

RECENT EMGEN ACTIVITIES

Eastern Mediterranean Health Genomics and Biotechnology Network (EMGEN) was created in 2004 for representatives of selected centers of excellence in (health related) Molecular biology, Biotechnology & genomics in the Eastern Mediterranean Region by recommendation of WHO/EMRO efforts.

EMGEN has organized four rounds EMGEN Grant involved EMRO and Islamic countries in the frame of establishing and promoting the applied significance of the joint research projects which investigators from two or more different institutions of at least two countries of the Eastern Mediterranean region collaborate on a unified research topic pertaining to one of all health genomics and biotechnology areas.

Eastern Mediterranean Health Genomics & Biotechnology Network (EMGEN) collaborated with the Biotechnology Development Council of Iran (BDC) in the form of a research project. The project was grouped into some sections including scientist's database in the Eastern Mediterranean region, newsletter edition, biotechnology arbitration plan, an action plan for improvement of regional biotechnology collaborations as well as holding seminars for promotion of industry-university links. The project was successfully accomplished in 2016.

A variety of projects have been accomplished Since EMGEN was found which include exchange of researchers for scientific projects, collaboration between Iranian and regional scholars, introduction of papers, books, journals and useful all-inclusive databases, containing research centers, 1200 companies and also more than 7000 active scientists in the field of genomics and health biotechnology. In this regard at 2016, EMGEN signed a five year Memorandum of Understanding (MOU) between KOYA University (Kurdistan Region-Iraq), to joint scientific activities. Both sides briefed each other about the programs of their respective organizations and thoroughly discussed various areas of collaboration.

The MOU's focus points are collaborative projects, researcher exchange, and to hold common scientific events such as conferences, seminars, workshops, mutual cooperation, Exchange of master and Ph.D. students, Transfer of knowledge and exchange of scientific materials and information, also Exchange of staff and research scholars.

Table1. EMGEN's MoUs and parties name

| Parties Name | Countries Involved | Date |
|-------------------------|---------------------------|-----------------|
| EMGEN & KOYA University | Iran-Iraq | 2 November 2016 |

EMGEN organizes International training workshops and webinars to develop research outcomes and improve capabilities such as lab works with bioinformatics servers and etc.

The workshops and webinars include lectures, and teaching by various professions. The list of past webinars and workshops are shown in table 1 and 2. The participants of the past webinar were from I.R.Iran, Pakistan and USA.

Table2. Time and Title of EMGEN's Webinars

| Webinar Title | Instructor | Affiliation | Time |
|------------------------------------------------------------------------|------------------------------|------------------------------------------------------|-------------------|
| Strategies to Develop Behavioral Biosafety Culture in the Laboratories | Dr. Salma Saleem | Post Doctorate (OU-HCOM, USA) | 29 May 2017 |
| Writing a Grant Proposal | Dr. Shamshad Zarina | National Center for Proteomics-University of Karachi | 22 May 2017 |
| Academic writing with a specific focus on writing a research paper | Dr. Shumaila Shafket Ali | Department of English-University of Karachi | 20 April 2017 |
| The Next Generation of Influenza Vaccines | Dr. Taghizadeh | Razi Vaccine and Serum Research Institute | 3 January 2017 |
| Drug Interaction | Dr. Yekta Farmahini Farahani | Pasteur Institute of Iran | 3 September, 2016 |
| Health Biotechnology in Asia with the focus on China | J. Zhu | China | 16 August, 2016 |
| Health Biotechnology in Europe with the focus on Austria | C. Bieler | Austria | 9 August, 2016 |

Table2. Time and Title of EMGEN's workshops

| Workshop Title | Time |
|--------------------------------------------------------------------------|------------------------|
| SnapGene software | 23 October 2017 |
| Microbial Control Processes in the Production of Pharmaceutical Products | 21 - 22 September 2017 |
| siRNA Designing Methods | 18 - 20 September 2017 |
| Principles of Cytoscape Software | 16 - 17 September 2017 |
| SPSS Software | 14 September 2017 |
| Paper Writing | 13 September 2017 |
| Instrumental Analysis Methods | 11 – 13 September 2017 |
| Protein Bioinformatics and Docking | 10 September 2017 |
| Next Generation Sequencing | 7 - 8 September 2017 |
| Molecular Biology | 2 - 6 September 2017 |
| HPLC | 25 July 2017 |
| Drug Modeling by SAR | 12 July 2017 |
| Immunoinformatics and Vaccine Design | 11 July 2017 |
| Protein Bioinformatics and Docking | 10 July 2017 |

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| Cheminformatics and Drug Discovery | 9 July 2017 |
| R Software and Omics Application | 8 July 2017 |
| HPLC | 22 May 2017 |
| HPLC | 18 April 2017 |
| Proposal and Paper Writing Workshop | 21 - 22 February 2017 |
| HPLC | 13 February 2017 |
| SPSS software | 18 - 19 January 2017 |
| Pharmaceutical Plants | 4 - 5 December 2016 |
| Pharmaceutical Plants | 17-18 October 2016 |