



HEIDELBERG FACULTY OF MEDICINE

Physician Scientist Program of the Heidelberg Faculty of Medicine

Application guidelines

The Physician Scientist Program of the Heidelberg Faculty of Medicine is a module of structured personnel development for physicians working in science. The aim of the program is to promote research activities of young clinicians by means of protected research time at the institutions of the Heidelberg Faculty of Medicine and thus strengthen basic as well as patient-oriented clinical and translational research. Furthermore, it enables planned and quality-assured medical education at the Heidelberg University Hospital combined with scientific work. The program targets physicians as well as dentists. For non-medical scientists, e. g. natural scientists and psychologists, a limited number of positions can be financed as well.

Every year, the Heidelberg Faculty of Medicine provides a variable number of Physician Scientist positions, depending on the faculty's financial resources. Funding is provided by financing the participant's position during a protected research time at a hospital/institute of the Medical Faculty of Heidelberg or the Heidelberg University Hospital. Various funding options are possible, which enable both: a complete exemption from clinical tasks as well as partial exemption (parallel clinical activity or block-by-block clinical activity). The program is based on the recommendations of the German Research Foundation (DFG) for the design of Clinician Scientist programs.

Elements of the program

Protected research time

The total duration of the program is three years. Within the framework of the program, the Heidelberg Faculty of Medicine will finance protected research time of up to two years full-time in total over a maximum period of three years ("2 out of 3"). A further year of clinical training is financed by the hospital or institute. The funding can be used in various ways, starting with a one-year research time (100%), followed by block-by-block or half-way distributed research and clinical activities (see Figure 1).

A full-time research activity at the beginning of the program has the advantage of effectively initiating the planned research project and thus being able to lay the foundation for future applications for third-party funding.

	1. Jahr				2. Jahr				3. Jahr				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Option 1	research								clinical training				two years of 100% protected research time + one year of clinical training
Option 2	research				research				clinical training				1 year of 100% protected research time + 2 years of 50% protected research time and 50% clinical training
Option 3	research				max. 1 year of clinical training				research				1 year of 100% research + max 1 year of 100% clinical training + max 1 year if 100% research
GEROK-Stelle Zahnmedizin	research				clinical training								1 year of 50% research parallel with 50% clinical training

Figure 1.: Different funding models

- Model 1: Two years of 100% protected research time, followed by one year of clinical training;
- Model 2: One year of 100% protected research time, followed by 2 years of 50% protected research time and at the same time 50% clinical training;
- Model 3: One year of 100% protected research time, followed by one year of clinical training, followed by a second year of 100% protected research time;
- Model 4: Dentists may apply for a one-year grant with a 50% protected research time parallel to the clinical activity ("GEROK Stelle Zahnmedizin").

Important: due to differences in wage agreements (Tarifvertrag), the applicant must make a binding decision on a timetable together with the host institution when submitting the application. A subsequent change is excluded after the commencement of funding (exception: family responsibilities).

Endowment

Due to the different funding options, the human resources department checks whether remuneration is paid in accordance with TV-Ä or TV-L wage agreement before commencing funding. Financial disadvantages for the beneficiaries will be avoided as far as possible.

Commitment by the hospital/institute

The application must be accompanied by an acceptance letter by a research group allocated to the Heidelberg Faculty of Medicine as well as a description of a specific research project. The hospital/institute must declare its willingness to provide the necessary resources and infrastructure for the research project. The institution must also agree to finance the share of work in patient care and render possible clinical activities in accordance with the training requirements.

Career concept

The application must be accompanied by a comprehensive individual career plan drawn up between the applicant and the host institution. This plan should contain milestones for the scientific career as well as for clinical training. Hospitals and institutes should be motivated to create reliable and attractive career paths for applicants to enable them to combine clinical training and scientific qualification (e. g. reliable rotation plans). The career concept should also contain statements about courses in which the applicant will participate (see curriculum).

Likewise, a concept of a possible continuation of the clinical-scientific career after the Physician Scientist Program should be provided. The Physician Scientists Program fellows should be able to successfully finalize their specialist training at the Heidelberg University Hospital after the funding. The career concept should be updated regularly (see Mentoring).

Accompanying scientific curriculum

The program comprises an accompanying scientific curriculum which takes into account the individual needs of the participants. The curriculum aims to deepen the participant's scientific knowledge and skills as well as key qualifications. Mandatory and optional modules are offered.

Mandatory modules:

- External two-day seminars ("outdoor seminars") of the Heidelberg Faculty of Medicine (one seminar per semester). Within the framework of these seminars, workshops on key qualifications alternate with project presentations held by the participants. Workshops on key qualifications cover topics such as "grant writing", "leadership and communication" or "career planning." Additionally, established scientists give lectures on research topics of superordinate interest and present possible career paths in medicine.

Optional modules:

These may include:

- Laboratory/research group and literature seminars
- Scientific colloquia and training courses
- Participation in specialist congresses, combined with presentation of the participant's own research project as a poster or lecture. Funding recipients should participate in at least one international congress of the respective subject area. For this purpose, the Heidelberg Faculty of Medicine provides, upon request, a total of up to 1.500 € as travel funds. Alternatively, the acquisition of specific methodological knowledge in an external institute, a methodology course or similar can be financially supported on request. Regular participation in the mandatory modules is a prerequisite for the financial support of congress trips by the Faculty of Medicine.
- Seminar series "Klinische Studien" by the KKS Heidelberg
- "Curriculum Klinische Forschung" by the KKS Heidelberg
- „Prüfarztkurs“
- Further training in areas such as "good scientific practice", "good clinical practice", "good manufacturing practice", "radiation protection", "animal experiments" etc.
- Scientific lectures/seminars in the context of Collaborative Research Centers and other collaborative scientific projects

An individual curriculum must be developed by each applicant together with the host institution and submitted with the application. The individual curriculum is part of the personal career concept.

The heads of the host institutions commit to support actively the individually developed career plan and to comply with the agreements reached. This includes regular meetings during which the career concept is reviewed and updated.

Mentoring

In addition to the clinical mentor (head of department, head of section), an external mentor must be named. A mentoring interview must be conducted at least once a year. This interview is to be documented and signed by both participants.

Prerequisite for an application:

- A doctorate or equivalent degree with at least "magna cum laude" (or equivalent) is required. Alternatively, the dissertation with a corresponding "votum informativum" can be submitted as well. If the doctoral dissertation has not yet been completed, a statement by the responsible doctoral office on the status of the dissertation procedure must be submitted.
- At least one first unshared authorship publication is required.

The application

Due to the large number of research groups at the hospitals and institutes, a central record of potential research topics is not possible. Therefore it is the applicant's responsibility to find a research topic or research group according to his/her interests.

Ideally, applications should be submitted 2.5 to 3 years after the doctorate. **Applications should be submitted in electronic form without access restriction in form of one PDF file only to the following address: forschungs.dekanat@med.uni-heidelberg.de**

The documents are to be drawn up in Times New Roman, type size 12; 1.15 line spacing.

The application must include:

- (1) A letter of motivation signed by the applicant (max. 1 page). It should contain concrete statements on the reasons for the application and the applicant's own career goals.
- (2) A career plan (see information sheet) for the period of funding in the program (3 years). This must contain:
 - a. A binding decision on one of the funding options (timetable for exemption from clinical tasks and the use of funding).
 - b. In case of clinical institutions: declaration of exemption from activities in patient care for the time financed by the faculty.
 - c. Information on planned accompanying courses, seminars, etc.
 - d. Information on key milestones in scientific and academic career as well as the clinical training. The career concept must be signed by both: the host institution's director and the applicant.
- (3) A description of the planned research project (German or English) in the usual structure (title of the project, state of research, problem definition, work program, goal). It should not exceed 5 DIN A4 pages. Here the applicant has also to specify in concrete terms, which work he/she will carry out him- or herself and which work will be carried out by cooperation partners, if applicable. The proposed project must be supported and co-signed by the supervising university teacher in Heidelberg (usually head of the research group).
- (4) Letter of support (see information sheet) containing a confirmation of the hospital's or the institute's acceptance of the applicant, signed by the head of the department responsible for budgeting and, if applicable, by the head of the research group. The letter must contain a statement that the financial means for the implementation of the project are available and that the financing of the clinical parts of the funding period is secured.

(5) Signed letter of reference from an external, independent university lecturer. This letter should contain statements about the planned scientific project on a maximum of 2 pages, as well as about the applicant's suitability.

An external letter of reference is not obligatory for applications for funding model 4 "GEROK Stelle Zahnmedizin". Instead, a written statement from the mentor or medical director is required, in which the scientific significance of the proposed project (innovation content, significance for the research area) is acknowledged.

(6) Proposal of an external mentor. In the case of approval, a binding commitment by the future mentor to take over the mentorship must be submitted. It is also possible to submit a letter of reference from the future mentor

(7) Curriculum vitae according to template

(8) Questionnaire according to template

(9) Publication list according to template

The listed publications must at least be accepted for publication. If necessary, proof of acceptance must be submitted. A publication in preparation, submitted or under review is not sufficient.

(10) Doctoral degree certificate or "votum informativum" (first examiner's expert opinion). If the doctorate has not yet been completed, a status of the procedure must be submitted as well. This can be obtained at the doctoral office

(11) License to practice medicine or, for non-medical students, Bachelor/Master degree

(12) Medical examination certificates (not applicable for non-medical applicants)

(13) Other appendices, if necessary

The required templates and information sheets can be found on the Internet at <http://www.medizinische-fakultaet-hd.uni-heidelberg.de/index.php?id=111367&L=en>

The requested documents must be submitted in the above specified order in one PDF file without access restriction. The provided templates are to be used. Incomplete or late applications as well as applications that do not meet the requirements will not be considered. Please do not forget the required signatures.

There is no legal entitlement to admission and funding by the program.

Please note: The above text is a translation which serves to inform about the aims and requirements of the program only and is therefore not legally binding.