Introduction to the European Molecular Biology Laboratory (EMBL) & the EMBL-European Bioinformatics Institute (EMBL-EBI)

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Where is this?
Correct answers 1:

• The building opposite this one
• Physically located on the Wellcome Genome Campus…
• …in Hinxton…
• …South Cambridgeshire…
• …in the UK?
• Hmmm…not quite…
Correct answer 2: Extraterritorial EMBL land through a treaty with the UK government

Dictionary

Search for a word

extraterritorial

/ˌekstrəˈtɛrɪərɪəl/

adjective

(of a law or decree) valid outside a country's territory.
"an extraterritorial decree of assassination from abroad"

- denoting the freedom of embassy staff from the jurisdiction of the territory of residence.
  "foreign embassies have extraterritorial rights"
- situated outside a country's territory.
  "extraterritorial industrial zones"
Extra-territorial
not
Extra-terrestrial
What is EMBL?

- EMBL founded through an *International Treaty* in 1973 to promote co-operation among European States in molecular biology.
- This makes EMBL an Intergovernmental Organisation (IGO).
- Some better known examples of IGOs are CERN, NATO, UN, INTERPOL, ESA.
- Through its charter as well as public international law, EMBL has certain privileges and immunities, e.g., inviolability of archives, immunity from jurisdiction and execution, and certain tax privileges.

*https://www.embl.de/aboutus/general_information/organisation/hostsite_agreement/un_agreement.pdf
**https://www.embl.de/aboutus/general_information/organisation/hostsite_agreement/agreementUK_en.pdf
History and Geography of EMBL

- EMBL operates from six sites across Europe:
  - **Heidelberg, Germany** (est. 1973) - Head Quarters
  - **Hamburg, Germany** (est. 1975) - research and services for structural biology
  - **Grenoble, France** (est. 1976) - research and services for structural biology
  - **Hinxton, UK - European Bioinformatics Institute (EMBL-EBI)** (est. 1994)
  - **Rome, Italy** (est. 1999) - epigenetics and neurobiology
  - **Barcelona, Spain** (est. 2017) - tissue biology and disease modelling
History EMBL-EBI

• 1981 Founding of the EMBL Data Library at EMBL in Heidelberg, Germany – goal was to establish a central database of DNA sequences - first central depository of nucleotide sequence data in the world

• **Host site agreement with UK** in 1994 for establishment of EMBL-EBI as a centre for bioinformatics (close proximity to the major sequencing efforts for the Human Genome project at the Wellcome Trust Sanger Institute)

• EMBL-EBI now…
  • makes the world’s public biological data freely available though services and tools
  • performs basic research
  • provides professional training in bioinformatics
Happy Birthday!!!

Subject: [All] The EBI opened 25 years ago!

To: all at ebi <all@ebi.ac.uk>

Dear All,

on 1.9.1994 the EBI opened. Thirty staff moved into their PortaKabins here on Campus in Hinxton. Looking forward to celebrating this event with all of you on Friday and Saturday!

Rolf
How EMBL is funded: EMBL council – “core funds”

- Indicative Scheme = 5 year plan
- Negotiated with the EMBL council made up of the EMBL member states (27 member states, 2 associate member states)
- MRC* sits on EMBL council as UK rep
- ~ 50% of EMBL-EBI’s funds are “core”

* https://mrc.ukri.org/funding/science-areas/international-and-global-health-research/subscriptions-partnerships/embl/
How EMBL-EBI is externally funded

27 Funders, 8 countries

NIH, 35%

BBSRC 16%

EC 12%

WT 22%

OTAR 7%

OTHER 5%

MRC 2%

HFSPO <1%

ERC, 1%

External income in 2017 to EMBL-EBI
EMBL-EBI Grants Office

- Central contact point for all matters relating to the administration of external funds
- Pre- and post-award (cradle to grave) administrative support
  - 48 Group and Team Leaders
  - 159 proposals
  - 165 live projects
Functions of EMBL-EBI by expenditure

- Data Services
- Research
- Training
- Systems (data infrastructure)

Figures based on 2018 income
External funding to EMBL-EBI over time
Growth in Staff Numbers at EMBL-EBI
Summary

- EMBL is an Intergovernmental Organisation (IGO)
- EMBL-EBI makes the world’s public biological data freely available to the scientific community via a range of services and tools, perform basic research and provide professional training in bioinformatics
- EMBL-EBI is funded ~50:50 by EMBL core funds and external grant funding
- Most grant funding is for teams that provide bioinformatics services (more on this soon)
- As bioinformatics resources are global, the funding we receive is also global
- Largest funder is the US National Institutes of Health (also more on this soon)
Questions?
How EMBL is funded: External income from grants

EMBL-EBI €36.5m

Rest of EMBL €22.1m

Figures based on 2018 income