Advancing Research Frontiers: NBIS's Impact on Sweden's Computational Infrastructure and European Bioinformatics Collaborations

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NBIS (National Bioinformatics Infrastructure Sweden) is one of the largest research infrastructures in Sweden. With approximately 120 multidisciplinary experts positioned across Sweden's major universities, NBIS constitutes the SciLifeLab Bioinformatics platform and represents Sweden within ELIXIR, the European infrastructure for biological information.

NBIS's team is composed of specialists in various bioinformatics fields, such as protein bioinformatics, mass spectrometry (MS), next-generation sequencing (NGS), large-scale data management, metagenomics, systems biology, biostatistics, and RNA sequencing. Committed to advancing research, NBIS delivers tailored support for numerous projects, providing sophisticated infrastructure and analytical tools for bioinformatics.

Establishing dynamic partnerships with SciLifeLab platforms, the SciLifeLab Data Centre, the National Academic Infrastructure for Supercomputing in Sweden (NAISS), and an extensive network of stakeholders, NBIS encourages collaboration and cohesion. These partnerships ensure exceptional support for researchers, enhancing bioinformatics research throughout Sweden and internationally.

As the Swedish node for ELIXIR, NBIS plays a crucial role in collaborative European initiatives, contributing to prominent projects like the Federated European Genome-phenome Archive (EGA), Genomic Data Infrastructure (GDI), BigPicture, EUCAIM, and the European Joint Programme on Rare Diseases (EJP-RD). By connecting local expertise with worldwide efforts, NBIS not only bolsters Sweden's computational capacities but also contributes to a concerted effort to manage the complexities of biological data across Europe.

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Session Classification: A view from the bridge: a look at innovative practices in our community