

14th International Workshop on Resistance to Thyroid Hormone

Scientific Program

Wednesday, March 25, 2020

- 1.30pm - 2.00pm Welcome Coffee/Tea
- 2.00pm – 2.30pm Plenary Lecture 1
Moderator: **Douglas Forrest**
Speaker: **Val Galton** "Thyroid Hormone Action: an Historical Perspective"
- 2.30pm – 4.30pm TRANSPORTERS
Moderator: **Samuel Refetoff**
Speakers: **Ana Montero-Pedrazuela** (Guadano-Ferraz lab)
 "New insights on the neuropathology of MCT8 deficiency"
 Steffen Mayerl (Heuer lab)
 "Impact of TH transporter deficiency on hippocampal function in mice"
 Lior Appelbaum
 "Modeling disorders of thyroid hormone transporters in zebrafish"
 Gad Vatine
 "From BBB-Chip to BBB-targeted gene therapy"
- 4.30pm – 6.00pm THYROID HORMONE SIGNALLING AND REGULATION
Moderator: **Yoshiharu Murata**
Speakers: **Nilhan Gunhanlar** (Visser lab)
 "iPSC derived neural cells as a model to understand thyroid hormone
 signaling in human brain"
 Marco Medici
 "Genetic determinants of thyroid function: novel insights and new
 approaches"
 Csaba Fekete "Novel mechanisms in the regulation of the HPT axis"
- 6.00pm – 7.00pm Dinner

Thursday, March 26, 2020

7.00am - 8:00am	Breakfast
8.00-10.00	<p>HUMAN RTH ALPHA & BETA</p> <p>Moderator: Paolo Beck-Peccoz</p> <p>Speakers: Maura Agostini (Chatterjee lab) "RTHalpha: Studies in anonymised and recallable genome datasets" Karn Wejaphikul (Peeters lab) "Divergent gene regulation by truncating TRa1 mutants correlates with the severity of the cognitive phenotype in patients" Manassawee Korwutthikulrangsri "Mosaicism as an important cause for missing THRB gene mutations in nonTR-RTH" Carolina Marques Chaves (Anselmo lab) "Resistance to thyroid hormone beta is associated with an increase in hepatic fat measured by transient elastography (FibroScan®) with controlled attenuation parameter (CAP)"</p>
10.00am – 12.00pm	<p>T3 TARGET TISSUES</p> <p>Moderator: Sheue-yann Cheng</p> <p>Speakers: Vanessa De Oliveira (Wondisford lab) "TR tagged mice" Tatiana Fonseca (Bianco lab) "Regulation of liver chromatin accessibility by Dio2" Douglas Forrest "Transcriptional regulation by TRb in endocrine and sensory systems" Anne van der Spek (Boelen lab) "Thyroid hormone action in innate immune cells"</p>
12.00pm – 1.00pm	Lunch
1.00pm – 2.30pm	<p>NEW MOLECULAR MECHANISMS OF T3 ACTION</p> <p>Moderator: Gregory Brent</p> <p>Speakers: Beatriz Romartinez-Alonso (Schwabe lab) "Structural and functional insights into the molecular behavior of dominant negative mutant TRalpha receptors" Cho Rong Han (Cheng lab) "Novel genetic models to dissect RTHa in zebrafish" Megan Ritter (Hollenberg lab) "New insights into corepressor function in vivo"</p>
2.30pm – 4.00pm	<p>NEW T3 SIGNALING PATHWAYS</p> <p>Moderator: Frederic Flamant</p> <p>Speakers: Daniela Geist (Moeller lab) "Canonical versus non-canonical TR action" Laurent Sachs "Network analysis and epigenetic analysis of T3 action"</p>

Guo Huang

"Molecular Control of Heart Regeneration"

4.00pm – 6.00pm

TISSUE REPAIR

Moderator: **Tony Hollenberg**

Speakers: **Cristina Luongo** (Salvatore lab)

"Role of type 2 deiodinase in muscle stem cells"

Davide Komla-Ebri & Andrea Pollard (Williams lab)

"TH regulation of tissue maintenance and repair in the skeleton"

Meredith Hartley (Scanlan lab)

"CNS-Penetrating thyromimetics for myelin repair"

Hongwei Ma (Ding lab)

"Thyroid hormone and retinal degeneration"

6.00pm – 7.00pm

Dinner

Friday, March 27, 2020

7.00am - 8:00am	Breakfast
8.00-10.00	<p>DEIODINASES</p> <p>Moderator: Balasz Gereben</p> <p>Speakers: Ulrich Schweizer "Towards structure and mechanism of Dio1 and Dio2" Monica Franca (Refetoff lab) "Identification of DIO1 gene mutations in humans" Federica Marelli (Persani lab) "Phenotypes of secisbp2 mutations in Zebrafish" Alexandra Dumitrescu "Long term effects SBP2 deficiency"</p>
10.00am – 12.00pm	<p>METABOLISM</p> <p>Moderator: Peter Kopp</p> <p>Speakers: Eveline Bruinstroop (Yen lab) "Hepatic deiodinase expression and activity modulate NASH progression" Annunziata Gaetana Cicatiello (Dentice lab) "Type III deiodinase over-expression in muscle induces metabolic switches thereby influencing systemic energy metabolism" Yan-Yun Liu (Brent lab) "THRA sumoylation modifies fat cell differentiation and proliferation" Karine Gauthier (Flamant lab) "TR function in brown adipose tissue"</p>
12.00pm – 1.00pm	Lunch and free afternoon
2.00pm	Bus departs to the town of Carmel Bus departs to vineyards in the Carmel valley
6.00pm	Trip ends at Asilomar
7.30pm – 9.00pm	Dinner

Saturday, March 28, 2020

7.00am - 8:00am Breakfast

8.00am - 10.00am DEVELOPMENT

Moderator: **Juan Bernal**

Speakers: **Duncan Bassett**

"Alternate splicing of Thra and mammalian development"

Arturo Hernandez

"Congenital abnormalities resulting from fetal thyrotoxicosis"

Yuki Shibata (Shi lab)

"TR knockout leads to premature adult tissue development while liganded TR is required for larval tissue degeneration"

Pieter Vancamp (Demeneix lab)

"TH action during developmental neurogenesis"

10.00am – 12.00pm NEW INVESTIGATORS

Moderator: **Krishna Chatterjee**

Speakers: **Helge Muller-Fielitz**

"Tanycytes and HPT axis"

Rebecca Ölkzug (Mittag lab)

"Role of Maternal T3/TRb Signaling in Fetal Programming"

Jose Avila-Mendoza (Denver lab)

"Kruppel-like factors are effectors of thyroid hormone signaling"

Mara Laslo (Hanken lab)

"Expression patterns of T3-response genes in direct- and indirect-developing frog limbs"

David Sharlin

"Thyroid hormone and Igf1 in the developing brain"

Jeff ChenChe Huang

"The sexually dimorphic action of thyroid hormone on the adrenal cortex"

12.00pm Lunch Pack

12:30pm - 4:00pm Bus to San Francisco