Your Tasks
The goal of this project (project B04 of the collaborative research centre) is to test how male Zebra Finches conform to their social niche as set by the prevailing level of sperm competition. This will allow us to understand how individual variation in sexual competitiveness correlates with individual variation, and consequently, with both competitive traits and parental behavior. The two PhD students will closely collaborate to (i) quantify male social niche conformance by analyzing adjustment of sexual competitiveness including behavioral (i.e., aggression) and ejaculatory (i.e., sperm motility) traits. They will then (ii) identify the underlying mechanisms of social niche conformance on the hormonal (via endocrinological profiling) and the gene expression (via RNAseq) levels, (iii) assess the adaptive significance of niche conformance under a niche match/mismatch paradigm and, finally, (iv) test for trade-offs between investment in sexual competitiveness versus paternal care. Sub-project A will primarily focus on male social niche conformance through adjustment of behavioral traits and the hormonal mechanisms underlying niche conformance. Sub-project B will primarily focus on male social niche conformance through adjustment of ejaculate traits and the gene expression underlying niche conformance.

Full details of the CRC can be found at [http://www.uni-bielefeld.de/biologie/crc212/B04.html](http://www.uni-bielefeld.de/biologie/crc212/B04.html).

The main tasks will be the following:

- research tasks (80 %)
- teaching and conducting laboratory experiments with zebra finch
- maintaining a zebra finch stock population and breeding of experimental birds
- collecting and processing of behavioral recordings (sub-project A)
- collecting and processing of hormone samples (sub-project A)
- setting up a computer-assisted sperm analysis (CASA) system (sub-project B)
- phenotyping sperm samples
- carrying out data analyses for transcriptomic analyses
- bioinformatic processing of high-throughput sequencing data (sub-project B)
- statistical analyses of complex experimental data
- writing scientific publications
- organizational tasks in the research group and collaborative research centre (10 %)

Your Profile

- university degree in one or more relevant disciplines, e.g. biology, evolutionary ecology, behavioral ecology, behavioral physiology, neuro-ethology, bioinformatics, transcriptomics or veterinary science
- experience with carrying out animal experiments, preferably in birds
- experience with bioinformatic processing of high-throughput sequencing data (sub-project B)
- experience with statistical analyses of complex data sets
- very high ability to work both independently and as part of a team
- very good oral and written communication skills in English
- keen interest in using genetic and/or endocrinological methods to assess behavioral and life history questions

Preferred qualifications
- publications in peer-reviewed international journals
- experience with software for analyzing behavioral recordings (sub-project A)
- experience with sperm phenotyping including CASA (sub-project B)

Remuneration
Salary will be paid according to Remuneration level 13 of the Wage Agreement for Public Service in the Federal States (TV-L). As stipulated in § 2 (1) sentences 1 of the WissZeitVG (fixed-term employment), the contract will end after 3 years. In accordance with the provisions of the WissZeitVG and the Agreement on Satisfactory Conditions of Employment, the length of contract may differ in individual cases. The employment is designed to encourage further academic qualification. In individual cases, this percentage may be reduced on request, as long as this does not conflict with official needs.

Bielefeld University is particularly committed to equal opportunities and the career development of its employees. It offers attractive internal and external training and further training programmes. Employees have the opportunity to use a variety of health, counselling, and prevention programmes. Bielefeld University places great importance on a work-family balance for all its employees.

Application procedure
To apply, please provide:
(i) a letter of motivation including a statement of your research interests and skills and experience relevant to the position (including a statement for which of the sub-projects A or B you apply; preferences for one of the topics can also be indicated or discussed at a later stage).
(ii) a CV including publication list, (iii) names and contact details of two referees willing to write a reference letter, (iv) a project proposal, (v) degree certificates and transcripts, and (vi) a Zertifikat für biologische Forschung and an Antragformular (these documents should be sent as a single PDF file to both principal investigators: [peter.korsten@uni-bielefeld.de](mailto:peter.korsten@uni-bielefeld.de) and [tim.schmoll@uni-bielefeld.de](mailto:tim.schmoll@uni-bielefeld.de)).

ApplicationPeriod
The Collaborative Research Centre Transregio 212 "A Novel Synthesis of Individualisation across Behaviour, Ecology and Evolution: Niche Choice, Niche Conformance, Niche Construction (NC3)", subproject B04 (Dr. Peter Korsten, Dr. Tim Schmoll), offers two part-time research positions (PhD positions in Behavioural Ecology and Functional Genomics) starting soon as possible.

(E13 TV-L, non-permanent positions)

Bielefeld University has received a number of awards for its achievements in the provision of equal opportunity and has been recognized as a family friendly university. The University welcomes applications from women. This is particularly true with regard both to academic and technical posts as well as positions in Information Technology and Trades and Craft. Applications are handled according to the provisions of the state equal opportunity statutes. Applications from suitably qualified handicapped and severely handicapped persons are explicitly encouraged.

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