



# **FEBS Advanced Lecture Course** co-sponsored by CRESCENDO

# Nuclear Receptor Signalling in Physiology and Disease

# Spetses Hotel, Island of Spetses, Greece August 28 – September 2, 2011

# Program

# SUNDAY, August 28

from 16:00 Registration

19:00 Opening remarks (organizers)

19:30 - 21:00 Self-presentation of all participants

21:00 Welcome reception

# MONDAY, August 29

Chair: Johanna Zilliacus

08:30 Faculty meeting (lecturers, organizers)

09:00 - 09:45 Keynote Lecture

# Jan-Åke Gustafsson (Houston, USA)

Discovery of nuclear receptors, functions and structures of their domains and their superfamily nature

#### 10:00 - 10:45 Karen Knudsen (Philadelphia, USA)

Cross talk of the androgen receptor and DNA damage pathways: *molecular and translational prostate cancer relevance* 

10:45 - 11:15 Coffee break

#### 11:15 - 12:00 Jorma Palvimo (Kuopio, Finland)

Androgen receptor signaling in cell stress

Chair: Barbara Demeneix

12:00 - 13:00 Short Talks 1-6 (5 min talk + 5 min discussion)

#### Natalie Eriksson (St Lucia, QLD, Australia)

Transgenic expression of Nr3a3 regulates skeletal muscle fibre type

#### Anna Aakula (Turku, Finland)

Systematic Analysis of MicroRNAs Targeting the Androgen Receptor in Prostate Cancer Cells

#### **Amine Toubal (Paris, France)**

Dysregulation of SMRT/GPS2 Corepressor Complex Is Associated with Adipose Tissue Inflammation in Human Obesity

# Laia Rodríguez Carbó (Barcelona, Spain)

An Allosteric Modulator Surface on the Androgen Receptor Ligand Binding Domain

#### Marleen Ansems (Nijmegen, The Netherlands)

DC-SCRIPT: Modulating Nuclear Receptor Activity and Prognosis in Primary Breast Cancer

#### Jessica Robinson (Cambridge, U.K.)

Androgen Receptor driven transcription in molecular apocrine breast cancer is mediated by FoxA1

13:00 - 14:00 Lunch

16:00 - 17:30 Poster Session I (odd numbers)

#### 17:45 - 18:30 Karin Dahlmann-Wright (Stockholm, Sweden)

Genetic dissection of estrogen signaling in metabolic disease

18:30 - 20:00 Poster Session II (lecture-student teams: presentations)

# **TUESDAY**, August 30

Chair: Knut Steffensen

#### 09:00 - 09:45 Carlie de Vries (Amsterdam, The Netherlands)

Orphan Nuclear Receptor Nur77 in the vessel wall

#### 10:00 -10:45 Antonio Castrillo (Las Palmas, Spain)

Regulation of Homeostatic and Inflammatory Macrophage Functions by LXR Nuclear Receptors

10:45 - 11:15 Coffee break

# 11:15 - 12:00 Eckardt Treuter (Stockholm, Sweden)

Epigenomic control of metabolism and inflammation by NRs and coregulators – link to metaflammatory disease pathways

Chair: Eckardt Treuter

12:00 - 13:00 Short Talks 7-12

#### Dorsaf Hedhli (Brussels, Belgium)

The disease modifing properties of LXR-dependant pathway in *M. tuberculosis* infection

# Eija Pöllänen ( Jyväskylä, Finland)

Differential influence of Peripheral and systemic sex steroids on skeletal muscle quality in pre- and postmenopausal woman'

#### Áine Nolan (Dublin, Ireland)

Estradiol promotes microRNA-20a expression in colon carcinoma which may contribute to tumour progression after loss of ER $\beta$  receptor

#### Jelena Kamilic (Groningen, The Netherlands)

Intestinal specific FXR pathway is not a main pathway in intestinal permeability regulation

# Sascha Fuchs (Eindhoven, The Netherlands)

Screening the Estrogen Receptor-cofactor Interaction

#### Natasha Mott (Maywood, IL, USA)

Estrogen receptor beta  $(ER\beta)$  associates with different nuclear coregulatory proteins dependent on age and hormone treatment in the rodent brain

13:00 - 14:00 Lunch

16:30 - 19:00 Poster Session III (even numbers)

# 19:15 - 20:00 Antonio Moschetta (Bari, Italy)

Selective Activation of Nuclear Bile Acid Receptor FXR in the Intestine Protects from Cholestasis

# WEDNESDAY, August 31

Chair: Jan-Åke Gustafsson

#### 09:00 - 09:45 Adriana Maggi (Milan, Italy)

Amino acid-dependent activation of liver estrogen receptor alpha integrates metabolic and reproductive functions via IGF-1

#### 10:00 - 10:45 Iannis Taliandis (Athens, Greece)

Transcription factor network regulating lipid metabolism in the liver

10:45 - 11:15 Coffee break

#### 11:15 - 12:00 Béatrice Desvergne (Lausanne, Switzerland)

Networking activity of PPARs during development and in adult metabolic homeostasis

Chair: Tassos Damdimopoulos

12:00 - 13:00 Short Talks 13-18

# Maria Stahl Madsen (Odense, Denmark)

Mechanisms for synergistic activation of adipocyte genes by PPARγ and C/EBPα

# **Eric Samarut (Illkirch, France)**

Evolution of nuclear retinoic acid receptor alpha (RARa) phosphorylation sites. Serine gain provides fine-tuned regulation

# Branka Sosic-Jurjevic (Belgrade, Serbia)

Effects of Orchidectomy on Thyroid Homeostasis in Middle-Aged Rats

#### Britta Stenson (Stockholm, Sweden)

LXR regulates lipolysis of mature fat cells

# Vanessa Dubois (Leuven, Belgium)

Study of androgen effects on skeletal muscle by inactivating the androgen receptor in muscle-progenitor cells

# Randy Schrecengost (Philadelphia, PA, USA)

USP22 is a Critical Cancer-Associated Modulator of AR and c-Myc Activity

13:00 - 14:00 Lunch

# Continuing: WEDNESDAY, August 31

16:00 - 17:00 Beach Workshops Part I

17:00 - 18:00 Beach Workshops Part II

NR genomics, cistromes & transcriptomes: Talianidis, Mandrup, Dahlman-Wright

(Download PDF-articles: <u>Dahlman-Wright</u>, <u>Mandrup</u>, <u>Park</u>)

Metabolic NR signaling & disease: Castrillo, Desvergnes, de Vries, Moschetta, Demeneix

(Download PDF-articles: Castrillo, Desvergne, Moschetta)

Steroid receptor signalling & cancer: Gustafsson, Knudsen, Maggi

(Download PDF-articles: Gustafsson, Knudsen, Maggi)

NR epigenomics, coregulators & modifications: Schwabe, Palvimo, Treuter

(Download PDF-articles: McKenna, Rosenfeld, Treuter)

# 19:15 - 20:00 Barbara Demeneix (Paris, France)

Thyroid hormone signalling as an orchestrator of adult neurogenesis

#### THURSDAY, September 1

Chair: Adriana Maggi

09:00 - 09:45 Susanne Mandrup (Odense, Denmark)

Transcriptional networks controlling adipocyte differentiation

10:00 - 10:45 John Schwabe (Leicester, UK)

Structure and mechanisms of the SMRT:TBL1:GPS2:HDAC3 repression complex

10:45 - 11:15 Coffee break

11:15 - 13:00 Concluding remarks, best poster & best short talks award, course evaluation, certificate

13.00 - 14:00 Lunch

Individual activities

21:00 Farewell dinner

# FRIDAY, September 2

Departure