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Date: Date.

# **External Evaluation** Report

## (Conventional-face-to-face programme of study)

- **Higher Education Institution: European University Cyprus**
- **Town: Nicosia**
- School/Faculty (if applicable): School/Faculty
- Department/ Sector: Department of Life Sciences & **Department of Medicine (Interdepartmental)**
- Programme of study- Name (Duration, ECTS, Cycle)

In Greek:

**"Βιολογία του Καρκίνου και Κλινική Ογκολογία (3** Έτη/180 ECTS, Διδακτορικό)"

In English: Cancer Biology & Clinical Oncology (3 years/180 ECTS/PhD)

**Programme Name** 

- Language(s) of instruction: English
- Programme's status: New
- Concentrations (if any):

The present document has been prepared within the framework of the authority and competencies of the Cyprus Agency of Quality Assurance and Accreditation in Higher Education, according to the provisions of the "Quality Assurance and Accreditation of Higher Education and the Establishment and Operation of an Agency on Related Matters Laws" of 2015 to 2021 [L.136(I)/2015 – L.132(I)/2021].

#### A. Introduction

This part includes basic information regarding the onsite visit.

This is the second visit of SI and NT who evaluated the MSc program in 2019 and the first visit of KG. We were very impressed from the development of MSc program since 2019. This is now an active, productive educational program with excellent students and we congratulate EUC for this achievement!

The site visit included meeting and presentations by the faculty and the administrative staff as well as a selected group of students. This was followed by a tour of the laboratories and of the library. We also had a glimpse of the fine classes for the medical/physiotherapy students. Clearly the EUC is a fine institution!

During this visit we were impressed by the overall vision, by the scientific presentations and also, especially, by the student representatives (Mscs and PhD candidates from the public health program). The enthusiasm and dedication of the staff and faculty is highly commendable.

## **B. External Evaluation Committee (EEC)**

Name	Position	University
Prof Shai Izraeli	Chair	Tel Aviv University, Israel
Prof Nektarios Tavernarakis	Member	University of Crete, Greece
Prof Kevin Gaston	Member	University of Nottingham
Ms Ioanna Papaioannou	Student representative	Cyprus University of technology
Name	Position	University

## C. Guidelines on content and structure of the report

- The external evaluation report follows the structure of assessment areas.
- At the beginning of each assessment area there is a box presenting:
  - (a) sub-areas
  - (b) standards which are relevant to the European Standards and Guidelines (ESG)
  - (c) some questions that EEC may find useful.
- The questions aim at facilitating the understanding of each assessment area and at illustrating the range of topics covered by the standards.
- Under each assessment area, it is important to provide information regarding the compliance with the requirements of each sub-area. In particular, the following must be included:

## **Findings**

A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

## **Strengths**

A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

## Areas of improvement and recommendations

A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

- The EEC should state the compliance for each sub-area (Non-compliant, Partially compliant, Compliant), which must be in agreement with everything stated in the report. It is pointed out that, in the case of standards that cannot be applied due to the status of the HEI and/or of the programme of study, N/A (= Not Applicable) should be noted.
- The EEC should state the conclusions and final remarks regarding the programme of study as a whole.
- The report may also address other issues which the EEC finds relevant.

## 1. Study programme and study programme's design and development (ESG 1.1, 1.2, 1.7, 1.8, 1.9)

#### **Sub-areas**

- 1.1 Policy for quality assurance
- 1.2 Design, approval, on-going monitoring and review
- 1.3 Public information
- 1.4 Information management

## 1.1 Policy for quality assurance

## **Standards**

- Policy for quality assurance of the programme of study:
  - o has a formal status and is publicly available
  - supports the organisation of the quality assurance system through appropriate structures, regulations and processes
  - supports teaching, administrative staff and students to take on their responsibilities in quality assurance
  - o ensures academic integrity and freedom and is vigilant against academic fraud
  - guards against intolerance of any kind or discrimination against the students or staff
  - o supports the involvement of external stakeholders

## 1.2 Design, approval, on-going monitoring and review

## <u>Standard</u>s

- The programme of study:
  - o is designed with overall programme objectives that are in line with the institutional strategy and have explicit intended learning outcomes
  - o is designed by involving students and other stakeholders
  - o benefits from external expertise
  - reflects the four purposes of higher education of the Council of Europe (preparation for sustainable employment, personal development, preparation for life as active citizens in democratic societies, the development and maintenance, through teaching, learning and research, of a broad, advanced knowledge base)
  - o is designed so that it enables smooth student progression
  - is designed so that the exams' and assignments' content corresponds to the level of the programme and the number of ECTS
  - o defines the expected student workload in ECTS



- includes well-structured placement opportunities where appropriate
- o is subject to a formal institutional approval process
- results in a qualification that is clearly specified and communicated, and refers to the correct level of the National Qualifications Framework for Higher Education and, consequently, to the Framework for Qualifications of the European Higher Education Area
- is regularly monitored in the light of the latest research in the given discipline, thus ensuring that the programme is up-to-date
- is periodically reviewed so that it takes into account the changing needs of society, the students' workload, progression and completion, the effectiveness of procedures for assessment of students, student expectations, needs and satisfaction in relation to the programme
- o is reviewed and revised regularly involving students and other stakeholders

#### 1.3 Public information

#### Standards

- Regarding the programme of study, clear, accurate, up-to date and readily accessible information is published about:
  - o selection criteria
  - intended learning outcomes
  - o qualification awarded
  - o teaching, learning and assessment procedures
  - o pass rates
  - o learning opportunities available to the students
  - o graduate employment information

## 1.4 Information management

## Standards

- Information for the effective management of the programme of study is collected, monitored and analysed:
  - key performance indicators
  - o profile of the student population
  - o student progression, success and drop-out rates
  - o students' satisfaction with their programmes
  - o learning resources and student support available
  - career paths of graduates
- Students and staff are involved in providing and analysing information and planning follow-up activities.

## You may also consider the following questions:

- What is the procedure for quality assurance of the programme and who is involved?
- Who is involved in the study programme's design and development (launching, changing, internal evaluation) and what is taken into account (strategies, the needs of society, etc.)?
- How/to what extent are students themselves involved in the development of the content of their studies?
- Please evaluate a) whether the study programme remains current and consistent with developments in society (labour market, digital technologies, etc.), and b) whether the content and objectives of the study programme are in accordance with each other?
- Do the content and the delivery of the programme correspond to the European Qualifications Framework (EQF)?
- How is coherence of the study programme ensured, i.e., logical sequence and coherence of courses? How are substantial overlaps between courses avoided? How is it ensured that the teaching staff is aware of the content and outputs of their colleagues' work within the same study programme?
- How does the study programme support development of the learners' general competencies (including digital literacy, foreign language skills, entrepreneurship, communication and teamwork skills)?
- What are the scope and objectives of the foundation courses in the study programme (where appropriate)? What are the pass rates?
- How long does it take a student on average to graduate? Is the graduation rate for the study programme analogous to other European programmes with similar content? What is the pass rate per course/semester?
- How is it ensured that the actual student workload is in accordance with the workload expressed by ECTS?
- What are the opportunities for international students to participate in the study programme (courses/modules taught in a foreign language)?
- Is information related to the programme of study publicly available?
- How is the HEI evaluating the success of its graduates in the labor market? What is the feedback from graduates of the study programme on their employment and/or continuation of studies?
- Have the results of student feedback been analysed and taken into account, and how (e.g., when planning in-service training for the teaching staff)?
- What are the reasons for dropping out (voluntary withdrawal)? What has been done to reduce the number of such students?

## **Findings**

A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

We were impressed from the quality assurance program as detailed below.

## Strengths

A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

- There is a formal policy that is publicly available, with appropriate regulations and processes.
- The mechanisms to support faculty and students are appropriate.
- There are technical approaches to detect plagiarism and scientific fraud
- There is a significant involvement of multiple stakeholders including both academic, private and non-for-profit foundations in and outside cyprus with a strong collaborative mentality.

## Areas of improvement and recommendations

A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

The design of the actual PhD programme and its supervision could be improve – please see details in item#6

## Please select what is appropriate for each of the following sub-areas:

		Non-compliant/
Sub-a	area	Partially Compliant/Compliant
1.1	Policy for quality assurance	compliant
1.2	Design, approval, on-going monitoring and review	Partially compliant
1.3	Public information	compliant
1.4	Information management	compliant

## 2. Student – centred learning, teaching and assessment (ESG 1.3)

#### Sub-areas

- 2.1 Process of teaching and learning and student-centred teaching methodology
- 2.2 Practical training
- 2.3 Student assessment

## 2.1 Process of teaching and learning and student-centred teaching methodology

## **Standards**

- The process of teaching and learning supports students' individual and social development.
- The process of teaching and learning is flexible, considers different modes of delivery, where appropriate, uses a variety of pedagogical methods and facilitates the achievement of planned learning outcomes.
- Students are encouraged to take an active role in creating the learning process.
- The implementation of student-centered learning and teaching encourages a sense of autonomy in the learner, while ensuring adequate guidance and support from the teacher.
- Teaching methods, tools and material used in teaching are modern, effective, support the use of modern educational technologies and are regularly updated.
- Mutual respect within the learner-teacher relationship is promoted.
- The implementation of student-centred learning and teaching respects and attends to the diversity of students and their needs, enabling flexible learning paths.
- Appropriate procedures for dealing with students' complaints regarding the process of teaching and learning are set.

## 2.2 Practical training

## Standards

- Practical and theoretical studies are interconnected.
- The organisation and the content of practical training, if applicable, support achievement of planned learning outcomes and meet the needs of the stakeholders.

## 2.3 Student assessment

## Standards

 Assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures.

- Assessment is appropriate, transparent, objective and supports the development of the learner.
- The criteria for the method of assessment, as well as criteria for marking, are published in advance.
- Assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary, is linked to advice on the learning process.
- Assessment, where possible, is carried out by more than one examiner.
- A formal procedure for student appeals is in place.
- Assessors are familiar with existing testing and examination methods and receive support in developing their own skills in this field.
- The regulations for assessment take into account mitigating circumstances.

## You may also consider the following questions:

- How is it monitored that the teaching staff base their teaching and assessment methods on objectives and intended learning outcomes? Provide samples of examination papers (if available).
- How are students' different abilities, learning needs and learning opportunities taken into consideration when conducting educational activities?
- How is the development of students' general competencies (including digital skills) supported in educational activities?
- How is it ensured that innovative teaching methods, learning environments and learning aids that support learning are diverse and used in educational activities?
- Is the teaching staff using new technology in order to make the teaching process more effective?
- How is it ensured that theory and practice are interconnected in teaching and learning?
- How is practical training organised (finding practical training positions, guidelines for practical training, supervision, reporting, feedback, etc.)? What role does practical training have in achieving the objectives of the study programme? What is student feedback on the content and arrangement of practical training?
- Are students actively involved in research? How is student involvement in research set up?
- How is supervision of student research papers (seminar papers, projects, theses, etc.) organised?
- Do students' assessments correspond to the European Qualifications Framework (EQF)?
- How are the assessment methods chosen and to what extent do students get supportive feedback on their academic progress during their studies?
- How is the objectivity and relevance of student assessment ensured (assessment of the degree of achievement of the intended learning outcomes)?

## **Findings**

A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

We found that the programme is compliant with the regulations. The institute invest significantly in the education and teaching program . The students are very satisfied with the program

## Strengths

A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

- The academic requirements are well addressed in the planning of courses. There is also involvement of adjunct faculty in courses that require expertise beyond the current faculty.
- The process of teaching and learning is somewhat flexible. For example, the graduate students informed us that they are allowed to work and that this is one of the criteria that led them to choose EUC.

## Areas of improvement and recommendations

A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

- There are no plans to support students with childcare responsibilities
- Regarding the practical training see more comments in item #6 describing the proposed PhD programme. In general, we suggest more flexibility for graduate students at the timing of courses and practical lab experience. We recommend, for the graduate courses, more emphasis on the individual learning needs for example, access to courses and training that are not necessarily provided by the EUC (or the specific faculty in which the student is doing the MSc/PhD) but are important for the research the student performs. For example computer informatic skills for a student in the cancer biology programme, flow cytometry, proteomics, etc.

## Please select what is appropriate for each of the following sub-areas:

		Non-compliant/
Sub-	area	Partially Compliant/Compliant
2.1	Process of teaching and learning and student- centred teaching methodology	Compliant
2.2	Practical training	Compliant
2.3	Student assessment	Compliant

## 3. Teaching staff (ESG 1.5)

## **Sub-areas**

- 3.1 Teaching staff recruitment and development
- 3.2 Teaching staff number and status
- 3.3 Synergies of teaching and research

## 3.1 Teaching staff recruitment and development

#### Standards

- Institutions ensure the competence of their teaching staff.
- Fair, transparent and clear processes for the recruitment and development of the teaching staff are set up.
- Teaching staff qualifications are adequate to achieve the objectives and planned learning outcomes of the study programme, and to ensure quality and sustainability of the teaching and learning.
- The teaching staff is regularly engaged in professional and teaching-skills training and development.
- Promotion of the teaching staff takes into account the quality of their teaching, their research activity, the development of their teaching skills and their mobility.
- Innovation in teaching methods and the use of new technologies is encouraged.
- Conditions of employment that recognise the importance of teaching are followed.
- Recognised visiting teaching staff participates in teaching the study programme.

## 3.2 Teaching staff number and status

## Standards

- The number of the teaching staff is adequate to support the programme of study.
- The teaching staff status (rank, full/part time) is appropriate to offer a quality programme of study.
- Visiting staff number does not exceed the number of the permanent staff.

## 3.3 Synergies of teaching and research

## Standards

- The teaching staff collaborate in the fields of teaching and research within the HEI
  and with partners outside (practitioners in their fields, employers, and staff
  members at other HEIs in Cyprus or abroad).
- Scholarly activity to strengthen the link between education and research is encouraged.
- The teaching staff publications are within the discipline.

- Teaching staff studies and publications are closely related to the programme's courses.
- The allocation of teaching hours compared to the time for research activity is appropriate.

## You may also consider the following questions:

- How are the members of the teaching staff supported with regard to the development of their teaching skills? How is feedback given to members of the teaching staff regarding their teaching results and teaching skills?
- How is the teaching performance assessed? How does their teaching performance affect their remuneration, evaluation and/or selection?
- Is teaching connected with research?
- Does the HEI involve visiting teaching staff from other HEIs in Cyprus and abroad?
- What is the number, workload, qualifications and status of the teaching staff (rank, full/part timers)?
- Is student evaluation conducted on the teaching staff? If yes, have the results of student feedback been analysed and taken into account, and how (e.g., when planning in-service training for the teaching staff)?

#### **Findings**

A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

The teaching staff is highly appropriate. SI and TK are very impressed from the significant recruitment of excellent teaching and research faculty since the site visit in 2019

## Strengths

A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

- There is good diversity in the teaching staff. There are good role models for female and male students
- Impressive quality of the newly recruited faculty
- Good integration between teaching and research and between the medical and the medical sciences faculties

## Areas of improvement and recommendations

A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

See our detailed assessment of the proposed doctoral programme item #6

## Please select what is appropriate for each of the following sub-areas:

Sub-	area	Non-compliant/ Partially Compliant/Compliant
3.1	Teaching staff recruitment and development	Compliant
3.2	Teaching staff number and status	Compliant
3.3	Synergies of teaching and research	Compliant

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4. Student admission, progression, recognition and certification (ESG 1.4)

## **Sub-areas**

- 4.1 Student admission, processes and criteria
- 4.2 Student progression
- 4.3 Student recognition
- 4.4 Student certification

## 4.1 Student admission, processes and criteria

## **Standards**

- Pre-defined and published regulations regarding student admission are in place.
- Access policies, admission processes and criteria are implemented consistently and in a transparent manner.

## 4.2 Student progression

#### Standards

- Pre-defined and published regulations regarding student progression are in place.
- Processes and tools to collect, monitor and act on information on student progression, are in place.

## 4.3 Student recognition

## **Standards**

- Pre-defined and published regulations regarding student recognition are in place.
- Fair recognition of higher education qualifications, periods of study and prior learning, including the recognition of non-formal and informal learning, are essential components for ensuring the students' progress in their studies, while promoting mobility.
- Appropriate recognition procedures are in place that rely on:
  - institutional practice for recognition being in line with the principles of the Lisbon Recognition Convention
  - cooperation with other institutions, quality assurance agencies and the national ENIC/NARIC centre with a view to ensuring coherent recognition across the country

## 4.4 Student certification

## **Standards**

- Pre-defined and published regulations regarding student certification are in place.
- Students receive certification explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed.

## You may also consider the following questions:

- Are the admission requirements for the study programme appropriate? How is the students' prior preparation/education assessed (including the level of international students, for example)?
- How is the procedure of recognition for prior learning and work experience ensured, including recognition of study results acquired at foreign higher education institutions?
- Is the certification of the HEI accompanied by a diploma supplement, which is in line with European and international standards?

## **Findings**

A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

The processes of student admission, progression certification are excellent.

## Strengths

A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

- There are clear regulations of admission, monitoring progression and requirements of certification
- There is a dedicated office with significant external connections with industry, companies, academic
  institutions etc, to support student careers after graduating from EUC

## Areas of improvement and recommendations

A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

• Issues regarding supervision and criteria for PhD completion are addressed in item #6

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Please select what is appropriate for each of the following sub-areas:

		Non-compliant/
Sub-	area	Partially Compliant/Compliant
4.1	Student admission, processes and criteria	Compliant
4.2	Student progression	Compliant
4.3	Student recognition	Compliant
4.4	Student certification	Compliant

## 5. Learning resources and student support (ESG 1.6)

#### **Sub-areas**

- 5.1 Teaching and Learning resources
- 5.2 Physical resources
- 5.3 Human support resources
- 5.4 Student support

## 5.1 Teaching and Learning resources

## Standards

- Adequate and readily accessible teaching and learning resources (teaching and learning environments, materials, aids and equipment) are provided to students and support the achievement of objectives in the study programme.
- Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).
- All resources are fit for purpose.
- Student-centred learning and flexible modes of learning and teaching, are taken into account when allocating, planning and providing the learning resources.

## 5.2 Physical resources

## **Standards**

- Physical resources, i.e. premises, libraries, study facilities, IT infrastructure, are adequate to support the study programme.
- Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).
- All resources are fit for purpose and students are informed about the services available to them.

## 5.3 Human support resources

## **Standards**

- Human support resources, i.e. tutors/mentors, counsellors, other advisers, qualified administrative staff, are adequate to support the study programme.
- Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).

 All resources are fit for purpose and students are informed about the services available to them.

## 5.4 Student support

## Standards

- Student support is provided covering the needs of a diverse student population, such as mature, part-time, employed and international students and students with special needs.
- Students are informed about the services available to them.
- Student-centred learning and flexible modes of learning and teaching, are taken into account when allocating, planning and providing student support.
- Students' mobility within and across higher education systems is encouraged and supported.

## You may also consider the following questions:

- Evaluate the supply of teaching materials and equipment (including teaching labs, expendable materials, etc.), the condition of classrooms, adequacy of financial resources to conduct the study programme and achieve its objectives. What needs to be supplemented/improved?
- What is the feedback from the teaching staff on the availability of teaching materials, classrooms, etc.?
- Are the resources in accordance with actual (changing) needs and contemporary requirements? How is the effectiveness of using resources ensured?
- What are the resource-related trends and future risks (risks arising from changing numbers of students, obsolescence of teaching equipment, etc.)? How are these trends taken into account and how are the risks mitigated?
- Evaluate student feedback on support services. Based on student feedback, which support services (including information flow, counselling) need further development?
- How is student learning within the standard period of study supported (student counselling, flexibility of the study programme, etc.)?
- How students' special needs are considered (different capabilities, different levels of academic preparation, special needs due to physical disabilities, etc.)?
- How is student mobility being supported?

#### **Findings**

A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

There are ample resources available for students

## **Strengths**

A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

- Excellent access to learning resources. For example, there is a modern library with both hard-copies and digital resources as well as physical space for both individual and group studying.
- Students are allowed to work by flexible study schedule

## Areas of improvement and recommendations

A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

- Suggest encouraging students to excellence in teaching by, for example, providing awards for the best student teachers.
- As students are allowed to work, there is a need for clear guidelines on the expected balance between
  maximal time allowed to work (during the day) and the minimal required time for research. This is
  especially important for graduate (MSc and PhD) students.
- See our comments regarding the physical infrastructure of the laboratories in item #6
- Similarly, to the medical student we recommend supplying the graduate scientific students with laptops/tablets.

## Please select what is appropriate for each of the following sub-areas:

Sub-	area	Non-compliant/ Partially Compliant/Compliant
5.1	Teaching and Learning resources	Compliant
5.2	Physical resources	Compliant
5.3	Human support resources	Compliant
5.4	Student support	Compliant

## 6. Additional for doctoral programmes (ALL ESG)

## **Sub-areas**

- 6.1 Selection criteria and requirements
- 6.2 Proposal and dissertation
- 6.3 Supervision and committees

## 6.1 Selection criteria and requirements

## Standards

- Specific criteria that the potential students need to meet for admission in the programme, as well as how the selection procedures are made, are defined.
- The following requirements of the doctoral degree programme are analysed and published:
  - the stages of completion
  - o the minimum and maximum time of completing the programme
  - the examinations
  - o the procedures for supporting and accepting the student's proposal
  - o the criteria for obtaining the Ph.D. degree

## 6.2 Proposal and dissertation

#### Standards

- Specific and clear guidelines for the writing of the proposal and the dissertation are set regarding:
  - the chapters that are contained
  - o the system used for the presentation of each chapter, sub-chapters and bibliography
  - o the minimum word limit
  - the binding, the cover page and the prologue pages, including the pages supporting the authenticity, originality and importance of the dissertation, as well as the reference to the committee for the final evaluation
- There is a plagiarism check system. Information is provided on the detection of plagiarism and the consequences in case of such misconduct.
- The process of submitting the dissertation to the university library is set.

## 6.3 Supervision and committees

## Standards

- The composition, the procedure and the criteria for the formation of the advisory committee (to whom the doctoral student submits the research proposal) are determined.
- The composition, the procedure and the criteria for the formation of the examining committee (to whom the doctoral student defends his/her dissertation), are determined.
- The duties of the supervisor-chairperson and the other members of the advisory committee towards the student are determined and include:
  - regular meetings

- reports per semester and feedback from supervisors
- support for writing research papers
- participation in conferences
- The number of doctoral students that each chairperson supervises at the same time are determined.

## You may also consider the following questions:

- How is the scientific quality of the PhD thesis ensured?
- Is there a link between the doctoral programmes of study and the society? What is the value of the obtained degree outside academia and in the labour market?
- Can you please provide us with some dissertation samples?

## **Findings**

A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

The MSc program in cancer biology was approved three years ago in May 2019. Currently this program recruits excellent students, some of which have already completed or close to complete their MSc. We have seen publications in good scientific journals that originated by these students. Hence, we believe that the program is ready for the next step – training PhD students.

## Strengths

A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

- Excellent MSc program, availability of students that can continue towards PhD
- Recruitment of excellent researchers that fit to instruct PhD students
- Significant external funding (especially from RIF)
- International dimension the program in in English, the program is open for international students; There are close connections of the faculty with international institutions (some of them were recruited from international universities).
- The support provided by the EUC for employment after graduation.
- The support provided by the EUC for research assistant jobs within the University.
- The availability of student scholarships based on excellence (however these are too few).
- The access to an excellent mouse facility close to the university.

#### Areas of improvement and recommendations

A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

Our comments below are divided into three groups. The Faculty, The quality of the PhD and the Infratructure.



#### A. Faculty.

- Although the faculty has substantially grown since 2019 and have impressed us by the quality of their research, some will need support by more experienced internal or external faculty to oversee a PhD student.
- The scientific portfolio of the current faculty is somewhat limited. Perhaps additional faculty may be hired. Alternatively, the PhD program could be complemented with additional external faculty.
- There is a need for mouse pathology, given the many mouse models studied.

#### B. The PhD program.

- Currently the PhD program is planned for a minimum of three years. PhDs limited to 3 years will
  include first year of courses and exams followed by three semesters of research and one semester
  for writing the PhD dissertation. This is clearly inappropriate for a PhD in life sciences.
- We suggest a minimum of three years of original research led by the student. We recommend that
  students be required to join the research group from the time of initiation of their studies as a "prePhD candidate". This will allow them to get acquainted with the research methodologies and with
  the research mentor and team. It will also allow the collection of preliminary data that is essential
  for a high-quality PhD proposal. After passing the exam and after approval of the PhD proposal the
  student will become officially a PhD student (PhD candidate).
- Proper "exit" criteria should be published for students who do not pass the exams or, more importantly, for students who passed the exam, but their proposal is not satisfactory.
- The reasonable time for a PhD is 4-5 years. Curiously this is exactly the expectation of the MSc students that we met (indeed they expect 5 years). We suggest having a range of 3-6 years of active research as the time scale of a PhD.
- We believe it should be a standard that every PhD student should get a scholarship. Normally such scholarship are divided between the University and by the supervisor resources.
- The students mentioned that one of the criteria to choose EUC for their graduate studies was the permission to work part time, which is not allowed in some other institutions. However, this should be regulated. The minimal numbers of hours of research per week should be defined. Although the program was presented to us per semester, it should be clear that research is performed throughout the year except for a reasonable vacation time.
- The criteria for submission of a PhD dissertation vary among academic institutions in different countries. The proposed program by the EUC suggests a requirement of one first author publication and another co-author publication. While this requirement is common to many PhD programs and is desirable it is likely to be associated with a lower publications' quality, especially these very competitive days. The lower quality could affect not only the career of the student but, importantly, the career and capability of the supervisor to obtain future funding. Low impact publications are also damaging the reputation of the university. It may also cause significant delays in graduation of the student while preforming the necessary research for a successful publication.

The alternative criterion, (in addition to a co-author publication) is high quality ("publication quality) PhD thesis as determine by the student review committee. This committee should continuously advise the PhD student from the time of submission of PhD proposal and throughout the PhD by at least yearly progress meetings. This committee should include at least one member outside the department of the student's supervisor. The committee needs to approve the submission of a PhD

thesis based on an outline submitted by the student towards the end of the PhD. As we mention above academic institutions adopt different criteria for PhD completion. We recommend that the team at EUC will discuss various options.

• PhD courses – we recommend that frontal teaching during the PhD will be tailored to the needs of the individual student and flexible in their timing during the PhD (i.e. not limited to the first year). Some courses delivered by other faculties in EUC could be beneficial (for example basic and advanced computer skills, taking advantage of the very strong computer sciences faculty in EUC). For graduates of EUC MSc in cancer biology the initial courses may not be mandatory, and they could proceed to the PhD after passing the qualifying exam. This could streamline the transition from MSc to PhD and encourage graduates of EUC master program to continue to PhD in the same faculty.

#### C. Physical Infrastructure

- There is insufficient research lab space to accept a significant number of PhD students. The dual use of labs for teaching and research is not recommended.
- There are no core facilities. We recommend core facilities for technologies that are routinely used by the research groups. For example: Flow cytometry including sorting and possible Cytof or a similar technology. Microscopy imaging including con-focal and atomic force microscopy. Bioinformatics (cooperation with the computer sciences faculty?). A dedicated tissue culture room approved for the use of lenti/retroviruses.

## Please select what is appropriate for each of the following sub-areas:

		Non-compliant/
Sub-	area	Partially Compliant/Compliant
6.1	Selection criteria and requirements	Compliant
6.2	Proposal and dissertation	Partially compliant
6.3	Supervision and committees	Compliant

#### D. Conclusions and final remarks

Please provide constructive conclusions and final remarks which may form the basis upon which improvements of the quality of the programme of study under review may be achieved, with emphasis on the correspondence with the EQF.

The cancer biology program and faculty are impressive, and so is the university. The planning of the PhD program is very thoughtful and comprehensive as reflected both in the written application and the presentation during our site visit. We have detailed specific recommendations to improve the proposed PhD program in cancer biology.

## E. Signatures of the EEC

Name	Signature
Prof Shai Izraeli	
Prof Nektarios Tavernarakis	
Prof Kevin Gaston	
Ms Ioanna Papaioannou	

**Date:** 19/5/2022