L'ORÉAL-UNESCO
FOR WOMEN IN SCIENCE
2017

INTERNATIONAL RISING TALENTS

For Women in Science

UNESCO FONDATION L'ORÉAL


For Women
in Science
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THE YOUNG WOMEN IN SCIENCE *who will have the power to change the world*

Since 2001, the L'Oréal-UNESCO *For Women in Science* program has highlighted the achievements of younger women who are in the early stages of their scientific careers. Each year, the International Rising Talents program selects the 15 most promising women scientists among the 250 national and regional fellows of the L'Oréal-UNESCO *For Women In Science* program. These young women have the power to change the world and recognizing them will help ensure that they reach their full potential.

1/
WATCHING THE BRAIN AT WORK

Brain imaging techniques, and especially MRI (Magnetic Resonance Imaging), have come along in leaps and bounds over the last few years. As well as imaging anatomical structures, they can now also reveal cerebral activity. The brain is one of our least-understood organs so such observations, combined with innovative clinical testing, could help in the development of improved disease diagnostics and treatments in the future.

2/
ON THE ROAD TO CONCEIVING NEW MEDICAL TREATMENTS

The cell is the basic structure of all living beings. Shedding more light on the complex mechanisms at play inside biological cells would help improve how we treat a number of diseases, including autism, neurodegenerative diseases like Alzheimer's and Parkinson's, ulcers, burns, arthritis, cancer or auto-immune diseases.

3/
FINDING POTENTIAL NEW SOURCES OF DRUGS

Soil bacteria have provided us with molecules for making antibiotics for decades, so studying these microorganisms should help us unearth potential new sources of drugs. Unravelling the mysteries of proteins, which are the basic bricks of the living world, should also help us produce new antibiotics and bactericides.

4/
GETTING TO THE HEART OF MATTER

Physical and chemical reactions at the infinitely small scales of atoms, which are the building blocks of matter, are extremely important. By varying the composition, structure or the reactivity of materials, the researchers demonstrate how they can optimize the properties of electronic components, analytical equipment and even industrial processes.

5/
EXAMINING THE PAST TO SHED LIGHT ON THE FUTURE – OR VICE VERSA

Whether it is on Earth or in the depths of the Universe, powerful observation and analytical tools allow researchers to understand the present-day world, predict its future and even to turn back time and see how it might have been in the past. Here, we look at topics as diverse as lizards in the Amazon, ray-finned fish, and baby stars.

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INTERNATIONAL RISING TALENTS 2017

1/ WATCHING THE BRAIN AT WORK

DR LORINA NACI

L'Oréal-UNESCO National Fellowship - Canada
Brain and Mind Institute at the University of Western Ontario

FUNDAMENTAL MEDICINE

IN A COMA: IS THE PATIENT CONSCIOUS OR UNCONSCIOUS?

In Canada alone, 1.4 million people are currently living with the consequences of an acquired brain injury, with 50,000 new cases each year. Coma is defined as an acute state of behavioral non-responsiveness in which the patient is thought to lack consciousness or have minimal consciousness. Although patient outcomes vary greatly, there is currently no clinical tool to evaluate whether they will recover or not. This situation poses serious problems – for example, how does a physician know whether to continue with life-sustaining therapies or not, especially in the first 72 hours? Dr Lorina Naci, cognitive neuroscientists at the University of Western Ontario (UWO) is hoping to change the way things are done. She has developed an innovative and powerful technique that can assess preserved brain function in comatose patients. The technique involves the patients listening to a short audio-story while inside an MRI scanner (Magnetic Resonance Imaging). This approach, which allows researchers to visualize cerebral activity, has already succeeded in detecting the signs of consciousness in a patient who has been in a vegetative state for 16 years. Dr Naci's numerous publications on the subject have attracted the attention of other scientists in the field. *"I will now be able to test my method on comatose patients in the intensive care unit - as soon as they arrive, and then one month and six months later,"* explains the young scientist. *"My goal is to determine the clinical prevalence of covert consciousness and identify novel and objective prognostic markers of recovery in these patients. These studies will not only have profound implications for diagnostics and care, but will also help medical and legal decision-making relating to life after severe brain injury."*

ASSOCIATE PROFESSOR MUIREANN IRISH

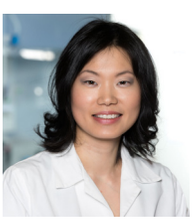
L'Oréal-UNESCO National Fellowship - Australia
FRONTIER Research group at the University of Sydney

CLINICAL MEDICINE

RECOGNIZING ALZHEIMER'S BEFORE THE FIRST SIGNS OF THE DISEASE APPEAR

"It was after seeing my grandmother suffering from the devastating effects of Alzheimer's when I was 17 years old that I decided to pursue a research career in the field of neurodegenerative diseases," says Muireann Irish, a newly appointed Associate Professor at the University of Sydney in Australia. Since then, and with a heartfelt desire to improve the quality of life of patients, Dr Irish has been focusing on the insidious changes that occur in brain structure and function across a range of neurodegenerative disorders. Such symptoms include memory loss, profound cognitive, behavioral and social dysfunction, and can precede a formal diagnosis of dementia by around 15 years. Her research involves having patients undergo clinical tests and answer specific questionnaires while she examines their white and grey brain matter using different MRI imaging techniques. She then relates these early changes in thinking and memory to alterations in complex functional neuronal networks in the brain. The brilliant Irish researcher, who has already received many prestigious awards, has published a number of highly-cited papers and is now collaborating with American and British teams. *"I study the brains of pathological and non-pathological aging, and am beginning to explore changes in individuals who have a genetic predisposition for dementia, but who have no outward symptoms,"* she explains. *"I thus hope to be able to develop a new generation of clinical tests sensitive to the earliest pathological changes in preclinical dementia."*

INTERNATIONAL RISING TALENTS *2017*



DR HYUN LEE

L'Oréal-UNESCO National Fellowship - Germany

Hyman Laboratory at the Max Planck Institute of Molecular Cell Biology and Genetics

BIOLOGICAL SCIENCES

NEURODEGENERATIVE DISEASES: UNTANGLING AGGREGATED PROTEINS

Several tens of millions of people around the world suffer from neurodegenerative diseases (such as Alzheimer's, Parkinson's and Lou Gehrig's disease) that deteriorate the cells of the nervous system, in particular neurons. Many of these diseases share a common trait: as people age, rigid structures made of aggregated proteins accumulate in the brain and adversely affect neuron function. The mechanisms behind this aggregation are still not well understood. *"I study how proteins transition from being freely moving structures to rigid aggregated ones in neuron cultures,"* explains Dr Hyun Lee, a post-doctoral fellow at the Max Planck Institute in Dresden, Germany. *"I hypothesize that there are mechanisms in healthy cells that prevent proteins from aggregating and these mechanisms decline with age. I use state-of-the-art imaging techniques to investigate this."* The young Korean researcher, who has been living in Germany for 5 years, hopes to identify these mechanisms and find ways to reverse protein aggregation. Her work could help in the development of new therapeutics for neurodegenerative diseases, which we do not yet have cures for.

DR NAM-KYUNG YU

L'Oréal-UNESCO National Fellowship - Korea

Yates Laboratory at the Scripps Research Institute in La Jolla, United States

BIOLOGICAL SCIENCES

RETT SYNDROME: NEURONAL CELLS COME UNDER FIRE

1 to 2% of children born around the world suffer from some form of autism spectrum disorders (ADS). However, there is still no reliable way to treat these diseases, which affects cognitive function and neurodevelopment and is characterized by deficits in social interaction and communication as well as repetitive behaviors. Although some common biological mechanisms appear to be responsible for different types of autism, the disease can be caused by a wide range of factors. Dr Nam-Kyung Yu, research associate at the Scripps Research Institute in the United States, is studying one of the ADS, Rett syndrome, which is caused by mutation of the chromosome X-linked gene encoding MeCP2 (methyl CpG-binding protein). MeCP2 appears to be crucial for the normal function of nerve cells and this mutation renders it ineffective. Thanks to advanced mass-spectrometry based proteomic analyses in her laboratory, Dr Yu is studying molecular mechanisms of pathogenesis of Rett syndrome. *"I am also studying the effect of a clinical-phase drug and its impact on correcting Rett syndrome phenotypes,"* explains the Korean researcher, who has already obtained some remarkable results published in the journal Science in 2015. She now hopes to develop new therapeutic strategies for Rett syndrome as well as other autism spectrum disorders.

2/ ON THE ROAD TO IMAGINING NEW MEDICAL TREATMENTS

DR STEPHANIE FANUCCHI

L'Oréal-UNESCO Regional Fellowship – Sub-Saharan Africa

Biomedical Translational Research Initiative (BTRI), Council for Scientific and Industrial Research (CSIR) and the University of Cape Town, South Africa

BIOLOGICAL SCIENCES

BETTER UNDERSTANDING THE IMMUNE SYSTEM

Major advances in molecular biology over the last 40 years have allowed us to learn a lot more about the immune system. Rapid gene activation is critical for a successful inflammatory immune response. This process is adversely affected in a number of diseases, including certain cancers, autoimmune diseases, Crohn's disease and septicemia. Indeed, the latter is one of the most frequent causes of death in intensive care units. *"Nevertheless, the upstream molecular events that come into play in the first stages of inflammatory gene regulation remain enigmatic,"* explains Dr Stephanie Fanucchi, who is a post-doctoral researcher at the CSIR within the Biomedical Translational Research Initiative (BTRI) - an initiative of the Council for Scientific and Industrial Research (CSIR) and the University of Cape Town, South Africa (her native country). *"I am studying the mechanisms of chemokine regulation, which are an important class of molecules involved in the immune response."* To study this process, Dr Fanucchi is using a combination of advanced microscopy and molecular biology approaches in transgenic models. Her work came to the fore in 2013 thanks to a paper published in the prestigious journal Cell on the then poorly understood process of how 3D nuclear architecture influences gene regulation. Her current research will help refine targeted therapies for cancer and autoimmune diseases.

DR JULIA ETULAIN

L'Oréal-UNESCO National Fellowship - Argentina

Experimental Thrombosis Laboratory of the Institute of Experimental Medicine. CONICET/National Academy of Medicine in Buenos Aires

BIOLOGICAL SCIENCES

BETTER TISSUE HEALING

Platelets are blood cells crucially involve in forming blood clots. Besides this traditional role, increasing discoveries indicate that platelets also promote tissue regeneration (tendon, muscle, cartilage) through the release of several growth factors. Injection or topical application of platelet-rich plasma (PRP), produced by taking a blood sample from a patient, are often given to help treat ulcers and burns, to repair bone and muscle, and speed up tissue recovery after surgery. *"The effectiveness and biological mechanisms of action of PRP therapy remains, nevertheless, a subject of debate,"* explains Dr Julia Etulain, an Argentinian researcher at the Experimental Thrombosis Laboratory of the Institute of Experimental Medicine in Buenos Aires. *"Our goal is to identify the optimum conditions for preparing PRP to improve their efficiency."* Dr Etulain's studies on the physiology of platelets have already allowed her to enhance the regenerative capacity of PRP by optimizing how it is conditioned and formulated. Today, she is performing in vitro tests to evaluate how different inflammatory diseases, which are targets of these therapies (such as diabetes or burns), affect the regenerative abilities of PRP. She is also looking at how antiplatelet drugs like aspirin (when used as a cardiovascular drug or as an anti-inflammatory treatment) block tissue regeneration and slow down tissue healing. The results of her research will help in the development of simple and cost-effective treatments for patients in the future.

INTERNATIONAL RISING TALENTS *2017*

3/ FINDING POTENTIAL NEW SOURCES OF DRUGS

DR RYM BEN SALLEM

L'Oréal-UNESCO Regional Fellowship - Maghreb

Laboratory of Microorganisms and Active Biomolecules at the University of Tunis El Manar

BIOLOGICAL SCIENCES

NEW ANTIBIOTICS ARE RIGHT UNDER OUR FEET

The discovery of antibiotics was one of the most important advances in the history of modern medicine and they have helped save millions of lives. However, for 15 years or so now, the discovery of new antibiotics has been in a state of stagnation and increasing numbers of bacterial strains are becoming drug resistant. Indeed, according to the World Health Organization, this problem is one of the greatest health threats today, responsible for 700 000 deaths a year. Most antibiotics are produced by soil bacteria and these bacteria have been intensively screened over the last 60 years. However, this massive screening effort has focused on only 1% of the potential bacterial resource because most bacteria cannot be cultured in the laboratory. *"I am developing tools to access the other 99% of soil bacteria,"* explains Dr Rym Ben Sallem, a post-doctoral researcher at the Laboratory of Microorganisms and Active Biomolecules of the University of Tunis El Manar. *"I am studying DNA fragments taken from bacteria present in the soil."* Instead of looking at cell cultures in the laboratory, Dr Ben Sallem employs innovative genetic techniques, especially cloning and gene expression techniques to identify promising DNA fragments in recombinant clones derived from a Large-insert BAC Library. The new antimicrobial agents she hopes to unearth could help overcome the current antibiotic resistance crisis.

DR HAB JOANNA SUŁKOWSKA

L'Oréal-UNESCO National Fellowship – Poland

Interdisciplinary Laboratory of Biological Systems Modelling at the University of Warsaw

BIOLOGICAL SCIENCES

UNRAVELING THE SECRETS OF ENTANGLED PROTEINS

Proteins are the basic molecules of all living cells and are fundamental for biological function. We now know that long chains of amino acids that make up proteins may be entangled. Understanding properties of entangled proteins, which may form knots, or lassos and links recently discovered by Dr Sułkowska, is important for applications in structural biology, biophysics, and also for antibacterial drug development. It is also the subject area that Dr Joanna Sułkowska is focusing on. After a post-doctoral position at the University of California San Diego, she returned to her home country Poland to set up a team at the University of Warsaw thanks to the European Molecular Biology Organization and the Foundation for Polish Science. *"First of all, the fundamental aim of my research is to understand the function of entanglement in proteins,"* explains Dr Sułkowska. *"My second goal is to discover the evolutional signal responsible for entanglement, and understand how entanglement affects the efficacy of certain drugs."* Using several techniques at the crossroads of statistical physics, computational biology, computer simulations, and mathematical knot theory, combined with experimental analyses, her work is being conducted in collaboration with American, French and Japanese teams.

INTERNATIONAL RISING TALENTS *2017*

NAZEK EL-ATAB

L'Oréal-UNESCO Regional Fellowship – The Middle East

Nano-electronics and photonics laboratory at the Masdar Institute of Science and Technology in Abu Dhabi, United Arab Emirates

ELECTRICAL, ELECTRONIC AND COMPUTER ENGINEERING

MINIATURIZING ELECTRONICS WITHOUT LOSING MEMORY

Most electronic components, including those in cellular telephones, laptop computers, cameras or medical devices and military systems, have been getting ever smaller over the past decades. The problem we are facing now, however, is that traditional miniaturization techniques have reached their physical limits. Below a certain size, the memory performance of these tiny devices degrades. Nazek El-Atab is a PhD student at the Masdar Institute of Science and Technology in Abu Dhabi, a pioneering new ecocity in the middle of the desert. "*One of the solutions for creating memories that consume little power, last a long time and store lots of data is to fabricate them at the atomic scale,*" explains the young Lebanese scientist, who at 25 years old is the youngest of the 2017 L'Oréal-UNESCO Rising Talents. Going down to the atomic scale allows the electronic and optical properties of materials to be tuned more precisely thanks to the "quantum-confinement effect". The researcher is using a technique known as Atomic Layer Deposition (or ALD) to precisely control the thickness of atomic layers. "*In this way, I can optimize the performance of my nanostructures, which are in fact nano-islands made from different materials, by varying the composition of each individual layer in the structures produced.*" Such an approach will allow her to construct the active layer of a memory in a single ALD step, something that is less costly and time-consuming than conventional techniques, and which also overcomes the problem of contamination during fabrication. She thus hopes to make the next generation of low-power, low-cost and high-speed memory devices for applications such as solar cells and optoelectronic devices.

DR BILGE DEMIRKOZ

L'Oréal-UNESCO National Fellowship - Turkey

Experimental Space Radiation and Astro-particle Physics Laboratory at the Middle East Technical University in Ankara

PHYSICS

PIERCING THE SECRETS OF COSMIC RADIATION

Earth is showered with cosmic rays. These highly energetic protons, nuclei and electrons come from explosions on stars and can sometimes damage the electronic components in satellites. "*It is important to understand these damages to improve the design of these components,*" explains Dr Bilge Demirkoz, who returned to Turkey in 2011 after 14 years in the United States, Switzerland, Great Britain and Spain as a particle physicist. She is now managing and financing her own research at the Experimental Space Radiation and Astro-particle Physics Laboratory at the Middle East Technical University. Her work also interests physicists who want to avoid degradation of components in particle accelerators that are subjected to the same types of high-energy radiation. Working with CERN (the European Organization for Nuclear Research in Geneva, Switzerland), where she did her first post-doc, Dr Demirkoz is adapting a proton accelerator line in Ankara to test devices like solar panels or satellite batteries. "*We are studying the effect of high-energy protons on such electronics in Ankara and also at the Large Hadron Collider (LHC) at CERN,*" adds the researcher, who helped Turkey became a CERN member state in 2015.

4/ GETTING TO THE HEART OF MATTER

DR TAMARA ELZEIN

L'Oréal-UNESCO Regional Fellowship - Levant and Egypt

Lebanese Atomic Energy Commission at the National Council for Scientific Research

MATERIAL SCIENCES

TRAPPING RADIOACTIVITY

"I want to reduce the impact of radioactivity on health, environment and natural resources," says Dr Tamara Elzein, associate researcher at the Lebanese Atomic Energy Commission of the National Council for Scientific Research. The problem, however, is that there are no efficient and cost-effective radio-decontamination processes at hand. This is where her research comes in: *"I am synthesizing and testing materials, in particular polymers, that either have alveoli-like microstructures capable of trapping radioactive elements or which have been grafted with molecules that act as reactive trap sites."* Materials with high trapping efficiency will also be used as radionuclide pre-concentrator systems that act as fast, efficient low-cost dosimeters that can identify the type of radioactive molecules present, rather than just measure overall levels of radiation, as is often the case. After 15 years in France, 10 of which as associate professor of material science at the University of Haute Alsace in Mulhouse, the Lebanese researcher decided to return to her native country in 2014. She is now creating a new laboratory in her home institution with the support of the International Atomic Energy Agency (IAEA), while assuming a number of national scientific, advisory, and administrative responsibilities. She is the mother of three young children and has successfully managed to combine family life with high-level research.

DR RAN LONG

L'Oréal-UNESCO National Fellowship – China

National Synchrotron Radiation Laboratory at the University of Science & Technology of China

CHEMISTRY

UNLOCKING THE POTENTIAL OF ENERGY RESOURCES WITH NANOCHEMISTRY

How can we replace fossil fuels, which are limited as well as polluting resources? Biomass – organic matter derived from wood, dried vegetation, crop residues, aquatic plants and garbage – could be the answer. More than 10% of the world's energy already comes from renewable sources such as biomass. *"My research focuses on catalytic materials, which boost chemical reactions, to help transform biomass into fuels or energy,"* explains Dr Ran Long, a post-doc at the National Synchrotron Radiation Laboratory at the University of Science & Technology of China. Dr Long, who has been honored by the Chinese Academy of Sciences, has already obtained some promising results. Her work involves meticulously optimizing the nanostructures of catalysts, atom by atom, and then characterizing them using a synchrotron, an extremely powerful source of light. This approach will allow her to engineer better catalysts that work for specific chemical reactions in optimal conditions, greatly improving their efficacy. Ultimately, this nanochemistry will have important implications for the chemical industry (catalysis plays a crucial part in most modern processes), as well as for environmental applications.

INTERNATIONAL RISING TALENTS *2017*

DR FERNANDA WERNECK

L'Oréal-UNESCO National Fellowship - Brazil

Biological Scientific Collections at the National Institute of Amazonian Research

BIOLOGICAL SCIENCES

PREDICTING HOW ANIMAL BIODIVERSITY WILL EVOLVE

How will accelerated climate change affect animal populations and species in the future? This is the pressing question that Fernanda Werneck, researcher at the Biological Scientific Collections at the National Institute of Amazonian Research in Brazil, is trying to answer. Dr Werneck is studying extinction risks of lizards and their ability to adapt. These animals are very sensitive to environmental conditions, which makes them ideal models to study biodiversity. To do this, she is focusing on the transition zone that separates and connects the two largest biomes in South America, the Amazon rainforest and the Cerrado savanna, each of which have very different climates. This transition zone largely coincides with the so-called "Arc of Deforestation" where most of the environmental degradation in the Brazilian Amazonia is concentrated. "*This poorly studied zone can act as a buffer for animal species,*" she explains. "*Our research group is identifying the historical and environmental factors that could have affected the biodiversity in this region to understand whether the Amazon-Cerrado ecotone acts as a biotic filter that prevents the migration of animals (and thus the flow of genes) or, as a possible source of biodiversity by forcing them to adapt, in particular to changes in climate.*" Working with an interdisciplinary team of collaborators and students, the young Brazilian scientist, who has always succeeded in obtaining the most coveted grants to finance her work, is collecting lots of genomic data thanks to innovative analytic methods. This information will help predict biodiversity trends with respect to future environmental crises and put forward improved conservation strategies.

5/ EXAMINING THE PAST TO SHED LIGHT ON THE FUTURE – OR VICE VERSA

DR SAM GILES

L'Oréal-UNESCO National Fellowship – United Kingdom
Department of Earth Sciences at the University of Oxford

BIOLOGICAL SCIENCES

TAKING ANOTHER LOOK AT THE EVOLUTION OF VERTEBRATES THANKS TO THEIR BRAINCASES

Did you know that nearly half of the 61 000 species of known vertebrates are actually fish? They belong to a group that has existed for almost half a billion years, known as the "ray-finned fishes". However, their evolution is poorly understood. Sam Giles, a post-doc at the Department of Earth Sciences at the University of Oxford in the United Kingdom, hopes to address unanswered questions concerning the age of origin of this group of animals, better understand rates of genetic mutation, and how these changes helped the fish to evolve. The result of this work will go far beyond the realms of paleobiology and may even have implications for biomedical research that routinely relies on the zebra fish as a model for studying genetic mutations. Dr Giles studies the braincase – a bony box that houses the brain and sensory organs – of extinct ray-finned fishes using X-ray tomography and reconstructs their brain anatomy in 3D. Such virtual studies have not been done before. She then compares these structures with those in living fish. *"These virtual images allow me to observe minute details in brain anatomy without ever damaging the samples,"* says the British researcher, who at just 27 years old has already published several articles in some of the world's most important scientific journals.

DR ÁGNES KÓSPÁL

L'Oréal-UNESCO National Fellowship - Hungary
Konkoly Observatory, Research Centre for Astronomy and Earth Sciences of the Hungarian Academy of Sciences, Budapest

ASTRONOMICAL AND SPACE SCIENCES

LOOKING AT THE BIRTH OF DISTANT SUNS AND PLANETS TO BETTER UNDERSTAND THE SOLAR SYSTEM'S

How were the Sun and Earth born? *"I hope to be able to answer this question"*, says Ágnes Kóspál, astrophysicist at Konkoly Observatory, an institute belonging to the Research Centre for Astronomy and Earth Sciences of the Hungarian Academy of Sciences in Budapest. After a post-doctoral fellowship at Leiden Observatory and at the European Space Agency, the talented young scientist returned to her native country to create her own research group. Now she has managed to secure European Research Council (ERC) funding, which is reserved for the most promising researchers, for 5 years. *"I am studying star and planet nurseries,"* she continues. *"Young stars are surrounded by gas and dust in the form of circumstellar disks. By understanding how these celestial bodies form will bring us one step closer to understanding our Solar System's past as well."* Such observations of faraway star-forming regions are possible thanks to powerful telescopes such as ALMA in Chile, inaugurated in 2013 and which Dr Kóspál was one of the first to use. The world's most advanced telescopes revealed a dazzling wealth of details on the structure of the circumstellar material, transforming in front of our eyes the traditional view of star formation. Such research also relies on performing huge numbers of computer simulations, which have become crucial for understanding the dynamics of star and planet formation and answering questions like: how quickly can a Sun-like star form? What influence do time-variable processes like episodic eruptions have? What role does the internal structure of a circumstellar disk play in the build-up of the star and the formation of planets? Exciting questions that Dr Kóspál also likes to discuss with the general public.

SELECTION COMMITTEE MEMBERS

DR. MARIE ABBOUD
Associate Professor, Former Director of the Physics Department, Faculty of Sciences, Saint-Joseph University, LEBANON
Member of the Levant and Egypt Regional Jury and 2009 International Fellow.

PROF. ABDELAZIZ BENJOUAD
Vice-president in charge of Research and Development, International University of Rabat, MOROCCO
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DR. BRUNO BERNARD
L'Oréal Fellow, L'Oréal Research & Innovation FRANCE

PROF. NADIA GHAZZALI
Department of Mathematics and Computer Science, Université du Québec à Trois-Rivières (UQTR), Natural Sciences and Engineering Research Council of Canada (NSERC), Chair for Women in Science and Engineering, CANADA
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Section of Science Policy and Partnerships UNESCO

PROF. ALEKSEY KHOKHLOV
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Chairman of the Russian National Jury.

DR. H KRISHNAMURTHY
Director of the Central Imaging and Flow Cytometry Facility at the National Centre for Biological Sciences, Tata Institute of Fundamental Research in Bengaluru, INDIA
Member of the Indian National Jury.

PROF. EWA LOJKOWSKA
Head of Department of Biotechnology, Intercollegiate Faculty of Biotechnology, University of Gdansk & Medical University of Gdansk, Vice president of the Committee of Biotechnology at the Polish Academy of Sciences, Professor Waclaw Szybalski Foundation, POLAND
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President of the Chilean National Jury and L'Oréal – UNESCO Laureate 1998

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Member of the Brazilian National Jury.

THE SELECTION COMMITTEE L'ORÉAL-UNESCO FOR WOMEN IN SCIENCE *International Rising Talents 2017*

The 2017 International Rising Talents Selection Committee is composed of 12 highly regarded scientists chosen from the L'Oréal-UNESCO *For Women in Science* national and regional juries in Brazil, Canada, Chile, China, France, India, Italy, Lebanon, Morocco, Poland and Russia.

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