## EUROPE BIOBANK **WEEK 2020**

17 – 20 November | **Virtual Conference** 

BIOBANKING FOR GLOBAL CHALLENGES

# The Neuro-CEB: a National Brain Bank

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> 1 NeuroCEB 2 Brain Institute 3 Neuro-CEB Association











#### INTRODUCTION

Researchers today have less access to human brain samples because of the scarcity of autopsies and the ethical and regulatory constraints. It is to meet this need that the Patient Associations created the Neuro-CEB in 2004. To date, the Defeat Alzheimer Foundation, France Parkinson, ARSEP (Multiple Sclerosis Research Association) and CSC (Know the Cerebellar Syndromes), DFT France (Fronto-Temporal Dementia Association), ARSLA (Amyotrophic lateral sclerosis Research Association) compose the NeuroCEB.

#### AIM

The missions of the Neuro-CEB are to collect, prepare, and preserve in the best conditions post mortem samples from patients suffering from neurological diseases and from unaffected persons (normal controls) in order to make the documented samples available to the duly authorized researchers. The goal is to enable and stimulate research on the normal and pathological human nervous system and to promote the discovery of new treatments.

### RESULTS

Registered Consents		
Parkinson disease	753	
Alzheimer disease	721	
Multiple system atrophy	231	
Cerebellar ataxia	181	
Control	909	
Amyotrophic lateral sclerosis	38	
TOTAL: 2833		

Vascular dementia	6
Alzheimer disease	195
Fronto-Temporal Dementia	53
Fronto-Temporal Dementia and amyotrophic lateral sclerosis	11
<b>Amyotrophic lateral sclerosis</b>	8
Tauopathies	
Pick Disease	5
Cortico-basal degeneration	16
Progressive Supra-nuclear paralysis	44
Fronto-Temporal Dementia tau	7
Posterior cortical atrophy	4
Synucleinopathies	
Lewy body dementia and Alzheimer disease	12
Lewy body dementia	17
Parkinson disease and Alzheimer Disease	126
Parkinson disease	18
Multiple system atrophy	23
Cerebellar atrophy	14
Multiple Sclerosis	14
Normal Controls	29

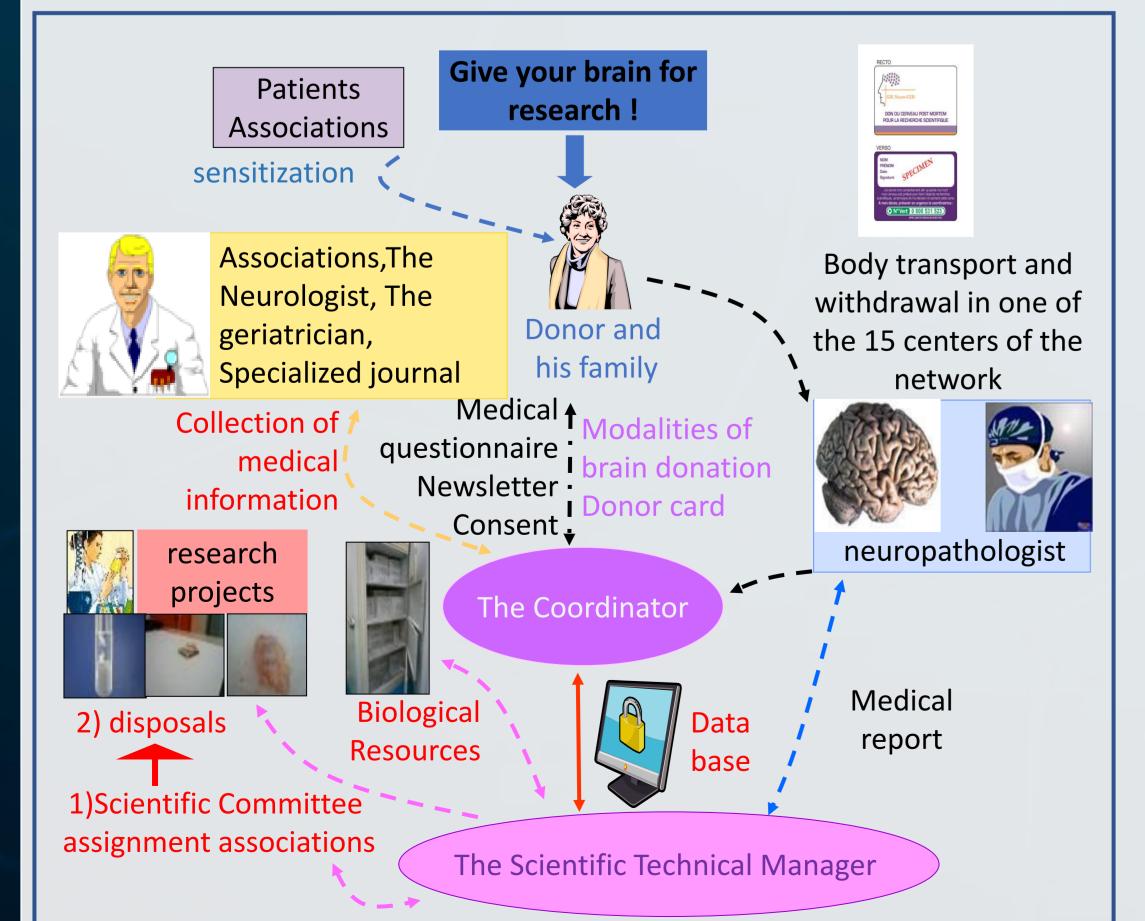
Number of cases in Biobank

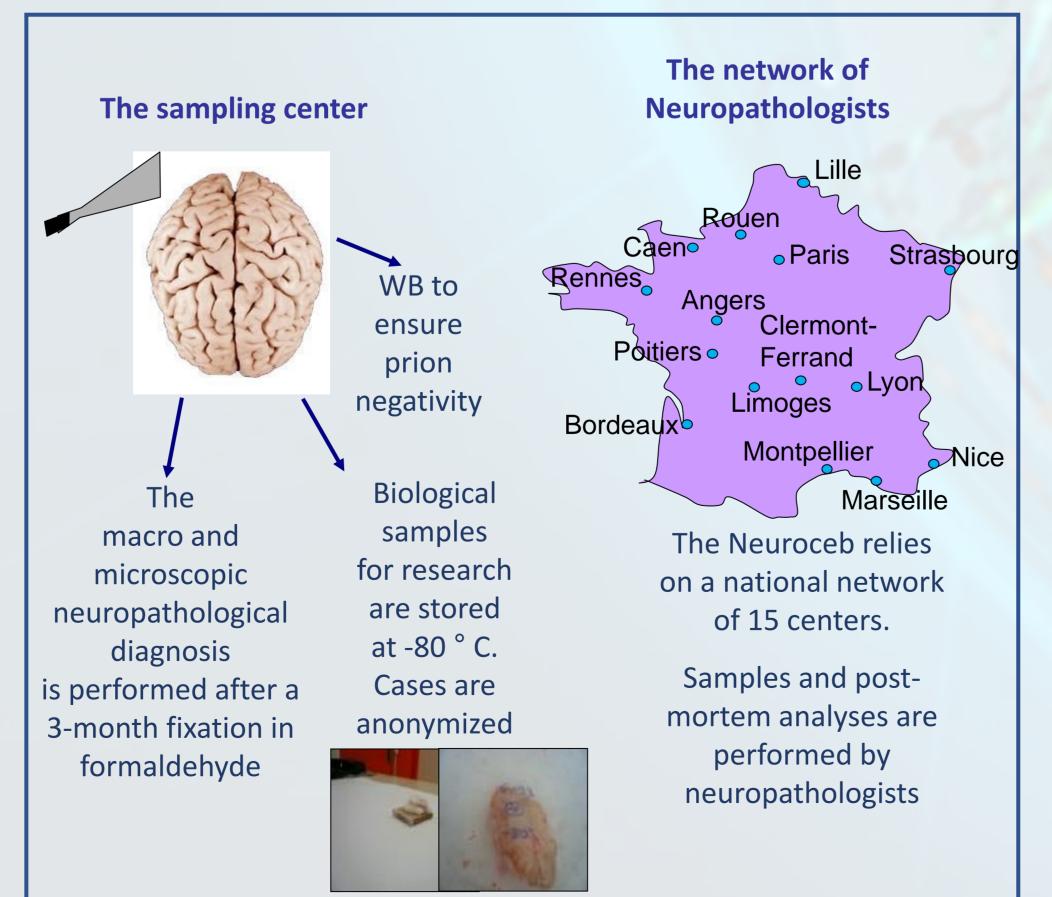
#### **Transfer of samples in France** and around the world since 2009

Number of projects	176
Alzheimer disease	2776
Parkinson disease	1465
Control	2193
Cerebellar ataxia	115
Multiple system atrophy	366
Amyotrophic lateral sclerosis	14
Total	5563

78 scientific articles. 1 patent.

#### **METHOD**





#### CONCLUSIONS

The goal of providing controlled quality samples to research teams has been achieved. Several difficulties and ways of improvement have been identified: the number of control cases is still low. Fusion with genetic data needs to be improved. The number of pathologies concerned could be increased which would imply a permanent public support.

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### ACKNOWLEDGEMENTS

Patient Associations : Alzheimer Foundation, France (Multiple Sclerosis Research Parkinson, Association) and CSC (Know the Cerebellar Syndromes), DFT France (Fronto-Temporal Dementia Association), ARSLA (Amyotrophic lateral sclerosis Research Association).

Paris Brain Institute, Pitié-Salpétrière hospital and the French network of neuropathologists and all donors.

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