

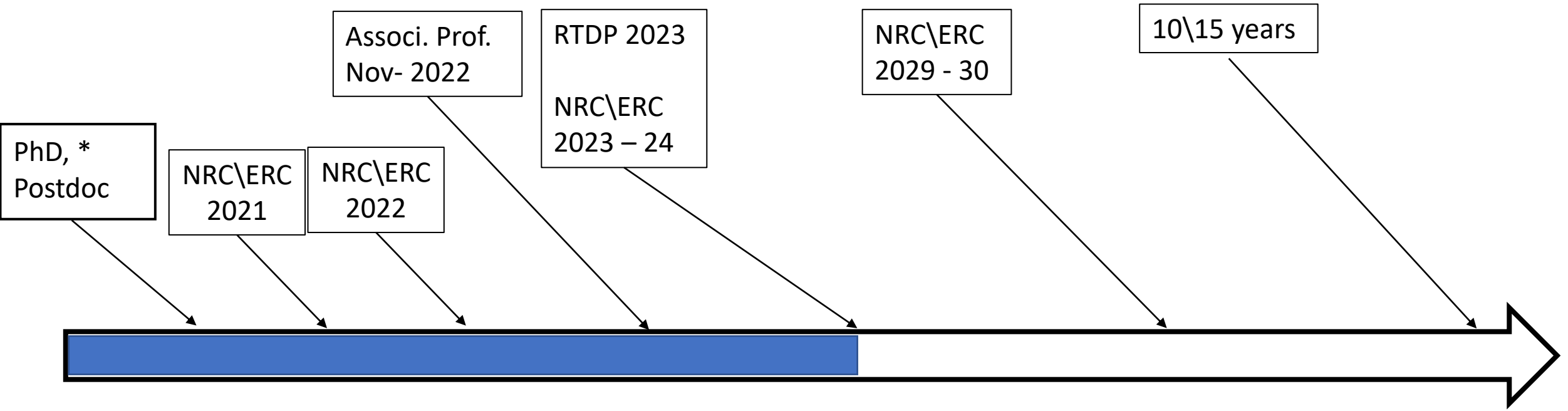
Research Talent Development Program - 2023

Kalliu Couto



Brief Overview of Today's Presentation:

- Activities this year
- Experience with the program



5 year goals

- Become a reference EAB, with emphasis on basic research, with strong collaborations, engaged students, exciting projects.
- Acquire a starting grant from NRC or ERC.

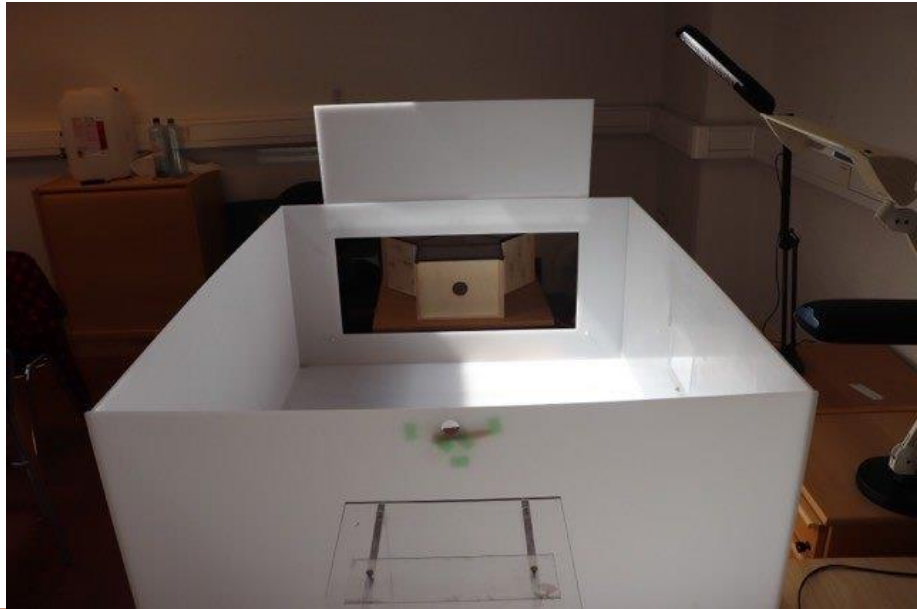
10 year goals

- Established two research lines: **Experimental analysis of behavior in bumblebees & Experimental analysis of group behavior/cultural evolution.**
- Acquire a consolidation grant from NRC or ERC.
- Apply for a professorship

Examples of research activities

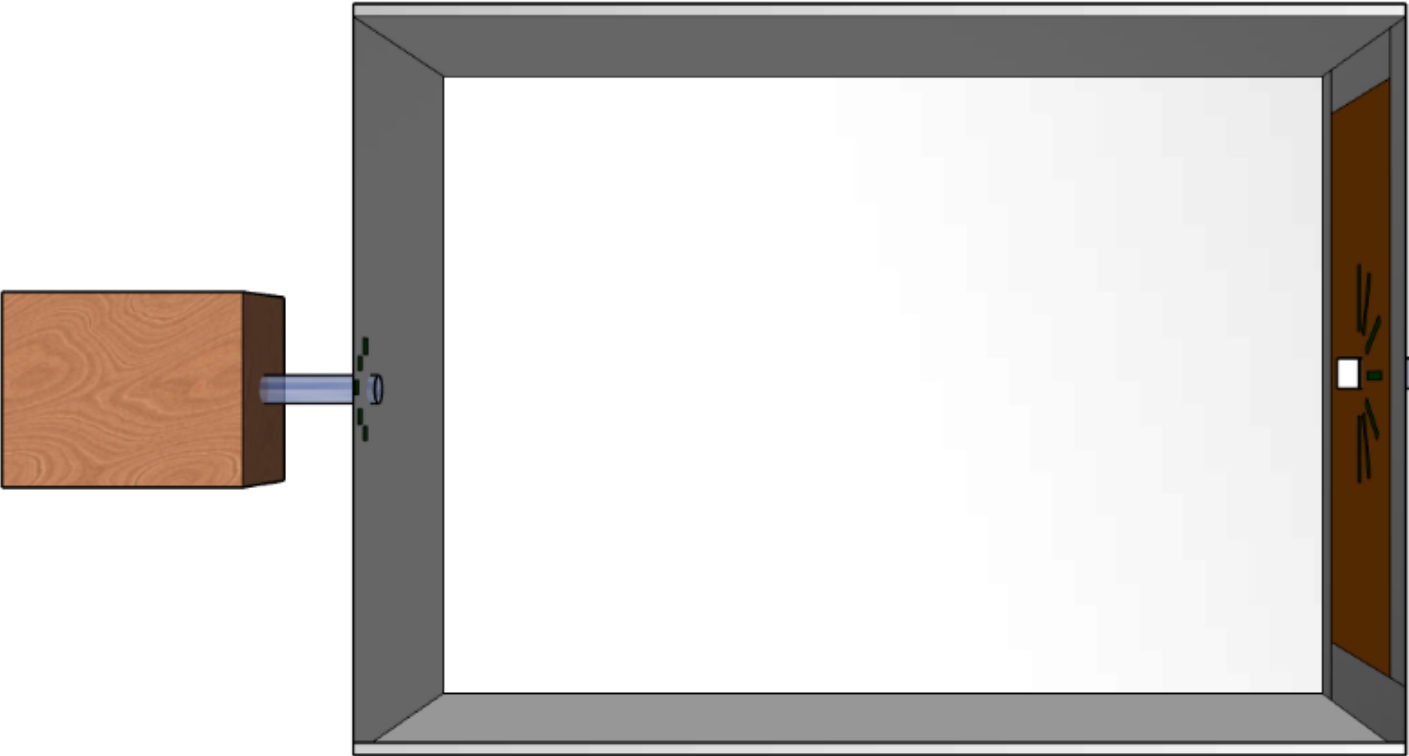
List of Experiments (publications in preparation):

- Self-control in bumblebees.
- Effects of reinforcement magnitude on bumblebee foraging.
- Schedules of reinforcement in bumblebees.
- Social preference for bumblebees.
- Cooperation in bumblebees.
- Behavioral toxicology of bumblebee foraging.
- RNA-seq analysis of bumblebee behavior.



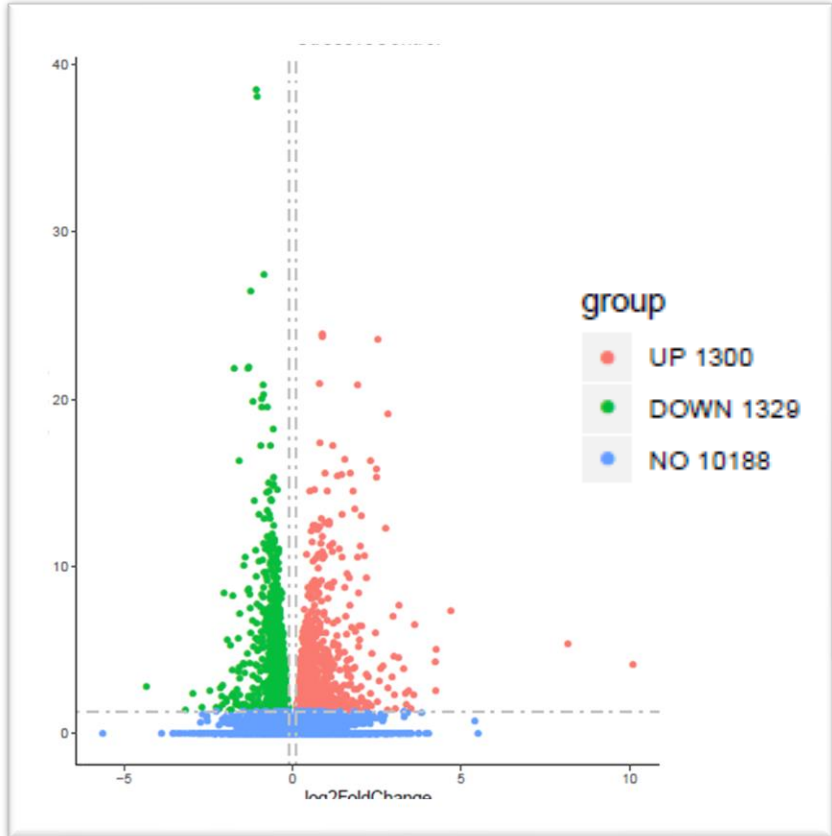
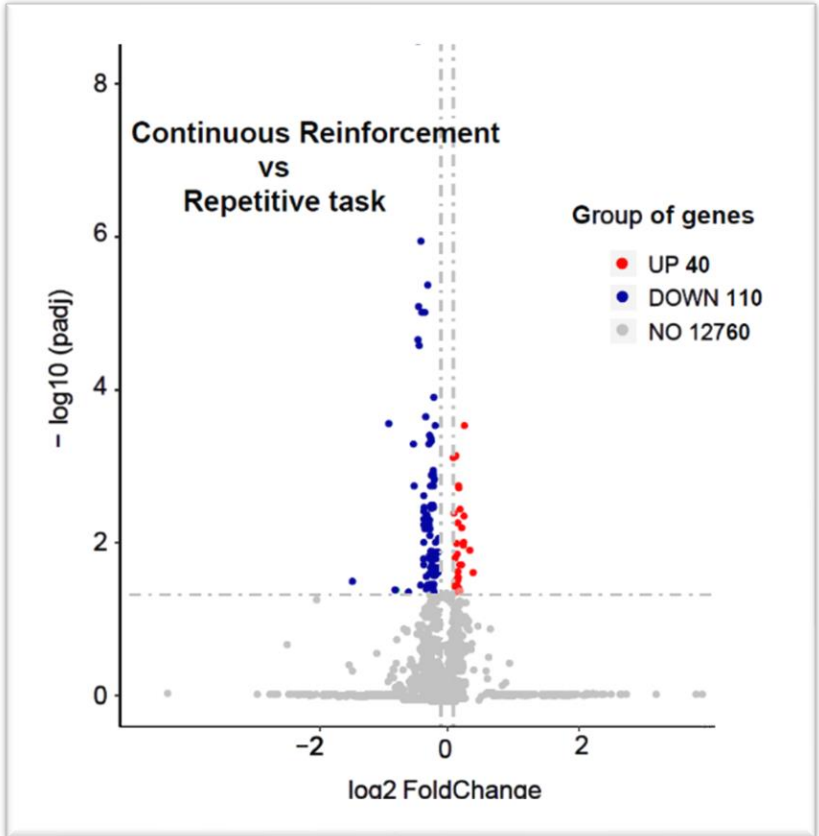
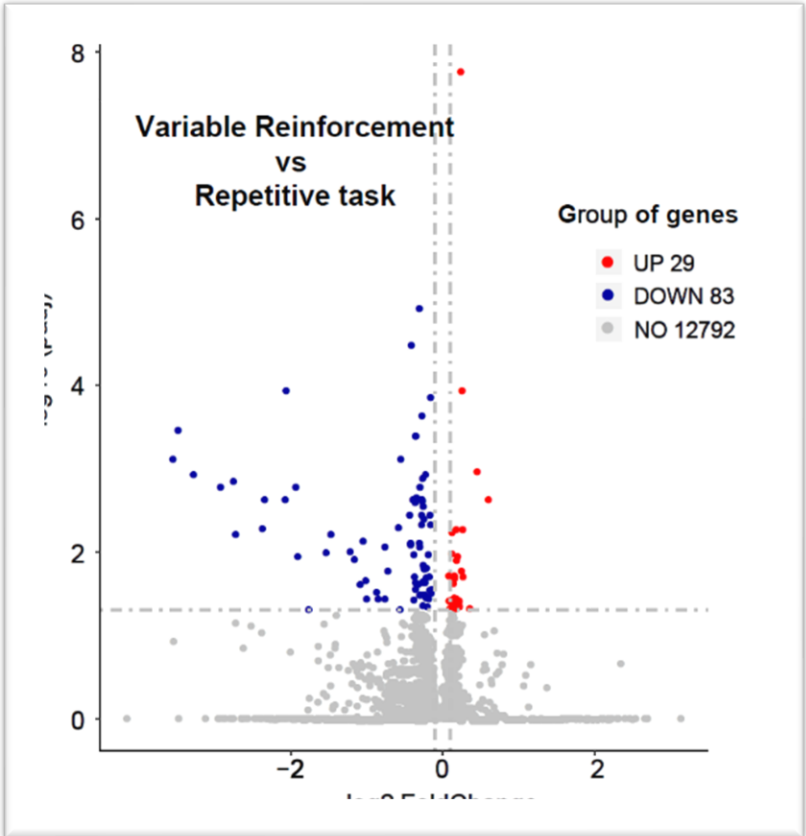
Schedules of reinforcement in bumblebees

Rafael Da Silva, Camila Muchon, Lívia Ângeli, Lucas Codina, Deisy de Souza, David Steffarud, Sanela Milenkovic, Couto, K, C.,



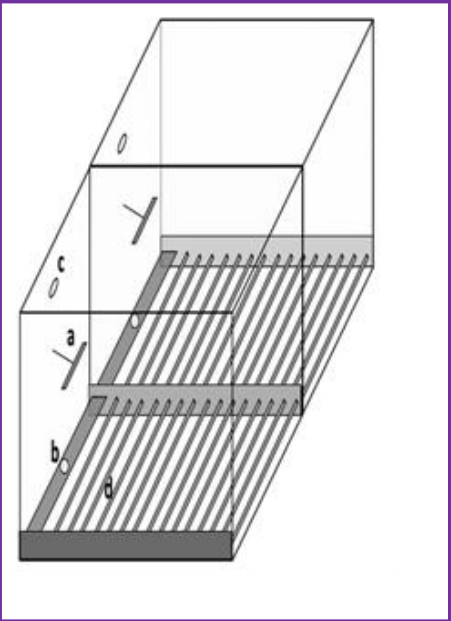
Schedules of reinforcement in bumblebees + Rna-seq

Rafael Da Silva, Eirik Søvik, Johannes Gjerstad, Couto, K, C.,



Cooperative Responding in Bumblebees

Camila Muchon Lucas Codina, Deisy de Souza, Rafael Da Silva, Lucas C



de Carvalho, L. C., Dos Santos, L., Regaço, A., Couto, K. C., de Souza, D. D. G., & Todorov, J. C. (2014). **Cooperative responding in bumblebees: effects of social reinforcement.** *Journal of the experimental analysis of behavior*, 114(3), 291-307.

Codina, L., Ângeli, L., de Carvalho, L. C., Couto, K. C., de Souza, D. D. G., & Todorov, J. C. (in preparation). *Journal of the experimental analysis of behavior*

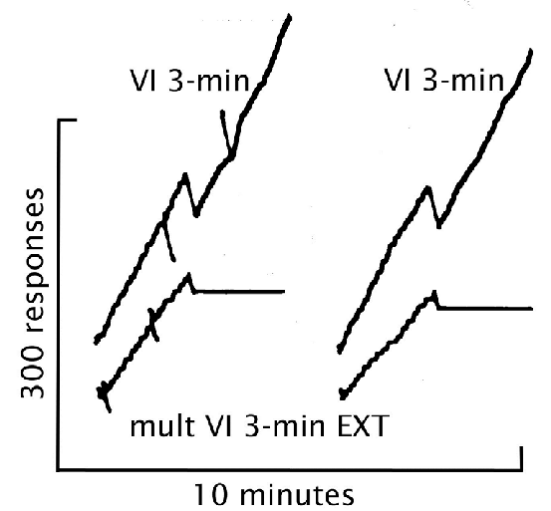
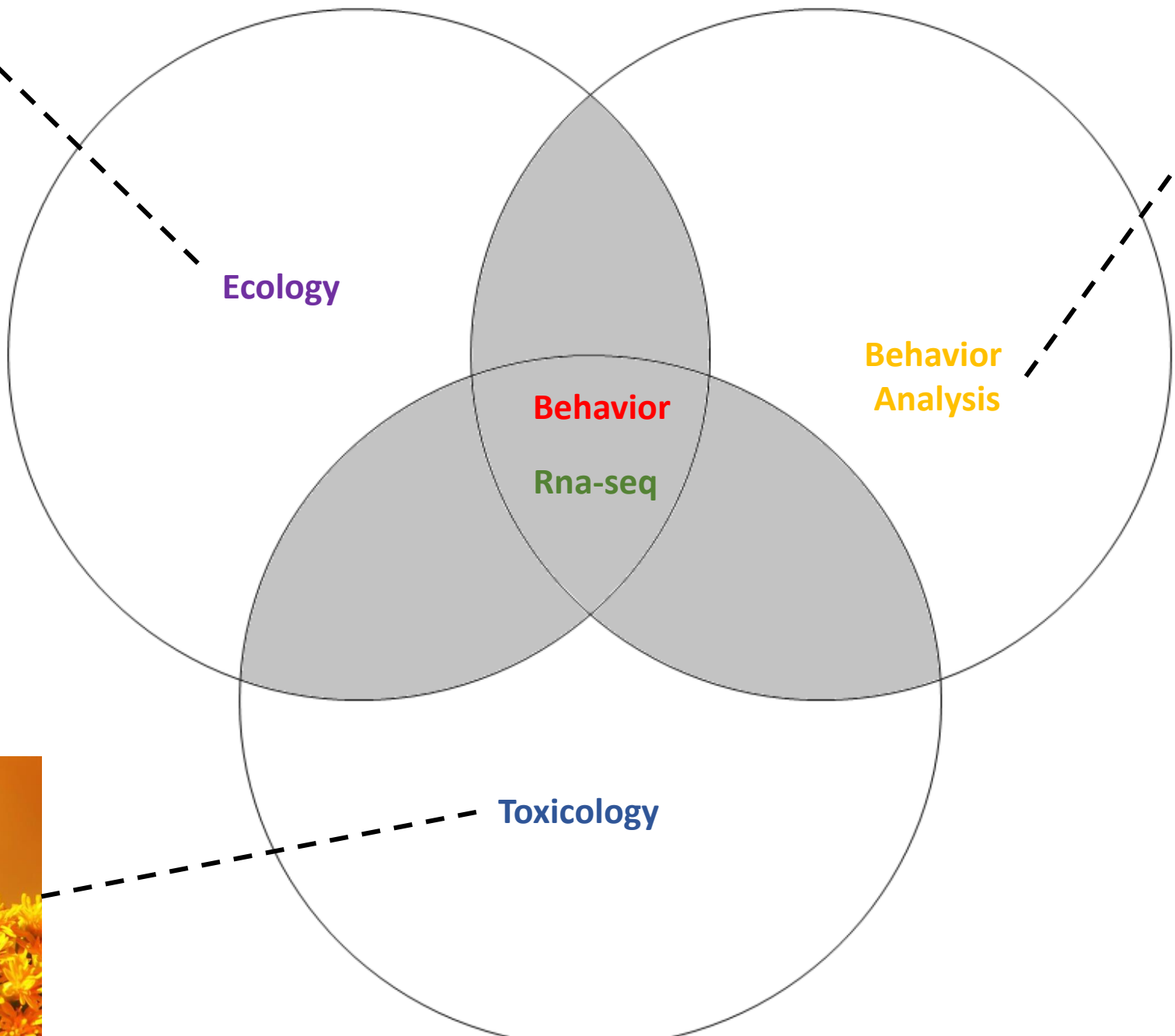
Publications

Published Papers/book chapter:

- "Experimental Analysis of Macrocontingencies and Metacontingencies Between Group Competition" (Behavior and Social Issues).
- "Avoiding the Tragedy of the Commons: Shaping Children's Sustainable Behavior in a Digital Game" (The Psychological Record).
- "Corruption as a Behavioral and Cultural Phenomenon: Research and Implications for Anti-Corruption Policies" (Análise do Comportamento: Dimensões Políticas).

Papers Submitted:

- "Aggregate Products in a Metacontingency Selected by Variable Ratio Schedules When Pairs of Rats Work for Mutual Reinforcement."
- "Effect of Reinforcement Duration on Lever Pressing Response in Bees (*Melipona quadrifasciata*) under Continuous Schedules."
- "Coordinated Behavior under Individual, Mutual, and Alternated Reinforcement."
- "Social Units of Behavior Produced by Artificial Organisms in a Cooperative Game."



Professional Development

- HPED6000-1 23V Universitets- og høgskolepedagogisk basiskompetanse (15 ECTS).
- Sharpen skills for the new position as the Head of the Research Group Cultural Selection and Behavioral Economics Lab.
- Apply for a starting grant from the NRC.
- Apply for an internal PhD position
- Learn in-depth about the starting grant of the ERC.
- Made a concrete plan for the application for NRC and ERC in 2024.

Network Expansion/consolidation

- University of Oslo, Norway
- Volda University College, Norway

- University of Brasilia, Brazil
- Federal University of Rio Verde, Brazil
- Federal University of Sao Paulo, Brazil
- Federal University of Londrina, Brazil
- University of Reno, Usa

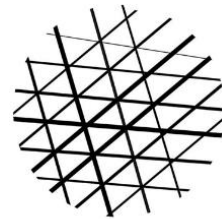
Experience with the Program

- Overall, the allowed me to better understand my personal goals and how to concretely pursue them.
- Program provided recourses (time and tools) for career development.
- Quick started carrier progressions as faculty at Oslo Metropolitan University.
- Experienced support system with colleagues, including Vera and Margrethe, the program organizers, and leading activities.



Thank You!
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OSLOMET



Cultural Selection and
Behavioral Economics Lab

