



Overview of Luxembourg's biomedical sector

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BEFORE THE GOVERNMENT'S LIFE SCIENCE INITIATIVE - INDIVIDUAL PUBLIC RESEARCH ACTORS



- **University of Luxembourg**
Faculty of Science, Technology & Communications – Life science Research Unit



- **Public Research Centre for Health**



- **Gabriel Lippmann Public Research Centre** with 3 major axes:
Sustainable management of natural resources (EVA) (including nutrition)
Innovative materials technology



- **Henri Tudor Public Research Centre**
Health Care Technologies - SANTEC

THE 2008 INITIATIVE



The Ministry of the Economy and Foreign Trade, The Ministry of Research and Higher Education & The Ministry of Health decide to launch a 5 years action plan for Health Sciences and Technologies

Why?

- Take an active role to tackle future healthcare challenges - sustainability of healthcare services
- Diversify the economy by developing knowledge-based, niches
- Create opportunities for Luxembourg's existing sectors

AFTER 2008: DEVELOP A CENTRE OF
EXCELLENCE IN MOLECULAR DIAGNOSTICS



Key Infrastructures:

Integrated BioBank of Luxembourg (IBBL)



Luxembourg Centre for Systems Biomedicine (LCSB)

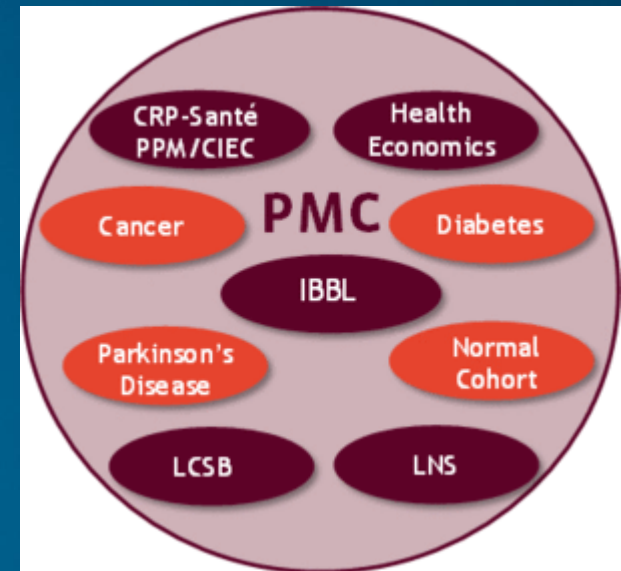


Demonstration Project:

Lung Cancer project: Identification and clinical
validation of prognostic proteomic biomarkers

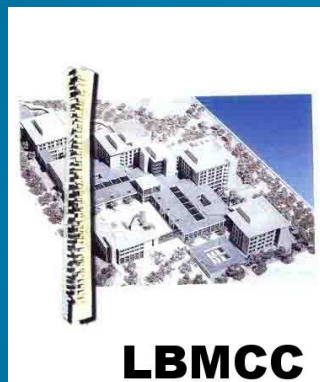
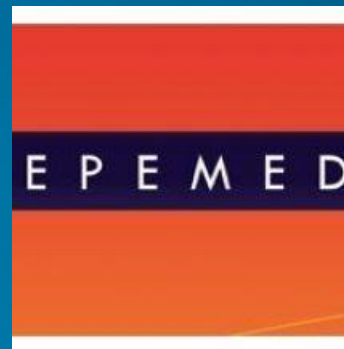


A COMMON PROJECT IS TAKING SHAPE

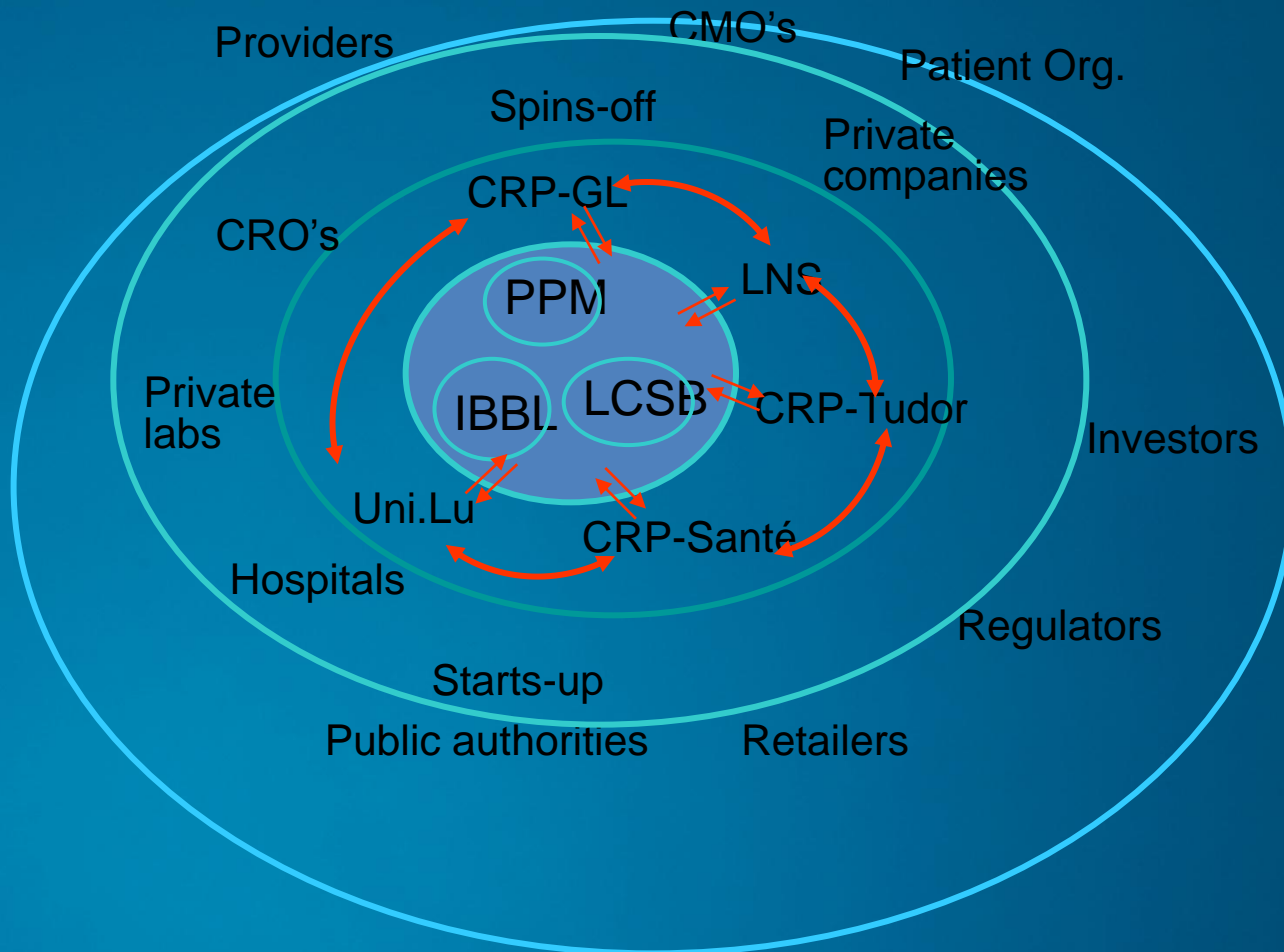


- Cancer (Breast, colon and lung)
- Neurodegenerative diseases, especially Parkinson
- Diabetes and life-style related diseases
- Normal population cohort

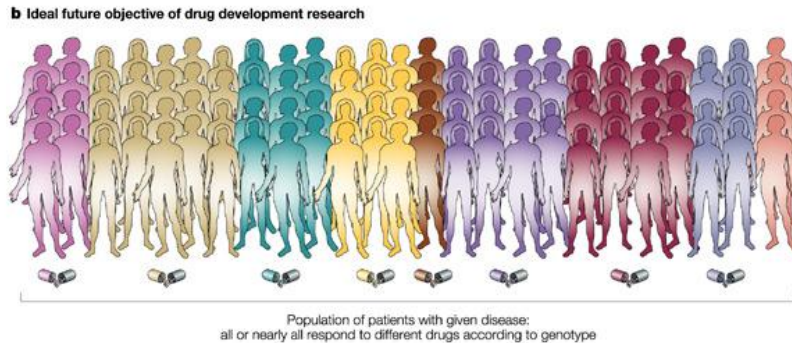
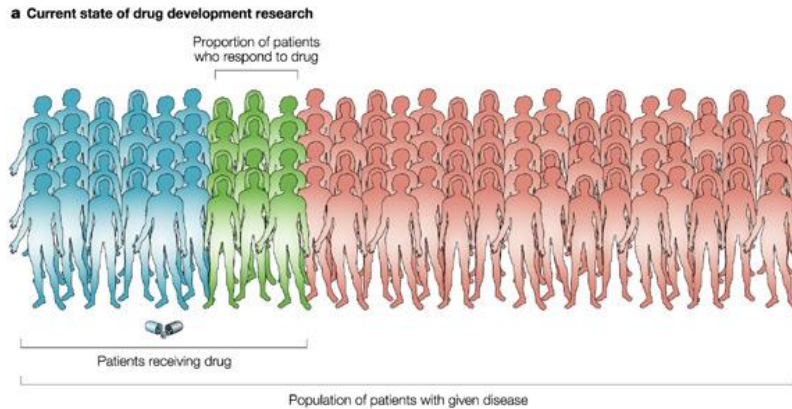
INCLUDING PRIVATE AND COMMERCIAL ACTORS
AS WELL



CONNECTING DOTS / CONNECTING ACTORS



WHY PERSONALIZED MEDICINE ... WHY LUXEMBOURG?



Nature Reviews | Drug Discovery

Providing each patient with the right drug, at the right dose, at the right time, at the right cost.

Better patient stratification needs better diagnostics!

WHY PERSONALIZED MEDICINE ... WHY LUXEMBOURG CONTINUED?



Better diagnostics needs an integrated, centralized approach

- Collecting, storing, managing & analyzing data;
- Collecting, transporting, storing & analyzing samples;
- Validating research results;
- Communicating diagnostics results;

There is a need for standard operating procedures; for data protection; for appropriate IT and communication infrastructure; for specialized logistics activity...

REGULATION / STANDARDS AS A COMPETITIVE ADVANTAGE



- We've done it with the financial sector as first movers.
- We have caught up quickly in the ICT sector, where we compete with the best
- A window of opportunity is currently open in the biomedical sector!

The right man (or woman 😊) is the one who seizes the moment
Johann Wolfgang von Goethe

Thank you for your attention!



Thanks to
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