

# Eastern Mediterranean Health Genomics & Biotechnology Network



[www.emgen.net](http://www.emgen.net)

EMGEN newsletter

Number 2-67, December, 2019

What have EMGEN member countries  
achieved in the research areas?

| No | Article  | Link  | Country |
|----|--|---|---------|
| 1  | Optimization of aqueous two-phase partitioning for purification of recombinant <i>Eupenicillium terrenum</i> fructosyl peptide oxidase | <a href="https://www.sciencedirect.com/science/article/abs/pii/S1878818119308072">https://www.sciencedirect.com/science/article/abs/pii/S1878818119308072</a> | Iran    |
| 2  | Single-Chain Variable Fragment-Based Bispecific Antibodies:  | <a href="https://www.sciencedirect.com/science/article/p">https://www.sciencedirect.com/science/article/p</a>   | Iran    |

|    |   |   |         |
|----|---|---|---------|
|    | Hitting Two Targets with One Sophisticated Arrow  | <a href="https://pubmed.ncbi.nlm.nih.gov/31376325">ii/S2372770519300312</a>                     |         |
| 3  | Biosimilar Gene Therapy: Investigational Assessment of Secukinumab Gene Therapy   | <a href="https://pubmed.ncbi.nlm.nih.gov/31376325">https://pubmed.ncbi.nlm.nih.gov/31376325</a> | Iran    |
| 4  | Genome-wide Single Nucleotide Polymorphism-Based Autozygosity Mapping Facilitates Identification of Mutations in Consanguineous Families With Epidermolysis Bullosa | <a href="https://pubmed.ncbi.nlm.nih.gov/29364557">https://pubmed.ncbi.nlm.nih.gov/29364557</a> | Iran    |
| 5  | Comparative Study of Different Forms of Jellein Antimicrobial Peptide on Leishmania Parasite  | <a href="https://pubmed.ncbi.nlm.nih.gov/31862270">https://pubmed.ncbi.nlm.nih.gov/31862270</a> |         |
| 6  | Further Evidence for the Implication of the MET Gene in Non-Syndromic Autosomal Recessive Deafness  | <a href="https://pubmed.ncbi.nlm.nih.gov/31801140">https://pubmed.ncbi.nlm.nih.gov/31801140</a> | Morocco |
| 7  | Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Neutralising Antibodies in a High-Risk Human Population, Morocco, November 2017 to January 2018             | <a href="https://pubmed.ncbi.nlm.nih.gov/31796154">https://pubmed.ncbi.nlm.nih.gov/31796154</a> | Morocco |
| 8  | Computational Analysis of nsSNPs of ADA Gene in Severe Combined Immunodeficiency Using Molecular Modeling and Dynamics Simulation                                   | <a href="https://pubmed.ncbi.nlm.nih.gov/31781678">https://pubmed.ncbi.nlm.nih.gov/31781678</a> | Morocco |
| 9  | Cell-mediated Immune Response Associated With Chlamydia Pneumoniae Infection in Atherosclerotic Patients  | <a href="https://pubmed.ncbi.nlm.nih.gov/31707079">https://pubmed.ncbi.nlm.nih.gov/31707079</a> |         |
| 10 | Dissemination of Carbapenem-Resistant Acinetobacter baumannii Strains Carrying the bla GES, bla NDM and bla OXA23 in Morocco  | <a href="https://pubmed.ncbi.nlm.nih.gov/31646143">https://pubmed.ncbi.nlm.nih.gov/31646143</a> | Morocco |
| 11 | Genetic Approaches for Definitive Diagnosis of Agammaglobulinemia in Consanguineous Families  | <a href="https://pubmed.ncbi.nlm.nih.gov/31696364">https://pubmed.ncbi.nlm.nih.gov/31696364</a> | Tunisia |
| 12 | Cellular Binding Analysis of Recombinant Hybrid   | <a href="https://pubmed.ncbi.nlm.nih.gov/31838658">https://pubmed.ncbi.nlm.nih.gov/31838658</a> | Tunisia |

Heteropolymer of Camel Heparin and Human Ferritin H Chain.  
The Unexpected Human H-ferritin Binding to J774 Murine  
Macrophage Cells

- |    |   |   |         |
|----|---|---|---------|
| 13 | Unexpected Diagnosis of Basal Cell Carcinoma in a Patient Presenting With a Secondary Location of Leishmania Parasites in the Skin  | <a href="https://pubmed.ncbi.nlm.nih.gov/31762877">https://pubmed.ncbi.nlm.nih.gov/31762877</a> | Tunisia |
| 14 | Phenotypic and Genotypic Characterization of Meningococcal Isolates in Tunis, Tunisia: High Diversity and Impact on Vaccination Strategies                                  | <a href="https://pubmed.ncbi.nlm.nih.gov/31756567">https://pubmed.ncbi.nlm.nih.gov/31756567</a> | Tunisia |
| 15 | Typing of Human Cosaviruses by Sequencing of Full VP1: Update on Global Genetic Diversity and Identification of Possible New Genotypes Circulating in Tunisia, North Africa | <a href="https://pubmed.ncbi.nlm.nih.gov/31715246">https://pubmed.ncbi.nlm.nih.gov/31715246</a> | Tunisia |

## Conferences and Meetings on Biotechnology

```
graph TD; A[Conferences and Meetings on Biotechnology] --> B[8th Annual Neuroscience Virtual Conference]; A --> C[14th World Congress on Advances in Stem Cell Research and Regenerative medicine]; A --> D[13th International Conference on Genomics and Molecular Biology];
```

8th Annual  
Neuroscience Virtual  
Conference

14th World  
Congress on  
Advances in Stem  
Cell Research and  
Regenerative  
medicine

13th International  
Conference on  
Genomics and  
Molecular Biology

# New Findings

## [A new gene therapy strategy, courtesy of nature](#)

Scientists have developed a new gene-therapy technique by transforming human cells into mass producers of tiny nano-sized particles full of genetic material that has the potential to reverse disease processes.

## [Mitochondria are the 'canary in the coal mine' for cellular stress](#)

Mitochondria, tiny structures present in most cells, are known for their energy-generating machinery. Now, researchers have discovered a new function of mitochondria: they set off molecular alarms when cells are exposed to stress or chemicals that can damage DNA, such as chemotherapy. The results could lead to new cancer treatments that prevent tumors from becoming resistant to chemotherapy.

### **EMGEN Secretariat:**

Biotechnology Research Center, Department of Medical Biotechnology, Pasteur Institute of Iran (IPI), No. 69, Pasteur Ave, Tehran, Iran.

**Tel:** +9821 64112444

**Fax:** +9821 66480780

**E-mail:** [Emgen@pasteur.ac.ir](mailto:Emgen@pasteur.ac.ir)