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1 9 9 3 S E M I N A R S

Morning Transport

- July 12 "Swelling-activated osmolyte transport: New roles for used channels" Leon Goldstein, Ph.D., Brown University
- July 19 "Sticky business: CFTR, frog skin and mucus secretion" David C. Dawson, Ph.D., University of Michigan Medical School
- July 26 "Differentiation of renal collecting duct cells" Geza Fejes-Toth, D.M.D., Dartmouth Medical School
- August 2 "Noise from ATP" Raymond A. Frizzell, Ph.D., University of Alabama in Birmingham
- August 9 "Organic osmolytes: Transporters and triggers" Rolf Kinne, M.D., Ph.D., Max-Planck-Institut fuer Molekulare Physiologie
- August 16 "The Na-K-Cl cotransporter: Recent Studies in the intact rectal gland, isolated tubules, and transfected cells" Bliss Forbush, III, Ph.D., Yale University School of Medicine
- August 23 "Why the kidney doesn't die of overwork: Endogenous modulators of hypoxic injury" Franklin H. Epstein, M.D., Harvard Medical School and Beth Israel Hospital

Noon

- July 16 "Aldosterone action against all odds" Aniko Fejes-Toth, M.D., Ph.D., Dartmouth Medical School
- "Bile salt and bile alcohol transport in skate hepatocytes" Gert Fricker, M.D., Sandoz LTD, Basel, Switzerland
- July 23 "Cloning of the major yolk protein, vitellogenin, from various species" D. Stephen C. Jones, Ph.D., University of Cambridge, Cambridge, England
- "Do sharks have a molecular potential for cancer?" Howard P. Taylor, Ph.D., Duke University Medical Center
- July 30 "Carbonic anhydrase in the eel: A slippery subject" Stephen Gehnrich, Ph.D., Salisbury State University
- "When did the renin angiotensin system appear in the evolution of vertebrates" Sara Galli-Phillips, Ph.D., College of Medicine, University of Florida
- August 6 "The dogfish as a model for cloning the cardiac calcium channel" James Maylie, Ph.D., Oregon Health Sciences University

"Glutamate receptor function in retina" Greg W. Maguire, Ph.D.,
University of Texas Health Science Center at Houston

August 20 "Apolipoproteins in elasmobranchs" Marina Paolucci, Ph.D., Boston
University

"Primitive immune molecules in the spiny dogfish" Carolyn R.
Newton, Ph.D., Kalamazoo College

Evening

July 7 "101 uses for a blood-brain barrier" Helen F. Cserr, Ph.D., Brown
University

July 14 THE TWELFTH ANNUAL WILLIAM B. KINTER MEMORIAL LECTURE. "Estrogen
ecotoxicology" John A. McLachlan, Ph.D., NIH, NIEHS

July 21 "Cellular and molecular mechanisms of brain cell volume regula-
tion" Kevin Strange, Ph.D., Harvard Medical School, Children's
Hospital

July 28 "Assembly of actin and myosin structures in cells" Joseph W.
Sanger, Ph.D., University of Pennsylvania School of Medicine

August 4 THE SECOND JOHN W. BOYLAN MEMORIAL LECTURE. "To the third power:
Teamwork, talent and technology in the race for America's Cup"
William Ingraham Koch, Sc.D., 1992 winner of the America's Cup

August 11 THE THIRD THOMAS H. MAREN LECTURE. "The molecular revolution:
New insights into understanding salt transport by urinary epithe-
lia" Steven C. Hebert, M.D., Harvard Medical School and Brigham &
Women's Hospital

August 18 "Metallothioneins in reproduction and development" Glen K. An-
drews, Ph.D., University of Kansas Medical Center

Special Seminars

July 20 "The History of Harpswell and MDIBL" Thomas H. Maren, M.D.,
University of Florida College of Medicine; MDIBL Research Scien-
tist since 1953

July 29 "Estuaries: Highways to the Sea", Prof. William Amos, Marine
Biologist, Nature Photographer and Science Writer, Lyndonville,
Vermont. Public lecture to enhance MDIBL's educational program
for high school and undergraduate students funded by the Burroughs
Wellcome Fund and the Hearst Foundation.

August 5 "Future Science: Young Scientists at work today!" Public seminar
featuring local and national high school and college students
participating in exciting hands-on training programs at the MDIBL
and The Jackson Laboratory describe their summer research
projects.

- August 13 MDIBL Symposium - "Responsibilities of Investigators and Students in the Conduct of Research". A special program designed to articulate ethical standards in biomedical experimental science. Attendance mandatory for MDIBL students, and includes lectures, group analysis of case problems and discussion.
- August 23 "Aquatic organisms as models for cancer research" Rebecca van Beneden, Ph.D., Duke University School of the Environment, Marine Laboratory and the University of Maine

STUDENTS' "BASIC" LECTURE SERIES

(Participation required by students who are recipients of fellowships/scholarships)

- July 8 "The Cytoskeleton: Principles & Techniques" John H. Henson, Ph.D. and crew, Dickinson College
- July 15 "Ab ovo ad (Squal)usque: Physiology of Maternal-Fetal Relations in Elasmobranchs" Gregg Kormanik, Ph.D., University of North Carolina/Asheville
- July 20 "Primitive Immune Molecules in the Spiny Dogfish" Carolyn Newton, Ph.D. and crew, Kalamazoo College
- July 27 "Methods of Illuminating Sodium Transport Mechanisms" David W. Towle, Ph.D. and crew, Lake Forest College
- August 3 "The Fish Gill Does It All!: Gas Exchange, Osmoregulation, Ion Regulation, Acid-Base" David H. Evans, Ph.D., University of Florida, Gainesville and J.B. Claiborne, Ph.D., Georgia Southern University
- August 10 "Why Study the Rectal Gland?" John N. Forrest, Jr., M.D. and crew, Yale University School of Medicine

1993 PUBLICATIONS

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- Kidder, G.W., III. Carbon monoxide and skate gastric cells: Respiration and action spectrum. *J. Comp. Physiol. B* 163:395-400, 1993.
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- Kinne, R.K.H. and L. Hocking. The Mount Desert Island Biological Laboratory (MDIBL): A short history and background. *Helgolander Meeresuntersuchungen*, (in press).
- Kinne, R.K.H. and E. Kinne-Saffran. Cellular and subcellular toxicity of pollutants: Plasma membrane transport systems as targets. In: Fundamental and Applied Research for Aquaculture. B. Lahlou and P. Vitello, eds., American Geophysical Union, (in press).
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