



The era of the inevitable marriage: the radiologists & biomedical scientists

Tips & tricks to make it smooth

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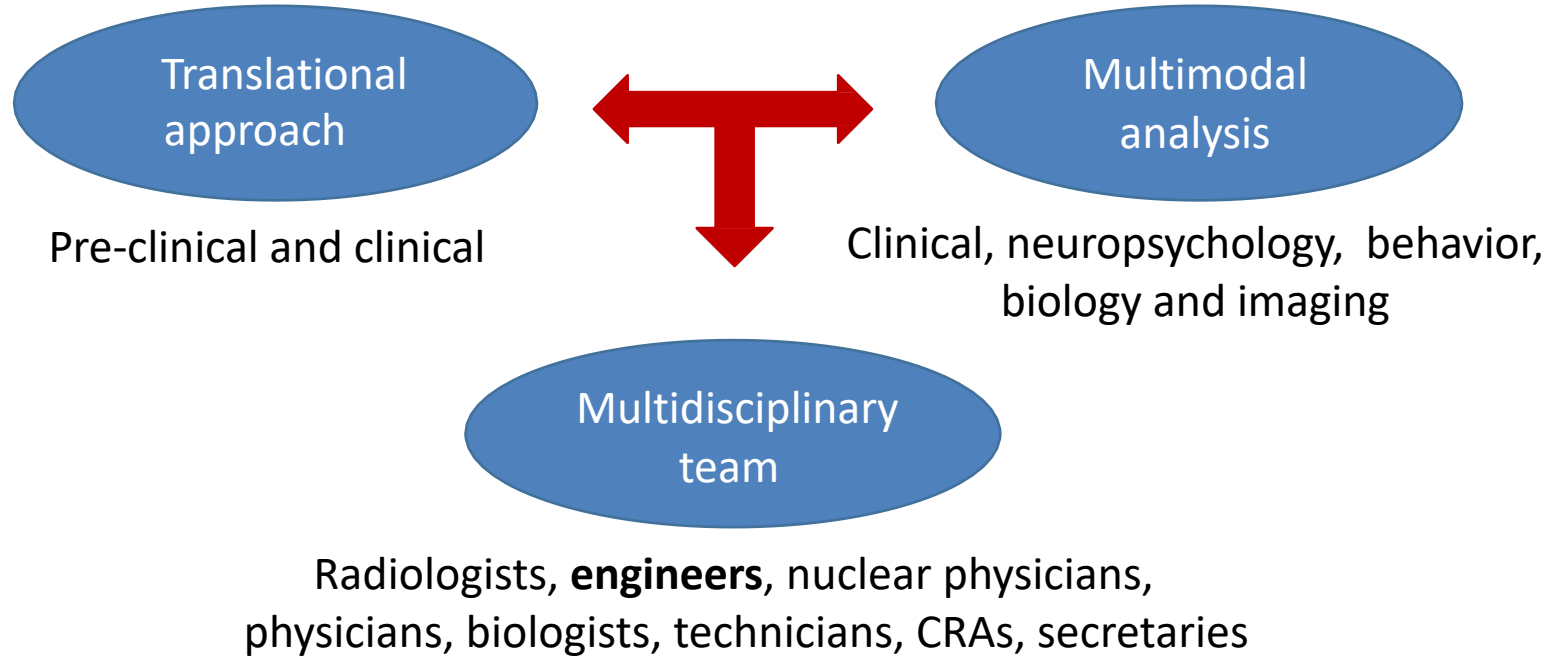
Tips and tricks to make it smooth

1. Engineers are a part of the multidisciplinary team
2. How to respect the place of engineers
3. We need engineers specialized in mathematics and physics



Engineers are a part of the multidisciplinary team

Research platform in biology and health



To support research and innovation around the understanding of life and its dysfunctions

How to respect the place of engineers

They are not only:

They are not only technicians hired to perform tasks in:

- image processing,
- statistics,
- artificial intelligence!

They are also:

- Researcher engineers in mathematics & physics,
- At the heart of research projects,
- From their conception to their publication

How to respect the place of engineers :

Tips and tricks to make it smooth

- Trust them
- Have a common research axis
- Shared supervision of research work
- Adapted environment
- Create bonds
- Mixed operational group
- Joint publication of the work
- Combine networks

Tips and tricks to make it smooth:

Trust them

Trust engineers and give them time off to develop their own research!

“Everything that increases freedom increases responsibility.”

Victor Hugo



Neurodiversity

We All Think Differently

Tips and tricks to make it smooth:

Have a common research axis

Choose a multidisciplinary research area that involves clinicians, radiologists **and** engineers:

"prognostic markers of cognitive disorders in neurodegenerative pathology and mental health"

Tips and tricks to make it smooth:

Shared supervision of research work

Encourage the supervision of Master's and University theses by a mixed team of engineers/radiologists/clinicians

Tips and tricks to make it smooth:

Adapted environment

Set up an environment adapted to their research (data processing and AI labs) composed of engineers and radiologists with the same vision within the university

We must add the creation of a real data processing lab which resembles a kingdom of engineers where all the researchers meet.

Tips and tricks to make it smooth:

Create bonds

Create links between radiologists, engineers and clinicians in order to optimise the work:

- understanding the objectives of the work,
- choosing the appropriate data processing,
- creation of suitable clinical cohorts.

Tips and tricks to make it smooth:

Mixed operational group

Set up a joint engineer and radiologist operational group with meetings to discuss the work in progress and in particular the methodology to be put in place according to the work objectives.

Tips and tricks to make it smooth:

Joint publication of the work

Published work involving complex data processing that will be of immediate clinical benefit to the patient.

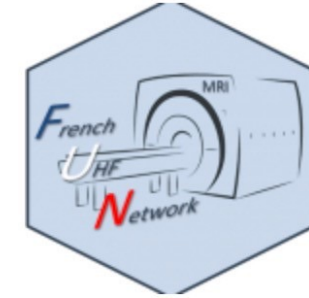
Publish in journals and travel to conferences suitable for both radiologists and engineers.

“To go to the trouble for the small things is to arrive at the big ones with time.”

Samuel Beckett

Tips and tricks to make it smooth:

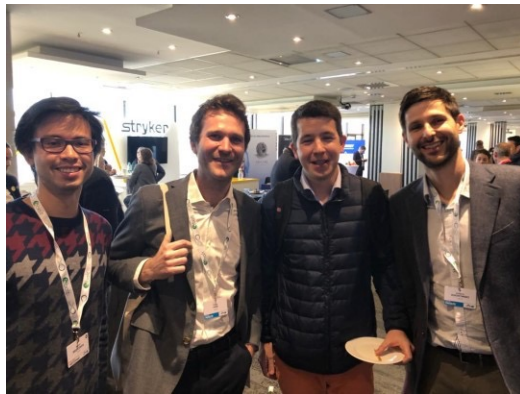
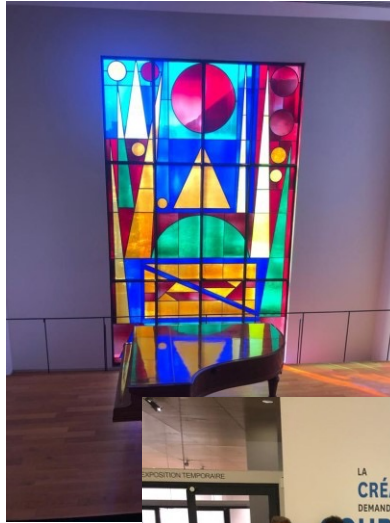
Combine networks



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