



El departamento de Informática de la Universidad Técnica Federico Santa María tiene el agrado de invitar a la comunidad Universitaria al coloquio del departamento de Informática. Esta presentación se realizará en el auditorio Claudio Matamoros (F-106), en la Casa Central el día **Martes 11 de Agosto a las 12:00**.

Título

PRINCIPLES OF APPLIED BIOINFORMATICS

Invitado



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Mini Bio

Physicist (Lomonosov Moscow State University, 1964); Ph.D (biophysics, Russian Academy of Sciences, 1971); D.Sci. (human and animal physiology, Russian Academy of Sciences, 1992); Professor (Supreme Interacademic Certifying Commission, Russia, 1999)

Resumen

Though a relatively young discipline, bioinformatics is finding increasing importance in many life science disciplines, including biology, biochemistry, medicine, and chemistry. Since its beginnings in the late 1980s, the success of bioinformatics has been associated with rapid developments in computer science, not least in the relevant hardware and software. In addition, biotechnological advances such as those witnessed in the fields of genome sequencing, microarrays and proteomics have contributed enormously to the bioinformatics boom. Finally, the simultaneous breakthrough and success of the World-Wide Web has facilitated the worldwide distribution of and easy access to bioinformatics tools.

Today, bioinformatics techniques such as the BLAST (Basic Local Alignment Search Tool) algorithm, pairwise and multiple sequence comparisons, queries of biological databases, and phylogenetic analyses have become familiar tools to the natural scientist. Many of the software products that were initially unintuitive and cryptic have matured into relatively simple and user-friendly products being easily accessible over the Internet. One no longer needs to be a computer scientist to proficiently operate bioinformatics tools with respect to complex scientific questions. Nevertheless, what remains important is an understanding of fundamental biological principles together with a knowledge of the appropriate bioinformatics tools available and how to access them. Also, and not least, is the confidence to apply these tools correctly to generate meaningful results.

The aim of this lecture and future lecture course is both to introduce the daily application of a variety of bioinformatics tools and to provide an overview of a complex field. However, the intent is neither to describe nor even derive formulae or algorithms, but rather to facilitate rapid and structured access to applied bioinformatics by interested students and young scientists.

Lugar y Fecha

11 de Agosto de 2015, 12:00

Auditorio Claudio Matamoros (F-106).

Departamento de Informática, Valparaíso.

UTFSM

La charla se transmitirá en videoconferencia a la Sala de Reuniones, Campus Santiago, San Joaquín.

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