National Academy of Engineering The Public is Invited

# March 13, 2003, University of Washington

Symposium: Room 110, Kane Hall, 1 - 5:30 pm Social Hour: Walker-Ames Room, Kane Hall, 5:30-6:30 The web site for the event is: http://www.cs.washington.edu/nae.

## Sponsors: Microsoft, Micronics, University of Washington, National Academy of Engineering

The National Academy of Engineering holds several Regional Conferences each year, on topics of interest to the host institution. Because of the biological/medical focus at the University of Washington, this meeting concentrates on engineering and scientific developments in the medical field.

### **Introduction to the National Academy of Engineering**

Dr. William A. Wulf, President

## Dr. Richard D. Klausner, M.D.

Executive Director, Global Health, Bill & Melinda Gates Foundation

## **Development of Medical Technologies for the Developing World**

Dr. Christopher J. Elias, M.D., M.P.H., President of PATH

#### Microfluidics and Engineering a New Doctor-Patient Interface

Professor Paul Yager, (UW, Bioengineering)

#### **Unintended consequences**

Professor Robert Bea, Department of Civil & Environmental Engineering, University of California, Berkeley

#### **Biomedical Research in Space**

Dr. Bonnie J. Dunbar, PhD, NAE

NASA Johnson Space Center, Assistant Director (University Research and Affairs)

# **To Tissue Engineer Heart Muscle**

Professor Buddy D. Ratner<sup>1</sup>, Margaret Allen<sup>2</sup>, John Angello<sup>1</sup>, Paul Bornstein<sup>1</sup>, Kip Hauch<sup>1</sup>, Stephen D Hauschka<sup>1</sup>, Allan S. Hoffman<sup>1</sup>, Charles Murry<sup>1</sup>, Joan Sanders<sup>1</sup>, Patrick Stayton<sup>1</sup>, Robert Vernon<sup>2</sup>, Kim Woodhouse<sup>3</sup>, <sup>1</sup>University of Washington, Seattle, WA 98195, <sup>2</sup>Hope Heart Institute, Seattle, WA 98112, <sup>3</sup>University of Toronto, Toronto, CA

## Flying with Animals: Interfacing Computer Electronics and Biology

Professors Thomas L. Daniel (UW, Biology) and Chris Diorio (UW, CSE)

#### LIFE-ON-A-CHIP

Professors Mary Lidstrom (UW, Chemical Engineering) and Deirdre Meldrum (UW, Electrical Engineering), Co-Directors, Microscale Life Sciences Center, University of Washington

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Automobile access to Kane Hall is best made by entering the Underground Garage on 15th Ave. NE and NE 41st street. Out of town guests can make reservations at the University Inn, 4240 Roosevelt Way NE, which is within about five blocks of Kane Hall. Ask for the UW Visitors Rate. Contact:1-800-833-3855, http://www.universityinnseattle.com, (206) 632-5055.

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Organizing Committee: Bruce A. Finlayson and Edward D. Lazowska, Co-chairs James B. Bassingthwaighte, Akira Ishimaru, Albert S. Kobayashi, Irene C. Peden, Buddy D. Ratner, Edward Wenk, Jr.