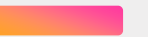




neuroservices  
ALLIANCE

# CNS CRO FOR TRANSLATIONAL DATA



IN VITRO – IN VIVO ELECTROPHYSIOLOGY & BEHAVIOR



# OUTLINE

01.

Who we are

02.

Where we come from

03.

Why an alliance?

04.

What is NSA

05.

Benefits

06.

Our vision

# WHO WE ARE





## WHO WE ARE



**Bruno Buisson, PhD**  
Founder, President and CSO



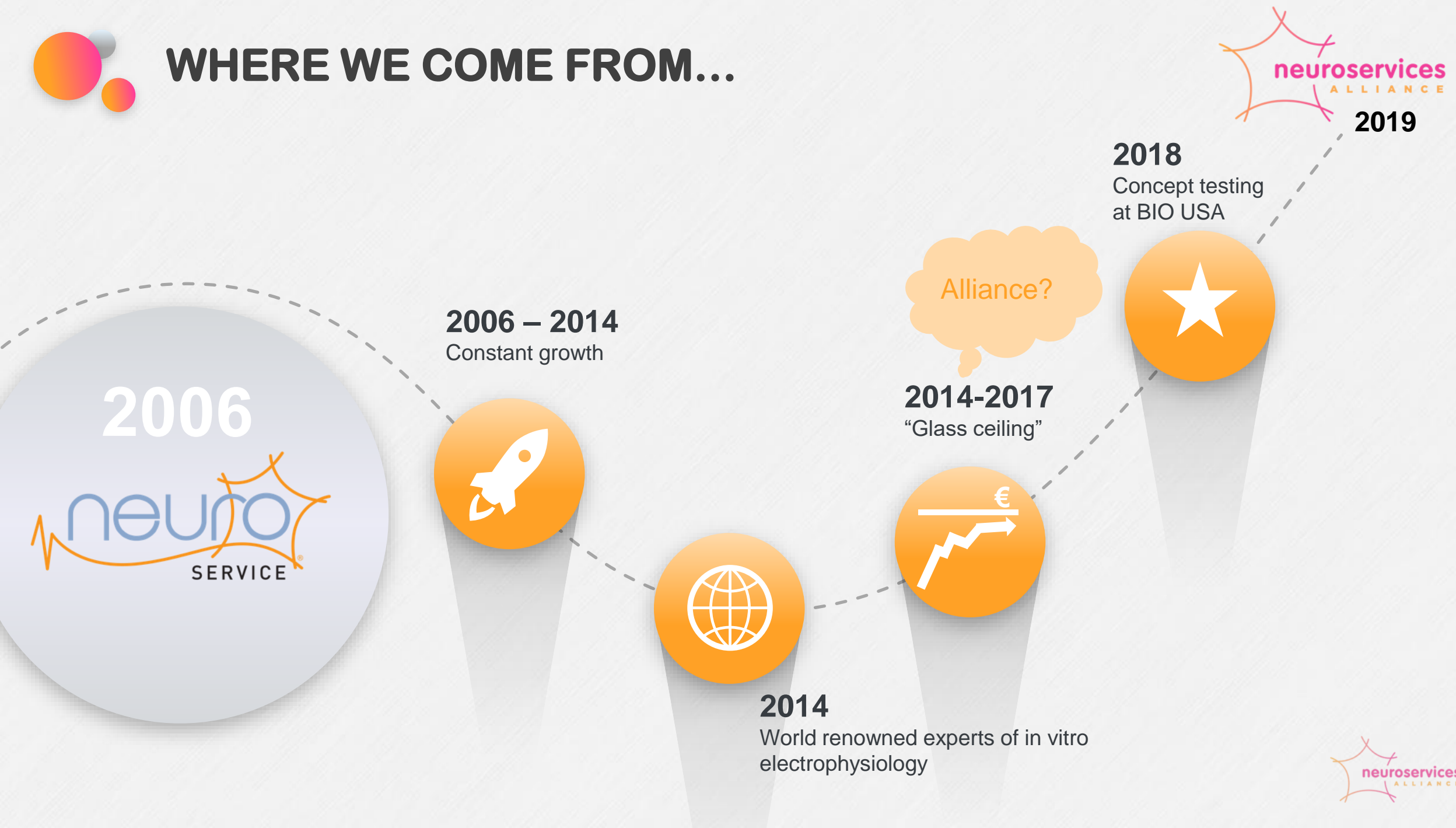
**Olivier Toury**  
Founder & CEO

# WHERE WE COME FROM





# WHERE WE COME FROM...



# WHY AN ALLIANCE?





# NEUROSERVICES-ALLIANCE: WHY?

**GLOBAL  
CROs**

CHARLES RIVER

APTUIT

Wu-Xi

...

**CNS  
MARKET**



Ephy

*IN VIVO*

Behavior

Optogenetics

*IN VITRO*



Ephy



**FOCUSED  
CROs**



NEUROSERVICE

COMPETITOR X

COMPETITOR Y

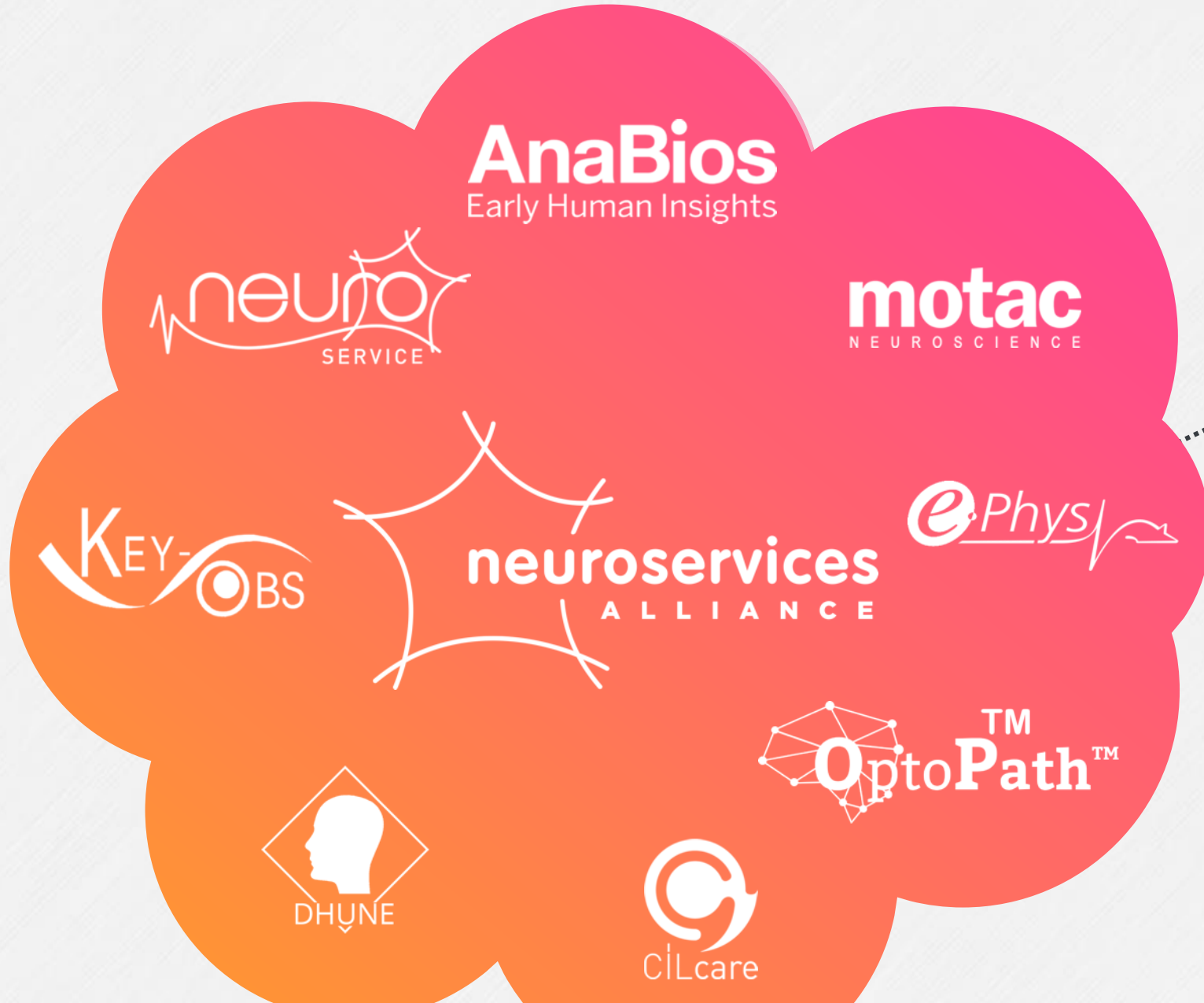
...







# NEUROSERVICES-ALLIANCE: WHY?

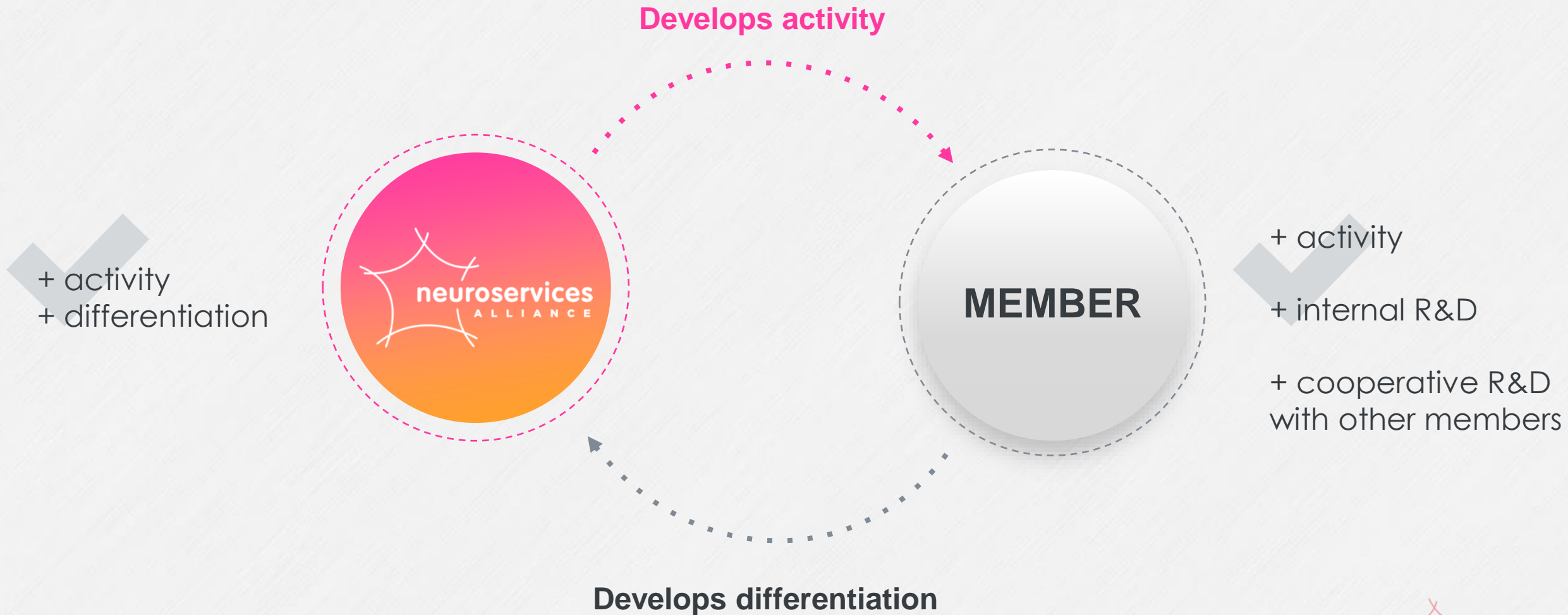


**Growth & Synergy**





# NEUROSERVICES-ALLIANCE: WHY?



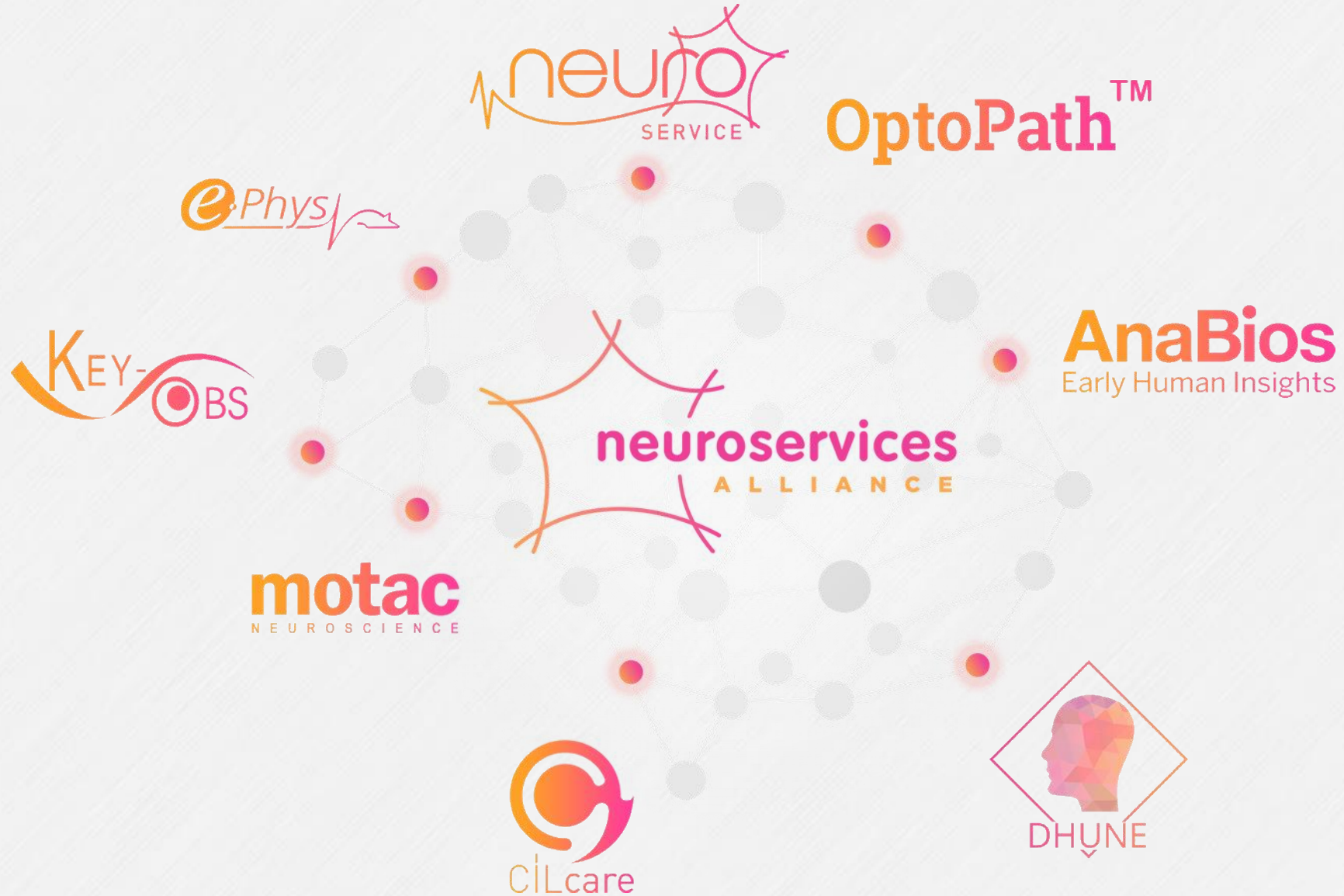


# WHAT IS NEUROSERVICES- ALLIANCE?





# THE ALLIANCE'S MEMBERS





ELECTROPHYSIOLOGY



BEHAVIOR



N  
O  
N  
H  
U  
M  
A  
N  
S



H  
U  
M  
A  
N  
S





## ELECTROPHYSIOLOGY

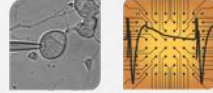


## BEHAVIOR

### CELL



### SLICE



### IN VIVO



### IN VIVO



N  
O  
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U  
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S

#### Neuron Cultures

- DRG
- Cortex
- Hippocampus
- Others...

PATCH CLAMP



#### Brain slices

MULTI ELECTRODE ARRAY

PATCH CLAMP



#### Spinal cord slices

MULTI ELECTRODE ARRAY

PATCH CLAMP



#### Free moving rodent

EEG

LFP

SPINDLES

RIPPLES

SINGLE UNITS

OPTOGENETICS



#### Anaesthetized rodent

SPINAL CORD SINGLE UNITS



#### Sleep-awake analysis

EEG



#### Behavioral analysis

ADDICTION

AFFECTIVE DISORDERS

COGNITIVE DISORDERS

HEARING DISORDERS

MOTOR DYSFUNCTIONS



#### Neurodegenerative Diseases (PD models)

COGNITIVE TESTING

KINEMATIC ASSESSMENTS



H  
U  
M  
A  
N  
S

#### PNS (DRG)

PATCH CLAMP

CALCIUM IMAGING



#### Induced Pluripotent Stem Cells (IPSC)

PATCH CLAMP



#### Brain tissue

(Cortex / Hippocampus)

PATCH CLAMP



#### Clinical trials consulting services

We offer expert guidance, from regulatory concerns to establishing your clinical trial strategy and connection you with our experts and patients network.



# OUR VALUE PROPOSITION

FUNCTIONAL INVESTIGATIONS FOR CNS DRUG DISCOVERY

Screening

Lead optimization & Pre-clinical development

IND

## UNIQUE EXPERTISE IN NEUROPHARMACOLOGY



MECHANISM  
OF ACTION



EFFICACY &  
POTENCY



TARGET  
ENGAGEMENT



CONSULTING

Translation to clinic

Every scientific question  
is **unique**  
and so is every solution

We **co-design**  
custom solutions  
with our clients





# THE ALLIANCE: STRONGER TOGETHER



300<sup>+</sup>

Worldwide clients

1,500<sup>+</sup>

Studies

20<sup>+</sup>

Scientific  
experts

500<sup>+</sup>

Years of  
cumulated experience



# BENEFITS





# BENEFITS FOR MEMBERS



## Research Institute

Value existing Intellectual property through external collaboration with pharma industry worldwide



## CRO specialized in CNS

Value their expertise through proactive Marketing & sales worldwide exposure



## CRO with CNS & other activities

Boost CNS expertise exposure



Increased visibility & clients interactions worldwide

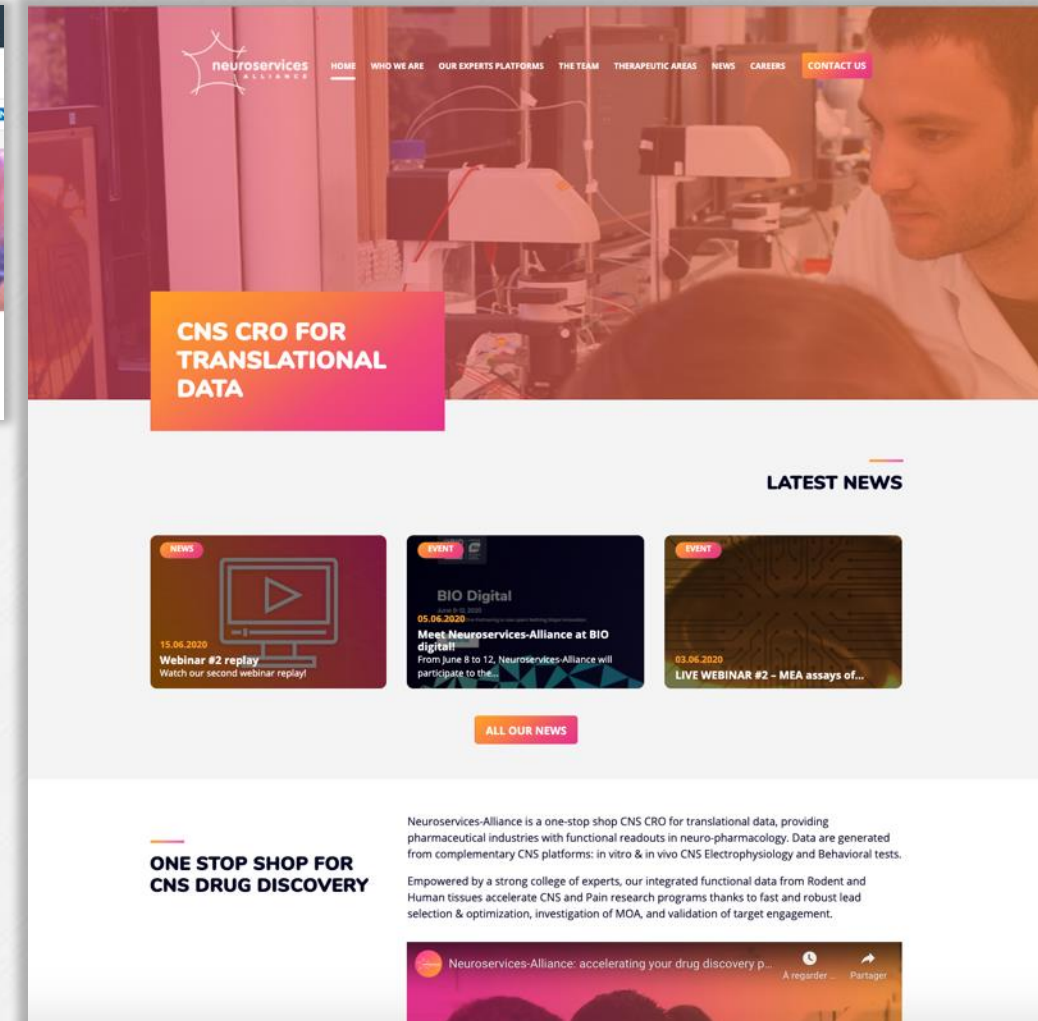
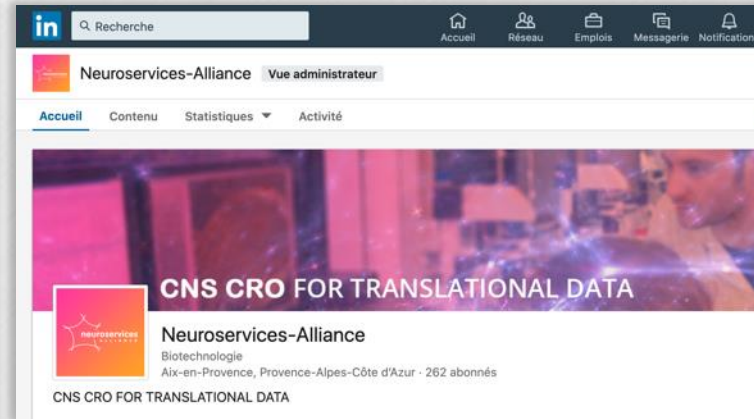


Joint study programs with other Alliance members



# BENEFITS FOR MEMBERS

## ACTIVE PROMOTION VIA OUR ONLINE PRESENCE



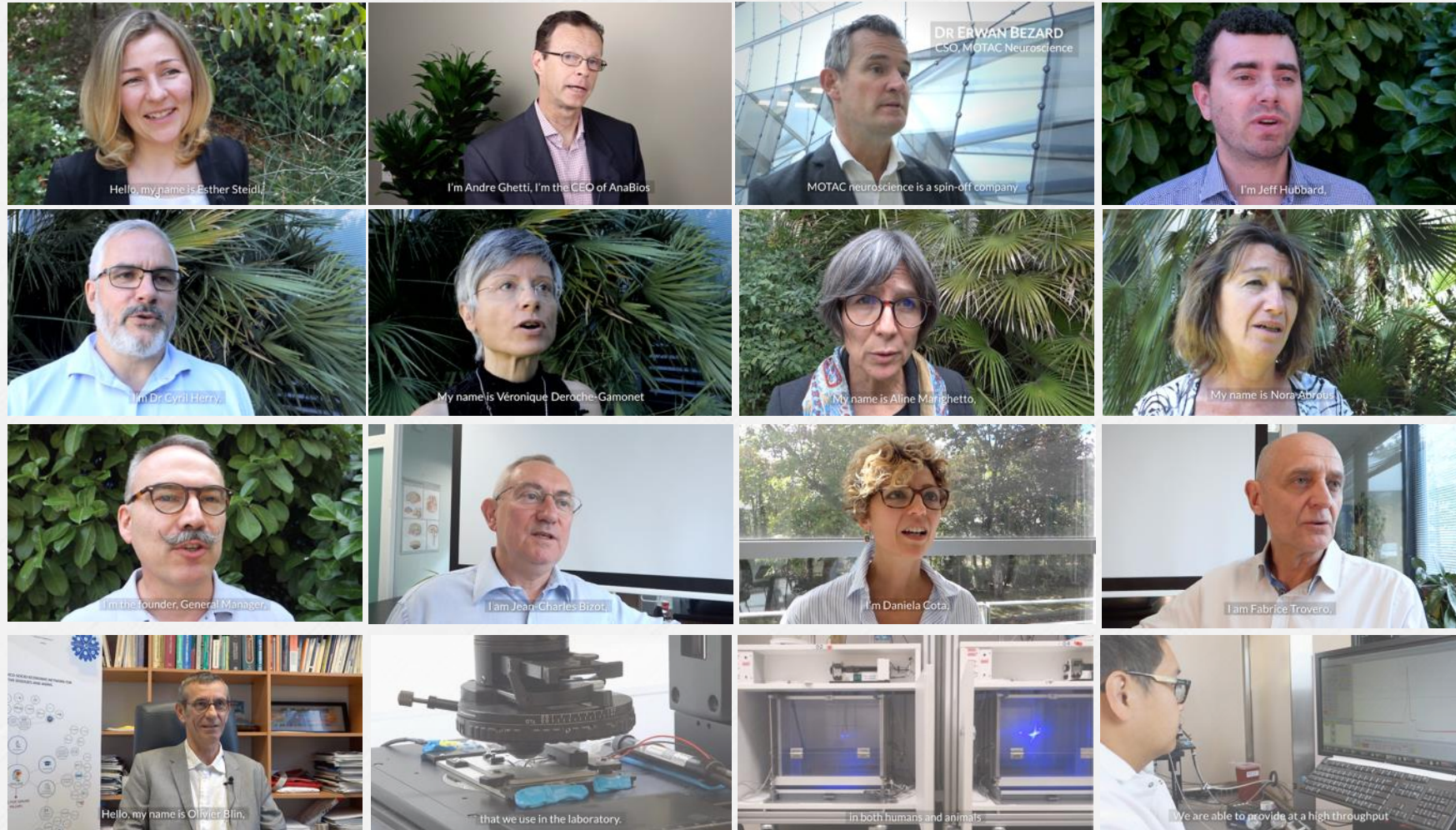
## Frequent publications for Alliance & Members

- News
- Events
- Solutions



# BENEFITS FOR MEMBERS

## WE VALUE OUR EXPERTS





# BENEFITS FOR MEMBERS

## OFFLINE PROMOTION OF THE ALLIANCE & CLOSE RELATIONSHIPS WITH CLIENTS

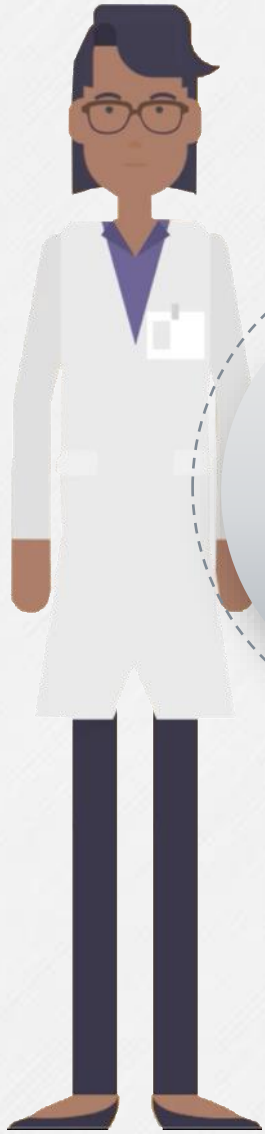


# 12 EVENTS IN 2019 in USA – Europe - Japan





# BENEFITS FOR CLIENTS



Quotation & Contractual Paperwork  
Project Management

**BUSINESS  
INTERACTIONS**

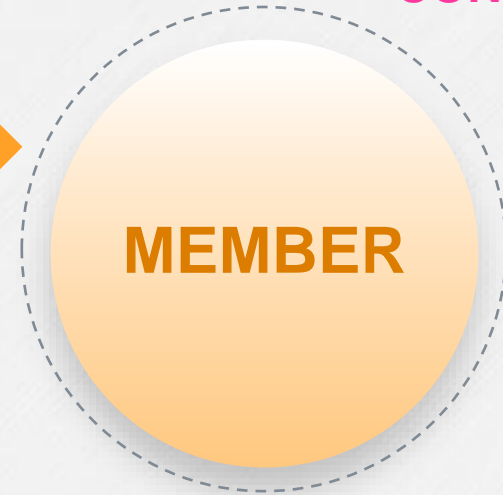


**CONTRACT**



**SCIENTIFIC  
INTERACTIONS**

Expert support / Protocol Design  
Intermediate Data Release  
Study Report



# OUR VISION







# OUR VISION

## FORM NEW PARTNERSHIPS

+ Reinforce NSA solutions



## REINFORCE JOINT R&D PROGRAMS

+ Value creation within the alliance  
+ Differentiation



## REINFORCE WORLDWIDE PRESENCE (EU & ASIA)

+ Direct interactions with clients  
+ Visibility

## OUR GOAL

To become the leader CRO WorldWide of functional endpoints for CNS and Pain pre-clinical programs

# CONTACT US



USA

**Olivier Toury**  
Founder & CEO

[olivier.toury@neuroservices-alliance.com](mailto:olivier.toury@neuroservices-alliance.com)

Mobile - +1 (619) 392 5594

Office - +1 (858) 757 7328



EUROPE & ASIA

**Bruno Buisson, PhD**  
Founder, President and CSO

[bruno.buisson@neuroservices-alliance.com](mailto:bruno.buisson@neuroservices-alliance.com)

Mobile - +33 (0)607 179 286

Office - +33 (0)442 991 220



neuroservices  
ALLIANCE

WWW.NEUROSERVICES-ALLIANCE.COM