Preface

EARL E. BAKKEN

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Introduction

MARC S. PENN and EARL E. BAKKEN

Heart-brain medicine: Update 2008

Bakken Lecture

PATRICK M. KOCHANEK

Bakken Lecture: The brain, the heart, and therapeutic hypothermia

Session I: Pathways Involved in Neuromodulation of Risks in Coronary Artery Disease

ROBERT M. CARNEY and KENNETH E. FREEDLAND

Depression and heart rate variability in patients with coronary heart disease

MICHAEL S. LAUER

Autonomic function and prognosis

JULIAN F. THAYER

Vagal tone and the inflammatory reflex

ROY L. SILVERSTEIN

Inflammation, atherosclerosis, and arterial thrombosis: Role of the scavenger receptor CD36

DAVID S. GOLDSTEIN

Pioneer Award Address: Ignorance isn’t biased: Comments on receiving the Pioneer Award

Session II: Measures and Strategies for Modulation of Heart-Brain Interactions

ROBERT W. SHIELDS, JR

Heart rate variability with deep breathing as a clinical test of cardiovagal function
MIKE J.L. DEJONGSTE, GERT J. TERHORST, and ROBERT D. FOREMAN
Basic research models for the study of underlying mechanisms of electrical neuromodulation and ischemic heart-brain interactions

Session III: Annual Review of Key Papers in Heart-Brain Medicine

DAVID S. GOLDSTEIN, YEHONATAN SHARABI, BARBARA I. KARP, OLADI BENTHO, AHMED SALEEM, KAREL PACAK, and GRAEME EISENHOFER
Cardiac sympathetic denervation preceding motor signs in Parkinson disease

JEFFREY P. MOAK, DAVID S. GOLDSTEIN, BASIL A. ELDADAH, AHMED SALEEM, COURTNEY HOLMES, SANDRA PECHNIK, and YEHONATAN SHARABI
Supine low-frequency power of heart rate variability reflects baroreflex function, not cardiac sympathetic innervation

Session IV: Code Lavender—Strategies for Implementing Heart-Brain Medicine

LAURA D. KUBZANSKY and KARESTAN C. KOENEN
Is posttraumatic stress disorder related to development of heart disease? An update

JONE GEIMER-FLANDERS
Creating a healing environment: Rationale and research overview

OWEN SAMUELS
Redesigning the neurocritical care unit to enhance family participation and improve outcomes

Session V: Insights into Neuromodulation of Cardiovascular Function

ROBERT D. FOREMAN and CHAO QIN
Neuromodulation of cardiac pain and cerebral vasculature: Neural mechanisms

ROSA CAO, BRYAN T. HIGASHIKUBO, JESSICA CARDIN, ULF KNOBLICH, RADDY RAMOS, MARK T. NELSON, CHRISTOPHER I. MOORE, and JOSHUA C. BRUMBERG
Pinacidil induces vascular dilation and hyperemia in vivo and does not impact biophysical properties of neurons and astrocytes in vitro

STEPHEN W. PORGES
The polyvagal theory: New insights into adaptive reactions of the autonomic nervous system

Poster Abstracts

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MATTHEW C. BECKER, JOHN M. GALLA, SAIF ANWARUDDIN, SAMIR KAPADIA, and RICHARD A. KRASUSKI
Insulin Use Does Not Protect Against Restenosis in Diabetic Patients Presenting with Acute Coronary Syndrome or Symptomatic Angina
Abstract 2
MATTHEW C. BECKER, JOHN M. GALLA, RYAN P. DALY, FEMI PHILIP, PETER ZIMBWA, STEPHEN O. CHEN, CHEN H. CHOW, TINGFEI HU, RICHARD A. KRASUSKI, and ARMAN T. ASKARI
Postoperative Statin Use and Lower LDL Cholesterol Concentration Are Associated with Reduced Incidence of Stroke

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GIULIA BETTO, VINCENT FAZIO, DAMIR JANIGRO, and CHAITALI GHOSH
Brain Edema and Blood-Brain Barrier Leakage Influence Antiepileptic Drug Levels

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KUMAR BUDUR and NATTAPONG JAICHRARAYATAM
CPAP Treatment vs Conservative Treatment in Mild Obstructive Sleep Apnea: Implications on Cardiovascular Morbidity

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WILLIAM C. BUSHELL
New Bioinformatics Program Identifies Behavioral Medicine Interventions for Epidemic Cardiovascular Disease in the Developing World: Analysis of Multidisciplinary Findings for Launching a New Global Public Health Initiative in Heart-Brain Medicine

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Do Systemic Inflammation and Blood-Brain Barrier Failure Play a Role in Pediatric Psychosis?

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Brain, Heart, and Education

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L. CUCULLO, T. SATHE, M. HOSSAIN, and D. JANIGRO
Tobacco Smoke Mediates a Monocytic and Endothelial Proinflammatory Activation that Synergistically Affects BBB Integrity

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H.A. ELSHARKAWY, S.M. EL HADI, J.E. TETZLAFF, and J.J. PROVENCIO
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