

Teaching Mentorship Programme DCEXS-UPF 2018-2020

Background

Many researchers will apply to academic posts as professional options of their future careers. However, it is common that those who have been trained in research institutions lack of knowledge of how teaching works in college students. Teaching consists of not only lecturing but of some other tasks that may be unfamiliar for pure researchers. The Teaching Mentorship Programme (TMP) has been created to fill this gap in the professional careers of those who may be interested in applying for academic positions.

The main objective of the Teaching Mentorship Programme (TMP) is to allow young post-doctoral researchers of the PRBB to get the basic knowledge and skills used in university teaching. This will enhance their working opportunities in academic institutions worldwide.

The TMP will improve the skills of mentees in the following aspects of education:

- Identification of the essential knowledge to be transmitted to the students.
- Elaboration of syllabus and curricula of specific subjects.
- Definition of educational objectives and professional competences.
- Identification of the relevant literature and information resources for students.
- Knowledge of teaching methods: lectures, seminars, problem-based learning, laboratory practicals....
- Students' evaluation and assessment
- The value teaching in scientific research
- Innovation in higher education

Institutional objectives of the TMP

The main objectives of TMP for the DCEXS are:

- To develop a training programme directed to postdoctoral researchers that want to develop educational skills in life and health sciences.
- To foster a new generation of researchers with experience in teaching.
- To share resources, assistance, and know-how with this generation of new educators.
- To establish a novel collaborative link between the UPF and the other research institutions at the PRBB.

The role of the mentor

Mentors will be the coordinators of the subjects where mentees will develop their training. They will be experienced members of the DCEXS faculty and will provide mentees with professional and personal guidance in the preparation and execution of their teaching tasks.

Mentors will assume their roles as part of their teaching responsibilities. The main duty of the mentor is to guide the mentee in the different teaching activities. He/she will supervise and support the mentee, including activities like discussions, critical attendance to the lectures delivered by the mentee, etc. The mentor is both a guide and a cheerful critic. On the other hand, it is very important that the mentor promotes innovative thinking to prepare the new generation of academics.

Mutual expectations, time course and responsibilities will be agreed upon at the onset of the programme. The mentor will ensure that there are clear objectives to achieve and a clear planning of them along the process.

The participation of the mentees in teaching duties will not have any impact on the capacity of the DCEXS teaching units, that is: no changes in resource assignment will be driven by the TMP.

The mentee as a teacher-to-be

Mentees should be postdoctoral researchers who wish to gain experience on teaching by means of supervised hands-on work. Mentorship will connect the experience of the mentor with the needs of highly motivated mentees so that the latter will have intellectual guidance and supervision.

The mentee has to be responsible for the assigned tasks and aware of their relevance for the university.

The inclusion of the mentee in teaching tasks will be recognized with an official certificate **issued by the UPF** as “Academic Collaborator”.

Application

The mentees will be chosen after their applications to an open call performed by the DCEXS. Application procedures will be revisited yearly. The following ones will be in place during the first year of the TMP:

Applications should be sent to the TMP coordinator (tmp.dcexs@upf.edu) before 15th September 2018. They will include: (i) the CV with a specific mention of the teaching

experience, (ii) a brief statement of interests suggesting areas of expertise where they could be involved, and why he/she applies to the TMP, and (iii) a recommendation letter of the head of the research unit to which the candidate is ascribed stating his availability to follow the TMP.

Selection will be performed by a committee appointed by the DCEXS, according to the criteria of appropriateness of the candidate to the programme. Once it has been carried out, each mentee will be assigned to a mentor. He/she has to send his/her teaching skills, curriculum development and portfolios to provide a wide picture of his/her background to the mentor. It is encouraged that potential candidates contact with faculty members of the DCEXS before submitting an application.

Successful applicants will receive the admission for the Mentorship Programme by 20th September 2018.

Academic structure of TMP

The TMP includes different activities that will be developed to provide mentees with the basis of learning and teaching in centers of higher education. The core of the activity will be the hands-on work under the guidance of mentors. Activities will extend during two years.

Practical activities (25 h total, 12/13h per year approximately) will include:

- Lectures (suggested at least two lectures of 45 min/1h)
- Seminars (suggested at least 6h)
- Laboratory courses (suggested at least 8h)
- Other activities as specified by the mentor: attendance to lectures, preparation of materials for practicals, preparation, supervision and marking of exams, etc
- Attendance to one students' tutoring meeting (at least 1h)
- Attendance to Problem Based Learning (PBL) tutorials (the mentees interested in PBL methodology will have the opportunity to attend to some PBL tutorials in subjects such as integrated medicine and biomedicine)

Seminars about teaching and learning in higher education (two 1h-seminars per year).

- Seminar 1. Teaching and learning may be an oxymoron: how to avoid such disgusting possibility
- Seminar 2. Education is also a science: the logics of setting educational objectives, defining competences and skills, and building subjects and curricula
- Seminar 3. There is clever life beyond the lectures: how to teach mature and competent people

- Seminar 4. Science only exists if you can measure it: the principles and practice of assessment and evaluation in teaching

Mentees will be assigned to teaching units of Human Biology, Medicine and Biomedical Engineering, as well as of masters on Bioinformatics, Biotechnologic and Pharmaceutical Industry, Biomedical Research, Clinic Analysis Laboratory, Public Health and Brain and Cognition. Mentees will be able to choose if they want to participate in subjects that are given in English or Spanish and/or Catalan (the list of mentors and subjects offered for TMP is in appendix 1).

The mentees will be involved in the teaching duties for a period of two academic years.

Evaluation

Mentee assessment

Mentees will be assessed through a brief teaching portfolio. It will include a mentee's brief report about their teaching experience at the end of the first year and at the end of the programme and a mentor's short report about the mentee's performance.

The TMP coordination committee will assess the performance of the mentee with the above information.

Mentor assessment

Mentees will elaborate a short report on their mentors. Mentors will be assessed by the TMP committee using the reports of the mentees (and his/her short talk if applicable)

Institutional assessment

The programme will be assessed by the TMP coordinator committee by, analysing the following indicators:

- TMP call success
- Mentees' satisfaction with TMP
- Mentors' satisfaction with TMP
- Mentees' TMP learning outcomes

Appendix 1. List of subjects and mentors offered for the TMP pilot programme

Subjects	Mentors
Developmental Biology (Degree on Human Biology and Medicine) Course language: Catalan or Spanish Neurosciences (Degree on Human Biology) Course language: English	Fernando Giraldez
Molecular Biology of the cell (Degree on Biomedical Engineering) Course language: Catalan or Spanish Model organisms (Master on Biomedical Research) Course language: English	Cristina Pujades
General Physiology (Degree on Human Biology and Medicine) Course language: Catalan or Spanish Systems Physiology II (Degree on Biomedical Engineering) Cell Communication (Master on Biomedical Research) Course language: English	Jose Manuel Fernández
Human Physiology (Degree on Human Biology and Medicine) Course language: Catalan or Spanish Systems Physiology I (Degree on Biomedical Engineering)	Ruben Vicente
Human Physiology (Degree on Human Biology and Medicine) Course language: Catalan or Spanish General Physiology (Degree on Human Biology and Medicine) Course language: Catalan or Spanish	Paco Muñoz
Structural Biology (Degree on Human Biology) Structural bioinformatics (Master on Bioinformatics for Health Sciences) Courses language: English	Baldomero Oliva

Biochemistry-II (Molecular Biology) (Degree on Human Biology and Medicine) Course language: Catalan or Spanish	Elena Hidalgo
Human evolution and health (Degree on Human Biology and Medicine) Course language: Catalan or Spanish Introduction to Biomedicine (Masters on Bioinformatics, Biomedical Research and Pharmaceutical Industry) Course language: English	David Comas
Human evolution and health (Degree on Human Biology and Medicine) Course language: Catalan or Spanish	Elena Bosch
Introduction to Biomedicine (Masters on Bioinformatics, Biomedical Research and Pharmaceutical Industry) Course language: English Molecular and Cell Biology (Degree on Bioinformatics) Course language: English	Berta Alsina
Neurobiology (Degree on Human Biology and Medicine) Course language: Catalan or Spanish The principles of biology in criminology (Degree on Criminology) Course language: Catalan or Spanish Addictive behaviour and delinquency (Degree on Criminology) Course language: Catalan or Spanish	Olga Valverde
Pharmacology (Degree on Human Biology and Medicine) Course language: Catalan or Spanish	Andrés Ozaita
Cell Biology (Degree on Human Biology and Medicine) Course language: Catalan or Spanish	Eusebio Perdiguero

<p>Cell Biology (Degree on Human Biology and Medicine) Course language: Catalan or Spanish</p>	Antonio Serrano
<p>Genomics (Degree on Human Biology) Course language: Catalan, Spanish, English</p>	Jaume Bertranpetit
<p>Mathematics (MAT) (Master on Bioinformatics for Health Sciences) Course language: English</p> <p>Advanced Genome Bioinformatics (AGB) (Master on Bioinformatics for Health Sciences) Course language: English</p>	Eduardo Eyras
<p>Botanics (Degree on Human Biology) Course language: Catalan</p> <p>Plant Physiology (Degree on Human Biology) Course language: Catalan</p>	Elisabeth Moyano