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GUIDE FOR APPLICANTS

Neuro-Innovation **Doctoral Programme**

Research and innovation for brain health throughout life

UPDATED 15.11.2022

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PROGRAMME DESCRIPTION

The Neuro-Innovation training is a novel effort at UEF to integrate the university's world class neuroscience with top-level management; social, legal and computer science and applied physics. This integration will produce unique inter/multidisciplinary competence that contributes to brain health innovation in Europe and beyond by training future leaders in this area of research and practice.

PhD training aims to

- educate innovation leaders who have world-class competence to advance and create brain health innovation in the international, multidisciplinary and intersectoral health care environment
- develop hybrid scientists with unique combinations of academic and practical skills needed in future jobs
- provide a new platform for intensive interaction of experts in different disciplines and research areas
- develop multi-professional insight needed in collaborative efforts with stakeholders
- offer means to advance impact and innovation in science, business, and policy

PhD training offers to Doctoral Researchers

- research skills that offer extended possibilities for an academic career and employment to R&D positions in companies
- transferable and multi/interdisciplinary skills that can lead to employment in non-academic sectors and enhanced opportunities for academic entrepreneurship
- knowledge of commercialization processes that lead to the creation of new health products and services, novel treatments, and more effective health care
- strong ethical insight with an excellent ability to engage with various stakeholders and make sustainable scientific, social, and economic contributions to society

We have supervisors from six regular PhD Programmes in three faculties: 1) Molecular medicine; 2) Clinical research in the Faculty of Heath Sciences; 3) Business; 4) Social Sciences; 5) Law in the Faculty of Social Sciences and Business Studies; and 6) Science, Technology and Computing in the Faculty of Science and Forestry. The new training will benefit from and work in close collaboration with the regular PhD Programmes at UEF. Precision medicine concerning epilepsy, traumatic brain injuries and neurodegenerative diseases have a long history as particularly strong, internationally ranked research areas of UEF neuroscience. Drawing from this expertise, the Neuro-Innovation training will address the translation of research results into clinical adaptation and commercial outcomes in three multidisciplinary research areas:

1. The societal impact of prediction and early diagnosis research area
2. The co-innovation for prevention and treatment research
3. The transfer of technologies, methods and models research area

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DOCTORAL RESEARCHER (PHD STUDENT) POSITIONS

In this fourth call, the plan is to recruit two (2) Doctoral Researchers for a four-year (48 months) PhD training.

The Doctoral Researcher positions will be open for MScs of any nationality in the relevant scientific fields/combinations, as specified in the call. Please see the specific description for positions at https://sites.uef.fi/neuro-innovation/open-call/.

Applicants after a career break (i.e. maternity/parental leave, working in industry) are encouraged to submit their applications. However, they will need to ensure that the description of the break and its reason is clearly presented on electronic application form. Any mobility experience or a change from one discipline or sector to another will be considered as a valuable contribution to the professional skills of the applicant. All documents must be prepared in English. The completed application and all required appendices must be submitted by the applicant. Only complete applications by the time of the deadline will be taken into consideration.

Working in the Doctoral Researcher position requires moving to Finland.

Important dates

PHASES	THIRD CALL TIMETABLE
Opening and closing of the call	18.11.2022 -31.1.2023
Interviews, planned schedule	March 2023
ESRs will start their studies at UEF	1.5.2023-1.9.2023

APPLICATION PROCEDURE

The selection process will follow the Charter and Code for the recruitment and selection of Doctoral Researchers. The selection procedure includes 1) an eligibility check (including an ethics check for topics suggested by the applicants), 2) an external review, 3) interviews, 4) the final selection and 5) feedback (see Figure 1).

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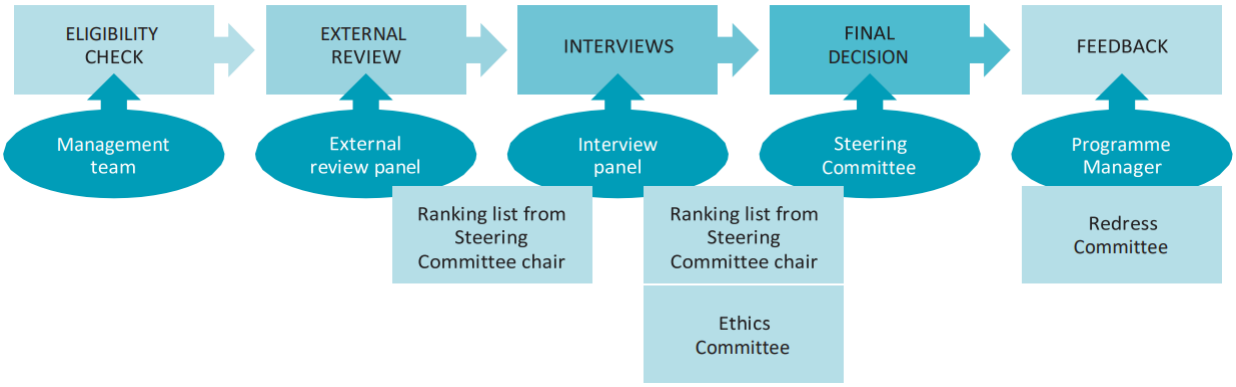

Figure 1: Overview of the selection process and the committees involved

1. An eligibility check

The process will start with the eligibility check to determine whether the candidates fulfil the predefined eligibility criteria. At the time of the recruitment, the candidates must fulfil the following eligibility requirements:

Research experience for doctoral candidates

- hold a Master's Degree or a Bachelor's Degree (or equivalent degree) that includes a research thesis (or equivalent) and that entitles to PhD studies in the country where the degree was issued in Neuroscience, Applied Physics, Biomedical Engineering or in another related relevant field
- should not hold a doctorate or PhD
- should have less than 4 years of research experience after graduation (Master's Degree or equivalent based on which you are applying for this position) by 31 January 2023. In this context, the 4 years refer to a net period of time, which does not include maternity leaves, parental leaves or military service. Mobility requirements for doctoral candidates
- fulfil the mobility requirement of the MSCA actions. I.e i.e. ESRs must not have resided or carried out their main activity (work, studies) in Finland for more than 12 months in the 3 years immediately before 31 January 2023. Compulsory national service and/or short stays such as holidays are not considered
- fulfil the application requirements described in the call

Applications that do not meet the pre-set criteria will not proceed to the next phase, and the candidate will receive information regarding the reason for rejection and instructions for complaint.

The Ethics Committee will pursue the infrastructure check for research topics suggested or modified by the candidates.

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2. An external review

The second step is the evaluation of the written applications of the eligible applicants by the external review panel consisting of independent and non-biased external experts. The panel will have a balanced mix of international, national, male and female experts outside the project partnership. The reviewers will have one month to complete the evaluation task.

The reviewers will evaluate candidates' 1) qualifications and merits on the basis of the degree certificates/diploma, Master's thesis summary and CV and 2) motivation and commitment to PhD studies and ability to tackle the chosen or suggested research topic on the basis of their motivation letter. Three reviewers will evaluate and score each application to ensure equitable evaluation.

The criteria used in the external review of the application documents are:

SCORING AND CUT-OFF TO PROCEED	EVALUATION CATEGORY	SPECIFIC ITEMS IN EACH EVALUATION CATEGORY
Maximum score 5 points in both categories. Cut-off 3 points in both categories to proceed. Total cut-off 7 points to proceed.	CANDIDATE'S MERITS Weight 50%	• Academic qualifications (MSc thesis grade and summary or thesis (or Bachelor's thesis grade and summary if applying with that) 40 % • Previous research experience in the chosen research area and topic (40%) • International experience / Interdisciplinary experience / Intersectoral experience (20%)
	MOTIVATION LETTER Weight 50%	• Commitment and motivation to pursue PhD studies (20%) Understanding of the chosen or suggested research topic (20%) • Understanding of the research methods used in the chosen or suggested research topic (20%) • Understanding of the interdisciplinary and intersectoral aspects in doctoral training (20%) • Prospect of completing PhD studies in the given time frame (20%)

The candidates must reach a threshold score on each evaluation category of the external review to proceed to the next phase. Those under the threshold will not proceed to the ranking phase, and these candidates will receive information about their rejection and instructions for complaint. The candidates who pass the external evaluation procedure will be ranked by the chair of the Steering Committee, who will then select three times as many students as will ultimately be accepted to be invited to the interviews. In cases of two or more similar scores but only a single interview spot, all candidates reaching the similar score will proceed to interviews. Those who will not be interviewed will receive notification of the reason for rejection and instructions for appeal.

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3. Interviews

The interview panel will interview the selected candidates online according to a predefined protocol. The Impact manager will provide compulsory training on non-biased evaluation to the interview panel. The interviews will be used to evaluate applicants' 1) understanding of the chosen research area, more specific research topic, and methodological skills; 2) motivation and commitment to PhD training, as well as learning goals and career plans and 3) English language skills. The basis for evaluation is a short pre-prepared presentation given on the Master's thesis summary and the chosen or suggested research topic, as well as joint discussions of candidates' objectives and motivation for pursuing a PhD.

An HR expert will be involved in interviews to secure a fair, non-discriminatory approach to each candidate and the overall transparency of the interview process. The candidates must reach a threshold score on each evaluation category of the interview to reach the final ranking list.

The criteria used in the interviews are:

SCORING AND CUT-OFF TO PROCEED	EVALUATION CATEGORY	SPECIFIC ITEMS IN EACH EVALUATION CATEGORY
Maximum score is 5 in every category. Cut-off is 3,5 points in every category to reach the final ranking list and be selected.	RESEARCH PRESENTATION Weight 50%	• Presenting Master's thesis summary in the given time frame (20%) • Assimilation of research purpose and aims for the chosen or suggested research topic (40%) • Mastering of theory, methods, and ethics for the chosen or suggested research topic (40%)
	MOTIVATION Weight 30%	• Motivation for PhD studies and for the chosen or suggested topic (60%) • Assimilation of learning goals for PhD studies (20%) • Career plans for future (20%)
	LANGUAGE PROFICIENCY Weight 20%	• English language proficiency (100%)

Based on the interview scores, the chair of the Steering Committee will produce a new ranking list that identifies candidates who are qualified to be offered a PhD position. The Ethics Committee will approve the topics modified or suggested by the PhD students who will reach the main list and the waiting list on the basis of the interviews.

4. Final decision and feedback

Selected will be notified of the selection as soon as the ranking list is confirmed. The remaining interviewed candidates will be on a waiting list until the selected applicants have confirmed acceptance of the position. In case of vacancies, the next person on the list will

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be offered a position. When all positions have been filled, applicants on the waiting list will be informed. The candidates will receive feedback on the evaluation results when the application process has ended.

HOW TO APPLY?

Description of the research topics and expectations from the candidate are provided on the programme website at https://sites.uef.fi/neuro-innovation/neuro-innovation-Doctoral Researcher-positions/ The candidates may modify the research topic given in the call or suggest their own topic in the motivation letter.

The UEF online application system (Saima Rekry) provides an easy-to-access electronic form to be filled out by the candidate. All application documents, written or transcribed in English, must be attached to this electronic form. The electronic application must contain the following documents and information:

- certified copies of BSc and MSc degree diplomas/certificates in English
- certified copies of BSc and MSc degree transcripts in English
- certified copies of possible attachments of degree diplomas/certificates in English that indicate applicant's eligibility to doctoral studies
- copies of possible attachments of degree diplomas/certificates in English that indicate applicant's English language proficiency
- if the proof of English language skills has not been demonstrated in an academic degree and the applicant has not taken the English language test, the English language skills will be assessed in the interview for the position
- curriculum vitae (CV) (https://tenk.fi/en/advice-and-materials/template-researchers-curriculum-vitae)
- Master's thesis (or Bachelor's thesis if applying with that) in any language, electronic copy (in zip file or pdf file)
- two-page summary of the Master's thesis (or Bachelor's thesis if applying with that) in English (in pdf file)
- motivation letter (max three pages) describes the applicant's motivation to pursue PhD studies in the chosen research area and topic. When suggesting your own research topic or modifications to the given topic, the research idea needs to be described as part of the motivation letter and research ethics and infrastructure forms provided on the programme website must be attached to the application (for more specific instructions on the motivation letter, see www.uef.fi/neuro-

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innovation)

- full name, mobile phone number and e-mail addresses of at least 2 referees

Motivation letter

Motivation letter describes the applicant's motivation to pursue PhD studies in the chosen research area and topic. It explains why you would be the best candidate for an Early Stage Researcher position. Carefully read instructions and write the motivation letter as follows:

1. Start with a brief explanation specifying the PhD Programme you are applying for and outline your interest in the Neuro-Innovation research project.
2. State a clear career objective of your PhD studies and the reasons for choosing the particular research topic (as given in the call, modified or your own topic).
3. Summarize key information about your previous academic and professional experience, knowledge and competence related to the chosen PhD Programme and the research topic. Include relevant research experience, international experience, and your work outside the academic sector and volunteering.
4. Specify in detail how your academic and professional achievements make you a valuable candidate for the PhD Programme, the Neuro-Innovation project, and the research topic you applied to.

When suggesting your own research topic or modifications to the given topic, the research idea needs to be described as part of the motivation letter (see details below). You can write these changes on the third page of your motivation letter. If you do not want to propose changes to a given research topic, the length of the motivation letter is two pages.

Please follow the technical requirements:

- Standard-sized paper A4 (8 ¼" x 11 ¾" or 210 mm x 297 mm), with 1"(2.54 cm) all around
- Clear font such as sans serif fonts 11-point Calibri, 11-point Arial, or 10-point Lucida Sans Unicode of serif fonts 12-point Times New Roman, 11-point Georgia, or normal (10-point) Computer Modern (the default font for LaTeX).
- Single-space the paragraphs. A space between each paragraph.
- No need to handwritten signature

SUGGESTING YOUR OWN OR MODIFYING THE GIVEN RESEARCH TOPIC

You may modify the research topic or suggest your own in your motivation letter. Suggested topic must be in the research area of the Neuro-Innovation DP and the hosting research group.

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When suggesting your own research topic or modifications to the given topic, your research idea needs to be described as part of the motivation letter (i.e. on the third page) and research ethics and infrastructure form must be attached to the application (i.e. 'other attachment of the electronic application form).

1. Instructions for the third page of the motivation letter

In one page:

- Describe your research topic and its relevance
- Shortly summarize existing research
- Position your own research approach
- Detail your research problem and methodology
- In case any ethical issues arise in your proposal, please describe them

2. Instructions concerning research ethics and infrastructure

Fulfil the research ethics and infrastructure form (available at www.uef.fi/neuro-innovation and attached at the end of this document) and attach it to your application in the SaimaRekry system. If you cannot complete the form provided, you can copy the questions and submit your answers in a separate document.

The ethics and infrastructure questions must be answered for all modified or own topics. The Ethics Committee will check your answers as part of the eligibility check.

HOW TO FILL IN THE APPLICATION FORM

The electronic application forms will be published in the SaimaRekry portal at https://www.uef.fi/en/open-positions

When filling in the electronic application form, you will need to provide the following information in it:

- Contact details
- Education. If you have completed the MPhil degree, select the licentiate degree from the menus. If the degree/other education is in progress, please indicate what percentage you have completed.
- Language skills.
- Work experience. Provide only the relevant information for the position you apply. Explain other work experience shortly in your Curriculum vitae.
- Number of publications, if any.
- Expert tasks (e.g. acting as referee for scientific publications)

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- Other research merits (e.g. awards and honours granted for scientific merits, positions of trust in scientific communities, cross-disciplinary expertise, international research expertise)
- Other societal merits (e.g. promoting open science and research, appearing as an expert in the media, intersectoral experience)
- Referees. Provide full name, mobile phone number and e-mail addresses of at least 2 referees
- Possible start of the work.
- How many months have you resided or carried out your main activity (work, studies, etc.) in Finland during 1.2.2020– 31.1. 2023? (Compulsory national service and/or short stays such as holidays are not taken into account.)
-
- If you have several Master's degrees (or several Bachelor's degrees if applying with that), which is the one with which you are applying for this doctoral research position?
-
- Does the Master's or Bachelor's degree with which you are applying for this doctoral research position qualify for postgraduate studies in the country where the degree was issued? (Yes/no)
-
- Is the qualification for doctoral studies mentioned in your Master's or Bachelor's degree diploma/certificate/attachments that you have provided us as part of your application? (Yes/no)
-

  Title and grade of the Master's Degree Thesis (or Bachelor's Thesis if applying with that) in English of the degree with which you are applying for this position:
-

  Name and affiliation of the main supervisor of the thesis you mentioned in the previous question:
-

  How many years of research experience do you have after graduating from the Master's degree, Bachelor's degree (or equivalent) with which you are applying for this position) by 31 January, 2023 (Years/months)? In this context, 4 years refers to a net period of time, which does not include maternity leaves, parental leaves or military service.
-

  Do you hold a doctoral degree or a Doctoral Researcher position? (Yes/no/currently studying at [university] for [topic]):
-
- Specify your previous research experience (based on your academic degrees and work experience), including methodological expertise in the research area and the topic of the position you are applying for:
-
- Specify your previous research visits and secondments (if applicable). Provide the purpose of the visit or secondment, the name of the hosting organization, the

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location and the length of the visit or secondment, and the new knowledge you gained.

-

Careful completion of the form will take at least an hour. You can modify and complete your application during the application period. Some of the questions are marked as mandatory and the application cannot be sent without answering the mandatory questions.

Any questions?

For further information on research topics, supervision, and application procedure, please visit www.uef.fi/neuro-innovation

In case of further questions or problems:

Study Frequently asked questions https://sites.uef.fi/neuro-innovation/2021/05/25/frequently-asked-questions/

Contact neuroinno@uef.fi

Call the project manager +358 50 367 5236

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APPENDICE 1. RESEARCH ETHICS AND INFRASTRUCTURE FORM

Fulfil this research ethical and infrastructure form and attach it to your application in SaimaRekry system. If you cannot complete the form provided, you can copy the questions and answer them in another document.

Research Ethical Issues Table (if applicable, not included in the 1page limit of your own proposal)

In case any ethical issues arise in your own proposal, please mark all fields where "YES" is applicable to your own project proposal. The information asked in this table must be included into your application even if the proposal does not raise any severe ethical issues.

Research Ethical Issues Table		
RESEARCH ON HUMAN EMBRYO/FOETUS	**YES**	**NO**
Does your research involve human embryos?		
Does your research involve human foetal tissues/cells?		
Does your research involve human embryonic stem cells (hESCs)?		
Does your research on human embryonic stem cells involve cells in culture?		
Does your research on human embryonic stem cells involve the derivation of cells from embryos?		
I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL		
RESEARCH ON HUMANS		
Does your research involve children?		
Does your research involve patients?		
Does your research involve persons not able to give consent?		
Does your research involve adult healthy volunteers?		
Does your research involve human genetic material?		
Does your research involve human biological samples?		
Does your research involve human data collection?		
I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL		
PRIVACY		
Does your research involve processing of genetic information or personal data (e.g. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)?		
Does your research involve tracking the location or observation of people?		
I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL		
RESEARCH ON ANIMALS		
Does your research involve animals?		
Are those animals transgenic small laboratory animals?		
Are those animals transgenic farm animals?		
Are those animals non-human primates?		
Are those animals cloned farm animals?		
I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL		

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RESEARCH INVOLVING DEVELOPING COUNTRIES	**YES**	**NO**
Does you research involve the use of elements that may cause harm to the environment, to animals or plants?		
Does your research deal with endangered fauna and/or flora and/or protected areas?		
Does your research involve the use of elements that may cause harm to humans, including research staff?		
I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL		
DUAL USE		
Does your research have the potential for military applications?		
Does your research have the potential for malevolent/criminal/terrorist abuse?		
I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL		

Infrastructure Table

Answer the following questions in detail. The information asked in this table must be included into the application when the given topic has been modified or own topic suggested.

Infrastructure table
1) What kind of equipment is needed for the research topic you suggested/modified?
2) What kind of software is needed for the research topic you suggested/modified?
3) What kind of data bank or other data is needed for the research topic you suggested/modified?
4) What other resources, services, or other is needed for the research topic you suggested/modified?