

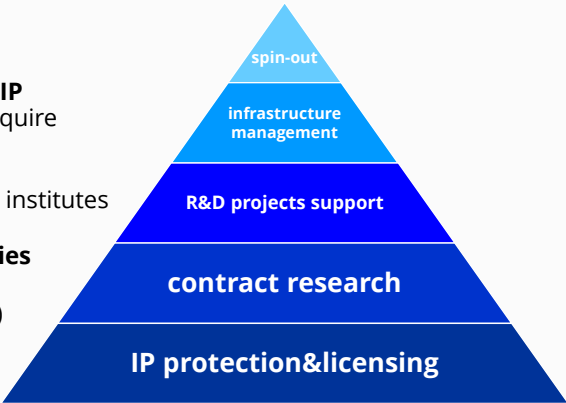




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IN KRAKÓW

# Knowledge transfer ecosystem in Poland

Overview, examples, recommendations

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## Characteristics of KT in Poland

- **„emerging innovator”**  
IT, biotech, energy
- **institutional ownership of IP**  
with researcher’s option to acquire
- **obligatory IP Policy**  
for universities and research institutes
- **knowledge transfer activities**  
through KTO (>90 KTOs)  
or a subsidiary company (22)
- **KTO employing**  
an average of 5 people

Typical tasks of KTO in Poland according to the PACTT survey (2023)

## KT policy initiatives



### Legal changes:

- promoting cooperation between universities and socio-economic environment: "dual studies", implementation doctorate program
- evaluation of scientific activity - impact on society and economy as one of criteria
- federalization of universities - formation of unions (e.g. Fahrenheit Universities)
- R&D tax relief: up to 100% of costs, with wide catalogue of deductible expenses

### Research universities and regional initiatives of excellence:

Additional funding streams to create „islands of excellence” (2020-2026)

### Łukasiewicz Research Network




22 research institutes and the Łukasiewicz Centre. Objective is to conduct R&D in priority areas from the point of view of national policy and commercialise its results.

## Programs for KT – Incubator of Innovativeness



- launched by Ministry of Science and Higher Education from EU Funds (Smart Growth Operational Programme 2014-2020)
- reached majority of KTOs in Poland
- total financing of 150 mln PLN (2017-2023)
- main objectives:
  - support for R&D projects with tangible application perspectives (IP protection, promotion, skouting and brokering tasks)
  - funds for PoC and external market analyses - leading to increase of TRL (obligatory constituting at least 50% of the project costs)
  - KTO capacity building

## Programs for KT – Incubator of Innovativeness

Indicator	 INKUBATOR+ INNOWACYJNOSCI 2017-2019	 INKUBATOR INNOWACYJNOSCI 20 2019-2020	 INKUBATOR INNOWACYJNOSCI 4.0 2020-2023*
Number of entities that received grant	53 (20 consortia)	60 (24 cons.)	76 (32 cons.)
Number of R&D works carried out	571	296	756
Number of patent applications filed	1206	873	1531
Number of forms of cooperation established between the academia and the business sector (licenses, assignments, lease, research services agreements)	1633	1282	2631
Number of spin-off companies created	64	51	36

## European Funds for a Modern Economy (FENG Program)

**Objective: innovation friendly ecosystem** – 3,4 bln euro for 2021-2027

**Significant role of KT:** cooperation programs, KT plan, business skills, spin-off creation and support

**„Science4Business” program:**

- total budget of 146 mln PLN
- „Incubator of Development” – call for KTOs
- KT staff capacity building (specialised training courses)
- creation of a nationwide database of technologies, services and infrastructure of research organisations

**„First Team”, „PoC”** – programs of Polish Science Foundation



## Polish Association of Centres for Technology Transfer



- established in 2015
- 90 members
- open to new members

**integration**

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**joint representation**

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**exchange** of knowledge, experience, standards


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development of a **professional competences**


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**cooperation** in the commercialization







## Polish Association of Centres for Technology Transfer




since 2016 PACTT organized **15 nationwide conferences** for its members




since 2021 – series of **webinars** „Thursday with PACTT”






technology offers database: [www.pactt.pl](http://www.pactt.pl)




joint participation in trade fairs and branch conferences



2 editions of Academy of Effective Preclinical Research







## Jagiellonian University

almost **40,000 STUDENTS**

over **7,000 STAFF MEMBERS**  
including **4,000** academic staff

**16 FACULTIES**





## Centre for Technology Transfer CITTRU

Jagiellonian University unit for *technology transfer*  
*knowledge transfer*

<b>TECHNOLOGY TRANSFER AND BUSINESS COOPERATION</b>	<b>ADMINISTRATION AND CONTRACT RESEARCH</b>	<b>ACADEMIC ENTREPRENEURSHIP INCUBATOR</b>
8 technology brokers 5 IP administration specialists	5 administration specialists	4 business development specialists
<b>Commercialization</b>	<b>Contract research</b>	<b>Entrepreneurship</b>
<b>Engagement</b>		

## Proof of Concept projects

- **25k euro** for prototype, testing, evaluation, IP, promotion
- requirement: IP rights + invention disclosed
- **external investment committee**
- **assistance of CITTRU brokers**

example:

***A super-sensitive method for detecting DNA damage (STRIDE technology)***

(assignment of IP rights + spin-out)

intoDNA



## JU Knowledge transfer

**Innovative ELISA-type test to diagnose infections (GBS) dangerous for pregnant women**

- can detect specific antibodies, providing rapid diagnosis and targeted therapy
- the license was culmination of 4 years of research cooperation between Jagiellonian University CM and CHDE Polska SA
- financed by „TANGO” – joint program of National Science Centre (NCN) and National Centre for Research and Development (NCBR)

### Statistics of Polish KTOs:

- average no. of contracts for assignment of rights (2021) – 2,3 (Jagiellonian – 0)
- average no. of license contracts (2021) – 2 (Jagiellonian – 9)





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## JU Contract research

**Laboratory of Cell and Tissue & Cell Bank, Małopolska Center of Biotechnology**

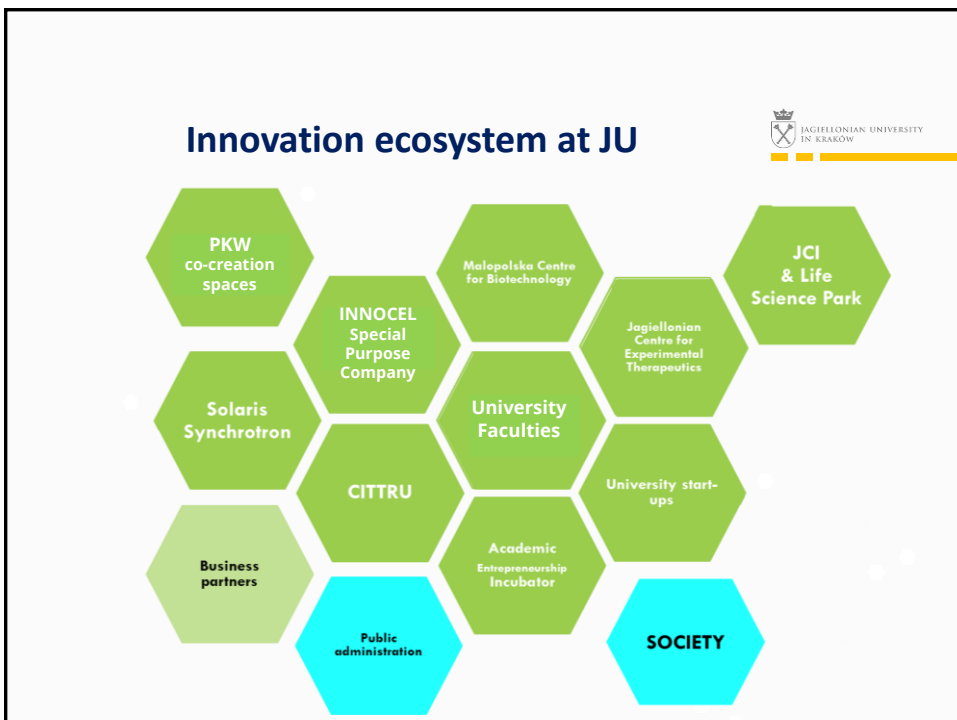
- cells of patients with large skin wounds are multiplied outside of their bodies and then grafted in hospitals
- based on scientific know-how

**Local and regional impact**

- Centre for Evaluation and Analysis of Public Policies: reports for administration and NGOs
- Institute of Geography: research and services for national parks and environmental institutions

**Statistics of 5 universities in Krakow:**

2019	– 60 mln PLN
2020	– 67 mln PLN
2021	– 64 mln PLN
2022	– 60 mln PLN
2023	– 60 mln PLN



## Co-creation Spaces (PKW)

- 5 designed and equipped spaces for creative and pro-development activities
- participation of entrepreneurs, public institutions, NGOs and local community
- use of co-creation methods like: Design Thinking, Living Lab, Project Based Learning
- funded by **Initiative of Excellence - Research University Program** at Jagiellonian University
- „Semestrator” = hackaton + workshop + pitch

#SDG48h  
CHALLENGE

CEFO  
ZRÓWNOWAŻONEGO  
ROZWOJU



## Challenges for the future – recommendations from PACTT/PSC

- create system of incentives for implementation of R&D results for business, administration and NGOs (continuous support)
- build critical mass of KT skills
- develop Application Research Agenda - with other universities in the region, based on the Regional Innovation Strategy 2030
- develop and implement model KT agreements
- create of a university seed fund (in partnership with companies) dedicated to supporting TRL 1-3 innovations
- launch prototyping labs, creative spaces and micro-grants
- develop inter-university cooperation to create a marketable R&D offer





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Contract  
Research

CITTRU  
Centre for Technology Trans

search contract research

2014  
Report TOP 100  
Europe's Most Innovative Universities  
Jagiellonian University  
best in Poland and East Europe

REUTERS

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**Thank you!**  
**Hvala!**

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