



Physiology
UNIVERSITY OF TORONTO

ARCHIBALD BYRON MACALLUM LECTURERS

The annual Archibald Byron Macallum Lecture is made possible by a bequest to the Department of Physiology, University of Toronto from the Estate of Alexander Douglas Macallum in honour of his father, Archibald Byron Macallum, who was Chairman of this Department from 1891 to 1908. The Lectureship is awarded each year to a distinguished physiologist.

- 1. DR. EDWARD EVARTS**, Dept. of Health, Education and Welfare, National Institute of Mental Health, Bethesda, Maryland, U.S.A.
"Control of movement by the brain: insights gained from studies of the activity of single nerve cells in the monkey"
February 16, 1978, (NEUROPHYSIOLOGY GROUP)
- 2. DR. ROLF LUFT**, Professor and Chairman, Department of Endocrinology, Karolinska University, Stockholm Sweden, and Chairman, Nobel Committee for Physiology and Medicine.
"Nobel prize and Nobel laureates"
April 19, 1979, (ENDOCRINOLOGY GROUP)
- 3. DR. WILLIAM F. GANONG**, Professor and Chairman, Department of Physiology, University of California, San Francisco, U.S.A.
"The brain as an endocrine organ"
April 29, 1980, (INTEGRATIVE GROUP)
- 4. DR. ELZBIETA JANKOWSKA**, Dept. of Physiology, University of Goteborg, Sweden.
"Spinal Interneuronal Systems"
April 6, 1981, (NEUROPHYSIOLOGY GROUP)

5. **DR. RICHARD J. WURTMAN**, Professor of Neuroendocrine Regulation, Massachusetts Institute of Technology, Cambridge, Massachusetts, U.S.A.
"Nutrients and neurotransmission"
February 24, 1982, (ENDOCRINOLOGY GROUP)
6. **DR. D.J.C. CUNNINGHAM**, Fellow of University College, Oxford, England.
"Breathing and exercise: old facts and newer thoughts"
March 16, 1983, (INTEGRATIVE GROUP)
7. **DR. COLIN B. BLAKEMORE**, Waynflete Professor of Physiology, University of Oxford.
"Plasticity in the visual system"
March 6, 1984, (NEUROPHYSIOLOGY GROUP)
8. **DR. JOSEPH B. MARTIN**, Julieanne Dorn Professor of Neurology, Harvard Medical School.
"Huntington's disease: new approaches to an old problem"
February 25, 1985, (ENDOCRINOLOGY GROUP)
9. **DR. ARTHUR C. GUYTON**, Chairman and Professor, Dept. of Physiology and Biophysics, The University of Mississippi Medical Center, U.S.A.
"Physiology of arterial pressure control and hypertension"
March 13, 1986, (INTEGRATIVE GROUP)
10. **DR. ERIC R. KANDEL**, College of Physicians & Surgeons of Columbia University, Center for Neurobiology and Behavior, New York, U.S.A.
"The short and long of long-term memory: a molecular biological approach"
May 14, 1987, (NEUROPHYSIOLOGY GROUP)
11. **DR. E.A. NEWSHOLME**, Merton College, and Dept. of Biochemistry, Oxford University, England.
"An amino acid metabolic link between muscle, brain and the immune system of equal importance to the athlete and to the septic patient"
April 13, 1988, (ENDOCRINOLOGY GROUP)
12. **DR. JOHN B. WEST**, Professor of Medicine and Physiology, University of California, San Diego, U.S.A.
"Severe hypoxia: lessons from high altitude"
April 26, 1989, (INTEGRATIVE GROUP)

- 13. DR. DONALD L. PRICE**, Professor of Pathology, Neurology, and Neuroscience, The John Hopkins University School of Medicine, Baltimore, Maryland, U.S.A.
"Alzheimer's Disease and Model Systems"
March 21, 1990, (NEUROPHYSIOLOGY GROUP)
- 14. DR. ROGER H. UNGER**, Professor of Internal Medicine, Touchstone/West Distinguished Chair in Diabetes Research, & Director, Center for Diabetes Research, University of Texas, Southwestern Medical School, Dallas, Texas, U.S.A.
"Diabetic hyperglycemia - linkage to glucose uptake by α -cells"
May 2, 1991, (ENDOCRINOLOGY GROUP)
- 15. DR. M.L. HALPERIN**, Professor of Medicine, University of Toronto, Toronto, Ontario, Canada.
"Potassium, some woolly thoughts"
April 15, 1992, (INTEGRATIVE GROUP)
- 16. DR. A.J. HUDSPETH**, Professor & Director, Center for Basic Neuroscience Research, University of Texas, Southwestern Medical Center.
"How hearing happens: hair cells of the ear"
May 10, 1993, (NEUROPHYSIOLOGY GROUP)
- 17. DR. GRAEME I. BELL**, Louis Block Professor, Departments of Biochemistry & Molecular Biology, and Medicine, and Genetics, The University of Chicago.
"Genetics of Diabetes Mellitus and Insulin Secretion"
April 19, 1994, (ENDOCRINOLOGY GROUP)
- 18. DR. DAVID J. HEARSE**, Professor of Physiology & Medicine, The Rayne Institute, St. Thomas' Hospital. London, England
"The Stunned Cardiologist: Adventures in the Land of Ischemia and Reperfusion"
March 27, 1995, (INTEGRATIVE GROUP)
- 19. DR. ROGER NICOLL**, Professor of Pharmacology & Physiology, Department of Cellular & Molecular Pharmacology, University of California, San Francisco
"In search of the molecules of memory"
April 29, 1996, (NEUROPHYSIOLOGY GROUP)
- 20. DR. JEFFREY FRIEDMAN**, Director, Starr Center for Human Genetics, New York, Professor, The Rockefeller University, New York
"Leptin and the molecular mechanisms regulating body weight"
April 28, 1997, (ENDOCRINOLOGY GROUP)

21. **DR. KENT L. THORNBURG**, Oregon Health Sciences University.
"Unsolved mysteries of the developing heart"
April 28, 1998, (INTEGRATIVE GROUP/AREA)
22. **DR. WOLF SINGER**, Director of the Max-Planck-Institute for Brain Research.
"The putative role of synchrony in neuronal processing"
April 29, 1999 (NEUROPHYSIOLOGY GROUP)
23. **PROFESSOR STEPHEN O'RAHILLY**, Departments of Medicine & Clinical
Biochemistry, Addenbrooke's Hospital, University of Cambridge
"Human obesity: not all gluttony and sloth"
April 25, 2000 (ENDOCRINOLOGY GROUP)
24. **2001 LECTURE CANCELLED – due to speaker's illness**
24. **PROFESSOR BRUCE MCEWEN**, Laboratory of Neuroendocrinology, Rockefeller
University, New York
"From Molecules to Mind: Lessons from Neuroendocrinology"
May 1st, 2002 (NEURAL AND ENDOCRINE GROUP)
- * **2003 Lecture postponed due to SARS Outbreak in Toronto**
25. **PROFESSOR ALLEN WILSON COWLEY, JR.** Professor and Chair, Department of
Physiology, Medical College of Wisconsin
"Genetic Map of Cardiovascular Function"
April 29, 2004 (INTEGRATIVE GROUP)
26. **PROFESSOR DAVID J.P. BARKER, FRS**, Director of the MRC Environmental
Epidemiology Unit, Southampton, UK
"The growth of children who will develop chronic adult disease"
April 18, 2005 (ENDOCRINOLOGY GROUP)
27. **PROFESSOR PAUL GREENGARD (Nobel Laureate)**
Vincent Astor Professor, Laboratory of Molecular and Cellular Neuroscience,
The Rockefeller University, NY
"Signal transduction pathways used by therapeutic agents and drugs of abuse"
May 1, 2006 (NEUROPHYSIOLOGY GROUP)

28. **PROFESSOR DAVID CLAPHAM**
Aldo R. Castañeda Professor of Cardiovascular Research
Investigator, Howard Hughes Medical Institute
Professor of Neurobiology, Harvard Medical School
Boston, MA
“New Ion Channels
March 8, 2007 (NEUROPHYSIOLOGY GROUP)
- * **2008 Lecture postponed**
29. **PROFESSOR JONATHAN SECKL**
Professor of Molecular Medicine, Endocrinology Unit, Centre for Cardiovascular
Science, Queen’s Medical Research Institute, Edinburgh
“Steroids, enzymes and cognitive ageing: more than a one-trick pony”
April 21, 2009 (REPRODUCTION & DEVELOPMENT RESEARCH PLATFORM)
30. **PROFESSOR AVRIL SOMLYO**
Professor, Department of Molecular Physiology and Biological Physics
Charlottesville, VA
“Signaling Upstream and Downstream of RhoA in Smooth Muscle”
April 13, 2010 (CARDIOVASCULAR RESEARCH PLATFORM)
31. **PROFESSOR BRUCE M. SPIEGELMAN**
Stanley J. Korsmeyer Professor of Cell Biology and Medicine
Dana-Farber Cancer Institute Harvard Medical School
“Transcription Control of Adipogenesis in Health and Disease”
April 7, 2011 (ENDOCRINOLOGY RESEARCH PLATFORM)
32. **PROFESSOR KARL DEISSEROTH**
Departments of Bioengineering and Psychiatry, Stanford University
Howard Hughes Medical Institute
“Development of Optogenetics”
April 7, 2012 (NEUROPHYSIOLOGY RSEARCH PLATFORM)
33. **PROFESSOR LEROY HOOD**
President, Institute for Systems Biology
Seattle, WA
“Complexity, Paradigm Changes, Systems Biology and Medicine”
May 2, 2013 (REPRODUCTION & DEVELOPMENT RESEARCH PLATFORM)

34. **PROFESSOR JAMES N. WEISS**
Kawata Professor of Medicine & Physiology Chief,
Division of Cardiology Director, Cardiovascular Research Laboratory
David Geffen School of Medicine at UCLA
"New Approaches to Unravel the Genetics of Heart Failure: Clues from Evolutionary Biology"
April 14, 2014 (CARDIOVASCULAR RESEARCH PLATFORM)
35. **PROFESSOR MITCHELL LAZAR**
Sylvan Eisman Professor of Medicine and Genetics, the Chief of the Division of
Endocrinology, Diabetes, and Metabolism, and the Director of the Institute for Diabetes,
Obesity, and Metabolism at the University of Pennsylvania.
"Thiazolidinediones and the Promise of Insulin Sensitization for Type 2 Diabetes"
May 13, 2015 (ENDOCRINOLOGY RESEARCH PLATFORM)
36. **PROFESSOR TIM BLISS, FRS**
National Institute for Medical Research, UK
"Synaptic plasticity and the neural basis of memory"
May 11, 2016 (NEUROPHYSIOLOGY RESEARCH PLATFORM)
37. **PROFESSOR CATHERINE DULAC**
Howard Hughes Medical Institute, Harvard University
"Molecular and Neural Architecture of Social Behavior Circuits"
May 8, 2017 (REPRODUCTION & DEVELOPMENT RESEARCH PLATFORM)
38. **PROFESSOR MONA NEMER**
Chief Science Advisor, Government of Canada
"Genetic Basis of Valve Disease"
May 3, 2018 (CARDIOVASCULAR RESEARCH PLATFORM)
39. **PROFESSOR RICHARD PALMITER**
Professor of Biochemistry, University of Washington, School of Medicine, Investigator,
Howard Hughes Medical Institute.
"Neurocircuitry of Mouse Feeding Behavior"
"Genetic Basis of Valve Disease"
May 1, 2019 (ENDOCRINOLOGY RESEARCH PLATFORM)