What's next? Academic path after your PhD

PhD days 09/04/2025

Original slides by Eva Miranda (2024). Adaptation and presentation by Toni Guillamon (2025).







You spent 3-4 years thinking of a specific problem... And now what?



What you would like to do...

...take some time off....



What you need to... Keep climbing...

...Embark on a postdoctoral stay



Pros and cons of a postdoctoral career

Pros: Broaden horizons

 Additional expertise.
 New research partners and groups.
 Start envisaging your own research lines.
 Excitement of a new adventure.
 New culture and language.

• Cons:

Having to move abroad.Lack of stability.Difficulties starting a family.



Family pressure

To get a stable job

- There is the continuous pressure to get a permanent job.
- True that postdoc is a period during which you do not hold a permanent job.
- Temptation to leave to a stable situation.
- Think of the postdoctoral phase as an opportunity to enhance your chances to get a better job soon.



If you decide to stay in science or research after options open to you.

Postdocs offer excellent opportunities to gain research experience and qualify for the next step in your career.

completing your PhD, there is a wide range of career



A postdoc abroad?





Soft postdocs: A **research stay or visit** will not only enable you to establish new contacts abroad and gain understanding both of the research and the higher education system; it can also **make it easier to decide in favour of a research career abroad**.

Staying closer... Juan de la Cierva, Beatriu de Pinós,..., specific opportunities at CRM (hopefully).

Lecturer positions (*professorat lector*) ... ideally after the postdoc.



Impact on your current personal live

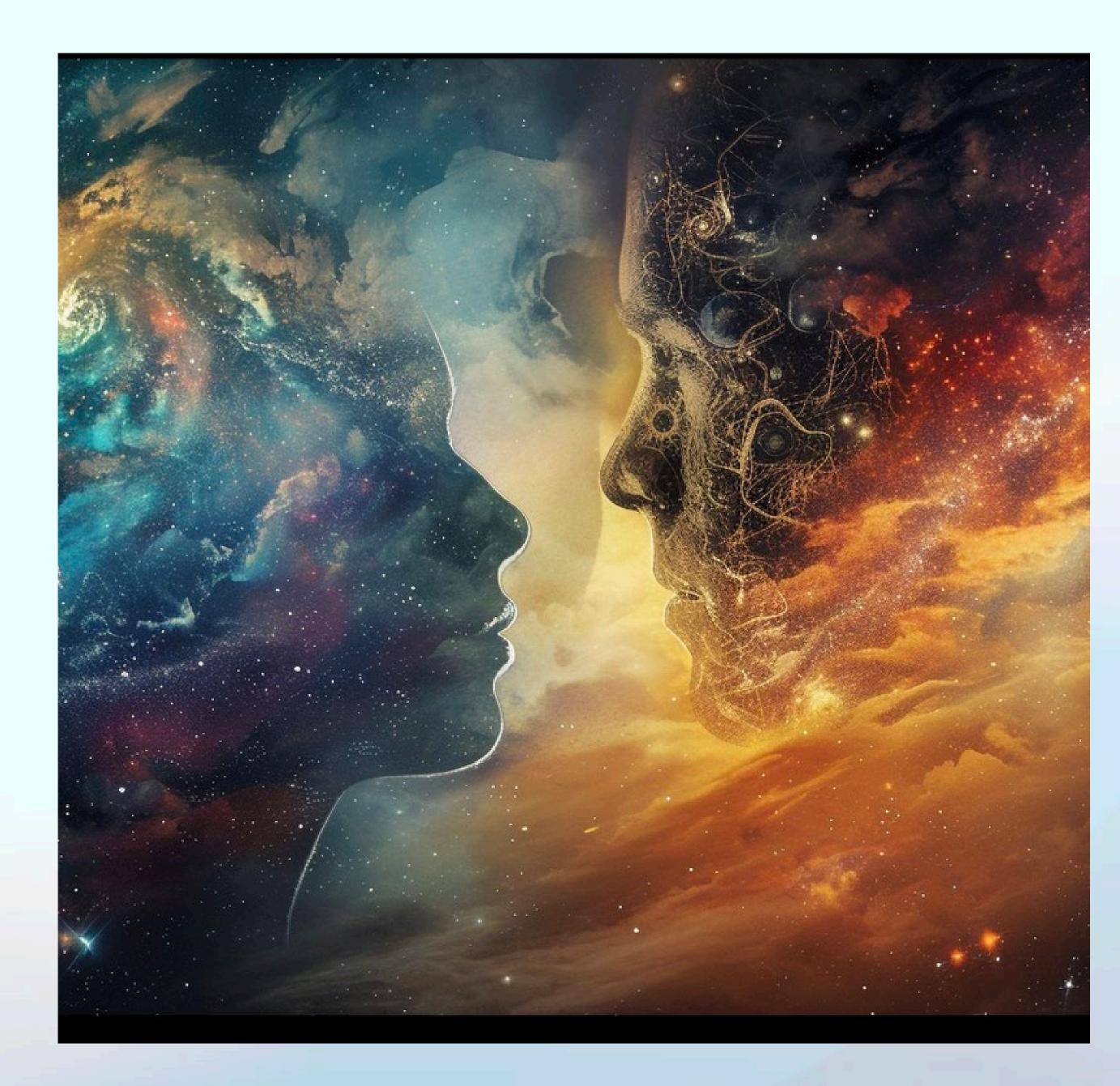
Personal level: Sometimes deciding to go abroad coincides with the moment to start a family.

Is it possible to do both?

The n-body problem

Is not solvable but...

The two-body problem: Couples who are both planning a career can receive targeted support from dual career networks at universities.



Bringing your significant others abroad is not easy

The n-body problem: Travelling abroad with a whole family is tricky but it is not impossible even if the nbody problem is not integrable.

Several grants: Marie Curie, Alexander von Humboldt Foundation, Beatriu de Pinós offer additional funds for bringing the family.



Women in science

If you are a woman and you plan to start a family, you may find this moment of your life hard. Some specific grants:

- L'Oréal-UNESCO Foundation.
- OWSD Early Career Fellowships.
- Simons Emmy Noether.
- Christiane Nüsslein-Volhard-Stiftung Stipendium.
- WiRe Postdoc Fellowships for International Female Researchers.
- Ruth-Lee Kennedy (Fulbright), travels.

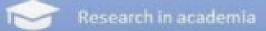


- Ask advice to members of your research group or department, especially your thesis supervisor.
- They may have contacts with other related research groups that may have grants available, or know useful thematic distribution lists.
- If you want to change the research topic (which is fine, by the way!), there are still many options depending on the destination...

Where to go? First tip

Catalan, Spanish & European programs





a 2 / R2 ormació r postdoc	Etapa 3 / R3 Prèvia a estabilització Senior postdoc	Etapa 4 / R4 Personal estable Leading researcher	
Gestia Gestia Aven Avenstania Risconce Fiu de Plinds	SHE MANAGE MINISTRA M	ICREA Senior & Académia	
CCIÓ Generalitat de Catalunya pring INDUSTRY			https://agaur.gencat.cat/ https://www.icrea.cat/
BG Galindo Junior Juan de la Cierva	Beatriz Galindo Senior Ramóny Cajal	Contratos investigador distinguido	https://www.aei.gob.es/ca/convocatories
lm Torres Quevedo		Miguel	
Sara Borrell	Miguel Servet I Carlos 38	de Salud Carlos II	https://www.isciii.es/ (health sciences)
MSCA IF	MSCA IF	erc CoG	
MSCA Cofund-FP (institutional)	MSCA Cofund-FP (institutional)	erc AdG Advanced Grants	https://marie-sklodowska-curie-actions.
	erc StG Starting Grants		

Research in/with non-academic sector



Europe

- Marie Curie Actions (individual or in a network).
- COST postdocs
- La Caixa targeted postdocs
- Alexander Von Humboldt postdocs
- DFG Excellence Clusters in Germany
- DAAD stays in Germany
- FSMP postdocs in Paris
- Fundación Areces Postdocs
- Rafael del Pino grants
- France: ANR postdoctoral opportunities
- Postdocs under VIDI grants in the Netherlands
- UK: EPRSC opportunities

• ...

SNSF Swiss Postdoctoral Fellowships (SPF)



North-america The American dream... ...can you trump it?

- NSF grants.
- Specific postdoc at SLmath (former MSRI) associated to specific research programs.
- Postdoc at top universities: Berkeley, MIT, NYU, etc...usually advertised on their websites.
- Use: <u>https://www.mathjobs.org/</u>, <u>https://academicjobsonline.org/ajo</u>.
- Other: Canadian mathematical society CRM-ISM Postdoctoral Fellowships, Catalunya-California program (Fundació Balsells; engineering),...



Asia and other opportunities

New opportunities

- The big China.
- Japan.
- Korea. Korea Institute For Advanced Study (KIAS).
- Hong-Kong university.
- Australia and New Zealand.
- Latin America. In particular, Chile offers many postdoctoral positions.



Organize postdoc applications with time. At least, one year in advance.

Final advice

In mathematics, there is no one path to success. You have to find your own way and embrace the challenges along the journey.

Maryam Mirzakhani