



Short Bio

Prof. Dr. Mahmoud M. Sakr

Current Position:

President, the Academy of Scientific Research and Technology (ASRT), Egypt

(April 2014- present)

Qualifications:

*B.Sc. in Botany, Excellent with Honors, Faculty of Science, Tanta University (1987)

*M.Sc. in Plant Tissue Culture, Faculty of Science, Tanta University (1992)

*Ph.D. in Plant Biotechnology, Faculty of Science, Tanta University (1995), the experimental work was carried out in Genetics and Microbiology Department, University of Pavia, Italy, through fellowships from the Italian Ministry of Foreign Affairs and International Cooperation, and The International Centre for Genetic Engineering and Biotechnology (ICGEB)

*Professor of Plant Biotechnology, National Research Center (NRC), February 2006-present

Previous Leadership Positions:

1- Acting President of ASRT (September 2013 – March 2014)

2- Executive Director of Science and Technology Development Fund STDF (May 2012 – May 2014)

3- Vice President of ASRT (December 2009 – May 2012)

4- Biotechnology Projects Officer, STDF, Egypt (2008-2010)

5- Head of Genetic Engineering & Biotechnology Division, NRC, Egypt (2008-2009)

6- Co-founder and the first Director of the Center of Scientific Excellence for Advanced Sciences (Noble Project), NRC, Egypt (2006-2009)

7- Founder and Group Leader of two research groups: Plant Molecular Genetics, and Plant Biotechnology and Biodiversity, Division of Genetic Engineering and Center of Scientific Excellence, NRC, 2006-present

Relevant International, Regional and National Activities:

1. Member of the Board of Trustees of the Egyptian Knowledge Bank (EKB) (2021)
2. Member of the Coordinating Committee for Science, Technology and Innovation Funding Agencies (2020)
3. Vice President of the Egyptian Genome Council (2020)
4. Member of the Board of Trustees of Salman International University (2020)
5. Chairman of the Advisory Board of the Egyptian Observatory for Science, Technology and Innovation (2020)
6. Member of the Supreme Council for Science, Technology and Innovation
7. Committee rapporteur for the Protection of Intellectual Property Rights.
8. The head of steering committee of the project entitled "Tanmia wa Tatweer: Egypt's Entrepreneurship Development Project" (known as TwT) is funded by the Multi-Donor Trust Fund for Countries in Transition (TFT) through the African Development Bank, and implemented by the Academy for Scientific Research and Technology (ASRT)
9. Secretary General of the Arab Association of Biotechnology, Federation of Arab Scientific Research Councils, Arab League, 2009-present
10. Member of the Regional Executive Committee, Middle East Science Fund, Jordan (2008-2010)
11. Member of the Advisory Board of the Arab German Young Academy AGYA, Berlin, Germany (2013-present)
12. Member of the Board of Trustees of Zewail City for Science and Technology, Egypt (2013-present)
13. Member of the Board of Trustees (BOT) of Egypt-Japan University of Science and Technology, Egypt (2014-present)
14. Editor-in-Chief of the Journal of Genetic Engineering and Biotechnology, Elsevier (2008-2019), then Springer (2019-present)
15. Founder and Chairman of the Arab Society for Genetic Engineering and Biotechnology (2012-present)

16. Vice-Chairman of Al-Elm (Science) Magazine, a scientific culture magazine published by ASRT in cooperation with Dar Al-Tahrir Printing and Publishing Corporation (Gomhoria), 2014-present
17. Ex officio, I represent Egypt as a member in the board or Council of: The Synchrotron-Light for Experimental Science and Applications in the Middle East (SESAME), the International Institute for Applied Systems Analysis IIASA, The Joint Institute for Nuclear Research in Dubna, Russia, IAP, International Science Council, ESCWA Science and Technology Center, The International Centre for Genetic Engineering and Biotechnology ICGEB, NAM S&T Center, Commission on Science and Technology for Sustainable Development in the South (COMSATS), Federation of Arab Scientific Research Councils, a number of Joint Committees with the European Union, South Africa, India, China, Belarus, France, and the corresponding academies (Hungary, Czech Republic, China, Bulgaria, Poland, ...etc)
18. Elected Vice Chair of SESAME (June 2020- present)
19. Member of the Selection Committee of the Presidents of the Universities of Zewail and Egypt-Japan University, the City of Scientific Research and Technological Applications, the National Institute of Oceanography and Fisheries, Theodore Bilharz Research Institute and the National Research Center
20. Member of the Boards of the National Research Center, the City of Scientific Research and Technological Applications, the National Authority For Remote Sensing & Space Sciences, Egyptian Space Agency, Electronics Research Institute, Central Metallurgical Research and Development Institute, Agricultural Research Center and Desert Research Center (Ministry of Agriculture), National Institute of Standards, Agricultural Development Program, Theodore Bilharz Research Institute, the National Water Research Center (Ministry of Water Resources and Irrigation), National Center for Social and Criminological Research (Ministry of Social Solidarity), National Institute of Oceanography and Fisheries, National Research Institute of Astronomy and Geophysics, Egypt Center For Research and Regenerative Medicine (Ministry of Defense), Cairo University Council, Tanta University Council, Supreme Council of Universities, Egyptian Atomic Energy Authority (The Ministry of Electricity)

Scientific Awards:

- Scholar of 2019, by the Association of Egyptian Scholars in the USA and Canada
- Prize of Scientific Excellence in Biotechnology from the National Research Center (2009)
- State Encouragement Award for Science in Advanced Biotechnology (1999)

- National Research Center Encouragement Award in Biology (1998)

Examples of Salient Outputs:

- The publication of more than 105 research papers, three books (Plant Cell and Tissue Culture, Queries in Genes and Corona Virus: the Shock of the Century), 3 chapters in co-authored books (Springer), co-author of Arab Thought Foundation Report (Innovation or Extinction), co-author of Egyptian Encyclopedia of medicinal plants and 26 abstracts and papers in conferences & workshops (Author Scopus ID: 7003363124, Google scholar: Mahmoud Sakr).
- Registration of 6 genes accessions in the World Gene Bank
- Supervision of 30 Post-graduate theses (M.Sc. and PhD) in Egypt and abroad
- The publication of several international papers in STI policy and indicators, brain drain and intellectual property policies
- PI of more than 11 national, regional, and international projects in plant biotechnology
- Participation in organization and co-organization of, and chairing 40 international, regional and national scientific events in Egypt, Jordan, Sudan, Morocco, Germany, Japan and USA.
- Awardee of 15 fellowship and post-doctoral short-term scholarships (Germany - Italy - Canada - International Center for Genetic Engineering and Biotechnology - South Korea - USA)
- Successful completion of many training courses in project management, national security, and management skills, and an intensive course in STI Policy from South Korea (STEPI)
- Member of the Task Force that prepared the Business Plan for North Africa Bioscience Network (NABNet-NEPAD), African Union
- Founder of the Egyptian Young Academy of Sciences EYAS, 2010
- Founder of the Egyptian Science, Technology, and Innovation Observatory ESTIO, 2014
- Vice-Chair of the committee that prepared Egypt's National Strategy for Science, Technology, and Innovation 2030
- At my earlier job with my team at STDF, where I served as executive director, we developed new funding mechanism in STDF, establishing Short Term Fellowship mobility program, Centers of Scientific Excellences, Demand Driven Program, National Challenges Program, Incubation Fund, new joint funds and agreements with the United Kingdom, Russian Federation, South Korea and Jordan. The STDF

experienced the highest performance rate during this period (since its establishment until 2018).

- In my current job, where I am as the president of ASRT, with the help of many colleagues in the team, we boosted and developed the performance of ASRT. ASRT showed the highest and best performance rates according to objective performance indicators. The development included supporting the innovation system through new programs to support the complete cycle of innovation, establishing the National Network of Technological Incubator (INTILAC) which comprises 17 specialized and general incubators covering Egypt, Technology, Innovation, and Commercialization Offices (TICOs), Knowledge and Technological Alliances, Deepening of Local Manufacturing Program (DLM), Scientific Networks, and connecting Diaspora scholars to motherland through the JESOR-Development program. Great efforts were exerted to publicize STI culture through new programs such as innovation exhibitions, TV competition programs “Cairo Innovates”, TV series, 3D animation series: Al-Azhar, and Noor and the Gate of History. Noor was awarded the Mohammed bin Rashid Prize for the best art work to spread science, technology and innovation culture in Arabic, UAE. Egyptian Science, Technology, and Innovation Observatory ESTIO, established in 2014, issues regular reports about STI indicators, benchmarking of Egyptian Research Institutions reports, foresighting studies, and help the in training of other observatories in Arab countries such as Algeria and Sudan. We developed a new mechanism for technology transfer and technology commercialization. And started new international cooperation with China, Belarus, and ESCWA...etc. We succeeded in linking ASRT with all elements of the innovation system; the Ministry of Trade and Industry, Ministry of Agriculture, Ministry of Military Production, Ministry of Investment, Ministry of Planning, the Arab Organization for Industrialization, the Federation of Industries, the Chambers of Commerce, the Union of Investors, Banks, the Private Sector, and Civil Society Organizations. Developing ASRT included the establishment of Cloud Computing and Big Data Processing Center and connecting it to CERN, and embracing the Egyptian Knowledge Bank, turning the building into an eco-friendly place through solar energy and cultivating the roof, and renovating the Egyptian Patent Office. As a result of the team efforts, ASRT nowadays ranked first in the Middle East as the best governmental institution in the field of scientific research according to the SCIMAGO report for the ranking of scientific research institutions (2019). At the national level, ASRT ranks first in terms of citations (field weight) according to SCIVAL in the past 5 years (2015- present). ASRT was the first public institution in Egypt working in the field of STI to establish spin off company for technology transfer and commercialization (Prime Minister Decree No. 2992 for 2019).

Personal Data:

Date of Birth: April 4, 1965

Place of Birth: Qutor, Gharbiyya Governorate, Egypt

Marital Status: Married

Children: a daughter; Aya, Graduate of the Faculty of Applied Arts and works as a design engineer in the private sector. A son; Mohamed, Fourth year student, Faculty of Computer Science, October University for Modern Sciences and Arts

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