FLANDERS IRF, CONNECTING THE ECOSYSTEM DOTS

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SETTING THE STAGE Belgium, in the heart of Europe **Amsterdam** London 200 km Ostend Bruges **Berlin** Antwerp 350 km 800 km Brussels **Paris** 300 km Population: 11M (2,6% of EU population)

European Life Sciences hotspot: 7% of European biotech companies, 10% of European R&D expenditures, 16% of European biotech turnover.

Flanders region

- Northern region of Belgium (+/- 6M population).
- 300+ Life Sciences companies (biotech, pharma, medtech), 80% of LS turnover, 75% of LS employment.
- Flanders government is responsible for science & innovation.
- Financial support of research institutes to drive innovation in the Flanders ecosystem. Direct investment of centers of excellence (VIB, IMEC) and universities.

INDUSTRIAL RESEARCH FUND (IRF)

- Main innovation tool for universities to extend TTO activities to asset & business development and ecosystem engagement.
- Recurrent annual budget to fund innovation staff and proof-of-concept funding.
- Each Flemish university has its own IRF managed by an academia-industry council. High degree of autonomy to adapt activities to best fit with industry.



GHENT UNIVERSITY INNOVATION MODEL

— Problem: research/clinical staff of 6.000+ active in a broad range of industry sectors (life sciences, engineering, materials, agri/food, energy, ICT). How to capture & develop innovation opportunities and connect to the different industries?

– Two-layered model:

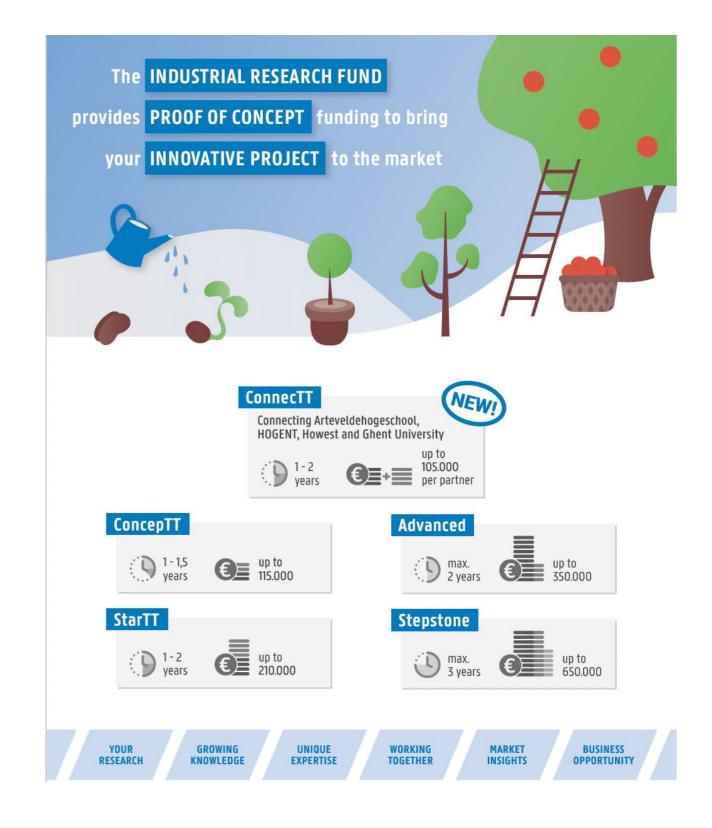
- Central level: TTO. Focus on policy, expert services (IP, legal, venture, science parks).
- At decentral level: IRF business development units and IRF Innovation Platforms. Focus on business development, strategic research projects and ecosystem engagement.





IRF BD UNIT

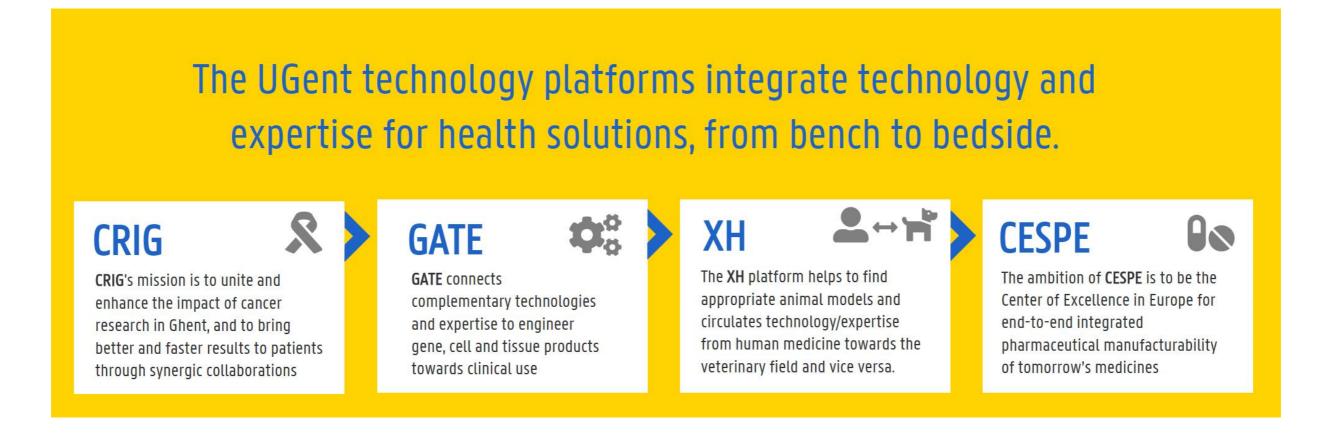
- Each BD unit focuses on industry subsector where UGent innovation potential is high
- Headed by a business development manager. Takes the lead in:
 - Asset & business development process in direct support of researchers (collaborations, venturing, licensing).
 - Building networks in a specific industry subsector and relevant ecosystem (companies, investors, agencies, patient organisations).
 - Alliance management (strategic research partners).
 - High degree of autonomy (professor-like) to support entrepreneurial behavior to meet KPIs. Depending on need support by TTO (e.g. legal, IP, venture), IRF platform Managers ecosystem outreach) or IRF innovation officers (grant support).
 - Financial support through the IRF proof-of-concept fund (grants € 100-650k) for internal incubation.





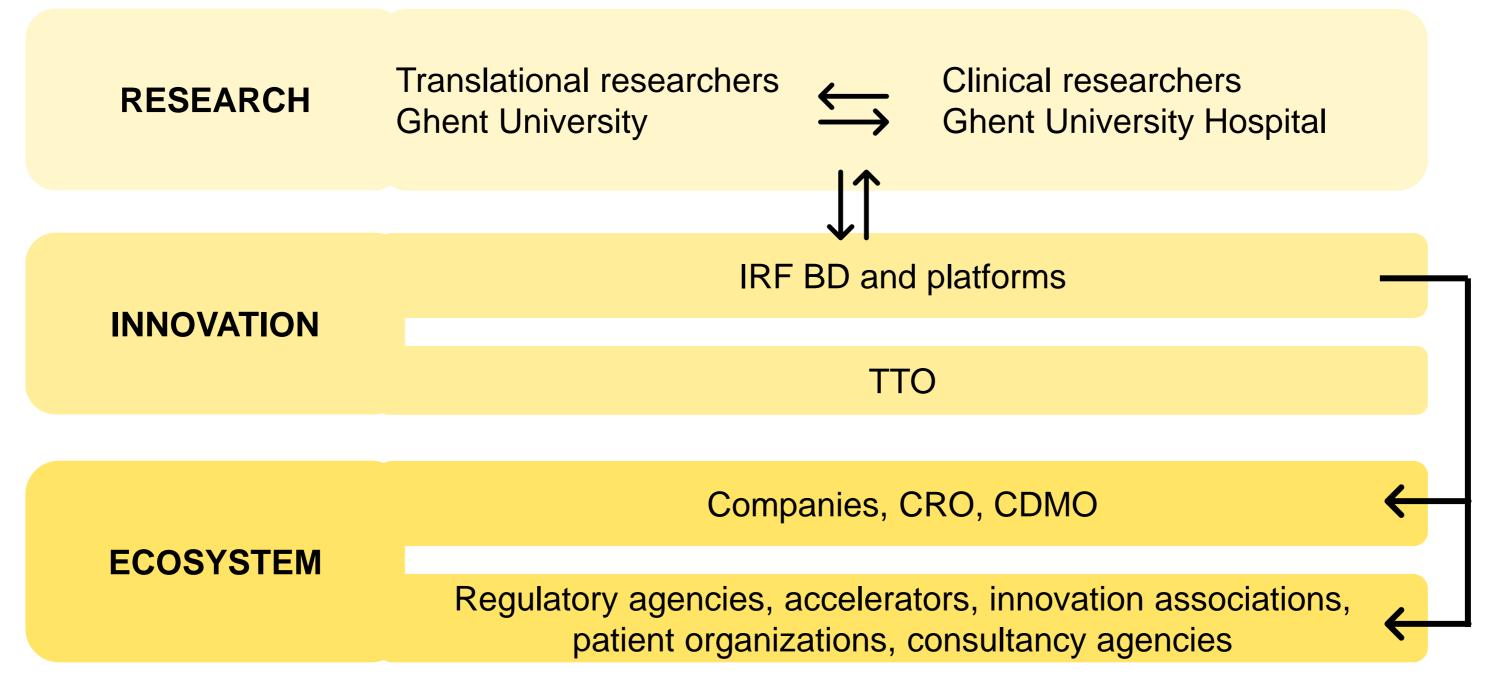
IRF PLATFORMS

- Theme specific innovation platforms to foster ecosystem outreach and cross-over innovations.
- Currently, 4 health oriented platforms: CRIG (cancer), GATE (advanced therapies), XHealth (cross-species health), CESPE (pharmaceutical manufacturing).



- Organisation of industry partnering events, support of relevant intra/inter ecosystem initiatives (talent, investor, regional acquisition).
- Lead in strategic infrastructure projects.
- Sharing of business opportunities and networks between BD units (cross-over).

MAPPING





EXAMPLE 1: SPARXELLS

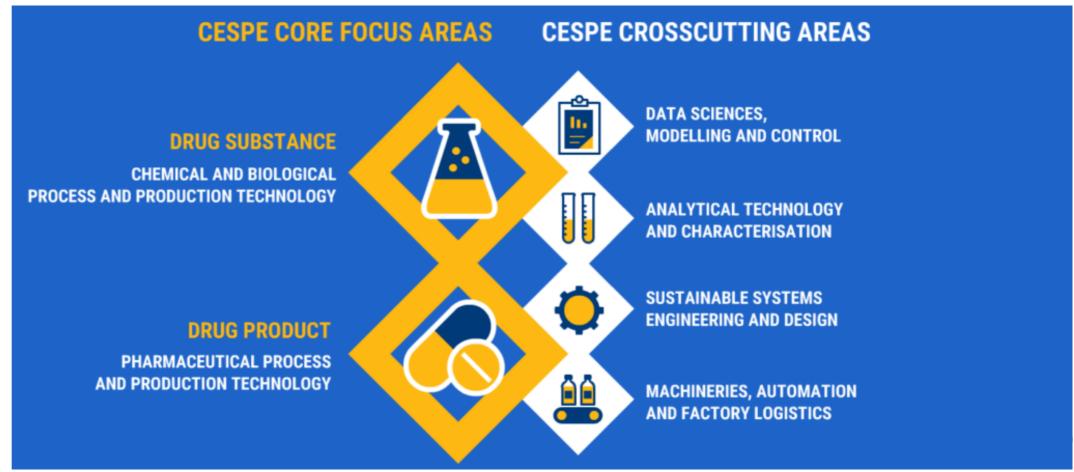
- UGent venture project (not yet incorporated).
- Development of a next-generation dendritic cell immunotherapy for solid tumors.
- Initial stage: first data set of investigator driven phase-I trial (supported input by innovation unit of Belgian regulatory agency).
- Involvement of IRF BD Manager. Business analysis and first round of talks with KOLs and investors. Conclusion: too early, need for additional validation data and technology.
- Additional support by CRIG (cancer IFR Platform). Grant writing and later active profiling of project in ecosystem.
- € 650k grant by UGent IRF. Development of pre-clinical tools and professional gap analysis for technology transfer.
- 2023: business & clinical development plan. Interaction with Belgian regulatory agency.
- Q3-2023: Profiling of venture project in ecosystem events (CRIG, GATE, FlandersBIO, HIHR) in combination with active investor road show.



EXAMPLE 2: CESPE

Center of Excellence of Sustainable Pharmaceutical Engineering

- IRF platform grouping all expertise at Ghent University (pharma, modeling, engineering).
- Close adaptation of activities to match manufacturing innovation needs by industry. Developing the manufacturing technologies & equipment of tomorrow.
- Focus on industry collaborations & dedicated training ("CESPE Academy").
- Strategic infrastructure: CESPE Accelerator. GMP-like research facility for open innovation (3000sqm accelerator space).
- Positioning in European ecosystem as major player.





Johnson&Johnson

EXAMPLE 3: J&J PARTNERSHIP

- Long-standing partnership with J&J driven by IRF support.
- Three axes: collaboration, talent and ecosystem.
 - Collaboration: focus on key collaboration areas where expertise and needs match. Close interaction between UGent and J&J teams.
 - Talent: series of initiatives to introduce academic researchers to pharmaceutical industry.
 Joint initiatives to attract international talent.
 - Ecosystem: aligning mutual interests to strengthen innovation in the regional ecosystem.
 Active support of ecosystem initiatives.



FURTHER INFORMATION

IRF: <u>Industrial Liaison Network</u> — <u>Organizations and Companies</u> — <u>Ghent University</u> (ugent.be)

— CESPE: https://cespe.be/

— CRIG: https://www.crig.ugent.be/

— GATE: https://gatehealth.be/

Xhealth: https://www.ugent.be/voor-organisaties-en-bedrijven/en/techtransfer/iof-platforms/cross-health-platform.htm

— HIHR: https://www.hihr.eu/









ENGINEERING





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