

TIGEM-Open University PhD program

Regulation

The Human Genetics PhD program is delegated through the collaborative efforts of TIGEM and the British Open University. Successful completion of the program, which is supported by TIGEM facilities, leads to a Ph.D. title conferred by the Open University. The graduate program is designed to prepare doctoral students for research and academic careers in the field of Human Genetics.

Entry qualification to the PhD program:

Students holding a Masters university degree are eligible to apply for the TIGEM-Open University PhD program. Degrees must be in Biology, Medicine, Chemistry, or Biotechnology to be suitable for admission.

Italian and non-Italian applicants must have sufficient knowledge of the English language for program eligibility.

Admission

Candidates applying to the program should submit an application form, which can be downloaded from the TIGEM web site, and two reference letters. On the basis of this information, the Committee selects students and invites them to TIGEM for further assessment. TIGEM covers travel and accommodation expenses, when necessary.

Invited candidates present an oral seminar in English, during which they present the background and results of an experimental thesis performed during their undergraduate studies or a past experience in a research lab. Additionally, individual

interviews are held to determine the applicants' scientific potential and motivation. Successful presentations and interviews are contingent upon the applicants' knowledge of English. The evaluation process is managed by the Research Degree Committee that is composed by two permanent members, i.e., the ARC Degree Coordinator, the TIGEM PhD Program Dean and by at least two additional TIGEM investigators that rotate on a yearly basis. Selected candidates will be put forward for registration that requires formal approval by the Open University.

The initial period of studies lasts three years and may be extended to four years. Students are assigned to the laboratory that best suits their research interests and has space to accommodate them.

The Program: Training activity

During the first (probationary) year, students organize and begin research in their thesis laboratories under the direction of their respective Director of Studies. Students meet with an external supervisor at the end of each year to discuss research progress, future strategies and troubleshooting methods. At the end of the program, students must submit a doctoral thesis, which is evaluated by expert readers and then discussed with an external examiner committee. Additionally, students are expected to submit a high-quality publication of the experimental work carried out during the course of the program, or at least submission of a manuscript concerning such work, prior to the discussion of the doctoral thesis.

The students are also required to participate in the following training activities:

1. Attendance at **TIGEM seminars**. Seminars are held weekly and are presented by TIGEM researchers and external speakers. These seminars inform PhD students on the latest developments in different areas of genetics and offer the unique opportunity of personal discussions with each seminar speaker.

2. Students will present research progress at least once a year in **TIGEM data-clubs**. They provide a unique opportunity for students to learn how to present their data in a more formal setting and to expose themselves to useful critical discussion of data.

3. During the last trimester of the probationary year, students should submit a **thesis proposal**. The proposal should introduce the topic of study, present the thesis

question and outline experiments to be accomplished during a three-year period. For each experiment proposed, students should discuss difficulties, possible outcomes and interpretations of the results. The proposed experiments, and even the project, may change in the following years depending on the results.

It is important that the experiments proposed be rational and feasible in order to complete them within the allowed timeframe. Preliminary data are welcome, but are not a requirement.

The thesis proposal will be evaluated by a commission composed of each student's supervisor and two other readers (either TIGEM group leaders or staff scientists/senior post-docs).

The student is expected to do an oral presentation to the thesis commission of the proposal for research and respond to questions from the committee, which establish the student's depth of knowledge and analytical ability to discuss the thesis topic. Usually, this presentation coincides with a TIGEM data club and therefore consists of a first session open to all TIGEM researchers and of a second session whose participation will be restricted to the student and the thesis committee.

The student should hand a copy of the proposal to the commission one week before the oral defense. The oral defense will consist of a SHORT presentation followed by a discussion (mini-viva format). If the thesis committee feels that the proposed experiments do not suitably address the question under study or that the student is not able to defend the proposal appropriately, the student will be asked to rewrite the proposal.

The proposal should be composed of the following sections (Title, Abstract of research, Specific aims, Background, Preliminary data, Methods, References) and stay within the limit of 10 pages.

Payment of fees:

Annual fees to the Open University are paid by TIGEM on behalf of the students. The fee is paid with research funds of the Director of Studies of each student.

Information for the students:

All those interested in the TIGEM PhD program can access information about the program, the admission procedure, organization and regulation by contacting:

• Dr. Valeria Rotoli, Dean Assistant

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- Dr. Sandro Banfi, ARC Degree Coordinator;
- Dr. Graciana Diez-Roux, PhD Programme Dean;
- Ms. Barbara Zimbardi, program Administrative Assistant.

Students may also contact phdprogram@tigem.it to make enquiries.

Students admitted to the program are given detailed information about its organization and regulations upon entry into the program and at the beginning of each year. This information is first provided during a meeting organized by Dr. Sandro Banfi. Furthermore, a document containing the "TIGEM regulations for PhD students" is distributed to all the students.

Students can easily contact Dr. Sandro Banfi for any information during the entire year.

Arrangements for student progression: third party monitoring

Besides the supervision arrangements required by the Open University, TIGEM has established a third party to monitor the students' progression. This third party is a scientist not directly involved in the student project, who provides pastoral support for the student. Students are strongly encouraged to meet their third party monitors at least one a year to discuss about all the different aspects concerning their program.

Supervision arrangements:

TIGEM expects that the Director of Studies stay in close contact with the student and direct his/her work during the entire course of studies. Students and Director of Studies should be held a meeting on a regular, at least weekly, basis. It is mandatory to keep notes of formal supervision meeting that are held on a monthly basis (at least 10 minuted reports/year).

Meetings with the entire Supervision panel should be organized at least once a year. The students are required to meet their external Supervisor at least once a year. It is suggested to students to invite their external Supervisors to TIGEM during the first year of studies. During this occasion, the Supervisor usually gives a seminar to the Institute and meets with a group of students. At least half a day is devoted to discussing student progress, together with the student and the Director of Studies. Usually this meeting is organized before the student submits his/her probationary report. A discussion addressing whether the student is eligible for the PhD is also

held. In the following years, meetings between students and Supervisors are organized at TIGEM or in the Supervisor's laboratory or in other appropriate modalities (e.g., during scientific meetings). In the impossibility of arranging face-to-face meetings teleconferences (via Skype) are also considered appropriate means of discussion. Students are asked to maintain constant contact with their Supervisors by e-mail.

In the case of absence of a supervisor/director of studies, the ARC program coordinator, in agreement with the remaining members of the supervision panel and the student will appoint a new supervisor within three months at the latest.

Finally, newly appointed TIGEM supervisors are strongly encouraged to utilize OU online supervision modules on the Virtual Research Environment to support initial supervisor training, and ongoing supervisor development.

Studies in collaboration with external bodies:

TIGEM allows students to perform part of their projects in collaboration with external bodies. However, this collaboration should be approved by both the Director of Studies and the second Supervisor, and should be clearly necessary for the development of the student's project. Students are allowed to spend up to six months in external laboratories to pursue specific project.

Procedure for dealing with plagiarism and fraud:

If plagiarism and/or fraud are suspected, the TIGEM PhD research Committee should be immediately notified by the Director of Studies and/or the second Supervisor. The Committee is entitled to assess the situation and take the appropriate actions. If fraud and/or plagiarism are discovered, the involved student is forced to withdraw from the PhD program.

Complaint mechanisms

The TIGEM encourages students to raise all issues at an early stage; this is accomplished by encourages communication between the student and the staff members. If that daily communication fails, the students are encouraged to informally raise complaints to their third party monitor or to the Degree Coordinator or to the PhD Programme Dean, according to their prefence. It is the responsibility of the contact chosen to mediate the problem and to speak with the parties involved.

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The formal complaint procedure should normally be used only when the complaint is too serious to be dealt at an informal level or when informal action failed to resolve the issue to the satisfaction of the student.

A formal complaint can be made in writing and addressed to the Coordinator of the graduate program, Dr. Sandro Banfi. If the complaint relates to the Coordinator, the complaint can be addressed to the PhD Programme Dean, Dr. Graciana Diez-Roux.

The Coordinator shall send the complaint to the student's Third Party monitor and to the staff member(s) against whom the complaint has been made. The student's Third Party monitor will be responsible for addressing the issue with the staff member involved.

The staff member directly involved in the complaint shall have the opportunity to respond to the complaint in writing, to the Coordinator and to the student's Third Party monitor within five days of receipt of notification.

The Coordinator, with the student third Party monitor or another staff member (in the case that the advisor is involved in the complaint), shall take all the steps necessary to establish and clarify the nature of the complaint. This commission may determine:

that the complaint is inappropriate within the grievance procedure and should be dismissed;

that the complaint can be resolved amicably, in which case, the Coordinator and appointed staff member shall endeavor to do so;

that a small panel be set up to consider the complaint and that its membership include at least one person from outside TIGEM;

that the complaint be upheld.

If the decision is that the complaint be upheld, the Coordinator shall take appropriate action. This may include:

that appropriate supervision be provided (this may involve changing the student's supervisory arrangements);

that the relevant equipment/resources be provided;

that the focus of the project be reviewed;

that the TIGEM take appropriate action in respect of the member of staff directly involved.

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The Coordinator should make the final decisions known in written to the student, within 10 days of receiving the written complaint. The concluding action should be sent to the student's Third Party and Supervisors and other member of staff directly involved.

IMPORTANT LINKS

For any additional information on ARC Open University Programs and on the Open University Graduate School Network, please refer to http://www.open.ac.uk http://www.open.ac.uk/students/research/ and http://www.open.ac.uk/research/degrees. For forms and guidance files, including the Research Degrees in Affiliated Research Centres Handbook, please refer to http://www.open.ac.uk/students/research/content/forms-and-guidance-z-0 or http://www.open.ac.uk/students/research/documents/lists/arc-supervisors Other essential documents concerning Open University policies and regulations are http://www.open.ac.uk/students/charter/essential-documents/a-to-z. available at Please also note the access to the OU library resources through the link http://www.open.ac.uk/library/.

A final useful resource is represented by the TIGEM Student Handbook, which is provided to all students upon registration.