

MSc Bioinformatics PAC: DC702

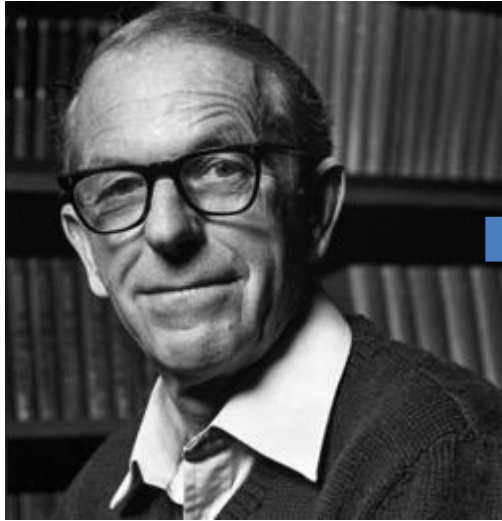
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A Ladybird Guide to Bioinformatics Today

- Bioinformatics:
 - *“Application of Large-scale Computing Resources and Sophisticated Computational Techniques in the Life Sciences and Like Data”*
 - Fact: (Generally) Easier to Teach Life Sciences to Computing Graduates than vice versa!
 - There is a great need for Graduates with numerical/algorithmic skills & a working knowledge of Biotechnology/ Biopharma terminology
 - So where is the need, actually?
 - &, more particularly: where are the jobs??

Where we are today in the life sciences ..

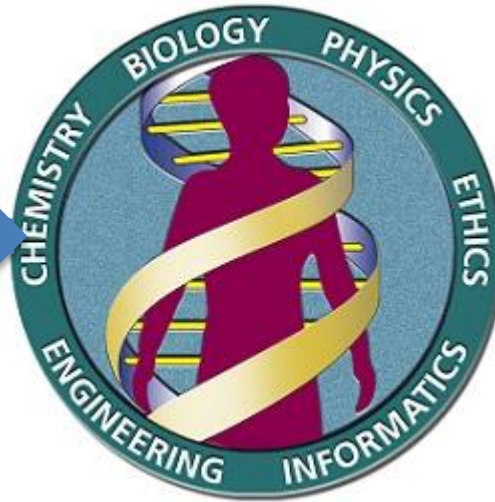
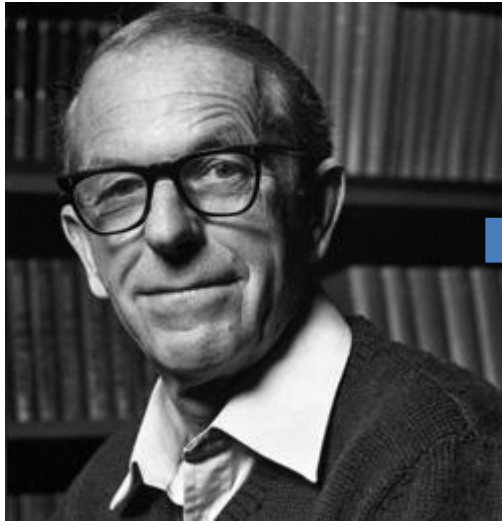
HUGE advances in technologies for sequencing whole genomes for example..



1980's Sanger
sequencing (Nobel prize
for chemistry)

Where we are today in the life sciences

HUGE advances in technologies for sequencing whole genomes for example..

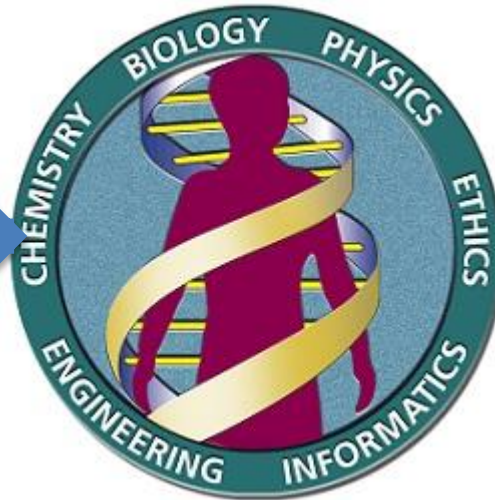
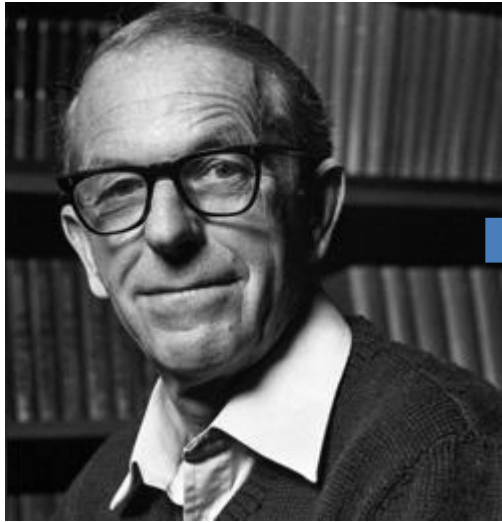


1980's Sanger sequencing (Nobel prize for chemistry)

2000:
11 years of work = 1
human genome

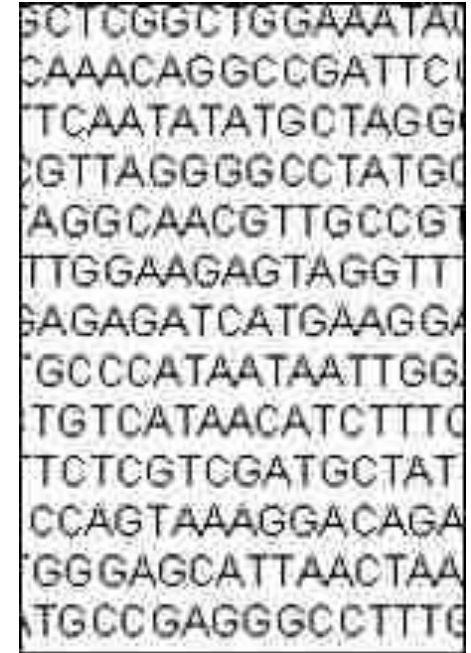
Where we are today in the life sciences

HUGE advances in technologies for sequencing whole genomes for example..



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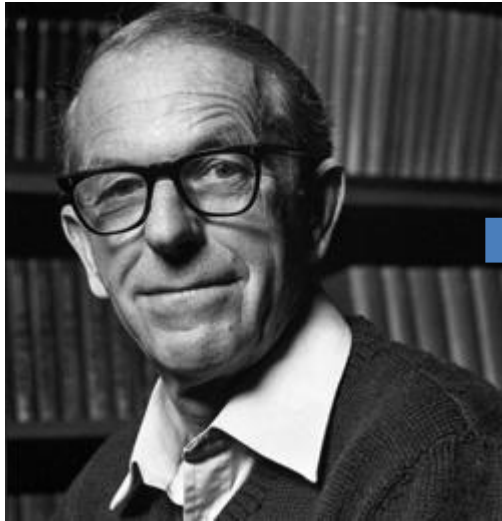
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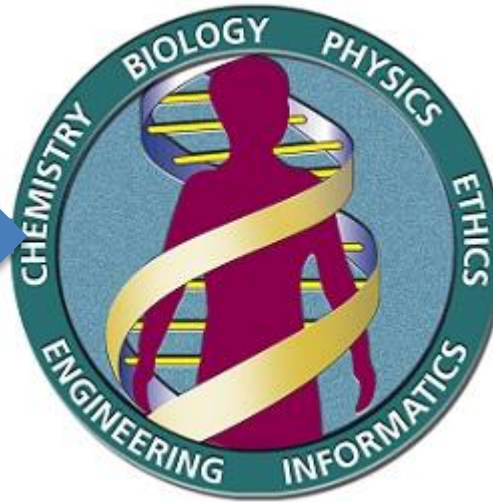
"a string"

Where we are today in the life sciences

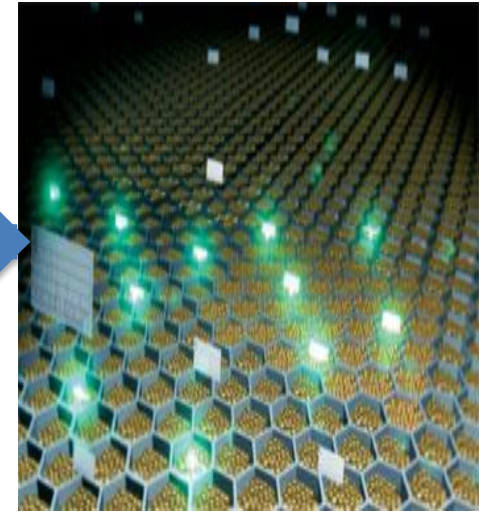
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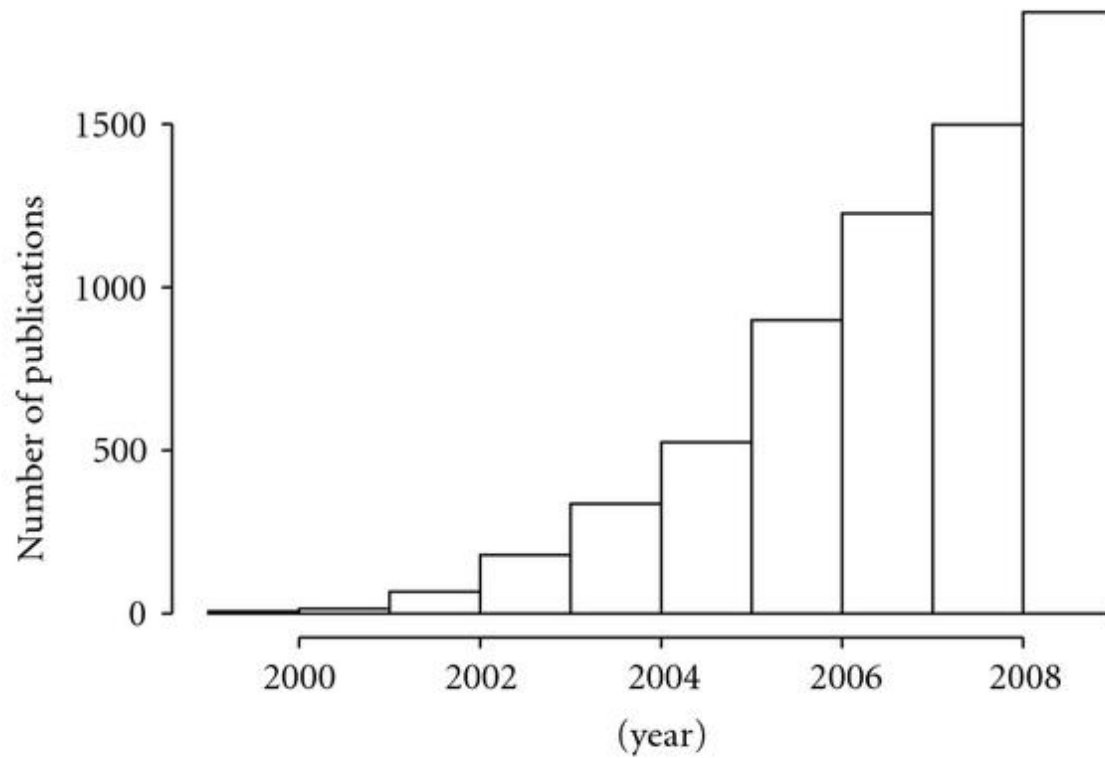


2000:
11 years of work = 1
human genome



2011: 1 human genome
before coffee break!!

Active area of research



Job opportunities

Programmer Analyst

Location : UCLA Center for Neurobehavioral Genetics, Los Angeles, California, USA

Deadline for applications : unknown.

Description :

Description:

The Informatics Center for Neurogenetics and Neurogenomics, Semel Institute - UCLA, is looking for a programmer analyst to join our fast growing team. We provide advanced informatic and analytic supports to neuroscientists at UCLA in a wide range of basic, clinical and translational research projects. These projects generate terabytes of large-scale genotyping, gene expression array and next-generation sequencing data. The programmer analyst will develop databases and web interfaces to provide real-time and interactive access to data and analytical results, develop and maintain a large-scale laboratory information management system (LIMS), implement and optimize analysis pipelines, and maintain the center's computing infrastructure. The successful candidate will be able to participate in and contribute to cutting-edge research in neuroscience. Salary will be competitive and commensurate with experience, and UCLA offers an impressive range of benefits.

Job opportunities

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Ensembl Developer - Vertebrate Genomics

Location : European Bioinformatics Institute (EBI), Hinxton, United Kingdom

Deadline for applications : unknown.

Description :

We are seeking a talented and motivated Bioinformatician to join the Ensembl Production team, part of the Ensembl Project at the European Bioinformatics Institute (EBI) located on the Wellcome Trust Genome Campus near Cambridge in the UK.

Job opportunities

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Bioinformatician

Location : Max Planck Institute for Molecular Genetics, Berlin, Germany

Deadline for applications : unknown.

Description :

Primary responsibilities:

The Max Planck Institute for Molecular Genetics is an international research institute with approximately 470 employees, working in the field of medical genomics. A special focus lies on genome analysis of man and other organisms.

Job opportunities

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Deadline for Bioinformatician

Description

Location

Bioinformatics Engineer

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Deadline

Location : J. Craig Venter Institute, Rockville, Maryland, USA

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Deadline for applications : unknown.

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RESPONSIBILITIES:

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The Bioinformatics Engineer is responsible for operating, supporting, maintaining, developing, integrating, and deploying bioinformatics tools and software supporting the scientific mission of the JCVI. Applicants should have substantial knowledge with genome-scale bioinformatics, including assembly, comparative genomics, analysis of protein families, multiple sequence alignment, and phylogenetic analyses.

focus lies

Bioinformatics Engineers contribute to all phases of the software engineering lifecycle to maintain JCVI's scientific leadership through the cost-effective application of bioinformatics and software engineering tools and techniques to solve JCVI's bioinformatics challenges.

Job opportunities

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Deadline for **Bioinformatician**

Description Location **Bioinformatics Engineer**

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Bioinformatics Analyst

Location : Cornell University, Ithaca, New York, USA

Deadline for applications : unknown.

Description :

A bioinformatics analyst position is available at Boyce Thompson Institute for Plant Research, Cornell University. The position requires carrying out computational analysis of large-scale omics datasets and developing resources to efficiently store and integrate these datasets. The candidate is expected to work independently, as well as within a diverse multidisciplinary team.

Major responsibilities:

Analyzing next-generation sequencing datasets, including DNA-seq, RNA-seq, ChIP-seq, methylC-seq and small RNA sequencing;

Developing novel algorithms/pipelines for high-throughput omics dataset analysis and integration;

Maintaining and developing existing and novel bioinformatics databases and packages;

Bioinformaticians are in Short supply

PAC code DC702

