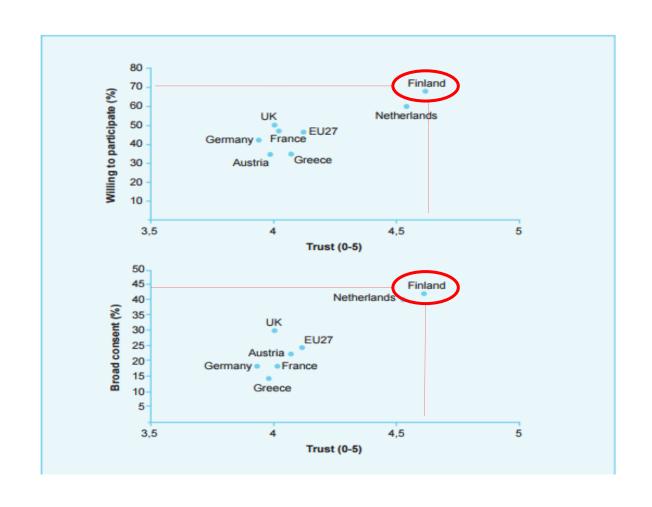


Most efficient health Innovation friendly care system legislation Governmental backing Public private **MAINTAINING PERSONALIZED** cooperation model **HEALTH & HEALTH WELLBEING** National health registers Why Finland? National centers Flexible business of excellence environment CONTINUOUS, VALUE-BASED Buzzing start up culture **DIGITAL** TRANSFORMATION, Culture of trust **HEALTHCARE SMART HEALTH** Global leader in digital health **INCREASE OF** Highly educated **DATA** citizens and experts Positive Health tech trade balance Biobanks Access to data team Unique genetic ancestry

FINLAND IS A TRUST-BASED SOCIETY



The TRUST of the citizens is crucial for the development of the data-based health care innovations

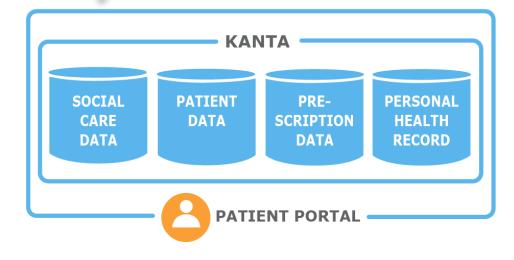




FINLAND HAS 100% ELECTRONIC MEDICAL RECORDS DIGITALLY ACCESSIBLE VIA KANTA SERVICE

- Patient, social care and prescription data gathered in a national databank.
- Healthcare professionals can access the needed data nationwide, store patient records and make prescriptions.
- Citizens can browse own medical records and prescriptions and order repeat prescriptions in the online service.

KANTA is an entity of digital services, which brings benefits for citizens, pharmacies and the social welfare and healthcare sector

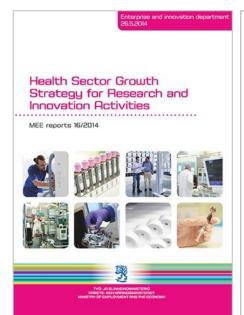




GOVERNMENT'S HEALTH SECTOR GROWTH STRATEGY - TOWARDS A NATIONAL DATA-BASED INNOVATION ECOSYSTEM

Political commitment of Finland to be

- An international hub of versatile and high quality scientific research, inventions and innovations.
- A global partner in public-private collaboration
- A dynamic operating environment for new companies.
- A reliable partner for the international growth of companies.
- An attractive target country for health sector investment.
- A model country of sustainable personalized healthcare.

















Centers of excellence

- Highest-class knowhow, research and education

Finnish government is investing over 30 million euros for personalized medicine research, innovation, education and data management centers of excellence.

Establishing

- National Cancer Center FICAN
- Genome Center
- Pharmaceutical Development Center
- Neurocenter
- Enhancing the joint activities the biobanks





Enabling legislation

BIOBANK LAW 2012

Enables faster drug discovery and clinical trials

Access to high quality data and biological specimens

ACT ON THE SECONDARY USE OF HEALTH AND SOCIAL DATA

2019

Enables authorities, institutes and companies secure access to the health and social data in Finland



DATA: National one stop-shop

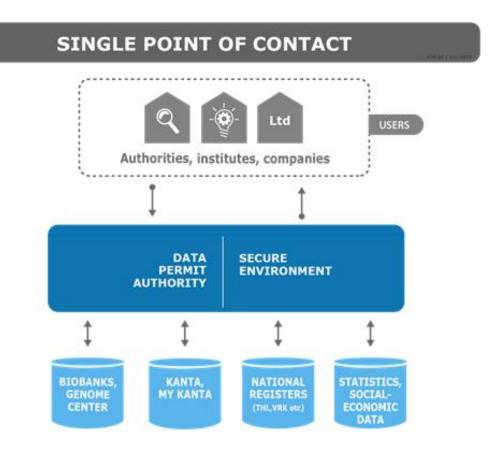
FOR THE SECONDARY USE OF HEALTH AND SOCIAL DATA

FINDATA

- Findata grants permits when data are requested from multiple registers
- Collect and process the data
- Provide the data in a secure IT environment for data users
- Help desk for data users

Findata goals

- Enable effective and safe processing and access to data
- Eliminate overlapping admistrative burden
- Enhance data protection and security
- Improve register data quality





Source: https://www.findata.fi/en/



Fingenious® Service

A digital gateway to Finnish biobanks and biomedical research – the 1st in class service in Europe.



Built to serve academic and industry researchers and to advance medical research globally.



A single point of contact for all public biobanks and their samples and data.

One contract with all the biobanks via Finnish Biobank Cooperative – FINBB.







FINNGEN INNOVATION ECOSYSTEM



Coordinating partners:













Finnish partners

















Funding partners:































InFLAMES in a nutshell

InFLAMES belongs to the Academy of Finland's Flagship Programme, which supports high-quality research and increases the societal impact emerging from the research.



Consortium of 2 Universities

- University of Turku
- •Åbo Akademi University



50 Group Leaders

•30 Professors and 20 Senior Researchers



Over 300 Researchers



Approx. 70 Doctoral Candidates

- •InFLAMES Doctoral Module
- Industrial PhD programme



12 Visiting Professors

•Top international researchers



2 Professors of Practice



Steering Committee and Scientific and Impact Advisory Board



High quality research infrastructure



<u>Unique innovation network and ecosystem</u>

- •12 Spin-off companies
- •12 Large pharmaceutical companies
- •7 Public partners









InFLAMES

Areas of expertise

PLATFORMS

- leukocyte differentiation
- immune activation
- leukocyte migration
- humanized mouse models

I M M U N O L O G I C A L D I S E A S E M O D E L L I N G

- genomics, transcriptomics, proteomics
- single cell omics
- bioimaging
- computational tools for data analyses

D E E P I M M U N O P R O F I L I N G

- structure-based drug development
- small molecule drugs
- biological drugs

I M M U N O D R U G D E V E L O P M E N T

PILOT STUDIES including CLINICAL TRIALS

- detection of inflammation in PET
- novel tools for diagnostic tests
- biomarkers for inflammatory diseases
- precision immune medicine (Molecular Immunology Board)
- I M M U N O D I A G N O S T I C S

- new treatments for inflammation and infections
- future vaccinations
- immuno-oncology
- new targets

IMMUNOTHERAPY





Technology supporting smart ageing and care at home KATI programme - vision

Technology solutions at home

- · Based on individual needs
- Technical support available
- Supporting preventative and family care
- Supporting functioning capability and increasing quality of life and safety
- Prolonging living at home
- Enabling novel and improved services

Healthcare professional

- Knows how to utilize data provided by technology at home
- Resources allocated to meaningful work



Family member

- Can easily reach both the elderly person and the care worker
- Has access to up-to-date information about the situation and of the care given to the elderly



Homebased services

- Rightly timed
- Enables quick communication and check-ups









Thank you!



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