10 YEARS OF INNOGAP the Proof-of-Principle fund by Unitec



THE INNOGAP FUND

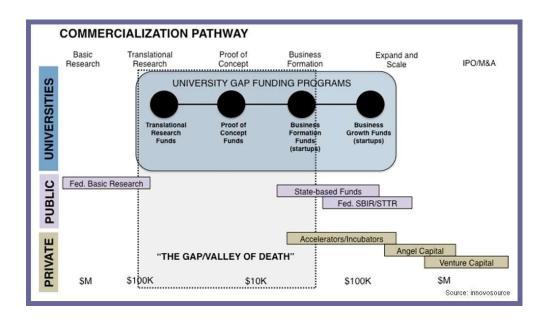
In 2009, Unitec created the INNOGAP proof-of-principle fund to help researchers at UNIGE and HUG to move their research discoveries towards practical implementation.

The INNOGAP fund increases the value of their inventions, improves the chances of realizing societal benefits of research and enhance UNIGE's and HUG's ability to license them to existing or newly created companies.

INNOGAP helps to position **Unitec as a strong partner for innovators**, offering more than advice to the researchers.

After an early period of research, innovators face a stage where their projects are less likely to be funded by standard funds from academic institutions. This is because their research is in need for practical applications. On the other hand, they are still not close enough to the market to be included in corporate R&D programs.

INNOGAP is especially designed to "bridge this gap" by helping researchers advance their **Proof-Of-Concepts (POC)** to develop new products and services available on the market.



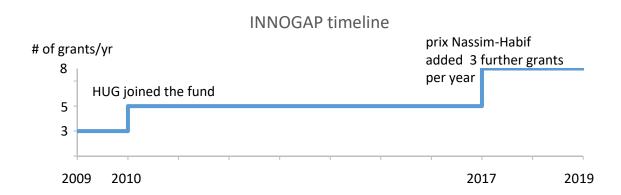
A majority of UNIGE spin-offs benefits from the INNOGAP fund; almost **70% of the licenses** granted in the frame of INNOGAP funded projects are granted to spin-offs.

The INNOGAP grant is a facilitating factor to obtain third party follow-on funds.

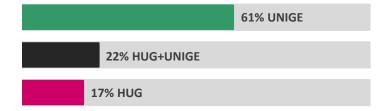
1. FUND MATURATION

Nessim-Habif INNOGAP Prize in Life Sciences

A new regulation (RVR decision - 30 August 2017) updated the conditions for the grant of the Nessim-Habif prize (medicine-surgery). The prize was renamed Nessim-Habif INNOGAP prize in Life Sciences. The conditions for assignation of the grants are now the same as those of the INNOGAP Fund. Thanks to this, the INNOGAP can distribute three additional prizes per year (total 90'000 CHF), enlarging therefore the funding sources available to the researchers.



Applications come from UNIGE (61%) and HUG, which is present in almost 40% (17% + 22%) of the applications

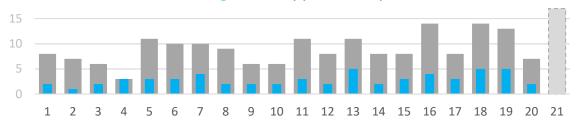


2. INNOGAP IN NUMBERS

Every year, United distributes up to 8 INNOGAP grants of up to 30'000 CHF each to UNIGE and HUG innovators to help them finance proof-of-principle or prototyping projects.

The INNOGAP fund is financed by UNIGE licensing revenues and with a yearly financial contribution from HUG. Thus, INNOGAP grants are a solidarity contribution to boost creativity and innovation within our institutions.

Received and granted applications per round



Grants distributed over the 10 years CHF 1,623,949

THIRD-PARTY GRANTS received* (up to round 17) CHF 4,725,655

LICENSES upon the grant contribution 12

number of new START-UPs created 8

The INNOGAP grant is a facilitating factor to obtain third party follow-on funds: over all the projects funded, INNOGAP grants already helped innovators (not only start-ups) to receive

THIRD-PARTY GRANTS corresponding to

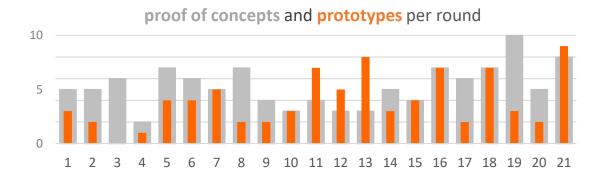
3.5 times the initial investments

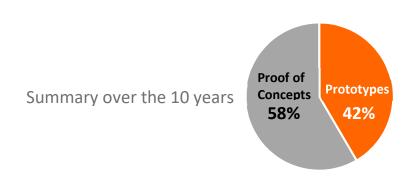
^{*}values based on available reports, which amount to 65% of the total grants

After an early period of research, innovators face a stage where their projects are less likely to be funded by standard funds from academic institutions. This is because their research is in need for practical applications. On the other hand, they are still not close enough to the market to be included in corporate R&D programs.

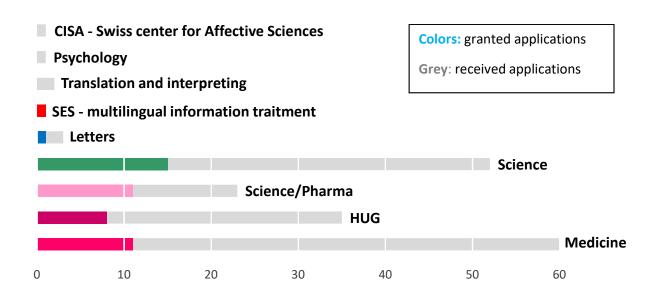
INNOGAP is especially designed to "bridge this gap" by helping researchers advance their Proof-Of-Concepts (POC) to develop new products and services available on the market.

The grant covers both POC and Prototypes.

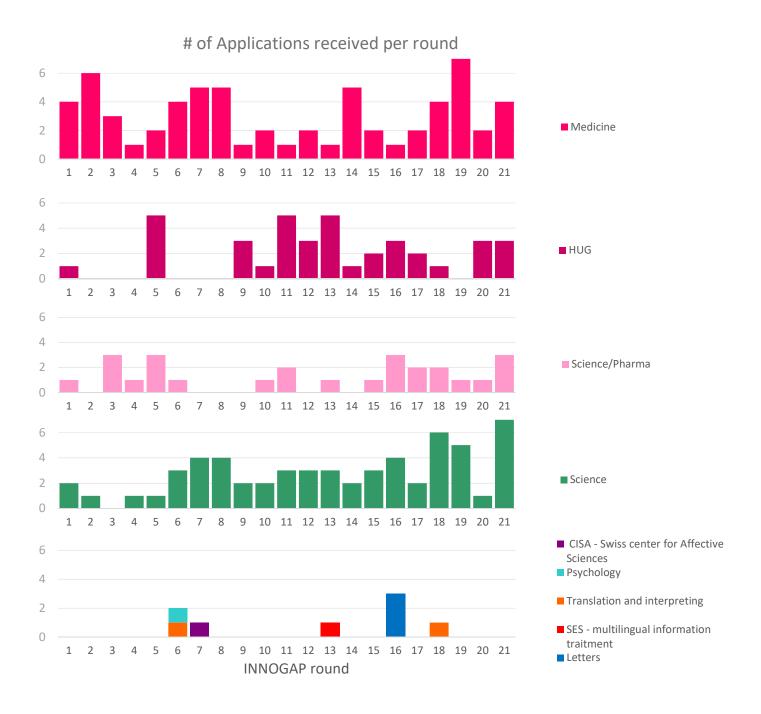




Received and granted (in colours) applications over the 10 years



The INNOGAP applications received by Unitec emanate mainly from HUG, from UNIGE Sciences and UNIGE Medicine. Other faculties are also represented, as shown below.



INNOGAP START-UPs:

















These young **spin-offs** that benefited from INNOGAP grant support obtained till present **third-party funds** for a total of:

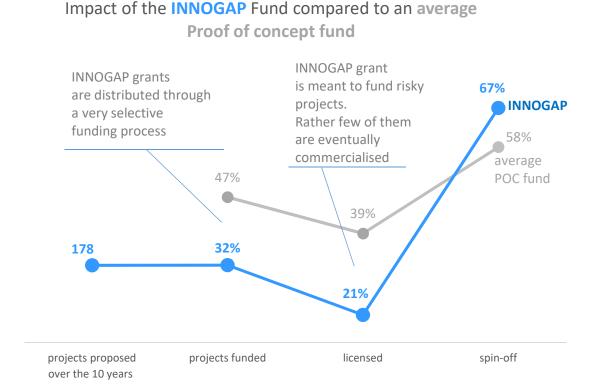


3. INNOGAP COMPARED TO THE AVERAGE PROOF-OF-PRINCIPLE GAP FUND

As illustrated in the diagram in this page, 178 projects were received over the last 10 years, of which 57 projects (32%) were approved and funded by the INNOGAP grant.

24% of these projects (i.e. 12 projects in total) reached the commercialization phase, either by being licensed to an existing company (in 4 cases), or to a newly created spin-off (8 cases).

Eligible applications that could not be funded through INNOGAP continued to be followed by UNITEC via the standard channels. Five of these projects (i.e., 5% of the cases) were eventually licensed to a company.



Average values for proof—of—principle GAP funds are data taken from the "Mind The Gap" report 2018 (source: Innovosource LLC., J.Johnson, **Mind the Gap Report** -- **2018**). Those funds include two different types of funds: those financing technology and POC (akin to INNOGAP), and those providing grants to cover mainly salaries for future entrepreneurs (similarly to the EPFL's InnoGrant, and therefore are only marginally representative of the INNOGAP fund).

The comparison between INNOGAP data and average GAP Fund data worldwide shows that fewer projects are funded with INNOGAP, meaning that the board of Unitec is very selective in the funding process.

The licensing rate with INNOGAP is lower than for the average GAP Fund. This is due to the fact that INNOGAP aims at funding risky projects stemming from fundamental research, where licensing of technologies to existing companies is more challenging than, for example, technologies stemming from Engineering.

Since the first startup created from a project that received the INNOGAP grant (Feb 2013), the INNOGAP fund has helped in the formation of 8 startups, which represent roughly

70%

of the startups funded under the same period from projects supported by UNITEC.

4. ROI OF THE INNOGAP FUND & TTM

The royalties/financial returns received from the licensed technologies which benefited from INNOGAP funding amounts to:

CHF 242,335.77

Whilst this figure may look small as compared to the total amount of funding since the creation of the fund, one should bear in mind that technology commercialization takes time.

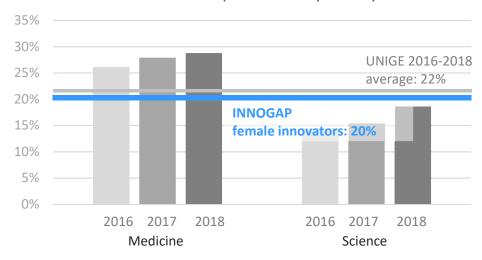
Usually several years are needed from the time when a license is granted until products are available on the market.

This figure indicates that the INNOGAP fund helps licensing academic technologies to companies. These companies commit through the licenses to paying royalties to the institutions. The royalty streams, over the coming years, shall pay back the investment made by the institutions.

5. GENDER EQUALITY DATA 🎱

20% of the INNOGAP applications received over the 10 years were submitted by female researchers. This is in line with the ratio of women over men in the professorial body in the faculties of science and medicine.

UNIGE female professors by faculty



(data source: Service Egalité UNIGE)

6. CONCLUSION

Proof-of-concept (POC) funds are a very efficient tool to foster innovation and technology transfer from higher education institutions. These funds fill a gap at a technological development stage where other types of funding do not exist.

At UNIGE and HUG, over the last 10 years INNOGAP became an important tool to mature projects intra-muros and to move them closer to the market, while keeping control over them. It also plays an important role in encouraging researchers with their entrepreneurial endeavors.

Researchers at UNIGE and HUG are more and more attracted by INNOGAP, as shown by the increase in the number of applications received. Although the vast majority of applications are related to Science and Medicine topics, other UNIGE faculties also benefit from the INNOGAP funding.

Because of the intrinsic risky nature of the projects supported by INNOGAP, the licensing process is quite selective. For the successful projects, the INNOGAP grant accelerates the advance of POCs towards the market and helps obtaining further third-party grants. The favorable local ecosystem to help startups and the high level of the research undergone at UNIGE and HUG make it possible, and even more favorable, for entrepreneurs receiving INNOGAP grants to create new start-ups.

The current flow of royalties deriving from supported technologies suggests that there is more to come, potentially paying back the initial investment.

By creating the INNOGAP fund, Unitec has strengthened its support to the research community.