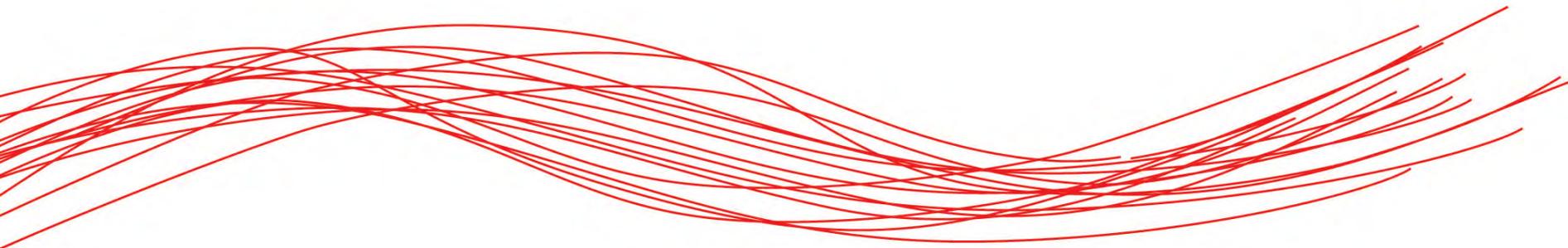


Approaches to improve availability of data and resources generated through EU FP-funded Research



European Commission
Research & Innovation DG
Desaintes, Christian

EUROPEAN UNIVERSITIES, PUBLIC RESEARCH CENTERS AND INSTITUTIONS IN EU FLU PROJECTS :

- ☀ Human influenza
- ☀ Animal influenza

PRIVATE COMPANIES :

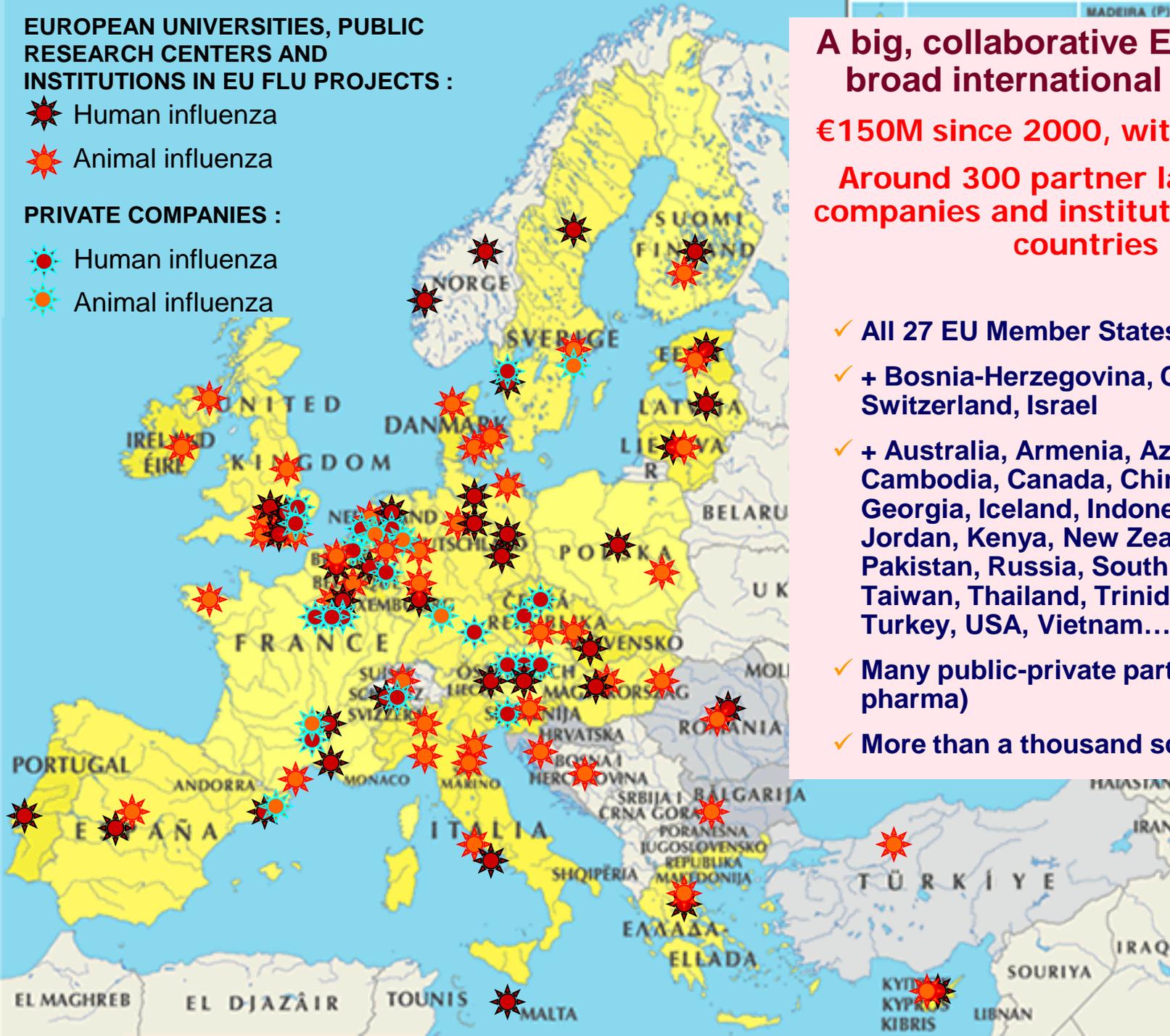
- ☀ Human influenza
- ☀ Animal influenza

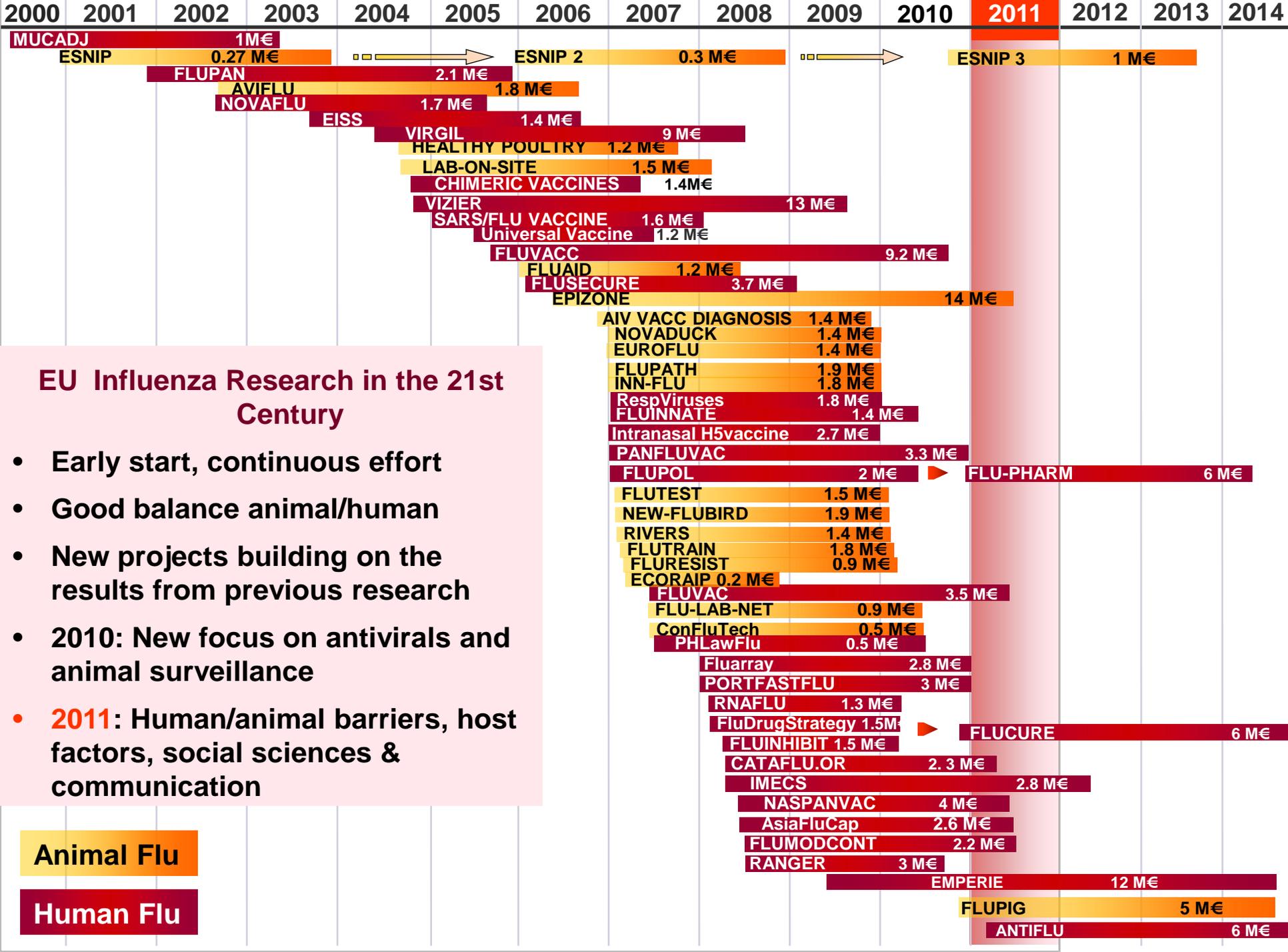
A big, collaborative EU effort with broad international dimension

€150M since 2000, with 54 projects

Around 300 partner laboratories, companies and institutions, from 57 countries :

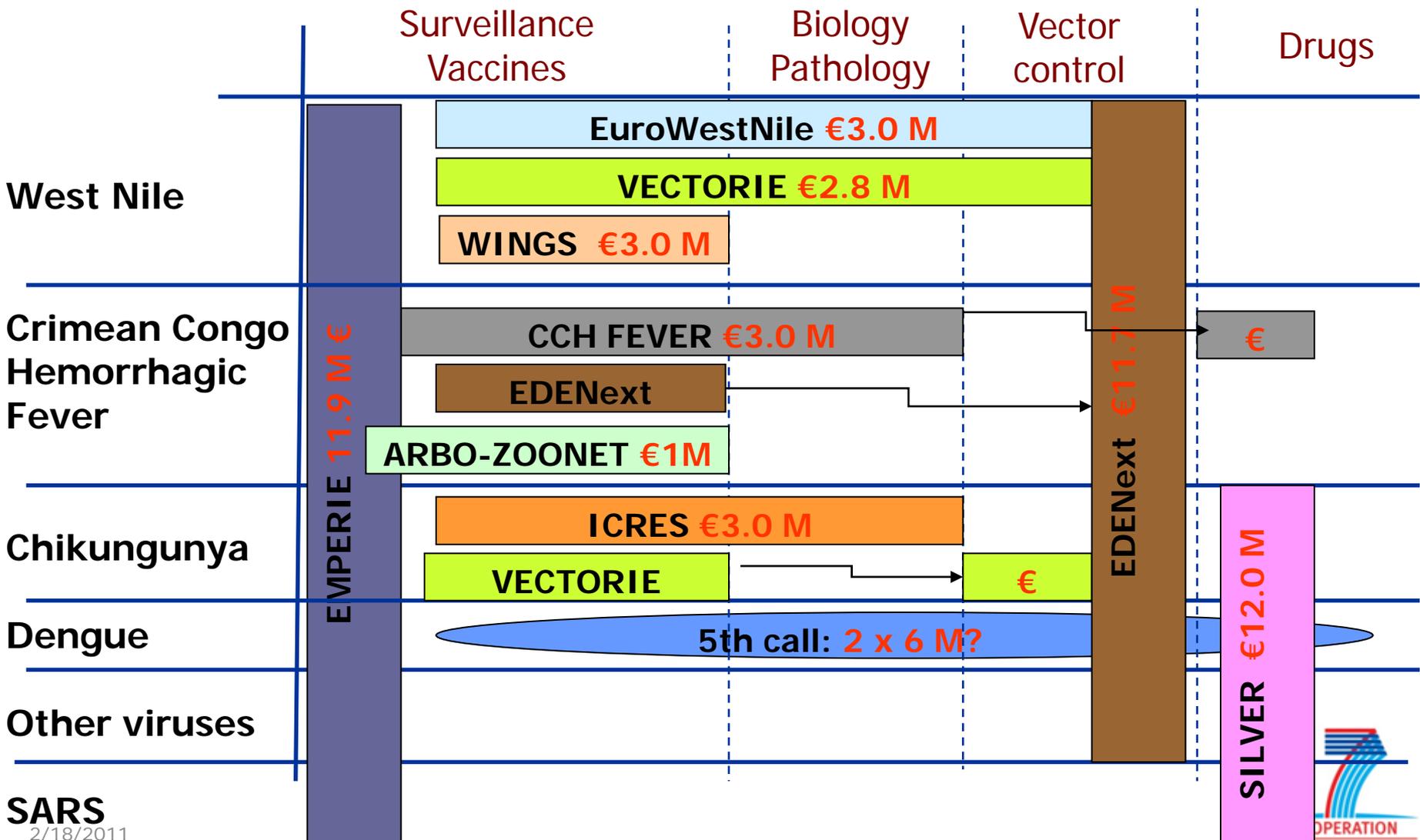
- ✓ All 27 EU Member States
- ✓ + Bosnia-Herzegovina, Croatia, Norway, Switzerland, Israel
- ✓ + Australia, Armenia, Azerbaijan, Cambodia, Canada, China, Gabon, Georgia, Iceland, Indonesia, Iraq, Jordan, Kenya, New Zealand, Nigeria, Pakistan, Russia, South Africa, Syria, Taiwan, Thailand, Trinidad and Tobago, Turkey, USA, Vietnam...
- ✓ Many public-private partnerships (SMEs, pharma)
- ✓ More than a thousand scientists





Other emerging viral diseases

FP7 Health projects: >€60M



Distribution of Data & resources generated by EC projects

- **The EC funds many projects generating extensive data & resources for the scientific community**
 - ▶ mouse KO, metagenomics, etc
- **The EC funds several infrastructures for making data & resources available to the scientific community**
 - ▶ EBI, EVA, EMbaRC, ERINHA, BBMRI, etc

FP6 and FP7 infrastructure projects for BRCs (1)

Microbial resources

EMbaRC 4.2 M€

Call 2012 ?

Virus archives

EVA 6.3 M€

Call 2012 ?

Marine genomic resources

ASSEMBLE 8.7 M€

Call 2012 ?

Call 2009 – EMBRC

Plant genetic resources

Call 2009

Native seeds

ENSCONET 2.5 M€

Call 2009

Mosquito resources

INFRAVEC 8.5 M€

Animal genetic resources

Call 2009

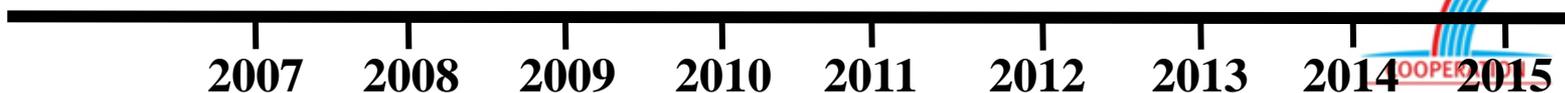
Mice

EMMAinf 6.0 M€

EMMAservice 8.0 M€

Call 2012 ?

Infrafrontier 4.5 M€



FP6 and FP7 infrastructure projects for BRCs (2)

Primates

EUPRIM-Net 4.8 M€

Call 2009

Biobanks

BBMRI 5 M€

Call 2009

Binders

ProteomeBinders 1.8 M€

Data

FELICS 16.7 M€

SLING 8.8 M€

Call 2010 ?

ELIXIR 4.5 M€



Data sharing policy in the EC Framework Programmes

- **No current unified policy in FPs' texts**
 - ▶ Find balance between providing sufficient incentives for innovation and facilitating the diffusion of knowledge
- **Clause on open access in new FP7 projects**
 - ▶ Pilot phase on >800 projects signed >08/08 in 7 areas
 - ▶ Embargo of 6 months (12 in social sciences & humanities)
 - ▶ After 2012, open access to become general principle
- **Several "ad hoc" actions**
 - ▶ Specific mention in some topics of the Work Programmes
 - ▶ Specific actions in some international collaborative efforts

Examples of projects with EC policy on data sharing

Genetic epidemiology

ENGAGE €12.0 M *P3G*

Genomics

BASIS €10.5 M *ICGC*

CAGEKID €10.5 M *ICGC*

METAHIT €11.4 M *IHMC*

IHMS €2.0 M *IHMC*

Model organisms

EUCOMMTOOLS €12.0 M *IKMC*

I-DCC €2.7 M *IKMC*

+

Epigenetics

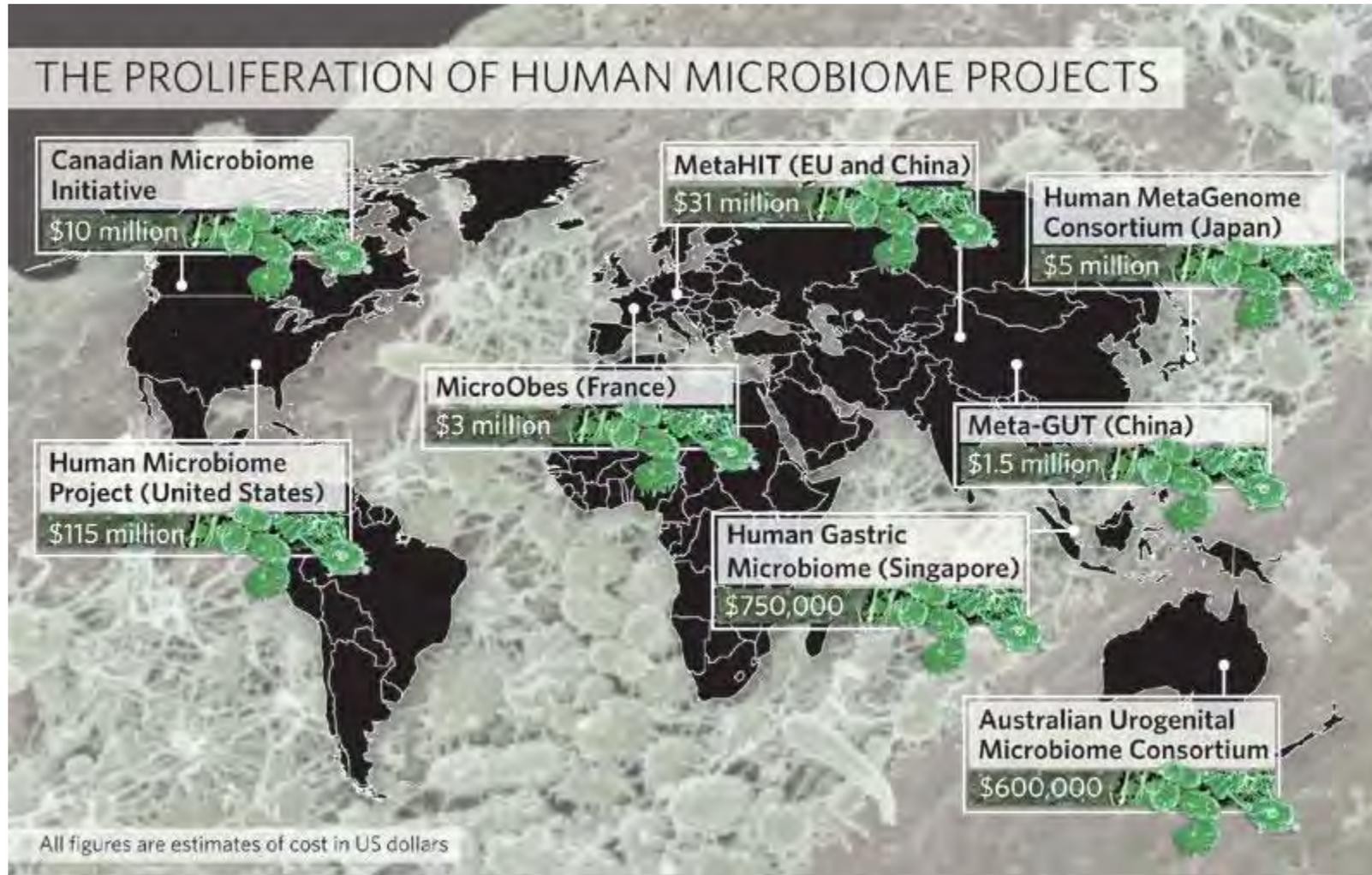
HEALTH.2011.2.1.1-1 €30.0 M *IHEC*

phenotyping

HEALTH.2013? €? M *IMPC*

P3G: PUBLIC POPULATION PROJECTS IN GENOMICS - *ICGC*: INTERNATIONAL CANCER GENOMICS CONSORTIUM
IHMC: INTERNATIONAL HUMAN MICROBIOME CONSORTIUM - *IKMC*: INTERNATIONAL KNOCKOUT MOUSE CONSORTIUM
IHEC: INTERNATIONAL HUMAN PHENOTYPING CONSORTIUM - *IMPC*: INTERNATIONAL MOUSE PHENOTYPING CONSORTIUM

Human Microbiome projects in the world*



International Human Microbiome Consortium (IHMC)

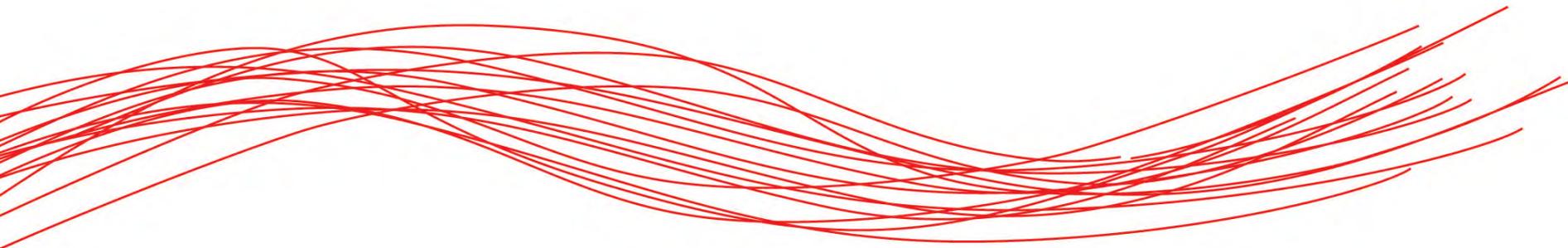
- **Aim: coordinate efforts in human microbiome research**
- **Formalized in Letter of Intend signed in 09/08 (EC & NIH)**
- **Current members present in all 5 continents**
 - ▶ 7 full members (US, EU, FR, CA, AU, JP, GM), 2 observing members (KR, IE), 2 potential members (CN, SG)
- **5 Principles:**
 - ▶ Free and open release of data and resources generated;
 - ▶ sharing info on new approaches and technologies
 - ▶ sharing production plans (lists of microbes to be sequenced, plans for metagenomic sequencing and analysis, etc.)
 - ▶ Coordination of public communications (common Web portal)
 - ▶ Coordination of archiving and distribution

Policy of IHMC data release

- **Immediate release of sequence data**
 - ▶ Sequences & other types of molecular data (expression, proteomic, metabolomic) from micro organisms
 - ◆ Open access public databases
 - ◆ Set of metadata attached to sequence info
- **Human DNA & clinical data linked to microbial molecular data**
 - ▶ Controlled access databases, such as dbGAP or EGA
- **Consents and protocols**
 - ▶ open site
- **Up to 12 month publication moratorium**
 - ▶ clock starts only when all molecular data have been generated (by which point the full set of clinical data will be deposited)



Thank you



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Research DG
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