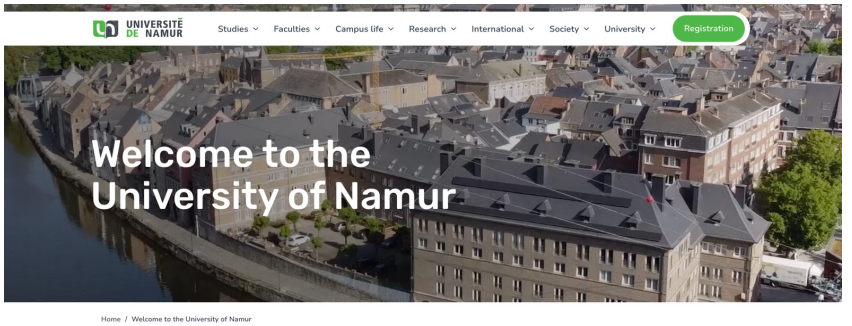
The University of Namur (www.unamur.be)

- 110 000+ citizens ; lovely and peaceful city in the heart of Belgium ; political capital of the Walloon Region

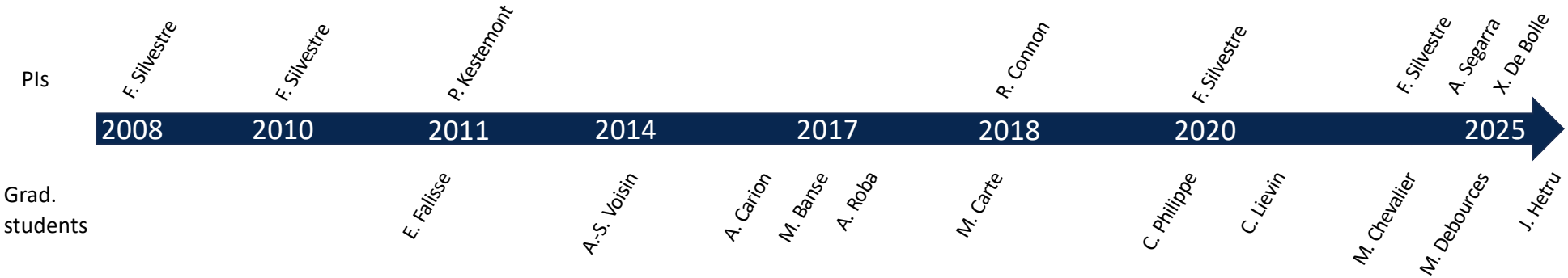
- Well connected nationally and internationally
  - Brussels: 65 km
  - Paris: 300 km
  - London: 430 km
  - Amsterdam: 265 km

- Full program in biology with diverse research units (18 PIs)



UNamur–UC Davis collaboration (2008–present)

Since 2008, the partnership has facilitated exchanges for **5 PIs** and **11 graduate students**.



Across 5 main leading UC Davis groups:

Dietmar Kültz > Stress-Induced Evolution of Fish and Marine Invertebrates
Andrew Whitehead > Environmental, Ecological, and Evolutionary Genomics
Andy Sih > Behavioural Ecology
Richard Connon (Emeritus) > Environmental Toxicology
Amélie Segarra > Ecological Toxicology and Diseases
Anne Todgham > Environmental Physiology in a Changing Climate

Agreement of Cooperation

Agreement of Cooperation Number 2022-21

AGREEMENT OF COOPERATION

BETWEEN

UNIVERSITY OF NAMUR
Rue de Bruxelles 61, 5000 NAMUR
BELGIUM

AND

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA,
ON BEHALF OF THE DAVIS CAMPUS
One Shields Avenue
Davis, CA 95616
UNITED STATES OF AMERICA

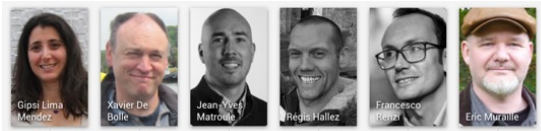
Each student receives 1500€ for travel expenses and 850€ per month

First phase ends in June 2026 > 1 student for 6 months or 2 students for 4 months total remaining

4 Research Units https://www.unamur.be/en/science/biology/research

URBM

Microbiology



URBC

Molecular and Cellular Biology

T. Arnould C. Michiels P. Renard H-F. Renard A. Forrester

URDB

Biology Education Research

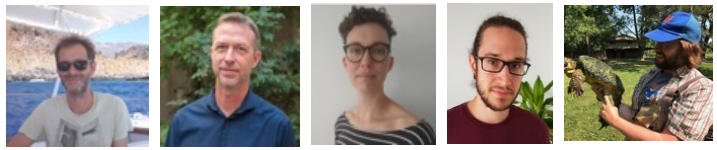
A. Vervoort J. Messiean

URBE

± 50 people

Environmental and Evolutionary Biology

https://www.unamur.be/en/science/biology/research/urbe



F. De Laender F. Silvestre A. Dennis E. Thoré B. Reid

- F. De Laender: Community Dynamics and Ecology Modeling
- F. Silvestre: Evolutionary and Adaptive Physiology Environmental Epigenomics Aquatic Ecotoxicology
- A. Dennis: Comparative and Evolutionary Genomics Snails - invertebrates
- E. Thoré: Behavioral Ecology Aquatic Ecotoxicology
- B. Reid: Conservation Genomics Herpetology Museum Genomics

Laboratory of Evolutionary and Adaptive Physiology - LEAP

Fonds de recherche Québec

ILE

Co-funded by the European Union

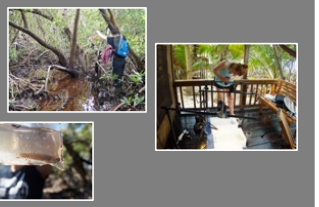
fnrs FREEDOM TO RESEARCH

ARES-CCD

Laboratory of Evolutionary and Adaptive Physiology - LEAP

PI: Prof. Frédéric Silvestre

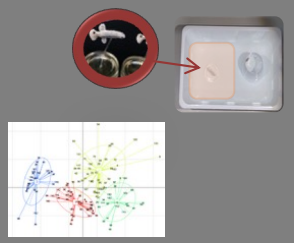
Field biology



Evolution of natural populations with low genetic diversity ; conservation epigenetics

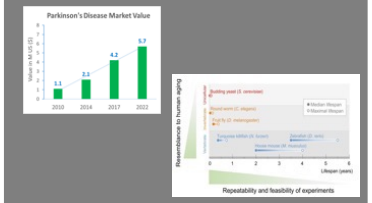
How organisms respond, adapt, and evolve under environmental change

Behavioral phenotyping

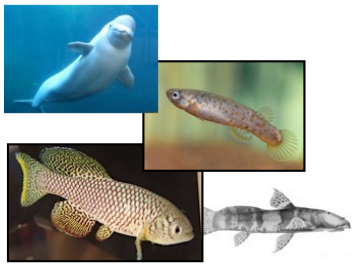


Behavioral individuality of personality traits

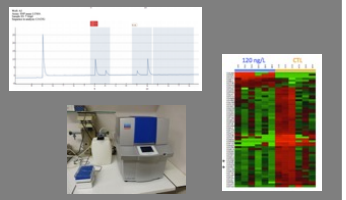
Ecotoxicology



Long-term effects of pollutants (neurotoxicants, EDCs,...) ; epigenetic biomarkers



Molecular mechanisms



Roles of epigenetics in adaptation and evolution

The mangrove rivulus:
Kryptolebias marmoratus

- **Distinctive feature**: the only self-fertilizing vertebrate
- **Interest**: to investigate the roles of epigenetics in adaptation and evolution

The turquoise killifish:
Nothobranchius furzeri

- **Distinctive feature**: the shortest life-span among model vertebrates
- **Interest**: ageing processes; interactions between neurotoxicant and ageing; models of neurodegenerative diseases (ND)

Beluga Whale from St. Laurent:
Delphinapterus leucas

- **Distinctive feature**: endangered species in teh St. Laurent river
- **Interest**: to develop epigenetic clock to assess the health status of the St Laurent population

Astroblepus fish from Ecuador:
Astroblepus sp.

- **Distinctive feature**: endemic species in Andes mountains
- **Interest**: to develop population epigenetics in an altitudinal gradient

Why to travel overseas ?

- To gain international experience for your CV
- To learn new techniques/workflows and work on new model species
- To think of new scientific questions
- To develop a personal international network
- To learn other languages
- To visit Europe

Contact:

www.evolution-physiology.be

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frederic.silvestre@unamur.be

The slides can be found here: