Cnidofest 2022 Draft Program

Wednesday, September 7

6:30 - 7:30 pm Registration and Check-in

7:30 - 7:45 pm Welcome

7:45 - 9:00 pm **Session 1: Genomics**

Jack Cazet: "New Hydra genomes reveal conserved principles of hydrozoan

transcriptional regulation"

Sally Chang: "Insights from the draft genome assembly for the hydrozoan

Podocoryna carnea: Just the tip of the tentacle"

Tetsuo Kon: "Genomic divergence and dynamics of the three stem cell lineages

in *Hydra*"

Karly Higgins-Poling: "Assessing evolutionary history of symbiotic Scyphozoa: A

case study, Mastigias papua in the marine lakes of Palau, and

beyond"

9:00 pm Know About Each Other in the Bar

Thursday, September 8

8:00 - 8:45 am Light Continental Breakfast

8:45 - 10:00 am **Session 2: Evolution**

Sophia Barreira: "Deducing the Common Ancestor of the Nucleolar Transcription

Factor and its Potential Role in Regeneration"

Anna Klompen: "Division of (toxic) labor: Venom distribution and utility across

distinct polyp types of Hydractinia symbiolongicarpus"

Alonso Delgado: "Sea anemone Insulin-like peptides, For all time. Always."

Darrin Schultz: "Ancient gene linkages show that ctenophores are sister to other

animals"

10:00 - 10:30 am Coffee Break

10:30 - 12:00 pm Session 3: Development I

Diego Calderon, Invited Technology Speaker: "The continuum of *Drosophila* embryonic development at single cell resolution"

Layla Al-Shaer: "Population density modulates asexual reproduction & gene expression in *Nematostella vectensis*"

Charisious Tsiairis: The transcription factor Zic4 prevents epithelial transdifferentiation in *Hydra*"

Uli Technau: "The developmental origin and relationship of the neuroglandular lineage in the sea anemone *Nematostella vectensis*"

12:00 - 1:15 pm Box Lunch

1:15 - 2:30 pm Session 4: Neurobiology

Abby Primack: "Characterizing neurogenesis pathways in Hydra vulgaris"

Minghe Cheng: "Investigating the role of NvashA during *Nematostella* neurogenesis"

Wataru Yamamoto: "Studying neuronal mechanisms of somersaulting in *Hydra vulgaris*"

Kelly Kim: "Phototaxis is a state-dependent complex behavior in *Hydra vulgaris*"

2:30 - 3:00 pm Coffee Break

3:00 - 4:15 pm Session 5: Evo Devo I

Gaku Kumano: "Branching morphogenesis of Cladonema medusa tentacles"

Yareli Alvarez: "Inducible organs of aggression in the plumose sea anemone, *Metridium senile*, as a model for the evolution of cell type plasticity" Julia Barnyk: "Cnidarian-specific neuropeptide RPamide decelerates the timing of life cycle transition in the sea anemone *Nematostella vectensis*"

Alison Cole: "A cell-type atlas from a scyphozoan jellyfish *Aurelia* sp. provides insights into cell-type diversity and reveals conserved cell specification mechanisms across the Cnidaria"

4:15 - 4:45 pm	Coffee Break
4:45 - 5:15 pm	Lightning Talks
5:30 - 7:30 pm	Poster Session
7:30 - 9:30 pm	Dinner with Cash Bar
9:30 pm	Know About Each Other in the Bar

Friday, September 9

8:00 - 8:45 am Light Continental Breakfast

8:45 - 10:00 am Session 6: Physiology I

Manuel Michaca: "Investigating the role of Alr1, Afadin, Syntenin, and PICK1 in the fusion response of *Hydractinia symbiolongicarpus*"

Samuel Bedgood: "Algal symbiont presence and not photosynthetic contribution affects the development of *Exaiptasia diaphana* asexual offspring"

Cory Berger: "How does *Nematostella's* circadian clock behave under conflicting light and temperature cycles?"

Olivier Cochet-Escartin: "Mechanical characterization of regenerating *Hydra vulgaris* tissue pieces"

10:00 - 10:30 am Coffee Break

10:30 - 12:00 pm Session 7: Physiology II

James Letts, Invited Technology Speaker: Title TBA

Kathrin Garschall: "Nutritional regulation of growth in the sea anemone Nematostella vectensis"

Lys Isma: "Saved by the Cell: Immune cells and Stony Coral Tissue Loss Disease (SCTLD)"

Yehu Moran: "The cnidarian antiviral immune system reflects ancestral complexity"

12:00 - 1:15 pm Box Lunch

1:15 - 2:30 pm Session 8: Cell Biology I

Ahmet Karabulut: "The architecture and operating mechanism of a cnidarian stinging organelle"

Anush Kosakyan: "Parasitic strategies in Cnidaria from omics perspective. Case study myxozoan parasite *Sphaerspora molnari*"

Bruno Gideon Bergheim: "Extracellular matrix dynamics during the life history of Nematostella vectensis"

Bert Hobmayer: "A *Hydra* Claudin cell-cell contact protein is involved in epithelial tissue dynamics, regeneration, and osmoregulation"

2:30 - 3:00 pm Coffee Break

3:00 - 4:15 pm Session 9: Cell Biology II

Marion Lechable: "Evolutionary dynamics of the stem cell factor Myc and functional conservation of the unique *Hydra* Myc3 protein"

Maria Valadez Ingersoll: "Interactions between symbiosis, innate immunity, and nutrition" in chidarians

Helen Horkan: "Hydractinia Genome stability"

Tsuyoshi Momose: "Origin of metazoan and origin of jellyfish; genetic and cell-biology approaches."

4:15 - 4:45 pm Coffee Break

4:45 - 5:15 pm Lightning Talks

5:30 - 7:30 pm Poster Session

7:30 - 9:30 pm Dinner with Cash Bar

9:30 pm Know About Each Other in the Bar

Saturday, September 10

8:00 - 8:45 am Light Continental Breakfast

8:45 - 10:00 am **Keynote: Mansi Srivastava**

10:00 - 10:30 am Coffee Break

10:30 - 12:00 pm Session 10: Development II

Paula Miramon-Puertolas: "A post-larval stem-like cell population contributes to germinal and somatic lineages in the sea anemone

Nematostella vectensis"

Fredrik Hugosson: "Functional characterization of canonical Wnt receptors and

ligands required for oral-aboral patterning in Nematostella

vectensis"

Keith Sabin: "An FGF activity gradient signals through a cnidarian paired-like

homeodomain gene to direct apical sensory organ development

in Nematostella vectensis"

Kerstin Ohler: "FGF signaling in the freshwater polyp *Hydra*"

Masha Brooun: "The Hippo pathway and Hydra morphogenesis."

12:00 - 1:15 pm Box Lunch

1:15 - 2:30 pm **Session 11: Evo Devo II**

Lucas Leclére: "Genomic consequences of the loss of the polyp stage in the

scyphozoan Pelagia"

Maciej Manko: "Origins of individuality in colonial siphonophores"

Mathew Travert: "Coevolution of the Tlx homeobox gene with medusa development (Cnidaria: Medusozoa)"

Patrick Steinmetz: "Yolk formation in a sea anemone provides insights into the evolution of animal nutrient transport"

2:30 - 3:00 pm Coffee Break

3:00 - 4:45 pm **Session 12: Regeneration**

Anapuma Hemalatha, Invited Technology Talk: "Live-imaging metabolic states in skin stem cells to reveal adaptations to oncogenic mutations"

Ben Cox: "Progenitor cell invasion during *Hydra vulgaris* head regeneration"

Sosuke Fujita: "Distinct stem-like cell populations coordinate tissue elongation and regeneration in *Cladonema* medusa tentacles"

Allyson DeMerlis: "Early-hour molecular responses of wound healing in *Pocillopora damicornis*"

Chiara Sinigaglia: "To regenerate or not to regenerate? Towards an integrative model for the recovery of shapes in damaged *Clytia medusae*"

Miguel Salinas-Saavedra: "Senescence-induced cellular reprogramming drives whole-body regeneration"

4:45 - 5:15 pm Group Photo

5:15 - 10:00 pm Dinner with Cash Bar

10:00 pm Know About Each Other in the Bar