**Supervision of Fellows and Postdocs at DESY (FH experiment) – Proposal**

**Introduction**

The postdoctoral years are crucial for a young physicist’s development into an independent researcher and an excellent, well-rounded scientist. They are often the most creative and productive years in one’s career, and also the time in which the postdoc starts the challenging search for a permanent position. The success of that search will depend largely on the achievements, skills and reputation developed during these years: Diversity in experience, opportunities to develop leadership and management skills, ability to multitask and communicate effectively in a collaborative environment, crafting of an interesting and independent research program.

At DESY, the experimental fellows and postdocs usually have two fields to work in, a technical one and some data analysis or detector R&D. In each of these fields they should have assigned supervisors. One of these should take the role as a mentor, who will ensure that the postdoc will receive a good coaching to increase their chances of following their desired career path: a prestigious 2nd postdoc position or a fellowship (e.g. a Marie-Curie fellowship), 3rd party funding for young investigators, a faculty or staff position in HEP, or in industry.

The supervisor(s) are responsible for assisting in creating a plan that includes their physics and technical activities, and are expected to offer advice, guidance, and support, as the postdoc faces choices and makes decisions through their postdoctoral years. The supervisor who acts as a mentor should ideally also be the person who conducts the annual appraisal interviews (“Mitarbeitergespräch”).

In addition, a mentor from another group in FH should be introduced to the fellow. It depends on the needs of the fellows, whether they interact regularly with the mentor or not.

**Research plan for new fellows**

New fellows have the chance to develop their own research proposal, which can directly connect to existing activities in the corresponding group, or also start a new project, which fits overall into the ongoing research activities. Therefore, it is important that the fellows first inform themselves about the ongoing projects in the different FH groups. They receive a list of contacts from the FH director after a first meeting. The fellow then talks to all contacts, who will also provide further contact to different subgroups, in which the fellow’s interest is highest.

After deciding for a group, the fellow will work with the corresponding contact for the technical part as well as the one supervising the data analysis or detector R&D (might be the same person), in order to prepare a short (~1 page) research plan that describes the proposed technical as well as physics research, estimated time allocations and timelines for each component as a function of time for the first two or three years. The plan is to be submitted to the FH director not later than two months after hiring. The scientists that will be responsible for guiding the postdoc should be involved in the preparation of the research plan and review it prior to its submission.

The research plan should be revised during the annual appraisal meetings.

**Annual appraisal interviews**

The standard annual appraisal interviews should contain a review of the progress according to the research proposal, and if needed the research plan should be updated. The progress in the postdoc’s research as well as their possibilities for leadership roles in analysis or within the experiment’s management structure, high profile internal talks or talks on conferences and seminars should be discussed. The interview should also include a detailed discussion about career planning and future job opportunities.

**Conference Presentations, Seminars and Job Talks**

The supervisors advise their postdoc about possible conference talks. They also help in arranging seminar invitations to increase visibility and sharpen the presentation skill of the fellow, which is particularly important at later stages of their postdoctoral term.

Supervisors organize practice talks for their postdocs who are about to give conference presentations or seminars (and especially for all job talks) and schedule them at least a week prior to the actual event. They should invite several senior scientists of the group, and ideally other scientists from this or other groups for the practice talk and ensure that there is plenty of time for comments on how to improve the presentation.

**Awards and Leadership Nominations**

Supervisors are made aware of awards within DESY as well as on national and international level, e.g. within the experiment or the general HEP community and are requested to nominate their postdocs for these awards. They will also advise their postdoc on opportunities to take leadership positions within the experiment and arrange for nominations and support.

**Job applications**

Supervisors assist their postdocs in preparation of the “job application package”. They review the CV, list of references, research statement and advise the postdoc, and also organize practice talks for job interviews. The goal is to to help them maximize their chances for securing a tenure track appointment at a university or a national laboratory.

However, our ultimate goal is for the postdocs to have a successful career, no matter which path they decide to pursue. As they approach the later stage of their postdoctoral term, some may be interested in exploring non-tenure-track positions, perhaps more technically oriented jobs in HEP, other sciences, and/or industry. In such cases the supervisor will support the postdoc by helping to develop the necessary technical skills, help enhance his/her visibility by participating in technical workshops and conferences, and by assisting in establishing contacts with former colleagues who made the transition. They will also point the postdoc early enough to the COAST program, which aims at providing necessary skills to prepare for industry positions.