



university of  
 groningen

## Master projects 2019 –

- (1) How do environmental factors shape reproduction?
- (2) The developmental plasticity of behaviour



We are currently looking for motivated MSc students to run a project with our captive zebra finch population at the University of Groningen.

We have two different projects pertaining to our long-term breeding programme with zebra finches & ideally, these projects will start in February 2019. However, alternative starting dates can be discussed. For these projects, you will work both independently, and as part of our team.

Concerning our research, we have zebra finches that were raised in different developmental conditions, and when they reach adulthood, they are subjected to environmental manipulations for the rest of their life. We have previously found that these manipulations affect ageing rate & life span of these individuals. Now, we aim to investigate the effect of these manipulations on reproduction & behaviour.

Within this setup, two projects are available;

- (1) The first project concerns the reproductive output of individuals that were subjected to both developmental and foraging manipulations. In this study, you will be responsible for tracking the reproductive output of individuals & measuring chicks.
- (2) The second project concerns the behaviour of the offspring of the individuals described in the first project. Here, you will be responsible for running behavioural experiments & analysing videos (using computer-assisted analysis).

For both projects, you will learn to become proficient in:

- Handling (small) birds
- Checking & maintaining welfare
- Ringing individuals
- Statistical methods (using the software 'R')

For the first project, you will become proficient in:

- Handling chicks
- Measuring body measures of both chicks & adults
- Real-time observations

For the second project, you will become proficient in:

- Running behavioural experiments
- Analysing videos with the program 'Ethovision'
- Analysing videos with the program 'Solomon Coder'

These projects will be under the supervision of the PhD students Yoran Gerritsma (<https://www.rug.nl/staff/y.h.gerritsma/>) & Merijn Driessen (<https://www.rug.nl/staff/m.m.g.driessen/>), who are both under the supervision of Simon Verhulst (<https://www.rug.nl/staff/s.verhulst/>)

If you are interested in these projects, or have questions regarding these projects, please contact either [y.h.gerritsma@rug.nl](mailto:y.h.gerritsma@rug.nl) or [m.m.g.driessen@rug.nl](mailto:m.m.g.driessen@rug.nl)