E-BioSci
a platform for e-publishing and information integration in the life sciences

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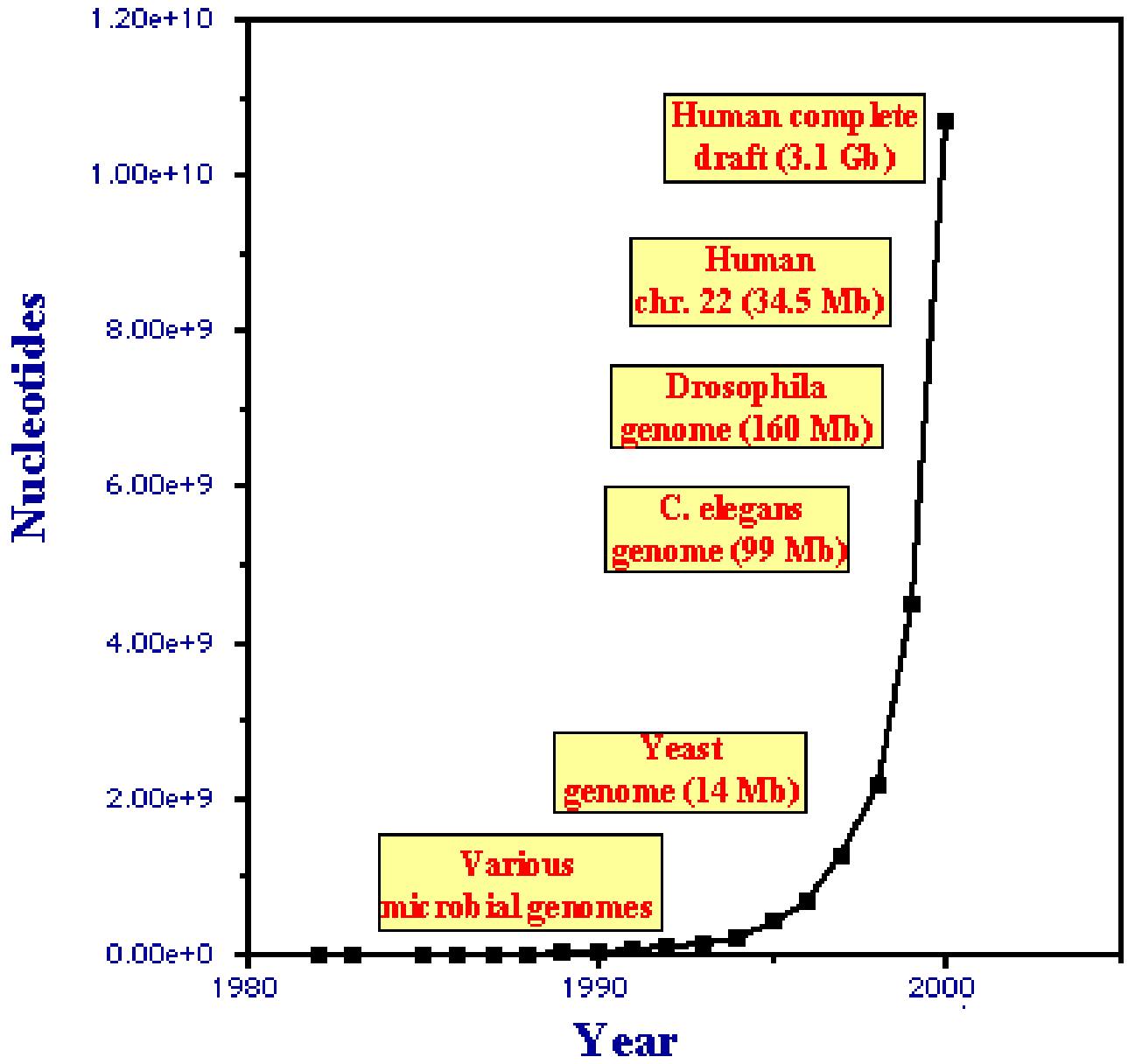
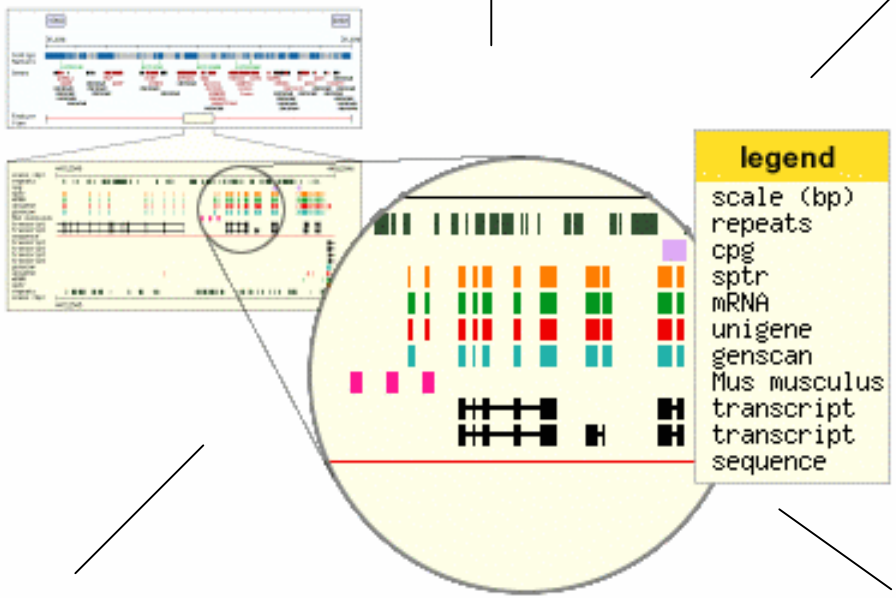
Exponential database growth (EMBL database)



The many facets of genomics



Genes

RNAs

Proteins

Disease

Interactions

Evolution

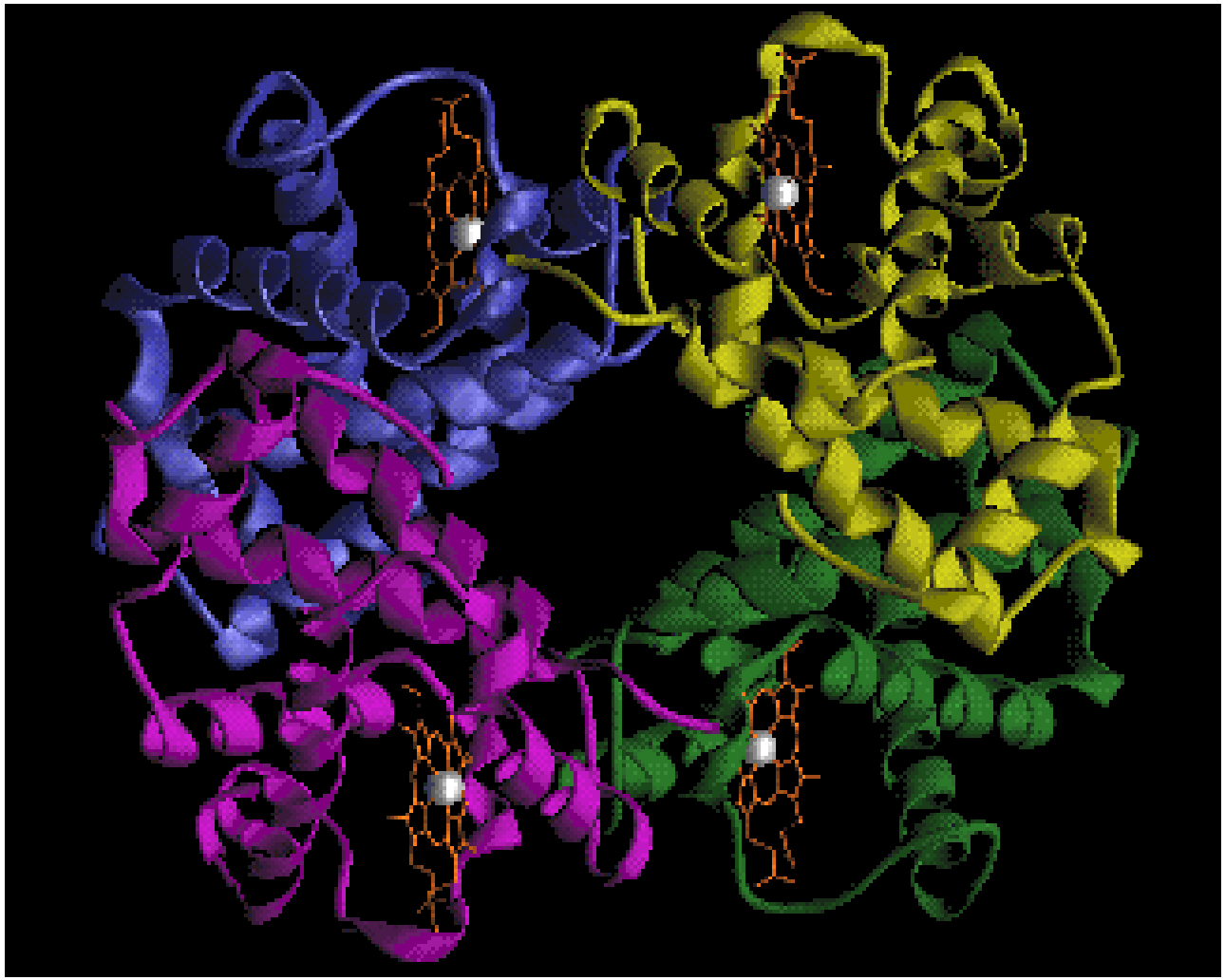
Populations

Diversity

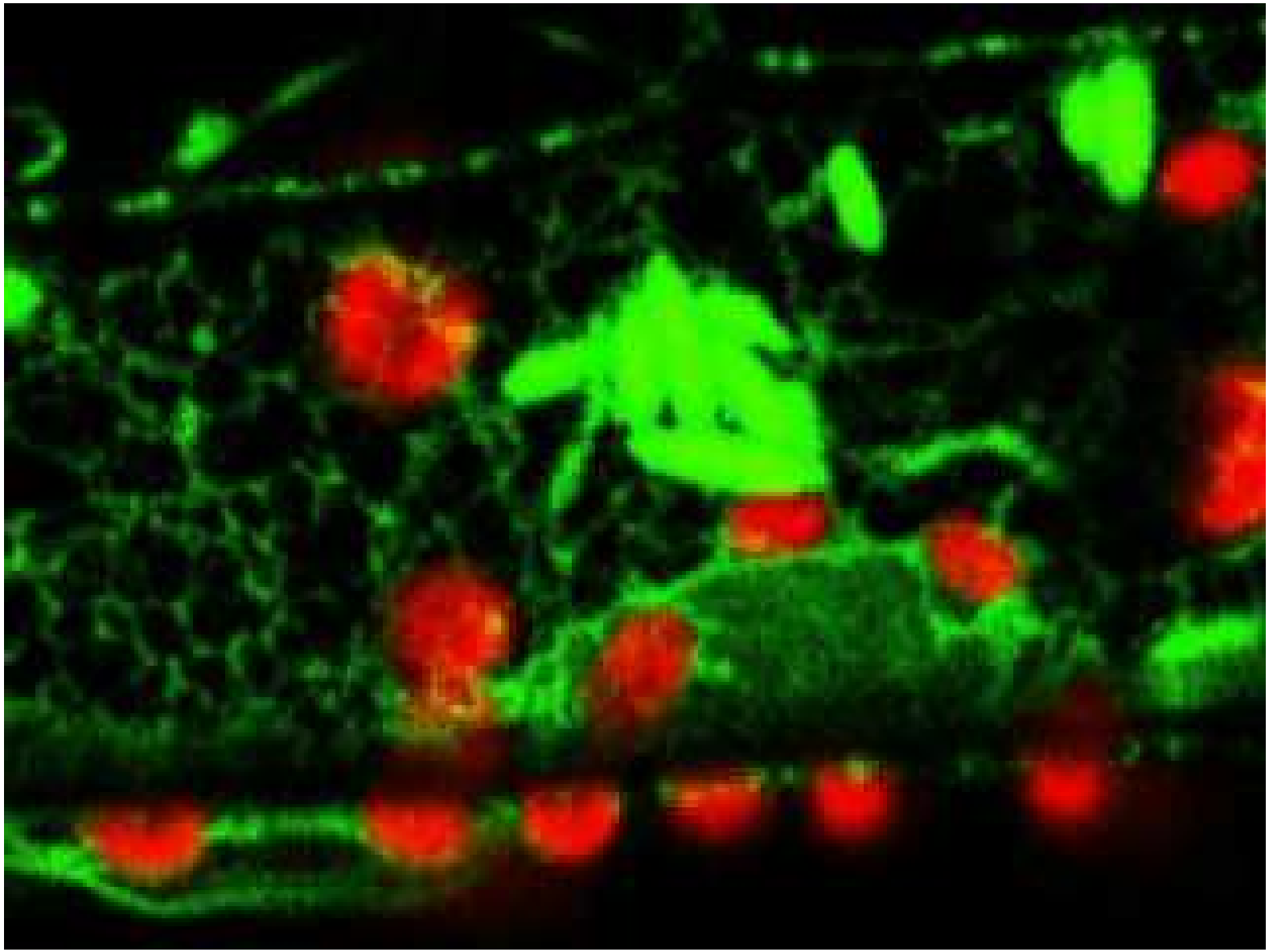
Regulation

Signalling

Molecules in motion



Viewing the world of the living cell



Paper is becoming an inadequate medium…

- Some data (types) require more space than is available
- Some data (3-D structures, movies) cannot be printed
- The reader may wish to have the data in computer-readable form

The paper publication is becoming simply a summary pointer to the electronic version

Retrieving information in an ideal world…

- Interconnect
- Search/navigate/explore
- Access information
- Extract/manipulate
- Analyze
- Integrate and visualise

Hurdles to information exchange

- Heterogeneous nature of biological information
- Absence of a uniform, scalable and generally-implementable means of database linking
- Varying degrees of access to full text information

E-BioSci

- Distributed network of information resources
- Europe-based; world-wide role
- Multiple entry points; different language formats
- Access to abstracts, full text, factual databases, multi-media
- Effective linkages between databases and literature
- Host and archive for peer-reviewed e-publications

Why insist on peer-review?

- Authors rely on the perceived quality of their publications as support for funding applications and career advancement

- Readers want guarantees that technical standards have been met, that the conclusions are adequately supported by the experimental data and that the presentation meets acceptable standards of clarity

E-BioSci differs from PubMed Central

- Will NOT insist on transfer of information
- WILL work in cooperation with content owners
- Will NOT contain material that is not refereed or that does not meet its criteria of scientific quality
- WILL permit e-publication on multiple sites

E-BioSci's goals

- To encourage standard protocols for access rights verification
- To promote wider use of structured documents
- To strive for increased connectivity of digital objects
- To aid development of full-text search tools
- To stimulate provision of free access to information
- To encourage conversion of back literature to digital form

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EMBO