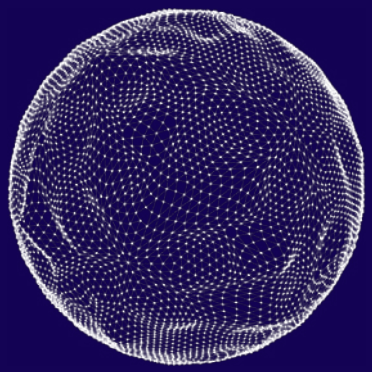


COMPUTE IMPACT

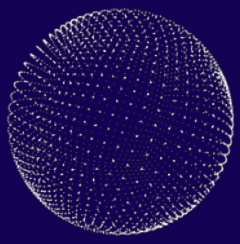
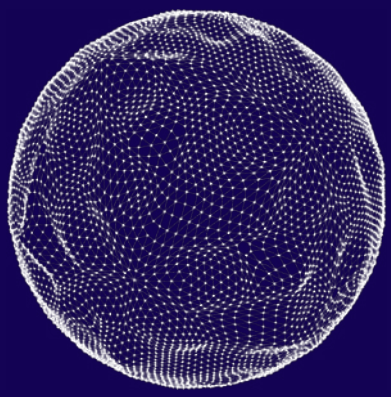
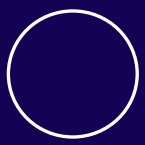
The impact of data/ computational technologies produced by ERI-IE in industry: The case of life science

PUBLIC SUMMARY

The European Research Infrastructure-Innovation Ecosystem (ERI-IE) has a rich tradition of producing novel computational tools and generating large datasets that generate tremendous value to industry and society. Despite the transformational effects of these technologies, their impacts have not been appropriately conceptualized and measured in traditional socioeconomic studies. Where economic assessments have been conducted, the emphasis has been on approximating the value to academic and scientific communities, with less granular approximations of industrial relevance.

An exemplary case of this is in the life sciences, where we lack an understanding of the specific value provided by computational infrastructures to the industry's innovation processes. Given the growing societal importance of bioinformatics and emergent multi-omics profiles in both traditional pharma and biotech, as well as emergent forms of therapeutic development and clinical medicine, this proposal aims to develop a focused study on how industrial partners benefit from bioinformatics research infrastructures.

We focus on two flagship initiatives under the European Molecular Biology Laboratory - European Bioinformatics Institute (EMBL-EBI): AlphaFold and Open Targets. Through these two case studies, the proposal seeks to contribute a better understanding of how Research Infrastructures (RIs - like those under ATTRACT) produce impacts to their industrial counterparts, beyond those currently measured in traditional economic metrics. Insights from this study would benefit ATTRACT's stakeholders, funders, and scientific policymakers.

This project has received funding from the European Union's Horizon 2020 research and innovative programme under grant agreement No. 101004462