13 Doctoral Positions in Social Science Genetics available across 8 Universities

Applications are invited for **13 PhD studentships** in Social Science Genetics across eight European Universities that constitute the European Social Science Genetics Network (ESSGN). The Doctoral Network is funded by the EU Marie Skłodowska-Curie Actions (MSCA) and includes: Erasmus University Rotterdam (NL), University of Bologna (IT), University of Bielefeld (DE), University of Bristol (UK), University of Oslo (NO), University of Oxford (UK), University of Uppsala (SE), and VU University Amsterdam (NL). We invite applications from eligible students for studentships that commence in Sept/Oct 2023.

The Doctoral Network

ESSGN brings together eight Universities with a shared interest in social science genetics, i.e., in incorporating genetic information to improve our understanding of age-old questions in the social sciences, such as the origins of inequality, the 'nature versus nurture' debate, and the extent to which the interplay between environments and genes is important in shaping life chances. The consortium consists of an interdisciplinary group of academics, spanning demography, economics, epidemiology, genetics, political science, psychology, sociology, and statistics, as well as seven non-academic partners experienced in and committed to using data science to better understand inequalities in life chances. The partners include government bodies (GO Science UK), the World Health Organization - International Agency for Research on Cancer (WHO-IARC), policy research institutes (RAND Europe, Netherlands Interdisciplinary Demographic Institute [NIDI]), charities (the Health Foundation), data infrastructure networks (CentERdata-ODISSEI) as well as economics consulting (Prometeia).

The Doctoral Network will create, nurture, and maintain a stimulating and world-class training environment in the interdisciplinary study of social-science genetics and geno-economics. **Training will be provided** through: i) courses in the biological foundations of genetic inheritance; ii) practical training in cutting-edge, multidisciplinary methods in social science genetics, including in state-of-the-art computational and bioinformatics methods for analysing big data and in statistical techniques for empirical research; and iii) cutting-edge academic research as well as secondments with our partners, to prepare doctoral students to be successful research scientists, but also for the professional job market in industry, technology and policy. A dedicated team will coordinate and support skill development as well as monitor well-being and progress towards the PhD. While based at one of the eight ESSGN universities, it is expected that doctoral students work across institutions and countries.

The PhD projects will jointly contribute to answering a key research question that has occupied social scientists for decades:

To what extent do inequalities in life chances arise from genetic variation, environmental factors, and their interplay, and what can we do about it?

The PhD projects will go beyond the state-of-the-art by (i) using Europe's largest and most comprehensive multi-generation databases to separate direct genetic effects from parental genetic and socio-economic factors that shape the rearing environment; and (ii) by exploiting the large toolbox of causal inference methods used in econometrics and statistics to estimate how environmental contexts causally protect individuals with genetic risk.

We will incorporate genetic information into the social sciences to explore how genetic and environmental characteristics jointly shape inequalities in life chances by (1) analysing to what extent genetic ('nature') and environmental ('nurture') factors contribute to inequality of opportunity and intergenerational mobility, and (2) establishing how nature and nurture jointly shape inequalities in life chances.

More information

Benefits

All researchers will be recruited under an employment contract that includes social security coverage.

Monthly living allowance: €3,400 per month (€40,800/year); this amount is adjusted with a country correction coefficient for the country in which the researcher is recruited. The country correction coefficients are indicated in Table 1 of the MSCA Work Programme (which can be located here).

Monthly mobility allowance: €600 per month

Monthly family allowance, if applicable and depending on the family situation: €495 month.

Funding:

The EU studentships are funded through the Marie Skłodowska-Curie Actions (MSCA); The UK studentships are funded through UKRI. They consist of tuition fees (if applicable), as well as a Doctoral Stipend. Additional research, travel and support funding is also available. Studentships will be 3 years full time, with the possibility for partially funded/unfunded extensions.

Eligibility criteria

Applicants can be of any nationality and must not have a doctoral degree at the date of recruitment. They must not have resided or carried out their main activity (study, work, etc.) in the country of the recruiting organisation for more than 12 months in the 36 months immediately before the recruitment date.

Because the funding is for three years, applicants must have obtained (or depending on the institution: be about to obtain), an MSc/MRes/MPhil (requirements may vary by institution) in an appropriate area of social science (e.g., demography, economics, epidemiology, political science, psychology, sociology, statistics) or medical science (e.g., genetics, epigenetics). We are looking for students with strong quantitative skills. Professional experience is a plus, but not a must.

If you want to apply for one of our grants you must:

Comply with the mobility rule, meaning that they must not have resided or carried out their main activity (work, studies, etc.) in the country of the recruiting beneficiary for more than 12 months in the 3 years immediately before the recruitment date (see below (*) for exceptions to this rule).

Comply with the doctoral candidate criteria, meaning that at the time of recruitment by the hosting institution they have not been awarded a doctoral degree.

Fulfil the requirements to be enrolled in a doctoral programme at the hosting institution/country, and, if applicable, the specific eligibility requirements at the hosting institutions.

Submit a complete application within the submission deadline.

*When checking compliance with the mobility rule, the refugee procedure will not be considered as a period of residence in the country where the candidate is applying. When all scores and evaluation criteria are equal, preference will be given to candidates from under-represented groups, for example women, and candidates with disabilities or those from refugee backgrounds.

If English is not your first language you will need to meet the English language requirements of the University you are applying to. Please check their respective websites.

Selection process

Fellows will be recruited through an **international open call** that aims at being "open, efficient. transparent and supportive" as stated in the European Code of Conduct for Recruitment. The process will seek merit-based selection while quaranteeing gender balance, equality, inclusion and transparency in line with the European Charter for Researchers.

Enquiries:

There is an online Q&A session on 29 November 2022, 10-11am CET. where at least one individual of each University is available to answer any questions. Zoom link (Meeting ID: 950 8277 9199)

For further Project or University-related queries, please contact the main local contact / supervisors of the PhD studentship (details above). For general ESSGN enquiries, please contact Titus Galama (t.j.galama@vu.nl) or Stephanie von Hinke (S.vonHinke@bristol.ac.uk).

How to apply: The deadline for expressions of interest is 5pm, 7 December 2022 CET. For this stage, please complete this online form, and send your CV, and a short (max 1 page) letter expressing your interest to essgn.sbe@vu.nl.

> Shortlisting takes place in the week of 12 December 2022. You will hear if you have been shortlisted by 16 December 2022.

> Formal applications need to be submitted to the relevant University/ Universities (you can submit applications to multiple Universities) of your choice by 8 January 2023 (deadlines may vary, so make sure you check). Each position will be advertised on the relevant University's website (please contact the local supervisors for more information).

> Note that, even if you have not submitted an expression of interest, you can still submit a formal application to the University/Universities of your choice.

> Interviews will be held online in the week of 23 January 2023 (to be confirmed).

ESSGN brings together 8 European Universities. The table below shows the number of studentships, supervisors and topics of interest:

University	Country	PhDs available	Main supervisors	Potential topics
Erasmus University Rotterdam	The Netherlands	2	Prof. Hans van Kippersluis Dr. Niels Rietveld Dr. Janine Felix Dilnoza Muslimova Tilbe Atav	Human capital, health Nature-nurture interplay Intergenerational mobility Causal inference Inequality of opportunity Epigenetics
University of Bologna	Italy	2	Prof. Nicola Barban Dr. Pietro Biroli	Epigenetics Family and Fertility Assortative mating Gene-environment interactions Econometrics Causal inference and genetics
University of Bielefeld	Germany	1	Prof. Martin Diewald Dr. Felix Tropf Dr. Tobias Wolfram	Nature-nurture interplay Missing heritability Whole-genome methods GxE theory
University of Bristol	United Kingdom	2	Prof. Stephanie von Hinke Dr. Paul Hufe Dr. Emil Sorensen Dr. Nicolai Vitt Dr. Neil Davies	Nature-nurture interplay Gene-environment interactions Developmental origins Intergenerational mobility Causal inference Inequality of opportunity Epigenetics
University of Oslo	Norway	2	Prof. Eivind Ystrøm Dr. Alexandra Havdahl	School environments and: -Heritability -Intergenerational mobility -Selection (gene-environment correlation) -Gene-environment interaction -Non-cognitive skills -Homogamy Genome-wide indirect genetic effects
University of Oxford	United Kingdom	1	Prof. Melinda Mills Prof. Augustine Kong Dr. Evelina Akimova Dr. Xuejie Ding	Intergenerational transmission Family models and data Direct and non-direct effects Participation bias Inequality of opportunity
University of Uppsala	Sweden	1	Prof. Sven Oskarsson Dr. Rafael Ahlskog	Nature-nurture interplay Gene-environment interaction Intergenerational mobility Causal inference Inequality of opportunity Prosocial and political behavior
VU University Amsterdam	The Netherlands	2	Dr. Titus Galama Dr. Abdel Abdellaoui Prof. Karin Verweij Dr. Andries Marees Dr. Aysu Okbay	Nature-nurture interplay Inequality of opportunity Gene-environment interaction Early childhood development Causal genetic and causal environmental analyses Big data

Primary local contacts / supervisors

Erasmus Univ R'dam (NL), Hans van Kippersluis hvankippersluis@ese.eur.nl University of Bologna (IT), Nicola Barban n.barban@unibo.it Univ of Bielefeld (DE), Martin Diewald martin.diewald@uni-bielefeld.de University of Bristol (UK), Stephanie von Hinke s.vonhinke@bristol.ac.uk University of Oslo (NO), Eivind Ystrom eivind.ystrom@psykologi.uio.no University of Oxford (UK), Melinda Mills melinda.mills@sociology.ox.ac.uk University of Oxford (UK), Stephanie von Hinke g.vonhinke@bristol.ac.uk University of Oxford (UK), Melinda Mills melinda.mills@sociology.ox.ac.uk University of Oxford (UK), Telus Galama melinda.mills@sociology.ox.ac.uk University Amsterdam (NL), Titus Galama <a