## <u>Timeline</u>

November 2015:	Ullal et al, paper published in The Journal of Cell Biology	
31 <sup>st</sup> October 2016: November 2016:	Departure of Pranav Ullal (postdoc) from the lab, leaving follow-up story not quite completed Repeat experiments – inability to reproduce results – many email exchanges – meeting with Pranav – admission of fabrication for 2 <sup>nd</sup> paper => project trashed	
Nov-Dec 2016: 14 <sup>th</sup> December:	Investigations into possible problems with published paper – inability to reproduce results – primary data missing confront Pranav – unclear answers, leaving many questions unanswered	
<ul> <li>19<sup>th</sup> December: confront Pranav again =&gt; admission of data fabrication in published paper</li> <li>Phone collaborator (in US)</li> <li>Write to all co-authors</li> </ul>		
<ul> <li>Write to JCB editors to expose problem =&gt; set up retraction of paper</li> </ul>		
22 <sup>nd</sup> December:	write to Dean and Integrity Officer => Commission d'enquête from UNIL	
10 <sup>th</sup> January 2017: 30 <sup>th</sup> January : 2 <sup>nd</sup> February : 13 <sup>th</sup> February : 16 <sup>th</sup> February :	departure of Pranav from Switzerland culpability verdict by UNIL Direction for Pranav (letter) write to funding agencies (ERC + SNF) => Commission d'enquête SNF write to colleagues (local and international) to inform on upcoming retraction retraction of the paper	
February 2020:	paper re-investigating the biological question of retracted paper accepted in Molecular Biology of the Cell	

## Consequences of the event

- Extremely stressful
- Decisive and transparent communication has been critical in actions after discovery of the fraud. I received lots of support.
   ⇒ Reputation of scientists is very important
- Fraud pertaining to Pranav's PhD work at Imperial College London subsequently discovered, leading to retraction of his earlier publication
- Triggered thoughts and reorganization at level of my group and department
  - Uniformization and better tracking of primary data within the lab, allowing easy access
  - Statement on scientific integrity to be discussed with, and signed by, all (new) members of the DMF



## Statement on scientific integrity

Scientific integrity is central to the advancement of Science. It requires all researchers to follow fundamental rules of good scientific practice, including a concern for truth, care, transparency and self-criticism. These behaviors are prerequisites for the credibility of all scientific results.

The Department of Fundamental Microbiology (DMF) at the University of Lausanne is committed to these values and expects all its researchers, be they group leaders, postdocs, students, technicians or others, to abide to national, European and international standards of research integrity. These include:

- Honesty in all aspects of a research project, such as:
  - o Presentation of research goals,
  - o Presentation and reporting of research findings and methods,
  - Data gathering and analysis,
  - Acknowledging the work of others;
- Scrupulous care, thoroughness and excellence:
  - In performing research and using appropriate methods,
  - In keeping a clear and complete record of the work performed;
- Transparency and open communication in declaring conflicts of interest and reporting research data and analysis.

By signing this document:

- I understand that, as a researcher at DMF, it is my responsibility to conduct research with total integrity, to respect the policies at the University of Lausanne (Directive de la Direction 4.2), and to uphold the good reputation of the institution.
- I acknowledge that I have received and will read the document "Integrity in scientific research principles and procedure" published by the Swiss Academies of Arts and Sciences and followed by UNIL, and have discussed this topic with my PI.

	DMF researcher	Principal Investigator
Name:		
Date:		
Signature:		

## Could it have been avoided?

- Systematic examination of all primary data by several researchers could potentially prevent it, but serious issue of time and resources
  - $\Rightarrow$  Trust is absolutely essential
- Pranav was socially very well integrated in the group. However, **retrospectively**, several testimonies of lab members noting that data always materialized before group meeting
  - ⇒ Inappropriate behaviour may start as a small deviation from the ethical behaviour; being aware may allow to detect issues early on
  - ⇒ how to approach the issue, and with whom to discuss, in case of suspicions are delicate matters (The book Raw Data by Pernille Rørth makes an interesting read.)
- Collaborative work may guard against fabrication
   ⇒ This was not sufficient in this case