

Project

What is this work about?

The [COPEwell project](#) aims to develop a new integrative framework for the study of **fish welfare** based on the concepts of allostasis, appraisal and coping styles.

The project focuses on the understanding of **how fish experience their world**, and what effects early life experiences have on later development and coping abilities.

Our collaborators

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Group Leader

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Post Doc

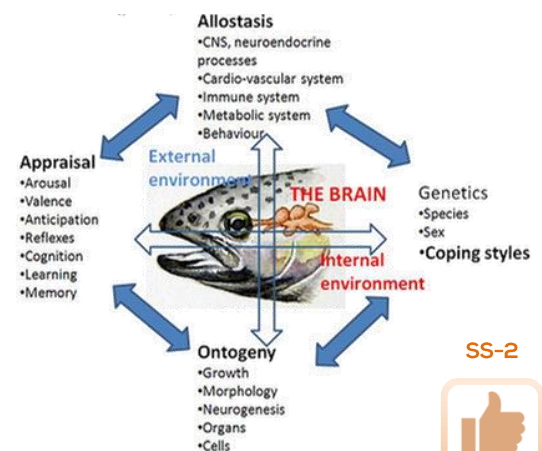
Researcher on Evolutive Immunology,
University of Stirling



What problem did they face?

With the goal of establishing a link between stress coping ability and brain function in Atlantic salmon, they performed **a battery of behavioral tests to more than 480 animals** and assessed the expression of target genes related to stress coping styles with different functions from metabolism to neuronal plasticity.

This led to a complex multi-dimensionality exploratory problem with 75 variables and 6 related sources of information for which **PCA analysis was insufficient** due to the manual effort it required.



SS-2



Success Case Sheet

Which was the contribution of ?

AutoDiscovery helped them to face such a challenge thanks to the following features:

- 👍 The [automatic consolidation](#) of the behavioral and gen expression data.
- 👍 The exhaustive evaluation of relationships [within the different data subsets](#).
- 👍 The [Hypo Booster tool](#) to explore relationships efficiently.