

NEWSLETTER CNRS@CREATE

Biannual external newsletter - January-June 2026



EXTERNAL NEWSLETTER



Prof. Dominique Baillargeat, Scientific Executive Director of CNRS@CREATE

« Welcome to this second CNRS@CREATE external newsletter! This newsletter is published every semester in order to inform you on what keeps CNRS@CREATE busy.

During the first part of 2026, two major milestones for CNRS@CREATE were celebrated with the kick off of the Embodied AI project, as well as the inauguration of the CNegSAF Synthetic Biology Laboratory. CNRS@CREATE also hosted Wandercraft's first event in Singapore, introducing their self-balancing exoskeleton and humanoid robot to the Singaporean research ecosystem.

The DesCartes Programme was also invited by HTX (Home Team Science & Technology Agency) to unveil the Future Urban Dispersion Simulation and Validation Exercise at the Milipol TechX Summit (MTX) 2026. During this event, Prof. Francisco Chinesta, Professor at Arts et Métiers ParisTech - École Nationale Supérieure d'Arts et Métiers Paris - and Director of the DesCartes Programme, was also invited by HTX to the CBRNE (Chemical, Biological, Radiological, Nuclear, and Explosives) Threats and Detection Workshop to deliver a talk. Additionally, the DesCartes Programme was showcased during the National University Hospital of Singapore (NUH) Innovation Hub Grand Opening through the presentation of the DesCartes-NUH collaboration on real-time agent-based modelling for hospital operations.

Furthermore, we welcomed more students from Georgia Tech and University of Texas Arlington, as well as two interns from the International French School of Singapore. The CNegSAF project and the DesCartes Programme also received one media coverage each. On top of this, Prof. Frédéric Thomas, CNRS Senior Research Director, gave a fascinating keynote talk during the NRF CREATE Symposium in June 2026, while Prof. Nouredine Hadjsaid, PI of the DesCartes Programme, hosted an insightful seminar on the Iberian blackout's consequences.

To celebrate the start of this new academic year, we'd like to remember that we are always open for collaboration.
Have a good read!

► EMBODIED AI PROJECT KICK OFF

The project "Embodied AI for Human-Robot Collaborative Task Execution" was launched during a team meeting on January 28, 2026. This 4-year project is coordinated by CNRS@CREATE, jointly with the National Robotics Programme Singapore. 20 attendees from CNRS, NRF, NRP, NTU, NUS and SMU discussed the four next years of the project during this launch meeting, which was also an opportunity for the French researchers visiting Singapore to meet their Singaporean collaborators in person.

[Read more here.](#)



► WANDERCRAFT SHOWCASES CALVIN AT CNRS@CREATE



On Monday 6 April, CNRS@CREATE hosted Wandercraft's first event in Singapore at the CREATE Campus. More than a hundred guests from governmental agencies, academia, and industry came together to discover Calvin, Wandercraft's autonomous industrial humanoid robot, live in action in Singapore.

The event brought together Chairman of NRF; Ambassador of France to Singapore; ED NRP Singapore; and Wandercraft CEO, alongside representatives from sectors spanning engineering, defence, maritime, healthcare, aviation, and logistics.

The highlight of the afternoon was the live demonstration of Calvin, Wandercraft's heavy-payload industrial humanoid.

This event reflected CNRS@CREATE's growing ambition to become a key hub for collaborative research in Embodied AI between France and Singapore research ecosystems.

[Read the full article here.](#)

► MTX - MILIPOL TECHX 2026

From 28-30 April, CNRS@CREATE unveiled the Future Urban Dispersion Simulation and Validation Exercise at the Milipol TechX Summit (MTX) 2026: a live demonstration developed with HTX (Home Team Science & Technology Agency) under the DesCartes Programme.

This advanced surrogate modelling technology dramatically reduces chemical incident simulation time, making real-time emergency decision-making possible. The project also includes a planned field trial to collect local wind and atmospheric data, validating these dispersion modelling tools for Singapore's response operations.

We were honoured to welcome Ms Sim Ann, Senior Minister of State, Ministry of Foreign Affairs & Ministry of Home Affairs of Singapore, and Mr Jean-Didier Berger, Minister Delegate to the French Minister of the Interior. It was a great opportunity for Prof. Francisco Chinesta, Professor at Arts et Métiers ParisTech - École Nationale Supérieure d'Arts et Métiers Paris - and Director of the DesCartes Programme, to demonstrate them how the DesCartes Programme can respond to emergency crisis scenarios in Singapore in real time.

On 30 April, Prof. Francisco Chinesta was invited by HTX to the CBRNE (Chemical, Biological, Radiological, Nuclear, and Explosives) Threats and Detection Workshop, where he delivered a talk on Threat Assessment in an Urban Environment: Combining High Fidelity Dispersion Models and Data into a Physics Augmented Digital Twin. He also joined the panel on The Future of Urban Threat Prediction.

[Read the article here.](#)



► INAUGURATION OF THE CNEGSAF LABORATORY AT CREATE

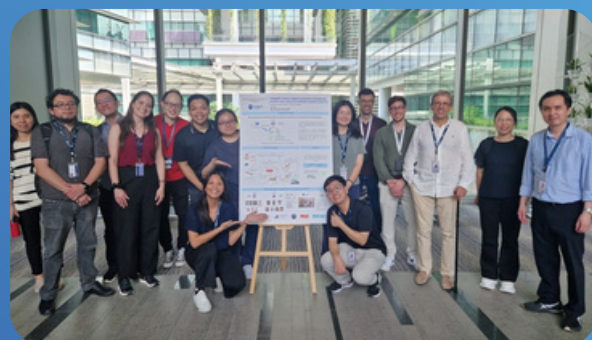
On Thursday 23 June, CNRS@CREATE celebrated the inauguration of its new Synthetic Biology Laboratory, established by the CNegSAF project: Carbon-Negative Production of Advanced Sustainable Aviation Fuels Using Twin Synthetic Bacterial Consortia.

Part of the National Research Foundation of Singapore's Decarbonisation Grand Challenge, and in partnership with NUS, NTU, A*STAR, as well as CNRS, INSA Toulouse and INRAE, CNegSAF takes on one of aviation's hardest problems: how to fuel flight without fueling emissions.

Our guests got a first look at the new facility, designed for enzyme engineering, strain engineering, and fermentation studies under both heterotrophic and autotrophic conditions. A platform for the next generation of microbial technologies driving industrial decarbonization.

The inauguration included an introductory talk by Prof Philippe Soucaille and Prof. Chueh Loo Poh followed by a short presentation of the team's progress, a tour of the new CNegSAF laboratory, and a chance to connect over coffee.

[Read more here.](#)



► DESCARTES-NUH COLLABORATION

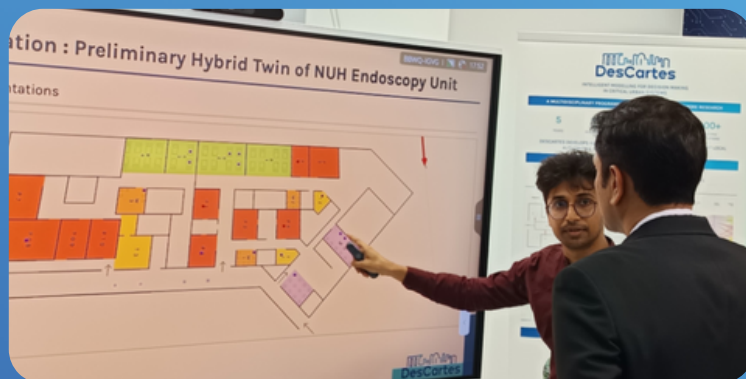
CNRS@CREATE was invited by its partner National University Hospital of Singapore (NUH) to present the DesCartes-NUH collaboration on real-time agent-based modelling for hospital operations during two major events gathering over 150 attendees.

•NUH Staff Group Retreat: pitch to NUH C-suite leaders and key decision-

makers, followed by participation in a roundtable discussion to explore new use cases and co-develop innovative solutions.

•NUH Innovation Hub Grand Opening: pitch to VIPs including Mr. Dinesh Vasu Dash (Minister of State for Culture, Community and Youth, and Manpower) and Prof. Aymeric Lim, CEO of NUH.

Notably, this was the only research institute pitch alongside NUH's in-house startups, highlighting how fundamental research capabilities are increasingly recognized as key drivers for solving real-world challenges in hospital operations.



► “DESCARTES EXPLAINS” SERIES BY PROF. FRANCISCO CHINESTA



In our latest “DesCartes Explains” series, Prof. Francisco Chinesta (DesCartes Programme Director, and Professor at ENSAM Paris) breaks down why the future of smart cities lies in Hybrid AI: merging physics-based models with data and machine learning.

Swipe through the photos available on the link below to discover:

- Why cities resist traditional modelling
- The limits of pure data & AI
- How hybrid modelling delivers accurate, fast, frugal, and explainable results
- The rise of the Hybrid Digital Twin
- Real-time applications: wind, heat, air quality, drones, smart grids, crisis management

DesCartes is Singapore's Augmented City Lab: scalable, transferable, city-ready.
[Discover the carousel here.](#)

► GEORGIA TECH AND UNIVERSITY OF TEXAS AT ARLINGTON STUDENTS VISIT

16 students, 8 from Georgia Tech (GT) and 8 from University of Texas at Arlington (UTA) undergraduate programmes visited CNRS@CREATE on 23 June 2026.

Prof Amine Ammar, PI in the DesCartes Programme, and Flora Luciani, DesCartes Programme Officer, presented the latest advancements in the DesCartes programme.

The students also had the chance to experience the DesCartes demos, to understand how this research is currently applied to Singapore.



► IFS INTERNS AT CNRS@CREATE



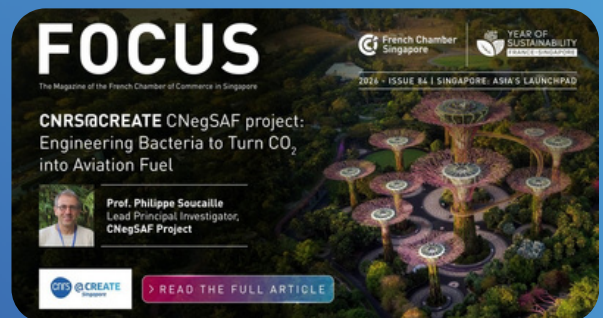
2 students from the International French School of Singapore did an internship at CNRS and CNRS@CREATE in June, from 8 to 19 June 2026. Calixte and Ginevra visited all 4 International Research Labs of CNRS in Singapore (MajuLab, CINTRA, IPAL, BMC), met with young researchers and Senior PIs from CNRS@CREATE, and joined several seminars. They also discovered the DesCartes demos, and visited 2 other CREATE partners: CARES and TUMCREATE.

► PROF. PHILIPPE SOUCAILLE INTERVIEW FOR FCCS' FOCUS MAGAZINE ON SINGAPORE: ASIA'S LAUNCHPAD

The 84th issue of FOCUS Magazine, by The French Chamber of Commerce in Singapore, is available. This edition explores how Singapore drives regional growth through connectivity, innovation, and sustainability. Featuring insights, interviews, and member case studies, it highlights how companies leverage Singapore as a launchpad to Asia.

Discover CNRS@CREATE's impact on Research & Sustainability at page 24.

[Read now](#)



► COMBINING ARTIFICIAL INTELLIGENCE WITH DIGITAL TWIN SYSTEMS HELPS IN CRISIS RESPONSE – LIANHE ZAOBAO



A collision occurred in Marina Bay, with the vessel catching fire, billowing thick smoke, and leaking oil. This is a simulated scenario created by a local research team for developing a digital twin system. The system, incorporating artificial intelligence simulation capabilities, can assist authorities in monitoring the situation in real time and quickly formulating response plans.

Read the [article from Lianhe Zaobao here](#).

SCIENTIFIC HIGHLIGHTS

► SEMINAR BY PROF. NOUREDINE HADJSAÏD : "ONE YEAR AFTER THE IBERIAN BLACKOUT AND LESSONS LEARNED"

On Thursday 11 June, CNRS@CREATE had the pleasure of hosting Prof. Nouredine Hadjsaid for an insightful seminar: "One year after the Iberian blackout and lessons learned: Are renewables to be blamed?".

Prof. Nouredine, who is a PI of the DesCartes Programme and visiting professor at Energy Research Institute @ NTU, Nanyang Technological University Singapore, unpacked the characteristics of the Iberian grid, the conditions leading up to the incident, the sequence of events, and, one year on, the key lessons for power systems undergoing rapid energy transition.

[Read the article here.](#)

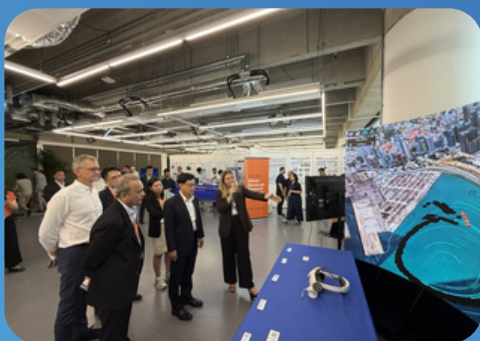


► CNRS@CREATE AT THE NRF CREATE SYMPOSIUM 2026



On Thursday 25 June, the National Research Foundation of Singapore hosted its CREATE Symposium on "Climate, Environment, Health and Urban Resilience", and CNRS@CREATE was represented across every theme.

Prof. Frédéric Thomas, CNRS Senior Research Director, founder of the Centre for Research in Ecology and Evolution of Cancer (CREEC), co-director of the CNRS research platform "Health-Environment Camargue" (Zone Atelier) and CNRS Silver Medal laureate (2012), delivered a fascinating keynote: "Evolution and Cancer: An Eco-Evolutionary Perspective on Environmental Drivers of Tumorigenesis."



Discover the research highlights at our booth and poster on display during the Symposium by [reading the article here.](#)



WEBSITE LINKS



CNRS@CREATE

cnrsatcreate.cnrs.fr/



DESCARTES PROGRAM

descartes.cnrsatcreate.cnrs.fr/

ONGOING PROJECTS

NGAP

cnrsatcreate.cnrs.fr/ngap/

CNEGSF

cnrsatcreate.cnrs.fr/cnegsaf/

HYCOMBS

cnrsatcreate.cnrs.fr/hycombs/

EMBODIED AI

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