THURSDAY, MARCH 21, 2019

1:00 - 1:10 PM  Welcome: Morag Young, Conference Chair, Hudson Institute of Medical Research, Australia and Frédéric Jaisser, Conference Co-chair, INSERM U1138, Paris, France

1:10 - 1:50 PM  Senior Investigator Presentation:

The Role of Endothelial Cell MR Activation in Development of Vascular Stiffness

James Sowers, MD, PhD
Vice Chair, Professor of Medicine, Dept. of Endocrinology, School of Medicine
Dalton Cardiovascular Research Center, University of Missouri, USA

SESSION I: ALDOSTERONE AND MR, CARDIOVASCULAR AND METABOLIC OUTCOMES

Session Chairs: Frédéric Jaisser, INSERM U1138, Paris, France
Toshiro Fujita, The University of Tokyo, Japan

1:50 - 2:05 PM  Susan Stienen, Centre d'Investigation Clinique et Plurithematique Nancy, France
Determinants of Anti-fibrotic Response to Mineralocorticoid Receptor Antagonists Therapy

2:05 - 2:20 PM  Thitinan Treesaranuwa, Brigham & Women’s Hospital, Harvard Medical School, USA
Lysine-Specific Demethylase-1 (LSD1) Deficiency Increases Aldosterone Signaling via Mineralocorticoid Receptor Activation

2:20 - 2:35 PM  Andrea Vecchiola, Pontificia Universidad Catolica de Chile, Chile
Eplerenone Ameliorates Renin-Angiotensin-Aldosterone System Activation and Obesity in High-fat Mice Model

2:35 - 2:50 PM  Michael Hill, University of Missouri, USA
A Role for Mineralocorticoid Receptors in Vascular Smooth Muscle Cell Stiffness and Adhesion during Aging

2:50 - 3:05 PM  Christopher Heier, The George Washington University SOM and Health Sciences, USA
The ∆9,11 Drug Vamorolone Targets Both the MR and GR to Safely Treat Inflammation and Dystrophic Cardiomyopathy

3:05 - 3:20 PM  Sai Prasad Iyer, Relypsa, Inc., a Vifor Pharma Group Company
A Novel Rodent Model of Hyperkalemia: Effect of Patiromer on Serum Potassium and Aldosterone

3:20 - 3:45 PM  COFFEE BREAK

SESSION II: YOUNG INVESTIGATOR COMPETITION PRESENTATIONS

Session Chairs: Matt Luther, Vanderbilt University, USA
Elise Gomez-Sanchez, University of Mississippi Medical Center, USA

3:45 - 4:05 PM  Charlotte van der Heijden, Radboud University Medical Center, The Netherlands
Aldosterone Induces Trained Immunity via Fatty Acid Synthesis

4:05 - 4:25 PM  Elizabeth Moss, Molecular Cardiology Research Institute, Tufts Medical Center, USA
Sex-Specific Role for Endothelial Mineralocorticoid Receptors in Vascular Inflammation in Atherosclerosis
4:25 - 4:45PM  Moe Thuzar, University of Queensland, Australia  
*Effect of Mineralocorticoid Receptor Antagonism on the Function of Human Brown Adipose Tissue*

4:45 - 5:05PM  Rami El Zein, INSERM U970, France  
*Sex-Specific Role of Retinoic Acid Receptor Alpha Signaling in Adrenal Cortex Development and Functional Zonation*

5:05 - 5:15PM  Tribute to Professor John Coghlan  
John Funder, Hudson Institute of Medical Research, Australia

5:15 - 5:20PM  Conference Announcements

5:30 - 7:30PM  Moderated Poster Session and Reception  
**CLINICAL:**  
Moderators: Gordon Williams, MD, Harvard Medical School, USA  
Maria-Christina Zennaro, MD, PhD, INSERM, U970, PARCC, France

**BASIC AND TRANSLATIONAL:**  
Moderators: Frédéric Jaisser, INSERM U1138, Paris, France  
Morag Young, Hudson Institute of Medical Research, Australia

**FRIDAY, MARCH 22, 2019**

8:00 - 8:55AM  *State of the Art Lecture*  
*Natural Genetic Variation and the Personalized Actions of Nuclear Receptors*  
Mitchell Lazar, MD, PhD  
Willard and Rhoda Ware Professor, Diabetes and Metabolic Diseases  
Perelman School of Medicine, University of Pennsylvania, USA

8:55 - 9:35AM  *Senior Investigator Lecture*  
*Corticosteroid Receptor Action: When Dynamics Matter*  
Marc Lombès, MD  
Head, Endocrinology, INSERM U693  
Fac Med Paris Sud, Paris, France

9:35 - 9:40AM  Conference Announcements

9:40 - 10:00AM  COFFEE BREAK

**SESSION III: NEW MECHANISMS REGULATING MR SIGNALING**  
Session Chairs:  
Tim Cole, Monash University, Australia  
Gail Adler, Brigham & Women’s Hospital, USA

10:00- 10:15AM  Diego Alvarez de la Rosa, University of La Laguna, Spain  
*The Long Non-coding RNA Gas5 Selectively Regulates Corticosteroid Receptor Activity*

10:15 - 10:30AM  Nobuhiro Ayuzawa, The University of Tokyo, Japan  
*Two Distinct Regulations of Pendrin by Mineralocorticoid Receptor in Distal Nephron*

10:30 - 10:45AM  Christoph Korbmacher, Friedrich-Alexander University Erlangen-Nürnberg, Germany  
*The Stimulatory Effect of Aldosterone on ENaC is Site-specific in Mouse Distal Nephron and Requires Endogenous Protease Activity of Tubular Cells*
A Novel Compound Heterozygous Pathogenic Variant (R213C/R337C) in the HSD11B2 Gene as Cause of Apparent Mineralocorticoids Excess

Ross Feldman, University of Manitoba, Canada
Aldosterone is More Potent than Estradiol as a GPER Agonist: Functional and Radioligand Binding Studies

SESSION IV: CLINICAL UPDATES FOR PA
Session Chairs: Franco Mantero, University of Padua, Italy
Robert Carey, University of Virginia, USA

Adina Turcu, University of Michigan, USA
The Dichotomy of Primary Aldosteronism Subtypes: Fact or Fantasy?

Yuta Nanao, Hiroshima University, Japan
ATP1A1 Mutation Stimulates Adrenal Cell Proliferation via Vitamin D Receptor Signal Induced by DNA Demethylation

Jun Yang, Hudson Institute of Medical Research, Australia
Primary Aldosteronism is Common in Australian Primary Care: A Pilot Study

Motoko Nomura, Keio University School of Medicine, Japan
Comparison of the Efficacy of Laparoscopic Partial Adrenalectomy and Total Adrenalectomy in the Surgical Treatment of Primary Aldosteronism -Emerging Usefulness of Segmental Adrenal Venous Sampling

Matt Luther, Vanderbilt University, USA
Primary Aldosteronism Decreases Insulin Secretion and Increases Insulin Clearance in Humans

Luncheon and Presentation of Young Investigator Competition Awards

Senior Investigator Lecture
MicroRNAs as Tools for Diagnosis and Treatment of Primary Aldosteronism
Eleanor Davies, PhD
Professor of Molecular Endocrinology, BHF Glasgow Cardiovascular Research Institute
University of Glasgow, UK

SESSION V: ALDOSTERONE SYNTHESIS – NEW MECHANISMS
Session Chairs: Sheerazed Boulkroun, Inserm U970 – PARCC, France
Celso Gomez-Sanchez, University of Mississippi Medical Center, USA

Paula Barrett, University of Virginia School of Medicine, USA
Form and Function: The Role of the Rosette Structure in zG Calcium Signaling

Steven Maris, Brigham & Women’s Hospital, Harvard Medical School, USA
Differential Effects of Lipophilic and Hydrophilic Statins on Aldosterone Biosynthesis

Gian Paolo Rossi, University of Padua, Italy
A Novel GPER Mediated Feed-forward Loop Enhancing Aldosterone Biosynthesis
2:55 - 3:10PM  Annabel Berthon, National Institutes of Health, USA  
*Role of Kisspeptin and Kisspeptin Receptor in the Regulation of Adrenocortical Development and Steroid Hormone Secretion*

3:10 - 3:25PM  Steven Sparks, Selenity Therapeutics, Durham, NC, USA  
*Durable Suppression of Aldosterone Production in Non-human Primates by SE-6440, a Potent and Highly-Selective Inhibitor of Aldosterone Synthase (CYP11B2)*

3:25 - 3:40PM  William Rainey, University of Michigan, USA  
*Defining Somatic Mutations that Cause Aldosterone-producing Adenomas: Are We Done Yet?*

3:40 - 4:00PM  COFFEE BREAK

4:00 - 4:15PM  J. Howard Pratt, Indiana University School of Medicine, USA  
*Central Role of Aldosterone in Regulating Blood Pressure in Blacks*

**SESSION VI: SHORT TALKS**
Session Chairs:  William Rainey, University of Michigan, USA  
Gordon Williams, Harvard Medical School, USA

4:15 - 4:29PM  Annayya Aroor, University of Missouri, USA  
*Role of Oxidative Stress in Angiotensin II-Mediated Endothelial Sodium Channel Activation Leading to Arterial Stiffness*

4:20 - 4:25PM  Simon Travers, Inserm U 1185, France  
*Alteration of Mineralocorticoid Signaling Pathway by Accumulating Steroid Metabolites in Salt Wasting 21-Hydroxylase Deficient Patients*

4:25 - 4:30PM  Taweesak Wannachalee, University of Michigan, USA  
*In Search of Predictors of Concordance between Imaging and Adrenal Venous Sampling in Unilateral Primary Aldosteronism*

4:30 - 4:40PM  Closing Remarks  
Morag Young, Hudson Institute of Medical Research, Australia  
Frédéric Jaisser, INSERM U1138, Paris, France  
Gordon Williams, Harvard Medical School, USA