

Zebrafish, Xenopus and Drosophila: Small but Mighty Animal Models for Diverse Research Applications

Tuesday May 14, 2024 | 8h45 - 17.30 | FORUM - Ghent University Museum (GUM), Ledeganckstraat 35, Ghent

- 8u45-9u00** **Welcome from the organizers**
- 9u00-9u40** **Keynote lecture Prof. Martin Distel, Vienna, Austria**
Title: 'Pediatric sarcoma modeling and phenotypic drug screening in zebrafish'
- 9u40-10u40** **Topic 1: Tox/Drug screens**
- 9u40-10u00 Prof Sarah De Saeger - 'Zebrafish as a model for toxicological evaluation of mycotoxins'
- 10u00-10u20 Prof Patrick Sips - 'Drug screening in zebrafish: Fishing for new targets'
- 10u20-10u40 Charlotte Fieuws - 'Fishing for personalized ovarian cancer treatment'
- 10u40-11u10** **Coffee break**
- 11u10-12u30** **Topic 2: Disease modeling**
- 11u10-11u30 Prof Bart Dermaut - 'TDP-43 protein aggregation and neurodegeneration: a Drosophila perspective'
- 11u30-11u40 PhD Elke Bogaert – 'SRSF1 haploinsufficiency is responsible for a syndromic developmental disorder associated with intellectual disability; Drosophila as a cornerstone for variant modeling'
- 11u40-12u00 Soetkin Leys - 'Modeling cancer drivers and co-drivers in zebrafish'
- 12u00-12u10 Tamara Jarayseh - 'Deciphering phenotypic variability in zebrafish disease models'
- 12u10-12u20 Marthe Boelens – 'Liposarcoma and Wilms tumor modeling using CRISPR/Cas9 multiplexing in *Xenopus tropicalis*'
- 12u20-12u30 Munevver Burcu Cicekdal – 'Decoding the non-coding regulatory genome - Modeling of eye enhanceropathies in *Xenopus tropicalis*'

12u30-13u30 **.Lunch break (free visit to Ghent University Museum and Botanic Gardens)**

13u30-14u10 **Keynote lecture PhD Natalie Kaempf, Leuven, Belgium**

Title: 'Behavioral defects delineate Parkinson's disease subgroups in Drosophila'

14u10-15u10 **Topic 3: Technologies/platforms**

14u10-14u25 PhD Delfien Syx - 'Behavior analysis in zebrafish models'

14u25-14u40 PhD Thomas Naert – '*Xenopus* disease modeling at the intersection of light sheet imaging and deep learning'

14u40-14u50 Michiel Vanhooydonck – 'Genome editing in zebrafish: as short overview and practical considerations'

14u50-15u00 Elyne De Neef - 'Knock-in of disease related variants in zebrafish using prime editing'

15u00-15u10 Sophie Debaenst - 'Crispr disease modeling in zebrafish'

15u10-15u40 **Coffee break**

15u40-16u20 **Keynote lecture Prof. Muriel Perron, Paris, France**

Title: 'Retinal regeneration: a *Xenopus* perspective'

16u20-16u50 **Facilities/Cores/Expertise**

16u20-16u35 PhD Andy Willaert - Core Zebrafish Facility Ghent

16u35-16u40 PhD Elke Bogaert - Drosophila facilities

16u40-16u45 Prof. Kris Vleminckx - *Xenopus* facilities

16u45-17u00 Q&A

17u00-17u30 **Networking Reception**