We need much more MSCA!

On September 17, 2024, the Marie Skłodowska-Curie Actions (MSCA) unit of the Directorate-General for Education, Youth, Culture, and Sport (DG EAC) presented the outcomes of its consultation on the future of MSCA to the associations invited to contribute. The findings were clear: the MSCA is an outstanding success and a pillar of excellence in Europe's research and innovation ecosystem.

Despite its achievements and popularity, the programme is notably absent from Mario Draghi's report and the Mission Letters for the proposed Executive Vice-President for People, Skills and Preparedness, and Commissioner for Startups, Research, and Innovation. The latter's mission letter nonetheless states "I would like you to focus on supporting the next generation of researchers and help strengthen and incentivize cooperation between academic, private and public sector entities to create attractive career perspectives". This fully reflects the core mission of MSCA, particularly its support for initiatives like the industrial doctorates that foster collaborations and mobility across sectors, yet the MSCA programme is not explicitly referenced in the letter. Strange, to say the least.

We, the undersigned R&I organisations express our collective concern over this omission, which overlooks the programme's essential contributions to Europe's research, innovation and competitiveness. Therefore, we call for the recognition the MSCA deserves, alongside an increased budget to unlock its full potential.

Why MSCA matters

The Marie Skłodowska-Curie Actions, since decades part of the Framework Programme for Research and Innovation, stands as the EU's flagship programme for supporting doctoral and postdoctoral training through research and mobility. While often celebrated for promoting researchers' international mobility, attracting and retaining European and global talents in the EU, the MSCA has much more to offer. The programme funds high-quality, bottom-up research, enhances the career development of researchers at all stages, and supports the creation of interdisciplinary and intersectoral, global research collaborations. Its positive impact is felt across universities, research institutions, and non-academic organisations. By investing in the long-term careers of excellent researchers, the MSCA serves as a catalyst for driving innovation and enhancing competitiveness, aligning with Ursula von der Leyen's new political guidelines, which prioritise "research and innovation at the heart of our economy".

MSCA's lasting impact: Developing talent, advancing research

- 150,000 researchers supported since 1990
- 60,000 additional researchers will be supported under Horizon Europe
- 12,500 organisations funded in the past 10 years, of which 5200 SMEs
- 1,500 doctoral training programmes funded in the past 10 years
- 13,500 prestigious Postdoctoral Fellowships awarded in the past 10 years

The MSCA has funded researchers who have made groundbreaking discoveries across a wide range of fields. This **legacy of excellence and innovation** is clearly illustrated by the remarkable achievements of MSCA alumni, many of whom have received prestigious awards, including several Nobel Prizes.

Nobel laureates:

18 Nobel Prize laureates have received support and funding from MSCA. Their groundbreaking research spans various fields, including quantum information science, genome editing, gravitational waves, fluorescence microscopy, and neutrino oscillations.

Additional recognitions:

- 3 winners of the European Women Innovators Prize in the past 5 years
- 1 winner of the EU Innovation Radar Prize Grand Prix in 2020
- 6 MSCA researchers involved in the discovery of the Higgs boson
- 1 winner of the European Sustainable Energy Awards Women in Energy

These impressive accolades underscore the high quality of the research fostered through MSCA funding, which advances scientific knowledge and fosters the development of tangible innovation outputs. Here below we showcase a selection of industry examples that have emerged from this thriving environment, illustrating how MSCA helps bridging the gap between academia and industry.

RS Research

Smart nanomedicines for targeted chemotherapy

MSCA connection: Rana Sanyal, 2024 European Women Innovator Prize winner

ThrustMe

Space industry and space propulsion

MSCA connection:
Ane Aanesland,
CEO and cofounder of ThrustMe

Haelixa

Product traceability solutions based on DNA

MSCA connection:
Michela Puddu, 2019
European Women
Innovator Prize winner

Zymvol

Enzyme engineering, discovery and development

MSCA connection:
Maria Fátima Lucas,
2020 European Women
Innovator Prize winner

These examples represent just a glimpse of the many success stories resulting from MSCA support, each highlighting the programme's effectiveness in developing talent and driving research that meets societal needs.

Conclusions: Unlocking MSCA's full potential with more funding

As Europe navigates unprecedented challenges and exciting opportunities, the need to invest in the Marie Skłodowska-Curie Actions is clearer than ever. MSCA nurtures talent, fosters groundbreaking research, strengthens global collaborations, and therefore has a key role in driving economic growth and securing Europe's competitive edge in a rapidly evolving global landscape.

However, the current funding is insufficient to maintain the programme's momentum and expand its reach. We therefore urge the European Commission, Parliament and Council to recognise the MSCA's invaluable contributions by increasing its budget, while maintaining its purely bottom-up research character. This investment will improve application success rates (which currently stand at just 14%), expand access for a broader range of high-quality projects and, ultimately, empower even more researchers to excel.

President Ursula von der Leyen urges Europe that "to lead on innovation, we need to create the conditions for researchers to thrive" and then underlines that this "also means attracting new talents and retaining the best and brightest minds here in Europe." MSCA has an outstanding track record in these areas, and we need much more of it!

"The Marie Skłodowska-Curie Actions (MSCA) were crucial at the beginning of my career in Sweden. [...] Receiving support from MSCA to train and supervise doctoral and postdoctoral fellows within a network was very important for me. [...] I think the MSCA have helped a lot to increase networking and communication among research actors."

- Dr Anne L'Huillier, 2023 Physics Nobel Prize laureate and Wolf Prize winner

Organisations endorsing this statement

AURORA



















PUSHING THE FRONTIERS OF INNOVATIVE RESEARCH





