



**GLOBAL
YOUNG
ACADEMY**

Challenges faced by ECRs in LAC and how programs from academies of science and young scientists organizations could have a positive impact

Sandra López Vergès, Ph.D.

GYA member 2018-2023

Gorgas Memorial Institute of Health Studies, PANAMA

June 30 2021

COVID19 pandemic increased the visibility of problems ECRs were already facing

COVID-19: research after the pandemic

As universities worldwide close their doors against the COVID-19 pandemic, researchers are facing uncertainty over their work and employment contracts. Early-career researchers and new principal investigators (PIs) are likely to be particularly affected because delayed research programmes put their career prospects on hold. As board members of the Young Academy of Europe, we urge institutions, governments and funders to clarify how they intend to protect this vulnerable group during these difficult times.

Several funders have announced that they will consider extensions beyond the original project end-date for research that is delayed as a result of the pandemic, but with no extra funding ('no-cost' extensions'). Among them are the Royal Society (go.nature.com/3bjvt9b) and the biomedical funding charity Wellcome (go.nature.com/3aeu18t) in the United Kingdom, the German Research Foundation (go.nature.com/2x34hh1; in German) and the Swedish Research Council (go.nature.com/3dmebpz).

We now urgently need a commitment to 'costed' extensions, which supplement a project's original budget, for PhD students, postdocs and new PIs. This will allow them to secure the delivery of their research programmes once the

Molecular Plant

Comment

CellPress
Partner Journal

How Early-Career Researchers Are Navigating the COVID-19 Pandemic



« Back

Doctoral education and Covid-19: the impact on early-career researchers

22 May 2020 | Alexander Hasgall,

INNOVATIONS AND PROVOCATIONS

Preventing a Secondary Epidemic of Lost Early Career Scientists Effects of COVID-19 Pandemic on Women with Children

Michelle I. Cardel¹, Natalie Dean², and Diana Montoya-Williams³

¹Department of Health Outcomes and Biomedical Informatics, and Pediatrics, University of Florida College of Medicine, Gainesville, Florida; ²Department of Biostatistics, University of Florida College of Public Health and Health Professions, Gainesville, Florida; and ³Department of Neonatology, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania

ORCID IDs: 0000-0002-9395-8618 (M.I.C.); 0000-0003-3884-0921 (N.D.); 0000-0002-5882-1181 (D.M.-W.).

The novel coronavirus disease (COVID-19) has reached pandemic levels, with more than 9 million infections and more than 475,000 deaths worldwide (1). Millions of people are on "stay-at-home" orders, universities have prohibited in-person classes, and schools and childcare centers

responsibilities and are less likely to have a stay-at-home partner compared with men (3). Together, these issues contribute to well-documented sex disparities in academia (2).

During this pandemic, women are disproportionately bearing the load of additional full-time caregiving and

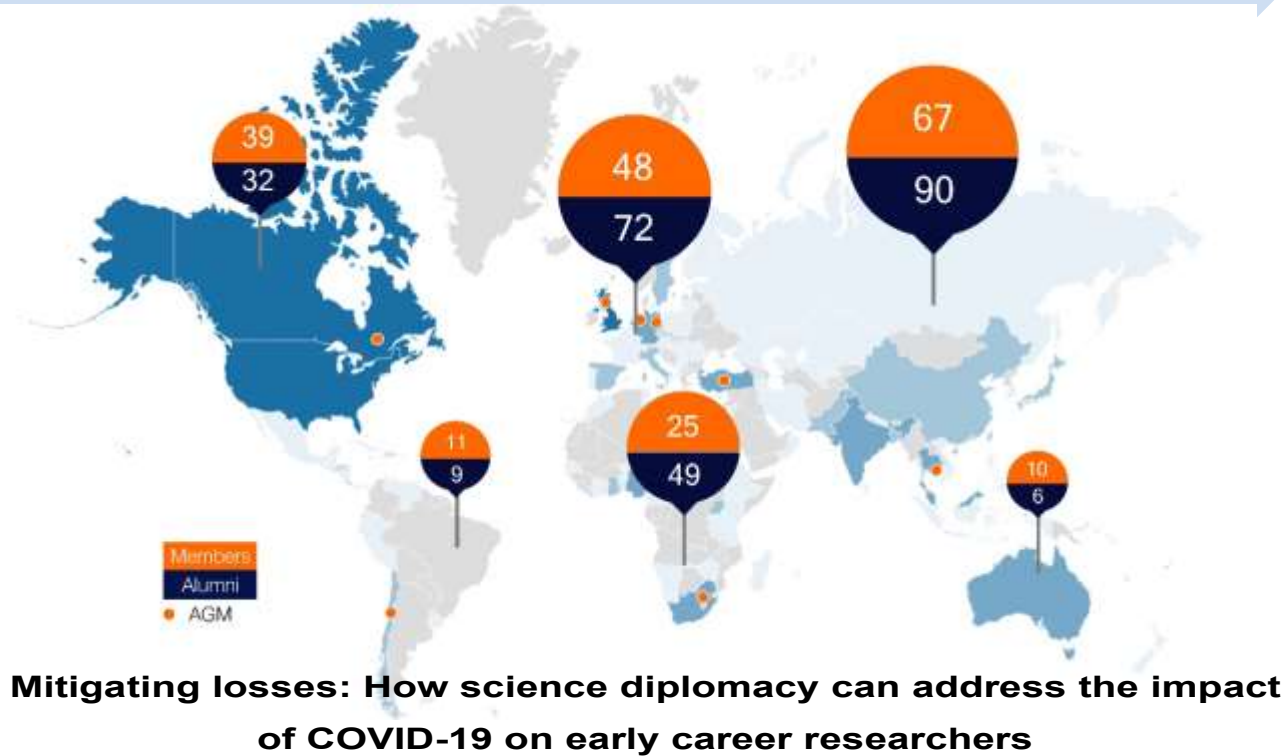


Who we are: The Global Young Academy

- A worldwide network:
- 200 members
- 258 alumni
- **83 countries.**

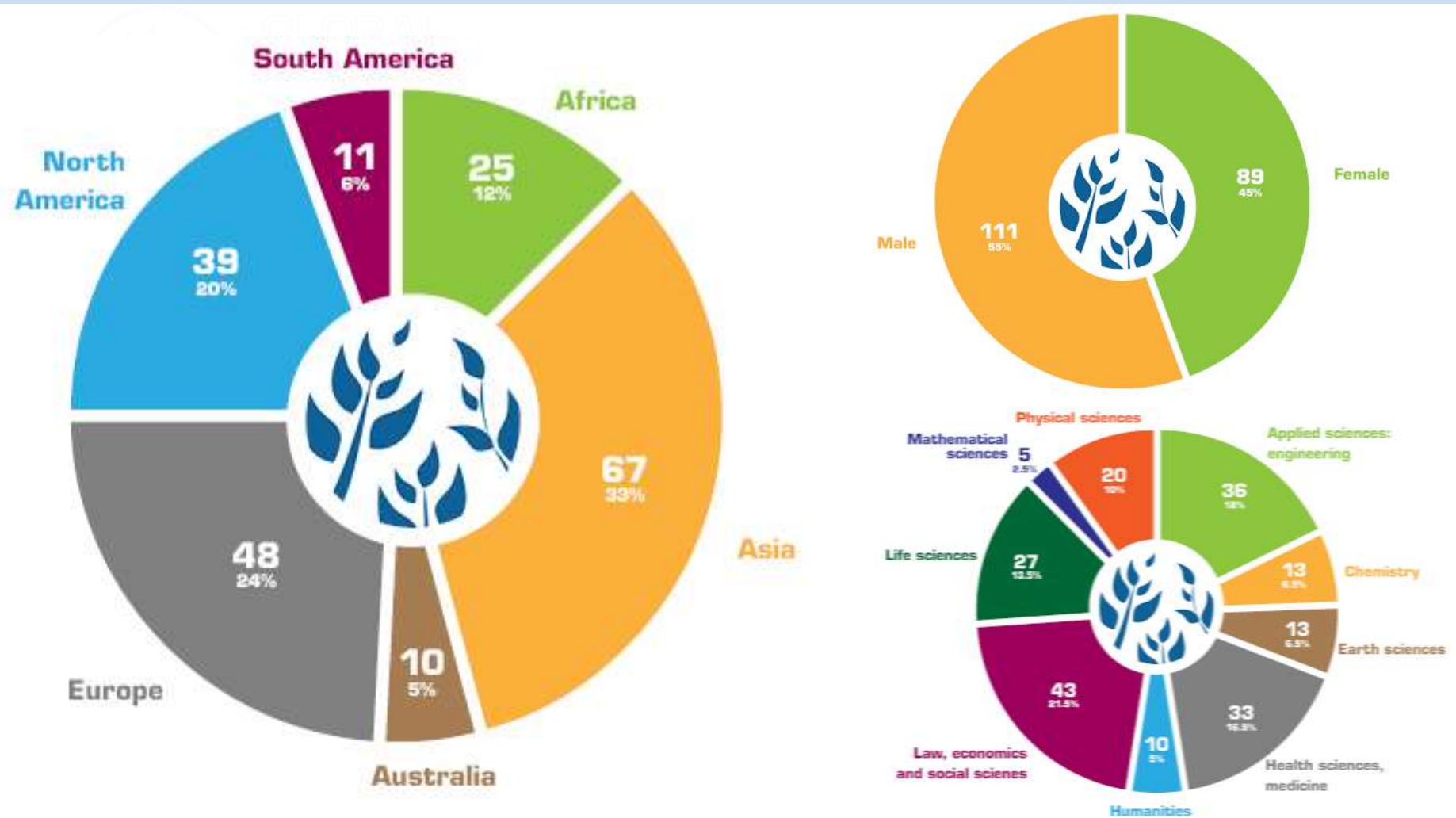
- Selection criteria
 - Research excellence
 - **Commitment to service/outreach**

- Median age ~40y
- 5y membership term



Sandra Lopez-Verges ¹, Bernardo Urbani ², David Fernandez Rivas ³, Sandeep Kaur-Ghumaan ⁴, Anna Coussens ⁵, Felix Moronta-Barrios ⁶, Suraj Bhattarai ⁷, Leila Niamir ⁸, Velia Siciliano ⁹, Andreea Molnar ¹⁰, Amanda Weltman ¹¹, Meghnath Dhimal ¹², Shalini S. Arya ¹³, Karen J. Cloete ¹⁴, Almas Taj Awan ¹⁵, Chandra Shekhar Sharma ¹⁶, Clarissa Rios Rojas ¹⁷, Yoko Shimpuku ¹⁸, John Ganle ¹⁹, Maryam M. Matin ²⁰, Nzweundji Justine Geramo ²¹, Abdeslam Badre ²², Paulina Carmona-Mora ²³ ‡

Who we are: Membership



GYA Flagship Projects

Projects with a direct impact on early career researchers

- **Global State of Young Scientists (GloSYS)**
= empirical research examining access to support mechanisms, mentoring, and funding as well as scientific productivity, mobility, and gender inequities within the higher education/research environment
- **Science Leadership Programmes (SLPs)**
= capacity building, mentoring and leadership training for early career scientists and scholars
- **At Risk and Refugee Scholar Membership Initiative**
= contribute to at-risk scholar re-integration into a scholarly work environment
- But also, support **National Young Academies**

Global State of Young Scientists (GloSYS)

- Project examining the state of early career researchers across the globe
- Precursor study in 2014
- First Regional GloSYS study (GloSYS ASEAN) in 2017
- Finishing largest GloSYS study to date - GloSYS Africa (14 countries)
- Issues of interest:
 - Mentoring and support structures
 - Working conditions
 - Infrastructure/funding access
 - Gender
 - Mobility

**GloSYS LAC: Began in 2019:
Review, Interviews, Survey.
Need your participation!!!**



Johannes Geffens, Catherine Gaudry, Hsin-Chou Yang,
Futao Huang, Onitarsaka Phonsuksa, Martin Dierink,
Yin-Chun Lin, Mei-Chao Huang, Shoji Kotaka, Karen Lorkner,
Wibool Phraswananantitha, Pichamasri Saengchantr,
Hasnawati Saleh, Brendon Tagg & Abhinavjyoti Venkatesanarayanan



Major goal of the GloSYS studies: use the data collected to develop evidence-based policy recommendations that support young scientists

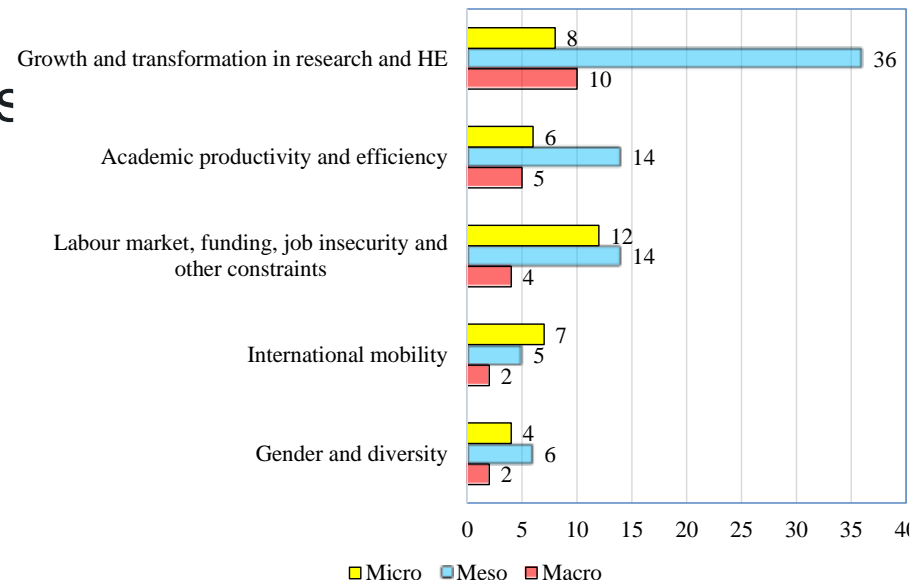
Global State of Young Scientists (GloSYS) LAC

- Review of current literature
- Opinion piece on ECRs in LAC
- Qualitative data: Design and realization of interview of ECRs in 6 countries: Panama, Cuba, Brasil, Argentina, Colombia, Guatemala
- Quantitative data: Survey of ECRs in the same 6 countries
- If good acceptance, good participation and enough funds, more countries should be incorporated in the study

<https://globalyoungacademy.net/wp-content/uploads/2021/03/GloSYS-LAC-Working-Paper-24.08.20.pdf>

Reviewing research on researchers: Our knowledge of early-career researchers in Latin America and the Caribbean

Alejandro Miranda-Nieto, Lynn McAlpine, Franziska F. N. Schreiber and Matt Keane



Issues of ECRs and young scientists in LAC



- ❑ Issues Early Career Researchers (ECRs) face in Latin America and the Caribbean
- ❑ How can ECRs organizations can have a key role in ways forward.
- ❑ How can science diplomacy help with solutions for ECRs-Lac challenges?
- ❑ Why is this important?

Issues of ECRs and young scientists in LAC

Different mobility groups= different issues:

1. Training in home country
2. Training abroad and returned
3. Diaspora

➡ Examples of ECRs organizations from these group that made contributions to policy to improve conditions.

➡ Harmonized pan-regional strategies can help strengthening LAC research systems

What is needed?

Understanding in depth the **challenges ECRs-LAC** face

Support for **repatriation/reinsertion**
Connection with the diaspora (harness diaspora location)

More **internationalization and visibility** for ECRs-LAC

Increase career **opportunities**

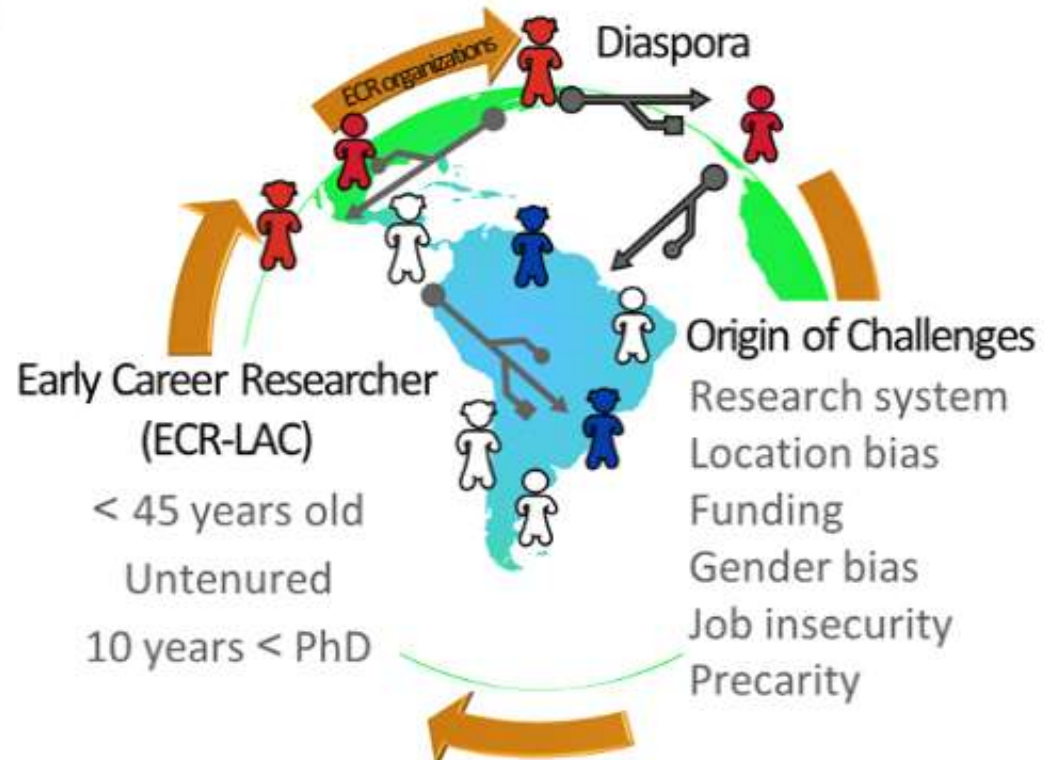


Image: David Fernandez-Rivas, GYA member

Intraregional mobility
South → North mobility

Challenges/questions	Actors*	Ways forward/recommendations
Current circumstances faced per professional mobility groups	Governments, scientific societies, and ECR organizations	Studies to understand the current circumstances of ECRs-LAC and strategic plan to equal opportunity for mobility
Access and availability of higher education opportunities	Governments, scientific societies, and ECR organizations	Increase national graduate programs and create new regional graduate programs and fellowships
Repatriation/reinsertion	Governments, scientific societies, and industry or start-up incubators/stimuli	Programs that consider not only funding but also infrastructure and institutional support
Connection with the diaspora	Governments, research institutions, scientific societies, industry or start-up incubators, diaspora organizations, and ECR organizations	Science diplomacy programs to increase collaborations and exchanges taking advantage of strengths of the science from the new country of the diaspora. Agreements and funding for partnerships. Facilitate access to research facilities
Assessing the quality of ECRs-LAC research	Governments, scientific societies, and ECR organizations	Determine what the quality of research is and its scientific or societal impacts and create better research assessment to generate a more holistic view of research performance that benefits all research fields
Impact and internationalization of ECRs-LAC research	Governments, scientific societies, research institutions, ECR organizations, and international organizations	Design specific strategies for the region on open access of research (for LAC researchers to have access to international production and for LAC publications to be read globally) publication cost, international collaboration in a win-win design (no "colonial science")
Quantification of the public policy of research in the region	ONU, CEPAL, research institutions, and Ministries of Science or relevant divisions	Assess current policies and their actual impact/value in the research systems through a science policy lens to modify existing research-related policies or create new ones accordingly

Here, the main challenges/questions of ECRs-LAC, along with the diverse actors that should be involved in addressing such challenges, and ways forward/recommendations to have a supportive research environment for ECRs are presented.

**Examples of ECRs and diaspora organizations and networks: Global Young Academy (international ECR organization), TYAN-TWAS (international ECR network from an international scientific academy), Redes Chilenas-Chile (independent ECR network including diaspora), RAICES-Argentina (governmental agency program for diaspora), RedGlobal MX-Mexico (independent diaspora network established with governmental support).*

Science Leadership Programmes

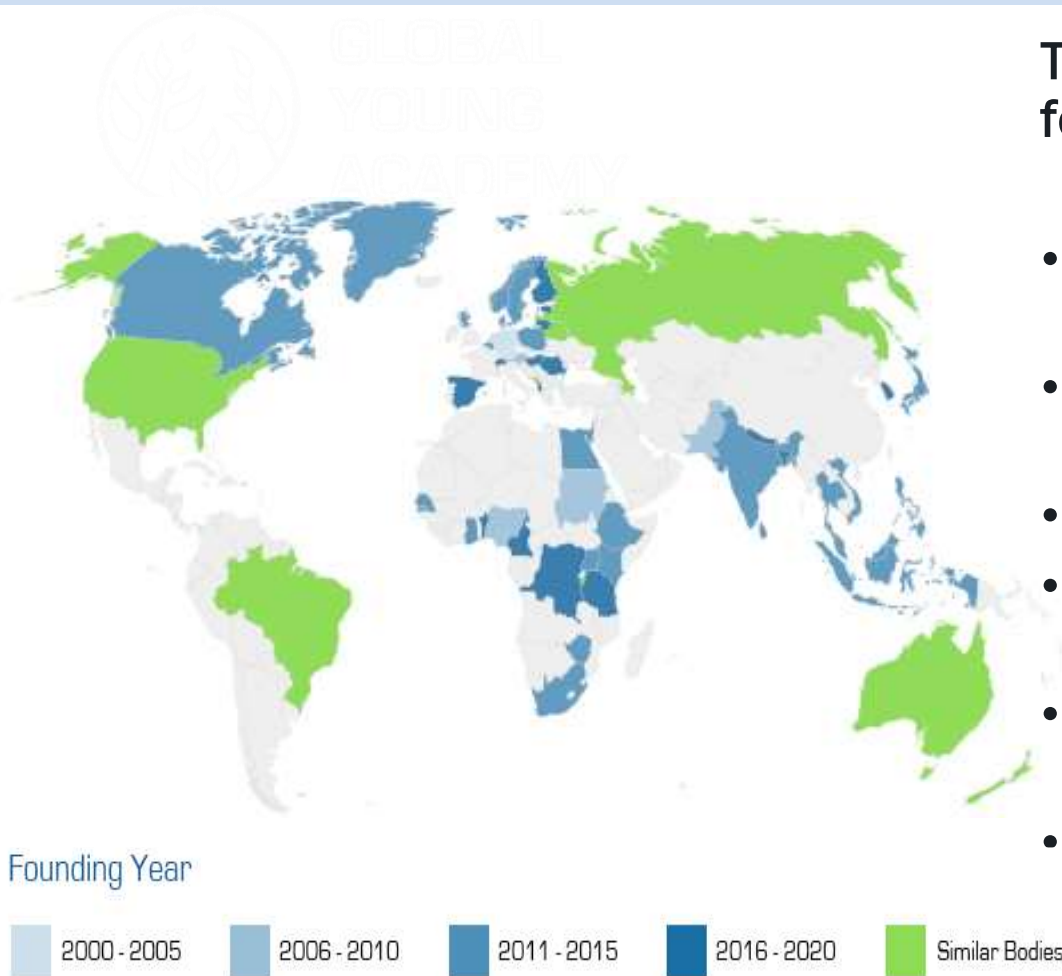
- Builds on GloSYS results
 - Applied leadership skills
 - Mentoring
 - Establishing regional networks of academic leaders
- Science Leadership Workshop for new GYA members since 2018
- **African Science Leadership Programme (ASLP)**
- **ASEAN SLP**



Begin in 2021:

- **Science Leadership Programmes in Latin America** and the APEC region

GYA and the NYAs and similar bodies



The GYA provides advice and networks for National Young Academies (NYAs)

- Technical support and advice (New Tool kit for creating NYAs)
- Facilitate and support contacts with senior academies
- Missions to countries
- Sharing of best practices, liaising, projects
- Organisation of regional or global meetings
- Invitation to GYA AGM to NYAs representative, projects in collaboration

GYA and the NYAs and similar bodies

Advice, technology and tools

Work

Your
story

Send your careers story
to: naturecareerseditor@nature.com



Science leadership training was organized for early-career researchers by the Global Young Academy in 2019.

SIX REASONS TO LAUNCH A YOUNG ACADEMY

The founders of Hungary's Young Academy describe how and why they set it up in 2019. By Erika Bálint and seven co-authors.

First National Young Academy (NYAs) 21 years ago in Germany!

GYA members think Globally, but ACT GLOBALLY, REGIONALLY and LOCALLY

- GYA members are part of different associations and NYAs: ALWAYS MOTIVATING and EMPOWERING their colleagues



Programs from US supporting education and ECRs in LATAM

Funding Opportunities for Graduate School & Research

VIEW ACADEMY



OAS ROWE Fund



Fulbright Graduate Scholarships



University Funded Fellowships



@educationuspty

Programs from US supporting education and ECRs in LATAM

Example of (free) Resources Available via EducationUSA



Basic English for STEM Majors

Mondays 6-8 PM - April 26 to August 23, 2021
Nivel Básico para Ciencia, Tecnología, Ingeniería, Matemáticas

See the calendar
<https://www.educationusa-unprep.org/groups>

Register in advance
<https://bit.ly/MondayBasicEnglish>





GRE Reading and Writing

Tuesday 4-6PM - June 29 to August 24, 2021
Graduate Record Exam: Verbal & Analytical Writing for Master's & Doctoral Program Applicants

See the calendar
<https://www.educationusa-unprep.org/groups>

Register in advance
<https://bit.ly/TuesdayGRE>





Application Essays & SAT

Wednesday 6-8 PM - April 28 to August 25, 2021
Personal Statement Coaching in the 1st hour and SAT Exam Prep for Undergrad in the 2nd hour

See the calendar
<https://www.educationusa-unprep.org/groups>

Register in advance
<https://bit.ly/WednesdayApplicationEssays>





TOEFL on Fridays from 6-9pm

Friday 6-9 PM - April 23 to August 27, 2021
TOEFL Exam Preparation for University Applicants
All skills: Reading, Listening, Speaking and Writing

See the calendar
<https://www.educationusa-unprep.org/groups>

Register in advance
<https://bit.ly/FridayTOEFL>





1 Research Your Options



2 Finance Your Studies



3 Complete Your Application



4 Apply for Your Visa



5 Prepare for Departure

@educationusapty

<https://linktr.ee/EducationUSAPanama>

Programs from US supporting education and ECRs in LATAM



Women in STEM Outreach & Mentorship



Thank you!



Website

www.globalyoungacademy.net

Email

info@globalyoungacademy.net

Twitter

[@GlobalYAcademy](https://twitter.com/GlobalYAcademy)

Facebook

www.facebook.com/GYA.online

Cooperation

Engagement with other international organizations



Leopoldina
Nationale Akademie
der Wissenschaften



International Network
for Government
Science Advice

