

# Universal Scientific Education and Research Network (USERN): To Make the Knowledge Without Borders

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## USERN background

Universal Scientific Education and Research Network (USERN) was formed in early 2015, for advancement of authentic, ethical and professional scientific research and education and consequently advancement of science for non-military purposes and public good. The establishment of USERN was officially announced on Dec 31<sup>st</sup> in the 1<sup>st</sup> Meeting of a number of top one percent scientists in Tehran, Iran (1,2). USERN envisions a reliable network of universally validated resources, including ideas, facilities, human, financial and educational resources in order to launch and facilitate authentic, ethical and professional scientific research intended to improve human life.

Formal sciences, Physical sciences, Biological sciences, Medical sciences, and Social sciences are shares of the heritage of ancient, true pioneers in knowledge. Enormity of this prodigious legacy, can only blaze when these segments, reunite as a whole and

into knowledge without borders (3). It is undeniable that science today, is unintentionally mistaken for various purposes, a line to draw boundaries, or a rule to rank orders. We believe that the golden key to this reconcile, is by the hands of the scientists themselves and the hands of anyone who has an ability to share for public good. USERN was developed as an initiative, to actualize this network and to bring about closer all filed of science in one ground and in a real asset (4).

## USERN advisors

USERN is honored to host more than 180 members from world top 1% scientists (Figure 1), including eleven Nobel Laureates, as scientific Advisory Board in different disciplines of science. Five of the elite advisory board are the Nobel Laureates in chemistry, 4 in physiology or medicine, and 2 are prize winners in economics and business. Moreover, according to the USERN statute, annually selected USERN Laureates in any of the five fields are eligible to join the USERN Advisory Board (4).

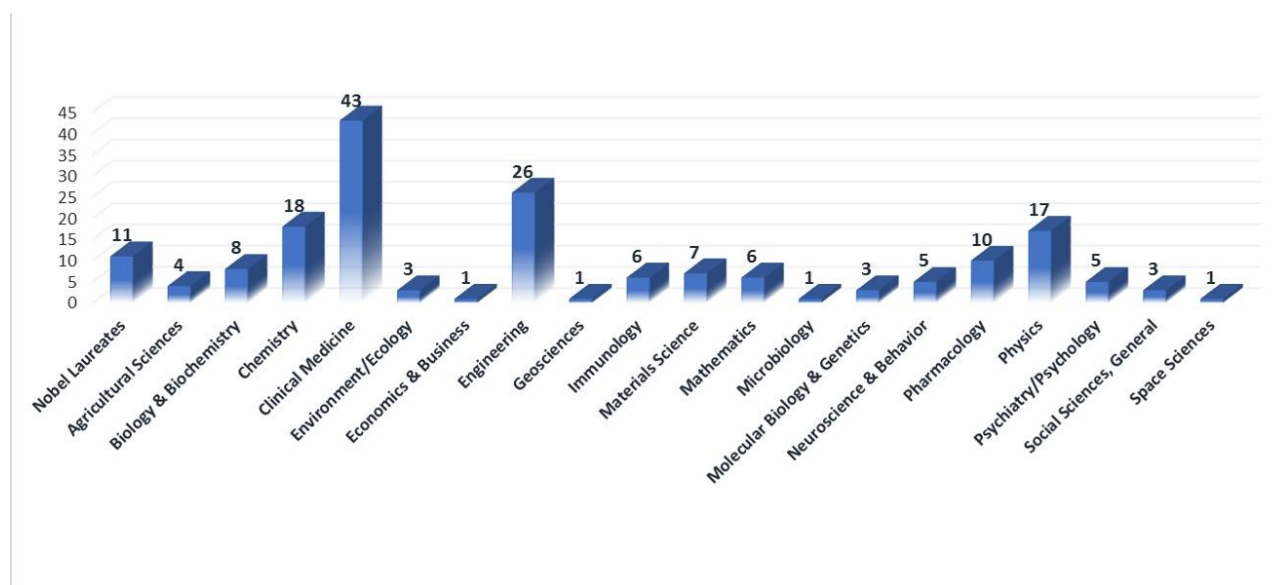


Figure 1. USERN advisory board, 2016

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The Advisory Board is responsible for providing non-binding strategic advice to both Policy Making Council and staff in a number of scientific matters and dissolving disputes in the network. USERN Board members shall advise the Policy Making Council on strategic matters and have the privilege of attending all the meetings of USERN Policy Making Council and participate in discussions. Finally, the Policy Making Council is appointed by direct election and upon

obtaining the majority of votes of their fellow Advisory Board members in the respective field (4,5).

### USERN members

More than 4000 members of more than 50 countries, in all twenty one fields of science have registered via [usern.org](http://usern.org) within the first year of USERN inauguration (Figures 2 and 3).

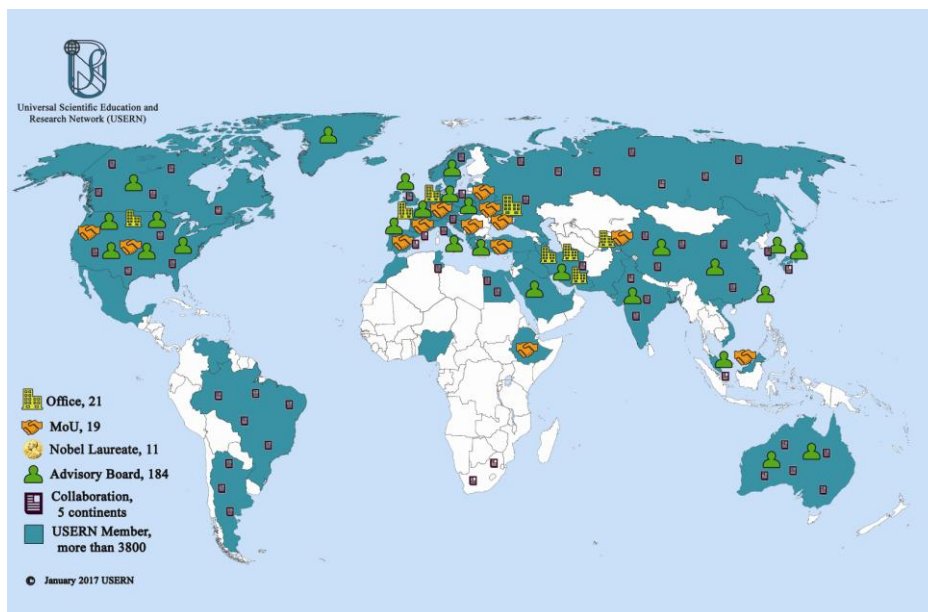


Figure 2. USERN map

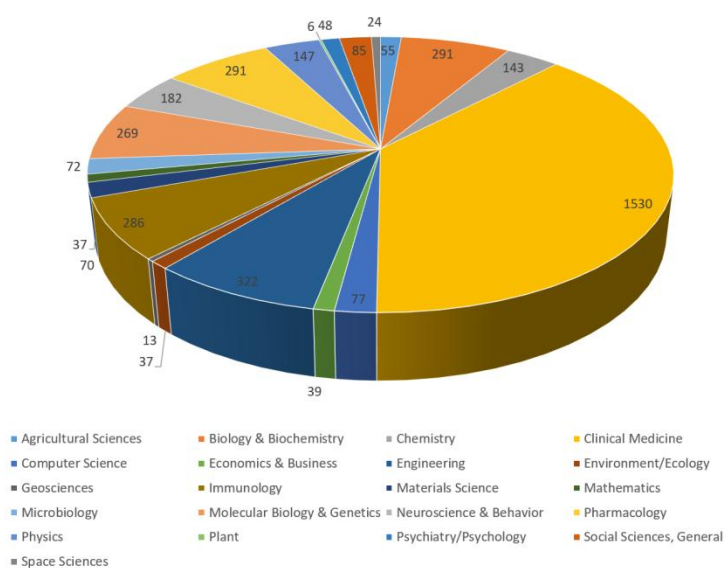


Figure 3. USERN members

### **USERN statute**

The draft of USERN Statute was finalized on 21<sup>st</sup> January 2015, and revised on 20<sup>th</sup> March 2016. Signed by more than 80 top scientists worldwide, USERN statute was officially unveiled during the 1<sup>st</sup> USERN Festival on Nov 10<sup>th</sup> 2016 (6). The USERN Statute consists of 9 articles and 34 sections, covering general principles of the network policies, structure, and goals. The main policies of USERN Prize, awarded each year, are explained in the final article of the statute as well (5).

### **USERN MOUs**

The Memorandums of Understanding (MoUs) are agreements to identify USERN collaboration with scientific centers worldwide and to promote universal scientific communications and collaborations. A total number of nineteen MOUs have already been signed since 2015 between USERN and a number of academic/scientific centers, including Division of Pediatric Allergy/Immunology, Marmara University Hospital, TURKEY; Belarusian State Medical University, BELARUS; Belarusian National Research Center for Pediatric Oncology, Hematology and Immunology, BELARUS; Tajikistan National Medical Center, TAJIKISTAN; Strasbourg School of Medicine, FRANCE; Center for Pathophysiology, Infectiology and Immunology, Medical University of Vienna, AUSTRIA; University Children's Hospital Munich, Ludwig Maximilian University of Munich, GERMANY; Universidad de Santiago de Compostela (USC), SPAIN; Department of Immunology and Rheumatology, Hannover Medical School, GERMANY; Seattle Children's Research Institute, University of Washington, USA; Kharkiv National Medical University, UKRAINE; Institute of Health Technology and Prevention Research, Medical University of Graz, AUSTRIA; Laboratory of Nanomedicine and Biomaterials, Brigham and Women's Hospital, Harvard Medical School, USA; Malaysian Society of Allergy and Immunology (MSAI), MALAYSIA; Jimma University, ETHIOPIA; International Nephrology Research & Training Center, Institute of pathophysiology, Semmelweis University, HUNGARY; Ukrainian Association of Pediatric Immunology, UKRAINE, Rare Immune Disease Foundation, UKRAINE, and Shupyk National Medical Academy of Postgraduate Education, UKRAINE.

### **USERN offices**

USERN offices are being established all around the world to promote expansion of scientific activities under mutual benefit and by commitment to USERN statute. None of the USERN offices are properties of USERN network, through adopting the USERN symbol senior scientists claim their companionship with USERN and their commitment to support junior researchers. Twenty one offices have already been labelled as USERN offices in different countries, including Iran, USA, Germany, France, Ukraine, and Tajikistan. It is to be hoped that such MoUs and offices help substantialize interdisciplinary scientific education and research activities in this network through scientific courses, workshops, academic exchanges, and other research/educational projects. USERN opens arms to new collaborations and welcomes scientific centers to open USERN offices worldwide.

### **USERN interest groups**

USERN encourages scientists worldwide to establish interest groups, having provided the opportunity of creating research and educational groups within the network. USERN interest group seek to develop international scientific communication, promote hopefulness, self-confidence, and effort-value among young scientists, benefit from motivated young workforce all over the world, provide grounds for fruitful teamwork and international collaboration, and facilitate the interface for senior: junior communication and sharing of experiences. More than 50 interest groups have been established since 2015, but only about half of them have been accredited to continue their activities under the name USERN, in 2017. Health and Art (HEART) group was the first established group, while Network of Immunity in Infection, Malignancy and Autoimmunity (NIIMA), Universal Council of Ophthalmology (UCO), NeuroImaging Network (NIN), NeuroImmunology Research Association (NIRA), and Cancer Immunology Project (CIP) were the top 5 active groups during 2016, according to their documented virtual activities in interest group homepages of USERN website (7).

### **USERN scientific output**

One hundred and eleven papers with about a hundred citations have already been published since 2015 under affiliation of USERN (Figure 4). A striking progress in scientific activities in USERN interest

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groups, has led to the high number of scientific publications and other scientific productions, including international published books, and presentations in international congresses as well. Interestingly, USERN has provided an innovative headstock to colligate science and art though creating rational connections

between scientific and artistic productions which were phenomenally eye-catching in several USERN events, including USERN congress and gatherings. USERN media and art performances are the most highlighted productions in this regard.

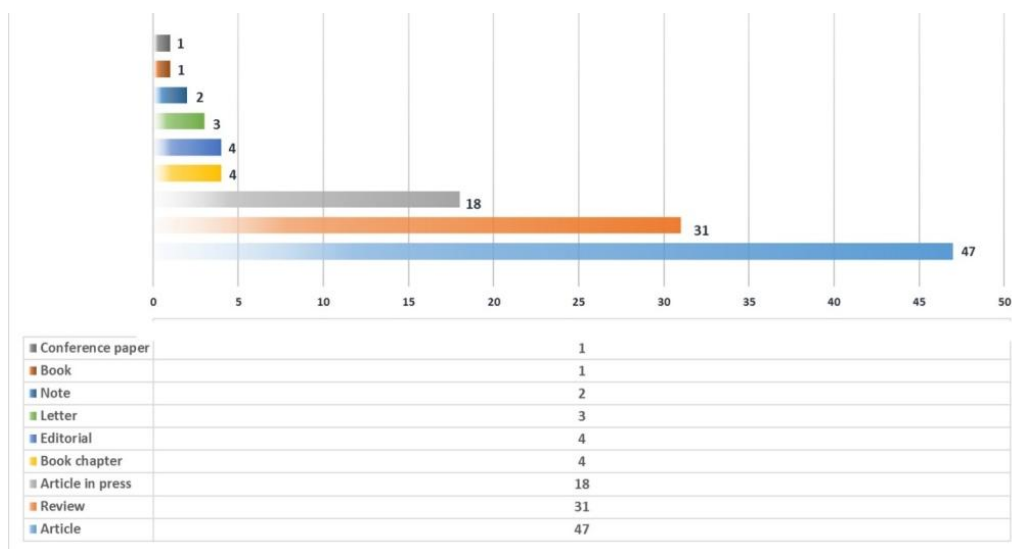


Figure 4. USERN scientific output, December 2016

### USERN talks

Fourteen USERN Talks were given by senior top scientists during 2016, while there was a decision to organize an USERN inspirational Talk (iTALK) by junior scientist at last week of the year, which was very welcomed by the delegates. USERN Talks/iTalks are part of USERN scientific activities, where scientists could share their scientific and personal experiences with USERN members. Proudly, 16 USERN Talk/iTalks have been presented up to this date, all by distinguished senior or junior scientists, and highly welcomed by the audience in the respective fields.

### USERN meetings and gatherings

Following the official introduction of USERN in the first USERN advisory board meeting in Dec 31<sup>st</sup> 2015, the second USERN introduction gathering was held on February 11<sup>th</sup> 2016, hosting enthusiastic minds to learn more about USERN and the "Science without Borders". USERN has thereafter organized 5 other Advisory Board meetings in order to discuss the timely challenges of USERN with true USERN stockholders, world top 1% scientists. The second and third Advisory Board meetings were organized on March 2016 in

Antalya, Turkey and April 2016 in Tehran, Iran, introducing the newborn network and its goals. The last three Advisory Board meetings of 2016 were organized in summer, two of which were in Tehran, Iran and one in Boston, USA. These were mainly focused on sharing the ideas of advisors regarding USERN and the scientific program of the USERN congress.

### USERN congress

The 1<sup>st</sup> USERN congress was an unique event held during Nov 8<sup>th</sup>-10<sup>th</sup> 2016 in Tehran, Iran. The lecturers and panel moderators were from 10 countries, including UK, Italy, China, USA, Canada, Iran, Netherland, Germany, Switzerland, and Spain, covering 5 major fields of science as designated by the theme "Science without Borders". The congress encompassed one USERN Nobel talk (UNT), one USERN Able Virtual Talk (UAVT), 16 USERN Keynote Lectures (UKL), 9 Focus Group Discussion (FGDs) sessions, 3 plenary panels, and USERN Junior Talks (UJT) (7). Art performances were part of the program, each created during one of the keynote lectures. More than a thousand delegates attended this

event. The 2<sup>nd</sup> USERN congress has already been agreed to be hosted by the Kharkiv National Medical University in Ukraine.

### **USERN prize**

USERN prizes, first of their own type, have been awarded to five exceptional talents under age 40, in Formal, Physical, Biological, Medical, and Social sciences in 2016 (9). The USERN Prize awarding festival was held on November 10<sup>th</sup>, to cherish the World Science Day for Peace and Development. The 2<sup>nd</sup> USERN Prize festival is expected to happen on Nov 10<sup>th</sup> 2017 in Kharkiv, Ukraine.

### **USERN website and virtual publicity**

Since of its official announcement, USERN has been available in cyberspace through its official website <http://usern.org> (1), giving the most recent updates on USERN activities, events, and achievements. Meanwhile USERN has been increasingly public in other social networks as well.

### **Acknowledgment**

USERN is pleased to acknowledge the efforts of all USERN advisors, members, and the team of Support and Resource Development Division, including Armin Hirbod Mobarakeh, Sanam Ladi Seyedian, Parya Akbari, Arya Aminorroaya, Saboura Ashkevarian,

Farnaz Delavari, Sara Hanaei, Ali Jaberipour, Mahsa Keshavarz-Fathi, Mona Mirbeyk, Sasan Paryad-Zanjani, and Farzaneh Rahmani who made this initiative possible!

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