

## BIPS PhD Program in Epidemiology, Statistics, and Prevention and Implementation Science

The Leibniz Institute for Prevention Research and Epidemiology – BIPS in Bremen, Germany, invites applications for a **three-year PhD program in epidemiology, statistics, and prevention and implementation science starting October 1, 2025.** BIPS, a leading center for population-based research in the heart of Europe, offers the opportunity to pursue a cutting-edge dissertation project. The PhD project will be embedded in the institute's active research program, providing an excellent environment for scientific development and collaboration.

#### **About BIPS**

The Leibniz Institute for Prevention Research and Epidemiology – BIPS is one of Germany's largest and oldest research institutes dedicated to epidemiology and prevention. Its core mission is to develop effective strategies for chronic disease prevention to support a healthy life course. Research at BIPS spans lifestyle and environment, biological and social factors, as well as early detection and drug safety.

With about 200 employees from diverse international backgrounds, BIPS's research covers the full spectrum from methods development and identification of disease causes to prevention and implementation research. The work is supported by extensive resources, including large prospective cohort studies with tens of thousands of participants and a linked biobank, a unique claims database covering 25 million people across Germany, a population-based cancer and mortality registry, community-embedded settings for participatory research, and cutting-edge methodological expertise in causal inference and artificial intelligence methods for epidemiology and biostatistics.

BIPS is a member of the Leibniz Association, consisting of 96 German research institutes spanning basic and applied sciences. BIPS is closely affiliated with the University of Bremen, which welcomes international students from 117 countries. The U Bremen Research Alliance offers support with the transition to Germany through its Welcome Center. Training the next generation of researchers, including via master's and PhD programs, is central to the mission of BIPS.

### **About Bremen, Germany**

Bremen is the capital of the German state of the Free and Hanseatic City of Bremen. With nearly 600,000 inhabitants, it is a major cultural and economic hub in northern Germany. Bremen is a vibrant city that takes pride in its diverse and multiethnic population as well as its 1,200-year history and architecture. BIPS is located adjacent to the University of Bremen campus, just north of the city center, and is easily accessible by tram lines and bike paths. Situated in the heart of Europe, Bremen is connected by train connections to the North Sea coast, Hamburg, Berlin, the Netherlands, and Denmark.



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# PhD Program: Research component

The focus of the PhD Program and of each individual PhD thesis is on the research component, which is embedded into BIPS's active research initiatives and typically funded through external grants. Research areas (and faculty members) include pharmacoepidemiology and cancer screening (Ulrike Haug), prevention and implementation science (Hajo Zeeb, Daniela Fuhr), biostatistics, machine learning, data science and research data management, and causal inference methods (Iris Pigeot, Marvin Wright, Vanessa Didelez), and etiologic and molecular epidemiology (Konrad Stopsack, Krasimira Aleksandrova).

The PhD student will be matched with a senior faculty member at BIPS who is an expert in their area of interest and will serve as their primary supervisor. The student will become part of the faculty member's research group, which typically includes master's students, PhD students, postdocs, and/or senior scientists. PhD projects will be co-developed between the PhD supervisor and the PhD student, and will involve applied and/or methodological research drawing on BIPS's extensive data resources or new data collections. An outline of the thesis aims and objectives (the exposé) will be developed within the first six months.

PhD students will receive close mentoring on both research and career development. An interdisciplinary thesis advisory committee with three members, led by the PhD supervisor, will serve as an advisory board for each PhD student.

The PhD student will publish findings from the thesis project in peer-reviewed journals and present them internally and at national and international scientific conferences. PhD students will also be supported in exploring other ongoing research programs and activities at the institute beyond their thesis projects. The working language is English.

### PhD Program: Education component

A structured doctoral education complements the research component of the PhD program. PhD students will begin the program as a cohort and undergo onboarding together. A team of two senior scientists and two doctoral students formally represents the interests of doctoral students at BIPS as dissertation representatives.

The coursework requirement of the PhD program is formalized by the doctoral-level seminar "Epidemiology, Prevention Research, and Biometry," which is partly co-organized by the doctoral students at BIPS. The seminar covers topics such as epidemiology, prevention research, and biostatistics, statistical project planning, implementation and evaluation, ethical and legal aspects, and good scientific practice. Coursework is offered over the three-year period of PhD studies, running alongside the research component. An advanced course on epidemiologic and statistical methods is offered annually in the spring and should be taken during the first year.

Additional coursework on scientific working methods includes literature search, literature management, and scientific writing. In addition, participation in external courses such as those offered by the University of Bremen, the U Bremen Research Alliance, and the Leibniz Association is supported, including in those focusing on presentation and communication skills, self-management, and time management.



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For PhD students with appropriate prior training, introductory courses may be substituted by more advanced coursework. All coursework is conducted in English.

# Regulations, graduation requirements, and perspectives

PhD students at BIPS register as doctoral students at the University of Bremen, where all faculty members of BIPS hold professorships. "PhD" is an umbrella term used here and at BIPS for different doctoral degrees, depending on the faculty. Specifically, doctoral students are awarded either a Dr. rer. nat. ("Doctor of Natural Sciences," e.g., for biostatistics dissertations) or a DrPH ("Doctor of Public Health," e.g., for implementation science dissertations), subject to the regulations of the respective faculties at the University of Bremen. BIPS also provides an additional contractual agreement outlining the rights and responsibilities of doctoral students and their supervisors.

The equivalent of three first-author publications in international peer-reviewed journals are required for graduation, of which two must be accepted at the time of thesis submission. Doctoral theses at BIPS typically follow a cumulative thesis model, consisting of a brief synopsis and copies of the original publications led by the PhD student.

Funding for a PhD position is in place for three years. PhD student status is subject to annual review by the thesis advisory committee. Faculty supervisors will strongly support PhD students to graduate as planned. Postponing graduation is subject to progress review and the availability of third-party funding.

### Salary and benefits

PhD students are salaried employees at BIPS, and receive the same benefits as other employees. PhD students are subject to the same regulations regarding health insurance, social security, unemployment benefits, and taxes. There are no tuition fees. Compensation follows the German pay scale for the public sector at 70% of a TV-L E13 position, amounting to approximately €3,240 gross (€2,100 net) per month in the first year of employment. Housing arrangements are the responsibility of the PhD student, with expected rental costs ranging from approximately €500 to €900 per month, depending on the type of accommodation.

### **Career perspectives**

PhD graduates of BIPS have gone on to successful postdoctoral training and to faculty positions, to other career tracks in the German academic system as well as internationally, and to jobs in the public sector and in industry. BIPS has successfully recruited many of its doctoral candidates to postdoctoral and leadership positions that offer job stability and an ever-changing creative work environment.

### Application requirements and procedures

Applicants are required to have completed formal master's degree programs (or equivalent) qualifying for a PhD program in epidemiology, statistics, and prevention and implementation science, or to have



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completed such a program by October 1, 2025. Prior research experience is an advantage. Applicants do not need to have identified a supervisor when applying for the PhD Program but are welcome to contact faculty members at BIPS if they wish.

There are no citizenship requirements. Students from outside the European Union will need to obtain a visa and work authorization for Germany.

BIPS is an equal opportunity employer and is committed to preventing any form of discrimination. Severely disabled applicants will be given priority conditional on equal professional and personal qualifications. The Institute strives to promote its employees' work-life balance and has been certified for its family friendliness (audit "berufundfamilie").

The application deadline is **July 7**, **2025**. Interviews will be conducted via Zoom during the week of July 14.

Required application components are:

- 1. A cover letter with a detailed description of the applicant's research interests, potential prior research experience, and career goals
- 2. A curriculum vitae
- 3. Copies of transcripts/school certificates with grades of all graduate and undergraduate coursework
- 4. Results of a standardized English language test (waived for native speakers or those with 2+ years of university-level education in English)
- 5. Names, affiliations, and e-mail addresses of two references, such as academic advisors

The following components are optional and can be added if applicable:

- 6. Copies of publications or manuscripts in preparation
- 7. URLs to programming code or other products of prior work beyond publications

Application packages should be submitted via e-mail as a single PDF file, quoting the reference number A 25-13, to BIPS's Human Resources: <a href="mailto:bewerbung@leibniz-bips.de">bewerbung@leibniz-bips.de</a>

One letter of recommendation in PDF format should be e-mailed directly by the referee to <a href="maileo-bewerbung@leibniz-bips.de">bewerbung@leibniz-bips.de</a> by the application deadline.

# **Contact information for further questions**

Vanessa Didelez, PhD, Program Director Professor of Statistics with Focus on Causal Inference

Leibniz Institute for Prevention Research and Epidemiology – BIPS Achterstr. 30, 28359 Bremen, Germany

E-mail: didelez@leibniz-bips.de

