

# RESEARCH ACTIVITY SHEET

2025 PhD selections

## YOUR DETAILS

\* Name & Surname

Diego di Bernardo, Davide Cacchiarelli, Gennaro Gambardella

\* Affiliation - TIGEM, Telethon Institute of Genetics and Medicine

## PHD PROJECT DETAILS

**Genomic Medicine**

\* Title of the proposed project

The GM area is composed of investigators with biomedical, engineering, and computer science backgrounds who work in close collaboration with the geneticists and molecular biologists within the Institute.

This makes TIGEM one of the few interdisciplinary institutes that applies computational biology approaches to genetic diseases.

The GM area plays a significant role at TIGEM, researchers are regularly encouraged to use innovative technologies and robust experimental and computational tools in their own research projects. These approaches include Next Generation Sequencing for DNA and RNA sequencing in single cells, machine learning approaches to drug repositioning, and microfluidics technology for cell culture and quantitative biology

\* Short description of the project (up to 300 words)

\* Indicate the main research area for the project described above -

If needed indicate a second research area for the project described above -

1. Computational biology
2. Next Generation Sequencing (NGS)
3. Machine learning

\* Provide up to 3 key words for project:

## YOUR LABORATORY ACTIVITIES DETAILS

Diego di Bernardo: <https://www.tigem.it/research/research-faculty/di-bernardo>

Davide Cacchiarelli: <https://www.tigem.it/research/research-faculty/cacchiarelli>

Gennaro Gambardella: <https://www.tigem.it/research/research-faculty/gambardella>