

Guidelines for Postgraduate Students at AHRI



Armauer Hansen Research Institute (AHRI)

Research Training Directorate

2019/2020

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1. Introduction

The Armauer Hansen Research Institute (AHRI) is a Biomedical research Institute which was founded in 1970 through the initiative of the Norwegian and Swedish Save the Children organizations seconded by the Ministry of Health of Ethiopia. The Institute took its name from the Norwegian physician, Gerhard Henrik Armauer Hansen, who first described the leprosy bacillus (*Mycobacterium leprae*).

AHRI is an autonomous biomedical research institute under the Federal Ministry of Health of Ethiopia located next to a referral hospital with specialty in leprosy care and training (ALERT – All African Leprosy Rehabilitation and Training Center) in Addis Ababa, Ethiopia. Research areas focus on mycobacterial diseases, malaria, leishmania and other neglected tropical diseases, bacterial and viral infections, clinical trials, and now expanding to non-communicable diseases. The Institute has a network of national and international collaborators working together on various research areas, clinical trials, capacity building activities, and in training of MSc and PhD students.

a. General Rules

The general rules and guidelines that apply to researchers at AHRI also apply to students. This includes, but not limited to the following:

Ethical and Responsible Conduct: Students should take professional responsibility in the conduct of their research, while working at AHRI. Students should follow the “Singapore Statement on Research Integrity”¹ which contains 14 responsibilities of researchers that are based on four principles; honesty, accountability, professional courtesy and fairness, and good stewardship.

Students should act ethically, with the highest integrity, in compliance with all regulations, and institute’s policies, in all aspects of their work; be fair and principled in institute business transactions and other related professional activities; act in good faith when

¹ Singapore statement on research integrity. (<http://www.singaporestatement.org/>)

dealing with both internal constituents and external entities; reflect positions of trust and loyalty with respect to the institute and members of the communities.

Respect for Others in the Workplace: AHRI recognizes that staff and students are the most important resource. It is an institution that values respect for one another and it is committed to avoid/prevent any form of discrimination/harassment on any basis, including sexual, ethnic, or religious.

Avoidance of Conflict of Interest: Students should avoid conflicts of interest in their training/research work at AHRI; not improperly benefit from their positions of trust at AHRI for both legal and ethical reasons and are responsible for identifying potential conflicts and seeking appropriate guidance.

Responsible Conduct in Research: Students have significant responsibility to ensure that research is conducted with the highest integrity. This can be achieved by strict adherence to the research protocols starting from the field work and up to the write up of the results obtained.

Responsible Stewardship and Use of AHRI Property, Funds, and Technology: Students are expected to ensure that AHRI property, funds, and technology are used appropriately. This can be achieved by obtaining proper and adequate training prior to using AHRI property and following the guidelines provided.

Appropriate Use of the Institute Name and Logos: AHRI may regulate the use of its name and logos in order to protect the Institute's reputation and students are expected to protect the Institute name and logos from improper use.

Responsible Reporting of Suspected Violations and Institutional Response: Students are expected to report suspected violations of the Institute's policies.

If the student fails to respect and abide by the set rules and regulations, he/she will be called to a Students' disciplinary committee for further action, which may result in the discontinuation of support given to the student.

b. Objectives and Scope

The research training program at AHRI aims to train graduate (MSc/PhD) students at an international level to perform their research work. AHRI does not grant degrees but provides laboratory access (including materials and equipment), supervision/mentorship, and financial support for students to develop their research proposal, conduct research, analyze data, and write their thesis required to complete their graduate studies. To develop the student's competency, AHRI will provide and facilitate trainings in all areas relevant to postgraduate training. The objective of this handbook is to provide students with rules and regulations of the institute and proper guideline to conduct their research work during their graduate training program. It provides adequate information on the role and responsibilities of students, their advisors, and the institution during the research training program.

c. Organization of Postgraduate Training Program

The graduate student's research training program at AHRI accommodates different schemes. Students are registered at different universities in Ethiopia or abroad where they fulfill the course requirements for their graduate studies. At AHRI, students are provided with training and supervision to develop a research proposal, conduct their research work, analyze and present their data, and write their thesis. Students receive financial support for their research work and the amount varies depending on the scheme and requirement of the work. Students can be supported by AHRI core fund or through various competitive grants AHRI receives; and the benefits students receive may vary accordingly.

In terms of student supervision, students will have a primary university advisor and a co-advisor from AHRI and possibly additional project advisors either from abroad or locally. The duration of the students stay at AHRI will depend on the work, project, and availability of reagents at AHRI. On average, MSc students take 1-2 years and PhD students 3-4 years to complete their research work at AHRI (excluding course work). Throughout this period, students are expected to have several presentations of their work, joint meetings with their advisors from the university and AHRI and may take additional responsibilities from the Institute (AHRI) to participate on national, regional or international scientific meetings/conferences. Upon completion of the thesis work, students will have a mock defense at AHRI followed by a final thesis defense at the university. Students will be required to have clearance from AHRI in order to have their thesis signed by their supervisors before their defense.

2. Admission Process

a. Enrollment

Available student positions will be communicated to the training directorate by prospective advisors well in advance before the calendar year starts which will be reviewed and approved by Deputy Director General for Research and Innovation and the Director General. The student position will be publicly advertised and communicated to partner universities and researches.

Enrollment follows this public announcement and a thorough selection process which is based on merit and research experience. The selection process involves review of the applicant's documents and interview when deemed necessary. AHRI may invite external evaluators in addition to its in-house experts for selection of students. As much as possible those prospective advisors who have requested for student will be included in the process to ensure the suitability of the selected candidates.

Admission to the Institute as MSc and PhD research student will be made formal by the training directorate, on the approval of the Director General, and will specify terms and

conditions governing entry to and completion of the program of study. The training directorate will be responsible for AHRI registration, preparation and signing of the contractual agreement between the Institute and the student, provision of student ID and the conduct of orientation session on institutional policy, data sharing policy, research ethics, gender, student facility etc.

b. Supervision

Each research student will be assigned an AHRI advisor, supervisor, and/or mentor in addition to the university advisor, who will be the primary source of information and guidance. The AHRI advisor will be appointed as early as possible after students are accepted. In some cases this may be delayed until the student has had the chance to meet members of staff to discuss possible project areas in more depth. Students should develop their research work with their advisors and have an agreed plan of work which should be submitted to the Training Coordinator as soon as possible.

If students are unhappy with the arrangements for supervision, particularly if the student wants to change advisors, he/she should first try to discuss the situation with the assigned advisor. If, for any reason, the student chooses not to do this, then he/she should contact the training directorate. It is the responsibility of the training directorate, in consultation with the Director General and Research and Innovation Deputy Director General, to approve a change of supervisor/advisor.

Supervisors follow, monitor, and supervise the student's daily activities. He/she can train the student and works closely with the student to design, optimize, and troubleshoot activities related to the research project. The supervisor will also provide input in the analysis and write up of the thesis.

Advisor is a senior member of the institution who will provide overall guidance to the student in designing and developing the study as well as analyzing and writing up of the

thesis work. A student may have either or both a supervisor and an advisor. This will be determined based on the need and availability of the experts at AHRI.

Co-investigators work with the student on the research project with adequate contribution as to earn this title. Co-investigators will be considered in co-authorship of the manuscripts to be developed from the research work based on their contributions. For more information on authorship, please refer to the recommendations of the International Committee of Medical Journal Editor's (ICMJE) on "Defining the Role of Authors and Contributors"².

A student may have also a mentor at AHRI. This maybe in addition to a supervisor or advisor, or instead of one of the former. A mentor is an experienced and senior person within the institution who takes on the role of guiding the students through his graduate studies and career development.

3. Roles of Students and Supervisors/ Advisors/ Mentors

a. Students roles and expectations

The Institute expects all graduate research trainees to accept their obligation to act as a responsible member of the Institute's academic community, and to take ultimate responsibility for their research program (including subject-specific research, personal and professional skill development and training) and for developing an appropriate working relationship with their supervisor/advisor/mentor. The main elements of the student's research program should normally be reviewed by the supervisor as early as possible. The discussion will include establishing regular meetings with the supervisor, agreeing on aims and objectives for the first year, and reviewing the facilities available to the student, such as laboratory provision (bench space); library provision; access to appropriate computer facilities, including e-mail and the internet. The meeting/discussion with the supervisor can also be done either in person or

²<http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html>

virtually (through skype or e-mail). At a minimum, the student is required to have quarterly scheduled meetings with the supervisor which should be minuted. The report/minute of these quarterly meetings must be submitted to the Research Training Directorate.

Students are ultimately responsible for the proper conduct of their research work, analysis and presentation. This includes acquisition of materials, developing standard operating procedures, optimizing the experiments, conducting the research work, writing their thesis and ultimately manuscript(s). They are required to submit regular reports and present their work at AHRI lab meetings and timely write up and submission of their thesis. Nonetheless, students need to obtain adequate training, assistance and supervision in all aspects of their research work from their supervisors as well as the Training Directorate of AHRI.

Students should not hesitate (or feel in any way inhibited) to contact the Research Training Directorate (RTD) outside their regular meetings and the students should feel free to consult other Institutional officials as necessary, including the Director for Research Training (DRT), the Institutional Advisor or Deputy Director General for Research and Innovation on matters relating to their research work at AHRI. Graduate Research Trainees should be aware that the RTD is not expected to perform the academic role of the Institutional Supervisor or Advisor. However, Graduate Research Trainees may seek general academic advice from the Research Training Coordinator (RTC). Graduate Research Trainees should feel free to seek advice from the RTC on academic-related matters including applications for research funding, conferences and seminar attendance, publication and career plans etc. It is particularly important that Graduate Research Trainees should consult the RT if they experience any difficulty with their Institutional supervisor/ Advisor. Any matters concerning thesis defense and examination procedures may be discussed with the RTC.

In order for the student to get the most benefit from the supervisor/ advisor/ and/or mentor, students should follow a few basic guidelines. The student is expected to:

- Discuss with the supervisor and advisor the type of guidance and comment that he/she finds most helpful.
- Agree on a regular schedule of meetings.

- Not hesitate to take the initiative in raising problems or difficulties, however elementary they may seem.
- Try to maintain progress in accordance with an agreed plan of work, and if this is not possible, discuss the reasons with the advisor as soon as possible.
- keep systematic records of all that has been attempted and accomplished (Diary/Portfolio)
- take responsibility for their own personal and professional development, including maintaining their laboratory Logbook
 - The Logbook shall be given to the student by AHRI and must be returned to the institution at the end of training. A student may keep a copy of the logbook.
- Submit data generated to the Data Management Unit on a regular basis. It is mandatory to submit the data on a quarterly basis.
- Hand in written work (including thesis drafts) sufficiently ahead of time to allow advisors time to review the work.
- Initial, and thereafter annual, registration in September of each year with the Institute (RTD) as a research student.
- set and keep timetables and deadlines, including planning and submitting work as and when required and generally maintaining satisfactory progress with the program of research, and responding to any guidance/feedback provided by supervisors and advisors;
- complete a bi-annual progress report which must be sent to the research training Directorate. Failure to make adequate progress could result in discontinuation from the program;
- attend at any Institutional induction program and seminar and any development opportunities (research-related and other) that have been identified as appropriate for the research student to attend;
- informing their supervisor(s) of other people with whom their work is being discussed;
- seek out and make regular contact with the supervisor(s), and raise any problems of access with the supervisor(s) in the first instance;

- prepare adequately for meetings with supervisors and keep notes/records of such meetings to send to supervisor to agree and sign (a quarterly meeting is a minimum requirement);
- making their supervisors aware of any specific needs or circumstances likely to affect their work (including learning disabilities/difficulties, circumstances that may require an interruption to study);
- The student should have familiarity with documentation, regulatory or otherwise, associated with and incumbent upon research students, including academic regulations, health and safety, intellectual property and research ethics;
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- Above all, be open and frank; with good communication, the student is likely to make good progress.

Graduate research trainees are expected to submit a progress report on their research project to the Training Coordinator bi-annually. The report should include a list of completed training, travels and any specific training needs and provide a comprehensive overview of the student's progress. The student can also report any concerns with his/her academic progress which will be highlighted to the Advisor, DRT, and RTC. If the student does not submit a report, he/she will be called to a meeting with the DRT to discuss the progress. If the student does not respond, it will have consequences on his/her attachment to AHRI. The latter may result in discontinuation of institutional support for the research training, including financial support for field work, procurement, etc.

b. Supervisors roles and expectations

The Institutional Supervisor will be the main source of information and advice throughout the course of a student's research at AHRI. Their responsibilities include giving early advice about the nature of research and the standard expected, and about planning the framework of the research program; arranging financial support for the research; advising on the literature sources, and attendance at lectures and classes; arranging training needed in research

techniques; meeting with the student regularly to discuss the work and student's skills and training needs; directing the student's efforts as necessary; and giving assessments of the student's progress.

All students will have a member of the institution as a main supervisor. Additional supervisor(s) maybe assigned, especially when a project involves drawing upon expertise from more than one area. When there are multiple supervisors, they should have joint meetings to ascertain a common understanding of the research work and progress made by the student as well as clear understanding of who is the main supervisor.

In order for the student to get the most benefit, supervisor(s) and students (as applicable) should follow the following basic guidelines:

- Knowledge of the student's subject area and theoretical or practical approach to be applied, including providing satisfactory guidance and advice;
- Establishing and maintaining regular supervisory sessions between student and supervisor, normally weekly (or as agreed upon on the work plan). Both supervisor and student should keep copies of notes made of each of the supervisory meetings and these should be signed by both supervisor and student. A quarterly meeting report shall be submitted to the RTD.
- Request written work from students as appropriate;
- reading and critically commenting on written work as it is produced and identifying, where appropriate, amendments to improve the work within an agreed time-period;
- making the student aware of either progress or the standard of work is unsatisfactory, and arranging for any necessary supportive action;
- ensuring availability of capacity (resource, equipment, man-power) to assist and train students in order to enable students to conduct their work appropriately;

- ensuring, where appropriate, that the data, results and information gathered by the student is given to the data management unit and making final database freely available to the student;
- ensuring that the student is aware of standard policy on good scientific practice;
- advising students about courses which may complement their field of research;
- introducing the student to meetings of learned societies, seminars and workshops, and to other researchers in the field;
- advice to the student on publication and publishers, on writing up the research in the form of papers and the final thesis, and ensuring that the student receives due recognition for contributions to any publication according to the usual conventions in the field;
- ensuring that the student is aware of the need to exercise probity and conduct of his/her research according to ethical principles, and implications of research misconduct, including an understanding of plagiarism;

4. Contents of Training

a) Proposal Development

Proposal development is the initial stage of a research work at AHRI. All students are required to have a proposal for their research work and to obtain ethical clearance from the AHRI-ALERT Ethics Review Committee. Students will receive training from the RTD and guidance from their supervisor on proposal development. Students will present their proposal at a Lab meeting to AHRI researchers and students before submitting to the AHRI-ALERT Ethics Review Committee for ethical clearance. It is the duty of the student to write a comprehensive proposal and for the supervisor to review and edit the proposal.

b) Trainings Provided at AHRI

AHRI will provide trainings to students that will build their capacity and enable them to carry out their research work according to best international standards and practices. In general, the following short-term trainings will be provided to all students:

- Orientation, including Institutional Policy and Gender Equality
- Basic Research Ethics
- Good Clinical Practice (GCP)/ Good Clinical Laboratory Practice (GCLP)
- Proposal Development
- Biosafety and Bio-risk management
- Data Management and Biostatistics
- Scientific Writing
- Scientific Presentation
- Laboratory Techniques (Immunology, Microbiology, and Molecular Biology)

In addition, students will receive in depth training on specific areas as required by their research work and they will need to be certified by the laboratory management center of AHRI in these areas prior to conducting their work independently. This can be done as part of an organized workshop or training, or on an individual basis with the expertise available at AHRI. In order to work on some of the more sensitive equipment and facilities, such as the P3 TB laboratory, PCR and real-time PCR, flowcytometry, and sequencing machines students will need to receive training followed by certification and authorization prior to performing independent work.

c) Research Work

The research project is the main part of a student's graduate program and must be able to serve as the basis for the thesis. The work may be organized as an independent project or as an integrated part of a larger research project. In the case of the latter, the role of the student must be clearly defined and structured. Students at AHRI will have adequate facility, equipment, and materials to do their research work. If necessary and depending on availability

of funds and international collaboration, students may have the opportunity to receive training and/or fulfill part of their research work at institutions abroad.

d) Research Ethics

Ethical conduct of research projects is a mandatory requirement of all graduate students and researchers at AHRI. All researchers will be required to take a “Research Ethics” training in order to conduct their projects that involve human participants. Therefore, all research proposals involving human participants must be reviewed and approved by the AHRI-ALERT Ethics Review Committee (AAERC) prior to the commencement of the research work. All information regarding the guidelines and regulations of the AAERC can be found at the RTD office. In brief, protocols submitted with all the requirements of the ethics committee are reviewed by regular meeting which is held once a month, or by expedited review procedure, which is determined by the AAERC Secretariat based on the risks associated with the project and vulnerability of study participants. Depending on the review procedure and the number of applications submitted, the review process may take from two weeks up to two months. Some research projects may need approval from the national research ethics review committee (NRERC) and where samples are transported abroad, authorization is required from the Ethiopian Biodiversity Institute.

For research work that does not involve human participants, it is recommended to obtain exemption from the AAERC. This involves submission of the protocol to the AAERC for review by the Secretariat. If there is no need to have ethical clearance, an exemption letter will be issued to the investigator.

A major aspect of research ethics and research integrity that should be addressed is avoidance of plagiarism. Plagiarism is the act of presenting someone else’s work or idea without adequate acknowledgement of its source, as though it were one’s own. Plagiarism is a form of fraud. Plagiarism may sometimes occur without the intention of the student. Therefore, it is the responsibility of the students to read about plagiarism and have adequate understanding of this topic in order to take the right measures to avoid plagiarism. AHRI has a firm stand on this issue

and disciplinary actions will be taken if the work of students contains plagiarism. The latter may extend to withdrawal of the student from the research training program and further communication of his/her misconduct with the university. A good reference on guidelines for avoiding plagiarism is “Avoiding plagiarism, self-plagiarism, and other questionable writing practices: A guide to ethical writing”.³

e) Laboratory Facility

Students have access to use the laboratory facilities at AHRI as per their research project. In addition, students should take the opportunity to gain knowledge and skills in as many areas as possible without losing track of their intended project. It is important that students abide by the rules and guidelines of the laboratory management center. Students should contact the lab manager before entrance to the laboratories and make sufficient arrangements with regards to access to the facilities they will be trained on or use; who will train them; where and how they obtain reagents, consumables, and other materials; and sample storage and usage.

Sample storage and usage is a critical element of research project. As such, students will be given adequate space for sample storage prior to sample collection and they shall follow the institution's procedures for sample storage by filling out the necessary forms and maintaining sample repository databases. There should be clear and prior agreement between the student and AHRI on sample storage, usage, and disposal or long term bio-repository. Although the student is the primary investigator of his/her research project, AHRI holds ownership of samples. If and when samples are sent abroad, both institutional and national ethical and regulatory guidelines shall be followed. For the latter, approval should be obtained from the institutional and national ethical committees and final authorization should be obtained from the Ethiopian Biodiversity Institute.

³ <http://ori.hhs.gov/education/products/plagiarism/>

f) Knowledge dissemination

Teaching and knowledge dissemination are part of a graduate program. Students should be willing to teach and disseminate knowledge they receive through their training to other students or staff both individually or as part of an organized workshop or training. The research work should also be conducted with the aim of publication in a peer-reviewed journal. In addition, knowledge and research findings should be disseminated at conferences and to relevant regulatory bodies to improve policies and health care in the country based on the evidence generated by the researcher.

5. Assessments

a. Student reports

Graduate students at AHRI are required to submit reports to the Training Directorate every six months. This will be done using a reporting template and it will enable the institution to evaluate the timely and proper progress of the student. Advisors from AHRI and the University are required to note satisfactory progress is being made and sign on the progress.

b. Joint meeting/assessment with University and AHRI advisors

The Training Coordinator at AHRI will also organize a joint meeting between the university and AHRI advisors of the student every six months. If the student has additional advisors from other centers or abroad, effort will be made to have all advisors in the joint meeting at least once a year until the completion of the study to discuss progresses made in the project.

6. Financial Planning and Guidelines

Finance Schemes

Students who join AHRI receive financial support to conduct their research work either from core budget or specific grants allocated to students. Expenses related to their research work; including, materials and reagents, field activity (transport, per-diem, payment to participants and study nurse/physician/tracer), and training activities will be covered accordingly. There is

no stipend allocated to students who join AHRI in the core budget scheme. However, special grants may have allocated budget for stipend which will be provided to students accordingly.

Prior to any request for research related payments, students should first have the AHRI/ALERT Ethics Review Committee Approval, prepare detailed financial proposal which is approved by the student's advisor and authorized by the Director. Students should also discuss with AHRI's Finance office and follow the institutional guidelines while requesting, using, and settling financial expenditures.

It is the responsibility of the student (in consultation with their advisor) to order the purchase requisitions as early as possible and making sure it contains all the necessary specification details.

Advance payments received from AHRI need to be settled within seven days with maximum of one month.

Funding for Travel

In general, AHRI is the designated home of the students in terms of research work. Therefore, subsistence and allowance for project related expenses will be provided to students when they travel to other destinations (for work, training, and/or conference/workshop) on a case by case basis and with the approval of their Supervisor and the General Director of AHRI. In exceptional circumstances, where the student's research work is primarily based at another site, he/she may be entitled to funding for transport, accommodation, and per-diem to come to AHRI.

Students will be required to request for an advance from Finance office for the specific activity the budget is to be used for and use it accordingly. Students need to discuss with Finance office for details of procedures involved in all financial transactions and respect and abide by the regulations of the institution. For any research and training related travel within Ethiopia, the institutional rate applies for per-diem which includes accommodation and meals. Until specific rate is defined, payment for research participants and daily labor will be made by negotiation

taking the market into consideration and prior agreement which should be approved by the and Finance office.

7. Clearance

All students are required to have clearance from the Research Training Directorate before the defense of their thesis. This includes settling all advances and debts with the Finance office, returning all materials to the main store, providing all data to the data management unit, and ensuring that specimens are properly stored at AHRI. In the event that this is not done and there is debt that is not cleared, the student may forfeit the right to have their guarantor released.

8. Linked documents


In addition to this guideline, students are responsible for understanding and abiding by the following guidelines.

1. Data transfer and sharing guideline (Knowledge Management Centre)
2. Standard operating procedures and guidelines of the Laboratory Management Centre
3. Guideline for Specimen Storage and Usage

Annex 1. AHRI Guidelines for Postgraduate Students at AHRI Signature Page

Dear Students,

After reviewing the information contained in this guideline, please sign and return this page to the Research Training Office.

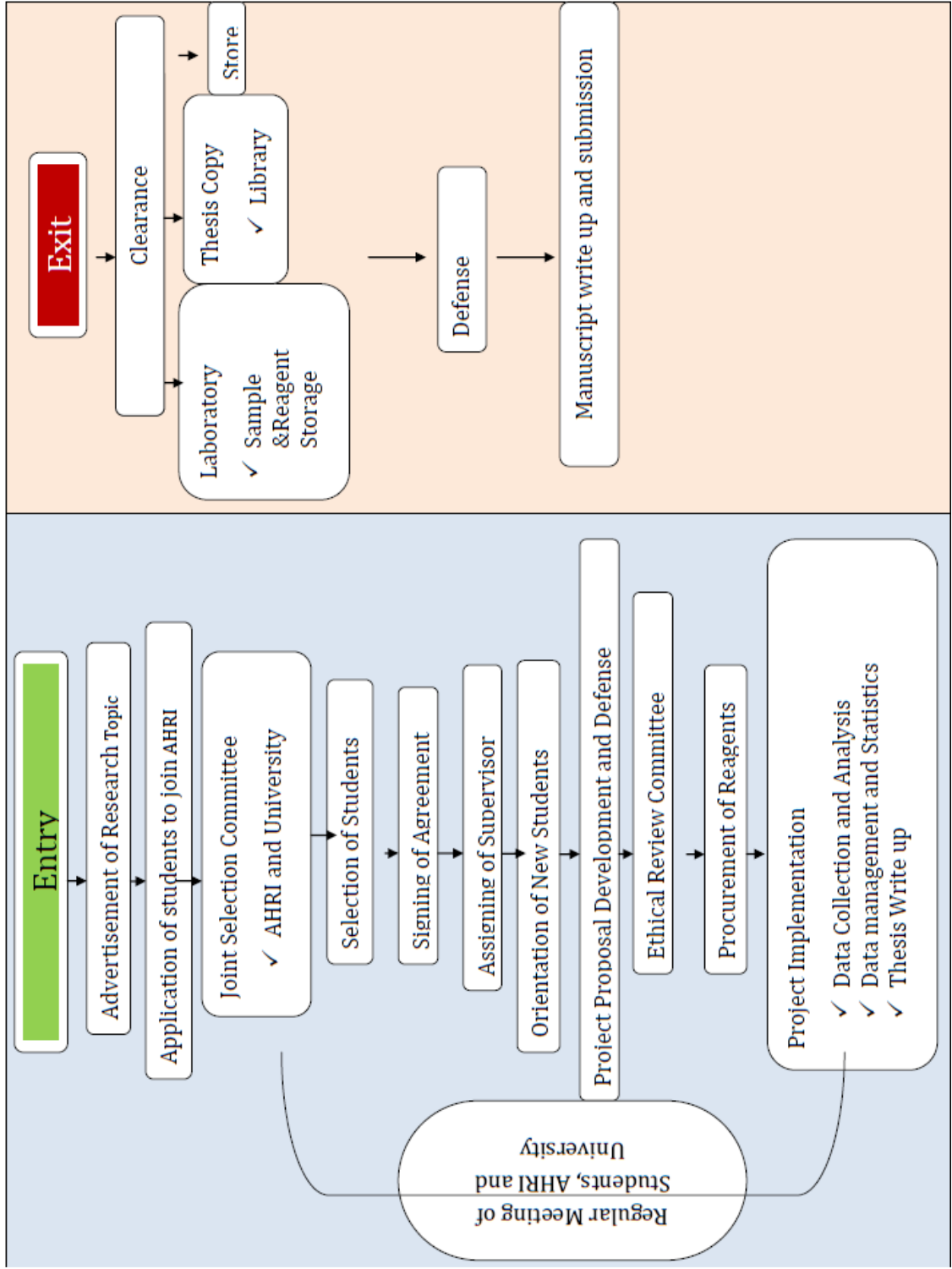
	Research Training Directorate	Page 1 of 1
	Guidelines for Postgraduate Students at AHRI Signature Page for Students	

I have received the Guideline for Postgraduate Students at AHRI and understand the expectations and responsibilities of students and AHRI supervisors and advisors. I agree to abide by the regulations and guidelines of AHRI. I agree to follow the clearance procedure of AHRI before my thesis defense. I understand that my University advisor will need the AHRI clearance prior to my thesis defense. I accept that the guarantee I sign with AHRI will be kept until I complete the clearance process.

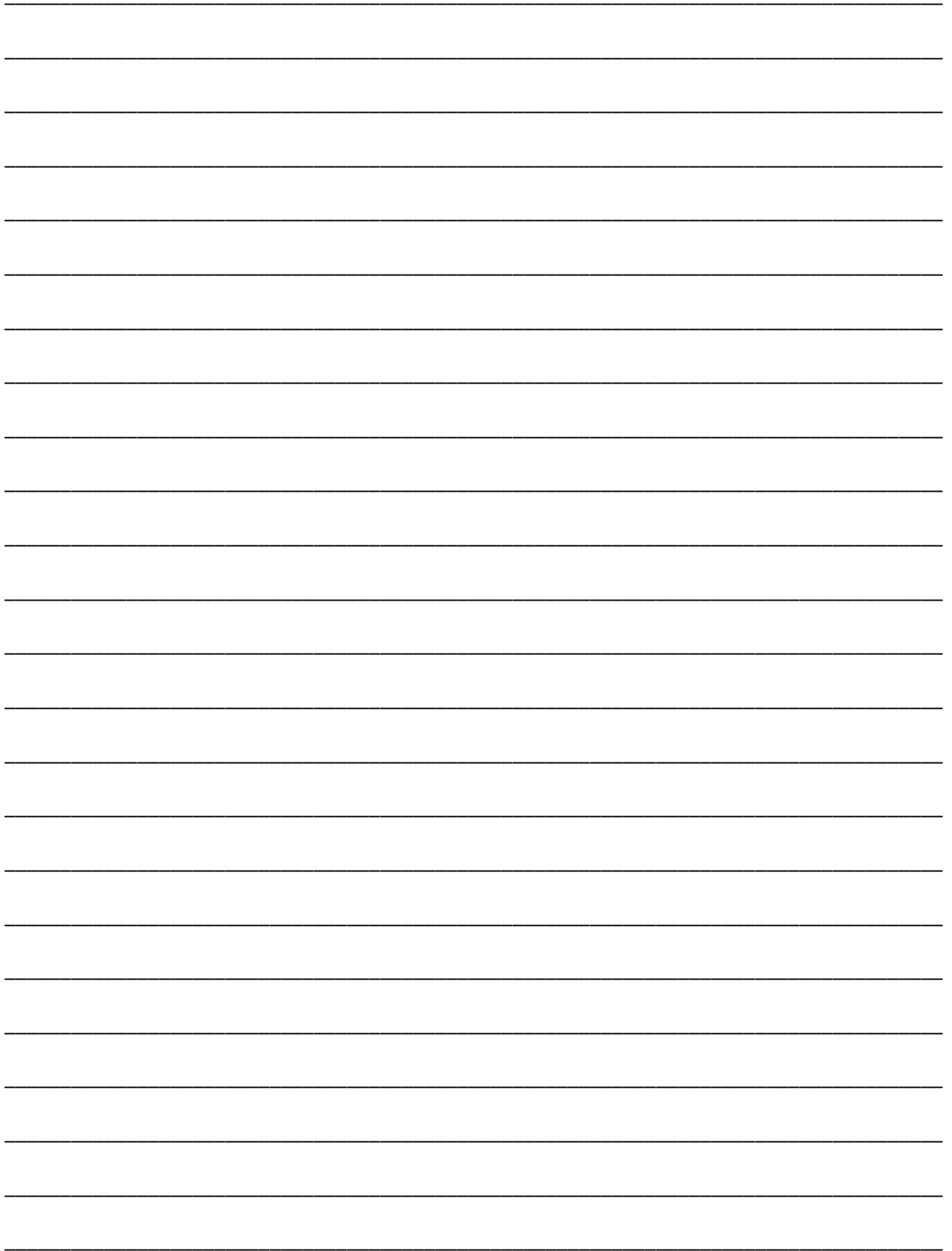
Student's Name	Signature	Date

AHRI Advisor's Name	Signature	Date

University Advisor's Name	Signature	Date



Annex 2.
Flow
chart for
Graduat
e
student
program
at AHRI



Armauer Hansen Research Institute (AHRI)

Research Training Directorate

2018/2019

