



Science without borders: the lasting legacy of Marie Skłodowska-Curie

More than 30 years ago, Europe made a decision: back researchers, trust their curiosity, and see where it leads. The results have been remarkable.

29 May 2026 - By ALISON JONES

Nearly a century after her death, Marie Skłodowska-Curie remains one of science's most enduring symbols of curiosity and discovery. The breakthroughs she made in radioactivity transformed medicine and physics, and her legacy reaches far beyond the laboratory.

"I am among those who think that science has great beauty," she once said. Born in Warsaw at a time when women were barred from higher education, she moved to Paris to continue her studies and in 1903 she became the first woman to win a Nobel Prize, the only woman to win it twice and the only person to win it in two different scientific fields.

For generations of scientists, she has come to embody the idea that science can cross borders, challenge conventions and improve lives.

This spirit is at the heart of the Marie Skłodowska-Curie Actions (MSCA), the EU's flagship programme for researchers' training, career development and mobility between borders, disciplines and sectors, supporting both individual researchers and large international doctoral networks.

Crossing borders for science

More than a century later, thousands of scientists supported by the MSCA follow a similar path: crossing borders, connecting fields and tackling some of the world's most pressing challenges.

In an interview marking the programme's 30th anniversary in 2026, Professor Hélène Langevin-Joliot, Skłodowska-Curie's granddaughter, reflected on how closely the programme echoes her grandmother's ideals.

“When I first heard about the programme, it reminded me of the fact that Marie promoted mobility – to be able to pay young researchers to travel around Europe.”

“When I saw the MSCA programme launched, I couldn’t have imagined the scale it would take on. But it was based on an idea she would have loved.”

Since 1996, the MSCA has supported more than 150 000 researchers from Europe and beyond. About 40% of those researchers come from outside the EU. For many of them, the programme is a concrete sign that Europe is willing to invest in people.

The programme has also helped universities, research institutes and companies build long-term international partnerships and training networks that continue beyond individual projects.

Among the researchers who have passed through the programme are 23 Nobel Prize laureates – as fellows, supervisors or project coordinators – a measure of how it helps accumulate talent and foster research excellence from one generation to the next.

Curiosity without limits

From cancer researchers developing new therapies to climate scientists tracking environmental change and AI specialists building trustworthy technologies, around 8 000 researchers receive MSCA support each year through doctoral programmes, postdoctoral fellowships and staff exchanges.

Many work within international doctoral and research networks that connect universities, companies and public institutions across Europe and beyond.

What distinguishes the programme is not only its scale, but its commitment to scientific curiosity across every field and sector. It gives researchers the freedom to explore their own ideas, however niche, often long before they make it to a policy agenda.

Dr Yara Bernaldo de Quirós, a Spanish biologist at the University of Las Palmas de Gran Canaria, used her MSCA fellowship to investigate [why dolphins and whales appear to avoid the arterial ageing](#) that affects humans and contributes to cardiovascular disease, with the ultimate aim of improving human health.

Her research grew from earlier work on decompression sickness in marine mammals. In humans, ageing naturally causes arteries to stiffen and blood vessels to function less efficiently. Diving can also trigger short-term vascular changes. Bottlenose dolphins, however, appear largely protected despite combining extreme longevity with lifelong deep diving.

“For me, the MSCA fellowship was really critical,” she said. “My PhD was very niche, very few people are working in this area, so finding employment opportunities to diversify my research was hard.”

The funding gave her the opportunity to train in cardiovascular research at the University of Colorado in the US.

“I’m in a vet school, so to be able to go to a human research lab and learn from them, and train, and return to Gran Canaria to apply that knowledge to marine mammals is really special.”

The MSCA fellowships are prestigious and highly competitive because of their reputation for transforming careers. The investment in personal development helps researchers stand out when they are applying for future grants and jobs. Bernaldo de Quirós credits it with helping her gain a permanent academic position.

From laboratory to startup

Backing researchers to ask daring questions and pursue unconventional ideas also encourages entrepreneurial thinking, and the scheme has nurtured the talent and technology behind many of Europe's startup companies.

Dr Michela Puddu, a former MSCA researcher, co-founded Haelixa, a Swiss technology company that uses DNA markers to trace products and raw materials through global supply chains, improving transparency and reducing fraud.

The company's technology applies microscopic DNA "fingerprints" to products such as cotton, textiles, gemstones and precious metals, allowing companies to verify origin claims.

"My PhD was funded through the MSCA fellowship, and it played a crucial role in shaping my career," said Puddu. "It gave me the opportunity to join a highly innovative research group, where I developed the core technology that I later commercialised."

Just as importantly, it was during her PhD that she met her company's co-founder, Gediminas Mikutis.

For Puddu, early investment in researchers is also an investment in Europe's future competitiveness.

"Supporting researchers at an early stage is critical for Europe's competitiveness," she said. "Early backing enables researchers to explore bold ideas, build expertise and advance technologies toward future real-world applications."

In this sense, MSCA acts as one of Europe's quiet talent engines, giving young scientists the confidence that the system will support them when their ideas are still unproven.

"It also ensures that promising technologies are developed and retained in the region. In a landscape where innovation cycles are accelerating, this early support can make the difference between leading and lagging behind," Puddu said.

The programme is building increasingly strong ties between academia and a wide range of non-academic organisations – from industry and public administrations to hospitals, museums and other actors in the research community. Companies, including SMEs, now account for half of participating organisations, giving smaller firms access to highly skilled international research talent.

These networks often continue long after individual grants end, creating lasting collaborations and shared expertise across sectors and countries.

Science for society

The MSCA's impact extends well beyond laboratories and startups. Public engagement has become a growing part of the programme's mission, particularly through the annual European Researchers' Night, which brings science directly to people across Europe.

On 25 September this year, events in around 40 countries are expected to draw more than 1 million visitors to museums, universities and research institutions to meet scientists and see research first-hand.

Named after one of history's most famous women scientists, the programme has also consistently promoted gender equality in research. Women represent 45% of supported researchers, making the MSCA one of the most gender-balanced parts of the EU Framework Programme.

Professor Anne L'Huillier, recipient of the [2023 Nobel Prize in Physics](#) and a former MSCA beneficiary, believes the diversity that the programme encourages is essential to scientific creativity.

"Research is done by groups of people, never by an individual person," she said. "And if research groups are diverse, you have different ideas and ways of seeing things. And this is where you have a truly creative

environment.”

It is a principle that has defined the programme from the start – and looks set to define the next chapter.

Backing the next generation

Thirty years after its creation, the MSCA continues to demonstrate how investing in people and curiosity can generate impact far beyond academia. By starting from researchers’ questions, and trusting them to chart the course, it offers a degree of freedom that many scientists see as increasingly rare.

From advances in health and sustainability to breakthrough technologies and international cooperation, the programme has helped build a generation of researchers capable of addressing complex global challenges, while strengthening Europe’s wider research and innovation networks, institutions and international partnerships.

It has shown in practical terms what it means when Europe chooses to invest in people.

The views of the interviewees don’t necessarily reflect those of the European Commission. If you liked this article, please consider sharing it on social media.

More info

- [Marie Skłodowska-Curie Actions](#)
- [European Researchers’ Night](#)
- [MSCA 30th anniversary webpage](#)