



*Bruno Virieux*  
*Deputy CEO & Biomed CBO*



2<sup>nd</sup> economical partners day  
Domaine Saint-Joseph, Sainte-Foy-lès-Lyon  
13 septembre 2017



# EXECUTIVE SUMMARY

## FEALINX :

Creation: 1999

People: 75

Total revenue: 11M€

R&D: 1M€ per year

## SWOMED Definition:

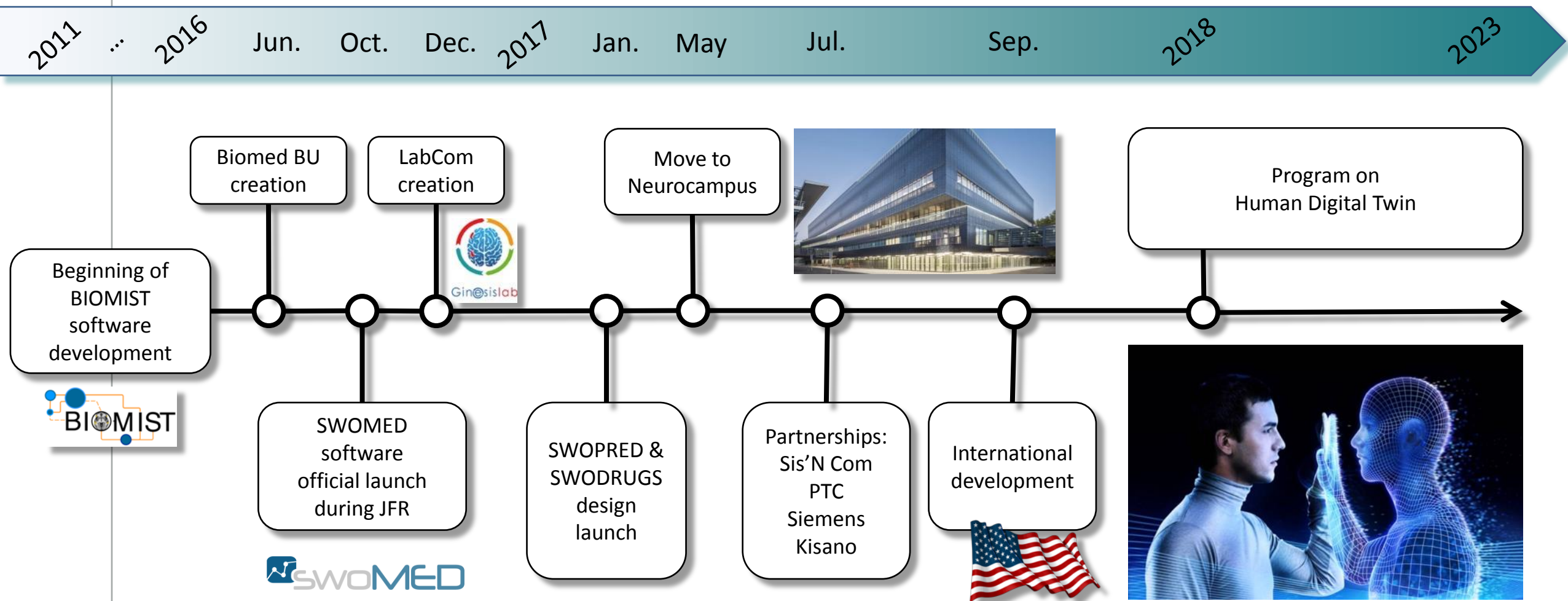
An IT **framework** which helps organizations (such as academic lab & big pharma) to **find, develop and commercialize** the new generation of **biomarkers & drugs**, to ultimately switch from curative medicine to **predictive care**.

## SWOMED Mantra:

*The ultimate IT Solution for “In Silico” Medicine*



# FEALINX BIOMEDICAL – KEY FACTS



JFR = RSNA - Biggest Radiology Event in France | Neurocampus = Biggest research center dedicated to Neurosciences in Europe

# ON THE ROAD TO IN SILICO MEDICINE



Human Digital Twin



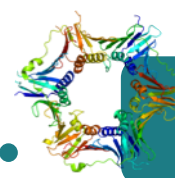
New Generation of Drugs



Predictive Diagnostic



Predictive Algorithms



Biomarkers 2.0



Biomedical research platform

# SWOMED CONCEPT



1

## ORGANISE DATA

- ✓ Multi-centric study (several countries)
- ✓ Heterogeneous contents (image, spectrum...)
- ✓ Sources aggregation (DICOM, HL7...)

2

## TRACE INFORMATION

- ✓ Security & Confidentiality
- ✓ Process automatization
- ✓ Massive (big) data processing

3

## IMPROVE KNOWLEDGE WORTH

- ✓ Biomarkers & Predictive models creation
- ✓ Diagnostic & « In Silico » test
- ✓ Data reuse & Meta-analysis



# FLOW

Biomedical Study  
-  
Acquisition Campaign



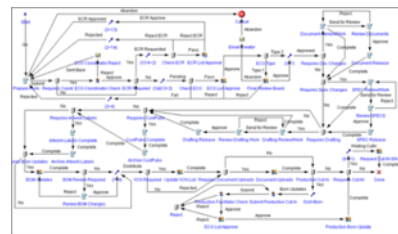
Research- SWORES

Cohort

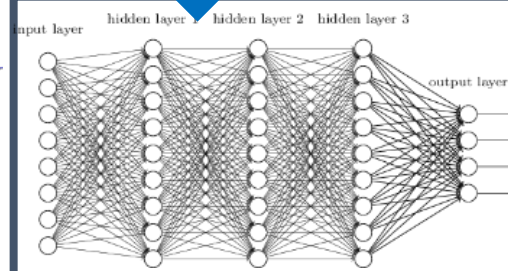
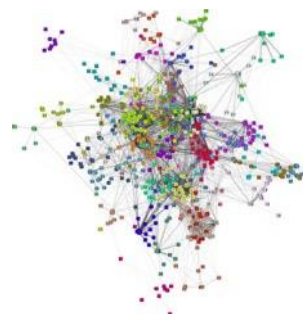


Auto Process:

- Quality check
- Validation
- Pre&Post processing

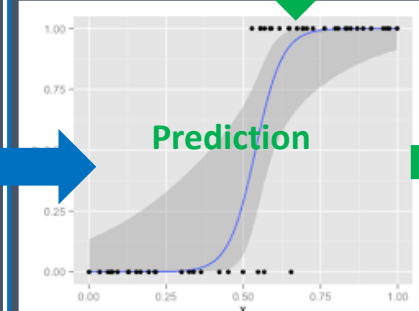


Biomarkers 2.0



Machine Learning

Prediction



Report



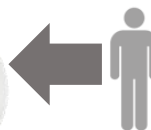
4P Medicine

Care - SWOPRED

Data anonymization & dynamic cohort update



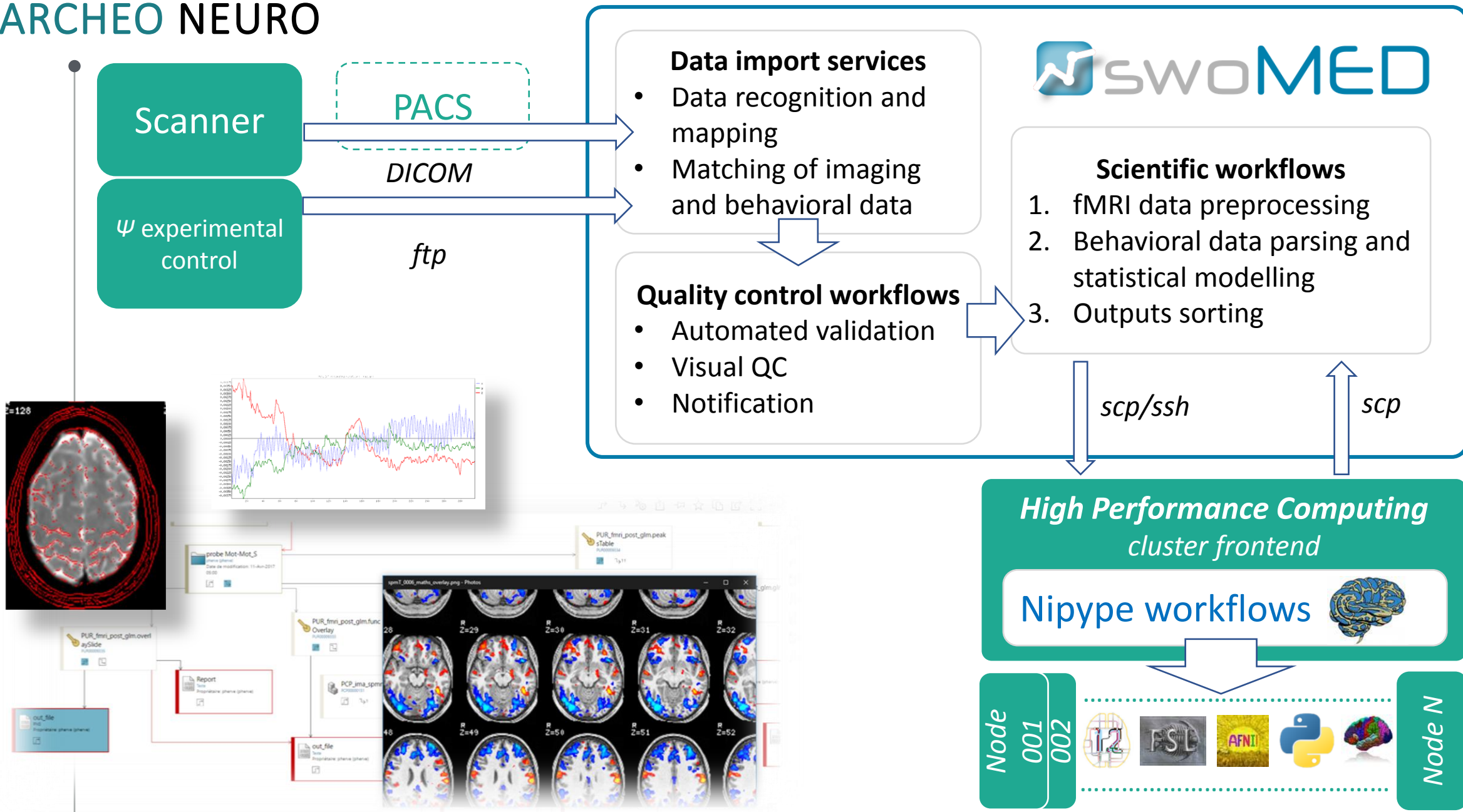
Patient Exam



Drugs - SWODRUGS



# ARCHEO NEURO





# Q&A



Bruno Virieux  
Deputy CEO & Biomed CBO



# SCIENTIFIC CREDITS



## Professor Bernard Mazoyer

Professor of radiology and medical imaging  
 Director GIN, UMR5296, CNRS, CEA, Bordeaux University  
 M.D., Head of Functional Neuroimaging, Diagnostic and Interventional Neuroradiology Unit  
 Hospital, Bordeaux  
 Honorary member of the Institut Universitaire de France (Cognitive neuroimaging chair)



## Marc Joliot

Senior Researcher in multimodal biomedical imaging at the French Atomic Energy Commission  
 Institut Curie – Board of directors' member



## Professor Bertrand Tavitian

Professor of radiology and medical imaging  
 PARCC – Inserm U970  
 Hopital Européen Georges Pompidou

