

10th INTERNATIONAL TUNICATE MEETING
PROVISIONAL PROGRAM

Sunday, July 7, 2019

Marine Station IMEV (Tregouboff Room)

2:00pm - 5:00pm **Workshop WashU, ANISEED Genome Browser**

Citadelle de Villefranche-sur-mer

5:00pm - 8:00pm: **REGISTRATION**

Monday, July 8, 2019

Citadelle de Villefranche-sur-mer

8:15- 9:00 **REGISTRATION**

9:00 - 9:15 **OPENING REMARKS** – Remi Dumollard and Stefano Tiozzo

9:15 – 10:15: **Session 1 – ECOLOGY**

T1 Xavier Turon : “Local microbiome of a global invader”

T2 Gal Vered : “Using solitary ascidians to assess microplastic and phthalate plasticizers pollution in marine environments”

T3 Vittoria Roncalli: “Transcriptomics of the developmental response of *Oikopleura dioica* to diatom-bloom derived biotoxins”

10:15 – 10:35: COFFEE BREAK

10:35 - 11:35 **Session 2 – IMAGING AND MODELLING**

T4 Benoit Godard: “Tension driven engulfment of non-mitotic by mitotic tissue determines cell division orientation in ascidian embryos”

T5 Hidehiko Hashimoto: “Differential expression of *Cadherin2* patterns *RhoA* and *Myosin II* activity to drive zippering and neural tube closure in a simple chordate.”

T6 Emmanuel Faure: “MorphoNet: An interactive online morphological browser to explore complex multi-scale data”

11:35 – 12:35 **Session 3 - ASEXUAL REPRODUCTION, REGENERATION, AND AGING**

T7 Simon Blanchoud: “Investigating the initiation of whole-body regeneration in *Botrylloides leachii*”

T8 Megan Wilson: “Epigenetic regulation of *Botrylloides leachii* whole body regeneration”

T9 Susannah H. Kassmer: “Primordial Blasts, a population of blood-borne stem cells responsible for whole body regeneration in a basal chordate”

12:35 - 2:00 LUNCH BREAK

2:00 - 3:20 **Session 3 - ASEXUAL REPRODUCTION, REGENERATION, AND AGING**

T10 Marta Scelzo "Novel budding mode in *Polyandrocarpa zorritensis*: a model for comparative studies on asexual development and whole body regeneration"

T11 Bill Jeffery: "Dying to Regenerate: Apoptosis, Wnt Signaling, and Polarity of Body Regeneration in *Ciona intestinalis*"

T12 Delany Rodriguez: "Aging and Senescence Effects on the Extracorporeal Vasculature of *Botryllus schlosseri*"

T13 Alexandre Alié: "Evo-Devo approaches to non-embryonic developments in colonial tunicates"

3:20 - 3:40 COFFEE BREAK

3:40 - 5:00 **Session 4 - FROM DEVELOPMENT TO GENOMICS**

T14 Chiara Anselmi: "Molecular and Morphological Atlas of *Botryllus schlosseri* Developmental Pathways"

T15 Elijah Lowe: "Identification of key morphogenesis genes in *Molgulidae* with alternate body plans and their interspecific hybrid embryos"

T16 Billie Swalla: "Tailless *Molgulid* Ascidiarians have a Notochord "Ball" that never converges or extends"

T17 Brad Davidson: "Differential drift among enhancer elements in the tunicate cardiopharyngeal gene network"

Tuesday, July 9, 2019

Citadelle de Villefranche-sur-mer

9:00 - 10:40 **Session 5 - BEGINNING OF EMBRYOGENESIS**

T18 Masaki Matsuo: "Protein phosphatase 2A is essential to maintain meiotic arrest, and to prevent Ca²⁺ burst at spawning and eventual parthenogenesis in the larvacean *Oikopleura dioica*"

T19 Marianne Roca: "The Spindle Assembly Checkpoint in *Phallusia mammillata* embryos"

T20 Toshiyuki Goto "Analyses of spatio-temporal interaction between microtubule and ER or maternal mRNAs in *Ciona* egg using new high resolution double staining methods »

T21 Silvia Caballero Mancebo "Actin-dependent contraction drives ooplasmic segregation in ascidian oocytes"

T22 Yana Mikhaleva: "Gap junction-dependent coordination of intercellular calcium signalling during early embryogenesis of *Oikopleura dioica*"

10:40 - 11:00 COFFEE BREAK

11:00 - 12:20 **Session 6 - EVOLUTION, SYSTEMATICS AND TAXONOMY**

T23 Benjamin Rosenthal : "Evolutionary Origin of the Mammalian Hematopoietic and Immune Systems Found in a Colonial Chordate"

T24 Federica Montesanto: "Further revelations on *Ciona* taxonomic complexity"

T25 Maria Casso: "Single zooids, multiple loci: Population genomics of a global invader"

T26 Jacques Piette: "The thaliacean *Salpa fusiformis* : the return of sessile ascidians to pelagic life"

12:20 - 2:00 LUNCH BREAK

2:00 - 3:20 **Session 6 - EVOLUTION, SYSTEMATICS AND TAXONOMY**

T27 Marie Nydam: *"Phylogeny of the Botryllid Ascidians"*

T28 Marika Salonna: *"The subfamily Botryllinae: species identification and phylogenetic reconstruction"*

T29 Rosana Rocha: *"Diplosoma listerianum: an interesting model of cryptic speciation"*

T30 Katrin Braun: *"Phylogenetic analysis of phenotypic characters of Tunicata supports basal Appendicularia and monophyletic Ascidiacea"*

3:20 - 4:00 **Session 7 - LATE EMBRYO AND LARVAE**

T31 Sebastien Darras: *"Antero-posterior ectoderm patterning by canonical Wnt signaling during ascidian development"*

T32 Bo Dong: *"Coordination of asymmetrical notochord contractility and epithelia cell proliferation drives tail bending in Ciona embryogenesis"*

4:00 - 4:20 COFFEE BREAK

4:20 - 5:20 **Session 7 - LATE EMBRYO AND LARVAE**

T33 Yuji Mizotani: *"Pulsatile Transport of basal factors toward apical domain during tubulogenesis, directed by the interaction between 14-3-3 ϵ a and ERM"*

T34 Hiroki Nishida: *"Neurula rotation and left-right asymmetry in ascidian embryos: Ciliary movements and the vitelline membrane signal"*

T35 Steve Irvine: *"The effects of high water temperature on developmental processes in C. intestinalis: limits to embryonic robustness"*
Marine Station IMEV - (Jules Barrois Bldg.)

5:40 - 7:40 **POSTER SESSION 1 - Odd numbers**

Wednesday, July 10, 2019

Citadelle de Villefranche-sur-mer

9:00 - 10:20 **Session 8 - NERVOUS SYSTEM DEVELOPMENT AND ANATOMY**

T36 Alberto Stolfi: *"Transcriptional states underlying neuron subtype-specific traits in the Motor Ganglion of Ciona"*

T37: Kouhei Oonuma: *"Left-right asymmetric development of cells in the larval brain of Ciona"*

T38: Bob Zeller: *"Jagged acts as a lateral inducer to specify caudal epidermal sensory neuron fate in Ciona"*

T39: Nanako Okawa: *"In vivo calcium-imaging reveals a possible role of the GnRH system in larval swimming of Ciona"*

10:20am - 10:40am COFFEE BREAK

10:40 - 11:40 **Session 8 - NERVOUS SYSTEM DEVELOPMENT AND ANATOMY**

T40 Izumi Oda-Ishii: *“Transcriptional regulatory mechanisms of Tbx6b by Zic-r.a (Macho1) through secondary binding motif sites”*

T41 Kerriane Ryan: *“Stereotypy and variation among the larval motor circuits”*

T42 Marios Chatzigeorgiou: *“Ciona intestinalis as a neuroethology model”*

11:40-12:40: **PLENARY LECTURE**

T43 Steve Wilson: *“Brain asymmetry – from genes to circuits and behavior”*

2:00 – **FREE TIME** (EXCURSION and DIVING)

Thursday, July, 11, 2019

Citadelle de Villefranche-sur-mer

9:00 - 10:20 **Session 9 - NON TUNICATE AQUATIC MODELS**

T44 (PLENARY) Carl-Philipp Heisenberg: *“Mechanosensation of tight junctions by ZO-1 phase separation and flow”*

T45 Amro Hamdoun: *“Patterning of transport function: How transporters are integrated in early developmental programs of the sea urchin”*

T46 Alex Venn: *“The Highs and Lows of pH regulation in Corals and Symbiotic Cnidarians”*

10:20 - 10:40 COFFEE BREAK

10:40 - 11:20 **Session 9 - NON TUNICATE AQUATIC MODELS**

T47 Eric Roettinger: *“Regeneration is a partial redeployment of the embryonic gene regulatory network”*

T48 Ina Arnone: *“Gene regulatory network approaches for gut patterning and evolution”*

11:20 -12:20 **Session 10 -DEVELOPMENTAL AND CELL BIOLOGY**

T49 David Lagman: *“Evolutionary novelties in tunicates: Pax37B is essential for the development of giant Fol cells in the house secreting epithelium of Oikopleura dioica”*

T50 Geraldine Williaume: *“ephrin-mediated “damping” of FGF signaling underlies the spatial precision of ascidian neural induction”*

T51 Rose Jacobson: *“Shp2 Phosphatase is Required for Normal Embryogenesis in C. intestinalis”*

12:20 - 2:00 LUNCH BREAK

2:00 - 3:20 **Session 10 -DEVELOPMENTAL AND CELL BIOLOGY**

T52 Christina Cota: *“Mitotic Kinases choreograph FGF receptor storage and redistribution during cardiopharyngeal cell”*

T53 Alfonso Ferrández-Roldán: *“Braveheart, Oikopleura dioica a cardiogenic loser, but not a heartless chordate”*

T54 Fan Zeng: *“A fine analysis of the Ciona larval sensory adhesive organ”*

3:20 - 3:40 COFFEE BREAK

3:40 - 4:40 **Session 11 POST-EMBRYONIC DEVELOPMENT**

T55 Yasunori Sasakura: *"GABA-mediated GnRH release triggers metamorphosis of Ciona"*

T56 Christopher Johnson: *"Molecular profile and function of the axial columnar cells of Ciona papillae"*

T57 Xiaoming Zhang: *"miR-4055 regulates Ciona sensory organ morphogenesis through AKT-MAPK signaling pathway"*

T58 Maiki Wakai: *"Ca²⁺ signaling contributes the beginning of metamorphosis via mechanical stimuli in palps"*

Marine Station IMEV - (Jules Barrois Bldg.)

5:00 - 7:00 **POSTER SESSION 2 - Even numbers**

Friday, July 12, 2019

Citadelle de Villefranche-sur-mer

9:00 - 10:00: **PLENARY SESSION**

T59 Patrick Lemaire: *"Extreme morphogenetic canalization of ascidian embryonic development despite high genetic variability"*

10:00 - 10:20 COFFEE BREAK

10:20 - 12:20 **Session 12 - GENE REGULATION**

T60 Emma Farley: *"Highly Conserved Enhancer Grammar"*

T61 Cristelle Dantec: *"Comparative genomic analysis : Identification of novel genes in ascidians"*

T62 Kotaro Shimai: *"Working towards a comprehensive and quantitative Ciona notochord gene regulatory network"*

T63 Claudia Racioppi: *"Combinatorial chromatin dynamics foster accurate cardiopharyngeal fate choices"*

T64 Shin-ichi Tokuhira: *"Foxd acts as an activator and a repressor for patterning along the animal-vegetal axis in early embryos"*

T65 Boqi Liu: *"Foxg is required for the palp formation in ascidian embryos"*

12:20pm - 2:00pm LUNCH BREAK

2:00 - 2:40 **Session 12 GENE REGULATION**

T66 Takehiro Kusakabe: *"Evolution of developmental programs for the midline structures in chordates: insights from gene regulation in the floor plate and hypochord homologues of Ciona embryos"*

T67 Burcu Vitrinel: *"Discovering post-transcriptional regulators of heart development"*

2:40 - 3:00 GROUP PHOTO and COFFEE BREAK

3:00 - 4:40 **ROUND TABLE - GENERAL DISCUSSION**

4:40 - 5:00 **CLOSING REMARKS** – Remi Dumollard and Stefano Tiozzo

7:00 - 12:00 **GALA DINNER** - *Citadelle de Villefranche-sur-mer*