

Luxembourg's Health Technologies Sector

Dr Jean-Philippe Arié

Key public academic research players

Luxembourg Centre for Systems Biomedicine (LCSB) - (2010) - University of Luxembourg (2003)

- *Parkinson's disease, metabolomics and disease network analysis*



Laboratoire National de Santé (1980)

- *pathologie morphologique & moléculaire, génétique, biologie médicale, microbiologie, médecine médico-légale, protection de la santé*



IBBL (Integrated BioBank of Luxembourg) (2008)

- *high-quality biospecimens and associated data*



Luxembourg Institute of Health (LIH) (1987)

- *oncology; infection and immunity; and population health*



Economic contribution

€175 MILLION
OF ADDED
VALUE
GENERATED IN 2016



0.38%
OF GDP
IN 2016

Sectorisation

DIAGNOSTIC &
MEDICAL DEVICES

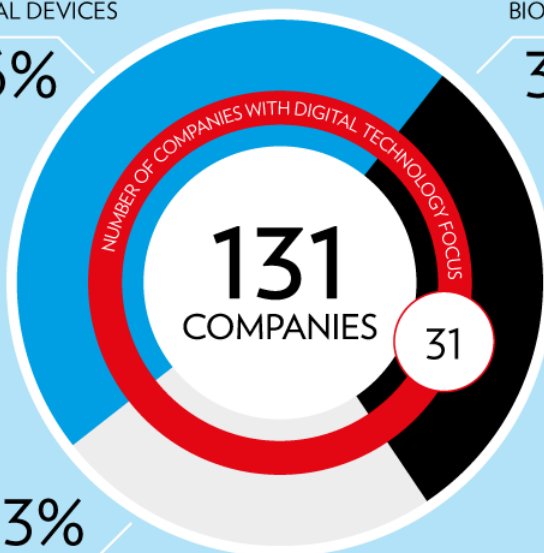
46%

BIO-PHARMA

31%

23%

OTHER HEALTH TECHNOLOGIES



Workforce

~1,600
employees (2016)

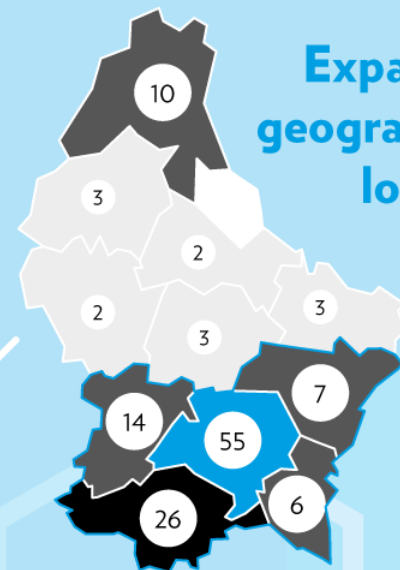
~80%

work in companies
with up to
10 employees



Expanding geographical location

58%
of health tech
companies are now
located outside
Luxembourg City



A young sector

50%
of today's
companies were
incorporated less
than 8 years ago



Sources: Orbis (Bureau van Dijk), Editus Data, Luxembourg Business Registers (LBR)

LUXINNOVATION
TRUSTED PARTNER FOR BUSINESS

**LUXEMBOURG
BIOHEALTH
CLUSTER**

THE GOVERNMENT
OF THE GRAND DUCHY OF LUXEMBOURG
Ministry of the Economy

Thank you!

■ **Ian Cresswell**
Business Luxembourg

■ **Dr Jean-Philippe Arié**
Cluster Manager - BioHealth

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TRADE & INVEST

Key business sectors



A magnet for talent

Cosmopolitan workforce



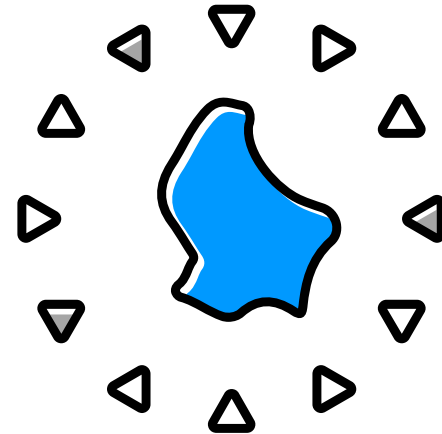
600,000 inhabitants

48%
foreigners

> 170
different
nationalities

+/-75%

foreign citizens in the workforce



200,000

cross-border workers from
Belgium, France and Germany

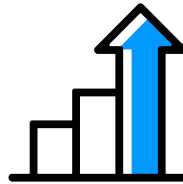
Stable and reliable

AAA rating



Sound macroeconomic
fundamentals

Consistent growth



Above EU average

Low inflation



Low unemployment



Social stability

Low government debt



2nd lowest in the EU

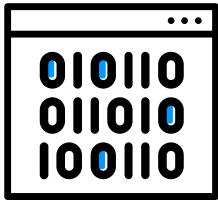
High competitiveness



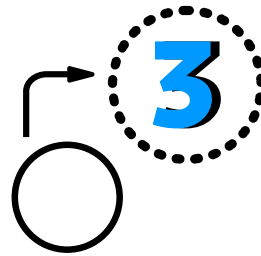
most competitive economy
in the world

Luxembourg: pursuing innovation

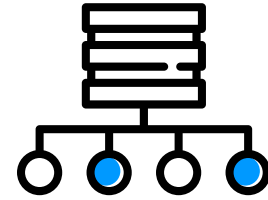
Forward-oriented policies



A data-driven economy



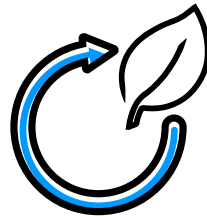
Third industrial revolution



A European HPC centre



Space resources



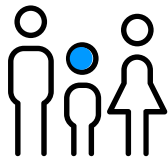
Circular economy



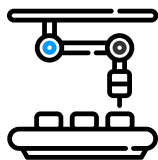
Autonomous driving

Luxembourg as a living lab

Size and agility



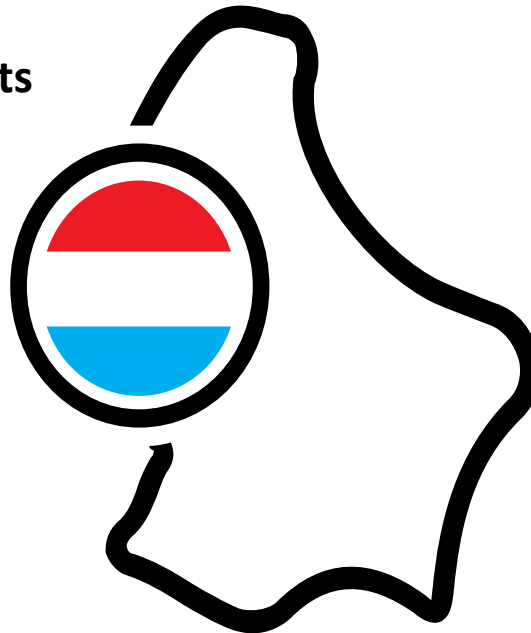
Varied population segments



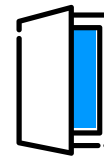
On the cutting edge of new technology



Open to testing and adapting



Diverse physical environments



Easy access to decision-makers

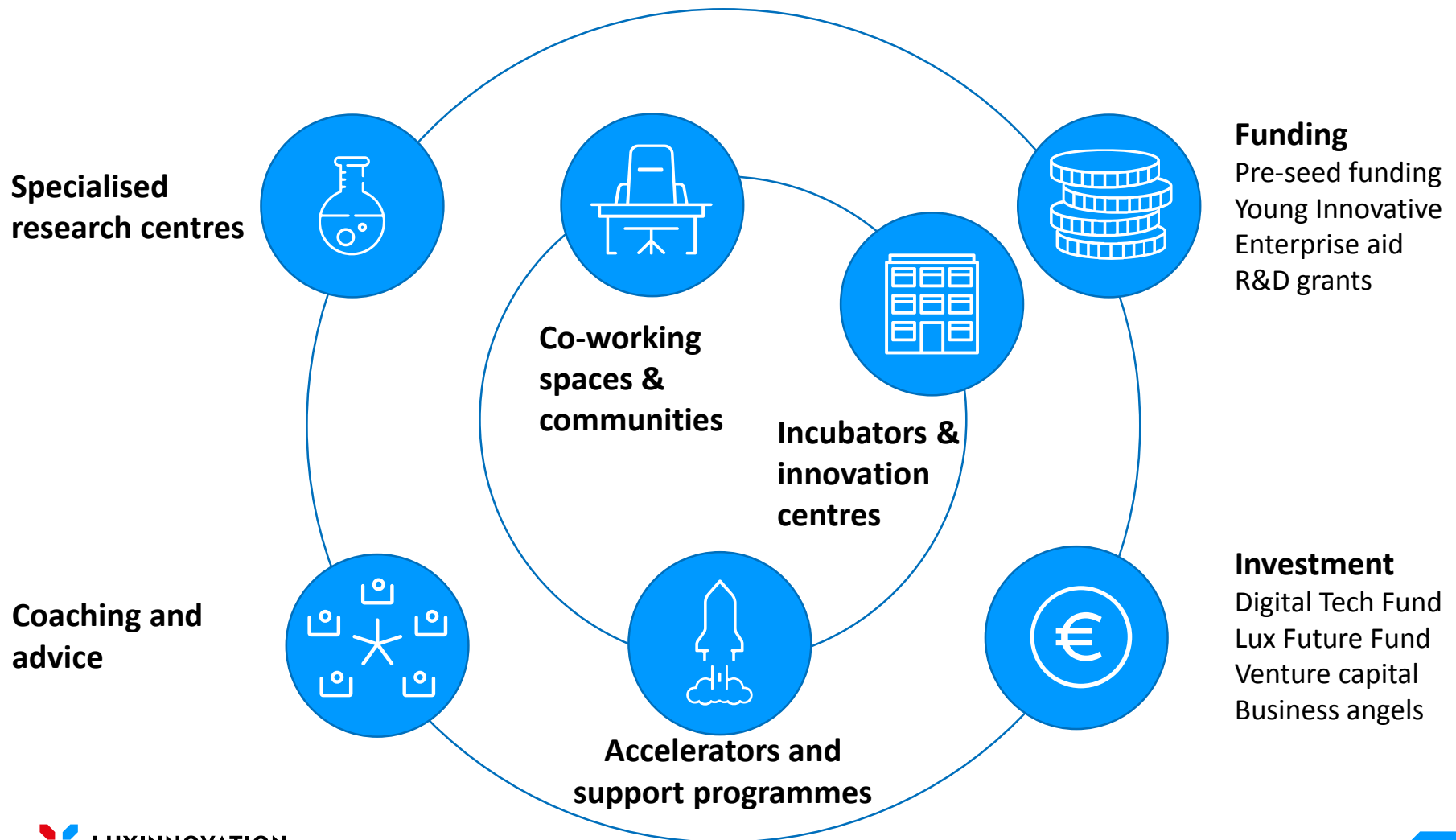


Public-private R&D collaboration

A business-friendly location



A dynamic start-up ecosystem



Easy procedures to start a company

- **No restrictions relating to the nationality**, residence or status of shareholders, directors and managers
- **Articles may be drafted in English** (with a French/German translation)
- **Any currency may be used** for accounting/reporting
- **Easy work permit procedure** for qualified personnel



Investment and incentives

Government grants

- Promotion of research, development and innovation
- Investment aid for SMEs in the industrial or services sector
- Financial aid for employment, recruitment and training

Government loans

- National Credit and Investment Bank (SNCI)

Digital Tech Fund

- Provides critical venture capital for promising early-stage high-tech start-ups

Luxembourg Future Fund

- Invests in early stage companies active in technology sectors other than Life Sciences
- Must show benefits for Luxembourg economy

Export credits

- Luxembourg Export Credit Agency

Private finance

- Luxembourg Business Angel Network
- Private banks

National innovation funding

Ministry of the Economy

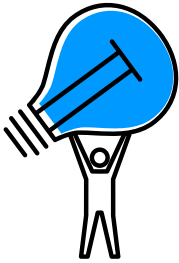
- **R&D** projects or programmes
- **Feasibility** studies
- **Innovation aids** for SMEs
- Aid for **small innovative enterprises**
- Aid for **process and organisational innovation**
- Investment aid for **research infrastructure**
- **Investment aid** for innovation clusters
- Aid for the **operation of innovation clusters**

**Permanently
open call**

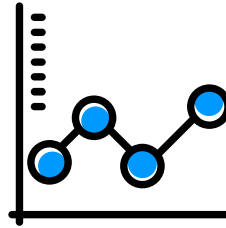
**Dedicated
innovation fund**



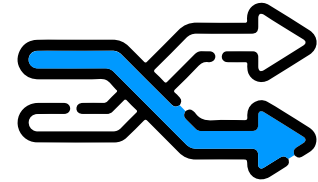
Luxembourg Cluster Initiative



Innovation



**Business
development**



**Cross-sector
cooperation**

**Stronger competitiveness of cluster members
and the Luxembourg economy**



Luxembourg Cluster Initiative



LUXEMBOURG
AUTOMOBILITY
CLUSTER



LUXEMBOURG
BIOHEALTH
CLUSTER



LUXEMBOURG
CREATIVE INDUSTRIES
CLUSTER



LUXEMBOURG
ECOINNOVATION
CLUSTER



LUXEMBOURG
ICT
CLUSTER



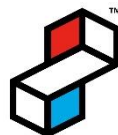
LUXEMBOURG
MATERIALS &
MANUFACTURING
CLUSTER



LUXEMBOURG
SPACE
CLUSTER



LUXEMBOURG
WOOD
CLUSTER



**CLUSTER
FOR
LOGISTICS**
LUXEMBOURG
ADDING VALUE IS THE KEY.



**CLUSTER
MARITIME**
Luxembourgeois

Thank you!

■ **Ian CRESSWELL**

Head of International Affairs

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