Info Letter for Research Groups hosting HiLIFE Research Trainee Scholarship recipients

The Research Trainee Scholarships are awarded by the Helsinki Institute of Life Science (HiLIFE); HiLIFE EDU work group coordinates the selection process. The awardees are selected based on their motivation letter, success in studies, and a video interview aimed to identify highly motivated students for a practical internship in a research group of their interest. Below we provide some useful information, and recommendations to help the host research groups in providing appropriate supervision, support, and mentoring to maximize the HiLIFE Trainees learning experience during the internship. The ultimate objective is to ensure a productive, inclusive, and engaging traineeship that will ignite students' interest in research.

I. Setting Expectations:

- 1. *Initial meeting:* Organize an initial meeting to discuss and assess the student's research, background, interests, and goals for the ca. 3 months traineeship. Establish a mutual understanding of the expectations. It is important to note that although the students have gone through a competitive application process, we are unable to assure the exact level of specific technical skills of each applicant. Therefore, it remains the responsibility of the host group to provide enough supervision to ensure that the student can perform the tasks.
- 2. **Project outline:** Try to develop a project outline with specific objectives, tasks, and milestones. Set time-bound goals to track progress throughout the traineeship period. We encourage this because for many of the awarded trainees, this is the first time they engage with a real-life research project.
- 3. *Timeline:* Create a timeline for the traineeship. Factor in time for training, data analysis, and reporting. This is foremost to support the learning experience for the trainees.

II. Communication:

- 1. **Designated mentor:** The student should have a designated mentor in the group, preferably a senior researcher, postdoctoral fellow or a senior PhD student, to guide the student throughout the traineeship (not just the research work, but also lab and institute policies, safe lab work guidance et cetera).
- 2. **Weekly check-ins:** The mentor should try to schedule weekly (or at least biweekly) one-on-one meetings with the student to review progress, provide guidance, and address concerns.
- 3. *Team integration:* Include the student in group meetings, seminars, and lab social activities to foster a sense of belonging and facilitate networking within the research group.

III Providing Feedback:

- 1. *Ongoing feedback:* Offer regular, specific, and constructive feedback on the student's performance, emphasizing both their strengths and areas for improvement.
- 2. *Final evaluation:* At the end of the traineeship, provide a comprehensive evaluation of the student's performance and discuss their achievements, challenges, and overall experience.

IV. Fostering Independence:

- 1. **Project ownership:** Encourage the student's independence (appropriate to their skill level) in their project and for making decisions related to experimental design, troubleshooting, and data interpretation.
- 2. **Problem-solving:** Provide support and guidance but allow the student to work independently to resolve issues and develop critical thinking and problem-solving skills.
- 3. **Skill building:** Identify any specific skills required for the project and ensure that the student receives proper training and opportunities to practice these skills.

V. Promoting Inclusivity:

- 1. **Supportive environment:** Create a welcoming atmosphere for the student and introduce the student to the lab. Encourage the student to actively participate in lab discussions and activities.
- 2. *Accessibility:* Ensure that the student has access to necessary resources, equipment, and support within the lab.

VI. Science communication and presentation skills:

- 1. *Communicating the traineeship experience:* In exchange for the scholarship provided by HiLIFE, the student is asked to write two blog posts on their traineeship experience and scientific learnings and publish those at HiLIFE Trainees blog site. The first post should be done prior to or just after starting the traineeship in the research group, while the second one is to reflect the outcome of the traineeship afterwards. Be ready to give feedback to the student on the blog posts to ensure that the details about your research group and the scientific work conducted are on point and such that can be released to the public.
- 2. **Social media utilization:** Actively share the student's blog posts and other releases related to the traineeship and scientific work on the research group's (or your personal) social media channels. HiLIFE EDU work group will also do boosting through various social media accounts.
 - HiLIFE Trainees X
 - HiLIFE Trainees Bluesky
 - HILIFE X
 - HiLIFE Bluesky
 - HiLIFE LinkedIn
- 3. **Presentation skills:** While HiLIFE EDU work group does not require the student to hold a presentation about the traineeship or scientific findings relating to it, if opportunities to do so emerge in the research group, feel free to encourage the student to take on the task.

These recommendations and suggestions are following the guidelines compiled by <u>Assoc. Prof. Juha</u> <u>Saarikangas</u> at the University of Helsinki, intended for students taking part in GMB-902 & NEU-406 research-intensive modules. HiLIFE EDU work group has adapted these guidelines as a supportive tool for the Research Trainee Scholarship program.

Given that these are mostly applicable also for any traineeship experience, we encourage the HiLIFE Research Trainee Scholarship recipients to share these to the research group they are joining to conduct their 3 months traineeship.

We hope that this guidance will help with the student – research group matchmaking, and trust that the
traineeship will be a great experience for both the host group and the awarded trainee. Let's train a new
generation of exceptional researchers in life sciences together!

Sincerely,

The HiLIFE committee for educational activities