



UNIVERSITÉ
CAEN
NORMANDIE



COMETE
UMR 1075 UNICAEN / INSERM



AgentT



FONDATION
VAINCRE
ALZHEIMER
Prévenir, soigner, guérir



BrightFocus®
Foundation

Cure in Mind. Cure in Sight.

PRESS RELEASE

Caen University and AgentT Announce a Scientific Collaboration Supported by Fondation Vaincre Alzheimer and BrightFocus Foundation to Decipher the Mechanisms Involved in a Healthy Brain Aging

June 23, 2021 10:00 AM Central European Time

PARIS, France – COMETE UMR-S1075 • Caen University • Inserm and AgentT announced today their research collaboration to discover the molecular mechanisms enabling healthy brain aging, despite the presence of brain lesions characteristic of Alzheimer's disease. This understanding of the mechanisms involved in cognitive resilience may lead to the identification of new therapeutic targets.

One medical question remains unanswered up to now: why do 49% of the individuals over the age of 90 present lesions characteristic of Alzheimer's disease (senile plaques) without any associated cognitive decline⁽¹⁾? Indeed, as a normal part of the aging process, everyone is overproducing the first toxic of Alzheimer's (**i.e.**, the amyloid peptide). However, for the same concentration of cerebral amyloid, some individuals will develop Alzheimer's disease while others will present no cognitive impairment. This cognitive resilience could be the consequence of the genetic background specific to each individual. Understanding the molecular mechanisms behind this cognitive resilience could reduce the burden of dementia and extend health span.

COMETE UMR-S1075 and AgentT have decided to take up this challenge by sharing their respective expertise and technological approaches. This preclinical project will help to gain a fundamental understanding of the

neuroplasticity substrates of cognitive resilience, a core research theme still unmet in Alzheimer's disease. **“Medical advances have made it possible to extend life expectancy ever further but aging with full cognitive capacity remains a challenge for a third of individuals over 80.”** entrusted Marianne Leger, PharmD, PhD in Neuroscience and Principal investigator at COMETE UMR-S1075 · Caen University · Inserm. By shedding light on the early protective mechanisms underlying resilience, they will try to enhance the cognitive resilience thanks to therapeutic strategies. **“We are pleased to take part in this ambitious project whose discoveries could help to slow down the progression of Alzheimer's disease by improving the cognitive resilience of patients.”** enthused Jérôme Braudeau, PhD, co-founder and CEO of AgenT.

This project is supported by the French Fondation Vaincre Alzheimer and its American partner BrightFocus Foundation. **“We are convinced of the imperative need to better understand cognitive resilience to counter the devastating effects of Alzheimer's disease. This is why we have decided to support this project with our American partner, BrightFocus Foundation. We want to promote our research worldwide and prove the benefits of borderless research.”** declared Maï Panchal, PhD, Scientific Director of Fondation Vaincre Alzheimer. **“We are proud to support this exciting research to better understand cognitive resilience, science that could lead to new and better steps toward healthy aging and reducing one's risk for dementia.”** said Diane Bovenkamp, PhD, BrightFocus Foundation Vice President for Scientific Affairs. **“This research collaboration between a public institution, a private company and two non-profit foundations is a unique opportunity to improve scientific understanding of the biology of cognitive resilience and could pave the way for the prevention of dementia.”** concludes Marianne Léger.

About COMETE UMR-S1075 · Caen University · Inserm

The University of Caen Normandy UNICAEN is one of the oldest universities in France, established in 1432 by Henry VI King of England. Committed to achieving excellence in research and scholarship, the University of Caen Normandy has risen to become a leading academic center in the Normandy region with more than 32,000 students from all walks of life. It offers a wide range of degree programs that allow students to specialize in their interests. The University has 45 research units covering a broad range of academic fields. The strength stems from a well-structured and multidisciplinary research potential which puts special emphasis on cross-disciplinary collaborations.

The COMETE UMR-S 1075 research unit strives to understand the fundamental mechanisms underlying the interactions between mobility

and cognitive processes. Particular emphasis is given on attentional and memory processes, spatial orientation as well as internal biological clock, but also over the way these mechanisms evolve throughout life and how to accordingly adapt physical activity protocols. Through complementary approaches, the fundamental and clinical research carried out within the unit aims to improve patient care through the development of technologies for health.

For more information about COMETE UMR-S 1075, please visit www.comete.unicaen.fr.

Contact:

Marianne Leger
marianne.leger@unicaen.fr
+33 2 31 56 68 76

About Agent

Agent is a life sciences company whose mission is to detect Alzheimer's early through a simple blood test. By combining multiomics assays with advanced machine learning techniques to recognize Alzheimer's associated patterns, Agent is developing a non-invasive blood test to detect Alzheimer's up to 20 years before the onset of the irreversible symptoms. Agent is headquartered in Paris, France.

For more information about Agent, please visit www.agent-biotech.com.

Contact:

Jérôme Braudeau
Jerome.braudeau@agent-biotech.com
+33 6 11 10 26 95

About Fondation Vaincre Alzheimer

Preventing, treating, curing: Fondation Vaincre Alzheimer funds innovative medical research. Created in 2005, Vaincre Alzheimer is a Foundation of Public Utility. The organization has three main missions:

- Accelerating the arrival of new treatments. Vaincre Alzheimer Foundation aims to increase knowledge and promote therapeutic innovation by developing and supporting excellent biomedical research at the national and international levels.

- Improving diagnosis and medical care by training and bringing together health professionals for the benefit of patients.
- Preventing Alzheimer's and related diseases by raising awareness about prevention methods for healthy aging and about advances in biomedical research.

For more information about Fondation Vaincre Alzheimer, please visit www.vaincrealzheimer.org.

Contact:

Catherine Silva, Head of Communication and Webmarketing
c.silva@vaincrealzheimer.org
+331 82 83 48 20

About BrightFocus Foundation

BrightFocus Foundation is a leading source of private research funding to defeat Alzheimer's, macular degeneration and glaucoma. The nonprofit has a longstanding commitment to pioneering research in Alzheimer's and related dementias. Supporting scientists early in their careers to launch new and promising ideas, BrightFocus addresses a full and diverse range of approaches from better understanding the root causes of the diseases and improving early detection and diagnosis, to developing new drugs and treatments.

Over the past three years alone, BrightFocus has supported more than 275 projects worldwide, a \$60 million USD investment.

For more information about BrightFocus Foundation, please visit www.brightfocus.org.

Contact:

Michael Buckley, Vice President, Public Affairs
mbuckley@brightfocus.org
+1 301 556 9370

References

(1) Ossenkoppele et al., 2015