

CALL FOR APPLICATIONS

28 February 2018

for three Helmholtz International Research Schools

funded by the Initiative and Networking Fund
of the President of the Helmholtz Association

Second call

The approximately 8000 PhD candidates trained together by the Helmholtz Centers and universities make a major contribution to the outstanding research results obtained by the Helmholtz Association. Promoting PhD candidates has long been a key part of the Helmholtz Association's talent management. 34 Helmholtz Research Schools and Helmholtz Graduate Schools have been set up at the Helmholtz Centers since 2005. The established structures guarantee reliable conditions, facilitate exchange and networking, and are distinguished by a wide range of courses teaching subject-specific and interdisciplinary skills and by the provision of career advice. The high level of support for PhD candidates is also guaranteed by high quality standards of quality as specified in the Helmholtz PhD Guidelines (cf. Appendix 6).

A) Objectives of funding measure

Through the Helmholtz International Research Schools, the Helmholtz Association aims to continue diversifying the support available to PhD candidates while improving their career prospects. Another focal point of this Call for Applications is the recruitment of outstanding international PhD candidates. The Research Schools also have the purpose of establishing and consolidating international contacts, thus opening up new, promising research areas. The partner institutions involved complement each other and use the resulting synergies to increase their research performance, thus paving the way to becoming leaders in the most innovative research areas. This instrument consequently also makes a valuable contribution to the Helmholtz Association's strategy of internationalization.

Each Helmholtz International Research School focuses on one scientific topic and offers a structured program of doctoral education in cooperation with the respective Helmholtz Center, foreign partner and German university partner. PhD candidates at a Research School receive an outstanding scientific education along with professional, character-building training that significantly enhances their skills profiles. They work in a scientifically challenging international environment and quickly learn the importance of strategic alliances by carrying out joint research into interdisciplinary issues. The international nature of the program offers additional development opportunities for PhD candidates besides opening up a wide variety of career options.

B) Object and duration of funding

The aim of this Call for Applications is to grant funding for **up to three** Helmholtz International Research Schools working on topics in the following research areas: Energy, Earth and Environment, Health, Key Technologies, Matter, and Aeronautics, Space and Transport. Interdisciplinary topics and topics encompassing several research areas are welcomed.

The funding provided by the President's Initiative and Networking Fund will amount to **up to 300,000 Euro per annum** and will serve as co-financing. The applicants are expected to provide funding to at least an equivalent amount, with an appropriate contribution being made by the partner institution abroad. The monies from the Initiative and Networking Fund are primarily intended to finance the additional expenditure incurred on account of the organizational structure and the special professional and supplementary services offered. However, a part of the funding can be used to finance PhD positions. The monies awarded cannot be used to fund fellowships for PhD candidates.

Helmholtz International Research Schools are designed as joint institutions organized by the Helmholtz Center, the foreign partner and the German university in the region where the Center is located. The doctorates can be awarded by the German universities and/or the foreign partners.¹

Funding is provided for a period of six years, with an interim evaluation held after three to four years as part of a one-day on-site inspection.

C) Target groups

The offer is directed at Helmholtz Centers, foreign research institutions, German universities and other possible partners in the fields of science, business, society etc. who together wish to make a special contribution to training early-stage researchers and to develop or expand international cooperation in a promising field of research.

D) Application procedure

The application is lodged by the respective Helmholtz Center; it is compiled jointly by the Helmholtz Center, the German university, the foreign partner and additional partners, if applicable, and is submitted to the Helmholtz Head Office by the Helmholtz Center's director. The complete application (including all attachments) must be submitted in PDF format (as a continuous document) on or before **June 8, 2018** (exclusion period) using the Helmholtz Association's electronic application and review system EABS (<https://helmholtznet.de/antraege/default.aspx>). In addition, the Helmholtz Association's head office (Ahrstrasse 45, 53175 Bonn) must have received a hard copy of the application by June 08, 2018 (cf Appendix 1).

Each Helmholtz Center can submit at maximum one application for a Helmholtz International Research School.

For each application, the Helmholtz Head Office obtains a minimum of two written assessments from independent external experts.

Based on the written assessments, the applicants are invited to a selection meeting in Berlin, where they are required to present their application to a selection panel chaired by the President of the Helmholtz Association. The invitation will be sent out approximately six weeks before the selection meeting.

The Helmholtz International Research School must start within 12 months after the funding is awarded.

¹ The Helmholtz Association sees itself as bound by the content of the benchmark paper issued by the German Rectors' Conference and the Helmholtz Association on working together to promote early-stage researchers (cf. Appendix 7 in German only).

E) Dates and deadlines

- **February 28, 2018:** Publication of the call.
- **June 8, 2018:** Deadline for Helmholtz Centers to submit complete applications to Helmholtz head office.
- **November 27, 2018:** Selection meeting in Berlin.
- No later than 12 months following award of funding: Start of Helmholtz International Research School.

F) Criteria for the evaluation of applications by external appraisers and panel

Scientific program

- Excellence, innovative content, relevance, and sustainability of the specific scientific program. Interdisciplinary approaches are expected.
- Added value of the international partnership in terms of the development of the respective research area.
- Potential for outstanding thesis topics, joint publications and other joint projects.
- Scientific expertise of all scientists included in the application.

Training program and supervision

- Subject-specific and interdisciplinary teaching and training that takes account of the needs of the target group ("outstanding early-stage scientists") and also pays attention to intercultural aspects.
- Experience with supervision gained by all scientists included in the application.
- Quality of the supervision concept and career development measures.
- Added value of the partnerships with regard to the professional and interdisciplinary skills and career development of the PhD candidates.
- Mobility concept that can take various dimensions of mobility (e.g. intersectoral, interdisciplinary) into account along with international exchanges with partner institutions. The PhD candidates are expected to spend a significant period of at least 6 months at the foreign partner institution.
- PhD candidates are taught the principles of good scientific practice and encouraged to consider scientific ethics.

Program structure and general conditions

- Organization of the Research School including a management, communication and decision-making culture that fosters the interaction planned between all participants.
- Maturity of the partnership planned (e.g. interaction to date) and realizability of the jointly planned program.

- Integration of Research School into existing structures for doctoral education and talent management etc. (e.g. Graduate Schools) at the respective Helmholtz Center.
- Quality of selection procedure to be established.
- Strategy for developing longer term interaction between the institutions involved.
- Integration of additional strategic partners (e.g. in science, business, society etc.).
- Participation of PhD candidates in structuring Research School.
- Quality of equal opportunities and diversity measures.
- If applicable, concept covering alumni work and career tracking; monitoring training quality.
- Sustainability of structures and outline of ideas for developing the program further.
- Internationality of the Helmholtz Center lodging the application (e.g. existing 'welcome culture', language courses offered, translation of relevant documents, etc.).
- Marketing and PR concept with goals including increasing the Research School's international visibility.

Appendix 1

Applications for the establishment of an International Helmholtz Research School must be submitted to the Helmholtz Association's head office by the management board of the Helmholtz Center after an agreement has been reached with its partners.

Three documents have to be submitted:

1. Letter by the Director of the Helmholtz Center
2. Application (in English, size: max. 3 MB)
 - a. Cover sheet (cf. form Appendix 2)
 - b. Project outline (max. 20 pages)
 - c. Financial plan (cf. form Appendix 3)
 - d. Résumés of the participating scientists
 - e. Agreements between partner institutions, confirmation of the contributions indicated in the financial plan.
3. List of six independent reviewers (cf. Appendix 8)

The complete application must be submitted in PDF format on or before June 8, 2018 (exclusion period) using the Helmholtz Association's electronic application and review system EABS (<https://helmholtznet.de/antraege/default.aspx>).

In addition, the Helmholtz Association's head office (Ahrstrasse 45, 53175 Bonn) must receive a hard copy of the application.

Notes for the submission of documents

Project outline

Description of scientific program

- The program must stand out on account of its scientific excellence, innovative content, and relevance. It must link thematic or methodological focuses in such a way that it is likely to give rise to outstanding thesis topics.
- A well-found, conclusive argument must be presented for the choice of topic; moreover, assurance must be provided that suitable key questions and methods have been chosen and that the necessary substance and expertise are available.

Description of existing interactions and the potentials of the planned cooperation

- The scientific program must establish a link between a research program of the Helmholtz Association and the key areas of focus of the Helmholtz Center, foreign partner, university partner and any other partners.
- The application should outline a strategy for the development of long term interactions between the participating institutions addressing the demands of the institutions and building up

on existing interactions if applicable. The application should outline how the institutions complement each other and where synergies can be used.

Description of professional training opportunities

- A curriculum must be provided describing the courses and training opportunities offered by the Research School's partners. The duration and nature of the events (colloquium, symposium, work placement, lecture series, etc.) must also be specified.
- The study program must foster international exchange and cooperation between doctoral candidates. The PhD candidates must spend at least six months of their doctoral studies at the partner institution abroad (spread over several research visits if necessary).
- It should be outlined how PhD candidates acquire the methodologic skills necessary for their PhD project.
- One important concern is to teach participants interdisciplinary thinking and have them use this skill to plan solutions in complex systems and translate results into practical applications. Along with the events planned, other innovative offerings must be developed and described with the aim of fostering the participants' practical competence.

Description of interdisciplinary training and advice

- Besides the professional training opportunities, interdisciplinary trainings (e.g. soft skills courses) should be set up.
- The planning must also include measures providing assistance with the transition to the post-doctoral phase or with alternative routes after the period of doctoral research has been concluded. Innovative topics and advisory formats are welcomed.

Description of supervision concept

- PhD candidates are supervised by three scientists holding a doctoral degree, who together comprise a PhD committee or a comparable body. Primary responsibility is held by one member of the committee (primary supervisor), with the other supervisors exercising an advisory and supporting role. A meeting of the PhD committee together with the PhD candidate must be held at least once a year.
- A concept must be compiled describing how the PhD candidates will be supervised at the Research School. In accordance with the Helmholtz PhD Guidelines (cf. Appendix 6), this concept must for example encompass the conclusion of a written doctoral agreement between the PhD candidate and the supervisors at the beginning of the doctoral research period. The PhD agreement serves to provide guidance and enable quality assurance. Among other things, it defines the research topic of the PhD, the time schedule, appointments of supervision meetings and the applicable PhD regulations.
- It is advisable to compile an individual skills plan that contains the PhD candidates' scientific and interdisciplinary learning goals and that logically interlinks the educational material in terms of topic and time.

Participants

- The target number of participants must be specified. The ideal target is around 25 persons by the end of the 3rd year. A critical mass should be guaranteed for all activities.
- A substantial percentage (min. 30 %) of the participants should come from the partner institution abroad. Ideally the percentage of participants from each country should be equal.
- A description of the selection procedure of the PhD candidates and relevant criteria of excellence must be provided. Emphasis is placed on the recruitment of external candidates, particularly foreign ones. Internal doctoral candidates already researching at the Helmholtz Center or its partner institutions are permitted to participate but will face the same competition. A joint selection procedure or comparable list of selection criteria must be developed if possible.

Description of planned structure

- Speakers must be appointed for the Research School (by the Helmholtz Center, foreign partner, university partner and any other partners); they will be responsible for leading the school and act as primary contacts. Women are particularly encouraged to adopt these roles.
- Moreover, at least two coordinators (in most cases at the Helmholtz Center and foreign partner) must be appointed to take charge of managing the Research School. The planned management and organizational structures must be described.
- A description must also be provided of the way in which the work is to be divided between the partners, i.e. their respective scientific, organizational, administrative, infrastructural and other tasks and the communication structures planned.
- The Research School should be integrated into the respective Helmholtz Center's doctoral education and talent management structures (e.g. Graduate Schools) so that the synergies generated can be used. The existing activities undertaken by the partners in terms of promoting PhD candidates must be described. The establishment of duplicate structures should be avoided.

Financial Plan: Information on resources needed (cf. Appendix 3)

- A financial plan covering the six-year funding period must be submitted disclosing the total resources required by the Research School. It should contain the following information, divided into monies requested from the Initiative and Networking Fund and monies to be provided by the respective partners: Direct project-related costs/expenditure with information on personnel expenses, material expenses, investments (Helmholtz Center) and personnel expenses, material expenses, investments (partners). Travel expenses can be classified as material costs or expenses.
- The funds awarded cannot be used to cover overheads. It must be ensured that there is no total net cash flow abroad during the period covered by the funding. Note: Study fees charged by the foreign institutions must also be taken into account when compiling the financial plan.

Résumés of the participating scientists

Standardized Résumés of the participating scientist must be attached. Following aspects should be taken into account:

- Evidence of the professional competence of the scientists involved in the program must be provided in the form of maximum five publications within the last five years. A comprehensive publication list is not needed.
- The supervision experience of the scientists should be described. Please indicate if scientists have participated in formal supervision trainings.

Agreements with partners

The agreements should take the following aspects into account:

- Every Research School is given a specific designation/name; this name is agreed between the Helmholtz Center and the partner institutions. The designation “International Helmholtz Research School for/on...” or “International Helmholtz-*Name of Foreign Partner* Research School for/on...” must be used when naming the Research School. It must also be ensured that the Helmholtz Association’s corporate design is used (www.helmholtz.de/marke), if applicable in combination with the partner’s corporate design.
- The Research School’s official language is English. The partners must agree to doctoral theses being submitted and oral examinations (viva voce, oral defense) being held in English. The possibility of awarding a joint doctorate (cotutelle agreement) must be considered.
- When drawing up the agreements, the partners must ensure that the program can be integrated into existing educational and examination ordinances, statutory frameworks and the respective schedules (e.g. study duration, time of selection/admission, times at which PhD candidates are obliged to attend compulsory events etc.).
- The partners must also clarify whether and how candidates with a Bachelor’s degree (or similar qualification) can be assisted in gaining admission to doctoral studies.
- They must also agree under whose name (responsibility) the research results will be published.
- Agreements concluded with partners (e.g. partnership agreements, declarations of intent etc.) must be attached to the application as appendices.

Concluding notes

- The concept for the Helmholtz International Research School must be developed with special consideration of the “Guidelines for the Completion of PhD Projects within the Helmholtz Association” (“Helmholtz PhD Guidelines”). The standards defined in these guidelines are binding on the programs to be established. The Helmholtz guidelines for doctoral candidates are provided in Appendix 6 of this Call for Applications and can also be consulted at www.helmholtz.de/phd.

- PhD candidates (employed by the Helmholtz Center) are funded by working in posts liable for social security contributions. Payments should amount to at least 65% of an E13 post. The monies awarded cannot be used to fund fellowships.
- For purposes of reliable career planning, the term of the agreement should cover the proposed duration of the doctoral project (cf. Appendix 6). Additional funds for possible extensions must be reserved as appropriate (cf. Helmholtz PhD Guidelines", Appendix 6). In the event of any PhD candidate taking parental leave, it must be possible to extend the duration of the funding to cover his/her absence.
- The doctoral project and doctoral conditions are structured in such a way that it should be possible for PhD candidates to obtain their degrees in three to four years. Possible extensions must be anticipated in plenty of time and agreed with the supervisors so that all parties can work together to develop a final plan. It should be possible to provide funding until the thesis is submitted in accordance with this plan.
- Please note: On accepting the funding from the Initiative and Networking Fund, the scientists undertake to make any scientific publications based partly or fully on the results of the funded project generally available in a freely accessible archive (repository) within six months of initial publication (cf. Appendix 4 FAQ). Open Access publication can be waived if important grounds exist. The Helmholtz Association must be notified of these as soon as the scientists become aware of them.

A further Call for Applications on the same scale is planned for 2019.

Anlage 2 / Annex 2

Overview of the Application

| | |
|--|--|
| Name of the <i>International Helmholtz Research School</i> | |
| Helmholtz Center | |
| International partner | |
| German partner university | |
| Other cooperation partners | |
| Spokesperson of each institution | |
| 5-6 keywords (for the selection of reviewers) | |
| <u>Summary English (max. 300 words):</u> | |

Summary German (max. 300 words):

Email addresses to be included
in correspondence concerning
the application

Total amount applied for and
financial contribution of each
institution

Anlage 3 / Appendix 3

Total financial budget of the Helmholtz International Research School

Please indicate only direct project related costs/expenses. Overheads are not eligible.

1. Resources applied for from the Initiative and Networking Fund (€)

| | Year | | | | | | |
|-------------------------------------|------|---|---|---|---|---|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | Sum |
| Helmholtz Center | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Personnel costs | | | | | | | 0 |
| Costs of materials and supplies | | | | | | | 0 |
| Travel | | | | | | | 0 |
| Other (please specify) | | | | | | | 0 |
| German partner university | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Personnel expenses | | | | | | | 0 |
| Expenses for materials and supplies | | | | | | | 0 |
| Travel | | | | | | | 0 |
| Other (please specify) | | | | | | | 0 |
| Total applied for | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

2. Own contributions of partners (€)

| | Year | | | | | | |
|---|------|---|---|---|---|---|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | Sum |
| Helmholtz Center | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Personnel costs | | | | | | | 0 |
| Costs of materials and supplies | | | | | | | 0 |
| Travel | | | | | | | 0 |
| Other (please specify, e.g. scholarships) | | | | | | | 0 |
| German partner university | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Personnel expenses | | | | | | | 0 |
| Expenses for materials and supplies | | | | | | | 0 |
| Travel | | | | | | | 0 |
| Other (please specify, e.g. scholarships) | | | | | | | 0 |
| International partner | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Personnel expenses | | | | | | | 0 |
| Expenses for materials and supplies | | | | | | | 0 |
| Travel | | | | | | | 0 |
| Other (please specify, e.g. scholarships) | | | | | | | 0 |
| Total of all partners | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Please proceed accordingly for additional partners.

| | | | | | | | |
|--|---|---|---|---|---|---|---|
| Total: Applied for + own contributions | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|---|---|---|---|---|---|---|

Appendix 4

FAQ: Frequently Asked Questions

Application

Who can submit the application?

- The applicant is the Helmholtz Center. One German and one foreign university are required as partners. Additional university partners are permitted but explicit reasons for this must be given. The inclusion of additional strategic partners (e.g. in science, business, society etc.) is welcomed.

Do the international partners have to meet specific criteria?

- The international partners must be entitled to award doctorates in their own countries. There are no criteria relating to the international partner's country of origin.
- What is important is that the partners are a good match in scientific terms. The partner institutions should complement each other, giving rise to synergy effects that will increase research performance and pave the way to leadership in the most innovative research areas. The partnerships should also generate added value for the professional and interdisciplinary skills and the career development of the PhD students.

Is another call for applications planned for next year?

- Yes, a further call for applications on the same scale is being planned.

Which doctoral regulations form the basis for the award of the doctorate?

- The German universities and/or the foreign partners are entitled to award the doctorates. We assume that the doctorates will be awarded in compliance with the regulations of the universities involved. The possibility of awarding a joint doctorate (cotutelle agreement) must be considered.
- When drawing up the agreements, the partners must ensure that the program can be integrated into existing educational and examination ordinances, statutory frameworks, and the respective schedules (e.g. study duration, time of selection/admission, times at which students are obliged to attend compulsory events etc.). This must be explained in the application.

What are the criteria relating to funding for PhD students?

- Payments should amount to at least 65% of an E13 post as defined in TVöD (the German Public Salary Agreement). No fellowships may be paid from the funds awarded by the Initiative and Networking Fund.
- In general, care must be taken to ensure compliance with the "Helmholtz PhD Guidelines" (cf. Appendix 6).

What must be considered when appointing the doctoral committee?

- Doctoral students are usually supervised by three post-doctoral scientists forming a doctoral committee or by comparable structures. One supervisor assumes most of the responsibility (primary supervisor), while the others act in a supporting and advisory capacity.

- It is recommended that the doctoral committee at the Helmholtz International Research School includes scientists from the Helmholtz Center, the German university, and the international partner.

What is meant by appropriate financial involvement on the part of the international partners?

- The applicants are expected to provide funding to an overall amount at least equivalent to the monies awarded, with an appropriate contribution being made by the partner institution abroad. The international partner can for example fund the part of the project based in the respective country (stays, events and courses). A substantial percentage (min. 30 %) of the participants should come from the partner institution abroad. Ideally the percentage of participants from each country should be equal.
- The international partners' commitment must be described in the application and will be taken into account during the review process.

Assessment & Selection

What criteria are used when making the selection?

- The scientific program, the added value of the cooperation for the partners, the educational and supervision concept, and the structure and framework of the Helmholtz Research International School for which funding is being requested are all taken into account during the selection procedure (cf. Notes on the Call for Applications, [Appendix 1](#)).

What happens during the selection procedure?

- The selection procedure encompasses several phases (cf. diagram of selection procedure in [Appendix 5](#)). During the first phase, a minimum of 2 written assessments are obtained from independent external experts for each application. An internal selection meeting attended by the President is then held on the basis of these reviews.
- The applicants with positive written assessments are subsequently invited to a selection meeting in Berlin, where they are required to present their application to a selection panel chaired by the President. The panel subsequently selects the applications that are to be granted funding. A representative of the international partner is expected to participate.

Who are the members of the selection committee?

- The selection committee is interdisciplinary, made up of scientific experts and experts in graduate education.

How long does it take for a decision to be made?

- Applicants are informed of the decision on the day after the meeting.

Implementation

Use of monies awarded from the Initiative and Networking Fund

Can fellowships be awarded from the funding provided?

- No fellowships may be paid from the funds awarded by the Initiative and Networking Fund.

What percentage of the funding awarded can/should be used for doctoral student posts?

- There are no specifications concerning the percentage of monies from the Initiative and Networking Fund to be used for doctoral posts. This must be planned by the applicant depending on the funds needed to set up and run the Research School.

Can funds be transferred to the foreign partner?

- The Initiative and Networking Fund only funds that part of the project based in the Federal Republic of Germany. Projects involving international cooperation are funded in accordance with the principle of reciprocity, i.e. the foreign share of the funding should be provided by the institution involved or by a funding body in the respective country.
- The following can be used as a guide: Funds spent in the Federal Republic of Germany, e.g. travel costs (flights) incurred when the PhD students travel to the foreign partner institution, costs of accommodating PhD students from the foreign partner institution at the Center, costs of events (e.g. retreats in Germany) can all be taken from the monies awarded.
- Costs incurred abroad, e.g. events in the partner institution's country, study fees payable by the German partner's PhD students at the foreign institution, or accommodation required for the exchange program, should not be covered by the monies awarded.

No net cash outflow abroad is permitted from the funding awarded – what does this actually mean?

- In general, it must be ensured that there is no net cash flow abroad during the period covered by the funding. This means that if real money is sent across the German border to a foreign country and back, the cash flowing abroad must be balanced by cash flowing back to Germany.

Can the monies be used to finance investments?

- In general, the funds awarded should not be used to finance larger investments. However, smaller purchases may be made, e.g. laptops for coordination purposes.

Interim evaluation

When does the interim evaluation take place? What are the objectives of the evaluation procedure, and what does it consist of?

- An interim evaluation of the International Research School usually takes place halfway through the six-year funding period, i.e. at the end of the third year of funding. This consists of a one-day inspection held on site at the Center responsible. One of the objectives of the evaluation procedure is to assess the successful establishment of the International Research School. Another is to give the Research School the opportunity to continue developing its scientific orientation and postgraduate education structures.
- The evaluation criteria are oriented on the funding criteria in the Call for Applications and encompass an assessment of the scientific program, the educational program, the supervision provided, and the program structure and framework.
- The School is evaluated by an independent committee of 3-4 experts on the basis of the assessment report and an on-site inspection at the Center. The experts' assessments and recommendations are summarized in an evaluation report containing suggestions for specific activities and measures that will promote the success of the School.

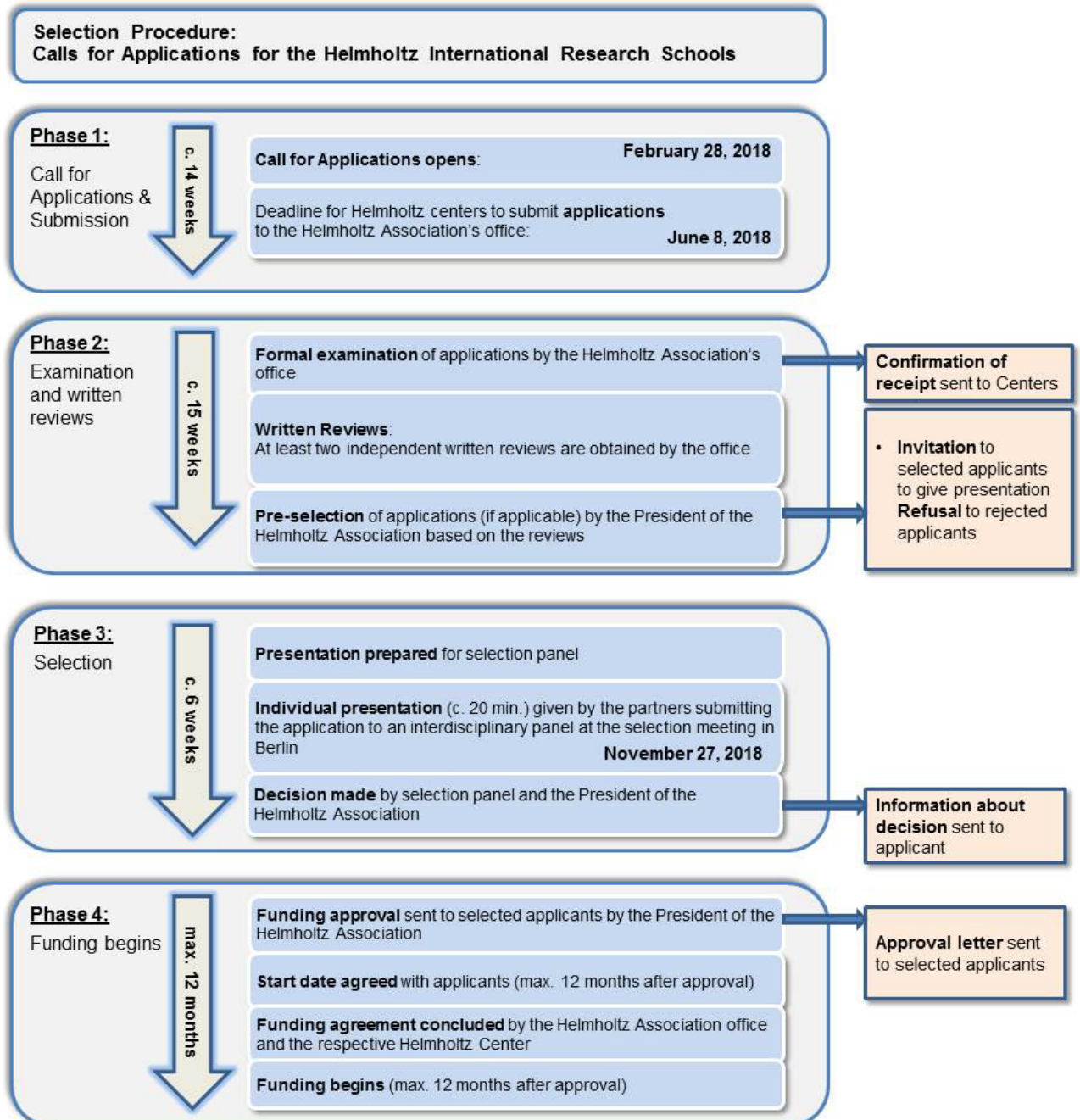
- In organizational terms, the evaluation is prepared and monitored by the member of Helmholtz Association's office staff responsible for the Helmholtz School in cooperation with the respective coordinators.

Scientific publications

What influence does the Helmholtz Association's Open Access guideline have on scientific publications?

- On April 7, 2016, the Annual General Meeting of members of the Helmholtz Association passed a guideline on Open Access (<http://os.helmholtz.de/de/open-science-in-der-helmholtz-gemeinschaft/open-access-richtlinien/open-access-richtlinie-der-helmholtz-gemeinschaft-2016/open-access-policy-of-the-helmholtz-association-2016/>)
- On accepting the funding from the Initiative and Networking Fund, the scientists undertake to make any scientific publications based partly or fully on the results of the funded project generally available in a freely accessible archive (repository) within six months of initial publication. Open Access publication can be waived if important grounds exist. The Helmholtz Association must be notified of these as soon as the scientists become aware of them.

Annex 5 Selection Process





GUIDELINES

**for the completion of PhD projects
within the Helmholtz Association**

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DEAR READERS,



Prof. Dr. Otmar D. Wiestler,
President of the Helmholtz Association

As Germany's largest scientific organization, the Helmholtz Association is committed to providing answers and solutions to the grand challenges of the 21st century – the urgent questions of science, society and industry. Through their outstanding work, creativity and commitment, PhD candidates play a major role in the pursuit of this mission. They are also the top scientists and senior managers of tomorrow. The promotion of PhD candidates is furthermore a central pillar of the successful and close collaboration of Helmholtz Centers and the universities.

Accordingly, the Helmholtz Association has placed the promotion of PhD candidates at the center of a comprehensive talent management concept. Our aim is to identify talented early-stage researchers early on and provide them with the conditions they need in order to flourish. The period during the PhD and immediately thereafter is decisive for a researcher's future career. Together with the universities, the Helmholtz Centers take the responsibility to offer doctoral training in the best possible manner and to present PhD candidates with a wide range of career options both within and beyond the sciences. We are especially committed to encouraging women to pursue leadership positions.

At the same time, the Helmholtz Centers and the universities have a responsibility towards society and the scientific community to comply with high quality standards in doctoral training and to establish and maintain a culture of good scientific practice.

The creation of 34 Helmholtz Research Schools and Helmholtz Graduate Schools has been a significant contribution to the establishment of quality standards in doctoral training in past years. In addition, the Directors of the Helmholtz Centers and the President of the Helmholtz Association have agreed on common PhD guidelines. These guidelines define minimum standards for the optimal design of doctoral training. They contribute towards a common understanding of quality, and establish and promote a culture in which responsibility is taken at every level for the development of talented early-stage researchers.

As a result, the Helmholtz Association offers outstanding conditions for PhD candidates: exciting research topics of great social relevance and exceptional research infrastructure on the one hand, and first-class supervision and comprehensive talent management with tailored training programs, on the other.

I warmly invite you to discover our quality standards and offers for PhD candidates, and to become a part of our talent management culture.

A handwritten signature in blue ink that reads "Otmar D. Wiestler". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

Otmar D. Wiestler



DOCTORAL TRAINING IN THE HELMHOLTZ ASSOCIATION

The Helmholtz Association: Shaping the future with sustainable research

The Helmholtz Association is Germany's largest scientific research organization. It has more than 38,000 staff at its 18 scientific-technical and biological-medical research centers and an annual budget of more than € 4.5 billion (as of 2018).

The Helmholtz Association performs cutting-edge research which contributes significantly to solving the grand challenges of science, society and industry. Scientists at Helmholtz focus on highly-complex systems which define human life and the environment. This means for example to secure future mobility and energy supply, preserving the environment for future generations, or to find treatments for diseases which have hitherto remained untreatable. The activities of the Helmholtz Association aim to secure the long-term foundations of human life and establish the technological basis for a competitive economy.

To meet these responsibilities, the Helmholtz Association focuses on six research fields: Energy, Earth and Environment, Health, Aeronautics, Space and Transport, Key Technologies plus Matter. Within the six research fields, Helmholtz scientists work together and collaborate with external partners – across disciplinary, organizational and national borders. Indeed, the name Helmholtz stands for sustainable research in which networking is the key principle behind scientific thought and action. Through sustainable and program-oriented research, the Helmholtz Association aims to create an effective basis for shaping the future.

Helmholtz researchers and the staff responsible for technology transfer work with great dedication and success on translating research findings into practical applications. In doing so, they fill the Helmholtz Association's mission with life and ensure that research at Helmholtz benefits society and economy.

The large-scale and complex research infrastructures of the Helmholtz Association guarantee outstanding research conditions. The operation and management of research infrastructures is an integral part of the mission of the Helmholtz Association and one of its unique features among Germany's science organizations. These infrastructures can also be used by research teams from universities and non-university research institutions both from Germany and abroad, and serve as focal points of many major international collaboration and networks.

Further information: www.helmholtz.de



Independent Research and Individual Support

An interesting PhD project that addresses relevant research topics can serve as a springboard for an academic career and opens the door to senior positions outside the sciences. The approximately 8000 PhD candidates, who are educated together with the universities, are therefore a major target group of talent management activities of the Helmholtz Association.

Since 2006, the Helmholtz Association has set up 34 Research Schools and Graduate Schools at its Centers. These schools offer a structured doctoral training, which offers excellent supervision, stable working conditions and an educational program tailored to the individual needs of early-stage researchers. In addition, PhD candidates are integrated into renowned research teams and international networks and have access to the Helmholtz Association's unique research infrastructures.

Helmholtz Research Schools

Helmholtz Research Schools are small units focused on specific research topics, bringing together up to 25 outstanding young doctoral candidates. In these schools, PhD candidates experience team work and collaboration in networks common in top-level research. They are supervised by a team of experienced scientists and receive individually customized professional training and advice.

Helmholtz Graduate Schools

Helmholtz Graduate Schools provide an umbrella structure for PhD candidates from different domains. The PhD candidates work in research teams and exchange ideas in seminars, lectures and internships. Furthermore, they receive interdisciplinary training.

Professional Skills Training for PhD candidates

The Helmholtz Association has recognized the importance of professional skills training for the career development of early-stage researchers and has set up a training program tailored to the specific needs of PhD candidates. The trainings are conducted by trainers of the University of Surrey and consist of three workshops which address the different phases of a PhD project and thus provide optimal support for PhD candidates. The workshops are open to PhD candidates from all Helmholtz Centers, providing a platform for interdisciplinary exchange and networking. In addition, all Helmholtz Centers provide further training and career advice in cooperation with their university partners.

Further information: www.helmholtz.de/phd



GUIDELINES FOR THE COMPLETION OF PHD PROJECTS WITHIN THE HELMHOLTZ ASSOCIATION

Introduction

PhD candidates make significant contributions to the research efforts of the Helmholtz Association, and at the same time have the potential to become the senior scientists and managers of tomorrow. The Helmholtz Association offers its PhD candidates a wide range of training and development opportunities and an optimal preparation for their future career. With the Helmholtz PhD guidelines, the members of the Helmholtz Association have agreed on common standards for the completion of PhD projects. The guidelines assure a high quality of doctoral training, provide guidance to PhD candidates and supervisors, and promote a culture of responsible talent management.

- The Helmholtz Association endorses the objectives of the Charta der Vielfalt (Diversity Charter). Accordingly, the Association appreciates and fosters the skills and talents of all PhD candidates. The selection, supervision and assessment of PhD candidates takes place without discrimination on the basis of gender, nationality, ethnic origin, religion or world view, physical ability, age, sexual orientation or identity.²

- The Helmholtz Association aims to offer PhD candidates regular employment contracts, even though granting fellowships shall remain possible. In the interests of career planning, the duration of the contract should match the expected duration of the PhD. In consultation with the supervisory committee, funding shall be guaranteed at least until the submission of the PhD thesis to the university.
- Universities and Helmholtz Centers collaborate closely, pooling their expertise, to promote PhD candidates in the best possible way. The Helmholtz Association is committed to the white paper by the German Rectors' Conference (HRK) and the Helmholtz Association for the joint support of early-stage researchers published in 2004. The PhD is awarded by the universities in accordance with the respective PhD regulations.

¹ www.charta-der-vielfalt.de/en/diversity-charter/.

² Cf. *ibid.*



I. STATUS OF PHD CANDIDATES AND GOALS OF THE PHD

PhD candidates conduct autonomous research under supervision during their PhD. They belong to the early-stage researchers within the Helmholtz Association and are appropriately supported and integrated into the Association.

- PhD candidates as defined by these guidelines have been admitted to a doctorate by a university, and are generally supervised by a university professor jointly appointed by the university and a Helmholtz Center. If the main supervisor is not employed by a Helmholtz Center, the PhD candidate is supervised by at least one postdoctoral Helmholtz researcher. In respect to supervision, the type of PhD (e.g. individual PhD or within a structured PhD program) or the type of funding (e.g. employment contract or fellowship) is not relevant.
- The independent investigation of a research topic lies at the center of a PhD, but PhD candidates receive constant feedback from their supervisors. PhD candidates are to be regarded as early-stage researchers who obtain qualification for a future career on the basis of a PhD project.³
- With the completion of their PhD, PhD holders have matured into competent and critically minded researchers with a good understanding of their field of research and an established network in this field. In most cases, they have published some or all of their research results in peer-reviewed journals and discussed them in the relevant

expert circles. Furthermore, they have a clear notion of their future career development and are prepared to perform responsible activities both within and outside the sciences.⁴

PhD holders are in the position to:

- thoroughly examine and question complex circumstances
- understand, apply and advance theories and methods.
- identify and independently work on relevant research topics.
- orientate themselves in an international environment and build up networks.

³ Cf. "First Stage Researchers", European Commission (2011): Towards a European Framework for Research Careers.

⁴ Cf. ibid. and LERU (2010): Doctoral degrees beyond 2010: Training talented researchers for society.



II. COURSE OF THE PHD

A. Supervision

PhD candidates and supervisors are jointly responsible for the PhD project. PhD candidates are generally supervised by a PhD committee or a comparable body.

- PhD candidates bear the primary responsibility for the completion of their PhD project and for their academic and personal development. They conduct research in an autonomous fashion and take responsibility for the progress of their project. Specifically, this means:
 - PhD candidates keep informed about their rights and duties and about the relevant regulations of their university.
 - PhD candidates comply with the principles of good scientific practice.
 - PhD candidates regularly report to the PhD committee on the progress of their PhD project, based on the agreed work plan, which can be adjusted where necessary.
 - PhD candidates inform the PhD committee or other appropriate body about any potential difficulties in good time, and take part in the search for solutions of conflict situations.
 - PhD candidates integrate into their working group and daily life at the Center. They network within the scientific community and thereby further their independence.
 - PhD candidates bear in mind their own career development and make use of appropriate offers and advisory services. The PhD committee and PhD candidate discuss possible career goals for the period after the PhD at an early stage.
- Supervisors share responsibility for the structured oversight of the PhD project and the academic and personal development of PhD candidates. They possess the necessary competencies and sufficient time resources for this task. They regularly undergo further training, and keep an open mind regarding their role as supervisors.
- Besides academic supervision, supervisors have the task to foster PhD candidates' independence, to give them freedom in their work, and to motivate them. Specifically, supervisors introduce PhD candidates to the scientific community and help them to establish their own network and cooperation partnerships and motivate them to take part in conferences and support them in making relevant contributions. Supervisors support PhD candidates in publishing, enable them to gain teaching and supervision experience, and make them aware of different career options.
- Supervisors serve as role models for PhD candidates. Consequently, they act in accordance with the principles of good scientific practice and hold the PhD candidates accountable to doing the same. Supervisors should also encourage PhD candidates to reflect on the scientific and ethical ramifications of their activities, and motivate them to scrutinize the subject of their research from a societal perspective.
- At the Helmholtz Center, PhD candidates are supervised by three scientists holding a doctoral degree, who together comprise a PhD committee or a comparable body. Primary

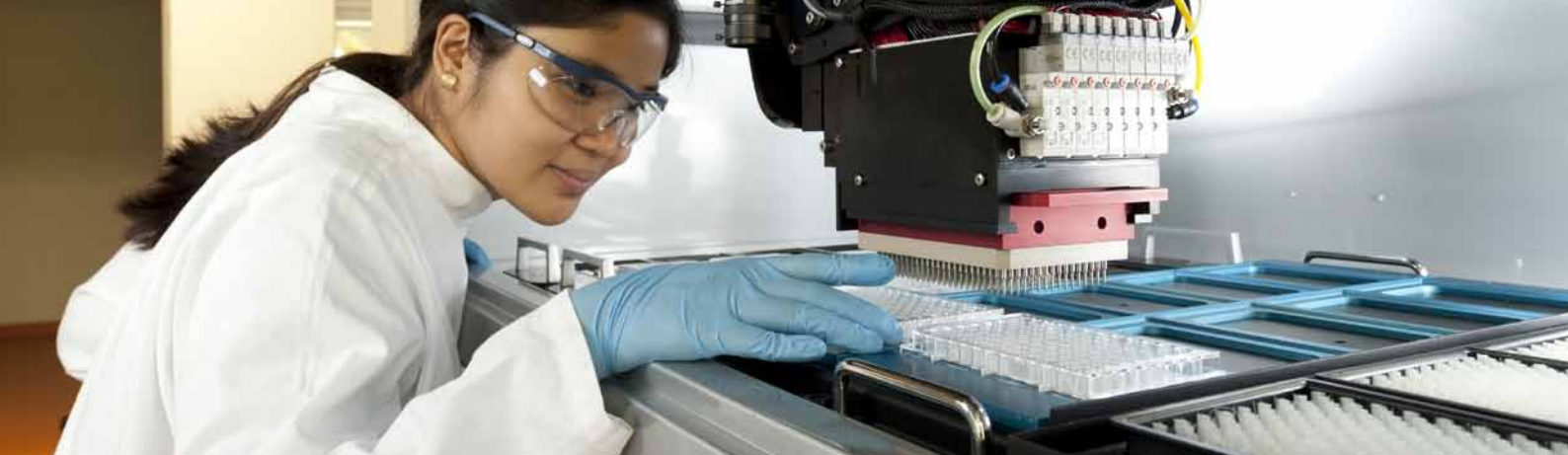


responsibility is held by one member of the committee (primary supervisor), with the other supervisors exercising an advisory and supporting role. At least one of the supervisors should be affiliated with a university and should have the authority to award doctoral degrees.

- At the start of the PhD, supervisors and PhD candidates enter into a PhD agreement. This agreement clearly sets out the responsibilities of all parties involved in the PhD process. The PhD agreement serves to provide guidance and enable quality assurance. As a minimum, it must contain the following elements: Names of the involved parties; topic and object of research; objectives; start date; approximate schedule; dates for supervision meetings; commitment to good scientific practice (e.g. pursuant to DFG standards⁵); and a reference to the applicable PhD regulations. In order to take into account the dynamic nature of scientific research, the schedule may be adjusted on an ongoing basis. PhD candidates and supervisors are responsible for ensuring that the admission process to pursue a doctoral degree at a faculty or division of a university and the registration process at the Helmholtz Center are started immediately after the PhD agreement has been made. The Helmholtz PhD agreement is to be reconciled with the PhD agreement required by the university, if applicable.
- It is advisable to create a tailored training plan that sets out the specialized and interdisciplinary learning objectives of the PhD candidate.⁶ To this end, supervisors and PhD candidates may request support from the human resources department, the central graduate office, or the career guidance office (cf. also Section B). The training plan should be reviewed on a regular basis and adjusted where necessary.
- The PhD project and conditions should be designed so that the PhD can be completed in three to four years. Ongoing and intensive oversight by the supervisors is important to ensure that this time frame is met. Meetings with the PhD committee should take place on at least a yearly basis. In addition, PhD candidates should have the opportunity to present their research to a specialist audience, e.g. in colloquiums or at conferences at least twice during the course of the PhD. Any extensions of the deadline for completion of the PhD project must be anticipated in a timely manner, in consultation with the PhD committee to allow a new completion schedule to be jointly developed. In line with this completion schedule, funding is to be sought for the period until the submission deadline.

⁵ Cf. http://www.dfg.de/foerderung/grundlagen_rahmenbedingungen/gwp/.

⁶ Cf. in this regard e.g. European Science Foundation (2012): A pan-European Professional Development Framework for Researchers, and European Science Foundation (2012): Developing Research Careers in and Beyond Europe.



B. Personality and Career Development

PhD candidates are prepared to take on responsibilities within and outside the sciences by individual support measures regarding personality and career development.

- The academic and technical training is the core component of the professional qualification during the PhD, which can take different forms depending on the area of research. The acquisition of additional interdisciplinary competencies is recommended in all research domains. The Helmholtz Centers offer PhD candidates a diverse range of training opportunities, e.g. by their graduate programs, such as Helmholtz Research Schools and Helmholtz Graduate Schools, and by the programs of their partner universities. Supervisors actively support the participation in these training courses. PhD candidates should draw up a training plan together with their supervisors to establish a meaningful link, in terms of time and content, between the training courses and the research project (see above). Participation in training courses must be documented and compiled after completion of the PhD, e.g. in the form of a certificate. Such certificates will enhance PhD graduates' career prospects and ensure international comparability of the degrees obtained.
- It is the responsibility of the Helmholtz Centers and supervisors to assist PhD candidates in developing their career prospects. Doctoral candidates should acquire experience in a variety of work contexts, e.g. by internships or cooperation with external partners. They can request career advice and, where necessary, participate in mentoring programs from the Centers. To ensure responsible talent management, PhD candidates are supported in planning their career after the completion of the PhD.
- Mobility periods are encouraged if they are appropriate in the setting of the specific research project. Mobility can take place and can be supported at different levels: international (e.g. by research stays abroad or binational doctorates); intersectoral (e.g. by internships in industry); interdisciplinary (e.g. by collaboration with scientists from other fields); and virtual (e.g. by cooperation and networks).



III. GENERAL CONDITIONS FOR THE PHD PROJECT

Structured application and selection procedures, permanent contact persons in the administration, center-wide graduate offices, offers for PhD candidates with families, support for international PhD candidates, and clearly defined conflict resolution procedures establish optimal conditions for doing a PhD.

- The PhD programs of the Helmholtz Centers establish a structured application and selection procedure with clearly defined requirements, transparent procedural steps, center-specific but standardized assessment criteria, and permanent contact persons. The relevant information can be found on the website of each Helmholtz Center. During the selection process, applicants' personality and their full range of experience are taken into account. In addition to academic qualifications, which constitute the primary criterion for the selection of PhD candidates, the selection process also accounts for additional competencies such as teaching and supervision experience (e.g. of Master and Bachelor students), team spirit, and involvement in student bodies or outreach activities.⁷
- The Helmholtz Centers provide PhD candidates with the necessary infrastructure for the completion of their PhD project, which may include test slots and opportunities to collect samples.
- Each Helmholtz Center has graduate offices or permanent contact persons within the administrative structure, providing PhD candidates with advice on how to structure and organize their PhD project. They also inform PhD candidates about training offers.
- During their project, PhD candidates receive support in the form of flexible working hours and childcare facilities. If PhD candidates take parental leave, the Helmholtz Association aims to extend their funding period accordingly.
- PhD candidates from abroad sometimes face major challenges as a result of cultural and language barriers, which can affect the progress of their PhD project and their integration. To address these difficulties, the Helmholtz Centers offer advice and training and networking opportunities. The Centers and supervisors are responsible for informing PhD candidates about these opportunities. The Centers guarantee that all information necessary for doing a PhD project is available at least in English, or that appropriate translation support is made available.
- The technology transfer offices of the Helmholtz Centers serve as confidential contact points for inventions, patent protection and business ideas. PhD candidates and their supervisors have a responsibility to inform the technology transfer offices of inventions or research results that may require initiation of patent procedures before their publication.
- The Helmholtz Centers actively encourage the formation of representations of PhD candidates such as the Helmholtz Juniors⁸ and other networking activities among PhD candidates. The Centers ensure that PhD candidates have a say in decisions affecting the promotion of PhD candidates.

⁷ In this regard, the Helmholtz Association orientates itself i. a. to the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (European Commission 2005).

⁸ www.helmholtz.de/juniors.



- The Helmholtz Centers recognize the importance of excellent supervision and of the support of early-stage researchers, and encourage the engagement of supervisors to undertake supervision training and to share experiences and ideas on good supervision.
- In the event of conflict situations, the Helmholtz Centers offer permanent contact persons and clearly defined procedures that are known to all parties involved in the PhD project.



IV. QUALITY CONTROL AND NEXT STEPS

The Helmholtz Association aims to be a learning organization that frequently questions its strategic orientation and strives towards constant development.

- All PhD projects carried out and supervised at the Centers of the Helmholtz Association are documented from the outset. The resulting statistical data are used for the Centers' reporting and form the basis of the Association's quality control procedures and strategic orientation.⁹
- The Helmholtz Association has implemented a range of instruments for quality control of doctoral training. The evaluations in the context of the Program-Oriented Funding and the interim evaluations of the Helmholtz Graduate and Research Schools are central for this. In addition, the Helmholtz Centers are advised to systematically integrate their support for PhD candidates into their quality control systems.
- The Helmholtz Association strongly recommends that established quality standards and structures of the Helmholtz Research Schools and Graduate Schools are continued after the initial funding has ended. The Helmholtz Association welcomes the introduction of a code of conduct for supervisors, the establishment of career tracking systems, and the execution of follow-up surveys by individual Centers as reasonable quality control measures.
- The Helmholtz Association seeks a close exchange with other national and international actors in the promotion of PhD candidates to share examples of good practice and initiate cooperation. Besides working together with universities, cooperation with industry is of particular importance for the Helmholtz Association in order to open up new career prospects for PhD candidates.
- In 2019, an expert group interviews the Helmholtz Centers about their experiences with the PhD Guidelines and discusses whether its content is still appropriate.

⁹ The data are recorded by the responsible administrative unit and include, e.g.: personal information; PhD start date; working title; name and institutional affiliation of the main academic supervisor, name and institutional affiliation of the daily supervisor; main supervisor's written approval for the acceptance of the candidate; type of funding (fellowship, employment contract, etc.); and contract duration. In addition, main supervisors must submit a final report containing the following information: submission date of the PhD thesis; date of examination; grade; and, if applicable, employment after completion of the PhD and new address. The administration of a Helmholtz Center must also be informed if the PhD is not completed. PhD candidates and supervisors are jointly responsible for compiling the data. They must ensure that the data are submitted to the responsible administrative unit immediately after the conclusion of the PhD agreement and after the completion of the PhD. The PhD candidate must consent to the recording, use and processing of the above mentioned data in the PhD agreement or in another suitable manner.

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MISSION OF THE HELMHOLTZ ASSOCIATION

We contribute to solving the major challenges facing society, science and the economy by conducting top-level research in strategic programs within our six research fields: Energy, Earth & Environment, Health, Aeronautics, Space and Transport, Matter, and Key Technologies.

We research highly complex systems using our large-scale devices and infrastructure, cooperating closely with national and international partners.

We contribute to shaping our future by combining research and technology development with perspectives for innovative application and provisions in tomorrow's world.

We attract and promote the best young talents, offering a unique research environment and general support throughout all career stages.

Published by

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Editorial Staff: Johannes Freudenreich
Status: February 2018

Photo credits

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Vanessa Rüttler (GEOMAR); p.7: Thomas Ernsting (DLR), KIT; p.8: Thomas Steuer (HZI), Heiner Mueller-Elsner (DESY); p.9: Bernhard Ludewig (IPP); p.10 Uwe Bellhäuser; p.11: DLR, Maïke Thomsen (AWI); p.12: DLR, Thomas Steuer (HZI); p.13: Heiner Mueller-Elsner (DESY), Thomas Opel (AWI)

The guidelines for the completion of PhD projects within the Helmholtz Association have been prepared by a working group chaired by Prof. Dirk Heinz and coordinated by Nina Löchte. The Helmholtz Association would like to thank the members of the working group for their commitment.



Eckpunktepapier der HRK und der Helmholtz-Gemeinschaft zur Kooperation bei der Förderung des wissenschaftlichen Nachwuchses

Gemeinsame Erklärung der Präsidien der Hochschulrektorenkonferenz und der Helmholtz-Gemeinschaft vom Juli 2004

- Hochschulrektorenkonferenz und Helmholtz-Gemeinschaft werden ihre Zusammenarbeit verstärken, um in Gebieten gemeinsamen wissenschaftlichen Interesses Exzellenz zu fördern.
- Die HRK und die Helmholtz-Gemeinschaft regen an, dass sich ihre Mitglieder mit regionaler Fokussierung regelmäßig und partnerschaftlich über ihre mittel- bis langfristige strategische Planung austauschen, um die Identifizierung zukunftssträchtiger, relevanter Forschungsfelder zu ermöglichen, deren gemeinsame und exzellente Bearbeitung hohe Synergieeffekte erwarten lässt.
- Die HRK begrüßt die Einrichtung von gemeinsamen "Virtuellen Instituten" zwischen Hochschulen und Helmholtz-Zentren aus Mitteln des Impuls- und Vernetzungsfonds des Präsidenten der Helmholtz-Gemeinschaft als einen wichtigen Schritt in diese Richtung.
- Die HRK und die Helmholtz-Gemeinschaft sehen weiterhin in der gemeinsamen Förderung des wissenschaftlichen Nachwuchses in Feldern übereinstimmenden wissenschaftlichen Interesses einen Mehrwert für die wissenschaftliche Wertschöpfung. Für die gemeinsame Förderung halten sie fest:
 - Das Promotionsrecht soll auch zukünftig in der Zuständigkeit der Universitäten liegen.
 - Die Promotion stellt vornehmlich die Qualifikation für wissenschaftliches Arbeiten dar. Darüber hinaus wird es zunehmend wichtig, Doktorandinnen und Doktoranden das Erlernen 'ergänzender Fähigkeiten' zu ermöglichen, insbesondere zur Förderung beruflicher und persönlicher Qualifikationen.
 - Die Strukturierung der Doktorandenausbildung nach vergleichbaren Standards ist vorzusehen, u.a. durch gemeinsame Promotionskomitees mit Mitgliedern aus Zentren und Hochschulen und einen Promotionsvertrag; dies gilt für Doktoranden(innen), die gemeinsam betreut werden und die einen Anstellungsvertrag mit einem Helmholtz-Zentrum haben.
 - Hochbegabte Doktoranden sollen durch ein herausragendes Angebot fachlicher sowie ergänzender Kurse ihren Fähigkeiten entsprechend besonders gefördert werden. Dies soll im Rahmen der bereits konzipierten Helmholtz-Kollegs, auf der Grundlage einer Kooperationsvereinbarung zwischen den beteiligten Institutionen, erfolgen, die u.a. auch eine gemeinsame Bezeichnung festlegt.
 - Gemeinsame Nachwuchsgruppen (Helmholtz-Hochschul-Nachwuchsgruppen) sind besonders geeignet, um an Schnittstellen von Forschungs- oder Kompetenzfeldern Profilspitzen zu setzen, die beiden beteiligten Einrichtungen einen Zuwachs an wissenschaftlichem Renommee bringen.
 - Bei gemeinsamem Interesse (Verknüpfung der Programmatik der Helmholtz-Gemeinschaft und der Profil-/Schwerpunktsetzung der Hochschule/Fakultät) können für die Leiter(innen) der Helmholtz-Hochschul-Nachwuchsgruppen gemeinsame Berufungen als Juniorprofessor(inn)en sinnvoll sein. Die HRK und die Helmholtz-Gemeinschaft regen an, in diesen Fällen die Berufung durch gemeinsame Berufungskommissionen vorbereiten zu lassen.
 - Die Leiter(innen) gemeinsamer Nachwuchsgruppen sollten auch in Fällen, in denen die Berufung auf eine Juniorprofessur keine Option darstellt, gemeinsam durch Helmholtz-Zentrum und Universität bestellt werden und die gleichen Rechte und Pflichten wie Juniorprofessor(inn)en (Personal und Budgetverantwortung, Führen von Doktorand(inn)en zur Promotion, Übernahme von Lehrverpflichtungen; ≤ 4 SWS, Zugang zu allen notwendigen Ressourcen/Infrastruktur), nach Maßgabe der Landeshochschulgesetze, erhalten.
 - Um junge talentierte Wissenschaftler(innen) gewinnen und halten zu können, ist es notwendig, ihnen längerfristige Karriereperspektiven zu bieten; z. B. Übernahme von qualifizierten Nachwuchsgruppenleitern nach positiver Evaluierung ohne neue Ausschreibung in Anlehnung an das in der Helmholtz-Gemeinschaft etablierte "Tenure-Track"-Modell, soweit dies den beteiligten Hochschulen rechtlich möglich ist.
 - Um Exzellenz in der Forschung durch Verstärkung der Zusammenarbeit zwischen der Helmholtz-Gemeinschaft und Hochschulen erreichen zu können, muss sichergestellt werden, dass die von den Nachwuchsgruppenleiter(innen) erbrachte Lehrleistung nicht kapazitätswirksam ist.
 - Die Auswahl der besten Konzepte für Helmholtz-Kollegs sowie der Helmholtz-Hochschul-Nachwuchsgruppenleiter(innen) soll gemeinsam erfolgen.

Annex 9

Selection of unbiased reviewers

Impartiality issues and conflicts of interest may exist in relation to the research project, the researchers or research institutes involved in the application.

Impartiality issues/conflicts of interest may for example arise if the reviewer:

- is employed or has been employed with the last five years by a research institute involved in the application.
- has a family relationship or close personal ties or contacts with a researcher involved in the application.
- is in close current or planned scientific cooperation with a researcher involved in the application.
- has been in a dependent employment or supervisory relationship (such as a teacher-student relationship at any level up to and including the postdoc phase) with a researcher involved in the application within the last six years.
- is preparing a proposal or carrying out a project closely related to the candidate's research topic (direct scientific competition).
- has had a joint publication or been actively engaged in cooperative research efforts with a researcher involved in the application within the last five years.
- has engaged in intensive use of the facilities of a research institute involved in the application within the last five years.
- is or has been involved in an ongoing or failed appointment procedure with any of the university partners involved.
- has personal commercial interests of relevance to the application.

Please name six potential reviewers and make sure that at least two of them are female scientists.

Please refrain from nominating only the most prominent scientists in your field of research, as it may be difficult to get an assessment.

Please attach the proposals to the application on a separate sheet with complete contact and address data (including e-mail addresses).

Please disclose possible points of contact with the reviewers and sign to confirm that no potential bias is known.

If the bias criteria are not observed, we reserve the right to reject applications before any review has taken place.