



FHU
DDS-PARISNET

University-Hospital Federations 2020-24

Joint AAP 2019 of AP-HP, INSERM and Paris Region Universities

What do they expect from FHU?

Create a strong synergy between the hospital, universities and research organizations to :

- Improve medical research
- Improving the quality of care
- Contributing to the rapid spread of innovation
- Give a better international visibility

September: Selection by COPIL of the auditioned candidates (29/ 47 projects submitted)

December : International Jury chaired by Prof. Kim Fox of Imperial College: 21 projects selected by the leaders of the 3 partners.

January 2020: Creation of FHU labeled for 5 years (COVID delays)

..... little tour of the 21 FHU's themes

Targeted Diseases

Pathophysiological mechanisms

Endeavour to **PerSonalize Interventions** for **Sepsis**
Improve **clinical care, treatment and research** in **neurovascular disorders** **Reducing mortality and severe morbidity** in the **first 3 years of life**
Prosthetic joint infections: **innovative strategies**
Understanding **SENEsCence** to improve life course health trajectory
Innovations in **Hepatology**
Improving **Emergency Care**
Early Identification of Individual Trajectories in **NeuroDevelopmentalDisorders**
InnovaTive theRapy for **immUne disordErs**
Predict & Prevent **Heart Failure** in **Young Subjects**
Excellence network for **therapeutics** in **neuromuscular disorders**
Addiction And Psychiatry Transformation with **Precision Medicine**
Personalized medicine in **chronic cardiovascular, respiratory, renal diseases and organ transplantation**
Cancer and Autoimmune/inflammatory diseases Relationship
PRecision Medicine for a cOMprehenslve CarE of **Critically ill patients**
Multiscale Optimized Strategy for **Artificial Intelligence-based Imaging Biomarkers** in Digestive Cancer Applications in **hepatocellular carcinomas and neuro-endocrine tumors**
Paris Center for **Microbiome** Medicine
Fighting Prematurity
Musculo-Skeletal diseases and **Therapeutic Innovations**
Network of Research in **Substance Use Disorders**

Personalized and innovative medicine

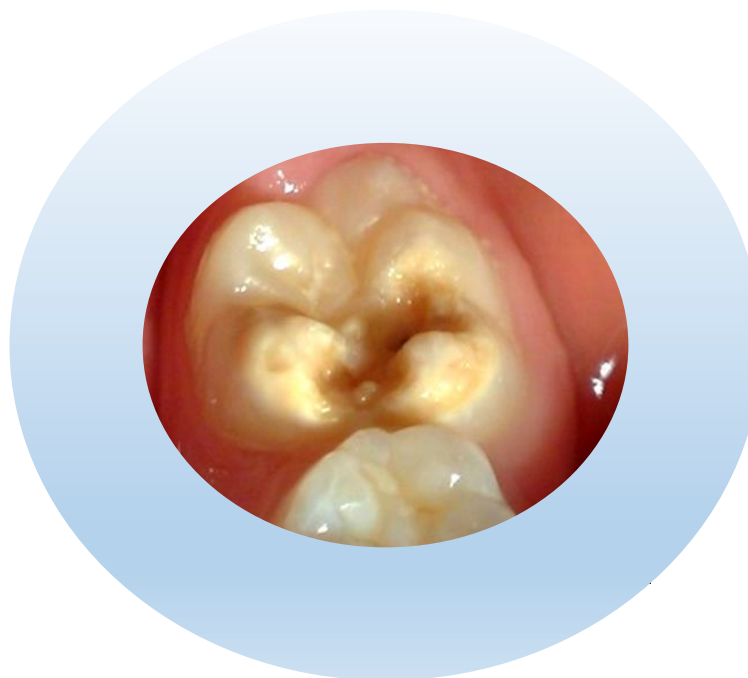
How did we "sell" our common *dental cause*?

University-Hospital Federation AP-HP, Paris University , INSERM
DDS-ParisNet: Dental Diseases Network in Paris



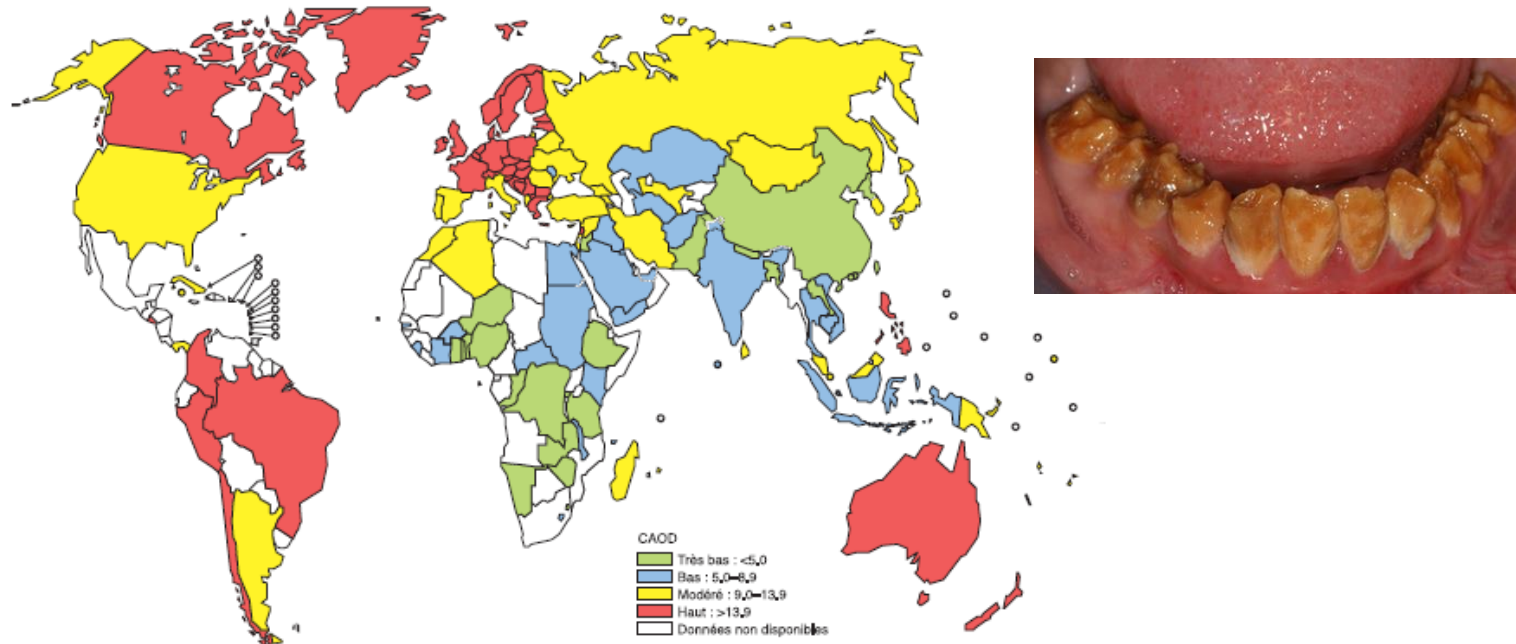
Ariane Berdal

Catherine Chaussain



Pleading 1 : an underestimated socio-medical-economic dimension

DDS (Dental Diseases): *Part of the Global Burst of Diseases*



Worldwide : **3.5 billions people** - Untreated - Fragile populations

Worldwide economic impact : **US\$442 billions** (2010)

Altered Quality of Life: pain, affected mastication, phonation, psycho-social life ...

Co-Morbidity with obesity, diabetes, cardiovascular diseases ...

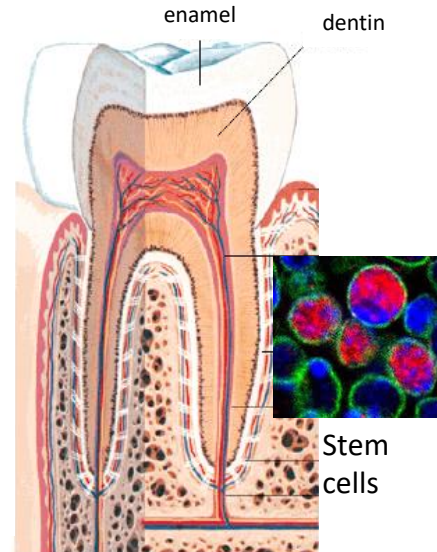
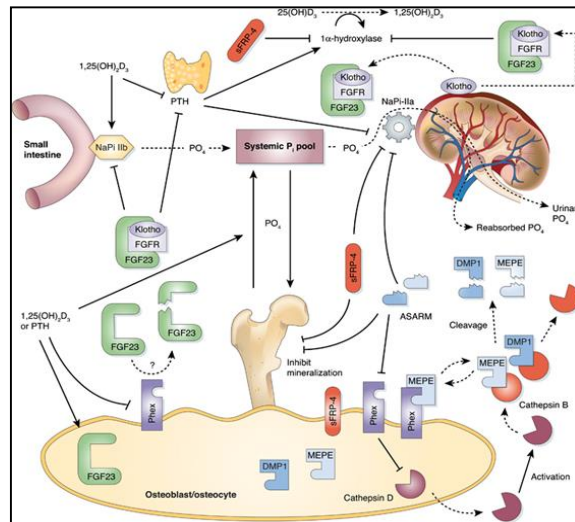
Individual Resistance to DDS ?

THE
LANCET

Pleading 2 : our subjects, dent-gene-environment, are of excellence

DDS Shared Mechanisms and individual disease susceptibility

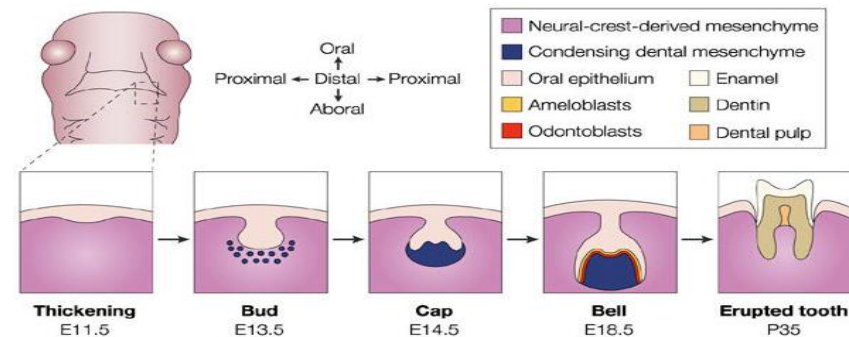
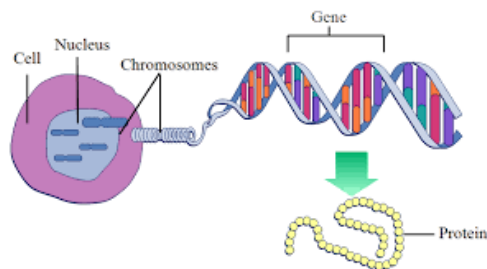
2. Mineral metabolism



3. Environmental challenges



1. Constitutive genes - mutations - variants



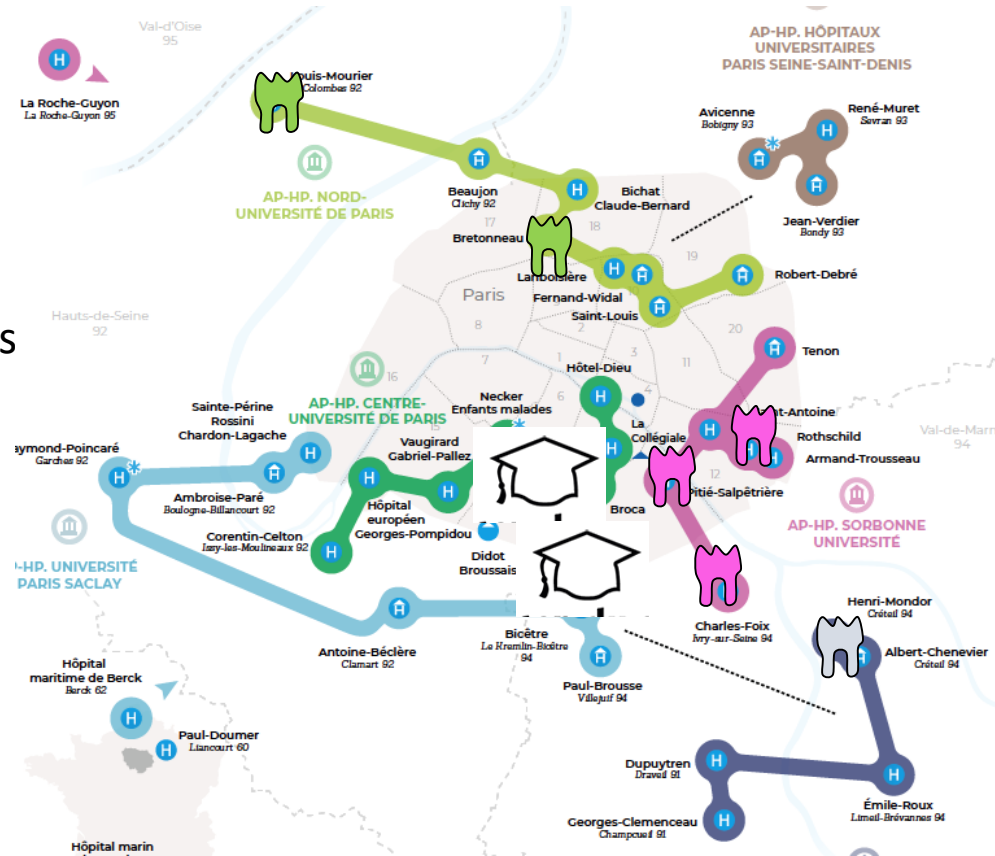
We discussed the context and today's geography

Dental Research



4 constitutive-labs
2 core-platforms
160 research members

Faculties in 21
outside labs



Dental Hospital



6 Clinical services

Dental Education



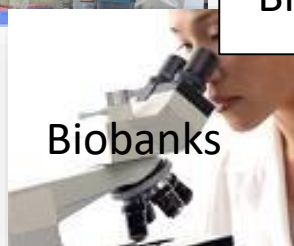
2 Schools
1000 graduates
1000 postgraduates
Masters/PhDs
220 staff

And the future of the rising generations within 5-10 years

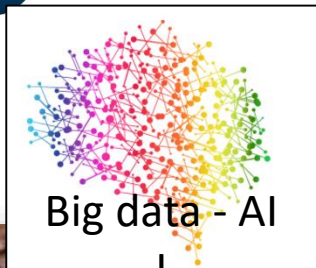
A Top 1% European Dental Institute



Biology



Biobanks



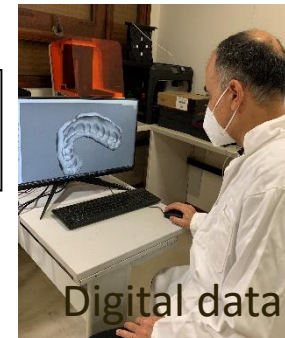
Big data - AI



Education



Clinical

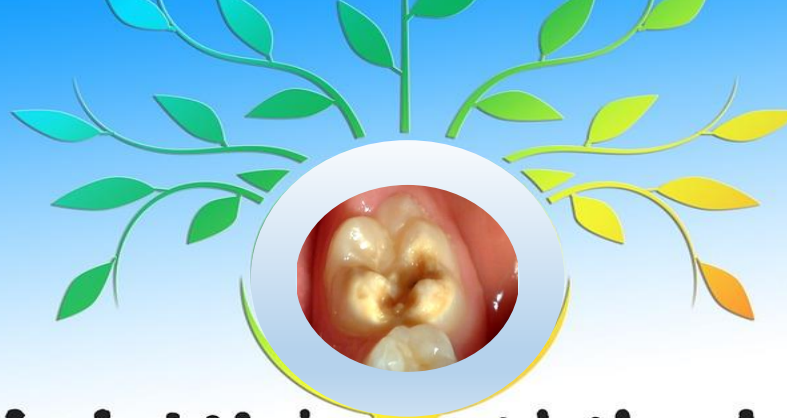


Digital data

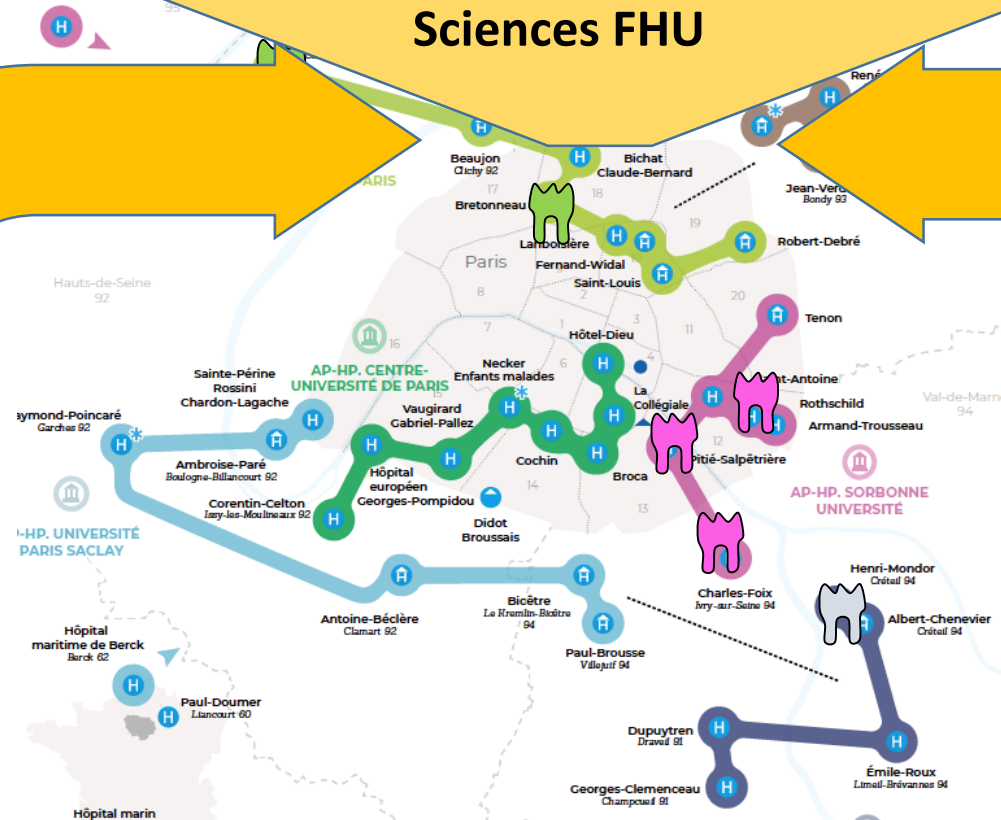


Simulation

Carrying out scientific projects



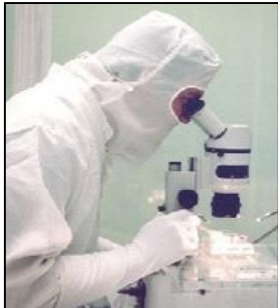
Sciences FHU



Our Deliverables and Milestones: Tools to build, share and strengthen

DDS-ParisNet FHU Specific Objectives

- ✓ **Constitute Cohorts:** Rare and common DDS
- ✓ **Explore Pathophysiology:** Molecular cellular mechanisms of DDS
- ✓ **Implement Therapy:** « Toxic-free » devices and innovations for DDS
- ✓ **Establish Clinical paths:** Diagnosis and cares for patients with DDS
- ✓ **Develop societal networks:** Patients associations, institutions, industries
- ✓ **Disseminate:** the Generated knowledge



Fédération Hospitalo-Universitaire AP-HP, Université de Paris

DDS-ParisNet: Dental Diseases Network in Paris

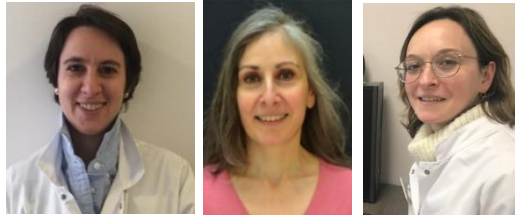


WP management:

Ariane Berdal and Catherine Chaussain



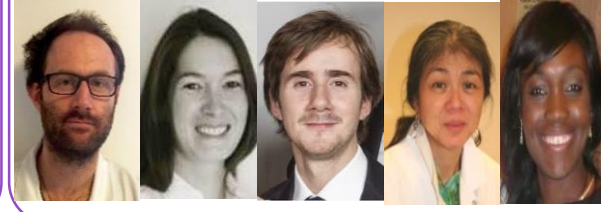
**WP1 Creating a DDS network
centered on the patient**
DE LADURE MOLLA M, KOZYRAKI R,
GAUCHER C, CHAUSSAIN C



**WP2 Generating translational
research on tooth genomics and
pathophysiology.**
BABAJKO S, BARDET C, DURSUN E.



**WP3 Ensuring clinical translation
for diagnosis and treatment of DDS**
FOURNIER B, LE NORCY E, BIOSSE
DUPLAN M, VIPHANE B, BOUKPESSI T.



**WP4 Ensuring registries and guidelines,
education and dissemination**
FRIEDLANDER L, SMAIL-FAUGERON V, GOGLY
B, LESCAILLE G.



Cohorts
Biobanks
Labs Core

DELIVERIES



Patient-centred projects



Septodont Company
Gilles Richard / Anne Salengro



Patients associations
Pol Harvengt



Proposed SAB :

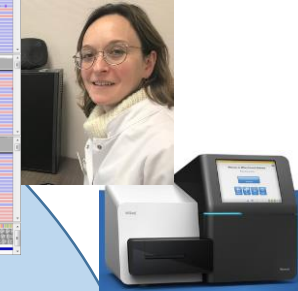
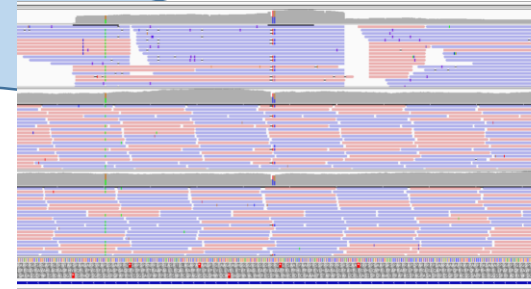
Marc McKee	(McGill, Canada)
Laurence Vicot	(Inserm, St Etienne)
Peter Fratzl	(Max Plank, Germany)
Catherine Boileau	(Inserm, Paris)
Olivier Duverger	(National Institute of Health -USA)
Anne Huyssuene	(Ghent University)



1. Clinical Diagnosis



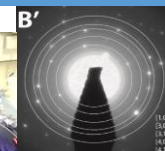
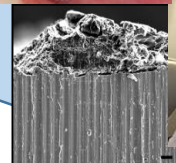
2. Molecular Diagnosis



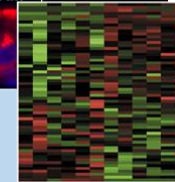
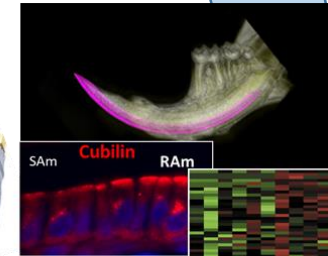
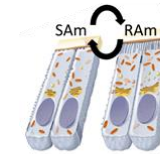
5. Dissemination Participative science



4. Patient-centred « toxics free » cares



3. Investigation of the underlying mechanisms



DDS-ParisNet Translational Research

