



Universität
Basel

Departement
Pharmazeutische Wissenschaften



DEPARTMENT
OF PHARMACEUTICAL SCIENCES

Master Program in Drug Sciences

Dr. Leonie Reutner
Study Coordinator, Department of Pharmaceutical Sciences,
Faculty of Science



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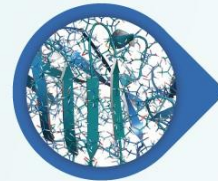
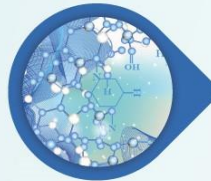
Learn about Drug Discovery, Development, Efficacy, and Safety



Program Overview

From Molecule
to Patient

Drug
Discovery



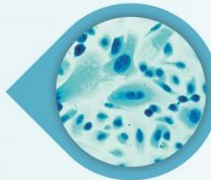
Clinical
Evaluation



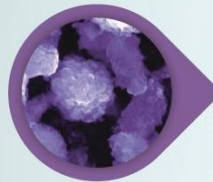
Drug
Development



Preclinical
Evaluation



Regulation and
Drug Application



Treatment
and Patient Care



Program Overview

- 4 semesters, 120 ECTS
- Course language: English
- Students develop a solid theoretical and practical knowledge drug...
 - discovery,
 - development,
 - efficacy,
 - safety.
- Further, they acquire the **scientific skills** and **analytical expertise** to understand and independently conduct laboratory research studies in early drug discovery and development as well as in pharmacology and toxicology.
- Students may acquire the theoretical foundation for a registration in the **Swiss Toxicology Registry**.

Program Structure and Content

Module	ECTS
Introduction and basis of human diseases	9
General skills and experimental tools	6
Target identification/validation and discovery of modulators	8
Translating pharmacology and drug safety to humans	12
Clinical drug development: the basis for market approval	8
Practical Training	8
Elective Courses Incl. Elective Module for Specialization in Toxicology, comprising 5 ECTS (required to fulfil theoretic background for the later registration as toxicologist)	15
Master Thesis Project (10 months)	50
Master Thesis Exam	4

Good Reasons to Study Drug Sciences at the University of Basel



Pharma-Hotspot Basel.

- International hub for pharma and biotech companies
- Pharma industry most important employer in the region
- Cutting edge Life Science research institution

Good Reasons to Study Drug Sciences at the University of Basel



Collaboration with drug experts.

Students profit from the expertise of experienced professionals.

Lecturers from

- Academia
- Industry
- Hospital
- Regulatory Agencies
-

Mentoring Program

- 1 year
- 1:1 mentoring
- Mentors from industry or academia

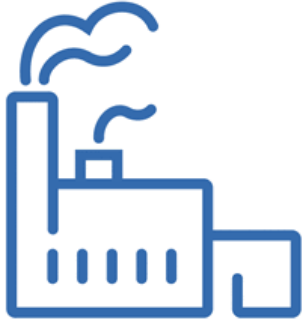
Good Reasons to Study Drug Sciences



Research Focus.

- Broad theoretical basis covering the **entire drug discovery and development** process
- **5-week practical training** in laboratory methods
- **10-month Master thesis** in academia or industry is an ideal start for a career in drug sciences.

Careers in Drug Sciences



Industry

- Research and Development (e.g., drug formulation, clinical research, ...)
- Production
- Regulatory Affairs
- Quality
- Marketing & Sales, Project Management, Consulting, ...



Academic Career

- PhD, PostDoc (Pharmaceutical Sciences, Toxicology, Pharmacology, ...)
- Often in collaboration with industry or as preparation for a career in industry or government authorities

FAQ

- **Do I qualify for admission to the Master program in Drug Sciences?**
 - The program builds on our Bachelor program in Pharmaceutical Sciences but students with a background in Science or Medicine are welcome to apply. However, they will most likely have to complete additional courses from our (German) Bachelor program. The same may be true for holders of a non-Swiss pharmaceutical degree.
- **Do I need an English language certificate?**
 - No, but C1 mastery of English (and potentially German, see above) is recommended.
- **Do I need to complete a PhD in order to get a job?**
 - Many of our students go on to complete a PhD, however, there are many job opportunities out there that don't require a PhD.

Further information

- **Information on the program and the Department of Pharmaceutical Sciences:**

- <https://pharma.unibas.ch/en/education/msc-drug-sciences/>

- <https://pharma.unibas.ch/en/>

- **Application and Admission process at the University of Basel:**

- For **external** students:

- <https://www.unibas.ch/en/Studies/Application-Admission.html>

- For **internal** students:

- Students finishing their Bachelor studies must inform the Office of the Dean of Studies about their plans for the next semester:

- <https://philnat.unibas.ch/de/studium/bachelor/absichtserklaerung/>

Points of Contact

- **Program Head:**

- Prof. Dr. Alex Odermatt (alex.odermatt@unibas.ch)

- **Study coordinator and student advisor:**

- Dr. Leonie Reutner (leonie.reutner@unibas.ch)

- Please contact for any information on the program or on how to attend upcoming lectures.



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We look forward to welcoming you in the program!

