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# Call for Proposals M20 Promotieplaatsen

# Background

The *M20 Promotieplaatsenprogramma* (M20 PhD scholarship programme) is an announced multi-annual programme that funds PhD scholarship positions in multidisciplinary research embedded in the new University of Groningen Schools. It is a programme of the Ubbo Emmius Fund. The programme is entirely funded by donations. In 2022, the first annual round of Calls for Proposals takes place with a budget for four (4) PhD projects. Upon a successful evaluation of the first round, this will be followed-up with a five-year programme with 10 PhD scholarship positions per year. For 2022, there is budget for one (1) project per school:

- Wubbo Ockels School: School with a focus on energy transition and climate adaptation for a sustainable planet
- Aletta Jacobs School: School for healthy ageing and for public health to work towards a healthy society
- Jantina Tammes School: School for digital innovation, artificial intelligence and technological progress for a knowledge society
- Rudolf Agricola School: School with a focus on governance, politics and sustainable processes to realise a sustainable society

# Purpose

The purpose of the programme is to stimulate multidisciplinary research from within the UG Schools and offer opportunities for careers for ambitious young scholars in academia at the University of Groningen.

# Wubbo Ockels School

The Wubbo Ockels School focusses on the energy transition and climate adaptation for a sustainable planet: to contribute to a cleaner planet for future generations. Hydrogen energy, decarbonization of energy supply, and citizen empowerment all just a few examples of the many topics that we deal with.

#### Aletta Jacobs School

Ubbo Emmius Foundation

The Aletta Jacobs School of Public Health is a network of researchers, educators and partners with one single goal: to contribute to more healthy years, for everyone. We are working across disciplines and with society to understand and develop new approaches to support better research, education and public policies that address society's key challenges in the field of public health. From disease, to the living environment, to mental health, we are working to improve research, build capacity and promote more healthy years. Our researchers come from a wide range of countries and academic fields. Their areas of interest span the social sciences, medicine, humanities, economics, spatial sciences and law to help us build the capacity to improve all areas of public health.



### Jantina Tammes School

The Jantina Tammes School is a vibrant community and fertile soil on which new research and educational activities can be built. We are looking forward to new interdisciplinary projects that have added value for our community and the world beyond. This includes themes like inclusive cognitive AI, data and platforms for social, cultural and business innovation, applications of AI in healthcare, AI as a tool to empower critical thinking for good, and smart systems and robotics.

### Rudolf Agricola School

The Agricola School for Sustainable Development is a platform organization for UG academics working on large societal challenges that relate to sustainability, economic welfare, social inclusion and justice, and good governance. Inspired by the UN sustainable development goals, we aim to contribute to a high quality of life of present and future generations. Within the School, we work on important and urgent societal challenges, and to which interdisciplinary collaboration of UG academics can make a difference in terms of policy development, decision making and implementation. Our regional embeddedness is recognizable in our work, while maintaining a clear link to global problems.

#### **Budget**

The total budget for the call is €1.160.000 for four (4) Phd Scholarship positions.

#### Who can Apply?

An application needs a minimum of two applicant UG staff members. One of the applicants should have the ius promovendus. The applicants need to come from at least two different faculties at the UG.

#### What to apply for?

An application needs to address a challenge from one of the Schools as listed above. It is not possible to apply for projects that study religions. This topic is excluded from the call due to explicit conditions in the donation that sponsors the M20 PhD Scholarship Programme. The PhD scholarship is a lump sum that covers the cost for 1 PhD position, including personnel cost, benchfee, and material cost (€290.000).

#### When to apply?

This call for proposals opens on March 28 12.00 pm. The deadline for applications is **April 18 12.00 pm**.

#### Assessment procedure

Applications are submitted at <u>application-portal.uef.nl</u>. After the deadline, the submitted proposals are checked on eligibly (phase 1):

- Does the application have two supervisors from two different faculties?
- Does the proposal address a challenge from one of the Schools?



The applications are then reviewed by the M20 PhD scholarship commission. This commission chaired by Prof. dr. Petra Rudolf, has representatives of all four Schools and the Ubbo Emmius Fund. The proposals are assessed by two assessors on the following criteria (phase 2):

- Quality of the proposal
- Originality of the research question
- Feasibility of the proposal
- Relation with the theme and goal of the School and long term impact

In short, the procedure has the following steps:

- Submission of the proposal
- Eligibility check of the proposal
- Review and assessment of the proposal
- Decision on the proposals

#### Conditions

The following conditions and regulations of the Ubbo Emmius Fund apply to this call:

- Toekenningsregeling Ubbo Emmius Fonds (English version available soon)
- Algemene voorwaarden grants UEF (English version available soon)
- All applications are held against the same procedures and criteria as communicated through the call. The selection commission will give concise written feedback on decisions towards applicants in phase 1 (eligibility) and phase 2 (review). However, there will be no other communication about decisions of the selection commission beyond what is given.
- The board of the Ubbo Emmius Fund has the sole authority to award grants based on the call for proposals and internal considerations regarding the general goals and objectives of the foundation.

#### Contact

For questions: grants@uef.nl

# Annex: Themes of the Schools

# Jantina Tammes School

New interdisciplinary PhD projects that have added value are expected to relate to one of the following themes:

- Inclusive Cognitive AI: In this theme, knowledge of the human mind is used to address social issues, with a specific focus on contributing to an inclusive society, and foregoing the traditional focus on a relatively narrow social band. In particular, AI techniques can be used to build personalized education based on learning models, using knowledge of theory of mind to detect lying and deception, and build methods for explainable AI that take into account differences in cultural, social, and economic status.
- Data and platforms for social, cultural and business innovation: The focus of this theme is the interaction between humans and (new) technologies, both in terms of practical and social implications. This theme also includes the effect of AI and automation on cultural production (incl. news, information, music, etc.) and on digital inclusion, ensuring inclusion of all citizens in a digital society.
- Applications of AI, digitalisation and technology in healthcare: In this theme, research spans a broad range of topics, from generating synthetic (time-dependent) health data using computational models, to the responsible development of AI applications that draw on electronic patient record data.
- Al as a tool to empower critical thinking for good: Al could foster a more resilient society by supporting debate training by automatically creating arguments and counterarguments, thereby automatically generating different perspectives on a given topic.
- Smart Systems and Robotics: The theme focuses on developing chatbots, mixed human/robot teams, autonomy, linguistics and vision, leading to applications such as 'digital Groningen', domotics, smart industry, smart energy, and decision-making systems.

# **Rudolf Agricola School**

The Rudolf Agricola school is looking for an interdisciplinary PhD position that explicitly relate to one of the following pressing research themes we develop:

— Sustainable Landscapes: Agricultural intensification, industrial progress and urbanization have strong detrimental impacts on our landscapes. However, maintaining resilient and harmonious landscapes is key to human identity and belonging, to preserving biodiversity and to protecting ecosystem services that support human wellbeing. Moving the present tide towards developing sustainable landscapes requires inclusive and novel societal processes with a clear focus on ecological, economic and socio-cultural sustainability. Interdisciplinary research is key in order to address complex new questions that emerge, and our Northern region offers enormous opportunities to advance our knowledge.





- Democracy & Governance: Democracies are not to be taken for granted and are in constant evolution. Presently, they face a variety of threats at the local, national and international levels. There is increasing pressure on the legitimacy of democratic decision making process and policy implementation. This raises -for instance- important questions related to polarizing electorates, to democratic innovations and their limits, and to tensions between collective decisions and local participation.
- Disaster resilience: Disasters are events that disrupt societies and threaten future prosperity. They cause widespread and serious damage to people, communities and the physical environment they live in. Therefore, developing sufficient Disaster Resilience is a fundamental need of societies with high future welfare. Especially in times when human induced disasters (i.e. consequences of climate change, Groningen earthquakes) create new questions and demand new answers.
- Illicit Trade: Illicit trade fuels conflicts and threatens human rights. It facilitates the
  overexploitation of natural resources and it affects the sustainability of the environment.
  It often poisons good governance practices involving both public and private actors,
  nationally and on a global scale. Illicit activities are a serious threat to reaching
  important policy goals and affect the quality of present and future life.

#### Wubbo Ockels School

The Wubbo Ockels school is looking for PhD projects that explicitly relate to one of the following research themes:

- Hydrogen Economy: Green hydrogen is a promising means to cope with the challenges posed by the transition to renewable energy sources. The use of green hydrogen calls for a redefinition of the standards on energy security and reliability of supply, redesigning of the energy value chain, addressing emerging societal issues, development of new economic and business models as well as re-arrangements on the existing grid infrastructure. This research field offer a fruitful ground for interdisciplinary research involving, but not limited to, engineering, law, economics, psychology, sociology, business and economics and spatial sciences. Ph.D. projects should be focusing on a combination of technical challenges, legal/governance challenges, business/economic challenges, societal acceptability challenges and spatial configuration of hydrogen facilities (at least two challenges).
- Citizen-empowered in the energy transition: Citizen empowerment is put at the heart of the energy transition by the European Union. Three important choices that citizens have in this empowerment are support for energy production at the local level, i.e. wind and solar fields; heating their houses, i.e. electricity, green gas or district heating; and mobility, i.e. driving in electric or fuel cell cars. All three choices will directly influence physical infrastructure needs and socialized costs at the national scale. The main challenges to be addressed in this theme are:
  - What are the consequences over time and space scales of local energy activities, and which ones are optimum considering system efficiency?
  - How can citizens anticipate with their choices on techno-socio-economic-regulatory conditions?
  - How can these conditions be adapted over time and space to create favourable circumstances for the optimum choices?





— Opportunities and challenges of nuclear energy in the energy transition: Recent high-profile (meta-)studies conclude that decarbonization of the electricity sector and potentially also other sectors is more affordable if non- variable "firm" lowcarbon sources such as nuclear energy are deployed alongside variable renewables. These findings raise the urgent question whether and, if so, how the potential of nuclear energy to contribute to the decarbonization of energy systems can and should be used in the context of the ambitions expressed by the Dutch national and regional governments. Ph.D. projects should be focusing on a combination of technical challenges, legal/governance challenges, business/economic challenges, societal acceptability challenges and spatial configuration of nuclear facilities (at least two challenges).

# Aletta Jacobs School

Applicants for topics related to the Aletta Jacobs School can relate to the general purpose above.

