

Milan finds missing link to turn research into reality | fDi Intelligence – Your source for foreign direct investment information

fDi fdiintelligence.com/content/feature/milan-finds-missing-link-to-turn-research-into-reality-84139



Unbeknownst to many, Italy is one of Europe’s biggest sources of scientific research. The EU’s latest innovation scoreboard classifies the country as a ‘strong’ innovator for the quality of its scientific publications. Four of its universities, including the University of Milan, are in the top 20 of CWTS Leiden’s ranking of Europe’s biggest producers of scientific papers — more than any other country.

But Italy has historically struggled to commercialise these capabilities to their fullest potential. “The entrepreneurial mindset has been lacking,” says Pierpaolo Padula, a healthcare angel investor. “Now I think this gap is finally being closed.”

In Milan, that ‘gap’ is being closed in two ways. The first is improved technology transfer — or turning research into a minimal viable product — by building stronger links between industry and research. The second is increased funding, thanks to more attention from venture capital (VC). Data from Listup, an organisation that tracks Italian life sciences, suggests these efforts are working. Between 2021 and 2023, it identified 152 life science start-ups founded in Milan — 20% of the country’s total.

Technology transfer

At the heart of the city’s efforts to boost technology transfer is the Milano Innovation District (MIND), which opened in 2019. The one million square metre site in the city’s north-east hosts a growing life sciences cluster that embraces the triple-helix model,

encouraging collaboration between its public tenants — the Galeazzi - Sant’Ambrogio hospital, Human Technopole research institute and an upcoming university science campus — and private tenants including the UK’s AstraZeneca, the US’s Illumina and Italian incubator Bio4Dreams. “Italy’s life science ecosystem has always been considered very fragmented,” says Fabio Bianco, Bio4Dreams’ chief scientific officer. “But since the MIND initiative was born, there’s been alignment among different stakeholders never seen before.”

Human Technopole is already collaborating with AstraZeneca, and exploring research programmes with other companies in MIND’s network. This growth of synergies is accelerated by Federated Innovation @MIND, a public–private network launched in 2022 to help “bridge the gap between research and real world applications”, says its president, Fabrizio Grillo. “We expect to improve technology transfer, ensuring new ideas can be rapidly tested, scaled and, in the end, brought to the market.”

Bio4Dreams also has technology transfer as its overriding mission and has supported 53 projects since launching in 2019. Mr Bianco describes the group as part incubator, part accelerator and part investor for very early-stage ventures. “We call ourselves the ‘business nursery of life sciences’,” he says. In addition to offering work and laboratory space, Bio4Dreams provides support remotely, with the overall goal of getting projects ready for industrial or financial partnerships. Its efforts are complemented by Berkeley SkyDeck Europe, a six-month accelerator programme based in MIND operated by its namesake Californian university.

VC funding

Another hurdle that the city’s life sciences start-up ecosystem is now overcoming is VC funding. In 2014, Alessio Beverina left Sofinnova Partners, a prominent European life sciences VC firm, to co-found Panakès Partners in Milan. Panakès launched the first fund dedicated to Italian life sciences. “I saw an opportunity as there was the science in Italy, and start-ups trying to raise funds, but no dedicated VC,” he says.

Fast-forward a decade, and there are now five VC firms with funds dedicated to Italian life sciences. Three of them — Panakès, Indaco Venture Partners and Xgen — are based in Milan.

Pitchbook data shows life science VC funding flowing to Milan is still dwarfed by Europe’s leading hubs of London, Paris and Cambridge. But it is following an upward trajectory and hit a record high \$117m in 2022. The city’s VC flows, plus its strong healthcare infrastructure and status as Italy’s most international city, is drawing start-ups to relocate to Milan from across the country. In recent years, these include biotech specialist Sibylla from Trento, Alzheimers-focused Diadem from Brescia, and oncology specialist BetaGlue from Naples. “The technology can be out of Modena, Trento or Pisa. But Milan is the place to be [in Italy] if you want to create something and attract the right people,” says Mr Beverina.

Panakès has expanded its portfolio to foreign start-ups, and is encouraging some to open branches in Milan. One example is Britain's Enterprise Therapeutics, which is focused on respiratory diseases and in January commenced research and development activities in the city. Italy's cost competitiveness compared to other life sciences hubs is one drawback, but there are other factors at play.

This year Swiss start-up EBAMed, which is pioneering a non-invasive method to treat cardiac arrhythmias, opened its first foreign branch in Milan to capitalise on Italy's leadership in ion beam therapy, which is key to the start-ups technology.

"Italy was the first country worldwide to use proton therapy for cardiac radiotherapy," says its CEO, Marina Izzo. "The European Institute of Oncology in Milan, plus a hospital in Trento, are planning to do further clinical investigations so we want to be close to them," she adds.

Building bridges

Milan's life science start-ups still face challenges, including Italy's famed bureaucracy. Mr Bianco says that constantly changing regulations is "a major issue" for fostering innovation across all fields, as innovation's long timeframes "require stable rules so that you can plan".

However, government initiatives are improving start-up life in other ways. Since 2020, national development bank CDP has sought to strengthen the country's funding ecosystem by investing in VC funds that invest in Italy and are managed within the country.

This year, the government launched a national working group dedicated to the internationalisation of its biotech sector. It is led by Pierluigi Paracchi, CEO and co-founder of Milan-headquartered oncology specialist Genenta Science, which in 2021 listed on the Nasdaq. With only a handful of life sciences companies trading on Italy's stock market, Genenta ruled out going public in Italy due to minimal analyst coverage and sector expertise among bankers. Indeed, a more buoyant local public equity market is some way off for Milan's life sciences start-ups.

But Mr Paracchi is using Genenta's presence in the US to "create a bridge" between the country's investors and Italy's science. "We pitch our story to US investors so they understand there is great quality science at a competitive cost, here in Italy."

If Genenta's bridge is successful, Milan's life sciences start-ups have much to look forward to.

Do you want more FDI stories delivered directly to your inbox? [Subscribe to our newsletters.](#)

This article is part of the Special Report:

Milan's life sciences ascent

Read more articles from the report