

TURKEY: A COUNTRY WITH MORE FUNDING OPPORTUNITIES FOR INTERNATIONAL COLLABORATIVE BIOMEDICAL STUDIES

The Scientific and Technological Research Council of Turkey (TUBITAK) is responsible for the development and coordination of scientific research in line with the national targets and priorities in Turkey. TUBITAK represents Turkey in international research efforts including memberships in European Science Foundation and the European Union Framework Programmes for Research and Technological Development. There are several organizations under TUBITAK, which encourage and promote international research activities.

Besides providing grants for research and fellowships at different educational levels, the Council also organizes and promotes symposia, seminars, and congresses.

FUNDING OPPORTUNITIES FOR BIOMEDICAL RESEARCHES

Incoming researchers can benefit from a variety of TUBITAK programmes such as Program code 2215 and 2216 and international programmes such as FP7. The scholarship and grant programmes that scientists can benefit in Turkey should be evaluated as a whole package in order to analyze the situation better.

Turkey-US Collaborative Program for Affordable Medical Technologies (17)

This Funding will support research partnerships formed between scientists from U.S. and Turkey to accelerate the development of appropriate affordable diagnostic and therapeutic technologies, which address medical needs in low-middle resource settings. Appropriate medical technologies are those that are useable, cost effective, sustainable, and effective in meeting a significant clinical need in a lower-middle resource setting in different world regions.

Fellowships for Visiting Scientists and Scientists on Sabbatical Leave (8)

TUBITAK grants fellowships for international scientists/researchers who would like to give workshops/conferences/lectures, or conduct R&D activities in Turkey in the fields of Natural Sciences, Engineering and Technological Sciences, Medical Sciences, Agricultural Sciences, Social Sciences and Humanities. The program aims to promote Turkey's scientific and technological collaboration with countries of the prospective fellows.

Three types of visit are granted within this program:

i-Visiting Scientists/researchers on Short-term (up to 1 month):

Short-term fellowships fund is available for the following activities in Turkey: a) Conducting workshops/conferences/seminars etc.

b) Giving tutorials/lectures etc.

c) Participating in R&D activities

d) Organizing technical meetings for scientific and technological collaboration

ii-Visiting Scientists/researchers on Long term (up to 12 months):

Long-term fellowships fund is available for the following activities in Turkey:

a) Conducting research and development (R&D),

b) Teaching graduate/undergraduate courses etc.

iii-Scientists/researchers on SABBATICAL LEAVE (from 3 months to 12 months): Scholars or academic staff on SABBATICAL LEAVE planning to come to any Turkish university/institution is also funded for the following activities in Turkey:

a) Conducting research and development (R&D)

b) Teaching graduate/undergraduate courses etc.

Requirements for Beneficiaries:

Fellows can be citizen of any country.

Fellows should have a PhD degree (or equivalent) or have at least five years of research experience

Fellows should be invited by a hosting institution in TURKEY, which can be universities, research institutions, or industrial companies with a R&D unit.

Fellows on Sabbatical leave should be invited for duration of at least 3 months.

Fellowship Details:

A monthly stipend of up to 3.000 US\$ for Visiting Scientists.

A monthly stipend of up to 3.500 US\$ for Visiting Scientists on Sabbatical Leave

Travel costs (round trip) and health insurance premiums.

Duration of the fellowship varies from one week to 12 months

Fellows must use their fellowships within six months of having been notified of the fellowship. The amount of the monthly stipend will be determined based on the academic titles of fellows.

How to Apply: Applications should be submitted by host scientist/institution. All applications must be submitted electronically via TÜBİTAK application portal, which can be reached at <http://e-bideb.tubitak.gov.tr/>. All required documents must also be uploaded electronically. *Application Deadlines:* Applications are accepted on a rolling basis.

Find a hosting institution; You may visit the web site below, which is numbered as “9”, to search hosting institutions/centers in Turkey.

Research Fellowship Programme for International Researchers (9)

TÜBİTAK grants fellowships for international highly qualified PhD students and young post- doctoral researchers to pursue their research in Turkey in the fields of Natural Sciences, Engineering and Technological Sciences, Medical Sciences, Agricultural Sciences, Social Sciences and Humanities. The program aims to promote Turkey’s scientific and technological collaboration with countries of the prospective researchers. Preference will be given to candidates who demonstrate the potential to contribute significantly to Turkey’s goal of international cooperation in scientific and technological development.

TÜBİTAK International Industrial R&D Projects Grant Programme (10)

The objective of the program is to create market focused R&D Projects between European countries and to increase cooperation between Europe wide firms, universities and research institutions, by using cooperation webs such as EUREKA.

EUROPEAN FUNDS FOR INCOMING RESEARCHERS

TÜBİTAK EU Framework National Coordination Office coordinates the EU FP7 activities. Under FP7- PEOPLE Programme, there are :

Intra-European Fellowships (11)

This action provides financial support for advanced training and trans-national mobility, for a period of 12 to 24 months (full-time equivalent), for individual projects presented by experienced researchers from Member States or Associated countries in liaison with a host organisation from another Member State or Associated country.

International Incoming Fellowships (12)

The action provides financial support to individual research projects presented by the incoming experienced researchers in liaison with a legal entity (“host organisation”) in a Member State or an Associated country, as well as possibly a “return host organisation” if the researcher’s country of origin is an International Cooperation Partner Country.

Co-Funding Of Regional, National And International Programmes (13)

Doctoral programmes address the development and broadening of the research competencies of early-stage researchers.

Other programmes aiming to fund and support international collaborations(14):

- *The Support Programme for the Initiative to Build Scientific and Technological Cooperation Networks and Platforms
- *International Industry R&D Network Support (including EUREKA)
- *European Cooperation in Science and Technology Programme (COST)
- *Bilateral Cooperation Programmes (Belarus, Bulgaria, China, France, Germany, Greece, Hungary, India, Italy, Korea, Macedonia, Mongolia, Pakistan, Romania, Russia, Slovakia, Slovenia, Tunisia, Ukraine, USA)
- *International Research Staff Exchange Scheme-IRSES
- *Industry-Academia Partnership Pathways- IAPP
- *Project Brokerage Events Funding Programme
- *Technology Transfer Programme for SMEs

7th Framework Programme includes following support programmes(14):

- *Career Integration Grants- CIG (former International Reintegration Grants-IRG), *International Incoming Fellowships-IIF
- *Intra-European Fellowships-IEF

The followings are short-term visiting programmes(14):

- *Global Researcher Programme
- *Visiting Scientists Fellowship Programme

FULLBRIGHT SCHOLAR PROGRAMS (15)

Please also visit "<http://www.fulbright.org.tr/default.aspx>" if you are thinking about getting a scholarship in Turkey either as a student or as a scientist.

TURKISH MOBILITY CENTERS

The aim of these mobility centers are to help and inform the foreign researchers in Turkey and Turkish researchers going abroad, with visa, residence, work permit, social security, health, taxation, language courses.etc. issues.

The followings are 6 mobility centers in Turkey under ERA-MORE Network:

- Bogazici University, Istanbul
- Ege University, Izmir
- Gaziantep University, Gaziantep •Istanbul Technical University, İstanbul •Middle East Technical University, Ankara •TUBITAK, Ankara

Researcher's Mobility Portal-Turkey

A portal was established under the TR-MONET project and it is intended to help researchers to identify training and job opportunities throughout Europe with this portal. Moreover the Portal offers information on fellowships and grants, research job vacancies and practical information and there are links from the European Portal to 31 National mobility portals and to contact information of ERA-MORE mobility centres.

The Portals can be reached from the following address:

<http://www.tubitak.gov.tr/eracareers/>

TUBITAK HAS BILATERAL COLLABORATION PROGRAMMES WITH MANY COUNTRIES (10)...

2501 –w/National Science Foundation (NSF)

2502 – w/ Bulgaria Science Academia

2503 – w/Belarus National Science Academia (NASB)

2505 – w/France National Science Research Center (CNRS) 2506 – w/Indian Science and Industry Research Council (CSIR) 2507 – w/ Germany Research Council (DFG)

2508 – w/ Slovenia Research Institution (ARRS)

2513 – w/ Slovakia Science Academia (SAS)

2523 – w/ Korea National Research Foundation (NRF)

2525 – w/ Germany Education and Research Ministry (BMBF) 2526 – w/ Mongolia Academia of Science (MAS)

2532 – w / Russian Foundation of Basic Research (RFBR)

2540 – w/ Slovakia Academia od Science (SAS)

2542 – w/ Azerbaijan Natioanal Academia of Science (ANAS)

2543 – w/ Morocco National Science and Techological Research Center (CNRST) 2544 – w/ Japanese Science Support Institution (JSPS)

MULTICENTRAL COLLABORATION PROGRAMMES

Turkey actively participates the programmes of following international institutions:

COST (European Cooperation in Science and Technology)

EMBO (European Molecular Biology Organisation)

ICGEB (International Centre for Genetic Engineering and Biotechnology)

WHY IS TURKEY GETTING MORE ATTRACTIVE FOR RESEARCHERS AND STUDENTS?

✓The vision of Turkey during the upcoming National Science, Technology and Innovation Strategy (UBTYS) 2011-2016 is to contribute to new knowledge and develop innovative technologies to improve the quality of life by transforming the former into products, processes, and services for the benefit of the country and humanity (16). Because of that, many recent programs, some of them are listed above, have been established to attract more collaborations between Turkish and foreigner scientists / students. The programs offer different opportunities for promising studies; aim to provide scientific bridge between Turkey and other countries.

✓If you are planning to visit universities in Turkey as a student, you may go to the following web site and hear from international students about how their experience was in Turkey: www.studyinturkey.gov.tr

EDUCATION IN TURKEY

Turkish universities offer high quality studies and are an integral part of the European education space. There are increasing number of universities offering programs taught in English. Turkey is part of Bologna Process since 2001 and also a member of many different international platforms.

According to The Times Higher Education BRICS & Emerging Economies Rankings 2015 (1) , there are 8 Turkish universities in the top 100-university list, and 3 of them are in the top 10.

CELL BIOLOGY RESEARCH IN TURKEY

The faculty, graduate students, and undergraduates carry out research encompassing a wide array of disciplines ranging from molecular biology and genetics to biomaterials and tissue engineering, nanotechnology, microbiology, immunology and vaccine development, molecular biophysics, ecology, evolutionary biology and conservation. Collaborative national and international networks allow for the sharing of ideas and technology, thereby greatly enhancing research potential and productivity in Turkey. When compared with the past; it is clearly seen that state and private universities as well as institutions, which are mainly founded by the Turkish government, use their resources for researches more than before. More private institutions are also becoming supportive for R&D studies in Turkey. Number of very well equipped research centers is also increasing significantly in the country.

Research in Turkey has also become increasing interdisciplinary and international, as shown by a 2011 study conducted by Elsevier (2). Collaborations between Turkey, European countries and US are becoming more efficient.

Statistics comparing the citations per publications show that the number of cited articles from Turkey has been strikingly increased (3).

Turkey is one of the most successful countries in the EU 7th Framework Programme among both Member States and Associated Countries for the applications of Reintegration Grants (4). Since the inviting research environment in Turkey impresses both Turkish and foreign researches, they are settling to Turkey for their future research activities. This appears to be achieved by the attempts of modern institutions of scientific community.

BECOMING AN INTERNATIONAL STUDENT IN TURKEY

There are more than 500 international study programmes and courses in Turkey. Foreign students' applications are accepted by the relevant universities within the limits of reserved places for foreigners. Applications are evaluated by the relevant universities, making sure that reserved places per country are not more than 20% of the total reserved places for foreigners.

Foreign students who would like to start off to a graduate program must take the Entrance Examination for Academic Staff and Graduate Studies (ALES) or international examination (e.g. GRE, GMAT) the equivalency of which is recognized by the relevant universities make the evaluation of these scores. International students may simply apply directly to universities with their international exam records.

Undergraduate Scholarship Programme for International Students

TUBITAK grants undergraduate scholarships for international students who are medal winners at any the International Science Olympiads (5).

Graduate Scholarship Programme for International Students

TUBITAK grants scholarships for international students seeking to pursue a graduate degree in Turkey in the fields of Natural Sciences, Engineering and Technological Sciences, Medical Sciences, Agricultural Sciences, Social Sciences and Humanities (6).

Graduate Scholarship Programme For The Least Developed Countries

TUBITAK aims to give scholarships for graduate students from the Least Developed Countries (LDCs) in the fields of Natural Sciences, Engineering and Technological Sciences, Medical Sciences, Agricultural Sciences, Social Sciences and Humanities in Turkish Universities for improving science and technology capacity of LDCs and building scientific and socio-economic bridge between LDCs and Turkey (7).

As a member of the United Nations and an emerging economy, Turkey is committed to the cause of Least Developed Countries (LDCs) in the international arena and is ready and willing to do its part in assisting in their development process. As a part of these responsibilities,

Turkey generated and declared an international aid programme for LDCs (The Economic and Technical Cooperation Package of Turkish Government for LDCs). One significant item of the programme is regarding to science and education fields. In this context, The Scientific and Technological Research Council of Turkey (TUBITAK) will give master and doctorate scholarships for citizens of LDCs. Turkey and TUBITAK aims to generate and promote closer educational and scientific relations between Turkey and LDCs.

SOURCES:

1. <https://www.timeshighereducation.co.uk/world-university-rankings/2015/brics-and-emerging-economies#/sort/0/direction/asc>
2. <http://www.elsevier.com/connect/turkeys-scientific-research-output>, 2013.
3. <http://euraxess.tubitak.gov.tr/research-funding-in-turkey>
4. <http://www.tubitak.gov.tr/en/news/an-invitation-to-return-home-for-researchers-in-europe>
5. <http://www.tubitak.gov.tr/en/scholarship/undergraduatesgraduates/international-programmes/content-2205-undergraduate-scholarship-programme-for-international-students>
6. <http://www.tubitak.gov.tr/en/scholarship/undergraduatesgraduates/international-programmes/content-2215-graduate-scholarship-programme-for-international-students>
7. <http://www.tubitak.gov.tr/en/scholarship/undergraduates-graduates/international-programmes/content-2235-graduate-scholarship-prog-for-the-least-developed-countries>
8. <http://www.tubitak.gov.tr/en/scholarship/postdoctoral/international-programmes/content-2221-fellowships-for-visiting-scientists-and-scientists-on-sabbatical-leave>
9. <http://www.tubitak.gov.tr/en/funds/academy/international-researchers-fellowship-programmes/content-2216-research-fellowship-programme-for-international-researchers>
10. <http://www.tubitak.gov.tr/en/funds/industry/international-support-programmes/content-1509-tubitak-international-industrial-rd>
11. http://ec.europa.eu/research/mariecurieactions/about-mca/actions/ief/index_en.htm
12. http://ec.europa.eu/research/mariecurieactions/about-mca/actions/iif/index_en.htm
13. http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/505_0-msca-cofund-2014-dp.html
14. <http://www.tubitak.gov.tr/en/about-us/policies/content-national-sti-strategy-2011-2016>
15. <http://www.cies.org>
16. <http://www.eurescom.eu/news-and-events/eurescommessage/eurescom-message-archive/eurescom-messge-3-2011/science-technology-and-innovation-in-turkey.html>
17. <http://grants.nih.gov/grants/guide/pa-files/PAR-15-276.html#sthash.JULJWwwC.dpuf>