

Strategy of SILS concerning the hiring and training of PhD students towards their graduation

Project committee: prof. dr Joost Teixeira-de-Mattos (Professor), dr Gertien Smits (Assistant Professor), Maartje Brink (Institute coordinator), Reuben Smith (PhD-council), Iris Hövel (PhD-council)

The PhD trajectory at SILS has a dual purpose:

- a) to provide the candidate with an in-depth scientific training, which includes collection of primary data in the laboratory and/or (computational) analyses of the data and synthesis of novel insights, publishing these data and insights in internationally peer-reviewed journals and presentation for expert and lay audiences with the focus on becoming a self-reliant scientist of high moral integrity capable of professional collaboration and delivering output of high quality;
- b) to conclude this training with a high quality thesis, approved by a doctorate committee so that the candidate will graduate within 4 years and 4 months. A thesis containing 4 manuscripts (including non-first authorships) publishable in internationally peer-reviewed journals is considered of high quality, but a lower number can also be accepted at the discretion of the doctorate committee.

A number of issues influence the success rate of this trajectory. These issues are:

a) **Who is responsible for which part of the trajectory?**

It is the PhD candidate's responsibility to:

- hand in the admission and doctorate committee request forms in time;
- adhere to the education scheme as set by the Faculty (25-30 EC);
- produce scientific output in the form of internationally publishable peer-reviewed manuscripts;
- prepare and provide input for yearly evaluation meetings, lab meetings and any attended conferences;
- develop a scientific way of working and thinking;
- develop the capacity to collaborate;
- adhere to scientific integrity morals;
- develop writing, presentation and communication skills for expert and lay audiences;
- develop personnel skills (project and time management; teaching and supervising students; career planning; societal awareness and scientific responsibility)
- write and defend thesis within 4 years and 4 months.

The promotor is responsible for:

- instruction of PhD candidate (and daily supervisor if applicable) on responsibilities at intake;
- providing scientific background and in-the-lab and/or computational training;
- performing evaluations: set up of the Training & Supervision Plan (TSP) at the start of the trajectory (within 3 months), also covering specific responsibilities of the student and

- supervisor; 9, 14 and 18-month evaluation, annual consultation after 18 months, yearly meetings (see paragraph 2);
- coming up with sufficient course subjects in the TSP and monitoring the 4-year graduation deadline;
- forming the doctorate and evaluation committee (see paragraph 2);
- evaluation and publishing of the generated output.

N.B. The promotor may pass on these responsibilities to a daily supervisor or copromotor (PI). The promotor however, remains responsible for the above mentioned. In case of a PI not being the chair of the group that obtained the funding for the PhD student position, this PI by default becomes copromotor and daily supervisor. An official document should be drawn up to formalize the copromotor status, stating the responsibilities and also the benefits (e.g. last authorships, copromotorship) awarded to the copromotor. A predetermined list of questions/subjects provided by the institute should be covered. This document is part of the TSP.

The institute director is responsible for:

- quality control: overseeing the content of TSP and 9, 14 and 18 months evaluations and further annual consultations, providing feedback, preferably in person (mail or talk), on the evaluation forms, also in case of positive evaluations;
- to instruct and evaluate promotors yearly as part of the annual consultation;
- back-up in case of candidate-(co)promotor issues;

The institute manager is responsible for:

- providing facilities (lab and desk space, internet access, computer);
- providing a list of available techniques matched to contact persons and a list of all available equipment (currently in the possession of the PhD/PD Council and being made for the AFS, to be updated by the technicians);
- monitor timely evaluations (report back to director);
- keep Faculty PhD student database up-to-date;

Personal Affairs (PA) is responsible for:

- handing out admission and doctorate committee request forms to new PhD candidates;
- assisting with candidate selection by explaining selection, employment and dismissal procedures and writing to candidates;
- organizing staff instruction for starting PIs, explaining PA procedures and teaching PIs how to select and coach PhD candidates.

b) Recruitment and selection

Hiring a PhD student needs the approval of the institute director. The institute manager plays a pivotal role in the procedure to reach such an approval which includes a check on the available funds and permission by the Faculty. In general all vacancies are advertised, however, in certain cases and in consultation with the institute director, it may be decided to abandon this step.

If approval has been obtained, the PI who obtained the grant delivers the text of the advertisement in the layout according to the standards of the Faculty to the institute manager for approval. The institute manager sends it to the SILS contact person at Personnel Affairs who is responsible for making it public via the UvA website, Academic Transfer and otherwise.

Candidates have to send their letter of application and CV exclusively to Personal Affairs where all

correspondence is collected and made available to the PI after the deadline.

The PI and institute manager together decide who to invite as member of the selection committee of max. 6 persons. Each committee accommodates at least the chair of the group, one member of another chair group and the institute manager or coordinator. An external recruitment officer, specialized in recruiting (foreign) PhDs, may be hired to assist in the proceedings. The selection committee preferably forms two subcommittees of three persons each. Both subcommittees separately read the application letters of relevant applicants and independently decide which applicants to invite. Subsequently the subcommittees compare their choices and decide together which candidates are to be invited by SILS Office.

The candidates will be interviewed followed by a ranking of the candidates, based foremost but not solely on their scientific capacities, by each subcommittee independently. The two rankings will be compared and discussed leading to a final ranking of all candidates. If the committee does not reach consent, a second round of interviews by the whole committee will be organized by the PI with help of SILS Office with a maximum of three candidates. Before these interviews take place the indicated references of the candidates are contacted/phoned by the PI and the resulting information shared with the other committee members.

The application letter and CV of the selected candidate and the reasons of the committee to select the candidate is presented to the SILS director who finally decides about the job offer. Finally the PI contacts the selected candidate while the institute manager/coordinator informs Personal Affairs who contacts the candidate, proposes the salary scale to the institute manager and finalizes the appointment after consent of the institute director. The other candidates will be informed by Personal Affairs with reasons for not being selected.

c) Education, supervision and evaluation

Education plan

The most important and largest part of the PhD candidate's education is the day-to-day in-the-lab or computational training. Next to this, the mandatory and personal development curriculum is organized by the Faculty. As an institute, our goal is to provide students with enough options to gather the remainder of the mandatory credits (FNWI 25 ects; EPS 30 ects; ONWAR: 25 ects). Candidates are obliged to join their respective accredited Interuniversity Graduate Schools. For students in research fields lacking a Graduate School SILS, will provide a clear overview of available courses offered by the Faculty and credits that can be earned. To this end:

- all training options are to be summarized on the PhD/PD Council website, including options organized outside of the Faculty after having been approved by the institute director.
- the website should also promote self-organized training, since SILS has many in-house skills which reduces costs. Frequently asked courses are: qPCR, genomics, statistics or programming.
- Per training option the number of credits that can be earned will be indicated. The EPS credit system values the different activities as follows (see also: www.graduateschool-eps.info/index.php/education-regulations-mainmenu00-111/specifics-of-training-a-supervision-plan-itsp-mainmenu00-284?task=view&id=59):

ACTIVITY	CREDITS
attendance of a SILS or external lecture, symposium or Research Day	0.3 ects / day
writing a review or book chapter	6 ects max
presenting your work through a talk or (newly made) poster at a SILS or external lecture/workshop/symposium	1 ects / occasion
training in another lab	0.3 ects / day
attending a MSc course in an indispensable skill	0.3 ects / day (6 ects max)
attending outside courses, for instance NWO	0.3 ects / day
active member of the PhD council	0.7 ects / year (1.4 ects max)

Supervision and Evaluation

The current system of supervision and evaluation may fail particularly in case of problems between the PhD student and supervisor. Ultimately, the director is responsible to assist in such matters, but PhD students may be hesitant to contact him/her or are unaware of this option. In addition, the director is often not familiar enough with the subject material to be of day-to-day assistance.

For the first problem, the PhD council can act as a portal, directing the student in question to the SILS and Faculty counselors. Names of the counselors will be made available to the candidate at the start of the PhD trajectory. For the second problem, we propose to add an external supervisor (outside of SILS, employed by FNWI, by another university or a member of the Graduate School) to those PhD trajectories that are not part of a KNAW accredited Interuniversity Graduate School such as Experimental Plant Sciences (EPS) or Neurosciences Amsterdam/Rotterdam (ONWAR). The external supervisor will receive a short progress report after 9 and 14 months and then every 6 months, attend a presentation at the end of the 1st, 2nd and 3rd year of the PhD trajectory and discuss progress and other issues that come up with the candidate and the supervisor. This will add valuable expertise and insights to the PhD trajectory with respect to the scientific content, the method of research and, in case of candidate-supervisor issues, an eye from outside. All plans, goals, problems and advice should be noted in an annual evaluation report. If needs be, a guideline document for annual evaluations will be provided by the institute.

For PhD students that are members of a Graduate School and obtain additional supervision according to the guidelines of the School (see for EPS: <http://www.graduateschool-eps.info/index.php/info-for-eps-members-mainmenublauw-307/phd-student-mainmenublauw-309>; see for ONWAR: <http://www.onwar.nl/pages/training/geninfo.htm>), a detailed report of said meeting will suffice. The report should explicitly cover an opinion on the supervision, clear goals and advice for the next year.

All evaluation reports are to be sent to and monitored by the institute director. In case of difficulties between candidate and supervisor or otherwise the director will arrange consultations with both parties to reach consent. If consent is not reached the director will take appropriate action which may result in a change of supervisor to ensure a further successful trajectory to graduation, dismissal of the candidate or otherwise.

d) KNAW accredited Interuniversity Graduate Schools

As stated above, two accredited Interuniversity Graduate Schools cover part of the research of SILS: Graduate Schools Experimental Plant Sciences (EPS) and Neurosciences Amsterdam Rotterdam (ONWAR). No research school for micro-, cell- or systems biology PhD students currently exist, however, initiatives have been taken to found a Graduate School Systems Biology and Bioinformatics.

In addition FNWI is in the process of including PhD candidates together with master students in the existing Graduate Schools of the Faculty. In the near future these Graduate Schools will offer an education, training and supervision plan comparable to the existing and accredited Interuniversity Graduate Schools EPS en ONWAR.

e) Social Aspects

The SILS PhD/PD council was established in 2010 to serve as an interface between PhD candidates, postdocs and the institute management. Their main goals are to serve as a feedback mechanism for the SILS management from the PhDs and Postdocs, improve the social coherence within SILS, communicate important management decisions to the community as well as the organization of PhD/PD events and symposia. Furthermore, the SILS PhD/PD council has a counseling function, as they can be considered a gateway for PhD candidates that encounter ‘difficulties’ during their PhD trajectory. The council can direct these candidates towards persons within and outside the institute that can help with the situations at hand.

Social events/aspects include: SILS Research day (1/year), SILS Seminars + Drinks (monthly), SILS Career event (1/year), SILS Theme Drinks (4/year), Facebook page, Web page.

f) Bursaries

The current SILS policy is not to hire a bursary who has to live on less than the minimum living cost in Amsterdam, which is currently € 1100/months (October 2013). This is also the policy of the Dutch Immigration and Naturalization Services. Legally, it is not allowed to pay bursaries additionally because it will be regarded as salary and so as a work relation between SILS/FNWI and the bursary.

In certain cases SILS reimburses the research group involved to cover laboratory costs of a bursary to a maximum of € 4000/year. In all cases this has to be discussed ahead of time with the institute manager and agreed by the director.

g) Implementation plan

A first version of this strategy as described above and formulated by a small committee of SILS representatives (full professor, assistant professor, two PhD students and institute coordinator) has been discussed with all group chairs during the regular monthly SILS Staff Meeting of October. A modified version has been discussed in the November and December meeting, resulting in the present document. All SILS members will be informed of the current strategy.

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