



In The Name of Allah  
The Merciful and The Beneficent



**Statement of STEP 5: Cutting Edge Pharmaceutical Approaches to Meet Health Challenges of CDs and NCDs; with an emphasis on female scientists' contributions"**  
**February 27<sup>th</sup> – March 2<sup>nd</sup> , 2019**  
**ICCBS, University of Karachi, Pakistan**

The 5<sup>th</sup> Science and Technology Exchange Program (STEP) in Islamic countries was jointly organized (February 27<sup>th</sup> - March 2<sup>nd</sup>, 2019) by Mustafa<sup>(pbuh)</sup> Science and Technology Foundation (MSTF) and International Center for Chemical and Biological Sciences (ICCBS), University of Karachi, focusing on Cutting Edge Pharmaceutical Approaches to Meet Health Challenges of CDs and NCDs; with an emphasis on female scientists' contributions.

The forum was attended by 64 delegates from 19 countries (Canada, Egypt, Pakistan, Germany, Iran, Iraq, Jordan, Kazakhstan, Finland, Lebanon, Malaysia, Oman, Turkey, USA, Yemen, France, Sweden, UAE, Singapore), and many undergraduate and graduate researchers and faculty members. Representatives from COMSTECH, TWAS, IAS, ISESCO, WHO, OWSD, MABIC also participated in STEP5.

The program included the following sections:

- **Scientific and technological panels, STEP talks, round tables, keynote addresses and invited talks focusing on the following areas, held during three days in 15 different sessions:**
  - a- Influential Actions to Overcome Health-Related Challenges lying in the Islamic World;
  - b- Latest development to Overcome Challenges Arising from CDs and NCDs in the Islamic World;
  - c- STI and Future of Communicable and Non-communicable Diseases in the Islamic World;
  - d- Latest Achievements in Tackling the Islamic World Health-Related Challenges;
- **Academia to Academia (A2A) meetings:** several A2A meetings between international delegates and academia took place.
- **Presentation of Young Scientists' achievements:** one session to showcase the achievements of young scientists was held.
- **Exposure of Industries to Scientists' achievements (EISA) was organized and included the following:**
  - ✓ Exhibitions
  - ✓ B2B meetings
  - ✓ Pitch Deck Presentations
- **As another parallel program, Innovation Lab on Neuroscience and Electrophysiology was organized and included the following:**

- **Workshops:** 75 scholars participate in the 3 workshops that was conducted by the Science Beam Co. and included following:
  - Animal Electrophysiology
  - Neurofeedback, Brain Mapping and QEEG
  - EEG/ERP and Brain Computer Interface
- **Grants:** 5 Laboratory Equipment Grants for the best research proposals was granted (Totally worth 40K USD)

Based on extensive discussions during these sessions and presentations by delegates on the state of R&D in their respective institutions, the following observations and recommendations were made to MSTF to further enhance S&T collaboration between Islamic countries and beyond:

- 1- To encourage women scientists to be involved in leadership as a model for others;
- 2- To create a free and enabling environment to foster freedom of idea, critical thinking, sharing and mentoring;
- 3- To enhance women's contribution to scientific bodies and events;
- 4- To establish STI virtual hub to facilitate the communication and networking;
- 5- To establish university and other research centers network;
- 6- To enhance collaboration between different STI organizations;
- 7- To map, identify gap and fill a niche to develop MSTF strategic plan;
- 8- To Encourage young scientists involvement in STI;
- 9- To facilitate mentorship programs by distinguished scholars;
- 10- To facilitate multilateral collaborations via private public partnership (PPP) by identifying and promoting best practices;
- 11- To encourage and support alliances and capacity building in priority areas;
- 12- To promote herbal medicine and natural product and indigenous knowledge;
- 13- To identify champion women scientists as the role model;
- 14- To increase public awareness on the activities and mission of MSTF;
- 15- To prioritize scientists working in Muslim countries to be awarded or to setup extra awards to those scientists;
- 16- To provide mobility assistance to young scientists;
- 17- To create innovation and entrepreneurship network;
- 18- To encourage collaborative research among Muslim countries;

The pilot of MSTF Lab Network which was proposed to be established in the 4<sup>th</sup> STEP Statement, was presented by MSTF and welcomed by the attendees of the 5<sup>th</sup> STEP.

The attendees of the meeting deeply value and appreciate the excellent organization of the program and the overwhelming hospitality of PCMD and the officers of ICCBS, University of Karachi and in particular the dedication and commitment of leadership and staff of ICCBS and University of Karachi.

We acknowledge the vision of MSTF for furthering the S&T agenda among the Islamic World.