

# ENCOURAGE YOUNG SCIENTISTS INTERNATIONAL FELLOWSHIPS

*The 15 UNESCO-L'Oréal International Fellows for 2012 were chosen for the excellence and feasibility of their proposed projects and for the potential impact of their research on the lives of human beings or the environment. Two of the fellows come from countries represented for the first time this year, Bolivia and Namibia.*

*Among a wide range of research topics in the domains of health, environmental protection and the potential pharmaceutical uses of indigenous plants, one major research trend that stands out this year is the emerging field of glycobiology, which holds out hope for the development of new antibiotics unlikely to encounter problems of resistance.*

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#### SELECTION COMMITTEE

Bruno BERNARD  
*Head of Hair Biology Research Group, L'Oréal*

Lucy HOAREAU  
*International Basic Sciences Program  
Section, UNESCO*

Maciej NALECZ  
*Director and Executive Secretary,  
International Basic Sciences Programme,  
UNESCO*

Maryline PARIS  
*Stem Cell Group, L'Oréal Research and Innovation*

Patricia PINEAU  
*Director of L'Oréal Research  
and Innovation Communication*

Ali ZAID  
*Head, Fellowship Program Section, UNESCO*



■ Home Country  
● Host Institution

A F R I C A



**KENYA**

**PEGGOTY MUTAI**

*Medicinal Chemistry*  
PhD student in Chemistry, University of Nairobi, and University of Cape Town, South Africa

**HOST INSTITUTION**  
Institute of Parasitology, McGill University, Quebec, Canada

Peggoty aims to exploit the untapped potential of local plants to find new treatments for parasitic worms responsible for the ill-health of millions of people in the developing world.



**NAMIBIA**

**GLADYS KAHAKA**

*Biotechnology/Biochemistry*  
PhD in Plant Sciences, Department of Chemistry and Biochemistry, University of Namibia

**HOST INSTITUTION**  
Department of Plant Sciences, University of Nottingham, United Kingdom

Gladys plans to exploit recent developments in transcriptomic biotechnology (gene-chip) to study three endangered species from the animal and vegetal worlds (cheetah, ximania tree, devil's claw).



**SOUTH AFRICA**

**JOHANNIE MARIA SPAAN**

*Wildlife Biology*  
PhD student in Zoology/Ecology, University of Pretoria, South Africa

**HOST INSTITUTIONS**  
College of Veterinary Medicine, Oregon State University, and University of Georgia, USA

Johannie will employ a non-invasive approach to study the effect of environment, stress and demography on the ability of African buffalo to resist parasitic infections and diseases.

## ARAB STATES



### EGYPT

AZIZA HASSAN  
**KAMEL**

*Virology*

PhD in Biology, National Research Center,  
Cairo, Egypt

**HOST INSTITUTION**

Center for Predictive Medicine for  
Biodefense & Emerging Infectious Diseases,  
University of Louisville, Kentucky, USA

Aziza wants to develop a monitoring  
tool for emerging strains of the H5N1  
avian influenza virus which is responsi-  
ble for decimating poultry stock across  
the world, and which poses an impor-  
tant threat to human health.



### LEBANON

DANA  
**BAZZOUN**

*Cell and Molecular Biology*

PhD student in Cell and Molecular Biology,  
American University of Beirut, Lebanon

**HOST INSTITUTION**

Department of Basic Medical Sciences,  
Purdue University, Indiana, USA

Through the study of the mechanisms  
involved in tumour formation,  
Dana hopes to open the way for  
new diagnostic tools for breast cancer  
detection and prevention.



### TUNISIA

EMNA  
**HARIGUA**

*Molecular Biology and Bioinformatics*

PhD student in Molecular Biology,  
Pasteur Institute, Tunis, Tunisia

**HOST INSTITUTION**

Structural Bioinformatics Unit,  
Pasteur Institute, Paris, France

Emna's research project focuses on the  
urgent need to find new treatments for  
leishmaniasis, a parasitic disease that  
affects 12 million people worldwide and  
causes some 60,000 deaths every year.

## ASIA & THE PACIFIC



### INDONESIA

SIDROTUN  
**NAIM**

*Molecular Virology*

PhD student in Environmental Science, Bandung Institute  
of Technology, Indonesia/Department of Soil, Water and  
Environmental Science, University of Arizona, Tucson, USA

**HOST INSTITUTION**

Department of Microbiology & Molecular Genetics,  
Harvard Medical School, Boston, USA

Sidrotun will investigate the structure  
and function of the genetic makeup  
of IMNV, a newly discovered virus in  
Indonesia that can kill up to 70% of  
a shrimp population, with devastating  
economic effects.



### NEW ZEALAND

ZOË  
**HILTON**

*Marine Biology*

PhD in Biological Sciences, Cawthron Institute,  
Nelson, New Zealand

**HOST INSTITUTION**

Catalan Institute for Food and Agricultural Research  
and Technology (IRTA), San Carlos de la Ràpita,  
Tarragona, Spain

The survival of the remarkable flat  
oyster has been endangered by over-  
fishing, pollution, disease and climate  
change. Zoë is studying the environment  
and nutrition necessary to ensure  
successful captive oyster production.



### SINGAPORE

PATRICIA MIANG LON  
**NG**

*Protein Engineering*

PhD in Cell and Molecular Biology, Singapore  
Immunology Network, Agency for Science,  
Technology and Research (A\*STAR), Singapore

**HOST INSTITUTION**

Donnelly Centre for Cellular and Biomolecular  
Research, University of Toronto, Canada

Patricia's research focusses on the  
challenge of re-engineering antibodies,  
the body's main arm against infection,  
so that they become more effective in  
fighting disease.

## EUROPE & NORTH AMERICA



### ISRAEL

#### NAAMA GEVA-ZATORSKY

*Molecular and Systems Biology*

PhD in Systems Biology,  
Weizmann Institute of Science, Rehovot, Israel

#### HOST INSTITUTION

Harvard Medical School, Department of Microbiology and Molecular Genetics, Boston, USA

Naama's research explores the medical potential of intestinal microflora, a microscopic ecosystem that every one of us harbours inside our bodies.



### The NETHERLANDS

#### ELZA VAN DEEL

*Cardiology and Molecular Genetics*

PhD in Cardiology and Molecular Genetics,  
Department of Cell Biology and Genetics, Erasmus  
Medical Centre, Rotterdam, The Netherlands

#### HOST INSTITUTION

National Heart and Lung Institute,  
Imperial College, London, United Kingdom

Elza will investigate the causes of hereditary heart disease by looking at the multiple roles of a single protein, fibulin-4, using a diversity of disciplines to unravel the mysteries of this disorder.



### SLOVENIA

#### VITA MAJCE

*Molecular Microbiology and Chemistry*

PhD in Chemistry, University of Ljubljana, Slovenia

#### HOST INSTITUTION

School of Life Sciences, University of Warwick,  
United Kingdom

Vita will be focusing on the challenge of drug resistance in bacteria, in the hope of contributing to the creation of new antibacterial medicines.

## LATIN AMERICA & THE CARIBBEAN



### BOLIVIA

#### KATHRIN BARBOZA MARQUEZ

*Behavioural Ecology*

PhD student in Biology, Menéndez Pelayo  
International University, Spain

#### HOST INSTITUTION

National Natural Sciences Museum,  
Madrid, Spain

Bats play an extremely important role in the ecosystem by controlling insect pests and Kathrin's research project will help to increase our knowledge of the environmental services that bats provide to the human population in different habitats.



### COLOMBIA

#### GIOMAR HELENA BORRERO-PÉREZ

*Marine Biology*

PhD in Biology, Colombian Marine  
Natural History Museum, Marine and Coastal  
Research Institute, Santa Marta, Colombia

#### HOST INSTITUTION

Naos Marine Laboratory, Smithsonian  
Tropical Research Institute, Balboa, Panama

Giomar's project focuses on the genetics and ecology of the 'chocolate chip' sea cucumber, a commercially important marine animal faced with decimation by over-fishing.



### MEXICO

#### DORA MEDINA

*Bioengineering*

PhD in Chemical Engineering and Biotechnology,  
National Polytechnic Institute, Mexico City, Mexico

#### HOST INSTITUTION

Massachusetts Institute of Technology (MIT),  
Cambridge, USA

Combining rheology and tribology studies of new biomaterials, Dora's quest to find the perfect bio-engineered material to protect or replace the knee joint could lead to greater comfort and mobility for many patients suffering from diseases such as osteoarthritis.

FOR WOMEN  
IN SCIENCE

**A PROGRAM OF  
SUPPORT SINCE 1998**

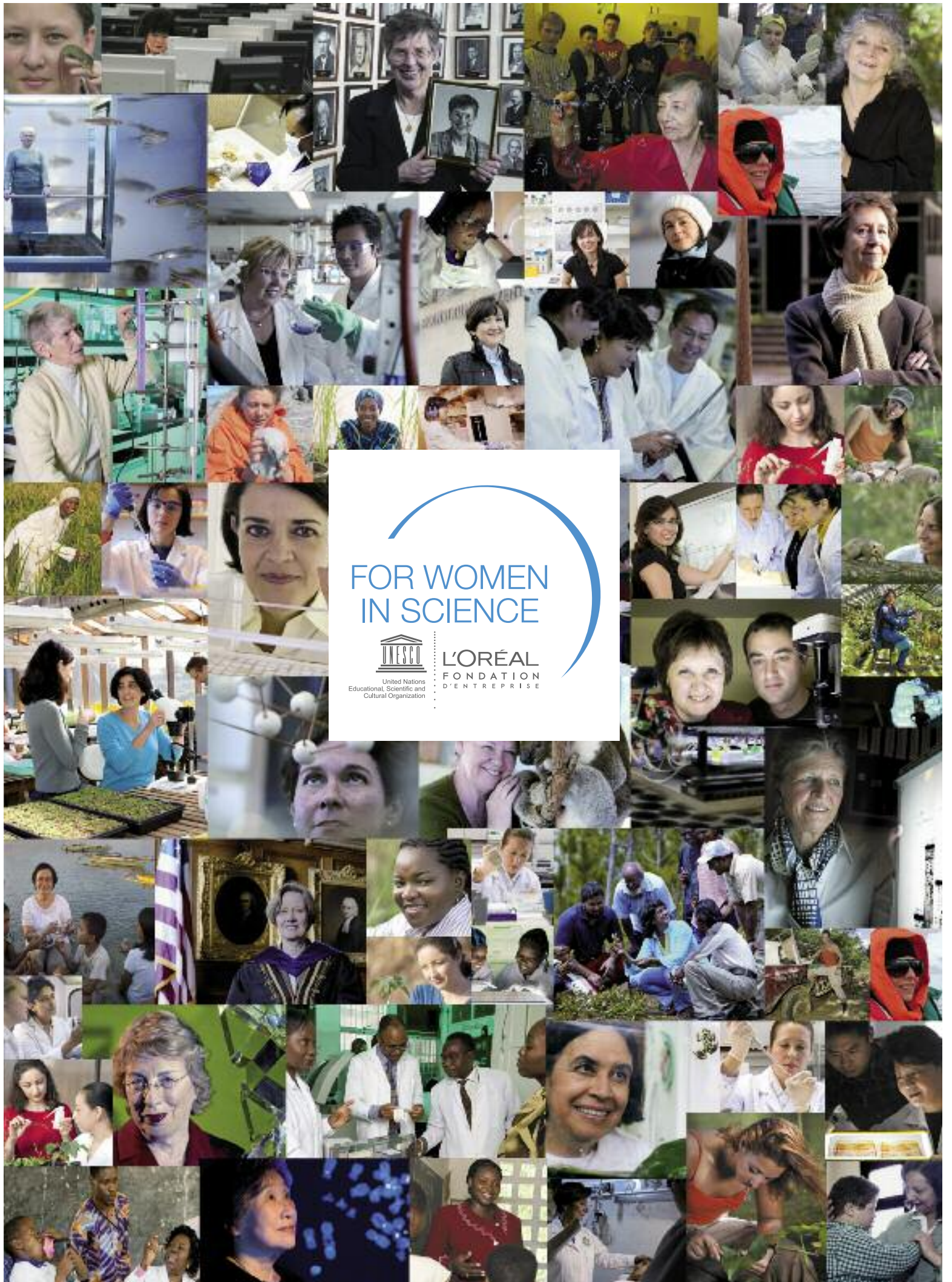
**14**  
years of  
existence

**1292**  
scientists  
supported

**72**  
L'Oréal-  
UNESCO  
Award  
Laureates

**2**  
Nobel prizes  
won by  
former  
Laureates

**106**  
countries represented



# FOR WOMEN IN SCIENCE



United Nations  
Educational, Scientific and  
Cultural Organization

L'ORÉAL  
FONDATION  
D'ENTREPRISE



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## THE L'ORÉAL CORPORATE FOUNDATION

The L'Oréal Corporate Foundation, created in 2007, pursues the goal of making the world a better place each day. Drawing on the Group's values and professional expertise, the L'Oréal Foundation aims to reinforce and perpetuate the Group's commitment to responsible citizenship. As the second largest corporate foundation in France, the L'Oréal Foundation is active in three main areas: supporting scientific research and the role of women in science, helping vulnerable people regain self-esteem and social reintegration, and fostering access to education.

## UNESCO

Since its creation in 1945, UNESCO has pursued its mission of promoting science at the service of sustainable development and peace. It focuses on policy development and building capacities in science, technology and innovation and promoting and strengthening science education and engineering. UNESCO fosters the sustainable management of freshwater, oceans and terrestrial resources, the protection of biodiversity, and using the power of science to cope with climate change and natural hazards. The Organization also works to eliminate all forms of discrimination and to promote equality between men and women, especially in scientific research.



FOR WOMEN  
IN SCIENCE



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