



ROBERT B. SCOTT

From France to Sweden



Project: **Protein aggregation and Alzheimer Disease**

Research topic: **Physics**

Swedish Institution: **University of Stockholm**

French Institution: **Université de Bretagne Occidentale**

Dates of mobility: **05/05/2022 to 29/06/2022**

Program: **SFVE-A (ex TOR)**



PRESENTATION

[Robert Scott](#) spent most of his research career working in ocean physics and climate research. After teaching fundamental physics in France, he broadened his research to include gravitational physics. Since 2020, he started reading widely in biology of ageing and ageing-related diseases.

In 2021, he focused his research on biophysics and contacted [Andreas Barth](#) to discuss possible collaborations. The discussion ultimately led to Scott's visit to Sweden in 2022, with funding from the SFVE-A program (known at the time as TOR) and [Université de Bretagne Occidentale](#), his host institution.

ACTIVITIES IN SWEDEN

During his stay in Stockholm, Robert Scott visited [Andreas Barth's group](#) at [Stockholm University](#) and attended a PHD defence, a departmental seminar and a conference. He also gave two seminars on his current research, especially on biology of ageing.

Barth and Scott focused on post-translational modifications of proteins, especially on the potential importance of racemization, when the amino acids change their handedness (e.g., left-handed aspartic acid (L-Asp) flips to its right-handed form, D-Asp). In the context of Amyloid beta aggregation, Barth and Scott developed together molecular dynamics simulations of aggregation of partially racemized proteins.