

Fellowships Higher Education/Advanced Training and Cultural exchange Program in Health between Universities in Countries in the South Mediterranean Region and the Middle East and Italian Centers of Excellence

Acknowledgement:

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Introduction:

The Medical and Experimental Bioimaging Center (MEBIC) is a university Consortium established in 2015 in Rome. Partners of the Consortium are: San Raffaele Telematic University of Rome, "Tor Vergata University of Rome Faculty of Medicine and Surgery, San Raffaele Rome Scientific Institute.

The Consortium purposes are:

- to promote and coordinate scientific activities in the field of molecular and cellular rehabilitation for the recovery of lost functions and their conservation with particular interest in cerebral, musculoskeletal, cardiac, respiratory, renal, hepatic and sensory functions.
- to promote access to an advanced morphological and functional Bioimaging Center with a complex technological platform together with a nursery for small animals and disease models.
- to foster the involvement of Universities and Institutions in countries of the South Mediterranean region and the Middle East interested in cutting-edge preclinical, translational and clinical research as well as education of students and new professionals to carry out concrete interventions aimed at Rehabilitation in the different areas of medicine.

MEBIC's research activities are aimed at enhancing translational and clinical applications for personalized and precision medicine, recovering lost functions (for pathological processes or for aging), through new rehabilitative strategies based on cellular and molecular approaches.

The longstanding tradition and mission of San Raffaele Rome Institute is motor and sensory rehabilitation in different areas of Medicine:

- Cardiology: rehabilitation in patients with heart failure, or after cardiac surgery
- Pneumology: chronic obstructive pulmonary disease, respiratory failure
- Neurology: ischemic and haemorrhagic stroke, neurodegenerative pathologies (eg Parkinson's disease, Alzheimer's disease), multiple sclerosis, movement and motor control disorders, headache and neuropathic pain, tumors of the nervous system,
- Orthopaedics: rehabilitation after hip and knee replacement surgery
- Paediatrics: neurodevelopmental disorders and disabilities (Down syndrome)

In particular, MEBIC pursues the following specific objectives:

- preclinical research aimed at identifying the cellular and molecular mechanisms of the beneficial effects in rehabilitation, both traditional and most recently used, and thus the identification of new strategies to enhance and optimize these mechanisms.
- translational research, which can be applied quickly to the patient (personalized and precision medicine), meeting specific needs of National Health Systems.
- Clinical research with a comprehensive patient centered approach with excellence in care and expertise in prevention, diagnosis, treatment and rehabilitation
- highly specialized education for the complex techniques of imaging, morphology and molecular as well as cellular medicine. Accordingly in collaboration with the two founding MEBIC Consortium Universities the training activity is carried out through:
 1. Technical-practical training courses for young laboratory researchers and technicians;
 2. First and Second level Master's Degrees related to bioimaging techniques, advanced morphology, complex pathways studies, both addressed to clinical and pre-clinical researchers, medical doctors, and physiotherapists;
 3. Advanced training in rehabilitation setting

A total of 20-30 fellowships will be available for researchers from Universities or Hospitals in countries in the South Mediterranean Region and the Middle East (Algeria, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Palestine, Tunisia). Researchers will be engaged in a specific training programme that will be completely performed in Italy at the clinical and research premises of MEBIC and its Partners.

- Short term fellow-ship between 3 and 6 months
- Fellowship 1-2 years
- PhD program

Objectives:

The objectives of the **MEBIC Short and Long-Term Fellowship** programme are to:

- support preclinical, translational and clinical research in the field of Life Sciences and Rehabilitation medicine, to enhance a Training Programme addressed to junior and senior health professionals and researchers from Universities and Hospitals in countries in the South Mediterranean Region and the Middle East.
- offer the possibility to undertake a specific research objective under the guidance of senior staff in the area of advanced morphologic imaging.
- introduce young health researchers to advanced morphological methods in life sciences
- favour researchers' career growth and enhance integration and translation of acquired knowledge upon return to the affiliated Universities or Hospitals in the South Mediterranean Region and the Middle East.

Eligibility criteria

To be eligible for the programme, you must:

- hold a postgraduate degree in medicine, biological sciences in life sciences, physiotherapy;
- All applicants are requested to have an advanced level English B2-C1; knowledge of Italian an asset;
- have computer literacy, web-based applications, Powerpoint.
- not be a first degree relative of a MEBIC Consortium staff member.
- There is no age limit.

Entitlements

Fellows will receive a financial support between €1,500 and €3,000 monthly depending on actual experience and CV. This financial contribution is intended to cover expenditure such as accommodation, living costs and transport. MEBIC will provide scientific and logistical assistance.

Upon arrival Fellows will receive a booklet with useful information on the research facilities and life in Rome.

How to apply

The Fellowship Call is posted at: <https://www.mebic.it/notices>

Potential applicants should send the following information and documentation:

Application procedure

Applicants will be required to submit a research proposal and scientific dossier (research project + appendices).

Deadline of the call will be December 31, 2022.

The application and scientific dossier must be submitted in English to: mebic@sanraffaele.it

Content of scientific dossier

The research proposal: the research proposal should consist in a short presentation from 10 000 characters to 20 000 characters (spaces and references included) composed with:

1. State of art, problematic, objective and specific aim of the research project, methodology.
2. A bibliography
3. The detailed programme of the research stay (places and institutions to be visited, contacts, work plan).

Appendices:

- A Curriculum vitae (2 pages maximum)
- A list of publications
- A copy of the PhD diploma
- A letter from the director of the research institution in the country of origin
- A letter of invitation from the director of the host research institution in english expressing the institution's willingness to host the applicant during the time of fellowship and explaining the work conditions they can offer

For further information please contact:
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This is the first call issued by the MEBIC Consortium and its Partners in this academic project in collaboration with Fondazione Terzo Pilastro.