



Department of Anatomy and Cell Biology

Hosted by Dr. Javier Vargas

“CryoEM: Our approaches to increase structural data throughput and its biomedical interpretability ”

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Spanish National Research Council (CSIC)



After a brief introduction to cryoEM, I will review the technologies we are developing to couple data acquisition to data processing in very effective ways, and the impact this approach is having in large Facilities such as Diamond (the UK synchrotron), ESRF (the European synchrotron) or the US National CryoEM Facility at NCI NIH, among many other places. I would then dive into some of the most relevant pieces of information that can be derived from cryoEM data, as it is macromolecular flexibility, presenting new ways to characterize not only the quality of a cryoEM map, but what is really telling us about molecular plasticity. I would finalize by introducing (as a life demo from the European Bioinformatics Institute and from our own center in Madrid -network permitting-) our interactive information integration environment aimed at seemingly interface structural information with a whole range of biomedical annotations in proteomics, genomics and interactomics, effectively combining many sources of information for a profound understanding of biological complexity.

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11:30 am

Strathcona Anatomy Building

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