

# Simulation healthcare : Support the teamworking in crisis situations used interprofessional Simulation

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# Funding

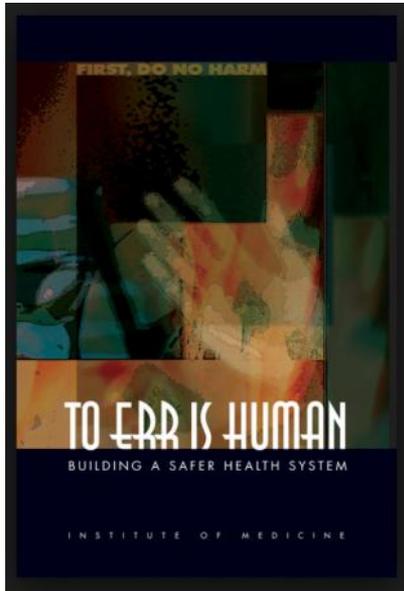


# Test

Are you ready!



# Medical Errors



**100 000 Deaths/Year**

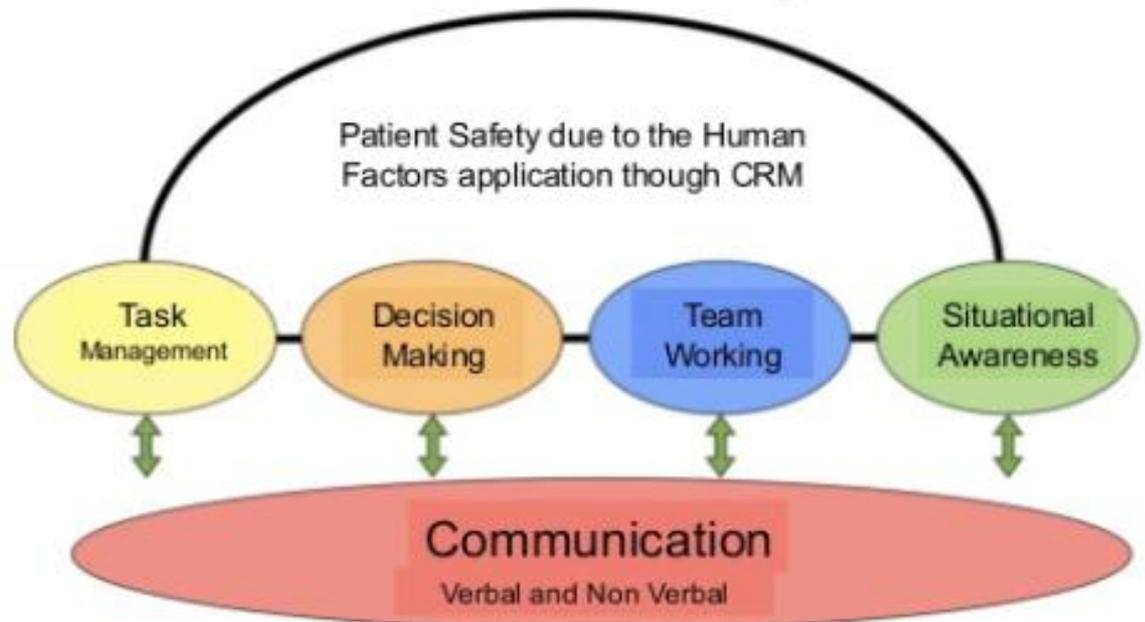
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**165 crashes A380 /year**

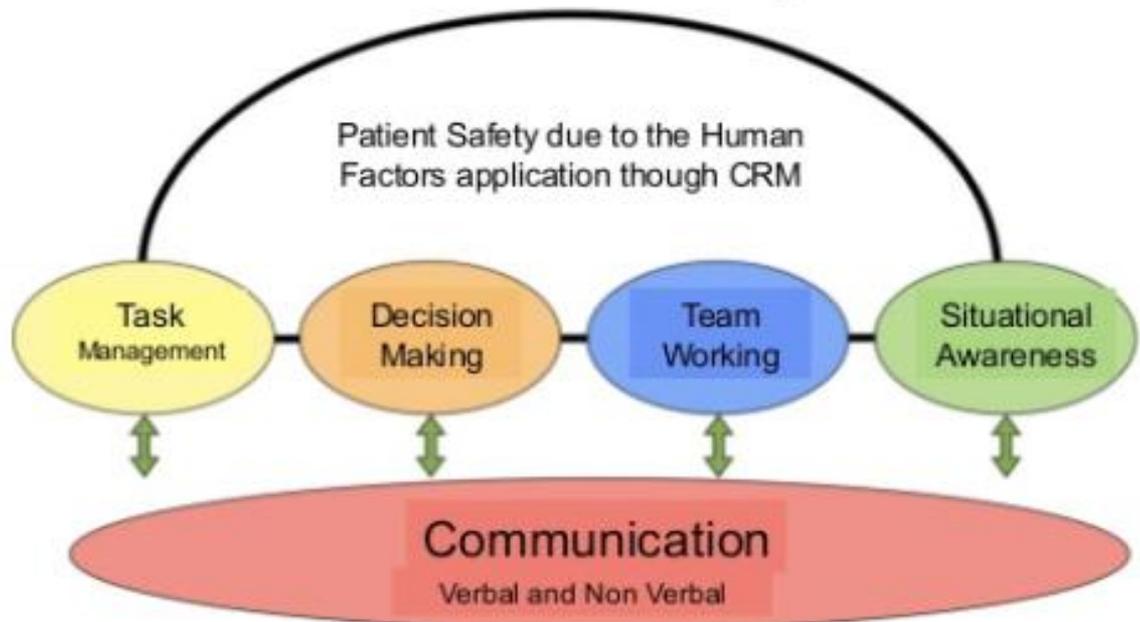


## Crisis Resource Management





## Crisis Resource Management

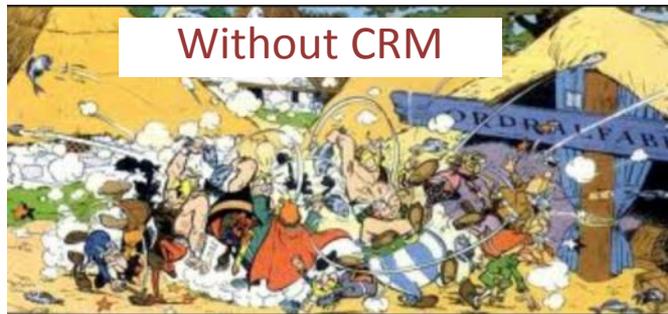


# CRM and Interprofessional simulated learning

Without CRM

Without CRM  
SIMULATION

With CRM



[René Goscinny](#) [Albert Uderzo](#)



# Simulation in the Hight Security System



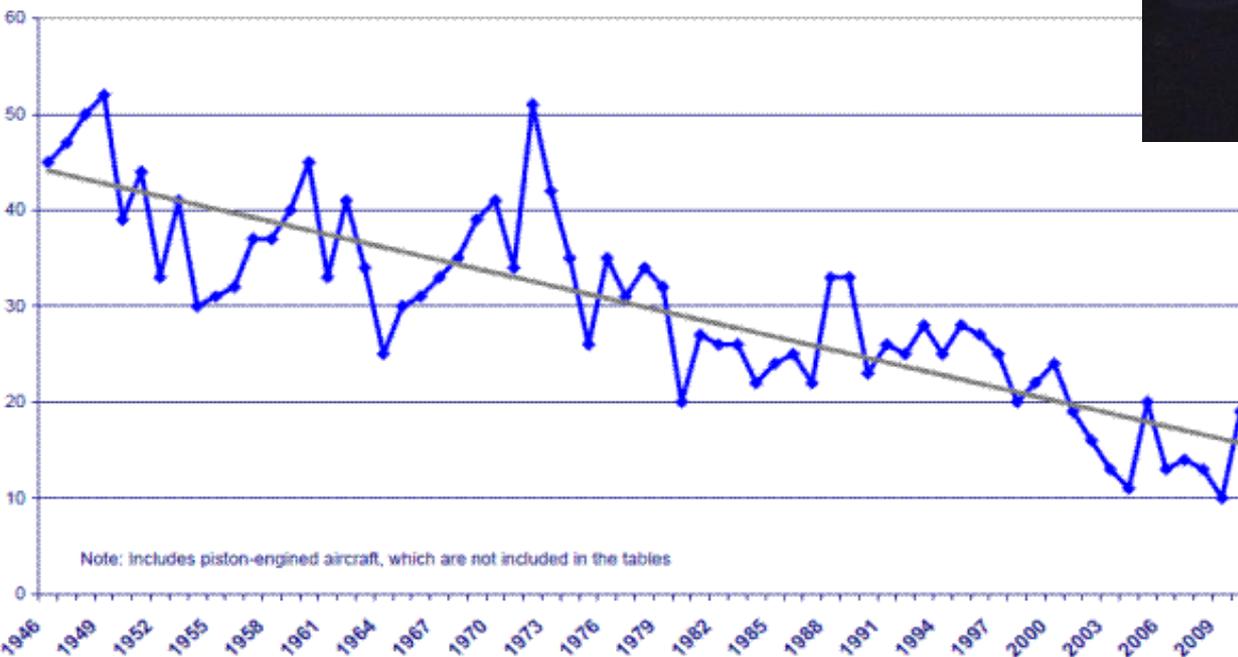
Aeroplan Simulator

Nuclear Central simulator



# Effect Safety Culture with Simulation training

Fatal Accidents to Passengers on Revenue Passenger Flights  
(Aircraft of 15 passenger seats or more. Excludes acts of violence.)



Source:

[http://www.economist.com/blogs/gulliver/2011/01/air\\_accidents](http://www.economist.com/blogs/gulliver/2011/01/air_accidents)

aviation Safety Network

# Simulation Based medical education



# Simulation Learning

## Advantages

- Fair
- learn from errors
- Ethic
- safety patient
- Learning to management the rarely events

## Disavantages

- Simulation is not always able to completely recreate real-life situations.
- very expensive:
  - Cost Mannekin, updates and maintenance
  - is carried out little group
  - Staff need to be trained
- Not every situation can be included.



PREBRIEFING



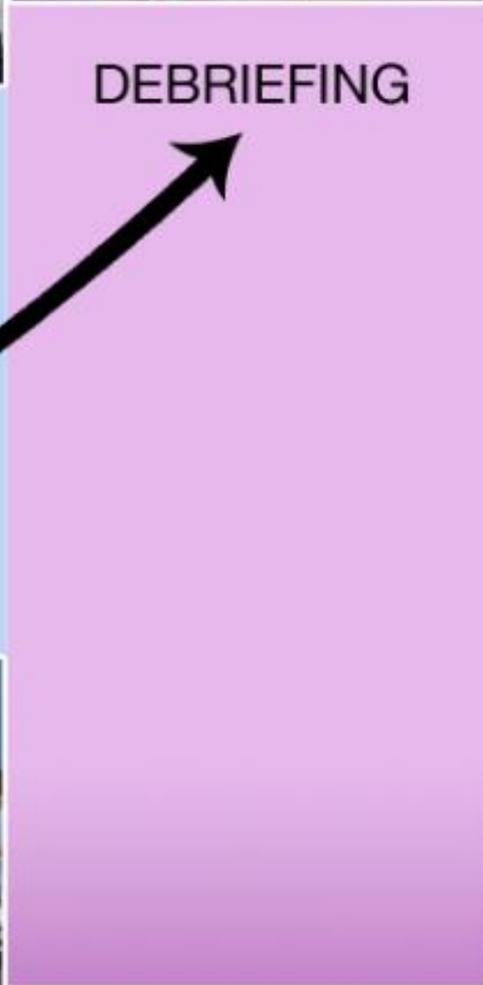
BRIEFING



SCENARIO



DEBRIEFING



# Sociocognitive conflict Theory

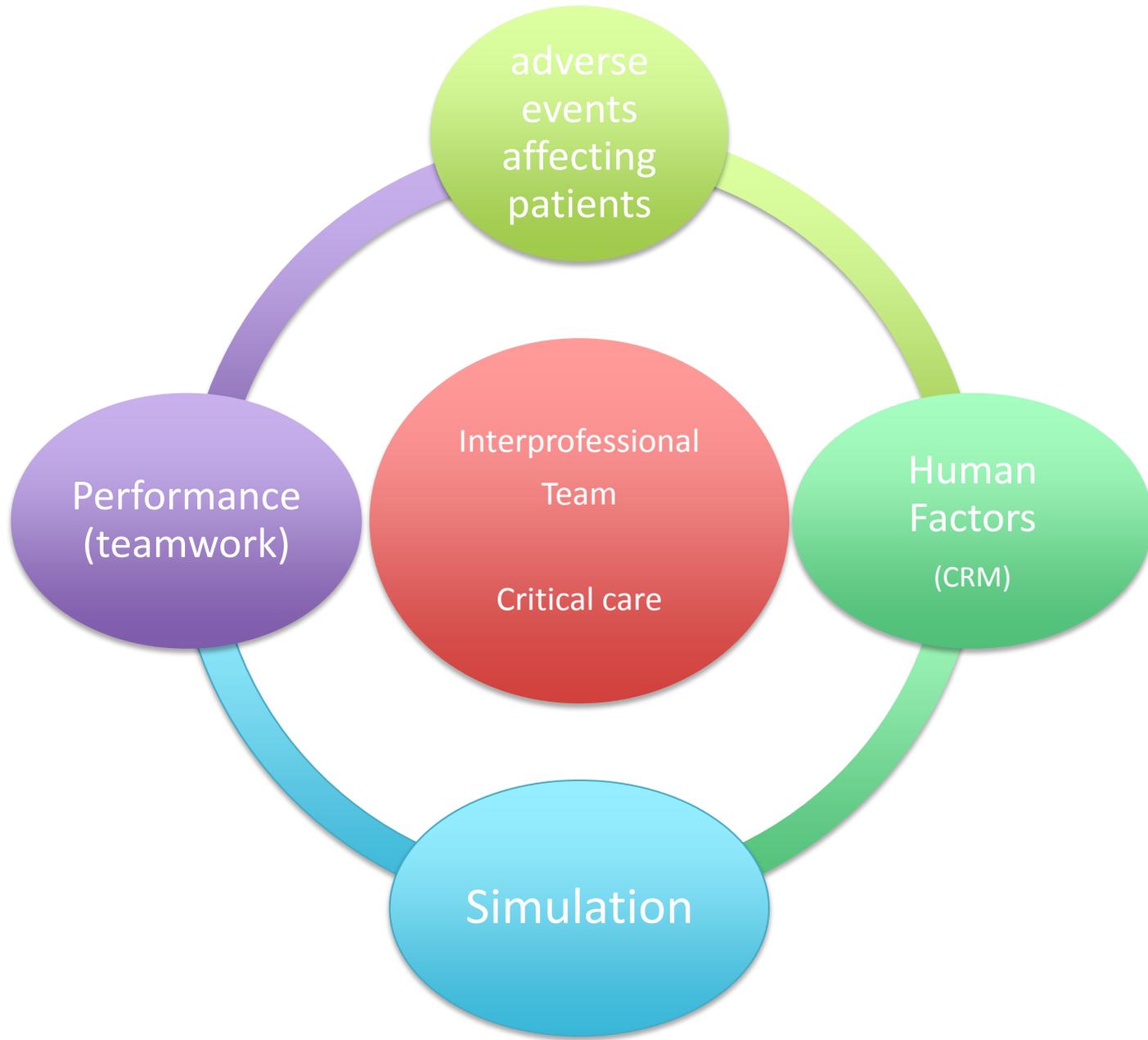
(Doise & Mugny, 1984)

- Cognitive conflict created by social interaction drives intellectual development
- Contradiction between the learner's existing understanding and current experience leads to disequilibrium
- Disequilibrium « force the subject to go beyond his current state and strike out in new directions » (Piaget )
- Among peers, there is mutual control over the interaction, therefore...
- Social interaction between equals is more likely to lead to cognitive development

# Inter Professional Debriefing



# Du Contexte à la problématique





**Problem :** The simulation literature continues to overlook the importance of sociological factors such as hierarchy, power relations, interprofessional conflict and professional identity, which are now well-known to affect teams interprofessionals learning and performance.

**Hypothesis:** The integration of an individual interview with an instructor before the debriefing would allow each participant with different background and professional identities to facilitating their reflection, self-assessment to the situation while maintaining emotional and psychological safety for better learning.

# Objective

Show that the teams healthcare learn of crisis resource management is better after an interprofessional simulation using a combined debriefing (individual interview and group debriefing) compared to a simulation using a usual debriefing.

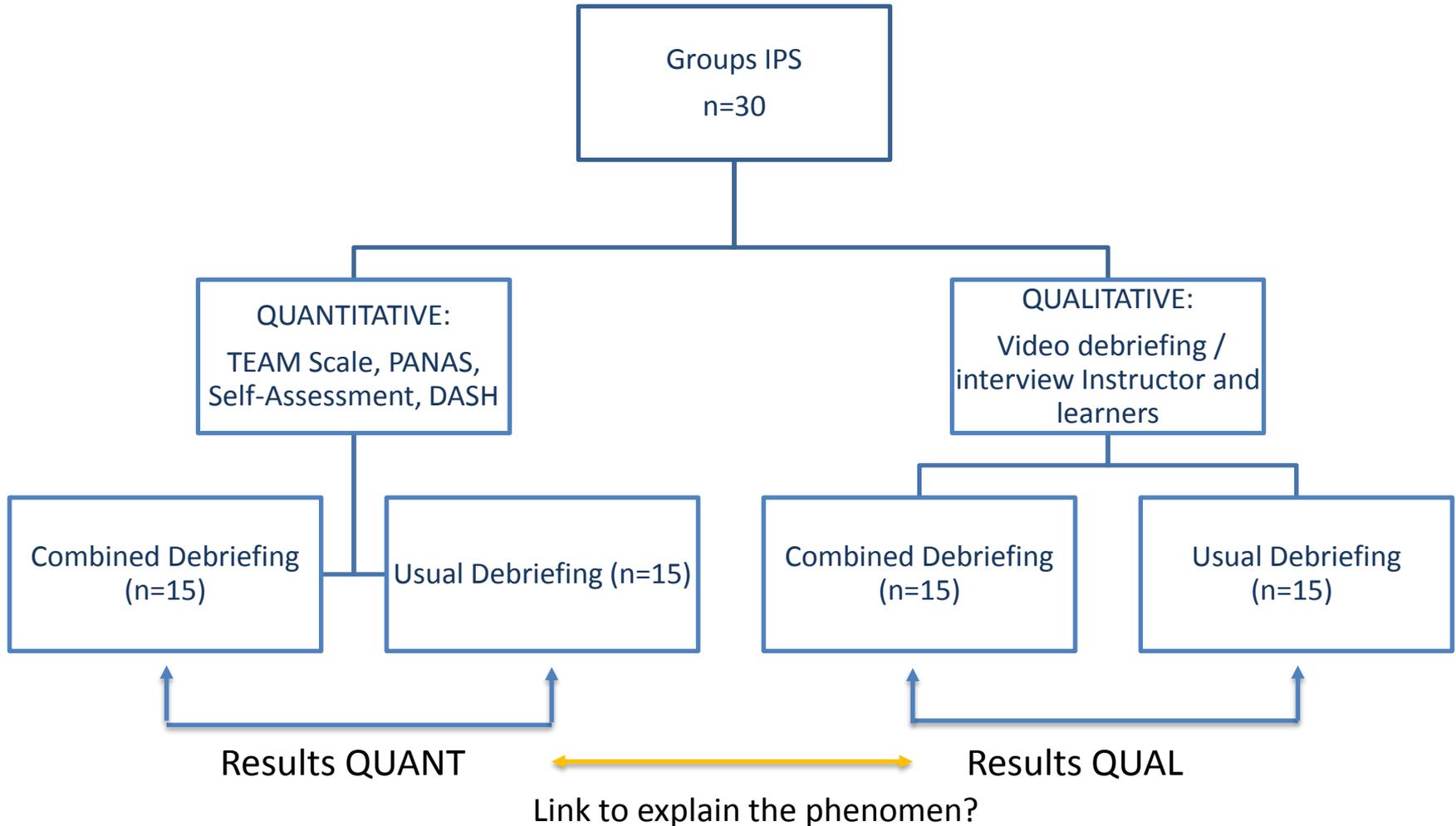
# Ethics Committee

- Approval to conduct this study was obtained from the Research Ethics Committee of University Jean Jaures.
- Informed consent was obtained prior to the start of the simulation. Participation was voluntary, and there was no penalty for not participating

# Méthods

- Randomised
- Compared. (Combined Debriefing VS Usual Debriefing)
- Multicentre (Toulouse, Limoges, Orange, Nimes)
- A Mixte Research or Hybrid Research: Quantitative et  
Qualitative Methods

# Hybrid Research



# The Schedule

- 4 years
  - 2015 -2016: Design Project, Ethic comittee and funding
  - 2016-2017: Open the centres and collect the data
  - 2017 – 2018: Analysed the data (> 9000; > 45 hours video recording)
  - 2018-2019: Publish the results in academic journals
    - 2 articles in international journal
    - 2 articles in french journal

# ITSIMS – uOSSC

## Future Research Program

- Collaboration with Anesthesia Team: « Effect stress factors on performance anesthesists residents in crisis situation at operating room» (Analysed Data)
- Collaboration with Emergency Team : Learning Curve on simulator for « Crisis Resource Management » competencies of canadians and frenches Emergency Residents ( Ethics Committee on July and start on September 2018)

# Future Publications

- « Simulation interprofessional in critical care: review literature ». *In Revue medecine intensive (french society critical care)*
- « Effect stress on team's perforance in critical care. » *Effect du stress sur la performance et l'apprentissage dans le domaine de la santé*
- « Simulation in curriculum emergency residents », *Annale de médecine d'urgence, Societé française de médecine d'urgence.*

# Medical Education

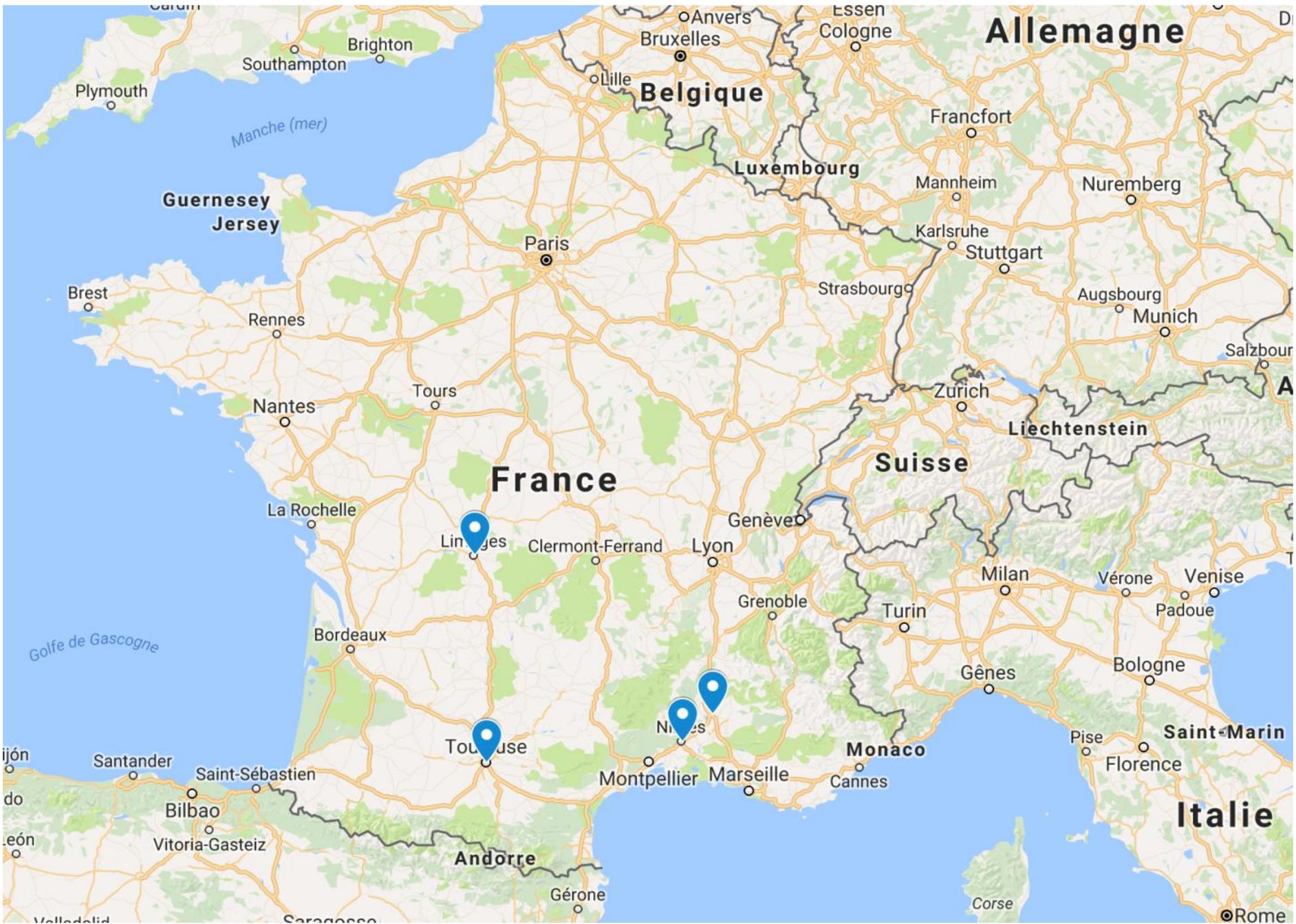
- DIME fellowship in Medical Education Research and Simulation
- Instructor course in simulation healthcare
- Collaboration between the learning course for instructor in France



Merci

Adoptez un parc  
H.O.P.E. Helping Other People Everywhere - Ottawa

SATURDAY APRIL 7, 2018  
As for the most interesting photo right at the moment



Allemagne

Belgique

Luxembourg

France

Suisse

Liechtenstein

Italie

Guernesey  
Jersey

Monaco

Andorre

Saint-Marin

Manche (mer)

Golfe de Gascogne

Corse

Paris

Lyon

Marseille

Francfort

Mannheim

Karlsruhe

Stuttgart

Strasbourg

Zurich

Nuremberg

Augsbourg

Munich

Salzbour

Genève

Grenoble

Turin

Milan

Vérone

Venise

Padoue

Gènes

Bologne

Pise

Florence

Rome

Plymouth

Southampton

Brighton

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