L'ORÉAL-UNESCO FOR WOMEN IN SCIENCE 2016

# INTERNATIONAL AWARDS



The L'Oréal-UNESCO For Women in Science programme was founded in 1998 with a simple aim; to ensure that women are fairly represented at all levels in science. We face unprecedented challenges in our world; climate change, sustainable energy, affordable healthcare, security among other issues. Part of the solutions will come from science and science needs women. Those recognized by the L'Oréal-UNESCO programme have already proved how transformative their science can be in addressing these challenges. Science is indeed part of the future, and it needs every talented mind available, be they men or women. The L'Oréal-UNESCO For Women in Science programme aims to ensure that research in every field takes full advantage of the intelligence, creativity and passion of one-half of the population of the planet. The world needs science, science needs women because women in science have the power to change the world.

# WOMEN IN SCIENCE have the power to change the world

Gender equality is a global priority for UNESCO. In general, the situation for women and girls in terms of access to education, especially higher education, career progression and participation in decision making processes, remains a matter of concern. As 'UNESCO Science Report: towards 2030' shows, the disparity is particularly evident in the natural sciences where the number of women participating in science still lags behind in many areas like the physical sciences and engineering. In the framework of UNESCO's partnership with the L'Oréal Foundation, the For Women in Science programme provides an important vehicle giving high visibility to the work and scientific excellence of eminent women researchers and has boosted the career progression of numerous young women researchers worldwide, offering them a support network of their peers and mentors. More can be done to build scientific capacities of women and empower them to participate in all spheres of science and high-level decision-making.

# WOMEN IN SCIENCE have the power to change the world



HON W to L'ORÉAL-UNESCO FOR WOMEN IN SCIENCE 2016

# HONOURING WOMEN IN SCIENCE who have the power to change the world



In the 18 years since its foundation, the *L'Oréal-UNESCO For Women in Science* programme has honoured 92 eminent scientists and supported 2,438 young women in science. These brilliant women researchers have, each in their own way, truly made the world a better place.

Impacting the lives of people around the planet, their discoveries are offering new solutions and answering vital questions. Their ground breaking innovation is advancing entire fields of research and even opening new ones.

The Laureates' research are contributing to curing disease, increasing food supplies, enabling sustainable development, helping ensure the survival of our planet to better understand our universe, adding to our knowledge of the very foundations of life.

# HONOURING WOMEN IN SCIENCE who have the power to change the world

HONOURING WOMEN IN SCIENCE who have the power to change the world

Among the visionary researchers recognized and supported by the programme over the past 18 years is Professor Mildred Dresselhaus (2007 Laureate for North America). She is a pioneering physicist whose career-long study of carbon nanotubes has made possible applications ranging from ultra-light materials for buildings, cars and bicycles to microscopic tools for delivering medicine directly inside cells. Her work has the potential to transform almost every aspect of our lives.

Professor Brigitte Kieffer (2014 Laureate for Europe) became the first scientist to isolate the long sought gene for an opioid receptor in the brain. This plays a key role in alleviating pain and opened a whole new world of research into pain management, reward processes and addictive behaviours. Because of this discovery, scientists finally began to understand why opium based drugs can act as both painkillers and drugs of addiction. Brigitte Kieffer's work has led to new analgesics and shown the biological basis of addiction, revolutionising our approach to addiction, and offering new hope for recovery to innumerable adults and teenagers trying to surmount the challenges of substance abuse.





L'ORÉAL-UNESCO FOR WOMEN IN SCIENCE 2016

THE 2016 LAUREATES: Women scientists at the cutting-edge

#### THE RIGOROUS SELECTION PROCESS



#### **45 CANDIDATURES** FROM 23 COUNTRIES

#### JURY

**13 EMINENT SCIENTISTS,** PRESIDED BY NOBEL PRIZE WINNER, REVIEW ALL CANDIDATURES

#### **5 LAUREATES**

1 IN EACH OF THE WORLD'S REGIONS



The L'Oréal-UNESCO For Women in Science Awards recognises five outstanding researchers, brilliant women, one from each of the following regions: Africa and the Arab States, Asia-Pacific, Europe, Latin America and North America. This year's Laureates once again exemplify women's scientific excellence and their potential for leading the global community in positive, productive directions. Scientists around the world are invited to nominate candidates, and an international independent jury of eminent scientists makes the final selection.

For this year's award, a new jury was led by former Laureate and Nobel Prize winner, Professor Elizabeth H. Blackburn. Her research on telomeres, the 'caps' on the end of chromosomes that protect DNA, has transformed our understanding of ageing and cancer. The Jury has recognised the tenacity, the creativity and the intelligence of the 5 eminent women scientists who bring their transformative science to change the world.

THE 2016 LAUREATES: Women scientists at the cutting-edge



THE 2016 LAUREATES: Women scientists at the cutting-edge

2016 Laureate from South Africa PROFESSOR QUARRAISHA ABDOOL KARIM

FOR CONTROLLING THE SPREAD OF HIV 36.9 million people live with HIV infection. Professor Abdool Karim's research has empowered women to help prevent HIV infection in Africa.



2016 Laureate from China PROFESSOR HUALAN CHEN

FOR PROTECTING LIVES FROM DEADLY FLU VIRUSES Thanks to Professor Chen's research, the world has been protected from pandemics through innovative vaccines.





2016 Laureate from the United States PROFESSOR JENNIFER DOUDNA

### FOR REINVENTING GENETIC RESEARCH

There are over 10,000 incurable conditions caused by single genetic defects. The gene editing technology developed by Professor Emmanuelle Charpentier & Professor Jennifer Doudna has the power to "rewrite" DNA.

> FOR LIMITING THE SPREAD OF DENGUE VIRUS Every year 390 million people suffer from dengue infection. Professor Gamarnik's research has the potential to control the spread of the disease.

2016 Laureate from Germany PROFESSOR EMMANUELLE CHARPENTIER



2016 Laureate from Argentina PROFESSOR ANDREA GAMARNIK



### 2016 LAUREATE Africa and Arab States

## Professor Quarraisha Abdool Karim

#### **MEDICINE AND HEALTH SCIENCES / EPIDEMIOLOGY**

Associate Scientific Director, CAPRISA, Honorary Professor of Public Health, Nelson R Mandela School of Medicine, University of KwaZulu-Natal, SOUTH AFRICA Professor of Clinical Epidemiology, Columbia University, UNITED STATES,

# FOR CONTROLLING THE SPREAD OF HIV

Worldwide, 2 million people became infected with HIV in 2014. Across the world nearly 37 million are already living with HIV, of which less than half are able to access treatment. Prevention of this global threat is the world's top health priority. Professor Quarraisha Abdool Karim's contribution to this agenda has been profound. Through her work as a globally recognised infectious disease epidemiologist, she is respected for her seminal discoveries in the understanding of HIV infection and spread. Her deep knowledge of the science and of the people affected by HIV/AIDS in her native South Africa which has the highest rate of infections in the world, has underpinned her determination to put prevention in the hands of women, particularly teenagers and young women. She persisted in the quest for an anti-HIV gel for use by women before, during and after sex, despite many saying it could never be done. In 2010 she succeeded, after decades of effort, with Science hailing it as one of the top ten breakthroughs of the year. For her achievements, the President of South Africa inducted her into the Order of Mapungubwe, the highest citizen recognition of her country.

## HER IMPACT: A BREAKTHROUGH IN THE FIGHT AGAINST HIV

Professor Abdool Karim is world renowned for her scientific discoveries in HIV prevention, having devoted the last 25 years to HIV research. Her work has provided new insights into how the HIV epidemic spreads and impacts adolescent girls and young women in Africa. HIV infection prevention initially rested solely with men, for instance, whether they chose to use condoms. It was recognized that infection prevention needed to be put directly in the hands of women and that ideally an antiinfective gel, a microbicide, was needed. But two decades of effort by many research teams, yielded little but failure. Professor Abdool Karim led the team that finally demonstrated that antiretroviral drugs could prevent the sexual transmission of HIV when the CAPRISA 004 study showed that gel containing the antiviral tenofovir reduced the risk of infection by HIV in women by 39%. This stunning discovery was named one of the Top 10 Scientific Breakthroughs of 2010 by Science. She continues to study HIV prevention technology options that will give women in high risk populations, sustained protection through slow release, long action products.

#### **HUSBAND-WIFE TEAM**

Collaboration has played a key role in Professor Abdool Karim's career. As well as co-operating extensively with scientists at Columbia University, New York and the Ragon Institute at Harvard, the South African researcher's main collaborator is also her life partner, Salim Abdool Karim. Like husband and wife team May-Britt and Edvard Moser, who won the Nobel Prize for Medicine or Physiology in 2014, Quarraisha Abdool Karim and her husband have worked together for 27 years. At the height of AIDS denialism in South Africa, in 2002, the couple co-founded CAPRISA, the Centre for the AIDS Program of Research in South Africa. The award winning research centre has impacted international policies for HIV prevention and treatment. When asked about working side by side with her spouse, Professor Abdool Karim's answer is unambiguously positive. "Our shared vision, mutual support and commitment to preventing HIV in young women have enabled us to persevere and succeed in a very challenging field."





Professor Chen heads China's National Avian reference Laboratory in Harbin and in 2013 found herself on the front line as cases of a new and deadly bird flu virus, H7N9, began to appear. Chen and her team tested more than 1,000 samples from soil, water and poultry farms and markets around Shanghai, and when they found H7N9 in the markets, they were quickly shut down. Her vigilance is the world's first line of defence and for now, H7N9 which had previously not been known to infect humans is quiet. Surveillance remains Chen's top priority but she is also renowned for her research in flu and for the development of innovative new vaccines for both humans and animals. In 2013, she was named one of Nature magazine's 'Top ten scientists who matter'.

#### HER IMPACT: PROTECTING HUMANS AND ANIMALS FROM DEADLY VIRUSES

Animals, birds and people can all be infected by flu viruses which constantly mutate, swapping genetic material with each other, so creating new strains with new characteristics. The fear is always that a lethal animal or bird strain acquires abilities to not only jump to humans but also to spread quickly between us. It's the makings of a worldwide flu pandemic, of the sort that killed more than 40 million people in 1918. Professor Chen protects us through surveillance but she is also known for her ambitious experiments creating flu hybrids. These demonstrated the exact nature of the threats posed by

## 2016 LAUREATE Asia-Pacific

Professor Hualan Chen

#### **BIOLOGICAL SCIENCES / VETERINARY SCIENCES** Professor, Harbin Veterinary Research Institute, Chinese Academy of Agricultural Sciences, Harbin, CHINA

## FOR PROTECTING LIVES FROM DEADLY FLU VIRUSES

wild emerging flu strains. These experiments and her deep understanding of flu have helped her develop two innovative new vaccines. Her efforts have proven invaluable in both saving human lives and in averting the catastrophic economic costs of livestock epidemics. A dedicated scientist whose goal has always been to alleviate pain and suffering, Professor Chen has indeed achieved her very noble dream of "using my knowledge, experience, expertise, and technology to try to protect humans and animals from a devastating disease."

#### WORLDWIDE COLLABORATION TO **COMBAT A WORLDWIDE THREAT**

As contagious diseases like influenza know no borders, they are symbolic of the critical need for global collaboration among scientists. The Center for Disease Control (CDC) and Prevention in the US is a monument to such collaboration and is, fittingly, the institution where Professor Chen spent three years undertaking post-doctoral research. Professor Chen has high praise for the CDC, the learning experience she was offered there, her ongoing cooperation with the institution and its worldwide network of scientists. "Because influenza viruses are moving targets that mutate and change as they constantly migrate from continent to continent, international collaborations are crucial to understanding, controlling and perhaps one day eradicating this often deadly disease.'

### 2016 LAUREATE Latin America

## Professor Andrea Gamarnik

#### **BIOLOGICAL SCIENCES/VIROLOGY**

Professor, Molecular Virology Laboratory, Fundación Instituto Leloir, CONICET, Buenos Aires, ARGENTINA

## FOR LIMITING THE SPREAD OF THE DENGUE VIRUS

Professor Andrea Gamarnik has spent much of her career trying to understand the virus that causes dengue fever. Affecting some 390 million people every year, this disease is spread by mosquitoes in the subtropical and tropical regions that are home to half of the planet's population. The most severe form of the disease causes hemorrhagic fever, leading to approximately 20,000 deaths annually, especially among children. Cases of dengue have increased dramatically since the 1960s and there is evidence that as the world warms, the mosquitoes responsible for transmission are extending their range.

#### HER IMPACT: GREATER UNDERSTANDING OF A DEADLY VIRUS

Professor Gamarnik has been trying to unlock the secrets of this virus for many years, focusing particularly on how it replicates. This is no easy task because the virus adapts to different environments and exists in different forms across vast expanses of the globe. Ultimately, her research has the potential to enable medical science to create antivirals or vaccines against dengue virus. Such medicines would prevent the untold suffering of millions of people living predominantly in emerging countries as well as alleviating the enormous economic burden on both individuals and underfunded public health systems in the developing world. But her research has also a very important impact for the understanding of the viral life cycle of other emerging and re-emerging viruses closely related to dengue, such as Zika virus, which is currently causing a tremendous epidemic in Latin America.

#### "SOMETHING THAT WOULD HELP ME CHANGE THE WORLD"

Along with her own investigations, she also devotes much of her time to training a new generation of scientists in molecular virology, a greatly underdeveloped field in her country. Professor Gamarnik is a woman of strongly-held humanitarian values and she dates her sense of social commitment back to her high school years. "I was an idealist and I wanted to study something that would help me change the world." Initially, she believed that studying politics would enable her to achieve her lofty goals before concluding that, for her, science offered an even better opportunity for improving lives. Professor Gamarnik was awarded a national fellowship by the *L'Oréal-UNESCO For Women in Science* programme in Argentina in 2009.

#### INTERNATIONAL SCIENTIFIC PARTNERSHIPS FOR INTERNATIONAL VISIBILITY

Professor Gamarnik's highly successful career perfectly illustrates her conviction that "collaboration is essential to the advancement of science." Her first international partnership was formed with researchers at France's famed Pasteur Institute. Such high-level exposure outside of her home country led to a chain reaction sparking further work with researchers in other European nations, in the US and in Latin America. "These collaborations were instrumental in bringing my research to another level and greatly enhanced the quality of my work."





<sup>\*</sup> World Health Organization (http://www.who.int/mediacentre/factsheets/fs117/en)

#### **CRISPR - A TECHNOLOGY AT THE CUTTING-EDGE**

Some types of viruses attack bacteria. They infect them, using them to multiply. But bacteria can fight back. Using molecular scissors, bacteria snip out a piece of DNA from an invading virus. They tuck this 'souvenir' of their foe away in the so called CRISPR region of their own DNA which contains many such souvenirs. These are equivalent to stamps on a vaccine record card, effectively recording that the bacteria is now immunized against attack by the viruses it has in its collection. Should one of the viruses appear again, the bacteria quickly uses the right 'souvenir' as a template to generate copies made of RNA (a chemical cousin of DNA). These are the foundation of the bacteria's lethal and highly specific antivirus weapon. The weapon is then activated by the addition of a further, and essential small piece of RNA, together with a subset of Cas enzyme called Cas9. Like a guided missile, this complex searches through the viral genome for an exact match. Only once it locks on the matching sequence in the virus, does the Cas9 act as molecular scissors, cutting clean through the double helix of the virus's DNA, disabling it for good.

Professor Emmanuelle Charpentier, 2016 L'Oréal-UNESCO For Women in Science Laureate for Europe and Professor Jennifer Doudna, 2016 L'Oréal-UNESCO For Women in Science Laureate for North America, each contributed key insights to the development of a ground breaking new technology that has set the scientific world on fire, reinventing genetic research and making it possible to perform microsurgery on DNA, the genetic material of plants, animals and humans. Working in collaboration, the two researchers discovered an easy way to alter any organism's DNA. Known as CRISPR-Cas9, this genome editing technique enables scientists to remove and add pieces of genetic material with exquisite precision. It can be used to disable genes, correct genetic disorders or to insert genes to create animal models of human disease.

# THEIR IMPACT: AN EXTRAORDINARILY POWERFUL RESEARCH TOOL AND A POTENTIAL CURE FOR INNUMERABLE DISEASES

We are only just beginning to grasp the full impact of this extraordinary new technology. The CRISPR-Cas9 complex is able to home in on a matching sequence with extraordinary precision. It opens completely new possibilities in gene therapy, cell therapy and immunotherapy. It opens new fields in agriculture and biotechnology. It offers new means of developing medicines. It offers the possibility of removing faulty disease causing DNA, for instance in cells in the lungs of children affected with cystic fibrosis or the muscles of those with so me forms of muscular dystrophy. It has already been used to save the life of a child with an incurable form of leukaemia and to improve the sight of patients suffering from retinitis Pigmentosa, a genetic eye disease. Now in a world first, it is being used to investigate the causes of infertility and miscarriage at the Crick Institute in London. And there is much, much more to come.

2016 LAUREATE Europe & North America

/ Professor Emmanuelle Charpentier & Professor Jennifer Doudna

### 2016 LAUREATE Europe

Professor Emmanuelle Charpentier

#### **BIOLOGICAL SCIENCES/MOLECULAR BIOLOGY**

Director, Max Planck Institute for Infection Biology, Berlin, GERMANY

# FOR REINVENTING GENETIC RESEARCH

Professor Emmanuelle Charpentier, 2016 L'Oréal-UNESCO For Women in Science Laureate for Europe, is a highly respected microbiologist and geneticist. For some time she had been working on Streptococcus pyogenes, more familiar to us as one of the bacteria responsible for sore throats. In particular she was fascinated by the way that it defended itself against attack by phages, viruses that hunt down bacteria. In a breakthrough piece of work, published in Nature in 2011, she described how so called CRISPR sequences (cf CRISPR – A technology at the cutting-edge) containing pieces of DNA taken by the bacteria from its foes uses these to immunize itself against further attack. She identified and characterized the components of the now known as - CRISPR-Cas9 system - in the pathogen S. pyogenes, namely the enzyme Cas9 and a duplex of RNA molecules containing the memorized foe. This was a stunning discovery. Her research - later went on to elaborate in greater detail that this exact system targets the DNA of the virus for its destruction. In 2011, at her request, she began collaboration with Professor Jennifer Doudna to further elucidate the structure of the CRISPR-Cas9 complex. In a landmark paper in Science in 2012 that reflected work from both labs, they reported that the targeting mechanism could be harnessed as a powerful programmable genome editing technology, and that the duplex of RNA molecules could be further adapted as a single RNA guide, providing a convenient and versatile

laboratory technology for gene editing.

Charpentier quickly realized that gene editing raised many potential ethical concerns, which she stated in the journal Le Monde.

Professor Charpentier has been immensely generous with her time, helping other scientists understand how to use CRISPR-Cas9 technology in their work. As a result, its use has spread like wildfire in the science community. It has literally reinvented genetic research.

## WHEN TWO WOMEN SCIENTISTS JOIN FORCES

"For today's scientists, crossing borders between countries and disciplines is instrumental to opening doors to new questions and new answers," affirms Professor Charpentier. Indeed a globetrotting researcher, she is well-positioned to speak out for international collaborative ventures. Along with leading an institution in a country other than her own, Germany, the French-born scientist has lived and worked in her native France, Sweden, the US and Austria while winning worldwide recognition for a history-making codiscovery made with another brilliant woman researcher located halfway across the world.





BIOLOGICAL SCIENCES/MOLECULAR BIOLOGY Professor, Howard Hughes Medical Institute, Department of Molecular and Cell Biology, University of California, Berkeley, United States

Professor Doudna is a world renowned structural biologist and understanding RNA, a close cousin of DNA, has long been her forte. Back in 2005 she was asked to have a look at intriguing repeating regions of DNA in bacteria called CRISPR sequences. In 2011, French microbiologist, Professor Emmanuelle Charpentier asked her to collaborate. Professor Charpentier had already published important work showing that bacteria were effectively able to vaccinate themselves against types of virus that they had already encountered using a CRISPR-Cas system (cf CRISPR - A technology at the cutting-edge). Together, Doudna, with her profound knowledge of RNA and Charpentier, with her CRISPR-Cas insight, published findings demonstrating that the mechanism used by bacteria to disable their foes could be adapted as a programmable precision genetic tool to modify genes in cells and organisms.

Professor Doudna quickly realized that gene editing raised many potential ethical concerns. She has also been at the forefront of ensuring that these concerns are properly debated and understood. In particular she has pointed out potential concerns posed by so called 'germ line editing', that is affecting future generations by altering sequences in either sperm or egg. 2016 LAUREATE North America

Professor Jennifer Doudna

## FOR REINVENTING GENETIC RESEARCH

## MODERN SCIENCE IS DEFINED BY COLLABORATION

As one of two 2016 Laureates sharing credit for the same discovery, this immensely important breakthrough provides the ideal example of what scientists achieve when working together. "Collaborations have been a crucial part of the success of my scientific research throughout my career" says Professor Doudna "Multidisciplinary research teams are essential to making fundamental progress in any field. Indeed, collaboration defines the modern mode of scientific research."



PROF. ELIZABETH H. BLACKBURN President of the Jury L'Oréal-UNESCO 2009 Nobel Laureate in Physiology or Medicine, President of the Salk Institute for Biological Studies, Professor Emerita, University of California San Francisco, United States L'Oréal-UNESCO Laureate 2008

PROF. ANA BELÉN ELGOYHEN Investigator at the Institute for Research on Genetic Engineering Scientific Director L'Oréal and Molecular Biology, National Scientific and Technical Research Council (CONICET), ARGENTINA L'Oréal-UNESCO Laureate 2008

DR. APPOLINAIRE DJIKENG Director, Biosciences Eastern and Central Africa (BecA) Hub, International Livestock Research Institute (ILRI), KENYA

PROF. RAYMOND N. DUBOIS

PROF. CHRISTINE PETIT MD, PHD Dean; College of Medicine, Professor of Biochemistry and Professor at College de France, Member of the Institute of Medicine, Medical University of South Carolina, USA Medicine of the National Academies (IOM) Head of Genetics PROF. PHILIP HIETER and Physiology of Hearing Laboratory, Inserm UMRS 1120-Professor of Medical Genetics, Michael Smith Laboratories, UPMC, Institut Pasteur, FRANCE University of British Columbia, CANADA L'Oréal-UNESCO Laureate 2004

PROF. NANCY Y. IP PROF. AUGUSTO ROJAS-MARTÍNEZ Dean of Science, Morningside Professor of Life Science, The Professor of Biochemistry and Molecular Biology, School Hong Kong University of Science and Technology, CHINA of Medicine and Centro de Investigación y Desarrollo en L'Oréal-UNESCO Laureate 2004 Ciencias de la Salud, Universidad Autónoma de Nuevo León, MEXICO

DR. KANYAWIM KIRTIKARA Executive Director of the National Center for Genetic PROF. MACIEJ ZYLICZ Engineering and Biotechnology (BIOTEC), THAILAND

THE JURY OF THE L'ORÉAL-UNESCO FOR WOMEN IN SCIENCE Awards 2016

> DR. JACQUES LECLAIRE Research & Innovation FRANCE

PROF. KHALED MACHACA, Professor of Physiology and Biophysics, Associate Dean for Research, Weill Cornell Medical College in Qatar, QATAR

PROF. MACIEJ NALECZ Director, Executive Secretary of the International Basic Sciences Programme, UNESCO, FRANCE

Head of the Department of Molecular Biology, International Institute of Molecular and Cell Biology in Warsaw, POLAND

### THE FOR WOMEN IN SCIENCE MANIFESTO

- 1/ encourage girls to explore scientific career paths.
- 2/ BREAK DOWN THE BARRIERS THAT PREVENT WOMEN SCIENTISTS FROM PURSUING LONG TERM CAREERS IN RESEARCH.
- 3/ prioritise women's access to senior positions and leadership positions in the sciences.
- 4/ CELEBRATE WITH THE GENERAL PUBLIC THE CONTRIBUTION THAT WOMEN SCIENTISTS MAKE TO SCIENTIFIC PROGRESS AND TO SOCIETY.
- 5/ ENSURE GENDER EQUALITY THROUGH PARTICIPATION AND LEADERSHIP IN SYMPOSIUMS AND SCIENTIFIC COMMISSIONS, SUCH AS CONFERENCES, COMMITTEES AND BOARD MEETINGS.
- 6/ PROMOTE MENTORING AND NETWORKING FOR YOUNG SCIENTISTS TO ENABLE THEM TO PLAN AND DEVELOP CAREERS THAT MEET THEIR EXPECTATIONS.

The L'Oréal-UNESCO For Women in Science programme has achieved a great deal for women in science in the almost two decades since its foundation. But the L'Oréal Foundation and UNESCO are convinced that more needs to be done in order to step up the pace of change. The programme is now therefore taking its commitment a step further, to ensure that it has the visibility and public support to achieve its goals with the necessary speed and urgency. On the 24<sup>th</sup> of March, the L'Oréal Foundation and UNESCO launch a digital campaign to engage the scientific community, the institutional and the general public to sign in the For Women in Science Manifesto.

The results of the campaign will be shared at the 9<sup>th</sup> European Conference on Gender Equality in High Education and Research from 12<sup>th</sup> to 14<sup>th</sup> of September in Paris.

# L'ORÉAL-UNESCO FOR WOMEN IN SCIENCE An ambition expressed in a manifesto

Over the last 18 years

2,530

Women scientists recognized in 112 countries

92

Awards Laureates honoured for excellence in science, including two who went on to win the Nobel Prize

2,438

Talented young women granted Fellowships to pursue promising research projects

250

Fellowships given worldwide this year over 6,531 applications

43

High level scientific institutions involved worldwide

353

Scientists involved including 31 L'Oréal-UNESCO For Women in Science Laureates in the selection process of the national and regional programmes

FOR WOMEN IN SCIENCE PROGRAMME Key figures in 2016

All media resources for the 2016 *L'Oréal-UNESCO For Women in Scienc*e programme are available on: WWW.FONDATIONLOREAL.COM/MEDIACENTER

Follow the L'Oréal-UNESCO For Women in Science programme on:



#FORWOMENINSCIENCE

Sign the For Women in Science Manifesto on: www.forwomeninscience.com

