Facts and Figures

IIT in Numbers

30th April 2018

ISTITUTO
ITALIANO DI
TECNOLOGIA

ISTITUTO ITALIANO DI TECNOLOGIA

Center for Neuroscience e Cognitive Science,
Università di Trento, TRENTO

Center for Genomic Science,
Campus IFOM-IEO, MILANO

Center for Nano Science and Technology,
Politecnico di Milano, MILANO

Center for Sustainable Future Technologies,
Politecnico di Torino, TORINO

Center for Translational Neurophysiology,
Università di Ferrara, FERRARA

Center for Microbiorobotics,
Scuola Superiore Sant'Anna, PISA

Center for Nanotechnology Innovation,
Scuola Normale Superiore, PISA

Center for Life Nanoscience,
Università degli Studi di Roma La Sapienza, ROMA

Center for Advanced Biomaterials for Health Care,
Università Federico II di Napoli, NAPOLI

Center for Biomolecular Nanotechnologies,
Università del Salento, LECCE

Center for Cultural Heritage Technology,
Università di Venezia, VENEZIA

- **Machine Learning, MIT, BOSTON (USA)**

- **Neurobiology Dept., Harvard Univ., BOSTON (USA)**

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<u>Central Research Laboratories, GENOVA</u>
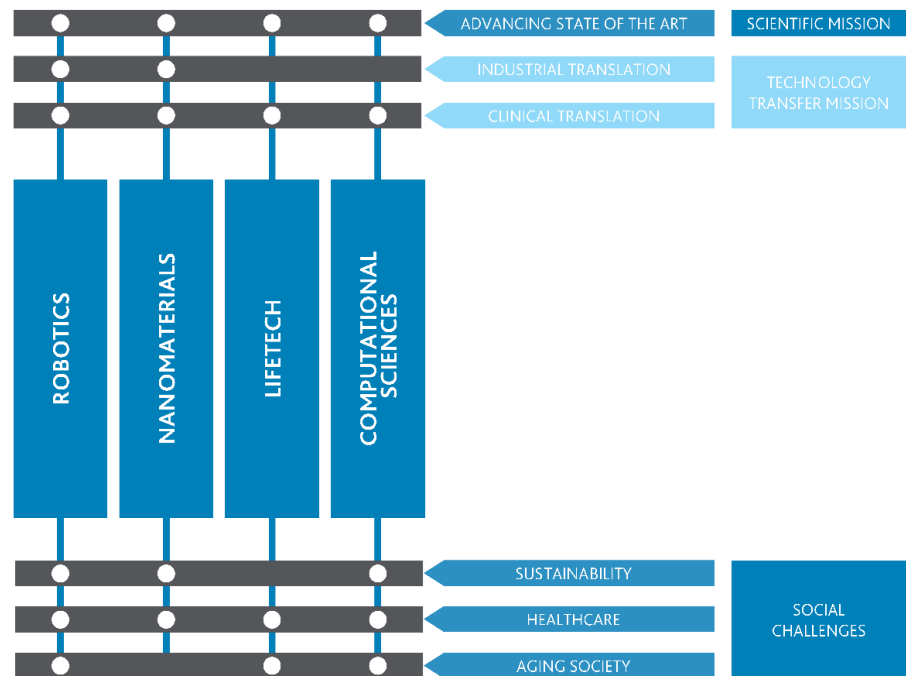
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The scientific plan consists of 4 Research Domains:

Robotics advances the state of the art by developing new robotic platforms in hardware and software
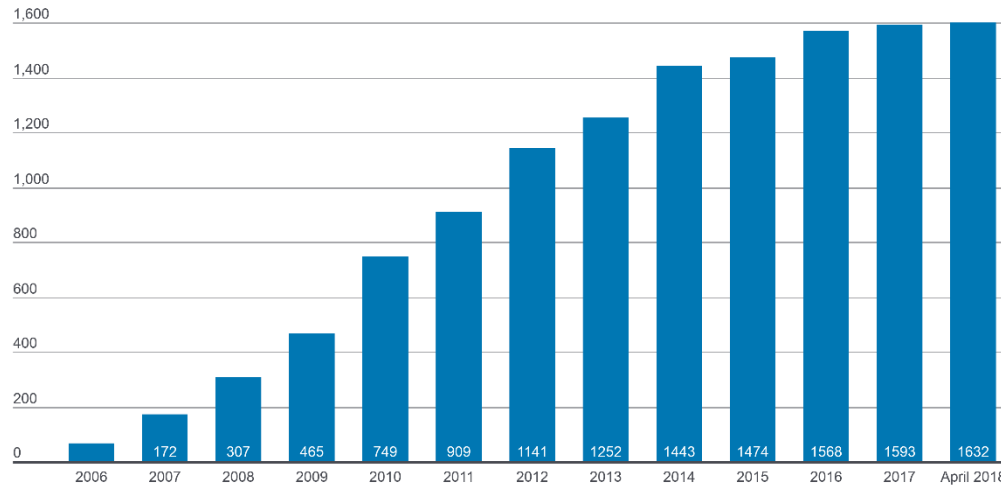
Nanomaterials includes new sustainable/biodegradable materials, nanocomposites, 2D materials, nanofabrication technologies and nanodevices, and new colloidal chemistry approaches

LifeTech is devoted to develop advanced genetic, molecular, electrophysiological, computational, imaging, and perturbation tools for dissecting the microscopic neural processes underlying brain function
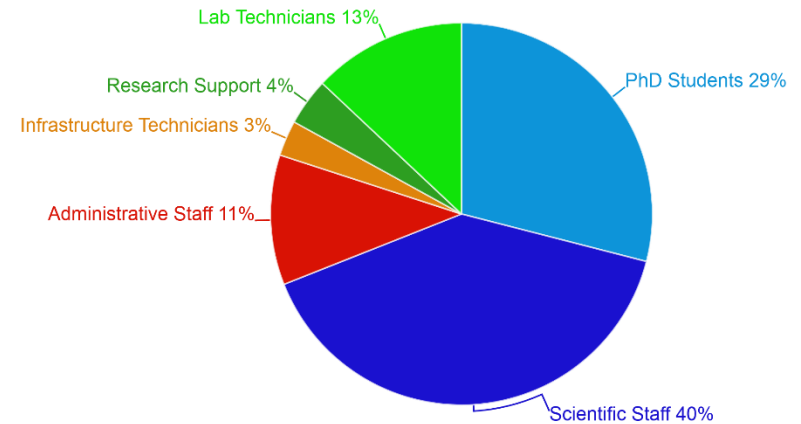
Computational Sciences is focused on massive simulations of physical systems and data analysis in general, including images, videos and sounds. The aim is to investigate and improve the knowledge in the several scientific and technological domains, in order to design intelligent systems able to cope with real-life situations

Diagram columns: ROBOTICS, NANOMATERIALS, LIFETECH, COMPUTATIONAL SCIENCES

Top rows: ADVANCING STATE OF THE ART — SCIENTIFIC MISSION; INDUSTRIAL TRANSLATION, CLINICAL TRANSLATION — TECHNOLOGY TRANSFER MISSION

Bottom rows: SUSTAINABILITY, HEALTHCARE, AGING SOCIETY — SOCIAL CHALLENGES

ISTITUTO ITALIANO DI TECNOLOGIA

Staff – Annual Growth

Year	Count
2006	
2007	172
2008	307
2009	465
2010	749
2011	909
2012	1141
2013	1252
2014	1443
2015	1474
2016	1568
2017	1593
April 2018	1632

Staff by Area (% of total headcount)

- Lab Technicians 13%
- Research Support 4%
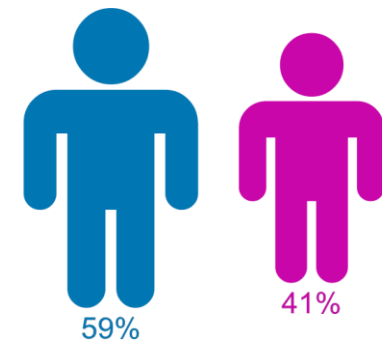- Infrastructure Technicians 3%
- Administrative Staff 11%
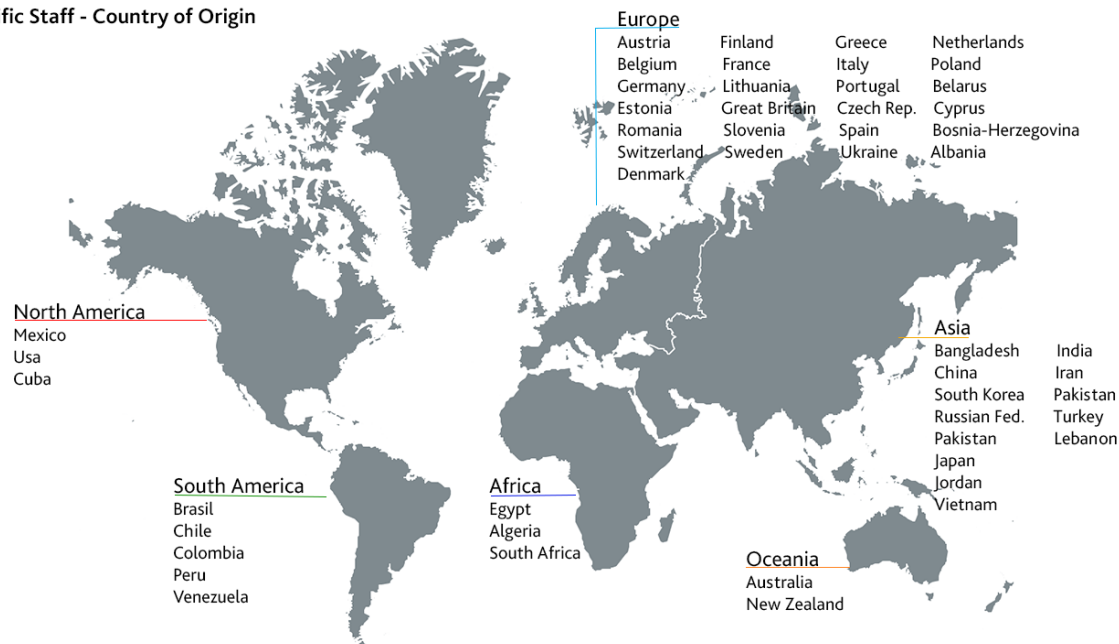- PhD Students 29%
- Scientific Staff 40%

More than **1600** people

Average age **34 years**

Scientific + Technical Staff + Ph.D. Students: **81%**

46 Tenure Track positions
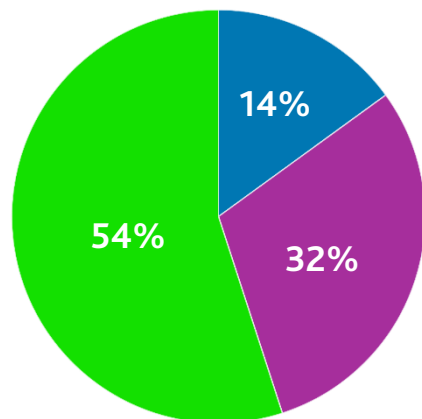
Overall staff from more than **55** countries

Staff – Gender Ratio
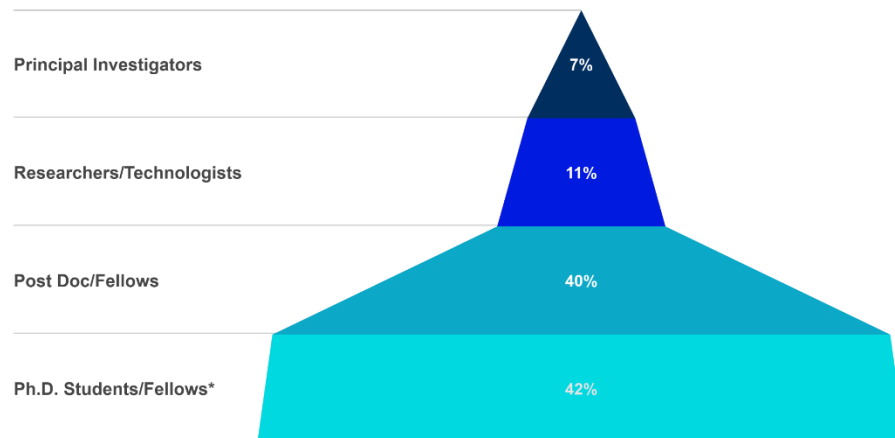

59%   41%

Scientific Staff - Country of Origin

Europe

Austria	Finland	Greece	Netherlands
Belgium	France	Italy	Poland
Germany	Lithuania	Portugal	Belarus
Estonia	Great Britain	Czech Rep.	Cyprus
Romania	Slovenia	Spain	Bosnia-Herzegovina
Switzerland	Sweden	Ukraine	Albania
Denmark			

North America
Mexico
Usa
Cuba

Asia

Bangladesh	India
China	Iran
South Korea	Pakistan
Russian Fed.	Turkey
Pakistan	Lebanon
Japan	
Jordan	
Vietnam	

South America
Brasil
Chile
Colombia
Peru
Venezuela

Africa
Egypt
Algeria
South Africa

Oceania
Australia
New Zealand

Scientific staff origins

- 14%
- 54%
- 32%

● Italians from abroad ● Foreigners ● Italians

Scientific staff and Ph.D. Students by position

Position	%
Principal Investigators	7%
Researchers/Technologists	11%
Post Doc/Fellows	40%
Ph.D. Students/Fellows*	42%

*with Ph.D. degree to obtain

PUBLIC FINANCIAL RESOURCES*

In 2017 public financing received through the Italian Ministry of Economy and Finance amounted to approximately EUR 94,4 million, of which 80% was allocated to scientific and technological activities.
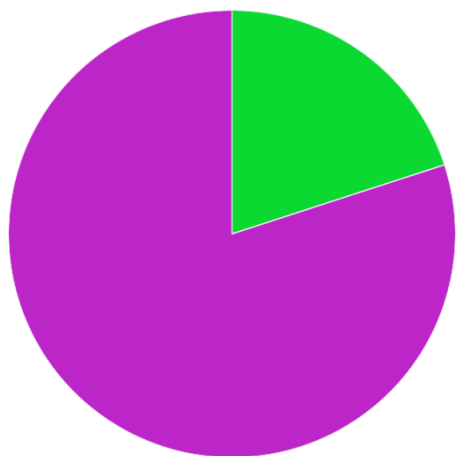

● **Administration Activities**

● **Scientific and Technologic Activities**

*Financial Report (31/12/2017)

INDIPENDENT FINANCIAL RESOURCES

Since 2006 independent financial resources from fund-raising activities have amounted to approximately **213,6 milion EUR** broken down as follows:

● Competitive Projects (155,3 milion EUR)
● Commercial Projects (46,8 milion EUR)
● In-kind Projects (11,5 milion EUR)
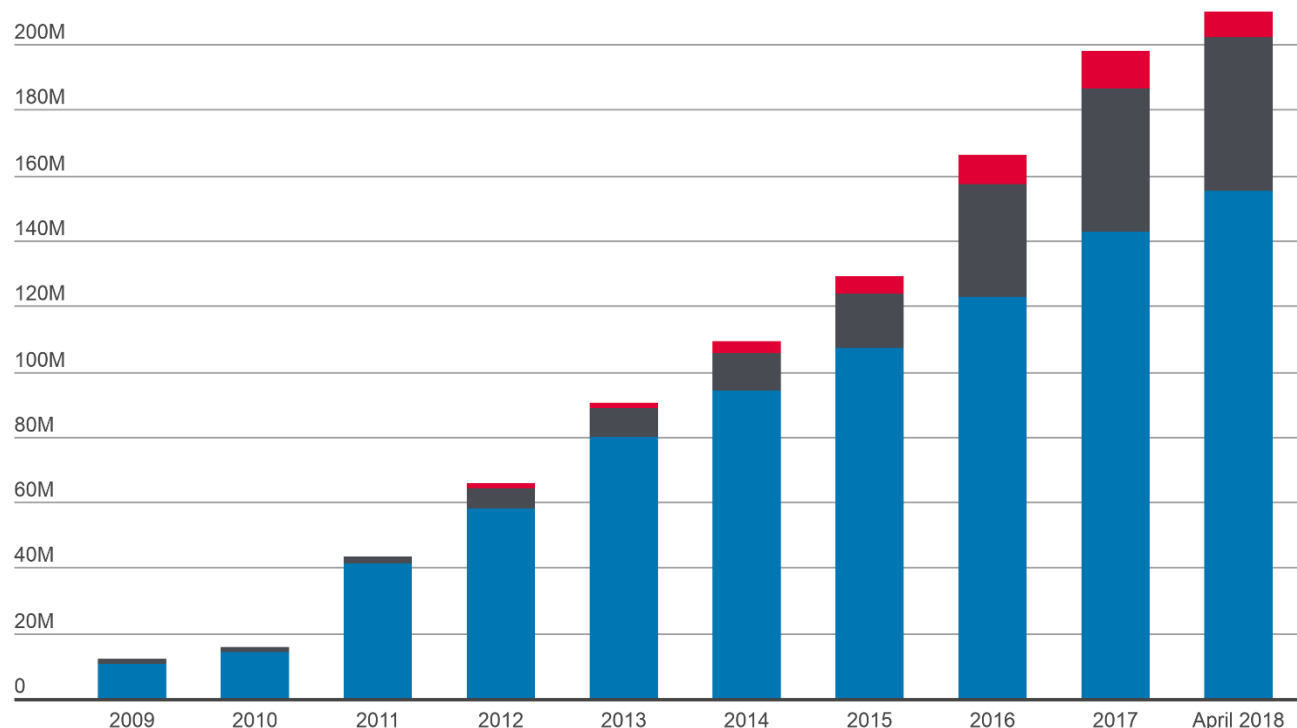
FUND RAISING:
COMPETITIVE GRANT E COMMERCIAL PROJECTS

All Projects since 2006

European Projects	174	
National Projects	75	Competitive Projects
Projects with Foundations	97	
International Projects	18	
Commercial Projects	505	
TOTAL	**869**	

Active Projects - April 2018

European Projects	56	
National Projects	32	Competitive Projects
Projects with Foundations	34	
International Projects	4	
Commercial Projects	110	
TOTAL	**236**	

19 GRANTS

Liberato Manna
(Nanochemistry, Genova)
ERC Starting Grant 2009-2013
ERC Consolidator Grant 2014-2019

Antonio Bicchi
(Advanced Robotics, Genova)
ERC Advanced Grant 2012-2017
ERC-Proof of Concept 2017-2018

Cristina Becchio
(Robotics, Brain and Cognitive Sciences, Genova)
ERC Starting Grant 2013-2018
ERC POC Grant 2017 – Under Negotiation

Francesco De Angelis
(Nanostructure, Genova)
ERC Consolidator Grant 2014-2018

Paolo Decuzzi
(Drug Discovery and Development, Genova)
ERC Consolidator 2014-2019

Mario Caironi
(Centro di NanoScience and Technology, Milano)
ERC Starting Grant 2015-2020

Tommaso Fellin
(Neuroscience & Brain Technology, Genova)
ERC Consolidator Grant 2015-2020

Ferruccio Pisanello
(Centro di Biomolecular Nanotechnologies, Lecce)
ERC Starting Grant 2016-2021

Teresa Pellegrino
(Drug Discovery and Development, Genova)
ERC Starting Grant 2016-2019

Valentina Cauda*
(Center for Sustainable Future Technologies, Torino)
ERC Starting Grant 2016-2020

Agnieszka Wykowska
(Social cognition in human-robot interaction, Genova)
ERC Starting Grant 2017-2022

Gianni Ciofani
(Smart Bio-Interfaces, Pisa)
ERC Starting Grant 2017-2022

Iwan Moreels*
(Nanocrystal Photonics, Genova)
ERC Starting Grant 2017-2022

Laura Cancedda
(Local micro-environment and brain development, Genova)
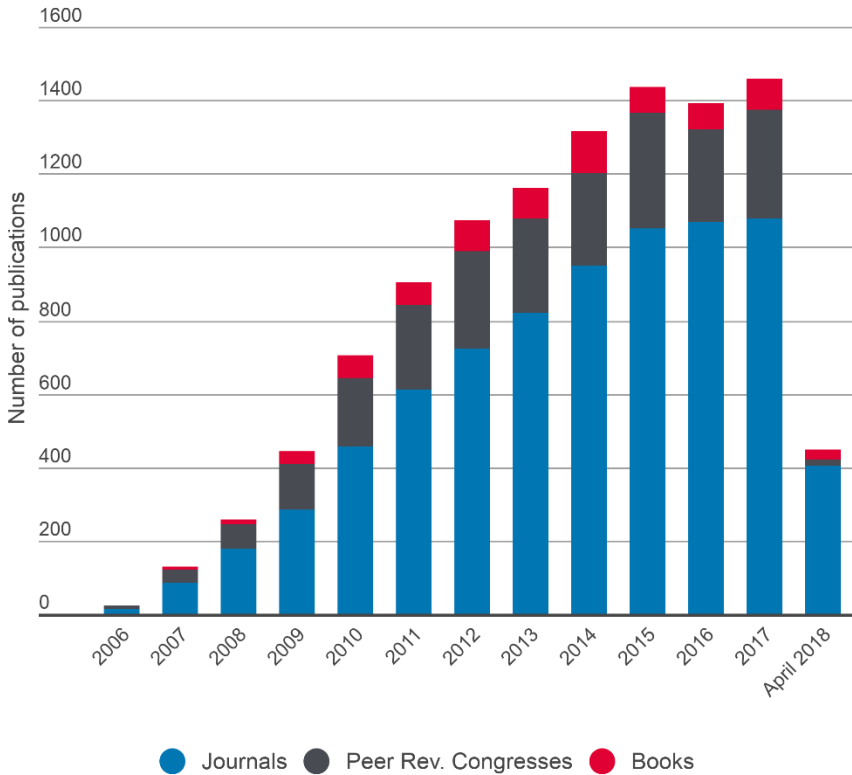ERC Consolidator Grant 2017-2022

Barbara Caputo
(Visual and Multimodal Applied Learning)
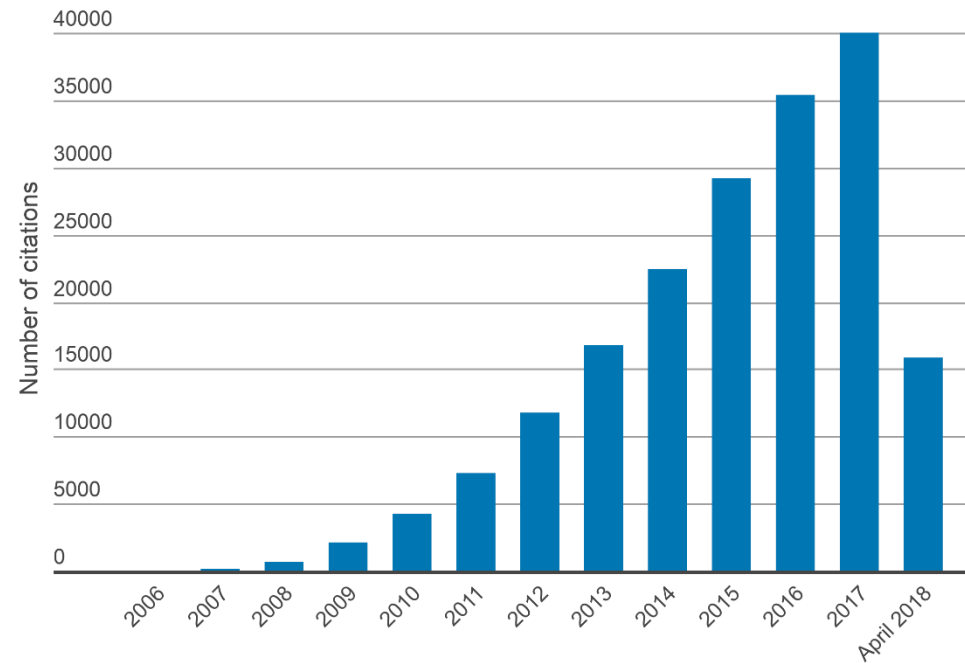ERC Consolidator Grant 2014

Annamaria Petrozza
Under Negotiation
ERC ConsolidatorGrant 2017

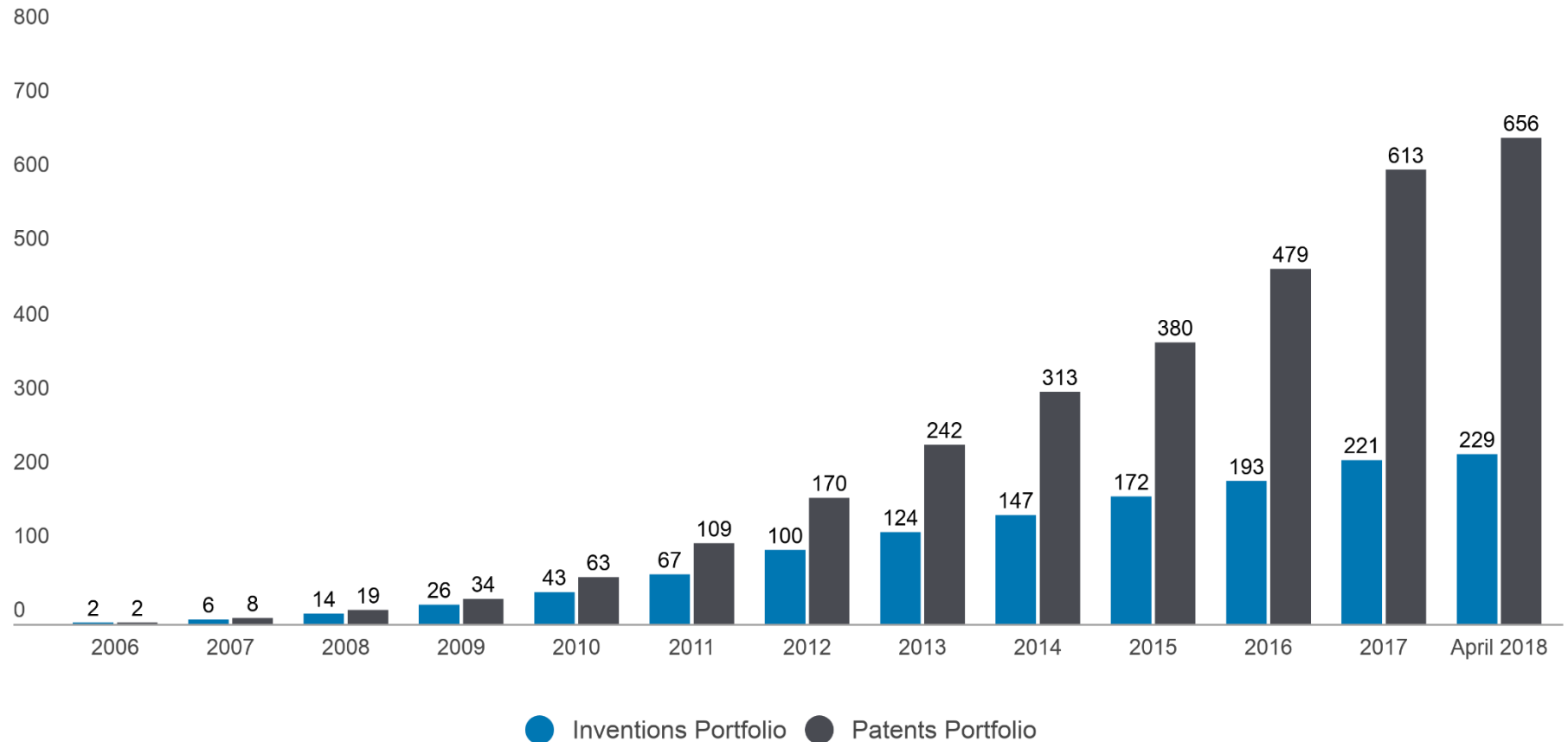*won at IIT and carried out at an IIT partner institute

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Publications since 2006: **10745**

Number of publications

Legend: ● Journals ● Peer Rev. Congresses ● Books

Citations per years (Scopus – Elsevier B.V.)

Number of citations

*Publications and citations are affected by indexing delay

So far Technology Transfer activity has led to 656 active patents, composed by 367 granted patents and 261 patent applications under review. These patents refer to 229 inventions.

18 Spin-offs launched,
26 under *due diligence*

Neokera Pharmaceuticals

IIT has started several Joint Laboratories with major international companies and R&D entities. In these laboratories a scientific and technological road map is developed jointly by IIT scientists and the R&D staff of the partner institutions.

Istituto Giannina Gaslini

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