



university of
groningen



GELIFES

Groningen Institute for Evolutionary Life Sciences

Looking for excellent scientists!

5 Tenure Track Assistant or Associate Professors

Apply before 30 January 2017!



Foreword

The University of Groningen is an ambitious international research university with strong roots in the north of the Netherlands. The University creates and shares knowledge through its outstanding research, scholarship and education. With an academic tradition dating back to 1614 and a rich heritage, the University is a unique academic community with a strong sense of belonging and a culture of innovative education and research. Research and teaching at the University of Groningen are curiosity driven and relate closely to global societal needs. The research is based on strong core disciplines. In Groningen, we believe that exceptional teaching and research depend on a diverse academic community with a broad range of nationalities and talents. Research, societal impact and education are closely intertwined at the University, and are set against a backdrop of academic freedom. We thus enable our students to become active, independent, critical and responsible global citizens who will help solve the scientific and societal challenges of tomorrow.

Focal research themes

Research within the University of Groningen concentrates on three focus areas– Energy, Healthy Ageing and Sustainable Society. With these themes the University is looking to bridge the gap between science and society. The research not only has immediate social relevance – researchers at the University also cooperate on a large scale with partners from business, public organizations and the government, within and outside the region.

The Faculty of Mathematics and Natural Sciences has a track record of research excellence in many of its fields. This is reflected in the large amount of externally acquired funding including successful awards from the ERC and national programmes, and in a number of prestigious awards such as the 2016 Nobel Prize for Chemistry, and Spinoza Awards in 2014 (in GELIFES) and 2016. Our faculty harbours a kaleidoscope of disciplines and research strengths. To fully harness the opportunities for inter-disciplinary research in a broad faculty and to play to our research strengths, our research is profiled by four themes: Advanced Materials, Molecular Life and Health, Data Science and Systems Complexity, and Adaptive Life.

Linnaeusborg

GELIFES

The Groningen Institute for Evolutionary Life Sciences (GELIFES) was established in 2015 and is the largest institute of the Faculty of Mathematics and Natural Sciences (FMNS). GELIFES fills a special niche in the life sciences by integrating mechanistic, evolutionary and ecological approaches through a combination of proximate and ultimate approaches. This strategy generates better understanding of fundamental biological processes and contributes to the solution of societal problems.

Our research fields include behavioural biology, chronobiology, ecology and conservation biology, evolutionary biology, genetics and genomics, neurobiology, physiology and theoretical biology, using a wide array of research tools at the molecular, cellular, whole organism and population and community levels, studied under laboratory, semi-natural and field conditions. We study a wide array of species, from microbes, algae, plants and insects to vertebrates such as fish, birds, rodents, marine mammals and humans. Our institute is the driving force of the Adaptive Life Programme, one of four integrative focus research areas of our faculty.



Adaptive Life Programme

A core aspect of living systems is their ability to adapt to their environment and to environmental change. There are two different forms of adaptation:

- 1) the short-term physiological, neurobiological and behavioural responses of individuals to their local conditions,
- 2) the long-term eco-evolutionary response of populations, ecological communities and ecosystems to challenges imposed by their environment.

Traditionally, these two forms of adaptation have been studied largely separately, by different scientific communities. Yet, the short-term responses of individuals have been shaped by evolution, while the course and outcome of evolution strongly depends on the phenotypic plasticity of individuals. In the [Adaptive Life programme](#) we aim to integrate both approaches, crossing traditional borders of research fields and institutes, providing new foundations for the life sciences.

To further strengthen Adaptive Life, the University of Groningen and FMNS enabled us to hire for 5 new faculty and 25 PhD scholarship positions, as well as to invest in large scale new facilities. This support also facilitated the establishment of the Sustainable Landscape Competence Centre and the Brain and Behavioural Competence Centre, in order to attract external research funds and further organize our outreach.

Successful candidates will be expected to establish an independent, largely externally funded research programme in collaboration with colleagues at our University and elsewhere. They will also be expected to participate in and contribute to the development of the teaching programme of their discipline. Candidates are expected to attract funding for new PhD projects and attain a leading international position in the field. They are excellent teachers who can motivate students of different disciplines and have an interest in teaching at the bachelor, master and PhD level.



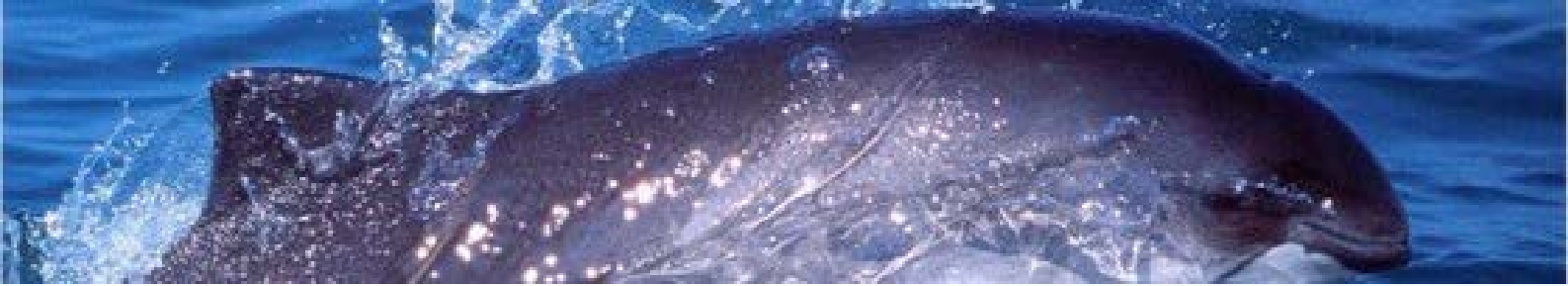
Tenure Track Assistant or Associate Professor in Chronobiology

Chronobiology is a discipline within the life sciences analysing the mechanisms, development, function, and evolution of cyclic biological rhythms over time in physiology and behaviour. It studies these rhythms in a wide array of organisms, ranging from microbes via plants to animals including humans.

Biological rhythms are present in almost all organisms. Chronobiology encompasses a wide array of approaches to the study of these rhythms, from molecular genetics and neurobiology to physiology and behavioural biology. It also plays an increasingly important role in understanding human health and disease. In addition, biological rhythms have always been seen in the context of adaptation to predictable cyclic environmental changes, many of these due to our rotating planet. These rhythms concern predominantly seasonal changes, day-night rhythms, (circadian rhythms), and within day changes (ultradian rhythms) such as tides and food. The field is therefore also linked with ecology and evolution. There is now an internationally recognised need to integrate mechanistic and evolutionary approaches in chronobiology. Another urgent question is about the relevance of human chronobiology for human health and disease.

Chronobiology at the University of Groningen has a long tradition and strong reputation in rhythm research, studying a diversity of animal species (insect, rodents, humans). Within the Netherlands it has its own niche by integrating both molecular and neurobiological approaches as well as comparative and evolutionary approaches and mathematical modelling. The work includes sleep research and applications for society, in particular shift work.

[More information & application](#)



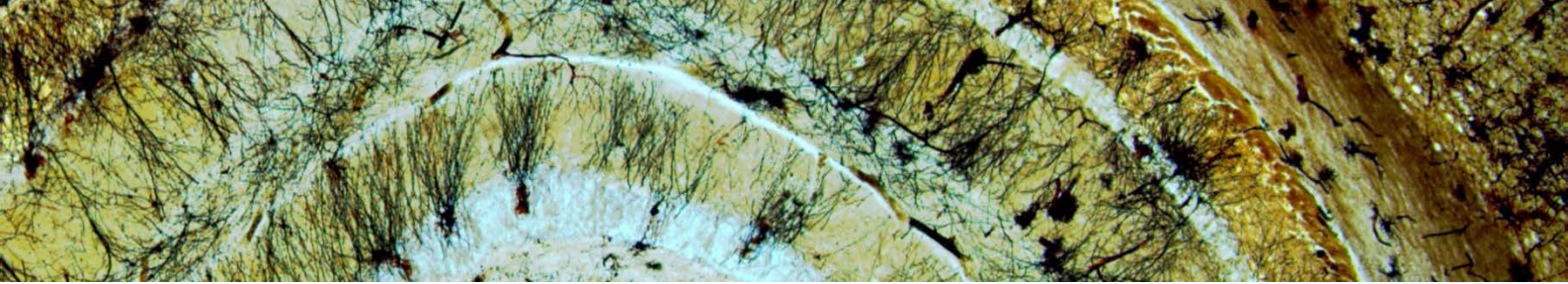
Tenure Track Assistant or Associate Professor in Evolutionary Ecology of Marine Animals

Marine biology is a broad field covering all biological aspects of organisms (microbes, plants, animals) that are dependent on the marine habitat. It includes both systematics, population dynamics, ecological and evolutionary studies, the study of the functioning and vulnerability of marine ecosystems, as well as the study of physiological mechanisms that are often specifically adapted to the marine habitat.

As the marine environment, being one of the most important habitats on earth, requires specific adaptations for life, marine organisms provide excellent models to study both the ecology and evolution of these special adaptations as well as the underlying general principles. The study of organisms that are dependent on the marine environment for only part of their life history, allows the study of plasticity in these adaptations. The evolutionary ecology approach aims to integrate ecological and evolutionary approaches that are often studied in isolation from each other whereas understanding their mutual interactions has now become essential. The field provides indispensable insight in many important societal topics such as food production, ecosystem services, biodiversity preservation, and causes and consequences of global change.

The field of marine biology has a unique position and a long tradition at the University of Groningen. Within the university, but outside the institute connections are present with the Arctic Centre for Polar research and a shared interest in genomics with the Groningen Biomolecular Sciences and Biotechnology Institute (GBB). Research from Groningen can be conducted anywhere on the planet but local/regional research is currently conducted in Arctic Norway, the Baltic Sea, the North Sea, the Wadden Sea, West Africa and China.

[More information & application](#)



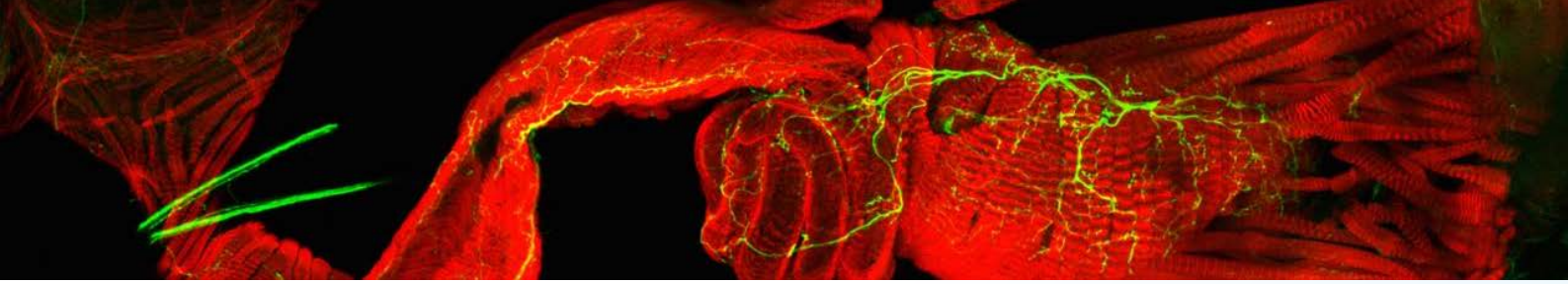
2 Tenure Track Assistant or Associate Professors in Evolutionary Medicine

Medical biology studies the fundamental biological mechanisms underlying human health and disease. Although evolution is a key characteristic of biological approaches in the life sciences, evolution is often not a crucial ingredient of medical biology. There is now growing awareness that both fields should become better integrated for mutual fertilization. This is the core of evolutionary medicine.

Evolutionary medicine is a fast growing new research field within the life sciences that applies modern evolution theory to the study of health and disease. It aims at understanding not only how people become sick (based on molecular, physiological and neurobiological mechanisms), but especially why people become sick, based on our evolutionary history and general evolutionary principles. It uses key concepts in evolutionary research, such as constraints in mechanisms and resulting trade-offs between different optimal solutions, different modes of Darwinian selection, our limits to adaptation, both in the past and in our currently rapidly changing world. It has yielded important progress in cancer research and immunology, but has also great potential for understanding other aspects of human biology such as ageing, vulnerability to infections, and metabolic diseases.

This field is currently growing rapidly, with a few centres on this topic recently being founded in the USA and Northern Europe. It has great potential for bridging biology and medical sciences, strengthening the connection between the Faculty of Mathematics and Natural Sciences FMNS and the Medical Faculty, as well as strengthening the societal topic of healthy aging at our university. As the integration between mechanisms and evolution for understanding adaptation is a key element in evolutionary medicine, the position is an outstanding opportunity to strengthen the research program Adaptive Life. It is envisaged that the new research field will attract extra students, both nationally and internationally.

[More information & application](#)



Tenure Track Assistant or Associate Professor in Microbial Ecology and Evolution

Microbial ecology and evolution is a sub-discipline of microbiology that focusses on the ecology and evolution of microbes and their interactions with the environment aiming at understanding fundamental principles in ecology and evolution at micro scale and the potential use of these principles for societal applications.

Microbes are present everywhere, in all, even extreme, ecological conditions on this globe, outside and inside organisms, in soils and in the air, often in large biomass and diversity, with a large impact on many biological and chemical processes. Microbial ecology and evolution is the field in which the adaptations, interactions and evolutionary dynamics of microbe species are studied in a community and ecosystem context. Due to their fast life span, microbes are often excellent models to study fundamentals of ecology and evolution but the field yields also societal applications for combatting disease, increase food production and understanding global change. Two currently important questions are, among others, the role of the microbiome of animals in relation to health and disease, neurobiology and behaviour, and the plant-microbe interactions in the rhizosphere and their consequences for ecosystems and their management.

The Microbial Ecology group at the University of Groningen has a strong tradition in soil and plant microbiology, where ecological theories and concepts are used to understand and explore these microbial communities. The group has a strong reputation in linking microbial diversity in soils to functional aspects, such as understanding the N cycle. Recently, knowledge on microbiomes has expanded to include the microbiomes of birds, insects, rodents and also humans. The group is well known for its ability to combine high throughput molecular data, bioinformatics and modelling approaches to unravel the ecological principles driving microbial communities, a unique combination in Europe. Current work includes soil microbial succession, microbial invasions, microbial consortia for lignocellulose degradation, plant-microbe interactions, bacterial-fungal interactions, horizontal gene transfer, the microbiome of birds and the importance of the gut microbiome in depression and cognitive disorders.

[More information & application](#)



Founded in	Students	Staff	Faculties	Alumni	Annual turnover
1614	30.000	5.500	10	120.000	€ 642.300.000

About the university

The University of Groningen is a research university with a global outlook, deeply rooted in Groningen, City of Talent. Quality has had top priority for four hundred years, and with success: the University is currently in or around the top 100 on several influential ranking lists. We collaborate with a number of renowned, foreign universities, including Uppsala, Göttingen and Ghent.

The University of Groningen is very popular with its 30,000 students and 5500 staff members from home and abroad. Talent is nurtured, enabling the University to bridge the gap between science and society. We are committed to active collaboration with our social partners, with a special focus on the research themes Healthy Ageing, Energy and Sustainable Society.





Founded in	Scientific staff	Support staff	PhD students	Postdocs	Annual turnover
2015	48	40	>150	>30	€ 12.500.000

About the institute

The Groningen Institute for Evolutionary Life Sciences was established in 2015 from the merger between the Centre for Ecological & Evolutionary Studies (CEES) and the Centre for Behaviour and Neurosciences (CBN).

Mission

Its mission is to provide a better understanding of fundamental biological processes by integrating mechanistic and evolutionary approaches, both in our research, education and public outreach, and to contribute where possible to the solution of societal problems.

Research and expertise

As the ability to adjust to environmental, developmental or physiological changes is a crucial aspect of living systems, this adaptation is a key issue in our research. Our research fields cover a wide array of expertise, ranging from neurobiology, physiology, genomics and behaviour to ecology and evolution, from molecular genetics, theoretical modeling and brain analyses to organismal and species interaction studies in semi-natural conditions and in the field. Studying mechanisms within an evolutionary and ecological framework requires the use of a large diversity of model organisms. Therefore we study a wide array of species, from microbes, algae, plants and insects to vertebrates such as fish, birds, rodents, marine mammals and humans.





Facilities

We have state-of-the-art facilities for housing a wide array of animal species (indoor & outdoor aviaries, rodent gardens and aquaria) as well as a human isolation facility to study the biological clock, and climate chamber and greenhouse facilities that belong to the best in the world. The institute also has a wide array of molecular, sequencing, endocrinological, histological, metabolic and behavioural labs and owns a confocal microscope. Our outdoor facilities include experimental gardens, the field station “The Herdershut” on the Wadden Island of Schiermonnikoog, the field station at the “Vosbergen” estate close to Groningen, and permanent facilities (equipment, vehicles, etc.) at field stations in the Serengeti, Tanzania and Hluhluwe-iMfolozi, South Africa and at the Seychelles, Indian Ocean.

Education

We teach at all levels of the curriculum in the life sciences, based on our unique framework as described above. We participate in the Biology major and we coordinate the majors in Ecology and Evolution, Marine Biology, Biomedical Sciences, the selective interdisciplinary research master Behavioural and Cognitive Neuroscience, and the internationally renowned top programme Evolutionary Biology that is also offered as an Erasmus Mundus Program (MEME). At the PhD level, the institute participates in the interfaculty Research School for Behavioural and Cognitive Neurosciences (BCN) and coordinates the Research School Ecology and Evolution (RSEE).



Our ambitions for 2020 include

1. To provide a stimulating environment for talented researchers, inspiring teachers, dedicated support staff and enthusiastic students that is balanced with regard to gender, age and ethnicity. In particular, we strive to increase the number of female faculty.
2. To improve the national and international profiling and recognition of scientific excellence at our university, building on current strengths. The Adaptive Life Programme will integrate research on physiology, neurobiology and behaviour with research on ecology and evolution, crossing traditional borders of research fields and institutes, and providing new fundaments for the life sciences.
3. To make novel and strong contributions to the University of Groningen societal priority areas Sustainable Society and Healthy Ageing, as well as to the Dutch Science Agenda, by providing a more pronounced biological perspective on sustainable agriculture and by initiating a more integrative and evolutionary perspective to medicine.
4. To further develop our Competence Centres for Sustainable Landscape (SLCC) and Brain and Behaviour (BBCC) that provide a platform for close collaborative interactions between researchers in academia, government, society and industry to convert knowledge into sustainable economic and societal processes, services and business activities.
5. To improve the visibility and attractiveness of MSc and PhD programmes in the Life Sciences, with a particular emphasis on MSc education in Marine Biology boosted by a strategic partnership with the Netherlands Institute for Sea Research (NWO-NIOZ). The evolutionary perspective will be a unique selling point for the programme in Medical Biology. All programmes will be offered in English to attract the highest-quality international students to Groningen.



What we ask

- PhD degree and, preferably minimal three years postdoctoral experience abroad
- Exemplary research record demonstrated by publications in international top journals and/or in peer-reviewed books
- Proof of independence and international recognition
- Experience in various working environments in different countries
- Successful in acquiring external funding for research projects
- Teaching experience or proven inclination for teaching demonstrated by tutoring/mentoring of individuals or small groups
- Proven organizational qualities and communication skills
- A well-founded and motivated application with an innovative and integrative research plan for the first five years and a challenging outlook for the future which takes into account the international research landscape in your field of specialization
- Fluency in the English language, in written and spoken form

The University of Groningen has adopted an active policy to increase the number of female scientists across all disciplines of the university. Therefore, female candidates are especially encouraged to apply.

In parallel with the Adaptive Life Programme, the UG is recruiting talented female scientists for 13 Rosalind Franklin Fellowships.



Conditions of employment

The University of Groningen offers a gross monthly salary dependent on qualifications and work experience from € 3,427 (salary scale 11 Dutch Universities) up to a maximum of € 5,330 (scale 12) gross per month for a fulltime position. The appointment for Assistant Professor (Tenure Track) will be initially for a maximum of 6 years at the level of tenure track assistant professor. After 5 years, an assessment of performance based on established criteria will take place. If the outcome of the assessment is positive, the assistant professor will be promoted to associate professor with tenure. There will be another assessment at the end of a further 4-7 year period for the promotion to full professor.

The appointment of Associate Professor will be a tenured appointment. The gross monthly salary, dependent on qualifications and work experience, will be from € 4,749 (salary scale 13 Dutch Universities) up to a maximum of € 6,349 (salary scale 14) gross per month for a fulltime position. There will be an assessment at the end of a 4-7 year period for the promotion to full professor.

In addition to the primary salary, the University offers 8% holiday allowance and an end-of-year bonus of 8.3%. The University of Groningen provides career services for partners of new faculty members moving to Groningen.



How to apply

Interested candidates are invited to submit a complete application including:

- A letter of motivation;
- A Curriculum Vitae, including a list of publications;
- A list of five self-selected 'best papers';
- A statement about teaching goals and experience and a description of scientific interest and plans;
- The names of three references complete with title and contact information.

You may apply for this position until January 30th 2017 via the application form on <http://www.rug.nl/about-us/work-with-us/job-opportunities/overview>.

More detailed information can be obtained from Prof. Ton Groothuis, chair of the selection committee (email gelifes-director@rug.nl; phone: +31 50 3638357 or +31 50 3632340).

Interviews will take place in the period of 20 March – 4 April 2017.

More information can also be found at the following links:

About the position:

<http://www.rug.nl/fwn/vacatures/structuurrapporten/index>

About the institute:

<http://www.rug.nl/research/gelifes/>

About the Adaptive Life Programme:

<http://www.rug.nl/research/fmns/themes/adaptive-life/>

About the Rosalind Franklin Fellowships:

<http://www.rug.nl/rff>

About the university:

<http://www.rug.nl/corporate/index>