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.

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
**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

Peggotty 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 (genechip) to study three endangered species from the animal and vegetal worlds (cheetah, ximenia 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.
AZIZA HASSAN
KAMEL

Virology
PhD in Biology, National Research Center, Cairo, Egypt

HOST INSTITUTION
Center for Predictive Medicine for Biodfense & 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 responsible for decimating poultry stock across the world, and which poses an important 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.

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.

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.

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 Rápita, Tarragona, Spain

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

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 focuses on the challenge of re-engineering antibodies, the body’s main arm against infection, so that they become more effective in fighting disease.
**ISRAEL**

**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.

**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 ---**

---

**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.

---

**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

1/4 years of existence

1292 scientists supported

72 L’Oréal-UNESCO Award Laureates

2 Nobel prizes won by former Laureates

106 countries represented
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.

www.forwomeninscience.com