BUILDING INTEGRATIVE SINGLE CELL OMICS CAPACITIES USING INVERTEBRATE TUMOR MODELS RELEVANT TO HUMAN DISEASE



SCENTINEL Kick-off Meeting 21-22 June 2024



HORIZON-WIDERA-2023-ACCESS-02/Twinning call

V.Theodorou

IMBB challenges

- a) <u>substantial upgrade</u> infrastructure and knowledge >keep up with fast technological, scientific advances
- b) modern practices of institutional management
- c) difficulties in retaining and recruiting skilled scientists/young talents

IMBB has

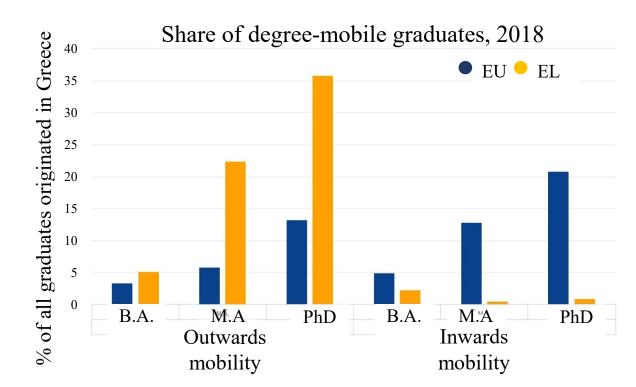
a) <u>Enthusiastic/talented human capital</u> (scientists, permanent staff) eager to develop, witness modernization of IMBB infrastructures and FORTH Operational Offices, for improved working conditions and impactful research

b) many <u>labs using invertebrate models</u>, long-standing excellence in Drosophila research EU efforts for phasing out animal use in research-> environmentally sustainable, ethical research

c) The Foundation for Research and Technology - FORTH research ecosystem

Greek Research Challenges

- 1. Low scientific performance metrics
- 2. Brain drain and limited attractiveness
- 3. Career uncertainty (senior scientists, women)



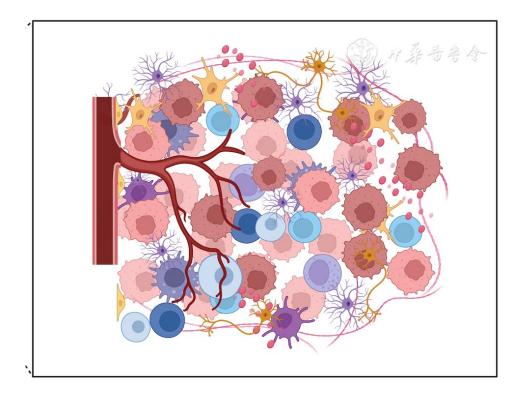
SHE Figures, on gender disparities in the EU R&I system

- Higher Educational Sector (HES) (EU-27 23.6%, EL-16%)
- Working under 'precarious' contracts (EU-27 Female-9.01%/Male-7.71% vs. EL Female-10.13%/Male-3.35%)

Social scientist, UoC

Research ethics, research integritySociology of genderResearch misconduct

Scientific challenges





SCENTINEL activities aim at:

a) Develop IMBB capacities:

In single-cell technologies and bioinformatics

Upgrade Genomics capacities (training to save on time and resources) 10 X Chromium (Chamilos/Talianidis labs) and PIPseq technology (Enzyquest/IMBB labs).

Establish a Bioinformatics Core (IMBB Director Vontas investing in such a team) FAIR data management plans, reproducible concrete pipelines > provide excellent services

b) Understand biological processes in tumor ecosystems

Produce collaborative, open, high impact publications, Raise international visibility to attract and retain talents.

c) Strengthen EU collaborations

a critical mass of European Drosophila experts and beyond, scientific output and creativity

d) Research management excellence.

FORTH Support Offices, training activities and exchange knowhow of best practices.









