

YOUNG TALENTS SUB-SAHARAN AFRICA L'ORÉAL-UNESCO FOR WOMEN IN SCIENCE

RULES & REGULATIONS OF THE 11th EDITION

1. Introduction

The L'Oréal-UNESCO For Women in Science sub-Saharan Africa regional program aims to promote and encourage the participation of young African women in science. This program identifies and rewards young talented researchers in life and environmental sciences, physical sciences, mathematics, computer and information sciences, engineering sciences and technological sciences (list of disciplines in Appendice 2).

In 2019, given the importance of the challenges of African scientific research and our commitment to encourage more women scientists across sub-Saharan Africa, we decided to separate the initial regional program into two separate programs:

- The national Young Talents programme dedicated to South Africa
- The regional Young Talents programme of Sub-Saharan Africa, with the 48 other countries of the region (see the list of countries in Appendice 1)

For this 11th edition, 20 endowments will be givent to encourage young researchers currently in doctoral or post-doctoral studies to pursue a brilliant scientific career.

- 15 endowments of 10,000 € each, will be allocated to 15 doctoral students enrolled in a doctoral school and in a research laboratory in sub-Saharan Africa (see section 2. Eligibility criteria).
- 5 endowments of € 15,000 each, will be allocated to 5 post-docs working in a laboratory or research institute in sub-Saharan Africa (see section 2. Eligibility criteria).

2. General conditions of eligibility

a. For doctorates

- Having the nationality of one of the 48 countries in the sub-Saharan African region
- <u>And</u> being enrolled in a doctoral school and carry out their doctorate in a research laboratory in one of the 49 countries in the region (including South Africa)

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- Having the nationality of one of the 49 countries of the sub-Saharan African region (including South Africa)
- <u>And</u> being enrolled in a doctoral school and complete their doctorate in a research laboratory in one of the 48 countries of sub-Saharan Africa
- Conducting research in one of the scientific fields listed in Appendice 2

b. For post-doctorates

- Having the nationality of one of the 48 countries in the sub-Saharan African region
- <u>And</u> being enrolled in post-doctorate in a research laboratory or an institution in one of the 49 countries in the region (including South Africa)

OR

- Having the nationality of one of the 49 countries of the sub-Saharan African region (including South Africa)
- <u>And</u> being enrolled in a post-doctorate in a research laboratory or an institution in one of the 48 countries of sub-Saharan Africa
- Having a doctorate in one of the scientific fields listed in Appendice 2
- Conducting research in one of the scientific fields listed in Appendice 2
- Having started the post-doctorate before 02/03/2020, opening of the call for application

Disclosure:

Applicants who have already obtained an endowment from a L'Oréal-UNESCO For Women in Science program are not eligible.

3. Selection criterias

The selection criteria by the jury are as followed:

a. The quality of the application

The applicant must:

- Demonstrate how the training or the practical and theoretical knowledge acquired within the host organization contribute 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 in 200 words maximum (justified text, Times New Roman font, size 12 with single spacing),
- Include exemplary and explicit letters of recommendation.

Origin(s):

- Letter from the thesis director
- Letter of acceptance from the laboratory reception team for the year 2020-2021.
- If possible, from a peer in the research area of the thesis and / or postdoctoral project (which 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, even
 economic and social scope). It is important to show how the candidate really
 contributed. It's not the lab's work we're talking about, but the one she did
 or will do herself.
- Appreciation of the human qualities of the researcher, of her autonomy, her inventiveness, 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 research plan as a whole, including the methodology, as well as the scope, novelty and possible repercussions of the research.
- This description is no more than two pages including the references.
- 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, in African and abroad.

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

d. Fluency in the English language is desirable:

- To be able to fully benefit from the training in "Management and Leadership" given in English
- To be able to benefit from the media exposure thanks to the various events (interviews, etc.) that will be offered to it.

4. Endowment: definition and use

a. Definition

The L'Oréal-UNESCO Sub-Saharan Africa Young Talent Program Awards For Women in Science are 20.

- Candidates rewarded in the "Doctoral" category receive an endowment in the amount of 10,000 euros each.
- Candidates awarded in the "Post-doctoral" category receive an endowment in the amount of 15,000 euros each.

The endowment is paid directly to the Young Talents by the L'Oréal Foundation after the Prize-giving ceremony, and after having received the original documents necessary for the bank transfer.

Each beneficiary must inquire about the taxation linked to this endowment.

The endowments are non-renewable.

They can be combined with other allowances: other donations, prices, salary and funding for doctorates and post-doctorates.

b. Use

The endowments are intended for the researchers themselves and must be exclusively devoted to the promotion of research in their country, or of the researcher in a 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, endowments cannot be used to procure basic laboratory equipment.
- Travel in the country or abroad to meet experts or create 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 are made by the candidates themselves only through the online platform: www.forwomeninscience.com.

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

- _ A detailed CV of 1 to 2 pages maximum including training, dissemination actions, commitments of the candidate, etc.
- Copies of diplomas or certificates obtained from the license in their original language,
- 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) and an estimated budget detailing the expenditure envisaged to support the coherence and realism of the research work. This budget must not exceed € 10,000 for doctoral students and € 15,000 for post-doctoral researchers (in the form of a table with projected expenses). If the estimated budget is less than the amount allocated, the excess may be spent after the year following the Prize (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),
- \neg for doctoral students: the 2 publications (article, patents, oral communications, posters, etc.) published or in the process of being published.
- \neg for post-doctoral students: the 2 most important publications (scientific publications, patents, etc.).

To note:

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

The jury is subject to a duty of confidentiality in relation to the documents entrusted to it.

6. Selection of young talents

The candidates will be preselected by a committee of experts and then presented to an independent jury made up of eminent researchers from the African continent. The jury is chaired by the President of the African Academy of Science.

You will find in Appendix 3 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 results will be communicated by telephone and email to the 20 beneficiaries after the deliberations of the allocation jury. They must remain confidential until the Awards ceremony.

7. Collaborative actions of young talents

The researchers commit to:

- Continue the research work for which the Young Talent Sub-Saharan African L'Oréal-UNESCO For Women in Science Prize was obtained.
- Carry out the expenses detailed in the estimated budget of the application file.
- Write a report on the research work, subject of the endowment, to be submitted to the L'Oréal Foundation in the year following the award of the Prize.

Participate in the training in "Management and Leadership" as well as in the award ceremony to be held in an African capital, probably in December 2020. Participation in these events is compulsory, transportation and accommodation costs, for beneficiaries living in the provinces, will be supported by the Fondation L'Oréal¹.

8. Communication

Young Talents will indicate the Prize in the resulting communications under the name "The Young Talent Prize for Sub-Saharan Africa L'Oréal-UNESCO For Women in Science".

They will be photographed, filmed and interviewed for non-commercial purposes related to the communication of the L'Oréal-UNESCO For Women in Science program and the For Girls and Science program. These photos, videos and texts may be used for written and audiovisual publications, allowing dissemination to the French, pan-African and international media. A written image right authorization must be signed by each of the beneficiaries when the contract is signed.

9. Estimated timetable

- Opening of the call for application: February 3, 2020
- Closing of the call for application : April 20, 2020 (midnight)
- First review of applications by experts: End of April 2020
- Final selection by the jury: September 2020

10.Rules

Participation in the call for applications for the Young Talent Sub-Saharan Africa L'Oréal-UNESCO For Women in Science program implies acceptance of these regulations.

11. Contact us

For any questions relating to the regulations, please consult the online FAQ on the platform www.forwomeninscience.com.

 $^{^{}m 1}$ According to the general terms and conditions of transport and accommodation applicable to the Fondation L'Oréal

Appendix 1 List of countries included in the programme

Angola Rwanda

Benin Sao Tome & Principe

Botswana Senegal
Burkina Faso Seychelles
Burundi Sierra Leone
Cameroon Somalia
Cap-Verde Sudan

Central African Republic South Sudan Comores Swaziland

Congo Tanzania
Ivory Coast Chad
Djibouti Togo
Erytree Zambia

Ethiopia Zimbabwe Gabon Gambia Ghana

Equtorial Guinea Bissau Guinea

Guinea

Kenya Lesotho Liberia Madagascar Malawi Mali Mauritius

Mauritania Mozambique Namibia Niger

Nigeria Uganda

Democratic Republic of Congo

Appendix 2 List of scientific areas

FORMAL SCIENCES

MATHEMATICS	COMPUTER & INFORMATION SCIENCES	
- Applied mathematics - Pure mathematics - Statistics and probability	- Computer sciences, information science and bioinformatics	

PHYSICAL SCIENCES

CHEMISTRY	PHYSICS
 - Analytical chemistry - Colloid chemistry - Inorganic and nuclear chemistry - Organic chemistry - Physical chemistry, Polymer science, Electrochemistry (dry cells, batteries, fuel cells, corrosion metals, electrolysis) 	- Astronomy (including astrophysics, space science) - Atomic, molecular and chemical physics (physics of atoms and molecules including collision, interaction with radiation; magnetic resonances; Moessbauer effect) - Condensed matter physics (including formerly solid-state physics, superconductivity) - Fluids and plasma physics (including surface physics) - Nuclear physics - Optics (including laser optics and quantum optics), Acoustics - Particles and fields physics

LIFE AND ENVIRONMENTAL SCIENCES

BIOLOGICAL SCIENCES	BASIC MEDECINE	CLINICAL MEDECINE	HEALTH SCIENCES	HEALTH BIOTECHNOLOGY	EARTH & RELATED ENVIRONMENTAL SCIENCES	AGRICULTURE SCIENCES
- Biology (theoretical, mathematical, thermal, cryobiology, biological rhythm), Evolutionary biology - Biochemical research methods - Biochemistry and molecular biology - Biodiversity conservation - Biophysics - Cell biology, Microbiology - Developmental biology - Ecology - Genetics and heredity - Marine biology, freshwater biology, limnology - Mycology - Plant sciences, botany - Reproductive biology - Virology - Virology - Zoology, Ornithology, Entomology, Behavioral sciences biology	- Anatomy and morphology - Human genetics Immunology - Medicinal chemistry - Neurosciences (including psychophysiology) - Pathology - Pharmacology and pharmacy - Physiology (including cytology) Toxicology	- Allergy - Andrology - Anesthesiology - Cardiac and Cardiovascular systems - Clinical neurology - Critical care medicine and - Emergency medicine - Dentistry, oral surgery and medicine - Dermatology and venereal diseases - Endocrinology and metabolism (including diabetes, hormones) - Gastroenterology and hepatology - General and internal medicine - Geriatrics and gerontology - Hematology - Obstetrics and gynecology - Oncology - Ophthalmology - Orthopedics - Otorhinolaryngology - Pediatrics - Peripheral vascular disease - Psychiatry - Radiology, nuclear medicine and medical imaging - Respiratory systems - Rheumatology - Surgery - Transplantation - Urology and nephrology	- Epidemiology - Infectious diseases - Nutrition, Dietetics - Occupational health - Parasitology - Public and environmental health - Sport and fitness sciences - Substance abuse - Tropical medicine	- Health-related biotechnology; Technologies involving the manipulation of cells, tissues, organs or the whole organism (assisted reproduction); Technologies involving identifying the functioning of DNA, proteins and enzymes and how they influence the onset of disease and maintenance of well-being (gene-based diagnostics and therapeutic interventions (pharmacogenomics, gene-based therapeutics) - Biomaterials (as related to medical implants, devices, sensors) - Forensic science	- Climatic research - Environmental sciences - Geochemistry and geophysics - Geology - Geosciences, multidisciplinary - Meteorology and atmospheric sciences - Mineralogy - Oceanography, Hydrology, Water resources - Palaeontology - Physical geography - Volcanology	- Agricultural biotechnology and food biotechnology - Agriculture - Agronomy, plant breeding and plant protection - Animal and dairy science - Fishery - Forestry - GM technology (crops and livestock), livestock cloning, marker assisted selection, diagnostics (DNA chips and biosensing devices for the early/accurate detection of diseases) biomass feedstock production technologies, biopharming - Horticulture, viticulture - Soil science - Veterinary science

ENGINEERING SCIENCES AND TECHNOLOGY

CIVIL ENGINEERING	ELECTRICAL, ELECTRONIC & INFORMATION ENGINEERING	MECHANICAL ENGINEERING	CHEMICAL ENGINEERING	ENVIRONMENTAL ENGINEERING
- Architecture engineering - Civil engineering - Construction engineering, Municipal and structural engineering - Transport engineering	- Automation and control systems - Communication engineering and systems - Computer hardware and architecture - Electrical and electronic engineering - Robotics and automatic control - Telecommunications	- Aerospace engineering - Applied mechanics - Audio engineering, reliability analysis - Mechanical engineering - Nuclear related engineering (nuclear physics to be in Physics) - Thermodynamics	- Chemical engineering (plants, products) - Chemical process engineering	- Environmental and geological engineering, geotechnics - Marine engineering, sea vessels - Mining and mineral processing - Ocean engineering - Petroleum engineering, (fuel, oils), Energy and fuels - Remote sensing
MATERIAL ENGINEERING	MEDICAL ENGINEERING	ENVIRONMENTAL BIOTECHNOLOGY	INDUSTRIAL BIOTECHNOLOGY	NANOTECHNOLOGIES
- Ceramics - Coating and films - Composites (including laminates, reinforced plastics, cermets, combined natural and synthetic fibre fabrics; filled composites) - Materials engineering - Paper and wood - Textiles including synthetic dyes, colours, fibres	- Medical engineering - 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, biofuels, bioderived bulk and fine chemicals, bio-derived novel materials - Industrial biotechnology	- Nano-materials (production and properties) - Nano-processes (applications on nanoscale)

Appendix 3 Evaluation grid

The candidates applications are reviewed and evaluated according to 8 criterias thanks to an analog scale with 5 scores

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, Africa 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 € 10,000 for doctoral students and € 15,000 for post-doctoral students.	1
Valorisation 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 AVERAEGE on 5 points

11