

The image is a movie poster for 'The Hobbit'. It features a large, snow-capped mountain in the background. In the foreground, there is a silhouette of a group of characters, including dwarves and Gandalf the White, standing on a hill. The title 'THE HOBBIT' is written in a large, serif font, and 'THE ACADEMIC' is written in a smaller, serif font to its right. A large red 'X' is drawn over the entire title. Below the title, the tagline 'THERE AND BACK AGAIN...' is written in a smaller, serif font.

# ~~THE HOBBIT~~ THE ACADEMIC

THERE AND BACK AGAIN...

Doing a postdoc abroad to secure your long-term future  
at home

Dr Micheál D. Scanlon (University of Limerick)

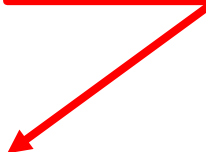
# My travels through academia so far:

2001-2005: **BSc. Chemistry**; University College Cork

2005-2009: **PhD**; Tyndall National Institute

2009-2011: **Postdoc**; University of Limerick

**Critical  
professional and  
personal decision**



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2011-2014: **Senior Postdoc**; Ecole Polytechnique Fédérale de Lausanne (EPFL)

2014-2016: **Starting Investigator**; University College Cork

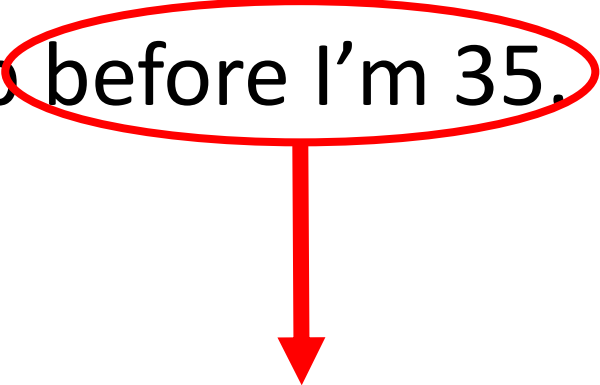
2017- : **Lecturer in Chemical Sciences\***; University of Limerick

**\*First “Contract of Indefinite Duration (CID)”**

# What is your long-term professional ambition?

## My ambition in 2009:

Secure an academic lecturing position at an Irish University and establish my own research group before I'm 35.



Personal deadline – might have wife, kids, mortgage by then; a somewhat secure job would be nice.



Postdoc = contract-based training position (not secure)

# The academic aging process: professional deadlines



# Why do a postdoc abroad?

## PROFESSIONAL MOTIVATION

- Enhance your academic reputation (quickly!);
  - International network development,
  - Develop highly specialized skills through training not available in Ireland,
  - Increase academic output (journal articles, reviews, conference oral and poster presentations, .....).

## PERSONAL MOTIVATION

- Personal development;
  - Learn a new language, experience a different culture,.....

## COLD HARD REALITY

- Facing imminent “academic” unemployment; no obvious positions available in Ireland.

# Will any postdoc abroad do?

**NO!!** Choice of foreign research group is **critical**.

## My ideal postdoc position:

- The most prestigious **active** group in the field (~20 publications per year);
  - Quality of the group leader
  - Network of the group leader: top-class researchers visit your lab
  - Strong group representation at international conferences (*networking*)
- A group with a healthy PhD: Postdoc ratio;
  - Supervising perhaps 3 but not 10 PhDs (*maintaining high standards*)
- Quality of the postdocs;
  - These will be **life-long international collaborators** (*networking*)
- Opportunity to write **proposals**;
  - Learning the soft skills to become *independent*.

# Decision time

**February 2011: two postdoc offers.....**

IRC postdoc in NUI Galway vs. postdoc in Switzerland

## **Switzerland Pro:**

- Internationally renowned Group Leader
- State-of-the-art facilities
- Large, extremely productive group
- Multidisciplinary group
- Healthy postdoc: PhD ratio
- High-standard of living in Switzerland



## **Switzerland Con:**

- Girlfriend - permanent job in Ireland



## Prof. Hubert Girault

- Author of 2 textbooks.
- Co-author of >500 scientific publications with more than 15'000 citations.
- Co-inventor of more than 15 patents.
- Supervised >60 PhD students.
- **25 alumni of his laboratory are now Professors.**
- Honours: Faraday medal 2006, Royal Society of Chemistry, Fellow of the International Society of Electrochemistry 2007, Reilley Award 2015.
- Associate editor of Chemical Science



# Lausanne and EPFL

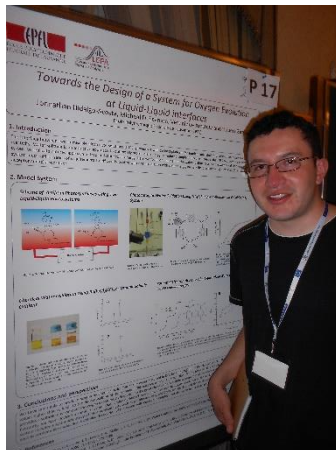




# Supervising group and visiting PhD students



Peiyu Ge  
(PhD student 2009 – 2013)



Jonnathan Hidalgo-Acosta  
(PhD student 2012 – 2016)



Evgeny Smirnov  
(PhD student 2013 – 2017)



Lucie Rivier  
(PhD student 2013 – 2017)



Collaboration with Fudan University, Shanghai



Xiaojun Bian  
(Visiting PhD student 2012)

Lei Liao  
(Visiting PhD student 2013)

# My fellow postdocs during 2011-2014



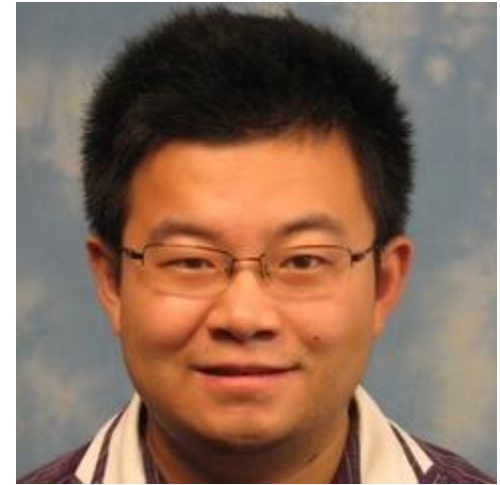
Dr Kathryn Toghill  
Lancaster University,  
UK



Dr Andreas Lesch  
Sensación,  
Switzerland



Dr Pekka Peljo  
EPFL,  
Switzerland



Prof. Liang Qiao  
Fudan University,  
China



Dr Manuel Méndez  
BASF,  
Germany



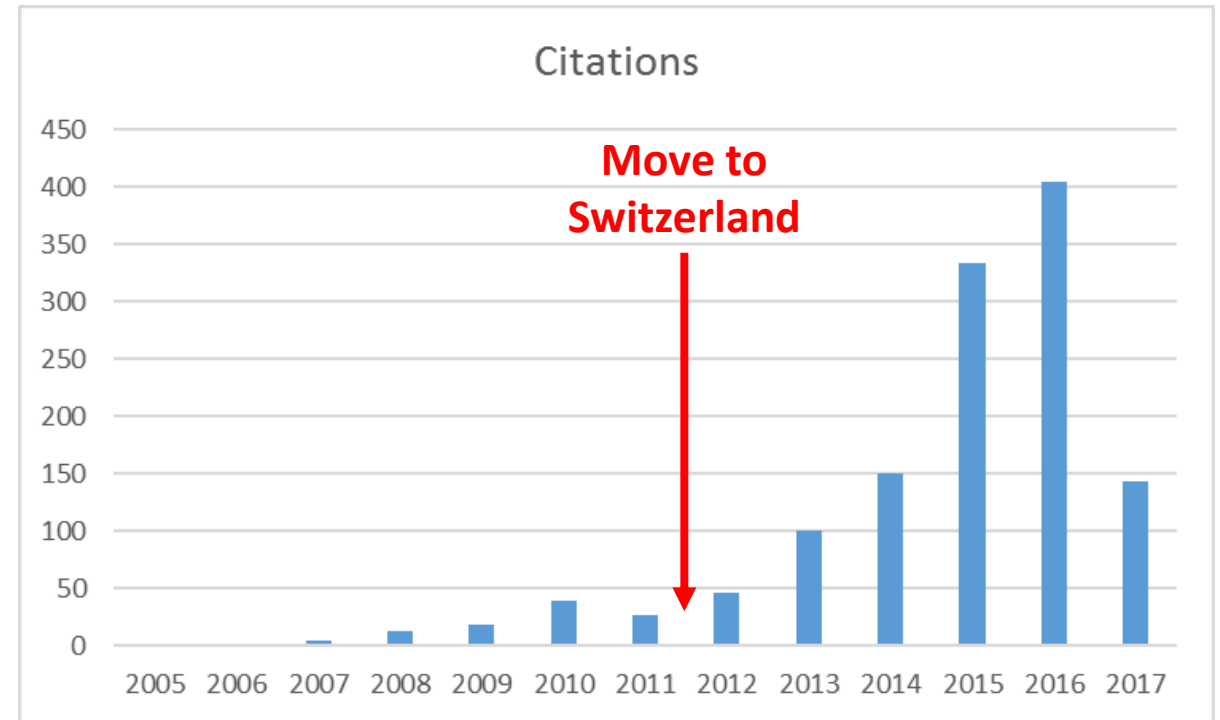
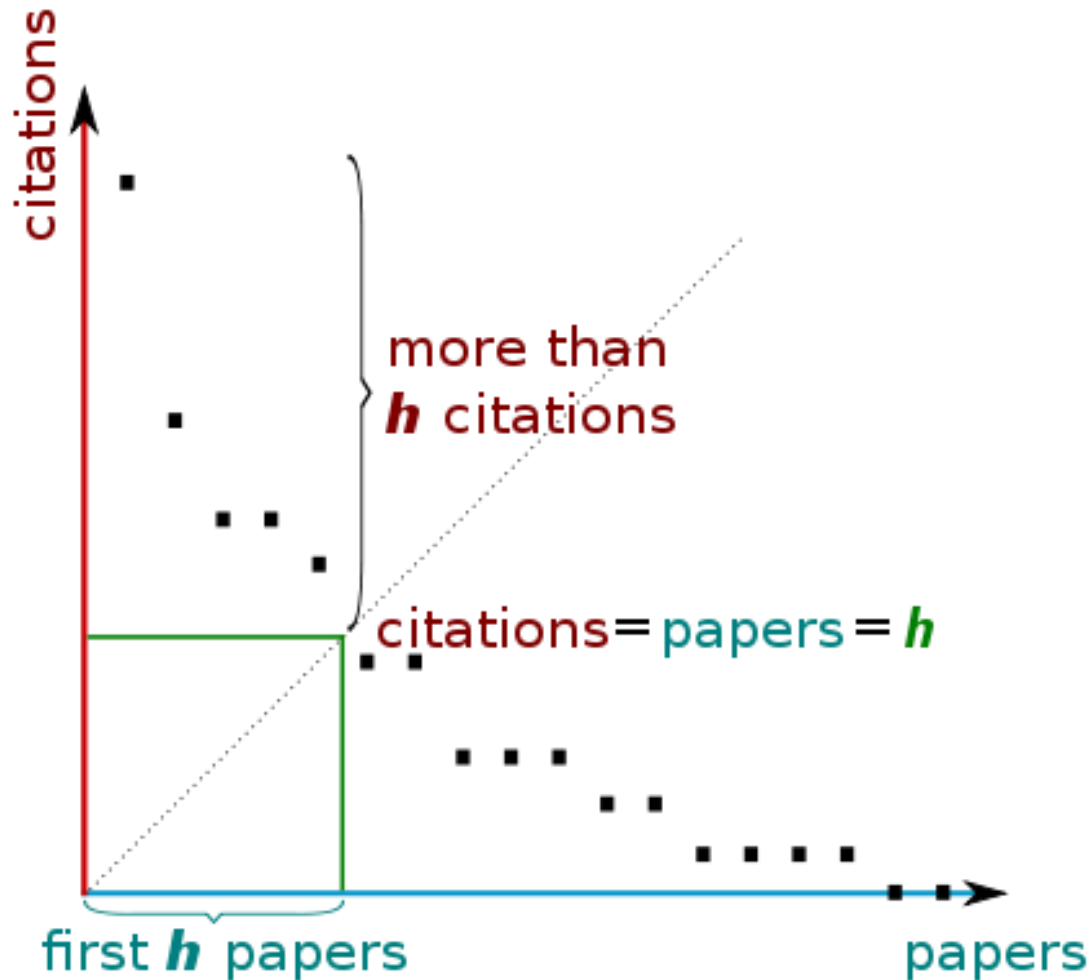
Dr Heron Vrabel  
EPFL,  
Switzerland



Dr T. Jane Stockmann  
Paris Diderot,  
France

# Measurable benefits of my postdoc abroad

- Improving my metrics: no. papers, citations and **H-index**.
- Half of papers published between 2014-2017!



Source: Scopus



# The Prodigal Son Returns

**Reviewers comment from SFI Starting Investigator Research Grant application:**

“While the project is surely relevant given its link to the energy problem, it is of a rather fundamental nature. Therefore economic benefits are rather far from now.

However, getting talented scientists like Scanlon back to Ireland is big added value for Ireland, as **people like him can likely go to many places within Europe**. [I am quite serious about this, and wouldn't normally make such a statement in a review].”



# The first independent grant opens many doors

**2014:** SFI Starting Investigator Research Grant

Travel grants (high % success rate)

Further professional development

- IRC Ulysses (**2015**)

- IRC New Foundations (**2014 & 2015**)

Significant scientific preliminary data

**2016:** European Research Council (ERC) Starting Grant

- Professional Skills for Research Leaders (PSRL; **2015**)
- Lecturing Chemistry Department (**2014-2016**)

**2017:** Lecturing position in Department of Chemical Sciences at University of Limerick

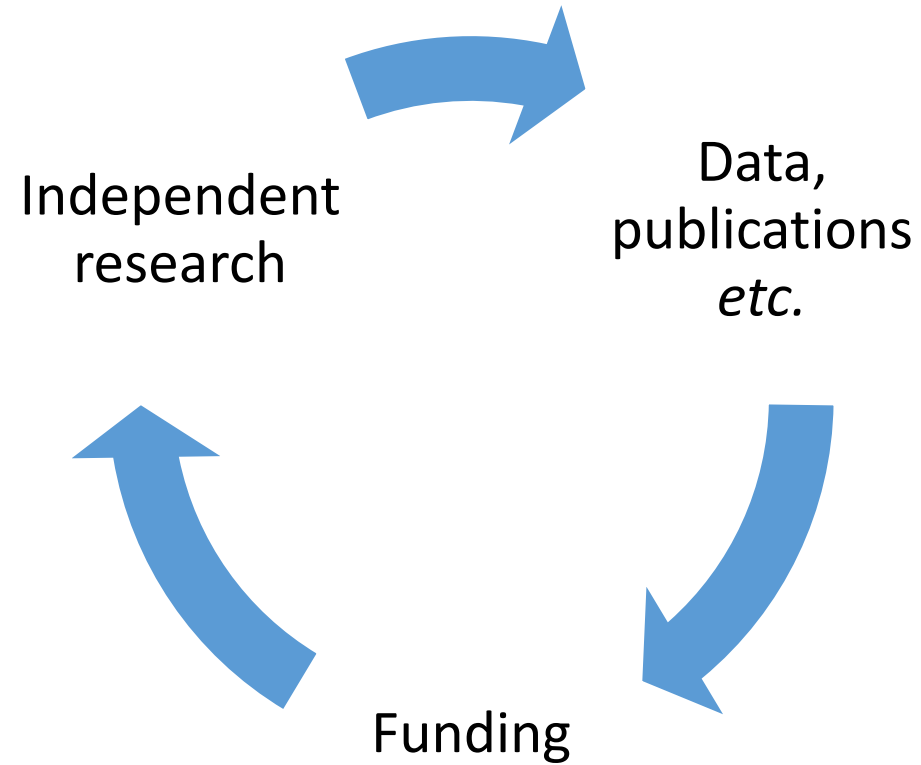
## The Snow-Ball Effect



# Escaping the shadow of your former advisors

- Is your work original?
- How have you demonstrated “independence”?

- Very difficult; catch-22 situation.



- The idea of “independence” to proposal reviewers seems massively variable.

# Escaping the shadow of your former advisors

## ERC reviewer telling me I'm still not showing independence:

- In many publications, the applicant is neither first nor last author, clearly **limiting the evidence for his original, creative thinking**. Publications in high-impact journals (JACS, Angew. Chem. Int. Ed., Nature journals, Science, PNAS, *etc.*) are not numerous yet.
- I think the work is interesting and worthwhile to pursue. However, the work is not so different, to my knowledge, with the directions already being pursued by the group of Girault. **It would have been nice to indeed see a new "big idea"** or high-risk aspect for at least part of this project and this, for me, was missing.

## ERC reviewer declaring my independence:

- The PI is an independent researcher and has published more than 30 scientific contributions in very good journals, including Angew. Chem, Adv. Funct. Mat., *etc.* His **track-record clearly shows his ability to lead independently** a research group and perform ground-breaking research based on independent thinking.



# How do I find a postdoc abroad?



<https://euraxess.ec.europa.eu/>

Cold call.....carefully!!!!