

Ruolo della SISSA nello sviluppo del trasferimento tecnologico nell'area triestina

Giornata formativa «L'approccio al trasferimento tecnologico: come trasformare un'idea in un prodotto innovativo»

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SISSA in brief

- Scientific center of excellence, with a special statute and funded by the State, within the national and international academic scene, located in Trieste
- The first (1978) University in Italy created to offer PhD courses and entirely focused on post graduate teaching and research
- Three main research areas: Physics, Neuroscience and Mathematics. Both teaching and research are conducted in English

Faculty
82

PhD Students
302

Administrative &
Technical Staff
118



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SISSA Positioning

The quality level of the research is further confirmed by the fact that within the competitive field of European funding schemes (ERC) SISSA holds the Top Position among all Italian scientific institutes in terms of research grants obtained (22) in relation to the number of researchers and professors (82);



SISSA has scored first place in Italy, seventh in Europe and among the Top 50 "Young Universities" in the world, according to a new Nature Index report ranking the top 160 universities in the world that are younger than fifty years of age.



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SISSA Positioning (II)

SISSA hosts and manages (along with ICTP - International Centre for Theoretical Physics) «Ulysses», one of the largest High Performance Computing (HPC) facilities (100 TeraFlops) in Italy and Europe;



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Premise: Why a TTO @SISSA?

Modern University Missions:

- EDUCATION
- RESEARCH
- “University Third Mission”

Classical & Traditional Missions



Innovation Creation & Knowledge Transfer

Technology Transfer @SISSA: brief history

2007→ Technology Transfer Office (Head dr. Maran) was created;

2008→ Technology Transfer Commission established;

2016→ Specific Director's Delegate (Prof. Rozza) appointed;

Today → a Team of 3 people, coordinated directly by the Vice-General Secretary

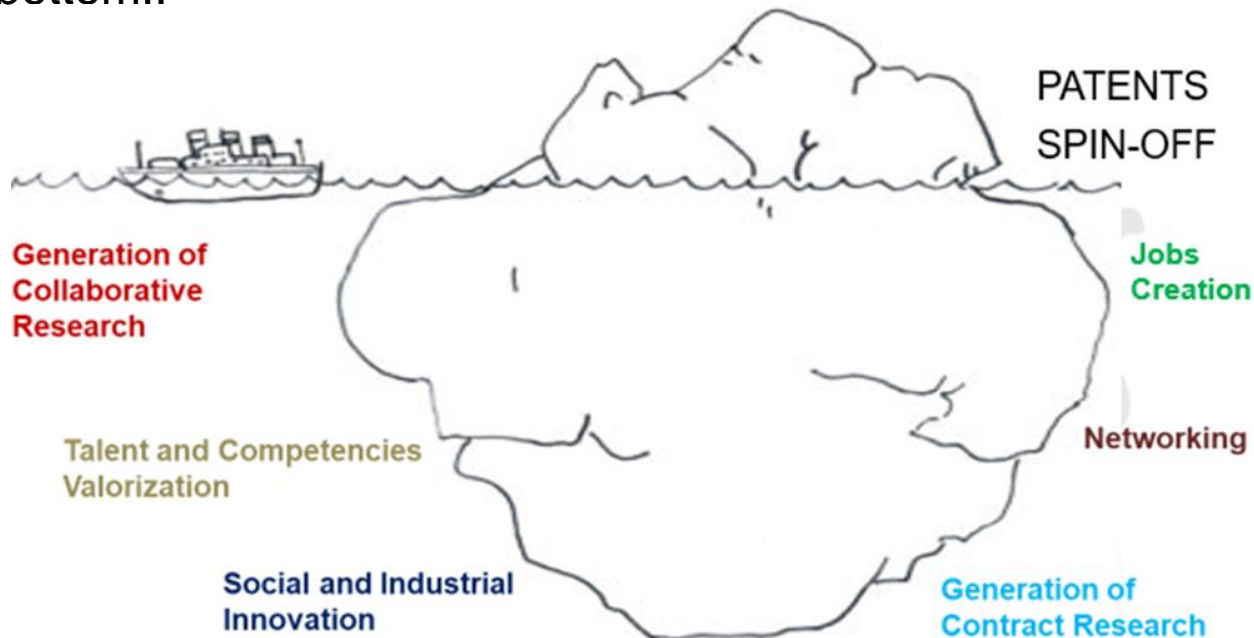


TTO's main objectives

- Promote - through specific initiatives, services and support the valorization of Research Results, Know-how, Competencies and Talents (inside out)
- Address the external demand of innovation from industry, end-users, investors, etc. to the internal competencies/know-how and talents (outside in)

SISSA TTO Vision

What's "Technology Transfer" from our point of view? We see it like an iceberg, with some important things clearly visible at the top (notably the creation of Patents and Spin-Offs) and others, maybe even more important, at the bottom..



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SISSA Technology Transfer Figures

- 6 Start-ups e Spin-offs (in the last 10 years):

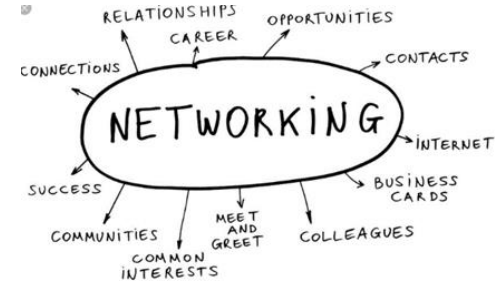


- 9 Active Patent Families, 7 licensed (commercialization rate >70%)

- Well established collaborations in the field of «Innovation»:



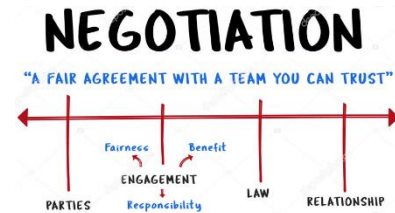
The Process and the Services



Competencies,
Talent, Know-how,
Technologies, etc.



External Demand of
Innovation from Industry,
End-Users, Investors, etc.



Concretely Speaking

PRELIMINARY ASSESSMENT:

- IP Protection (if possible);
- Prior Art & Market Survey;

OPPORTUNITY DETECTION:

- Competences;
- Know-how;
- Technologies;
- Talent;

VALORIZATION SUPPORT:

- IP Protection;
- Prior Art and Market survey;
- Funding opportunities;
- Network matching;
- Talent Valorization & Placement;

Talent and Competencies
Valorization

Impact

**Social and Industrial
Innovation**

Licensing & Spin-off

**Generation of
Collaborative
Research**

New Projects

**Generation of
Contract Research**



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An Example: Patent Application/Prosecution Due Diligence

Invention Disclosure



If the Prior Art Search and the Preliminary Market Research are positive

Patent Application



Within the first 10/12 months potential licenses/assignee are offered and the official search reported examined



If the market feedback and the search report are positive, we proceed in investing on



If the market feedback and the search report are negative, we proceed in further evaluations that may drive to stop the patent prosecution



Within the next 18 months an option/license/co-development agreement has to be signed to continue to national phases



If it doesn't happen, **Patent Application Dropped**



Patent Industrialization



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Advantages of such due diligence

- Pro-active marketing of the technology to get an effective feedback from the market (inside-out);
- Enter in contact with market players (companies/investors/etc.) that can potentially be interested in the scientific excellence/know-how/competences of the Organization (inside-out)
- Industrial/Market technical point of view on the technology to be addressed to the research group who is developing it (outside-in)
- Make an informed decision whether to continue or not to invest on patent prosecution (in other words, to understand if the patent will be an investment or a cost)



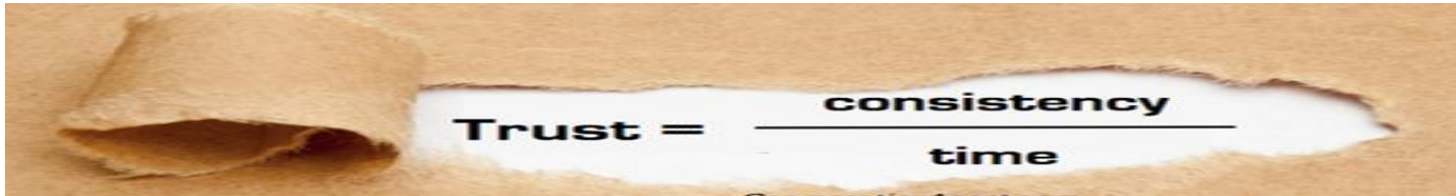
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TT keywords (from our experience)

- Trust
- People
- Awareness and Approach
- Contamination
- Funding
- Relationship management
- Medium-Long Term Perspective



TT key success factors (from our experience)



- Capacity to make scientific staff (on medium-long term basis) perceive things like IPR, Company driven projects, etc. as opportunities to improve and grow their research activity and not as “obstacles” to it!;
- Capacity to collect and select external innovation needs and address them continuously internally in terms of potential opportunities as well as external technological/societal trends;
- Capacity to consolidate and expand the consolidated collaborations with external players;





THANKS FOR YOUR ATTENTION!



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