



## OeAW - Discovering the future

As a central non-university institution for science and research, the **Austrian Academy of Sciences - OeAW** has the task of "**promoting science in every respect**". Founded in 1847 as a learned society, it now has over 760 members and around 1,800 employees dedicated to innovative basic research, interdisciplinary knowledge exchange and the dissemination of new insights. The OeAW initiates and maintains partnerships worldwide and represents Austria in international scientific organizations; it cooperates with numerous institutions in the scientific field in order to actively **shape the research landscape**.



## Postdoc (f/m/x) Bioacoustics

Job ID: ISF169PD225

The Austrian Academy of Sciences (OeAW), Austria's leading non-university research and science institution, is offering a Position as

**Postdoc (f/m/x) Bioacoustics**

(Full-time employee)

(Office & remote)

## Your Tasks

This position will be funded by the WWTF project "ANIML – Analysis of Nonhuman Intercommunication with Machine Learning", where the goal is to study the complex units of budgerigar (*Melopsittacus undulatus*, a small parrot species) warble song. In prior work, we showed that these song units contain subunits that are similar to consonants and vowels in human speech. However, our recordings were limited to mostly male songs that were produced directly by willing individuals into an experimenter's microphone. Here we have worked with a team with backgrounds in signal processing/machine learning to develop a pipeline to record individual bird vocalizations while they are all vocalizing naturally together in the group. We are now looking for someone with expertise to study this dataset as it becomes available. We want to know whether the budgerigars are using call-and-response with each other, whether their vocalizations contain syntactical patterns, and whether we can determine the fundamental units of budgerigar vocal perception. Ideally, we also want to generalize across budgerigar populations (we have 2 in our lab). It is an ambitious project with a lot of research possibilities.

As a member of the biology team, the successful candidate will be supervised by Dr. Marisa Hoeschele, head of the biology cluster, but also work closely with the signal processing/machine learning team members.

Your tasks:

- Take the recordings we have collected of individual budgerigars vocalizing in the group to conduct bioacoustic analyses and animal behavioural experiments (e.g., operant conditioning, place preference, habituation/dishabituation) to determine whether budgerigar vocalizations have language-like properties.
- Cooperate with the other team members to provide feedback on how their machine learning/signal processing models can be adapted to support your work.
- Communication of scientific results in scientific publications and at scientific meetings
- No teaching duties

## Your Profile

Requirements and qualifications:

- PhD in a field related to animal cognition.
- Prior experience working and publishing both bioacoustic and animal behaviour/cognition research.
- Prior experience training animals in a lab setting would be ideal.
- Comfortable handling animals. Prior experience, especially with small birds, would be ideal.
- Strong written and oral English.
- The candidate should be able to integrate into a multi-disciplinary research team.

## Our Offer

- The position is limited to 2 years but a short-term (max 12 months) extension may be possible. The planned starting date is June 2026 with some flexibility.
- The annual gross salary is € 69.028,40 according to the OeAW's collective agreement.
- A position in an innovative and internationally active environment crucial to success
- Numerous voluntary social benefits
- Opportunity to work independently and develop personally
- Work in a central city location with flexible flexitime arrangements and the option of working from home.
- Please apply online, including a CV, copies of relevant certificates, and a brief statement describing motivation, personal qualification, and research interests, no later than **February 15, 2026**. Please apply early: We will review applications as they come in and may fill the position earlier. Any queries may be directed to Dr Marisa Hoeschele

**APPLY NOW**

*The Austrian Academy of Sciences (OeAW) pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity. Individuals from underrepresented groups are particularly encouraged to apply.*

## Contact

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