

PRESS RELEASE

Université PSL (Paris Sciences & Lettres) and European Space Agency - ESA announce the signature of a Memorandum of Collaboration leading to the launch of joint programs on training, research and innovation

Paris, 22 October, 2018. Université PSL (Paris Sciences & Lettres) and the European Space Agency (ESA) have signed a Memorandum of Collaboration leading to the creation of the ESA_Lab@PSL, which will be embedded within ESA as part of its ESA_Lab@ initiative, and within PSL as part of its Space Technological Complex.

This interdisciplinary initiative will focus on human and robotic space exploration activities through training, research and dissemination projects. ESA will draw on the wide range of scientific fields within PSL – astrophysics, physics, biology, chemistry, life sciences, design - involving many of PSL members such as Observatoire de Paris, Ecole normale supérieure, Institut Curie, MINES ParisTech, Chimie ParisTech or Ecole nationale supérieure des Arts Décoratifs (affiliate member).

ESA's European Astronaut Centre (EAC) will be the focus of the first collaborations and later extended to other ESA centres. The Space Technological Complex at Observatoire de Paris will also play a major role. Many programmes and teams from PSL and EAC will be involved, applying a strong interdisciplinary tradition to improve the work of astronauts.

- Spaceship EAC will provide internships to improve space missions for top-level, highly selected students in fields such as robotics, materials or life sciences, notably from the PSL Institute for Technology and Innovation (PSL-ITI) which combines research and innovation with design technologies.
- Students following the PSL Medicine/Science programme, which provides a double skill set in life sciences and sciences (physics, mathematics, etc.), will be able to specialise in space medicine through specific courses offered by EAC.
- PSL and EAC will co-chair PhDs in the Medicine/Science programme according to specific profiles.
- Common research topics will include the history of astronauts and radiation exposure.

The President of PSL, Professor Alain Fuchs, and ESA Director General Professor Jan Wörner, revealed the new scheme during a meeting to sign the agreement at ESA Headquarters in Paris this week.

Strong foundations

Université PSL is a young institution, created in 2010 through the leadership of schools and research institutions themselves steeped in rich, centuries-old history. PSL's institutions, international in scope since their very beginnings, decided to unite to more fully harness the academic adventure of the 21st century. PSL encompasses every field of knowledge, from the sciences and engineering to the arts, humanities and social sciences. With 17000 students and 4500 researchers, PSL is comparable to the best universities worldwide.

The European Space Agency (ESA) provides Europe's gateway to space. ESA is an intergovernmental organisation, created in 1975, with the mission to shape the development of Europe's space capability and ensure that investment in space delivers benefits to the citizens of Europe and the world.

The European Astronaut Centre located in Cologne, Germany, is part of ESA's Human and Robotic Exploration endeavours and a centre of excellence for astronaut training and space medicine. It is also the home base for all European astronauts and a future spot for testing lunar exploration and operations.

Of the collaboration, Professor Fuchs said: "Space has been at the forefront of current debates with the strengthening goal of preparing missions to Mars. They are the stuff of dreams for everyone, not least amongst which our students and researchers. This collaboration is in perfect line with PSL's DNA in interdisciplinary training, research and innovation, as demonstrated by the flagship PSL programmes that will take part in the partnership. PSL is proud to contribute to the work of ESA in opening new frontiers and understanding our universe ever so slightly more."

ESA Director General Jan Wörner added: "A few years ago, ESA launched the Spaceship EAC initiative to tackle future space exploration challenges. The best way to do so, is to open up to new sectors around us and engage with people from outside the pure space sector. In a context of change of paradigm, I am confident that this new collaboration will contribute to leading us along the right path, for more research, more innovation and the emerging of new ideas."

Development of the collaborations

Several students in Life Sciences at Ecole normale supérieure have already benefited from specialised courses in space physiology. This programme will develop over the course of the coming years. Details of the academic content will be finalised over the next few months by PSL and ESA, including Frank De Winne (Head of the European Astronaut Centre EAC and Lead ISS Operations and Astronaut Group), Victor Demaria-Pesce (Senior Advisor to the Head of EAC), Cédric Denis-Rémis (Vice-President for Development, PSL), Minh-Ha Pham (Vice-President for International Relations, PSL) and Audrène Eloit (Director of Partnerships and Development, PSL).

More information

- Visit the PSL website / Visit the ESA website
- For more information about the collaboration, contact Victor Demaria-Pesce (EAC) / or Audrène Eloit (PSL)