



ELIXIR and Finland

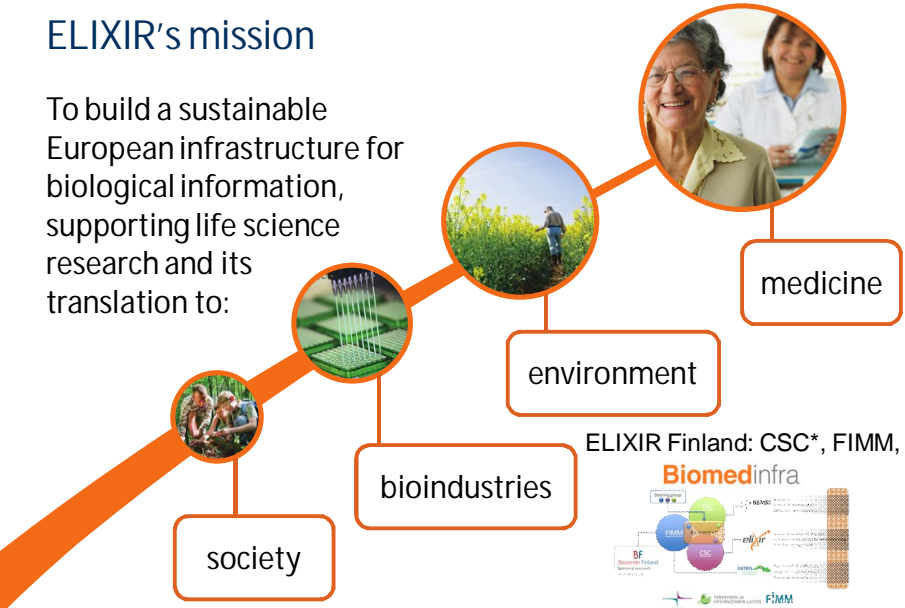
European Life Sciences Infrastructure for Biological Information
www.elixir-europe.org



Tommi Nyrönen CSC for
Haka seminar 13.2.2013



ELIXIR's mission

To build a sustainable European infrastructure for biological information, supporting life science research and its translation to:



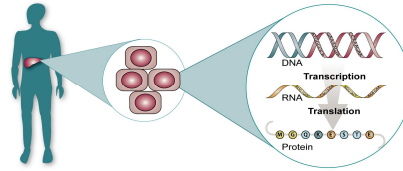
- society
- bioindustries
- environment
- medicine

ELIXIR Finland: CSC*, FIMM, THL

ELIXIR EGA AAI : enabling Sensitive data access

- Data Access Committees (DACs) control research access to sensitive data resources e.g. national health cohorts (Finrisk, Nordicdb). Research on such data need an authentication and authorisation infrastructure (AAI).



- Federated identity management for research (FIM4R) working group
- *ELIXIR AAI (authentication) pilot*. CSC, EBI, FIMM, EGI.eu. Produces a proof-of-concept resource entitlement tool "REMS" for authorisation for sensitive data providers. Leverages eduGAIN. Delivery in April 2013

Legislation and/or commercial interests restrict movement of sensitive data

Every national health system will need **expertise to interpret sequence data** and treat patients accordingly.

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Broader context: Federated Identity Management for Research Collaborations

- <http://cds.cern.ch/record/1442597>
- Status of the activities in research communities
- Use cases
- Recommendations

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Status

user community	other projects	# users	chosen technology	status	IGTF
photon/neutron facilities	EUROFEL, PanData, CRISP	>30,000 visiting researchers per year	Shibboleth/SAML	Umbrella prototype	no
Social Sciences and Humanities	DARIAH, CLARIN, CESSDA, DASISH, Bamboo	Hundreds now, potential for 10000+ across SSH	Shibboleth/SAML	Prototype CLARIN Service Provider federation deployed in 3 countries	yes
high energy physics	WLCG	10,000+ globally	X509	Production	yes
earth sciences	Earth System Grid Federation, GENESI-DEC, CMIP5, Metafor, IS-ENES, CORDEX, Exarch, Climate Data Exchange	5000+ for CIMPS	OpenID, X.509 and SAML	Production - earth system grid	Not yet but foresee for EGI integration
life sciences	ELIXIR, BioMedBridges, BBMRI, NCoEDG & potentially 10 BMI ESFRI projects	3 million researchers access data via EBI website each year	not chosen yet	Security is included in BioMedBridges project workplan and a pilot project is being planned with EGI	no

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Federated Identity Management Recommendations

- **Risk Analysis** from the point of view of a research infrastructure provider to reassure the security officers
- **Pilot Studies** Ongoing: Umbrella photon/neutron physics, ELIXIR AAI pilot and BioMedBridges biomedical, CLARIN humanities
- **Funding model and governance structure** common policy and trust framework
- **Credentials revocation** issued by the IdP upon an incident
- **Separation of Authorization and Authentication** formal separation of the authentication performed by the IdP and the authorization performed on behalf of the SP
- **Attribute delegation** support attribute authority by the research community in addition to the IdP and SP e.g. data access committee
- **Levels of Security** "no one size fits all "

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