How and why to do a PhD in Heidelberg?

Dr. Helke Hillebrand
Administrative Director
Graduate Academy
Heidelberg University

Heidelberg, July 21\textsuperscript{st}/22\textsuperscript{nd}/23\textsuperscript{rd}/28\textsuperscript{th}, 2020
Who are we?

The Graduate Academy serves as

- A central point of contact and support for young researchers (PhD and postdoctoral level) and their mentors.

- A dedicated provider for efficient and effective tools for tailor-made career development towards supporting the transition into academic careers and facilitating the identification of ambitious career opportunities outside of academia.

- A facilitator to enable the transfer of science into society.
Our mission

Serving excellent students carefully attended to by 12 different faculties across campus!
Cornerstones of the PhD lifecycle...

WORLD, HERE I COME!

Ambition

1st Year 2nd Year 3rd Year 4th Year 5th Year

Win Nobel Prize
Revolutionize your field
Get a job at a top University
Get a job
Attend that Conference in PoDunk, MN
Hope they have Pepperoni Pizza

HAPPY HOUR, HERE I COME!

WWW.PHDCOMICS.COM
Cornerstones of the PhD lifecycle...

Successfully fight your 2nd year depression

Submit your thesis

Take top job
Our target audiences in numbers

- About 1200 doctorates per year
  - Diversity matters: About 25% international PhD candidates
  - Gender balance: About 50% female and male graduates
Our target audiences in numbers

- About 8000 doctoral candidates steady state
- Four major Graduate Schools
  (Life Sciences, Mathematics, Physics, Humanities & Social Sciences)
- More than 40 structured PhD Programs
  (DFG, Excellence Cluster, EU-ITN, LGFG (MWK), participation in IMPRSs and Helmholtz International Graduate Schools, else)
- About 500 early postdoctoral researchers*

Heidelberg University in international comparison

Best German university (for the 6th consecutive time) - Shanghai Ranking 2019
University ranks 47th worldwide and 12th in Europe (August 15, 2019)

Heidelberg University ranks 3rd in Germany - QS World University Ranking 2019/2020
University ranks 66th worldwide and 19th in Europe (June 19, 2019)

Ruperto Carola among the world’s top 50 - THE Ranking 2019/2020
University ranks 44th worldwide, 12th in Europe and 3rd in Germany (September 11, 2019)

Heidelberg University ranks 3rd in Germany – THE Employability Ranking 2017
University ranks 38th worldwide and 16th in Europe (November 14, 2018)

* Almost 1200 postdoctoral researchers at HD University within six years after completion of PhD
Who are YOU?

Where are you from?

What are you passionate about?

What do you most enjoy doing?

What is your way to enjoy academia?

What is your career dream?

What do you expect from doing/gaining a PhD?
What’s in for you?

1. Graduate Academy services
2. Managing a PhD
What do we offer today?

Core activities Graduate Academy:

- Information services & consultancy (Beratung)
- Sponsorship for doctoral candidates (Förderung)
- Career development support (Seminarprogramm/ Karriereentwicklung)
- Writing and text production support G/E (Sprachberatung und Textproduktion D/E)
- Service on demand for faculties & structured programs: Supporting the advancement of excellent PhD framework conditions (e.g. heiDOCS)
Graduate Academy offerings (I)

- Consultations
- Welcome events
- Seminar and workshop program (20-25 courses p.a. in D & E)
- Primers for Predocs
- Digital (e-learning resources)
- Language and text production support
- German language courses
- Summer Schools (SHS, LERU, HISS)
Graduate Academy offerings (II)

- Cotutelles: Negotiating contracts for dual affiliations incl. supervision with international partners
- Brochure Kiosk – see [http://www.graduateacademy.uni-heidelberg.de/downloads/](http://www.graduateacademy.uni-heidelberg.de/downloads/) (Graduate Academy downloads)
- Newsletter (please subscribe on our homepage)
- Bulletin board (seeking partners for research, scientific or language co-operations; [https://www.graduateacademy.uni-heidelberg.de/aktuelles/index_en.html#board](https://www.graduateacademy.uni-heidelberg.de/aktuelles/index_en.html#board))
- Jour fixe Doktorandenkonvent
- Coordinating the Ombudsprogram for doctoral candidates
Sponsorship for doctoral candidates – status quo

- Fellowships for doctoral candidates (Landesgraduiertenförderung; LGF)
  - Individual 3-year fellowships
  - Completion fellowships (3-6 month)
  - Small-scale PhD programs (Promotionskollegs)
- Short term fellowships (DFG; Exzellenzinitiative; heiDOCS)
  - Travel stipends (courses, conferences, collaborations, field trips)
  - Stipends for printing costs (contribution)
  - Short term fellowships towards completion of PhD (also STIBET; DAAD)
- Support towards identification of suitable (external) fellowships for (international) doctoral candidates
- Support towards establishing a meaningful application/exposé writing
What is a PhD?
What is a PhD?

PhD / Ph.D. / Dphil / Doctorate

Oxford Dictionary: the highest college or university degree, or someone who has this.

Wikipedia: is the highest university degree that is conferred after a course of study by universities in most English-speaking countries.

Amazon.de:
How much of an academic career do I want?
What does a PhD entail?

The degree is conferred for producing independent, original research that expands the limits of current knowledge (can be published in a peer-reviewed journal).

- Identifying a PhD-worthy research question
- Pursuing original independent research
- Writing a dissertation (thesis) about the new findings
- Submitting the dissertation
- Defending the thesis (against experts in the field)
- Publishing the findings
- Being promoted to PhD (award of the title)
- Using the title Doctor (as awarded!!!)

- In non-English-speaking countries, variants such as "Dr. phil.“, “Dr. rer. nat.”, “Dr. med.” are in use.
- In English spoken countries often abbreviated "Dr" or "Dr." or with post-nominal letters such as "Ph.D.", "PhD", or "DPhil" (depending on the awarding institution).
- Never use both, the title and post-nominals, at the same time!
What is special about doing a PhD?

- You are not a student any more

- At Heidelberg University: PhD research is the first phase of a professional research experience and NOT(!) a third cycle of studies

- Independence (various degrees of)

- Life in a sandwich position

- Preparing for growth and leadership
What is expected from me when entering into PhD research?

Exhausted or ready for taking off?
What is expected from me when doing PhD research?

- Passion to perform
- Taking pleasure in (interdisciplinary) thinking, in writing and in contributing
- A profile matching a supervisor's mentor's expectations regarding the requirements of a specific project
- Enthusiasm, curiosity, dedication, creativity, diligence ...
- Becoming a valuable team member!

☆ where excellence originates ...
Why to do a PhD?

X good reasons (not do) do a PhD...

- Excited about learning and solving problems
- In love with thinking, writing & freedom of thought
- Enthusiastic about doing research
- Genuinely interested in the subject area
- Want to set the stage for life-long learning
- Want the title
- Deemed important for my career aspirations
- Want to become a professor

- Interested in the training programme
- Admire my supervisor
- Curious about the university doings

- I was always a successful & diligent student
- No better job in sight

!?
How to prepare for a PhD? (I)

- Talk and listen to your peers
  - [https://www.nature.com/articles/d41586-018-07332-x](https://www.nature.com/articles/d41586-018-07332-x)
    Article by recent PhD graduate Lucy A. Taylor sharing the advice she and her colleagues wish they had received (06/11/2018): Twenty things I wish I’d known when I started my PhD.

- Test your abilities (validated tests only!)
    Academics in collaboration with Heidelberg University (Institute for Psychology) developed a test for assessing personality traits, skills and qualifications relevant for a successful PhD (see also link on GA-web).
  - [https://myidp.sciencecareers.org/](https://myidp.sciencecareers.org/)
    A free, web-based career-planning tool that was created to help graduate students and postdocs in the sciences define and pursue their career goals.
  - [https://www.bachelorprint.de/promotion](https://www.bachelorprint.de/promotion)
    Checklists by Schneider & Molitor (on-line or book) - basis for the 2004 nation-wide THESIS-Study)

- Talk to your previous academic advisor(s) & mentor(s)
How to prepare for a PhD? (II)

- What is the subject area/research question you are interested in?
- Identify your “doctorfather” or “doctormother”
- Agree on a PhD-worthy research topic
- Set-up your personal funding plan
- Get a copy of your faculty’s “Promotionsordnung” – become acquainted with the specific rules and regulations
- Sign a “supervision agreement”
- Register with heiDOCS – and create your personal copy of the on-line PhD file
- Apply for admission as a PhD candidate with your faculty
- Register with Heidelberg University as a PhD-student (Immatriculation for PhD candidates)

- Focus on your research and your skills portfolio!
How to finance a PhD?

- Your PhD is financed by integration into your (university) supervisor’s team:
  - Departmental position; are (most likely) integrated in research and teaching at your department
  - Third party funding
  - You pursue an “external” PhD

- You are pursuing a job outside of your PhD project
  - You hold a contract somewhere within the university (e.g. “Geprüfte Wissenschaftliche Hilfskraft”)
  - You have a job elsewhere

- You hold a fellowship/ you are (preparing to) applying for a fellowship

- You are naturally born rich 😊
How to structure a PhD?

**Individual PhD**

**Typical characteristics**
- Single supervisor
- Thesis subject solely agreed upon with supervisor; may or may not be embedded in broader context
- No obligatory course work
- No formal definition for time-to-submission

**Structured PhD**

**Typical characteristics**
- Multiple supervisors/mentors (thesis advisory committee (TAC))
- Research topic is embedded in a doctoral program [Promotionskolleg (5-10), Graduiertenkolleg (up to 25), Graduiertenschule (≥ 100)]
- Requires formal application/admission
- Overarching funding/funding rules
- Programs define (disciplinary) training curricula
- Programs are set for 3-4 years of PhD research until submission
- Regular performance reviews

co-tutelles, research abroad; conferences & summer schools; meta-disciplinary skills training & Graduate Academy
How to structure a PhD?

Individual PhD

- Participate in welcome events (department, GS, GA, else)
- Get to know your peers and colleagues
- Network in an interdisciplinary fashion
- Go to lectures, PhD seminars, else…
- Get organized: Make sure to have regular meetings with your supervisor(s), compile your strategic questions, foster your critical thinking
- Get acquainted with basics in project management, research ethics & good scientific practice, avoiding plagiarism, mental health, statistics, …
- Keep talking & writing - about your research, your career aspirations, your doubts, your disappointments, your successes
- Seek opportunities for teaching in your field and for presenting your work
- Try out applying for funding – travel, conferences, research stays, …
- Continuously work on your portfolio of qualifications and skills
- Don’t forget to strive for submission!

Structured PhD

Network and broaden your horizons
How do I know I am ready to graduate?

SIGNS YOU’RE READY TO GRADUATE

- **When a form letter calls you “doctor” and you don’t react.**
  
  Dear Dr. We write to inform you that the...

- **When your prof. asks you to take on another project and you say “no.”**
  
  Allison, can you? No!

- **When you start winning arguments with your P.I.**
  
  See? Mmm, yes, you’re right.

- **When the younger students are genuinely surprised to see you in the lab.**
  
  Oh. Hey. You’re here. What?

www.phdcomics.com
What is expected from me after the PhD?

What will you gain?
- Resilience
- Endurance
- Critical thinking
- Self esteem
- Intrinsic motivation
- Can do-attitude
- Courage
- Leadership skills
- Respect
- Friends for life

What will society expect from you?
- Resilience
- Endurance
- Critical thinking
- Initiative
- Motivation and advice
- Accountability
- Courage
- Insightfulness
- Trustworthiness

DON'T QUIT!
## Entering the labor market with a PhD

<table>
<thead>
<tr>
<th>What will be easier?</th>
<th>What will be harder?</th>
<th>What are myths?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoiding routine</td>
<td>Securing your first position</td>
<td>Making more money</td>
</tr>
<tr>
<td>Life long learning</td>
<td>Over qualification risk</td>
<td>Broader choice of jobs</td>
</tr>
<tr>
<td>Work-life integration</td>
<td>Work-life balance</td>
<td>Job security</td>
</tr>
<tr>
<td>Freedom of thought</td>
<td>Higher expectations</td>
<td></td>
</tr>
<tr>
<td>Taking responsibility</td>
<td>Visibility</td>
<td></td>
</tr>
<tr>
<td>Visibility</td>
<td>You follow the job market</td>
<td></td>
</tr>
<tr>
<td>Securing leadership positions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>…</td>
<td></td>
<td>…</td>
</tr>
</tbody>
</table>

…
How to manage a PhD?

Happiness, satisfaction, resilience, work-life balance

Great –
- keep going,
- nurture
- and enjoy!

Fix it –
- talk to people
- identify sinks
- keep observing!

Drastic change is much needed –
- talk to people
- think about plan B!
Whom to contact if anything goes pear-shaped?
Avoid the fly 🐝

...  turning into a big white elephant...

... communication is key!
Avoid the fly 🐝 turning into a big white elephant…

Talk *(selectively!)* to

- your supervisor
- your 2nd supervisor/mentor/TAC members
- your peers or the postdoc you work with
- the student representative(s)
- the PhD program coordinator
- us – contact the Graduate Academy
- the department head / Dean of Graduate Studies
- the equal opportunity office (Gleichstellungsbüro)
- the ombudsperson

... and start talking early on; communication is key!
What is a PhD?
Adapted from https://pbs.twimg.com/media/CRvORSqUEAAED5t.jpg
Where the magic happens

your comfort zone

Adapted from https://pbs.twimg.com/media/CRvORSqUEAAED5t.jpg
Get in touch – stay in touch!

There is always space for YOUR ideas:

© Manfred Bofinger & Ming Fai Chow

THANK YOU & BEST OF SUCCESS!

http://www.graduateacademy.uni-heidelberg.de/
graduiertenakademie@uni-heidelberg.de
helke.hillebrand@uni-heidelberg.de