



THE AMERICAN UNIVERSITY IN CAIRO

الجامعة الأمريكية بالقاهرة

AUC International Conference on Research in African Challenges (ICRAC)

Track S: Science contribution to alleviating poverty

SUB-TRACK S4: TRADITIONAL MEDICINE ALTERNATIVES, EMPIRICALLY, AND NEW THERAPEUTICS

Chair: Dr. Dr. Hassan Elfawal, Dr. Anwar Abdelnasser

Co-chairs: Shaker Mousa

Medicinal plants have been utilized in all societies as a wellspring of drug. Traditional medication utilized plant, animal and mineral-based drugs, spiritual treatments, manual procedures and activities to treat, diagnose and avert illnesses. In spite of the advancement accomplished in the most recent decades with present day therapeutic and pharmacological items and new restorative innovation, in Africa, up to 80% of the population depends on traditional medicine for their essential health care needs. Despite the fact that not constantly fruitful or successful, traditional medication used to keep up great health, and additionally to anticipate, diagnose, enhance or treat physical and psychological illnesses with basic strategies and a huge range of natural items isolated from plants, animals and in some instances microorganisms. Natural medications that were used to treat various illnesses for long time have given significant incentive to the cutting edge pharmaceutical industry over the past 50 years, especially in the fields of infectious diseases and oncology. Reverse pharmacology approaches enlivened by traditional medicine offered a discerning procedure for new drug discoveries and encouraged for the improvement of sound synergistic plant preparations. In this sub-track we feature the advancement accomplished in the most recent decades by traditional medicine and its appropriation by the World Health Organization and the World Health Assembly. Additionally, how the natural products utilized in the past gave a valuable platform to the advancement of pharmaceutical industry. Besides, safety worries for traditional medication use will be discussed by a board of specialists.

Biographies

Hassan A. N. El-Fawal is Professor of Neuroscience, Toxicology and Pharmacology and Dean of the School of Sciences and Engineering at the American University in Cairo (AUC). Prior to joining AUC, he was Professor of Pharmaceutical Sciences and Dean of the School of Health Sciences at Albany College of Pharmacy and Health Sciences in New York. He was previously Assistant Chair and Chair of Natural Sciences and Professor of Health Sciences at Mercy College from 1997 to 2009. The focus of his research is diagnostic and prognostic neuro-immune biomarkers of neurodegeneration, neurotoxicity and therapeutics. He earned a B. Sc. from Alexandria University, Egypt in 1979, and a M.Sc. from the University of Guelph in Canada. His Ph.D. in Biomedical Sciences, was earned at Virginia Tech in 1989. From 1989 to 1997 he worked as Research Assistant Professor at NYU School of Medicine's Institute of Environmental Medicine.



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Anwar Abdelnaser

Is an assistant professor of chemistry at the School of Science and Engineering of The American University in Cairo? Abdelnaser received his bachelor of pharmacy (BPharm) degree from Ajman University (Ajman, U.A.E.) in 2006 and his MSc and PhD from the University of Alberta (Edmonton, Alberta, Canada) in 2008 and 2013, respectively. Following this, he worked as a post-doctoral associate at the University of Alberta for three years. During his graduate and post-doctoral studies, Abdelnaser received several university, provincial, and federal awards and scholarships. He has published over 40 peer-reviewed articles in international journals and a similar number of abstracts in local, regional, and international meetings and conferences.

Shaker Mousa was appointed as an endowed, tenured Professor and Executive Vice President and Chairman of the Pharmaceutical Research Institute (PRI) in 2002. He also served as Vice Provost for Research at Albany College of Pharmacy and Health Sciences from 2010 – 2018. As the leader of PRI, Dr. Mousa works with scientists and students to identify novel strategies for unmet medical needs. Dr. Mousa and his staff have developed partnerships with other academic research centers in New York State's Capital Region and academic and industrial centers nationally and worldwide. He holds Adjunct Professor Appointments at Rensselaer Polytechnic Institute, SUNY Albany, SUNY Buffalo, and Temple University. He is a Visiting Professor of Bioethics at Albany Medical College and a Visiting Scholar at Johns Hopkins University.

Previously, Dr. Mousa was a Senior Scientist and Fellow at DuPont Pharmaceutical Company for 17 years where he served as a Working Group Chair of several drug discovery programs from 1993-2001. Dr. Mousa holds more than 350 US and International Patents related to the discovery of novel anti-angiogenesis strategies, antithrombotics, anti-integrins, anti-cancer, and non-invasive diagnostic imaging approaches. He has published more than 500 journal articles, book chapters, and books as author and editor. His research has focused on diagnostics and therapeutics of angiogenesis-related disorders, thrombosis, and vascular diseases.

Dr. Mousa received his BSC from Alexandria University, College of Pharmacy & Pharmaceutical Sciences with distinction, ranking first in a class of more than 500 Pharmacy students. He was then appointed a member of the faculty, and he received his MSC in Biochemical Pharmacology. He received his PhD from Ohio State University, College of Medicine, in Columbus, OH, and did a Postdoctoral Fellowship at the University of Kentucky, Lexington. He has also received his MBA (Management) from Widener University in Chester, PA.