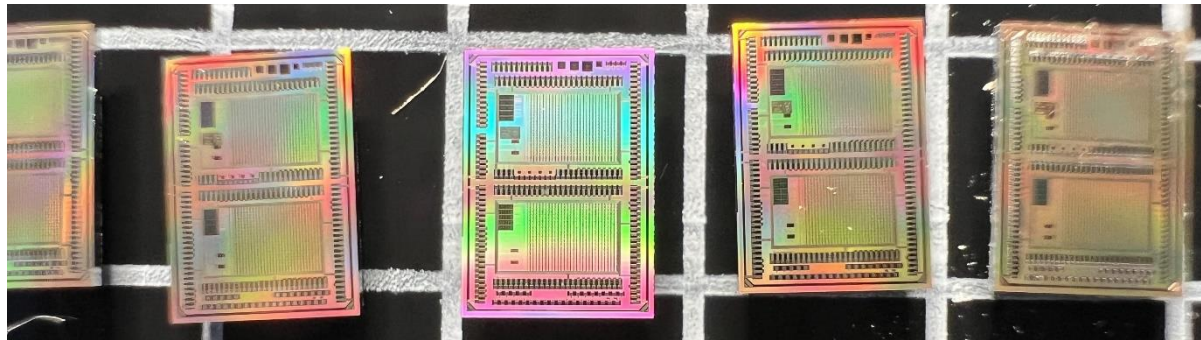# Career talk: Fellowship



Dr. Eva Vilella-Figueras

UKRI Research Fellow

University of Liverpool

vilella@hep.ph.liv.ac.uk

# What do I do?

- Research Fellow with the Department of Physics

- To develop novel silicon sensors in High Voltage CMOS technologies for tracking applications

- To exploit their use in future physics experiments and beyond

- To do my own independent R&D programme

- To form, train and mentor my own team (postdoc, engineer, PhD students, undergraduate and summer students)

- To become a world-leader in my area of expertise

Maks Roman

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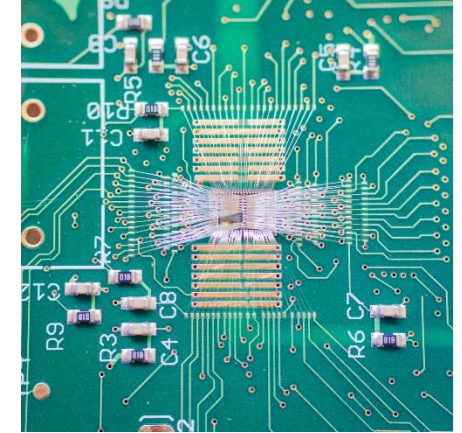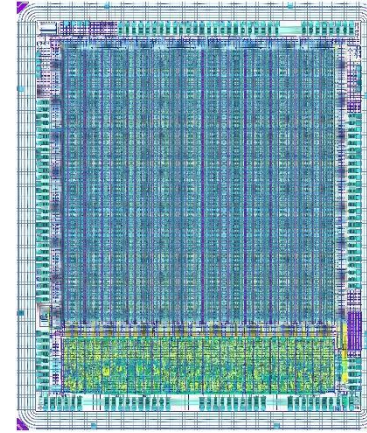
# UKRI Future Leaders Fellowship

- Prestigious and competitive scheme

- To support early career researchers and innovators with outstanding potential

- Funding for up to seven years
  - ≤ £1.5M for the first four years
  - ≤ £0.6M for the final three years

- To tackle ambitious and challenging research and innovation

- To develop the fellow's career

- For all disciplines and sectors

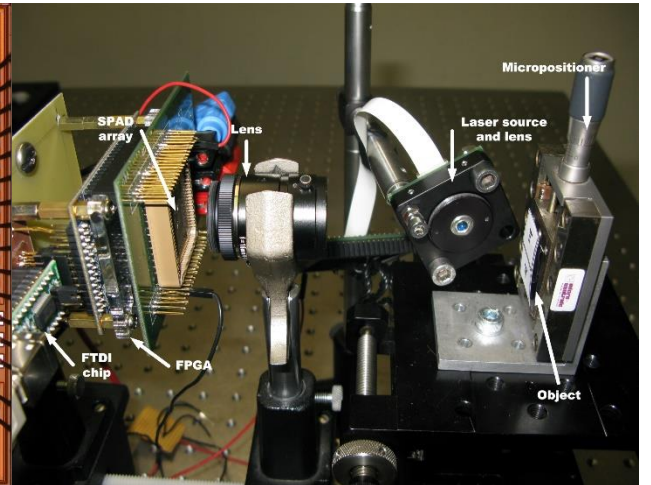- Provides a route to an open-ended contract within academia
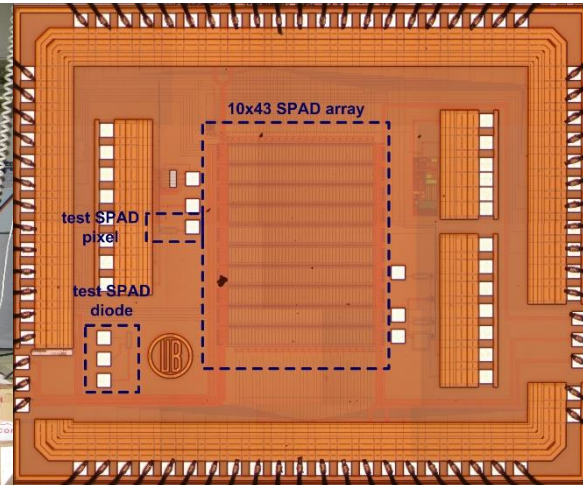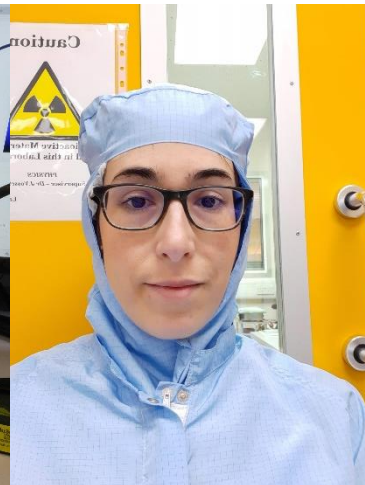
UKRI UK Research and Innovation

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# My pathway

BSc @ Uni Barcelona

MSc @ Uni Barcelona

PhD @ Uni Barcelona

2009   2011   2013   2015   2017   2019   2021   2023

# My pathway

BSc @ Uni Barcelona

MSc @ Uni Barcelona

PhD @ Uni Barcelona

Postdoc @ Uni Liverpool

2009     2011     2013     2015     2017     2019     2021     2023

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# My pathway



BSc @ Uni Barcelona — 2009

MSc @ Uni Barcelona — 2011

PhD @ Uni Barcelona — 2013

Postdoc @ Uni Liverpool — 2015

UKRI FLF application — 2019

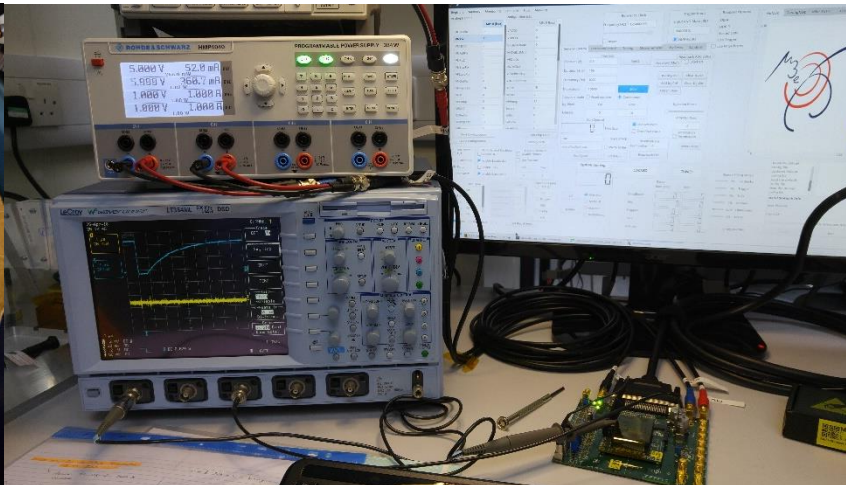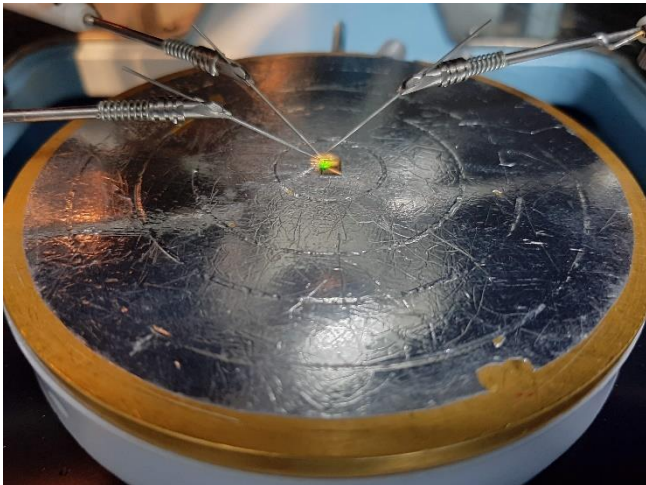UKRI FLF start — 2019

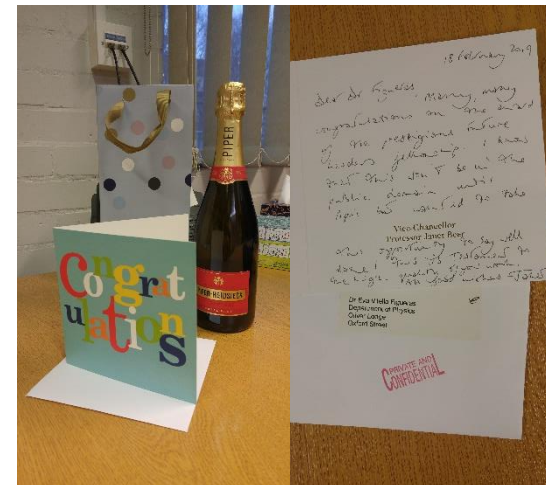2009 2011 2013 2015 2017 2019 2021 2023

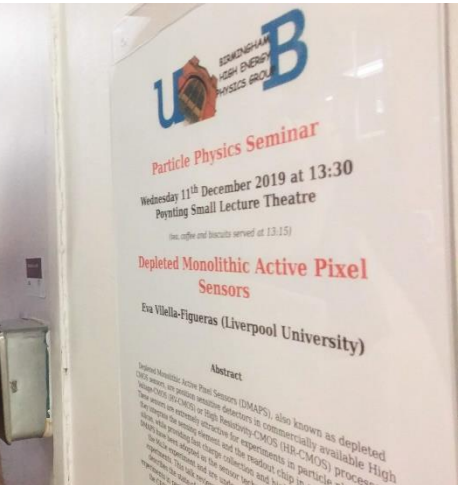# My pathway

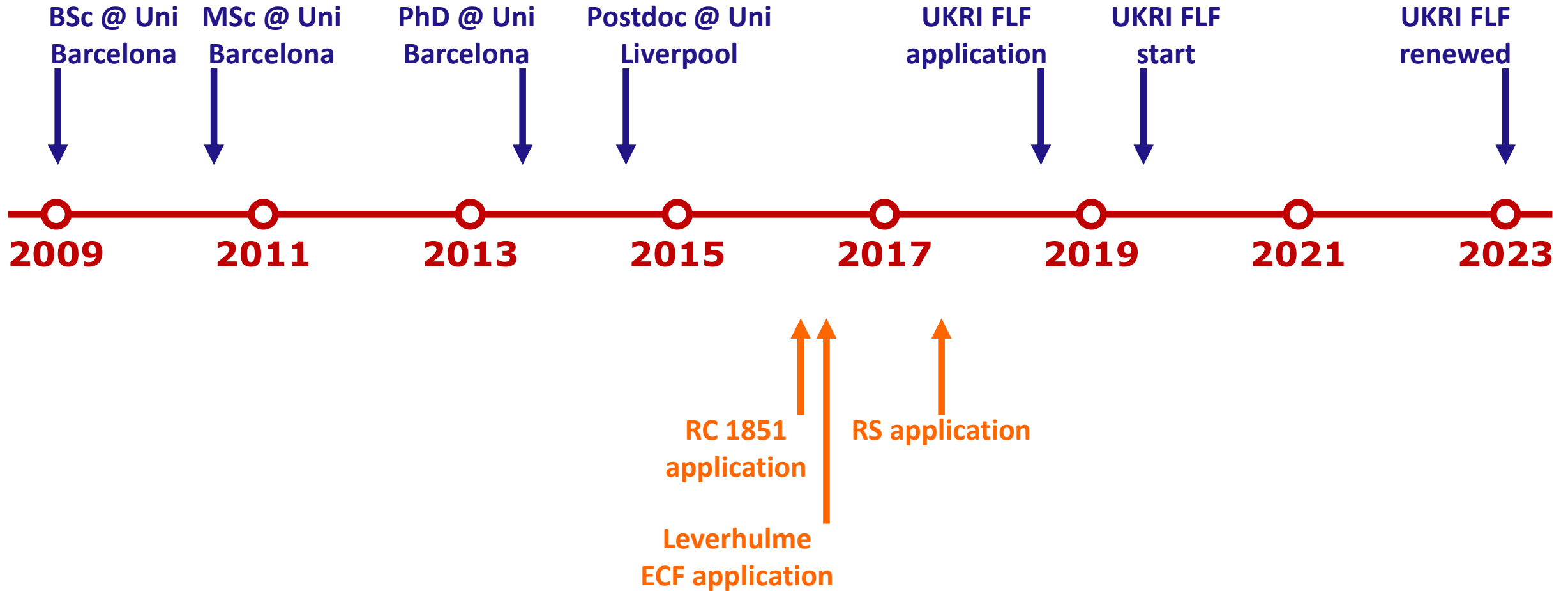BSc @ Uni Barcelona

MSc @ Uni Barcelona

PhD @ Uni Barcelona

Postdoc @ Uni Liverpool

UKRI FLF application

UKRI FLF start

UKRI FLF renewed

**2009**  **2011**  **2013**  **2015**  **2017**  **2019**  **2021**  **2023**

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# My pathway

# My pathway



BSc @ Uni Barcelona — 2009

MSc @ Uni Barcelona — 2011

PhD @ Uni Barcelona — 2013

Postdoc @ Uni Liverpool — 2015

UKRI FLF application — 2017

UKRI FLF start — 2019

UKRI FLF renewed — 2023

RC 1851 application

Leverhulme ECF application

RS application

Started to co-supervise PhD students

Started and led new Working Group in CERN-RD50

Co-wrote proposal for new detector for LHCb upgrade

# Qualities needed for a fellowship

**Excellence in research**

**Vision**

**Original thinkers**

**Leadership**

**Independence**

**Good communication skills**

**Good project management skills**

# Fellowship application: Getting started

- **Identify a host institution**

- **Make contact with a member of the department / research group**

- **Make contact with the Head of the Department**

- **Contact the central research support services**
  - To get advice on costings – Research Support Office
  - To get support for writing the application (e.g. with narrative CV training, revisions, etc.) – Research and Partnerships Development

- **Register for the funders research portal (e.g. UKRI Funding Service)**

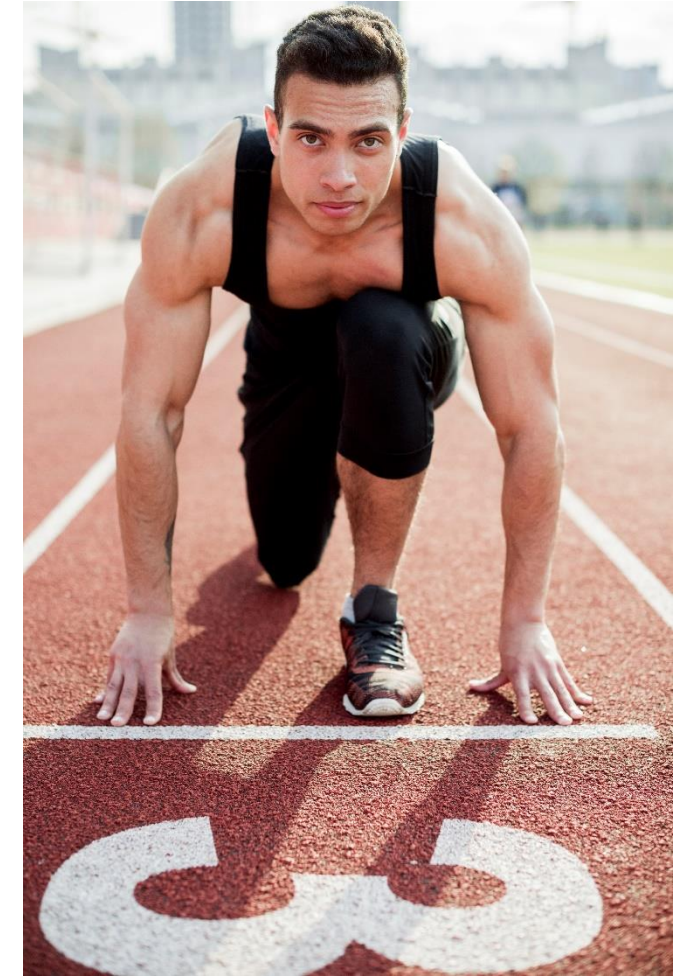- **Pay attention to the details of the call and the required format of the proposal**
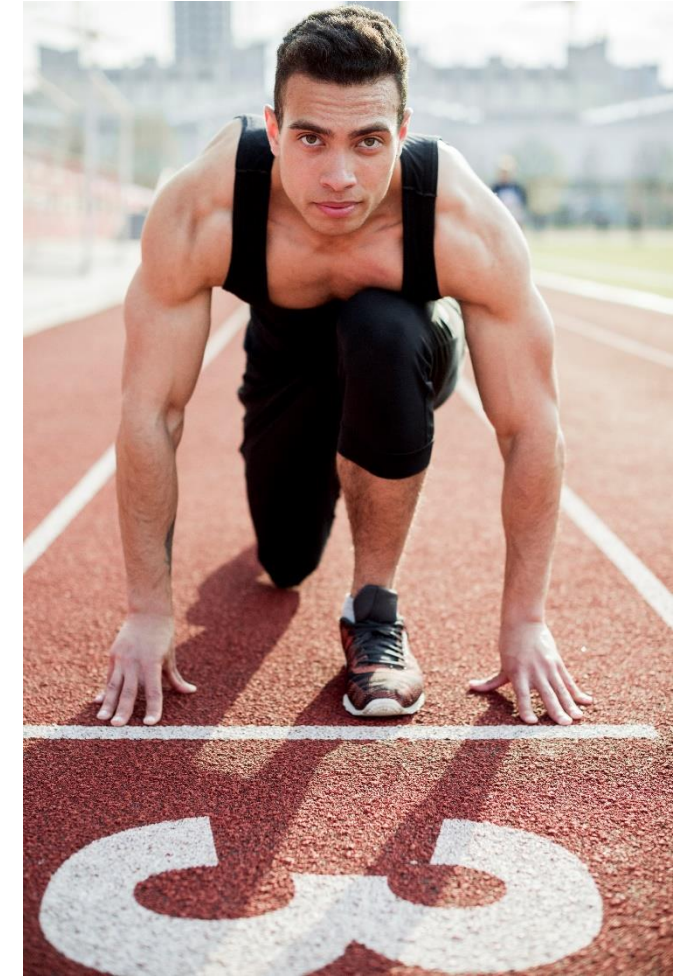
# Fellowship application: Process

- **Prior to submission**
  - Prepare proposal
  - Ask for internal review
  - Obtain letters of support detailing in-kind contributions from host institution and collaborators / partners

- **After submission**
  - Funder will send proposal to independent reviewers
  - Respond to reviewers where possible

- **Sift panel**

- **Invitation for interview**
  - Request mock interview with host institution
  - Interview with panel

- **Award of fellowship**
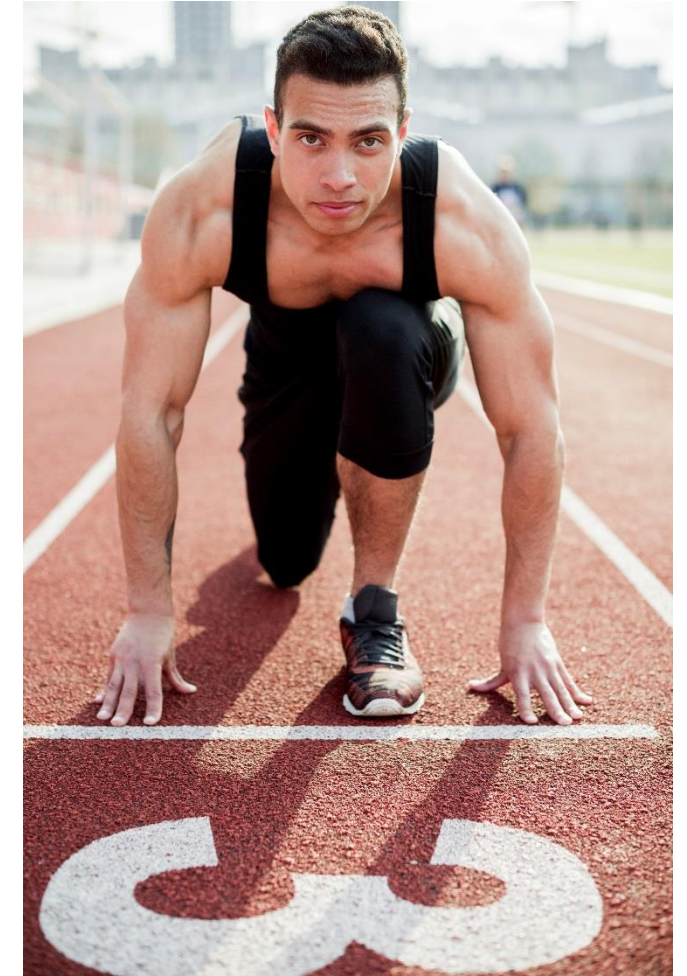
# Eva's fellowship application: required materials

- **Case for Support (8 pp)**
  - Why this?, Why now?, Why you?
  - Describe broad aims of research programme and objectives
  - Original research programme
  - To establish a leading research group
  - To achieve independence

- **Justification of Resources (2 pp)**
  - Justify staff time, consumables, travel and equipment

- **CV (2 pp)**

- **Head of Department Statement (2 pp)**

- **Pathways to Impact – Exploitation Plan (2 pp)**
  - Who and how will benefit from the proposed research

- **List of Publications (1 p)**

- **Data Management Plan (1 p)**

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- Examples

- Training material

- Contacts for support and revisions

**Website link**

# School of Physical Sciences PDRA Development Awards

- **Who can apply?**
  - PDRAs working within the School of Physical Sciences
  - $\geq$ 6 months left in their contract

- **Award**
  - £6,000
  - To spend on a range of selected activities and opportunities
    - Pilot project to gain preliminary data to write a grant or fellowship
    - Visiting another research group to learn a technique to apply in their research or teaching
    - …

- **Closing date is 24th October 2023**

- **Applications need to be submitted to Gillian McLaren**

- I think it is a nice opportunity and valuable experience for all PDRAs, especially those who are thinking of applying for fellowships

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# Fellowship schemes (incomplete list)

- Future Leaders Fellowship

- Royal Society Fellowship

- Ernest Rutherford Fellowship

- University Research Fellowship

- Royal Commission for the Exhibition 1851 Fellowship

- Leverhulme Early Career Fellowship

- …

# My fellowship: expectations



Achieving my
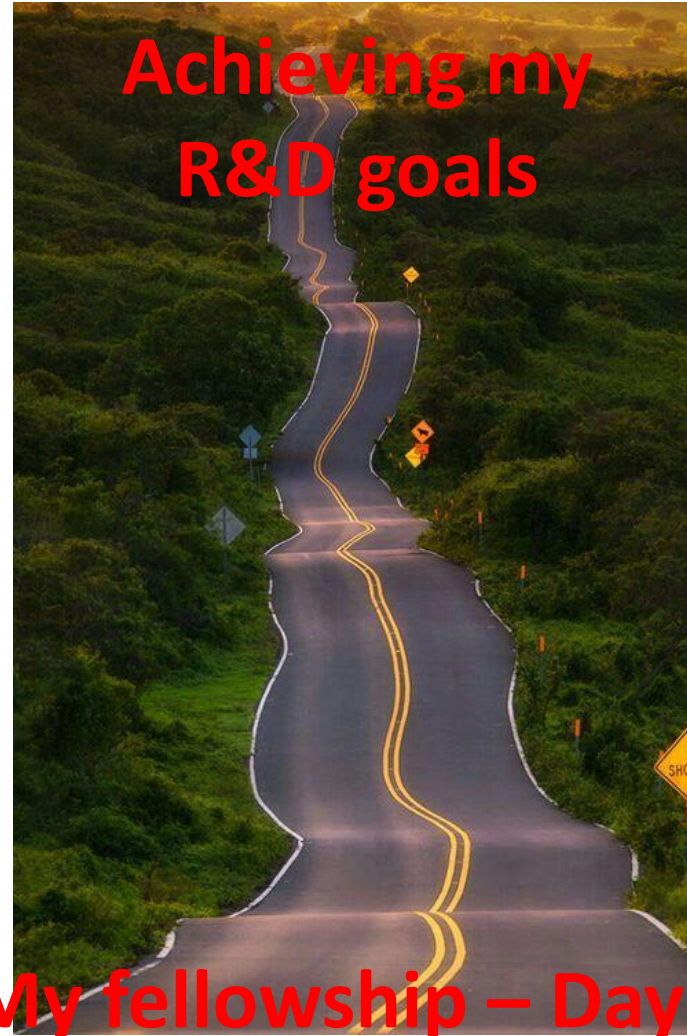R&D goals

My fellowship – Day 1

# My fellowship: reality

Unable to get agreement with international collaborators

Foundries where I fabricate my custom-designed silicon sensors do not agree to produce my sensors like I would like them to

Preliminary measurements do not go like expected

Recruiting is hard

Achieving my R&D goals

My fellowship – Day 1

Delay in technical programme

Discontinuation of software licenses –computer services people on annual leave

New PhD students need training

Newly recruited postdocs need training
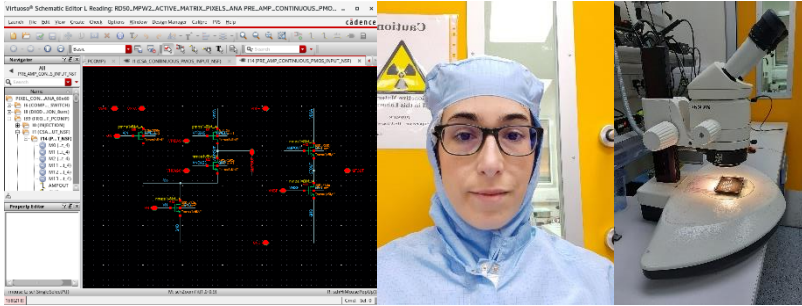
# My role as a PI: day 1



"With great power comes great responsibility."

COMICFANMAG.COM

I was the same exact person as before, with the same skills
– yet I had a completely new role
– and very different professional responsibilities!

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# My role as a PI: after 4 years...



- Being a PI means having less time to
  - Do sensor design
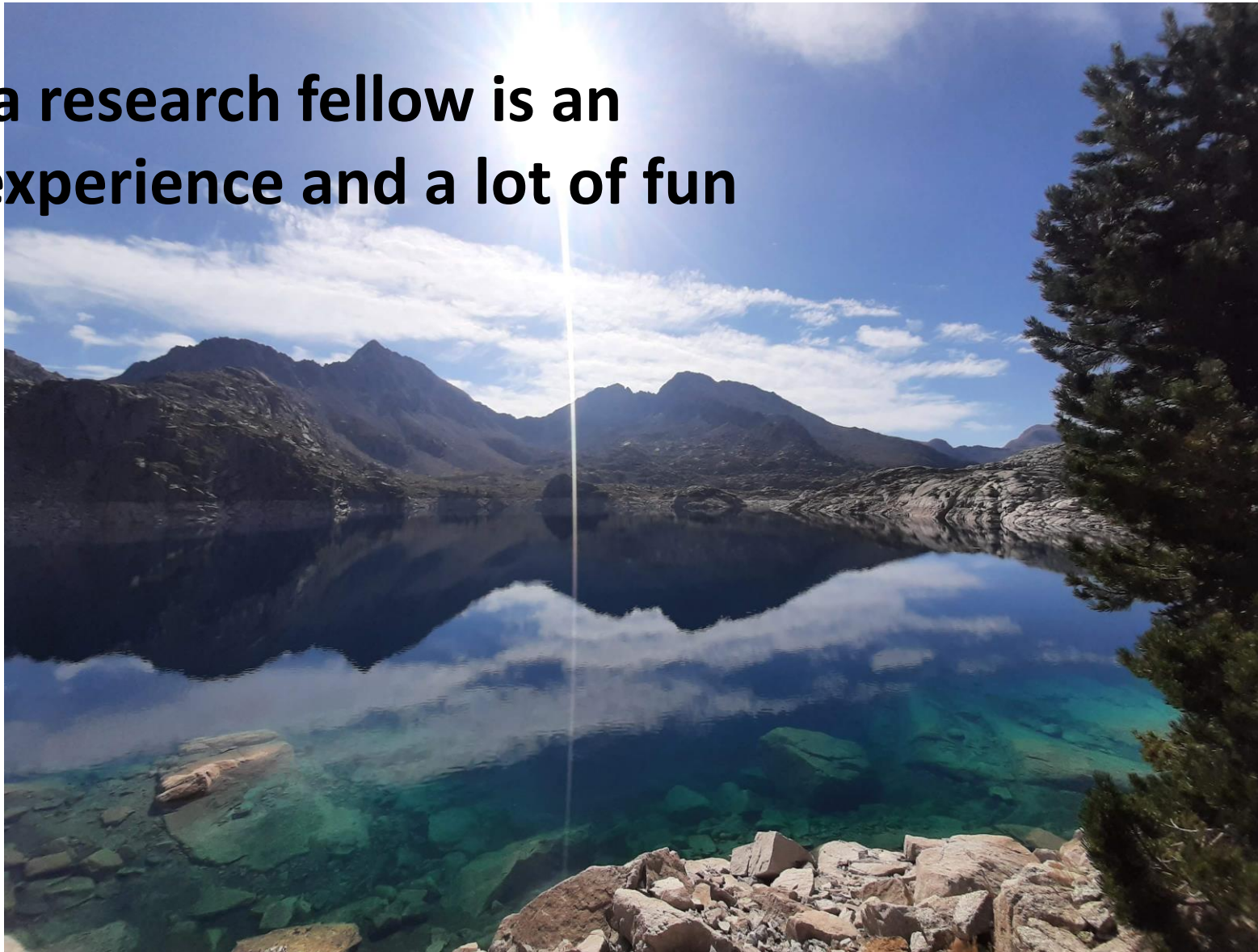  - Do sensor measurements in the lab
  - Read and write papers

- But needing to spend a significant amount of time
  - Supervising and mentoring postdocs, engineers + students
  - Funding applications
  - Dealing with paperwork (contracts, purchases, etc.)
  - Sorting things out (meetings, emails, etc.)

- Planning, developing relationships and making impact
  - Strategy to achieve my R&D goals
  - Developing relationships with collaborators + industry
  - Make things happen at a larger scale

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Being a research fellow is an
excellent experience and a lot of fun

Thank you for listening!