

# The 2<sup>nd</sup> Virtual *Platynereis* conference (8-10 December 2021)

(All times displayed in Central European Time)

## 8<sup>th</sup> of December 2021

12.00 Access to GatherTown possible

14.00 **Welcome**

### Development and Regeneration

(Chair: Eve Gazave)

14.10 **B. Duygu Özpolat** *Marine Biological Laboratory*  
New spin on traditional tools to understand germline development in *Platynereis dumerilii*

14.35 **Mette Handberg-Thorsager** *Max Planck Institute of Molecular Cell Biology and Genetics*  
Stereotypicality of the spiralian development

**Quentin Schenkelaars** *Aix-Marseille University*  
Histone mark regulations in *Platynereis* development and regeneration

15.00 **Break**

15.15 **Elena Novikova** *Saint-Petersburg State University; Zoological Institute RAS*  
No head regeneration - why is that?

**Loïc Bideau** *Institut Jacques Monod*  
Origin(s) and potency of blastema cells during posterior regeneration in *Platynereis dumerilii*

**Bria Metzger** *Marine Biological Laboratory*  
The impact of amputation on the maturation of *Platynereis dumerilii*

**Florian Raible** *Max Perutz Labs, University of Vienna*  
Decoding Regenerative Plasticity

16.05 **Break**

## Keynote Lecture

- 16.20      **Christoph Bleidorn** *University of Göttingen*  
Reconstructing annelid phylogeny – past, present and future

## Working Group Session 1

(Chair: Nadine Randel and B. Duygu Özpolat)

- 17.05      **Introduction**
- 17.15      **WG Cryopreservation**  
Luis Alberto Bezares Calderon
- 17.35      **WG *Platynereis* culture**  
Cameron Hird
- 17.40      **WG Behavior and reproduction**  
Jorg Hardege
- 17.45      **Questions to working groups**
- 17.55      **Concluding remarks**
- 18.00      **GatherTown get together (optional)**

## **9<sup>th</sup> of December 2021**

- 14.00      **Welcome**

## Evolution

(Chair: Mette Handberg-Thorsager)

- 14.05      **Detlev Arendt** *EMBL*  
The evolution of the bilaterian brain
- 14.30      **Sanja Jasek** *University of Exeter*  
Desmosomal connectome of the *Platynereis* larva
- Stephan Q Schneider** *Institute of Cellular and Organismic Biology,  
Academia Sinica, Taipei, Taiwan*  
Of cilia and worms: A phylogenomic & evo-devo approach to spiralian evolution

**Vinca Yadav** *Max Planck Institute of Molecular Cell Biology and Genetics*

Patterns of energy utilisation during early embryonic development of *Platynereis dumerilii*

**Tobias Gerber** *EMBL*

Determining hotspots of cellular adaptation in *Platynereis*

15.20      **Break**

### Ecology

(Chair: Oleg Simakov)

15.35      **Elizabeth Williams** *University of Exeter*

Larval settlement in *Platynereis*

16.00      **Jorg Hardege** *Hull University*

Behavioral ecology of *Platynereis dumerilii* reproduction

**Camilla Dellatorre** *University of Milan Department of Biosciences*

The *Platynereis* spp. as ideal model organism to study adaptation to ocean acidification: a case study in the CO<sub>2</sub> vent system off the Castello Aragonese at Ischia island (Italy)

**Victoria Moris** *University of Brussels*

Impacts of ocean acidification on chemical communication in *Platynereis dumerilii*

**Gabriele Andreatta** *Max Perutz Laboratories, University of Vienna*

Molecular mechanisms orchestrating sexual maturation and reproductive timing in *Platynereis*

16.50      **Break**

### Working Group Session 2

(Chair: Nadine Randel and B. Duygu Özpolat)

17.05      **WG Ensembl Metazoa**

Kevin Nzumbi Mutemi

17.25      **WG Nomenclature of genes**

Dave Ferrier

- 17.30      **WG Community website**  
Nadine Randel
- 17.35      **WG Sharing lists**  
Niko Papadopoulos
- 17.40      **WG Light microscopy data**  
Mette Handberg-Thorsager and Sanja Jasek
- 17.45      **Questions to working groups**
- 17.55      **Concluding remarks**
- 18.00      **GatherTown get together (optional)**

## **10<sup>th</sup> of December 2021**

- 14.00      **Welcome**

### Neurobiology

**(Chair: Sanja Jasek)**

- 14.05      **Kristin Tessmar-Raible** *Max Perutz Labs, University of Vienna*  
Decoding time information from sun and moon
- 14.30      **Milena Marinković** *University of Exeter*  
Catecholaminergic signalling in *Platynereis* trochophores
- Luis Alberto Bezares Calderón** *University of Exeter*  
Neuronal mechanism of pressure sensation in *Platynereis* larvae
- Kei Jokura** *University of Exeter*  
The role of nitric oxide signalling in the cPRC circuit
- Sören Häfker** *Max Perutz Labs - University of Vienna*  
No worm is like the other - Behavioral and molecular variability in *Platynereis* strains and individuals
- 15.20      **Break**

## Transcriptomics/Genomics session

(Chair: Michel Vervoort)

- 15.35      **Oleg Simakov** *University of Vienna*  
The algebra of animal chromosomes - how ancestral is the genome of *Platynereis*?
- 16.00      **Kevin Nzumbi Mutemi** *EMBL*  
The *Platynereis* genome resource: Progress, challenges and future :-)
- Madeleine Aase-Remedios** *University of St Andrews*  
Homeobox gene complement and organisation in *P. dumerilii*
- Nikolaos Papadopoulos** *EMBL*  
Decoding *Platynereis* development: a transcriptomics atlas for 48hpf
- Phil Oel** *EMBL*  
Hunting for the expected photoreceptor diversity in 6dpf *Platynereis*,  
using a single nucleus RNAseq atlas
- 16.50      **Concluding remarks**
- 17.00      **GatherTown social event**

We thank the [Company of Biologists](#) for sponsoring this conference.

