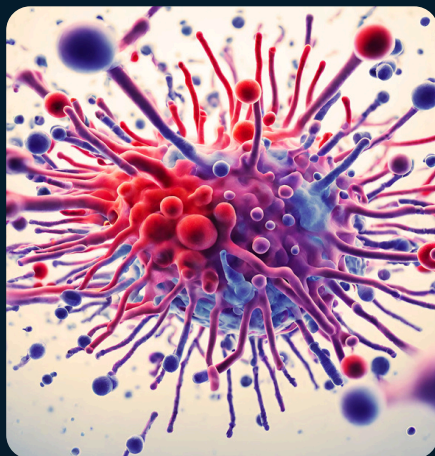




RESEARCH SCHOLARSHIP

CHEMOINFORMATIC SURVEY OF BIOACTIVE CENTRAL-AMERICAN NATURAL PRODUCTS



WHAT DOES IT COVER?

This scholarship covers an **8-month research stay** at the Leibniz Institute for Plant Biochemistry (IPB) in Germany, with a **stipend of 1.200 €/month plus flight costs** on economy class (max. 1.300 €).

RESEARCH AND TRAINING OBJECTIVES

GLACIER calls for applications from Latin American graduate students to work on the chemoinformatic survey of bioactive Central-American natural products in the fields of chemoinformatics | bioinformatics | computational chemistry (earliest start date: 01 Jan 2025 / latest start date: 01 April 2025).

This position will be seated in the computational chemistry group: <https://www.ipb-halle.de/en/research/bioorganic-chemistry/>. For a lead publication in the field from our group see here: <https://www.pnas.org/doi/10.1073/pnas.1915277117>.

The scientific part will comprise the following **tasks**:

- Database construction workflow to compile, integrate, curate, and analyze information on plant natural products and bioactivity data.
- Further development, maintenance, and update of One Health knowledge base for medicinal bioactive compounds discovery (<https://nih.org>).
- Development of workflows for chemoinformatic and bioinformatic analysis (including ML methods) of natural products and plant databases.
- Chemical information systems including literature-mining and data visualization methods (e.g., natural language processing and text mining methods).

DEADLINE: 31 DECEMBER 2024

HOST INSTITUTION

The **Leibniz Institute for Plant Biochemistry (IPB)** is a public top-level research institute of the Leibniz Association. It is located on the Weinberg Campus of the Martin-Luther-University in Halle (Saale), Germany. The Department of Bioorganic Chemistry headed by PhD Ludger Wessjohann focuses on the isolation, characterization and development of bioactive compounds and their selective targeting and release.

Responsible Investigator: Ludger Wessjohann (Germany).

ELIGIBILITY

The applicant must be a national from any of the Latin American countries that belong to the GLACIER consortium (visit glacieronehealth.org for more information).

The applicant must be (or plan to be) enrolled in a doctoral program at a GLACIER Latin American university.



BASIC REQUIREMENTS

Applicants must be a current PhD students of **chemo- or bioinformatics, computational chemistry or biology**, or **informatics** (or hold a master in chemistry or a related science completed with additional knowledge in programming or data science). Informatics students interested to venture into medicinal chemistry related scientific applications are also highly welcome.

They will have a keen interest in generating tools for the extraction and analysis of scientific data, i.e. a basic knowledge of informatics, programming (e.g., Python, Java), text and data mining, analytical tools including ML- or AI-based methods, and ideally also in chemistry, pharmacy, medicine, botany or a related subject. They will be expected to communicate in English and participate in GLACIER events (conferences, trainings, summer schools).

Applicants should also be active in or employed by a GLACIER partner institution and fulfil the following requirements:

- Fluent in (scientific) English or German.
- Belongs to the best quartile of students (certified by supervisor or statistics).
- Commits (both the applicant and their Latin American supervisor) to accepting co-supervision and task agreement with the host institution, and to completing and defending their PhD thesis within a maximum period of 4 years after the beginning of the research stay in Germany.
- Accepts the rules of DAAD, the host institution and commits to good scientific practice in general.
- Commits to providing reports, presentations, and full documentation on the dates established by the host (latest by January 2026).

DOCUMENTS YOU NEED TO SEND

Please send your application as a PDF document (< 10 MB) via email with the subject **GLACIER_IPB2025** to glacier@ipb-halle.de by **31 December 2024**.

It must include: (1) a **tabular CV**, with personal and institutional contact details, (2) a **motivation letter** not longer than ½ page, and (3) a 2-page (maximum) **research plan**, ideally coordinated with one local and one German supervisor and including a GANTT-chart.

In addition, your supervisor must provide a **reference letter** sent from their **institutional email address**. Supervisor letters sent from personal email addresses (e.g., Yahoo accounts) will not be accepted, unless the supervisor has registered such email address before with GLACIER.

CONTACT

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