

The 2nd Virtual *Platynereis* conference (8-10 December 2021)

(All times displayed in Central European Time)

8th 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**
Estefania Paredes and 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)**

9th 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 CO₂ 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)**

10th 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.

