TÉCNICO LISBOA

Towards scientific ~~independence~~ excellence

Rodrigo Miragaia Rodrigues, Departamento de Eng. Informática

Técnico Shaping the Future - Academia das Ciências

September 6, 2023

My research career

My research career (cont'd)

My research career (cont'd)

My research career (cont'd)

My research career (cont'd)

My research career (cont'd)

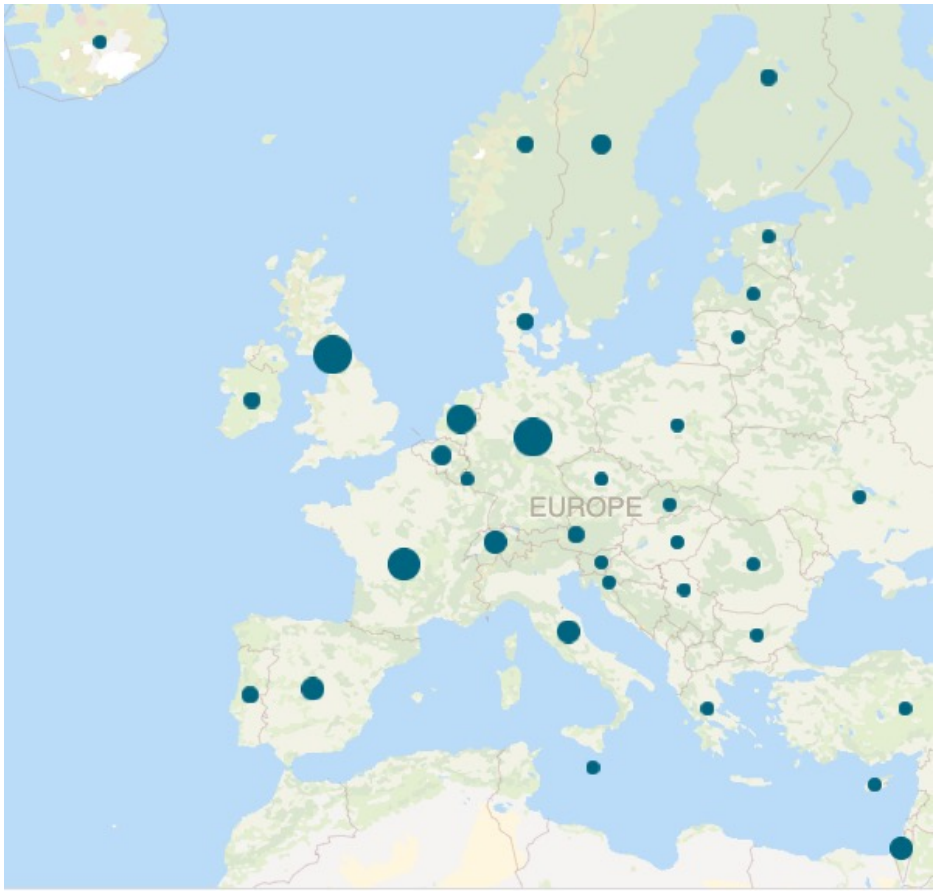
ERC funding

- Established in 2007
- Support “blue sky research”
- Three levels: StG, CoG, AdG
- Well established calendar
- Grant application is focused on scientific aspects (no “boilerplate”)
- Scores: A, B (no resubmission next year), C (no resubmission next 2 years)
- Evaluated on scientific quality of the proposal + past achievements
- Recently announced that former will be given more weight than latter

Main points to take into account when writing

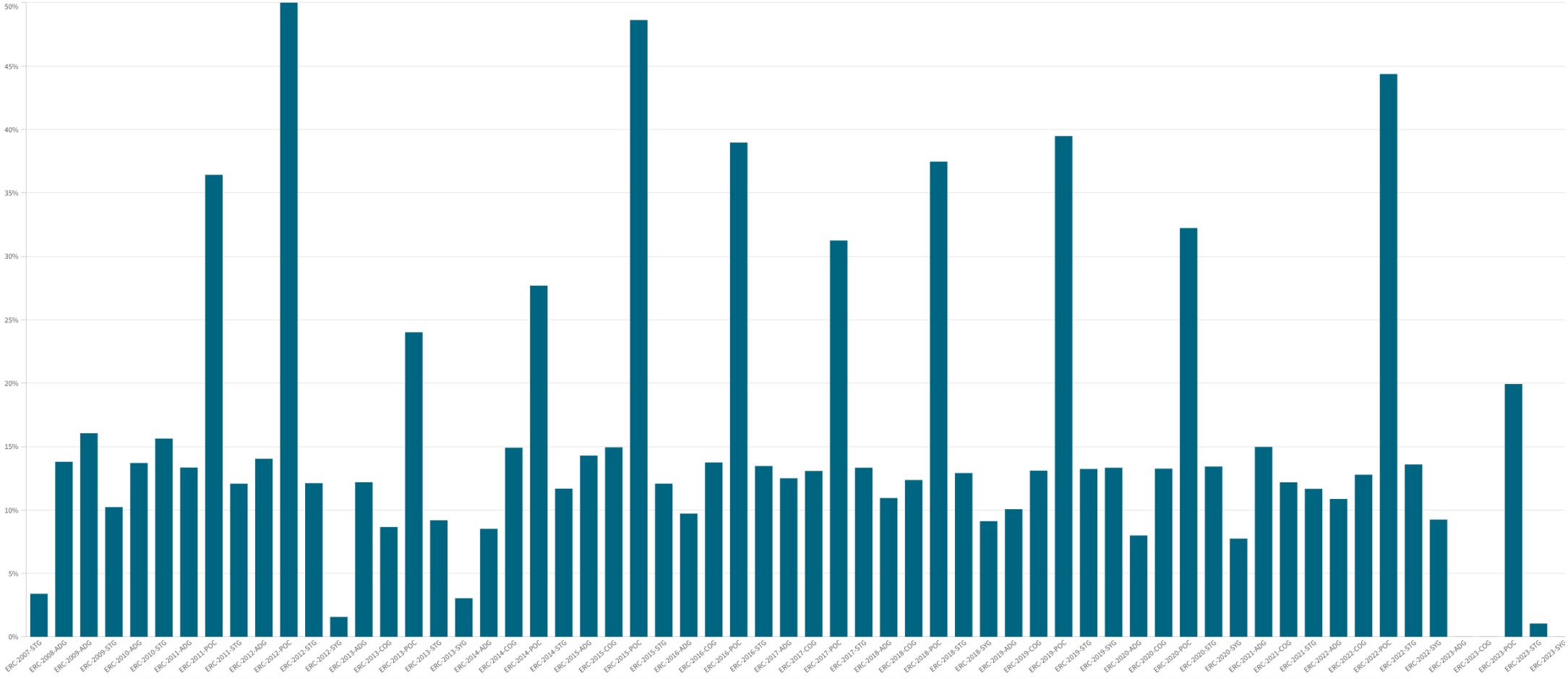
- Key words for rating a proposal: “groundbreaking”, “breakthrough”, “impact”, “high-risk + high-gain”
- Typical avenues of reviewer criticism:
  - Incremental research
  - Too narrow / too broad a scope
  - Workplan not clear / detailed enough, or does not contemplate risk management
  - Track record does not show evidence of independence / leadership / excellence

Fun ERC stats – funded projects by country

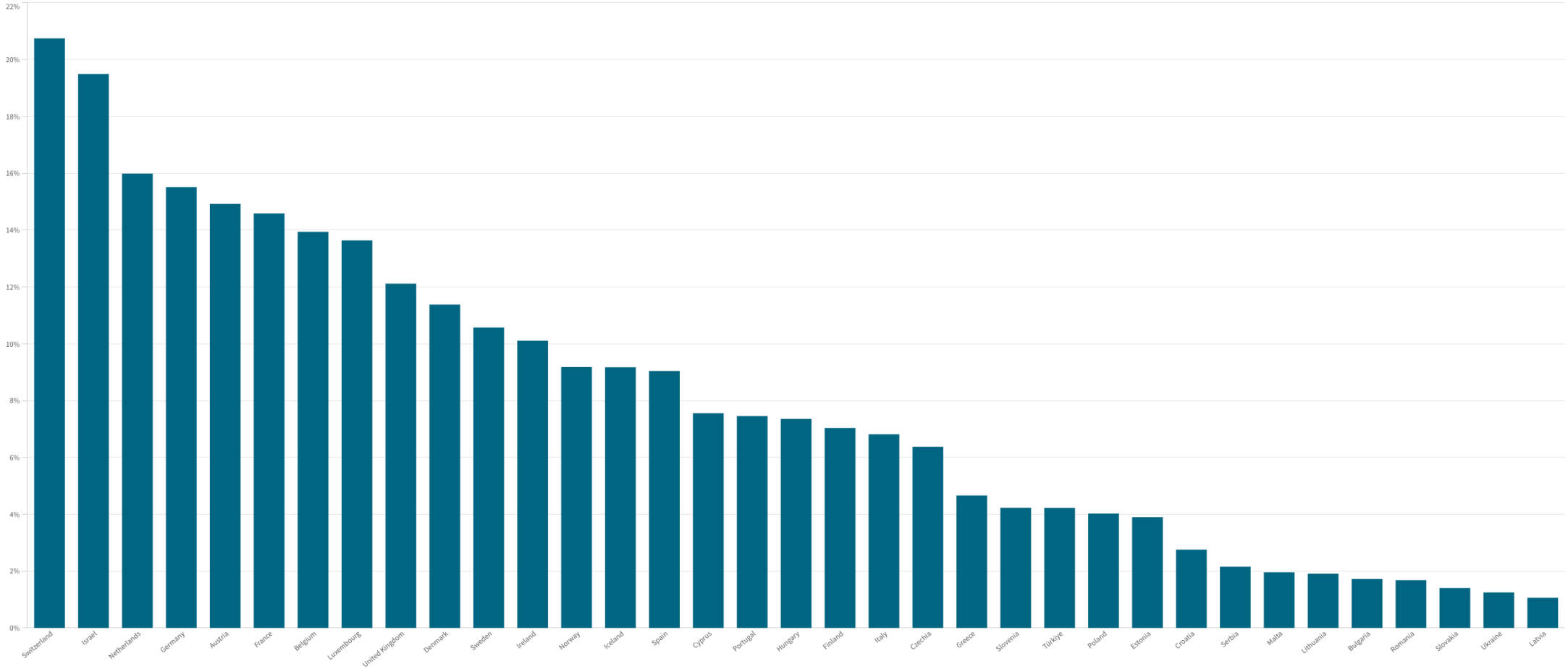


https://erc.europa.eu/projects-statistics

More ERC stats – success rate by call



More ERC stats – success rate by country



Some lessons learned

Setting a high bar

- Acts as a personal incentive to do your best
- Even if you don’t publish at the very top venue, your fallback is likely an excellent publication
- Evaluation metrics change all the time, do not optimize for the current metric
  - In contrast, quality and impact is always valued
- Your competitors should be the faculty at MIT, Stanford, ...
  - (Not your colleagues, those are your collaborators)

Some lessons learned

The role of mentoring

- Seeking advice is a sign of wisdom, definitely not ignorance

- Look for advice from colleagues, collaborators, even if they are not formally mentors or even if they are not from your institution

- Can also provide good feedback for grant proposals

Some lessons learned

Tour your ideas

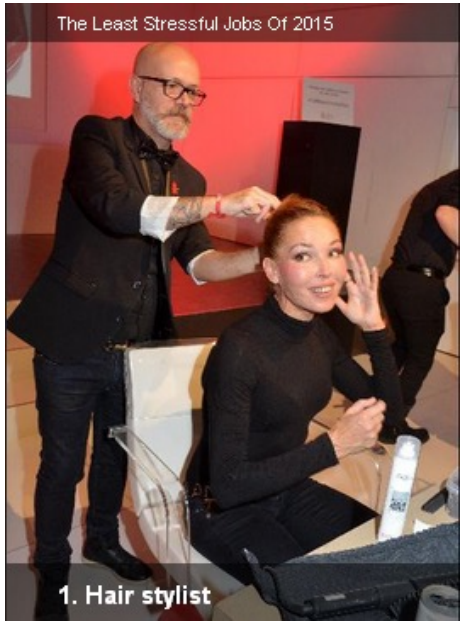
- Several things to gain from giving talks about your work
  - Get feedback and follow-up ideas
  - Establish collaborations
  - Rebut criticism
  - Be in the loop
- Normal thing to do in top universities, particularly before being up for tenure

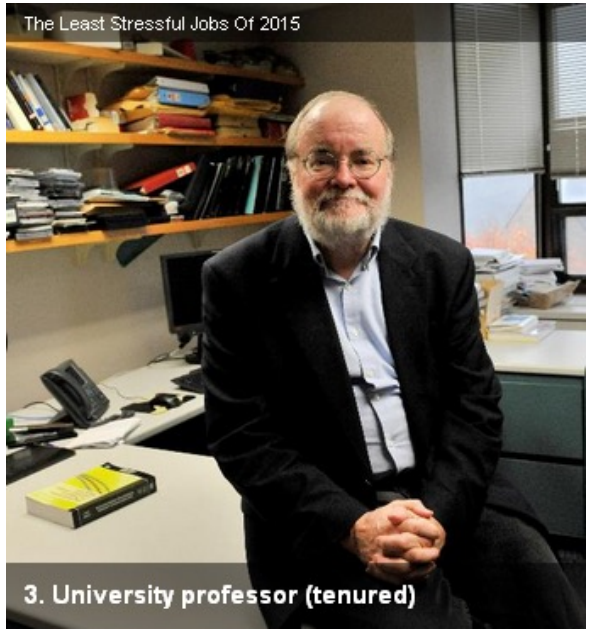
Some lessons learned

Finding the right number of “projects”

- The granularity varies from field to field
- At some point mid-way, it is wise to choose the most promising project
  - Goal should be to become a leader in a given research area
- Good piece of advice: for the least promising projects, context switch only when needed

One more piece of advice





Source: Forbes/CareerCast

TÉCNICO LISBOA