NICHE 2012 – STRESS RESPONSE AND CHILD HEALTH

NICHe 2008: Systems Biology and Child Health
NICHe2009: Child Health and Epigenetics, Developmental Plasticity and Programming
NICHe2010: Signal Transduction and Child Health
NICHe2011: Biological Rhythms: Perspectives in Child Health

NICHe Conference on ‘Stress Response and Child Health’
May 18-20, 2012 - Heraklio, Crete, Greece

Scientific Committee
George P. Chrousos, Evangelia Charmandari,
Jean-Claude Carel, John Achermann, Olle Soder

Organizing Committee
Evangelia Charmandari, George P. Chrousos
FRIDAY MAY 18, 2012

SESSION 1: INTRODUCTION

08.45-09.00 Opening, George P. Chrousos

09.00-10.00 Concepts of stress and neuroendocrinology of the stress response
George P. Chrousos University of Athens, Athens, Greece

10.00-11.00 Stress-system disorders: Overview of behavioral homeostasis
Gold PW, Section on Neuroendocrinology, National Institute of Mental Health, National Institutes of Health, Bethesda, MD 20892, USA

11.00-11.30 Break

11.30-12.30 Evolutionary perspective in the stress response
Ze’ev Hochberg, Department of Pediatric Endocrinology, Meyer Children’s Hospital, Haifa 30196, Israel

12.30-14.00 Lunch

SESSION 2: ENDOCRINOLOGY OF THE STRESS RESPONSE

14.00-15.00 The CRF family of peptides and their role in stress responsivity and behavior
Dimitris Grigoriadis, Clayton Foundation Laboratories for Peptide Biology, Salk Institute, La Jolla, CA, USA

15.00-16.00 Glucocorticoid receptor isoforms and the networks of glucocorticoid actions
John Cidlowski, Laboratory of Signal Transduction, National Institute of Environmental Health Sciences, National Institutes of Health, Research Triangle Park, NC 27709, USA
16.00-16.30  
*Break*

16.30-17.30  
*Alterations in the circadian rhythm of glucocorticoid secretion: Potential clinical implications*

*Tomoshige Kino, Unit on Molecular Hormone Action, Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, MD 20892, USA*

17.30-18.30  
*Alterations in the ultradian glucocorticoid secretion: Implications for GR-mediated gene transcription*

*Gordon Hager, National Cancer Institute, National Institutes of Health, Bethesda, MD 20892, USA*

19.30  
*Dinner*

**SATURDAY MAY 19, 2012**

09.00-10.00  
P450 oxidoreductase deficiency: A new disorder of steroidogenesis with multiple clinical manifestations

*Walter Miller, Department of Pediatrics, University of California San Francisco, San Francisco, California 94143-0978, USA.*

10.00-11.00  
*Allopregnanolone: Neurosteroids as regulators of stress*

*Synthia Mellon, Department of Obstetrics, Gynecology and Reproductive Sciences, University of California San Francisco, San Francisco, California 94143-0978, USA*

11.00-11.30  
*Break*
SESSION 3: EFFECTS OF CHRONIC HYPERACTIVATION OR HYPOACTIVATION OF THE STRESS SYSTEM

11.30-12.30 The effects of acute and chronic stress on growth
Lars Sävendahl, Department of Women's and Children's Health, Karolinska Institutet, Karolinska University Hospital, Stockholm, Sweden.

12.30-14.00 Lunch

14.00-15.00 The effects of acute and chronic stress on puberty/reproduction

15.00-16.00 Stress and cognition
Seckl JR, Endocrinology Unit, Centre for Cardiovascular Science, Queen's Medical Research Institute, University of Edinburgh, Edinburgh EH16 4TJ, UK

16.00-16.30 Break

16.30-17.30 Long-term effects of social status and psychological stress on health and longevity
M.G. Marmot, International Institute for Society and Health, University College London, London, WC1E 6BT, UK

17.30-18.30 The effects of acute and chronic stress on diabetic control
Franco Chiarelli, Department of Paediatrics, University of Chieti, Via dei Vestini 5, I-66100 Chieti, Italy

19.30 Dinner
09.00-10.00 Stress and Sleep

Alexandros Vgontzas, Sleep Research and Treatment Center, Department of Psychiatry, Pennsylvania State University College of Medicine, Hershey, PA 17033, USA

10.00-11.00 Effects of intrauterine stress exposure on long-term human health and disease risk outcomes: focus on metabolism, HPA function, immunity, cognition and cellular aging

Pathic Wadhwa, University of California, Irvine, School of Medicine, Irvine, CA 92697, USA

11.00-11.30 Break

11.30-12.15 Stress and Reproduction

George Mastorakos, University of Athens Medical School, Athens 11527, Greece

12.15-13.00 Primary Generalized Glucocorticoid Resistance and Hypersensitivity States: The End-organ Involvement in the Stress Response

Evangelia Charmandari, Division of Endocrinology, Metabolism and Diabetes, First Department of Pediatrics, University of Athens Medical School, Athens 11527, Greece

13.00-13.45 Physiological studies in hormone resistance diseases

Dov Tiosano, Division of Pediatric Endocrinology, Meyer Children's Hospital, Haifa 31096, Israel

13:45-14:00 Concluding Remarks - George P. Chrousos