

RULES AND REGULATIONS

L'ORÉAL-UNESCO FOR WOMEN IN SCIENCE SOUTH AFRICA NATIONAL YOUNG TALENTS PROGRAMME 2022

1. Introduction

The fourth edition of the L'Oréal-UNESCO For Women in Science South Africa National Young Talents Programme aims to promote and encourage the participation of young African women in science. This programme identifies and rewards talented young female scientists in the field of Formal sciences, Life sciences, Environmental sciences, Physical sciences, Engineering and Technological sciences (list of disciplines in Annexure 2)

The L'Oréal-UNESCO For Women in Science Africa programme launched in 2010 and has supported over 150 young female scientists. There are two dedicated programmes for Africa:

- The **regional Sub-Saharan Africa programme** supporting 48 countries in the region launched in 2010
- A **national programme** dedicated to South Africa launched in 2019

The South African National Programme recognizes six young female scientists annually.

- 3 research grants of R80 000 each will be awarded to 3 doctoral students enrolled in an institution and in a research laboratory in South Africa (see section 2 Eligibility criteria).
- 3 research grants of R160 000 each will be allocated to 3 post-docs working in a laboratory or research institute in South Africa (see section 2 Eligibility criteria)

The L'Oreal-UNESCO For Women in Science South Africa National Young Talents Programme research grants are awarded within the framework of the L'Oréal-UNESCO For Women in Science partnership.

2. Eligibility Criteria

Applicants must meet the following general criteria:

a. For doctoral students

- South African Nationality
- Be enrolled in a South African university and carry out their doctorate in a research laboratory in one of the 9 Provinces. As a minimum requirement, applicants must be in the 2nd year of thesis. Refer to Annexure 1 for the list of provinces.
- Conducting research in one of the scientific fields listed in Annexure 2.

b. For post-doctorates

- South African Nationality
- Be enrolled in a post-doctorate in a research laboratory or an institution in one of the 9 provinces. Refer to Annexure 1 for the list of provinces.
- Having obtained a doctorate in one of the scientific fields listed in Annexure 2.
- Conducting research in one of the scientific fields listed in Annexure 2.
- Having started the post-doctorate before the opening date of the call for applications.

Important note:

Candidates who have already been supported by one of the national or regional L'Oréal-UNESCO For Women in Science programmes are not eligible.

3. Selection Criteria

a. Quality of the application

The applicant must:

- Demonstrate how the training or the practical and theoretical knowledge acquired within the host organisation contributes to the work of the current research.
- Valorize the excellence of the academic record (number, quality, and impact of publications, conference presentations, patents, etc.)

- Include the research summary formulated in clear terms (200 words maximum).
- Include exemplary and explicit letters of recommendation.

Origin(s):

- Letter from the thesis director.
- Letter of acceptance from the laboratory reception team for the 2022-2023.
- If possible, from a peer in the research area of the thesis and / or postdoctoral project (who is not part of the environment close to the candidate).

Content:

- Recognition of the scientific quality and the importance of the work carried out and envisaged in the research work (originality, scientific scope, including economic and social scope). It is important to show how the candidate really contributed to the research project.
- Appreciation of the human qualities of the researcher, of her autonomy, her ingenuity, her creativity, and her ability to interact in an efficient, productive, caring way and with others (sharing, listening, mentoring...)

b. Scientific excellence in research

- The research describes the whole research plan, including the methodology, as well as the scope, novelty, and outputs of the research
- A detailed description of a maximum of two pages including the references. Note: Justified text, Times New Roman font, size 12 with single spacina.
- Relevant and well prepared, the description illustrates an innovative and creative spirit.
- This research work must contribute to knowledge in the research area of the candidate and make it possible to promote scientific work, in the country, the rest of Africa and abroad.

c. The candidate's ability to communicate and promote science to young people

d. Fluency in English language is desirable

- To be able to fully benefit from the training in Management and Leadership which is conducted in English.
- To be able to benefit from the media exposure from the various events (interviews etc.) that will be offered to them.

4. Grant definition and use

There are six research grants:

- Candidates in the doctoral category receive a research grant of R80 000 each
- Candidates in the postdoctoral category receive a research grant of R160 000 each

The research grants will be paid directly to recipients by L'Oréal South Africa (Pty) Ltd after the awards ceremony and following receipt of originals of the documents required for the bank transfer.

Each research grant recipient is responsible for meeting the tax obligations concerning the award.

The grants are not transferable for any other purpose whatsoever.

The research grants are non-renewable and may be combined with other allowances, including other donations, awards, salaries other funding.

a. Use

The grants are intended for the researchers themselves and must be exclusively devoted to advancing research in the country, or of the researcher in their professional framework.

Some examples of use:

- Purchase of computer equipment or advanced equipment. It is understood that the endowments must in no case replace the responsibilities of the laboratory vis-à-vis its researchers. As a result, the grant cannot be used to procure basic laboratory equipment.
- Travel in the country or abroad to meet experts or for collaborations.
- Funding to attend conferences, congresses, training/knowledge acquisition, creation of a business plan etc.
- Funding for babysitters to attend conferences and congresses for example.
- Purchase of scientific articles.

5. Application

Applications can be only made through the online platform www.forwomeninscience.com by the candidates.

An application is only considered complete when it includes all the following documents:

- A detailed CV of 1 to 2 pages maximum including training, dissemination actions, commitments of the candidate, etc.
- Copies of tertiary qualifications.

- A summary of research work in 200 words maximum (intended for a panel of scientific experts)
- A detailed description of the research work of 2 pages maximum, including the references (Text justified, Times New Roman font, size 12 with single spacing). An application will be considered complete if it contains a detailed description of the research project and its methodology. If animal experiments are carried out as part of the submitted research project, these experiments must be described in detail. The necessity of the animal experiments or the lack of alternatives must be justified.
- An estimated budget detailing the expenditure envisaged to support the
 research work. This budget must not exceed R80 000 for doctoral students
 and R160 000 for postdoctoral researchers (The budget should be in a table
 indicating projected expenses). If the estimated budget is less than the
 amount allocated, the excess may be spent after the year following the
 award (there is no limited time for its use).
- At least two letters of recommendation, each assessing the quality of the CV, the originality of the project and mentioning the relationship and human dimensions of the candidate.
- A list of the candidate's publications (from the most recent to the oldest),
 - For doctoral students: the 2 publications (article, patents, oral communications, posters, etc.) published or in the process of being published.
 - o For post-doctoral students: the 2 most important publications (scientific publications, patents, etc.)

Note:

Incomplete files or files received after the deadline, as well as applications that do not meet the conditions set out above, will not be taken into consideration.

The jury members expert panelists are subject to a duty of confidentiality with regards to documents entrusted to them.

6.Selection of Young Talents

- The candidates will be pre-selected by a committee of experts and then presented to an independent jury made up of eminent researchers from South Africa. The Jury is chaired by Professor Jill Farrant.
- Appendix 3 contains the evaluation grid and the coefficients associated with each criterion.
- The jury's decision is final and cannot be appealed. It can neither be disputed nor subject to explanations or justifications.

 The six selected beneficiaries will be contacted telephonically and via email after the jury deliberation meeting. The announcement is under embargo until the awards ceremony.

7. Collaborative requirements

The researchers commit to:

- Continue the research work for which the L'Oréal-UNESCO For Women in Science South Africa National Young Talents award was obtained.
- A report on the research work must be submitted 12 months after receiving the research grant.
- Carry out the expenses detailed in the estimated budget of the application file.
- Attend the awards ceremony hosted in Johannesburg. Participate in the Management and Leadership training (hosted by the L'Oréal Foundation in one of the other 48 countries in the region). Participation in these events is mandatory, transportation and accommodation costs for the award winners will be covered by L'Oréal South Africa for the ceremony and by the L'Oréal Foundation¹ for the Management and Leadership training.

NB: Please note that due to COVID-19 the ceremony and training dates will be confirmed closer to the time.

8.Communication

Young Talents agree to participate in communication activities related to the programme. They will be photographed, filmed, and interviewed for non-commercial purposes related to the communication of the L'Oréal-UNESCO For Women in Science South Africa National Young Talents Programme and For Girls in Science Programme.

These photos, videos and texts may be used for written and audiovisual publications, allowing dissemination to the South African, pan-African, and international media. An image rights authorisation form must be signed by each of the beneficiaries when the contract is signed.

9. Provisional Timetable

 $^{^1}$ According to the general conditions of transportation and accommodation applicable to the L'Oréal Foundation and L'Oréal South Africa

- Launch call for applications 5 May 2022
- Closing date -15 June 2022
- Expert panel and Jury review of applications by experts June 2022
- Final selection by Jury End August 2022
- Announcement of winners & Ceremony (TBC) September 2022

10.Acceptance of rules

Participation in the call for applications for the L'Oréal-UNESCO For Women in Science South Africa National Young Talents Programme implies acceptance of the programme rules.

Contact information

For any questions relating to the rules, please visit the online FAQ section and contact form on for www.forwomeninscience.com

Annexure 1 – List of provinces

Eastern Cape

Free State

Gauteng

KwaZulu-Natal

Limpopo

Mpumalanga

Northern Cape

North West

Western Cape

List of scientific areas

Annexure 2

*This classification of disciplines is based on the Revised field of Science and Technology (FoS) Classification in OECD Frascati Manual and adapted to the L'Oréal-UNESCO FWIS Programme

FORMAL SCIENCES

MATHEMATICS	COMPUTER & INFORMATION SCIENCES	
 Applied mathematics Pure mathematics Statistics and probability Biomathematics 	- Computer sciences - Information science - Bioinformatics - Artificial intelligence (AI)	

PHYSICAL SCIENCES

CHEMISTRY	PHYSICS
- Biochemistry - Analytical chemistry - Colloid chemistry - Material chemistry - Inorganic chemistry - Macromolecular chemistry - Medicinal chemistry - Nuclear chemistry - Organic chemistry - Organic chemistry - Physical chemistry - Electrochemistry (dry cells, batteries, fuel cells, corrosion metals, electrolysis) - Nanomaterials - Phytochemistry - Polymer science	- Acoustics - Astronomy (including astrophysics, space science) - Atomic (physics of atoms, Moessbauer effect) - Mechanics - Molecular and chemical physics: collision, interaction with radiation - Optics (including laser optics and quantum optics) - Physical chemistry - Condensed matter physics (including formerly solid-state physics, superconductivity) - Fluids and plasma physics (including surface physics) - Particles and fields physics - Solid state physics - Molecular physics - Nuclear physics - Theoretical physics - Magnetic resonances - Thermodynamics

LIFE AND ENVIRONMENTAL SCIENCES

BIOLOGICAL SCIENCES	BASIC MEDECINE	CLINICAL MEDICINE	HEALTH SCIENCES	HEALTH BIOTECHNOLOGY	EARTH & RELATED ENVIRONMENTAL SCIENCES	AGRICULTURE SCIENCES
- Biochemistry - Bioengineering - Cell biology - Reproductive biology - Extremophyle biology - Evolutionary biology - Evolutionary biology - Evolutionary biology - Human biology - Marine biology, freshwater biology, limnology - Molecular biology - Theoretical and mathematical biology - Biophysics - Biotechnology - Stem cells - Chronobiology - Cryobiology - Ecology - Embriology and Developmental biology - Enzymology - Epigenetics - Ethology - Genetics and heredity - Immunology - Metabolism - Biochemical research methods - Microbiology - Neuroscience - Paleonthology - Cell physiology - Biodiversity conservation - Radiobiology - Plant sciences, botany - Symbiosis - Virology - Zoology, Ornithology, Entomology, Behavioral sciences biology	- Anatomy and morphology - Medicinal chemistry - Human genetics - Immunology - Neurosciences (including psychophysiology) - Pathology - Pharmacology and pharmacy - Physiology (including cytology) - Toxicology	- Allergy - Andrology - Anesthesiology - Respiratory systems - Surgery - Dentistry, oral surgery, and medicine - Dermatology and venereal diseases - Endocrinology and metabolism (including diabetes, hormones) - Gastroenterology and hepatology - Geriatrics and gerontology - Hematology - Peripheral vascular disease - Critical care medicine and Emergency medicine - General and internal medicine - Obstetrics and gynecology - Oncology - Oncology - Opthalmology - Orthopedics - Otorhinolaryngology - Pediatrics - Psychiatry - Radiology, nuclear medicine, and medical imaging - Rheumatology - Cardiac and Cardiovascular systems - Transplantation - Urology and nephrology	- Epidemiology - Infectious diseases - Occupational health - Tropical medicine - Nutrition, Dietetics - Parasitology - Public and environmental health - Sport and fitness sciences - Substance abuse	- Biomaterials (as related to medical implants, devices, sensors) - Health-related biotechnology - Forensic science - Technologies involving identifying the functioning of DNA, proteins (genebased diagnostics and therapeutic interventions, pharmacogenomics, geneediting and recombinants) - Technologies involving the manipulation of cells, tissues, organs, or the whole organism (assisted reproduction)	- Contamination & waste management - Ecology - Geochemistry and geophysics - Physical geography - Geology - Geosciences, multidisciplinary - Meteorology and atmospheric sciences - Mineralogy - Oceanography, Hydrology, Water resources - Paleontology - Climatic research - Soil science - Environmental sciences - Volcanology	- Agriculture - Agronomy, plant breeding and plant protection - Agricultural biotechnology and food biotechnology - Agricultural chemistry - Livestock cloning, marker assisted selection, diagnostics (DNA chips and biosensing devices for the early/accurate detection of diseases) - Animal husbandry - Agricultural engineering - Horticulture, viticulture - Fishery - Phytopathology - Animal and dairy science - Soil science - Veterinary science - Forestry - GM technology (crops and livestock) - Biomass feedstock production technologies, biopharming

ENGINEERING SCIENCES AND TECHNOLOGY

CIVIL ENGINEERING	ELECTRICAL, ELECTRONIC & INFORMATION ENGINEERING	MECHANICAL ENGINEERING	CHEMICAL ENGINEERING	ENVIRONMENTAL ENGINEERING
Civil engineering Architecture engineering Construction engineering, Municipal and structural engineering Transport engineering	- Detection devices (radar, sonar, lidar) - Automation and control systems - Computer hardware and architecture - Communication engineering and systems - Electrical and electronic engineering - Microelectronics - Robotics and automatic control - Telecommunications	- Aerospace engineering - Audio engineering, reliability analysis - Nuclear related engineering (nuclear physics to be in Physics) - Mechanical engineering - Applied mechanics - Thermodynamics	Chemical engineering (manufacture, production plants) Chemical process engineering	- Mining and mineral processing - Environmental and geological engineering, geotechnics - Marine engineering, sea vessels - Ocean engineering - Petroleum engineering, (fuel, oils), Energy and fuels - Remote sensing
MATERIAL ENGINEERING	MEDICAL ENGINEERING	ENVIRONMENTAL BIOTECHNOLOGY	INDUSTRIAL BIOTECHNOLOGY	NANOTECHNOLOGIES
- Ceramics - Composites (including laminates, reinforced plastics, cermets, combined natural and synthetic fibre fabrics; filled composites) - Materials engineering - Paper and wood - Coating and films - Textiles including synthetic dyes, colours, fibres	- Medical engineering - Artificial Intelligence assisted devices - Medical laboratory technology (including laboratory samples analysis; diagnostic technologies)	- Bioremediation, diagnostic biotechnologies (DNA chips and biosensing devices) in environmental management - Environmental biotechnology - Environmental biotechnology related ethics	Bioprocessing technologies (industrial processes relying on biological agents to drive the process) biocatalysis, fermentation Bioproducts (products that are manufactured using biological material as feedstock) Biomaterials, bioplastics, bioderived bulk and fine chemicals, bio-derived novel materials Industrial biotechnology	- Nano-materials (production and properties) - Nano-processes (applications on nano-scale)

ANNEXURE 3 Evaluation grid

CRITERIA	DESCRIPTION	MULTIPLIER
Research summary	The research summary is formulated in clear terms and is no more than 200 words.	2
Research works	The research work describes all the work in progress at the time of the application. The research plan will be described in its entirety, as well as the scope, the novelty, and the possible repercussions of the research. Relevant and well prepared, it illustrates an innovative and creative spirit. It has no more than 2 pages.	5
Methodology	The experimental design is clear. The technologies used are in line with the objectives of the project. The project is feasible on time.	3
Recommendation letters	The quality and relevance of the letters will be assessed.	2
Scientific contribution	The research work should contribute to knowledge in the research area of the candidate and help promote scientific work, in the country and abroad. Ability to propose scientific solutions to social challenges facing Humanity.	2
Academic file	Excellence of the application: number, quality and impact of publications, conference presentations, patents, etc.	3
Use of the endowment	An estimated budget which does not exceed R80 000 for doctoral students and R160 000 for postdoctoral students.	1
Valorization and commitment	Overall appreciation including: the excellence of the application, but also the candidate's ability to communicate and promote science to the youngest. NB: the valuation will be weighted according to the thesis year	2
		TOTAL = 100 points AVERAGE on 5 points

The candidates' applications are reviewed and evaluated according to 8 criteria thanks to an analog scale with $5\ \mathrm{scores}$