



PennState

**One Health
Microbiome Center**



The One Health Microbiome Center Industry Internship at QIAGEN

Are you an advanced graduate student with a passion for microbiome sciences, biotechnology, and a desire to explore a career in industry? The One Health Microbiome Center is excited to announce an exceptional opportunity for graduate candidates to apply for an industry internship with QIAGEN, a leading global provider of sample and assay technologies for molecular diagnostics, applied testing, and academic research.

Interns will (i) gain hands-on experience in a leading biotechnology company, (ii) work on cutting-edge projects in the field of molecular diagnostics, testing, and assays, (iii) Collaborate with industry experts and scientists, and (iv) develop valuable skills and knowledge relevant to a future career in microbiome biotechnology, relevant to all sectors.

Internship Details:

- When: Summer 2025 (6-8 weeks)
- Where: QIAGEN R&D facility in Hilden, Germany
- What: Interns will learn about the broader R&D pipeline, as well as work on specific products or technologies in a lab setting. This work may have the potential to lead to a co-authored publication.
- How: Salary/stipends will continue to come from the student's PI or other standard sources (fellowships) during the student's visit. QIAGEN will provide travel and lodging, for the duration of the internship.

Eligibility:

- Must be an active member of the One Health Microbiome Center.
- The advisor/PI must support the application with a signature and letter of support on how this opportunity benefits the student.
- Applicants must have or plan to advance to candidacy by the end of Spring 2025, and do not have plans to defend before Fall 2025.

Application Materials:

- Letter of Support from advisor/PI
- Curriculum Vitae (CV) highlighting your academic and research achievements, relevant skills, and professional experience.
- Summary of Dissertation Work (up to 300 words): Provide a concise overview of your dissertation research, including its significance, methodologies, and key findings.
- Personal Statement (up to 300 words): Describe your long-term career aspirations and how an internship with QIAGEN aligns with your goals, as well as what you hope to gain from this internship, including skills, experiences, and/or knowledge.

Please compile your application materials (CV, 1-page summary of dissertation work, and 1-page personal statement) into a single PDF document. Send your application to Dr. Nichole Ginnan (nginnan@psu.edu) by **December 15th, 2024**. Applications will be reviewed by a panel of experts from the One Health Microbiome Center and QIAGEN. Shortlisted candidates may be invited for an interview. The Center can put applicants in touch with former interns if they would like more information on the experience.

What you can expect, if selected:

At QIAGEN we create Sample to Insight solutions that enable more than 500,000 customers worldwide to transform biological samples into valuable molecular insights. The work of unlocking these insights is quite a journey. We start off by offering the most reliable sample technologies, and continue by developing top-quality assays and test panels that enable our customers to accurately analyze and identify various diseases, genetic variations or other molecular targets.

For us, making improvements in life possible means enabling our customers to achieve outstanding success and breakthroughs in life sciences, applied testing, pharma and molecular diagnostics.

In the microbiome field, we use our technologies to support researchers elucidating the role of microorganisms in every context; from human health to food safety, forensics, environmental surveillance, and wherever else microbes have an impact. We are excited about the One Health approach that connects these fields and supports a more comprehensive view of how microbial research can make improvements in life possible.

Project Description

Projects at QIAGEN could take multiple forms, for example:

- Carry out laboratory experiments that are part of the students PhD/Study work with QIAGEN methods used in-house and industrial R&D support.
- Rigorously compare performance across multiple products or published methods.
- Establish a workflow on an unusual or particularly difficult sample type
- Execute life cycle management (LCM) projects – i.e. performance improvements, cost or material reduction, for example in the context of more environmentally sustainable products

Intern Job Responsibilities:

- Experimental work in S1 and S2 laboratories, with documentation of work in lab notebooks
- Presentation and discussion of results within the R&D group
- Other tasks as defined by the project(s) that you will be working on

What we provide:

- QIAGEN Life Science R&D laboratory space will be made available, including access to QIAGEN kits and instruments for extraction and analysis of microbiome samples.
- Training on QIAGEN protocols and methods
- Insights into the product development life cycle
- Introduction to project management principles

Intern Deliverables:

By the end of this internship:

- You get the opportunity to present your project to a QIAGEN senior leadership team
- You will be required to write a report summarizing your work, as well as
- producing a visual poster