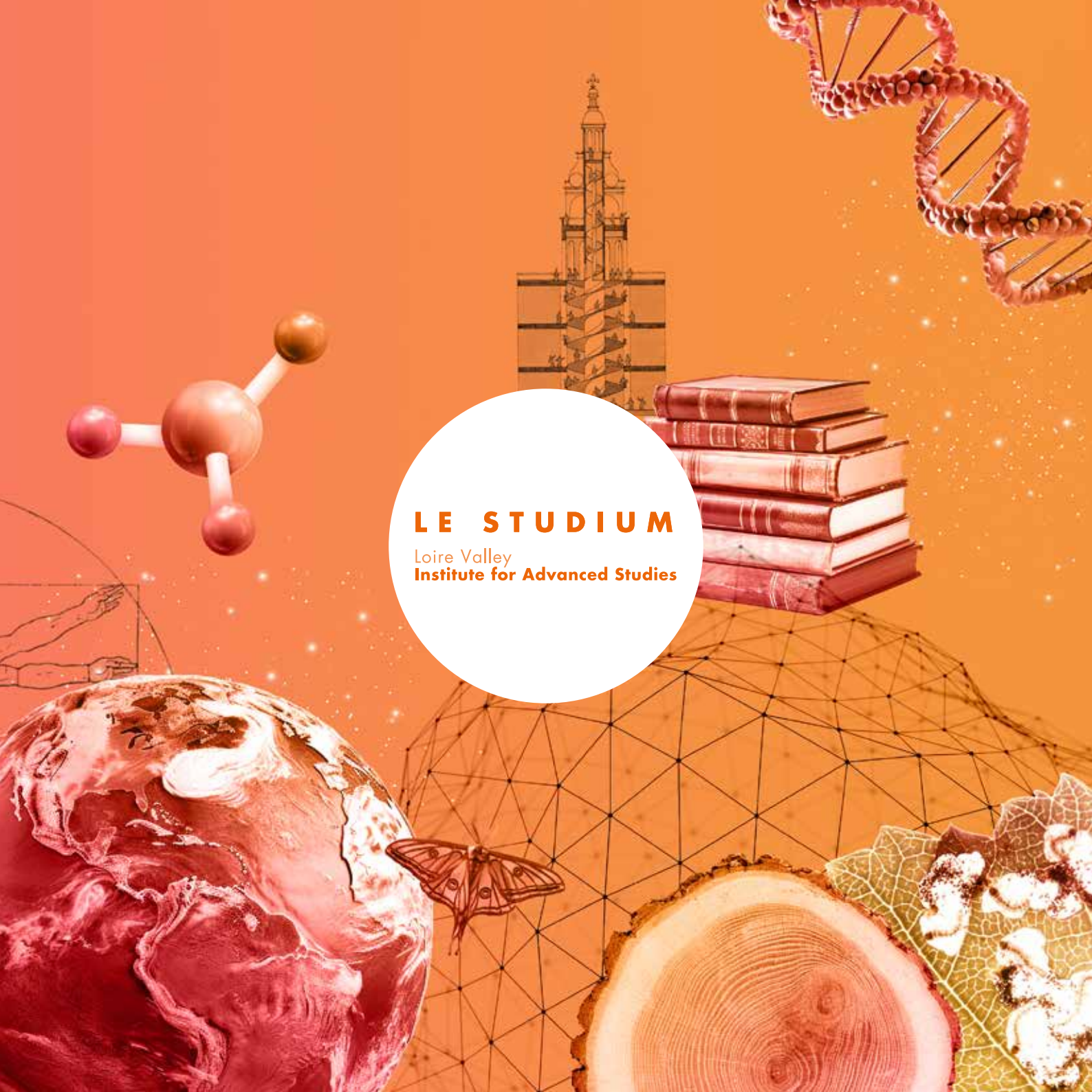

LE STUDIUM
Loire Valley
Institute for Advanced Studies

ANNUAL SCIENTIFIC REPORT 2025

THE PRESIDENT EDITORIAL

For Le Studium, 2025 marks a new phase in its 2021–2027 strategic plan to support the internationalisation of research in the Centre-Val de Loire region. Le Studium offers nine active visiting programmes that enable highly qualified scientists to come and stay in the region in order to develop long-term collaborations within higher education and research institutions, and national research organisations based in the region. The diversity of the topics and profiles of those hosted illustrates what has characterised the researchers who have benefited from a grant and stayed in the region since its inception: curiosity, imagination and intuition.

In 2025, the drive to attract talents was largely driven by the ever-dynamic 'Smart Loire Valley Programme', which has been open for over twenty years to all scientific disciplines and experienced researchers. The FIAS (French Institutes for Advanced Study) programme, funded by the European Union's Marie Curie-Skłodowska Actions and led by the French Network of Institutes for Advanced Study, in which the Studium participates, has been renewed for five years. The 'Visiting Researchers' Programme of the Loire Valley House of Social Sciences and Humanities, the "Arts & Sciences Programme" developed in partnership with the Orléans School of Art and Design and the Molecular Biophysics Laboratory of the French National Centre for Scientific Research in Orléans, and the brand-new "NEOLAiA Visiting Researchers Programme" developed in partnership with the University of Tours also contribute to this drive to boost attractiveness.

Furthermore, with the aim of helping to structure and strengthen the regional research ecosystem around recognised priority areas, Le Studium has contributed to four programmes entitled 'CVL Research and Development Ambition', launched by the Regional Council, through initiatives with an international focus. Le Studium reached out to several international ecosystems and partners. These efforts resulted in numerous visits abroad, interviews, hosting of delegations, and workshops for presentations and discussions. Several European projects were submitted in partnership with these established contacts, and an European staff exchange programme was funded.

The programmes will have facilitated visits by 45 international researchers to the region in 2025, amounting to 178 months of residency across 25 laboratories. In 2025, Le Studium was accredited as an Euraxess Service Centre, thereby enhancing its ability to offer support and its expertise. In collaboration with the research institutes and laboratories that hosted them, Le Studium organised around forty international events, four public conferences and an exhibition at the Museum of Orléans for Biodiversity and the Environment.

We would like to thank the members of our independent Scientific Council for their invaluable and steadfast contribution, which lends the necessary credibility to our activities and for the time they devote to the selection process. The Council has been deeply saddened this year by the sudden passing of Mark Oliver Goerbig, a renowned theoretical physicist. The Studium will honour his memory at its next council meeting in 2026.

Thank you to our financial contributors who support our programmes: the European Union, the Centre-Val de Loire Regional Council, Orléans Métropole, and the Universities of Orléans and Tours. Our sincere thanks also go to all our scientific partners: the Universities of Orléans and Tours, the CNRS, the BRGM, INRAE Val de Loire, the INSERM, AgroParisTech Orléans, the INSA-CVL and the CEA, not to mention the industry members of our committees and programme partners who take the time to advise us on the best ways to foster innovation. I cannot conclude without extending my heartfelt thanks to the entire staff members of Le Studium. Dedicated to the core mission of Le Studium, this team spares no effort to ensure that international researchers are welcomed under the best possible conditions within the research institutions in the Centre-Val de Loire region.

It is my hope that you will enjoy this 2025 report, with its wealth of new scientific research and discoveries.

Ary Bruand,
President

L'ÉDITO DU PRÉSIDENT

Pour Le Studium, l'année 2025 se distingue par une nouvelle étape de son plan stratégique 2021-2027 d'accompagnement de l'internationalisation de la recherche en région Centre-Val de Loire. Le Studium propose neuf programmes d'invitation actifs qui permettent à des scientifiques hautement qualifiés de venir séjourner en région afin de développer des collaborations durables au sein des établissements d'enseignement supérieur et de recherche, et des organismes nationaux de recherche présents en région. La diversité des thématiques et des profils accueillis illustre ce qui caractérise depuis sa création les chercheurs ayant bénéficié d'une bourse et séjourné en région : curiosité, imagination et intuition.

En 2025, l'effort d'attractivité a été largement fourni par le toujours très dynamique « Smart Loire Valley Programme » ouvert depuis plus de vingt ans à toutes les disciplines scientifiques et aux chercheurs expérimentés. Le programme FIAS (French Institutes Advanced Study) financé par les actions Marie-Curie Sklodowska de l'Union européenne, piloté par le Réseau Français des Instituts d'Etudes Avancées auquel participe le Studium, a été renouvelé pour cinq ans. Le Programme de « Visiting Researchers » de la Maison des Sciences Sociales et des Humanités du Val de Loire, le « Programme Arts & Sciences » développé en partenariat avec l'Ecole Supérieure d'Art et de Design d'Orléans et le Laboratoire de Biophysique Moléculaire du Centre national de la recherche scientifique à Orléans et le tout nouveau « NEOLAiA Visiting Researchers Programme » développé en partenariat avec l'Université de Tours contribuent également à cet effort d'attractivité.

Par ailleurs, avec l'objectif de contribuer à la structuration et au renforcement de l'écosystème recherche présent en région autour de domaines prioritaires reconnus, le Studium a contribué à quatre programmes intitulés « Ambition Recherche et Développement CVL » initiés par le Conseil régional par des actions tournées vers l'international. Le Studium est allé à la rencontre de plusieurs écosystèmes et partenaires internationaux. Ces efforts ont donné lieu à de nombreuses visites à l'étranger, interviews, accueils de délégations et ateliers de présentations et réflexions. Plusieurs projets européens ont été déposés en partenariat avec ces contacts établis et un programme d'échanges de personnels a vu le jour.

Les programmes auront permis la visite d'une quarantaine de chercheurs internationaux sur le territoire en 2025 pour 178 mois de résidence dans 25 laboratoires. Cette année 2025, Le Studium a obtenu l'accréditation de Centre de Service Euraxess et a renforcé ses capacités pour mieux les accompagner. En collaboration avec les instituts et laboratoires de recherche les ayant accueillis, Le Studium a organisé une quarantaine d'événements internationaux, quatre conférences grand public et une exposition au Museum d'Orléans pour la Biodiversité et l'Environnement.

Nous tenons à remercier la contribution précieuse et fidèle des membres de notre Conseil scientifique indépendant qui apportent le crédit nécessaire à nos activités et consacrent du temps aux sélections. Celui-ci a été endeuillé cette année par le départ prématuré de Mark Oliver Goerbig, physicien théoricien renommé. Le Studium lui rendra hommage à l'occasion de son prochain conseil en 2026.

Merci à nos contributeurs financiers qui soutiennent nos programmes : l'Union Européenne, le Conseil Régional Centre-Val de Loire, Orléans Métropole, et les universités d'Orléans et de Tours. Nos sincères remerciements vont également à tous nos partenaires scientifiques : les universités d'Orléans et de Tours, le CNRS, le BRGM, INRAE Val de Loire, l'INSERM, AgroParisTech Orléans, l'INSA-CVL et le CEA, sans oublier les membres industriels de nos comités et partenaires de programmes qui prennent le temps de nous éclairer sur les meilleurs moyens de favoriser l'innovation.

Je ne saurais terminer sans adresser des remerciements appuyés à l'ensemble de l'équipe du Studium. Au service des missions qui fondent le Studium, cette équipe ne compte pas ses efforts afin que les chercheurs accueillis le soient dans les meilleures conditions possibles au sein des structures de recherche présentes en région Centre-Val de Loire.

Puisse la lecture de ce rapport 2025 vous éclairer et surprendre avec son lot de nouvelles recherches et découvertes scientifiques.

Ary Bruand,
Président

IDENTITY & MISSIONS

LE STUDIUM Loire Valley Institute for Advanced Studies (IAS): *a unique transdisciplinary approach to support research and innovation in the Centre-Val-de-Loire region and a multidisciplinary intellectual and human space favouring international scientific exchanges.*

Established in 1996 by Prof. Paul Vigny and inspired by the historical, geographical and human cultures of the Loire Valley, LE STUDIUM Loire Valley Institute for Advanced Studies (IAS) covers all research fields in one global initiative aiming at boosting international and multidisciplinary scientific exchanges in the region and creating a dynamic scientific community that fosters knowledge, research and innovation. Strengthening fundamental research, sharing knowledge, contributing to innovation developments and addressing global challenges are the many goals pursued by the institute. Having welcome hundreds of highly qualified scientists, the institute contributes to the strengthening of human capital for research, development and innovation and participates in the promotion of regional scientific research and economic influence.

LE STUDIUM 's programmes enable the institute to welcome the residencies of experienced international researchers across all scientific disciplines and support the development of international sustainable research collaborations. The selections and recruitments happen through calls for applications and call upon high standards applying to LE STUDIUM Scientific Council and human resources management. Thanks to the variety of existing programmes, the scientific research projects hosted by the institute cover a wide array of scientific topics.

The Smart Loire Valley Programme opens every year and offers various residency awards across all scientific disciplines since the creation of the institute. This first LE STUDIUM programme set the basis of excellence in which the institute endeavours to select and welcome international scientists. For the period 2015-2021, it operated with a co-financing from the European Union in the framework of the Marie Skłodowska-Curie Actions (COFUND) for the mobility of experienced researchers.
Starting in 2022, LE STUDIUM is a partner of the French Institutes for Advanced Study (FIAS) Programme - financed by the Marie Skłodowska-Curie Actions (COFUND) – alongside with six other French institutes for advanced studies in the field of humanities and social sciences. In that field, LE STUDIUM Loire Valley IAS also collaborates with The Loire Valley House of Social Sciences and Humanities with a Visiting Researchers Programme. For the past fifteen years, LE STUDIUM Loire Valley IAS is also a key partner of the regional council for its Ambition, Research and Development programmes initiative to support the smart specialisation strategy (S3) efforts and structure the regional research in defined scientific fields: cosmetics, biopharmaceuticals, environmental metrology and digital twins, forestry, materials in extreme conditions, natural and cultural heritage… Fellowships, conferences, missions abroad and visits of delegations, workshops, and small groups meetings lead to the development of ambitious collaborations and projects.

Since 2024, LE STUDIUM is an associated partner of the NEOLAiA European University Consortium through a partnership with the University of Tours: a Visiting Researchers Programme open to the nine European universities members foster exchanges and creation of new curricula. The institute develops in parallel a rich scientific events programme including international conferences, workshops, transdisciplinary seminars, webinars, summer schools and lectures for the promotion of the scientific culture and knowledge.

At the interconnection between fundamental research and innovation, LE STUDIUM works in close collaboration with all regional research partners, stakeholders and intermediaries:

- University of Orleans, University of Tours, INSA Centre-Val de Loire, AgroParisTech Orléans, ESAD Orleans,
- BRGM, CNRS Centre Limousin Poitou-Charente, CEA Le Ripault, Centre INRAE Val de Loire, Inserm
- Cosmetic Valley, Polymeris, Dream, S2E2, Polepharma, Vegepolys
- Maison des Sciences Sociales et des Humanités Val de Loire, Da Vinci Labs
- Hospitals of Tours and Orléans
- Euclide, Dev'Up, Centre-Sciences, CCI, etc...

LE STUDIUM Loire Valley Institute for Advanced Studies' awards are selected thanks to the support and expertise of the LE STUDIUM Scientific Council. The latter is composed of twenty-five renowned scientists who regularly dedicate some of their precious time to evaluate research projects and candidacies in total independency.

SCIENTIFIC VISION & SURROUNDINGS

From fundamental research to innovation and socio economic development.

LE STUDIUM Loire Valley Institute for Advanced Studies is strongly imbedded in the Centre Val de Loire region's research landscape. With almost 30 years of experience and holding a prestigious portfolio of regional and international research programmes, activities contribute to spreading light on its regional actors, partners and visitors. The focus of its mission remains to build the human capacity for research and scientific knowledge and to foster socioeconomic development and innovation. LE STUDIUM's expertise lies in attracting and managing a growing flow of global research exchanges, boosting international scientific exchanges, creating new scientific value chains, and contributing to the emergence of innovative, collaborative research and enterprise activities. The impact of new knowledge on the economy is incremental, but the cumulative effect is substantial.
Based in the city centre of Orleans at the Hotel Dupanloup, the International University Centre for Research, LE STUDIUM Loire Valley IAS maintains deep interactions with all regional research partners and stakeholders, offering its high-quality services and attractiveness to welcome talents in the Centre Val de Loire region. It enjoys prestigious premises and exceptional facilities to welcome international visiting researchers and regional researchers.
LE STUDIUM Loire Valley IAS offers international invited research fellows and visitors an intellectual and human space favouring interdisciplinary exchanges and debates, offering science a human dimension and creating a path for inspired research. It is guided by the three necessary conditions required for a creative activity, namely Curiosity, Imagination and Intuition. Having the opportunity to spend some time in the institute remains a memorable experience.

After the selection process and during the whole residency period, a dedicated contact person brings support and assistance to each researcher to guaranty a smooth and efficient installation and integration in the region from visa preparation, fully furnished housing arrangements, clearing of all administrative and technical burdens for banking, schooling, insurance...
LE STUDIUM Loire Valley IAS develops in parallel a rich scientific events programme including international conferences, workshops, transdisciplinary seminars, webinars, summer schools and lectures for the promotion of the scientific culture and knowledge. All Research Fellows benefit of the permanent invitation to all events organised by the institute.
The monthly transdisciplinary seminars, LE STUDIUM Thursdays, praised by all participants have become over time a not-to-miss intellectual space for exchanges. Research Fellows are all invited to present their research to a multidisciplinary and international audience to start a discussion. This enables them to advance their presentation skills, to gain a deeper understanding of all regional research activities, to experiment concrete transdisciplinary

exchanges and to enhance visibility of their host laboratory and their laboratory of origin. Beyond the inspiring scientific presentations and discoveries of new disciplines, methods, analyses, the monthly seminar is certainly an important social time of the institute that enable Research Fellows to grow their network and develop international friendships. Events organised in 2025 have again demonstrated the diversity of research projects represented in the faculty of fellows and the creative interactions that emerged in all discussions.

LE STUDIUM Awards include the opportunity to have the institute partially finance and bring the necessary communication and logistics support for the organisation of an international Conference or Workshop. Each research fellow has the opportunity to apply to this support. These events organised in partnership with regional host research institutes and laboratories attract a large number of leading international researchers to the Centre-Val-de-Loire region each year. Their medium-size format and peculiarity offer the ideal scenery for the creation of close and fruitful discussions, which often result in new ideas for research and international collaborations. The digital format of certain events creates as well a new dynamic, as they enable a larger attendance with worldwide connections at lower environmental and financial costs. The online storage and accessibility of presentations beyond the conference time contributes even more to the public's awareness of research and facilitates the transfer of scientific knowledge to a wider audience.

In the framework of its participation to the Ambition, Research and Development programmes, LE STUDIUM Loire Valley IAS has developed a concrete expertise of liaising with international research ecosystems of interest for regional research laboratories and research institutes. The 2025 activities have led to the creation of firm partnerships engaged into proposed or funded international programmes. International collaborations are under further developments for the organisation of joined international conferences.

LE STUDIUM Loire Valley IAS remains an international, outward looking partner offering opportunities to access and develop fundamental research projects across all scientific fields. These opportunities are essential to lead to new knowledge and create the foundations from which the practical application of knowledge must be drawn. Together with its members and research partners, LE STUDIUM's mission nurtures this process closely linked to innovation.

LE STUDIUM AWARDS

Across its different research and invitation programmes, LE STUDIUM offers different types of awards and actions that stimulate and facilitate international scientific collaborations and interdisciplinary exchanges in the Centre Val de Loire region.

Independent external peer reviewers and international independent Scientific Council members assess and select the best candidates and innovative research projects and/or profile. To be eligible, applicant researchers must be nationals or long-term residents of a country other than France and comply with the European mobility rules.

LE STUDIUM RESEARCH FELLOWSHIP

This award enables experienced international researchers to work in a host laboratory for ten consecutive months. The award targets internationally competitive researchers and offer them the opportunity to discover and work in nationally accredited laboratories with international renown. Benefits include a remuneration, travel support, a fully furnished housing, logistic and administrative support and specific training opportunities.

LE STUDIUM RESEARCH INTEGRATION FELLOWSHIP

Integration Fellowhips awards of three to six months target researchers willing to settle in the region and to engage into a recruitment process to access a permanent position in one of the regional universities or national research centres. Benefits include travel support, a fully furnished housing, logistic and administrative support, specific training opportunities and guidance to prepare a candidacy.

LE STUDIUM RESEARCH PROFESSORSHIP

This award enables an experienced international Professor to work in a host laboratory, to participate in research, research team building, postgraduate teaching and mentoring. The Professorship residency consists in four periods of three months in the region (twelve months in total in four consecutive years). Benefits include travel support, a fully furnished housing, logistic and administrative support, specific skills acquisition, and access to funding to organise one international event.

LE STUDIUM VISITING RESEARCHER

This award enables experienced international researchers wanting to visit and work with a regional counterpart with personal resources, to experience a residency from three to twelve months. Benefits include travel support, a fully furnished housing, logistic and administrative support, specific training opportunities, access to funding to organise an international event and integration in the region.

LE STUDIUM VISITING ARTIST

This award enables renowned international artists looking to engage into an interdisciplinary art-science work with one arts research laboratory and one or more research institutes or laboratories in the region. The award offers a residency of minimum three months, and includes as benefits, travel support, stipends, a fully furnished housing, full logistic and administrative support, specific training opportunities, opportunity to organise an international event.

LE STUDIUM RESEARCH CONSORTIUM

This award enables the creation of a team of five researchers (under the leadership of one researcher or research team from the Centre-Val-de-Loire region) and funds its regular gatherings for a full week twice a year over two years (four meetings in total over two years). The consortium projects have well-defined research objectives, a work-plan to implement and milestone goals to achieve between meetings. They can serve different objectives and consist in a solid basis to build a sustainable collaboration among a small group of international partners.

PROGRAMMES & CALLS FOR APPLICATION

Smart Loire Valley Programme*

The Smart Loire Valley Programme call for applications is open from October each year to January the next year. It aims to foster international scientific exchanges and collaborations and to build human capacity and scientific knowledge for research, development and innovation. It is open to all scientific disciplines and is a precious tool to access funding to develop fundamental research projects and to create or extend international collaborations. The programme offers different formats of awards (residency, visit, networking) of 3 to 12 months.

For the period 2015 to 2021, the programme operated with a co-financing from the European Union in the framework of the Marie Skłodowska-Curie Actions - COFUND (Co- Funding of regional, national and international programmes for the mobility of experienced researchers) for the Fellowships award.

Since 2022, the programme is funded by regional partners and authorities and continues to offer attractive awards. More than 120 months of residencies are financed through this programme each year.

* The SMART LOIRE VALLEY Fellowships Programme received European Union H2020 funding (Marie Sklowdovska Curie Actions, COFUND contract #665790) for Fellowships awards between 2016 and 2021.

The French Institutes Advanced Study (FIAS) Programme*

FIAS is an international mobility programme proposing high-level scientific residencies in the seven IAS of Aix-Marseille, Loire Valley (Orléans-Tours), Lyon, Montpellier, Nantes, Paris and Cergy. Initiated in 2020 and partially financed by the Marie Skłodowska-Curie Actions - COFUND (Co- Funding of regional, national and international programmes for the mobility of experienced researchers) the FIAS Fellowship programme will run until the end of the 2029-2030 academic year.

The FIAS fellowship programme supports high quality and innovative research. The call is open to all disciplines in the social sciences and humanities (SSH) and all research fields. Research projects from other sciences that features a transversal dialogue with SSH are also eligible and the LE STUDIUM Loire Valley IAS welcome projects at the interface between SSH and other sciences enthusiastically. It offers 10-month paid fellowships. The call is open to all disciplines in the SSH and all research fields. Research projects from other sciences that features a transversal dialogue with SSH are also eligible. It offers 10-month fellowships.
In this context, the LE STUDIUM Loire Valley IAS welcome projects at the interface between SSH and other sciences enthusiastically.

*The FIAS programme receives funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreements No 945408 and No 101217263.

LE STUDIUM MSH-Val de Loire Visiting Researchers Programme

Started in 2023 in partnership with the Maison des Sciences Sociales et des Humanités Val-de-Loire, LE STUDIUM VISITING RESEARCHERS Programme will run till the end of 2026. Research projects should focus on the main axes developed by the MSH-Val-de-Loire:

- Cities and urban studies;
- Money, economy and finance;
- Environmental Humanities;
- Transmission(s), transfer(s), re-appropriation(s);
- Human interaction and Data Science;
- Health in all its forms.

This programme aims to attract experienced international researchers willing to conduct a high quality and innovative project in collaboration with one of the axes of the MSH Val-de-Loire. It offers residency periods of 3 to 10 months.

The Ambition Research & Development CVL Programmes

These programmes are built upon the expertise of multidisciplinary academic research teams and industrial companies (Smart Specialization Strategy in the Centre-Val de Loire region) present in the region. The global objective is to structure the regional research ecosystem in priority scientific domains creating a value chain leading to economic development. The Centre-Val de Loire regional council funds the activities of research projects with high translational potential led by academic researchers with economic partners located in the region. Le Studium has been a longstanding partner of these programmes since 2013, procuring high-level recruitments and organising targeted events to link with international partners. In 2025, Le Studium additional efforts related to the following programmes:

ARD CVL COSMETOSCIENCES (cosmetics)

ARD CVL JUNON (environmental digital twins)

ARD CVL MATEX (materials in extreme conditions)

ARD CVL SYCOMORE (connected forestry)

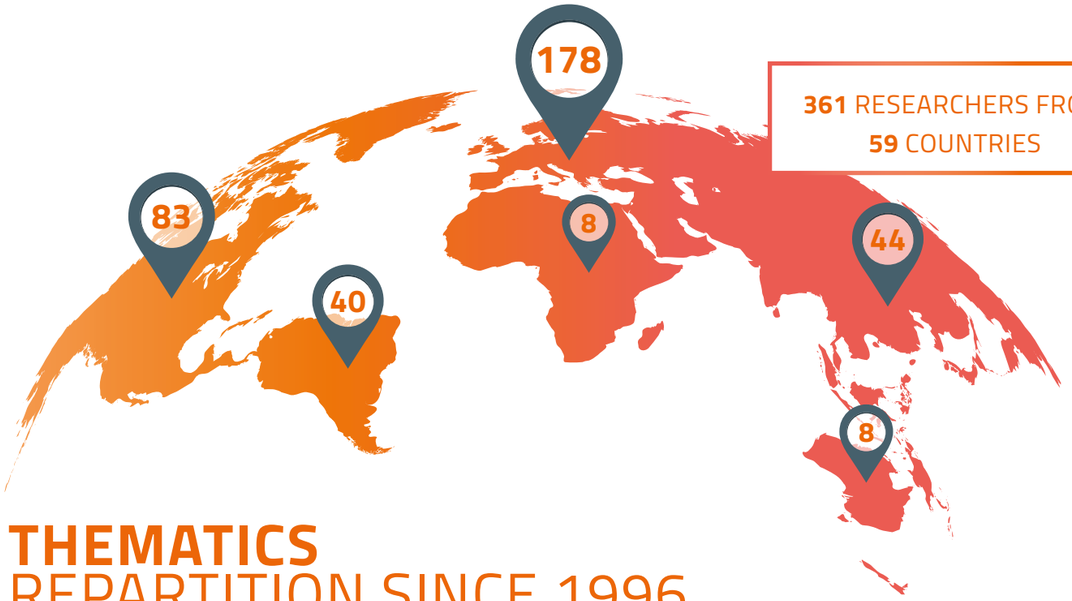
NEOLAiA Visiting Researchers Programme

Developed in partnership with the University of Tours and supported by the 'Plan France 2030' operated by the French National Research Agency (ANR-23-GURE-0010), the NEOLAiA Visiting Researchers Programme offers researchers a unique opportunity to forge strong research links through fellowships and residencies in Tours. This programme is open to all scientific disciplines and targets experienced researchers based in one of the nine partner universities of the European NEOLAiA alliance. It offers residency periods of 3 to 10 months to conduct a high quality and innovative project in collaboration with the University of Tours.

GreenCosmin Staff Exchange Programme

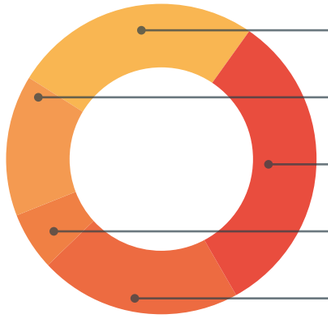
GreenCosmIn is funded through the Marie Skłodowska-Curie (MSCA) Staff Exchanges Action. The consortium counts fourteen members and aims to establish a robust, multisectoral and interdisciplinary network to implement green approaches to the exploration and sustainable use of natural resources in cosmetics production. The project use a range of advanced technologies - including extraction, phytochemical analysis and dereplication, in vitro screening and biotechnological production - to develop natural cosmetic ingredients and incorporate them into final products.

ORIGIN OF LE STUDIUM RESEARCH FELLOWS



361 RESEARCHERS FROM
59 COUNTRIES

THEMATICS
REPARTITION SINCE 1996



HUMAN AND SOCIAL SCIENCES	23%
EARTH, ECOLOGY AND ENVIRONMENTAL SCIENCES	20%
LIFE AND HEALTH SCIENCES	34%
COMPUTER SCIENCE, MATHEMATICS AND MATHEMATICAL PHYSICS	7%
MATERIALS AND ENERGY SCIENCES	16%

HIGHLIGHTS

Events and networking actions organised by LE STUDIUM aim at creating synergies between academic disciplines and links with the industrial world in order to increase interdisciplinary research and translational research to stimulate socioeconomic development. They contribute to the promotion of the research work carried out in the Centre Val de Loire region in partnership with international scientists and to the extension of their networks.

1 INSECTS AS NATURAL SOLUTIONS TO MAJOR CHALLENGES

Developed by Umberto Diecinove, Italian artist and LE STUDIUM Visiting Artist within the framework of the LE STUDIUM Loire Valley Interdisciplinary Forum, in collaboration with the Insect Biology Research Institute (University of Tours, CNRS) and Karol B. Barragán-Fonseca from the Universidad Nacional de Bogotá, Columbia, this photos exhibition aimed to illustrate the research work on “insectonomy” to reimagine insect management through science, art and ecological consciousness.

2 DISCOVERIES ON CANCER CRITICAL SIGNALS

In June, the conference “Ion channel signalling in health and diseases” welcomed Professor David Julius, winner of the 2021 Nobel Prize in Medicine for his work on the subject, alongside with a hundred international experts and speakers, including several members of the United States National Academy of Sciences. The event was organised in partnership with the Niche, Nutrition, Cancer and Oxidative Metabolism laboratory (N2COx – University of Tours, Inserm).

Prof. Mohammed Trebak, LE STUDIUM Visiting Researcher (University of Pittsburgh School of Medicine – USA) / Smart Loire Valley Programme

3 ADDRESSING NEURODEVELOPMENTAL DISABILITIES

A conference on Early Sensorimotor Development and Neurodevelopmental Disabilities was organised in partnership with iBraiN (University of Tours, Inserm), the EXAC-T Center for Autism and Prof. Jill Heathkock, LE STUDIUM Research Professorship coming from the Ohio State University, USA. Interdisciplinary exchanges among leading and emerging experts, clinicians and researchers blending foundational developmental research, neuroscience, clinical expertise, cutting edge technologies, and innovative research methodologies have highlighted innovative approaches to early detection and treatments.

1 MATERIALS & ENERGY SCIENCES

Bryan Beckingham

Period: September, 2024 - July, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Polymer Chemistry and Materials
Previously: Auburn University – USA
Research institute: Interfaces, Confinement, Materials and Nanostructures (ICMN) - CNRS / University of Orléans, Orléans
Host scientist: Christophe Sinturel

BIOGRAPHY

Dr. Bryan S. Beckingham is the Mary and John H. Sanders Endowed Associate Professor of Chemical Engineering, Director of the AU Center for Polymers and Advanced Composites, and Graduate Program Chair of Polymer & Fiber Eng. at Auburn University. He holds a Ph.D. and M.A. in Chemical and Materials Engineering from Princeton University and a B.S in Chemical Engineering from Clarkson University. His research is rooted in leveraging synthetic polymer chemistry, polymer processing, and materials characterization to inform the design of novel polymer materials for target applications, with an emphasis on polymer membranes, hierarchically structured matter, additive manufacturing polymer, and functional polymer systems.

RESEARCH QUESTION

Leveraging tunability of copolymer gradients during polymer synthesis to advance understanding of polymer self-assembly in confined geometries

Self-assembly of polymer materials provides a cost-effective route to preparation of materials with well-defined nanostructures. Due to their ability to self-assemble, block copolymers are a useful and important class of materials utilized in applications such as photonic crystals, ion conducting membranes, microfluidics, drug delivery, sensors, and nanoporous membranes, and templates for the fabrication of nanodots and nanowires. This project investigates the impact of a gradient copolymer within the block copolymer architecture for enabling control over self-assembly behavior in polymer thin films and how these films can be leveraged to fabricate porous templates. The approach is to synthesize block-gradient copolymers with controlled gradient structures from which polymer thin films are prepared and studied for their self-assembled morphology. Lastly, thin polymer films with controlled porosity will be prepared through selective removal of one of the blocks and subsequent backfilling with inorganic precursors the fabrication of nanopatterned surfaces.

Marcos Belançon

Period: October, 2025 – April, 2026
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Materials and Energy Sciences
Previously: Federal University of Technology, Paraná - BR
Research institute: Extreme Conditions and Materials: High Temperature and Irradiation (CEMHTI), CNRS - Orléans
Host scientist: Mathieu Allix

BIOGRAPHY

Marcos Belançon is a physicist with a background in optics and spectroscopy, teaching and researching at Federal University of Technology in Paraná State, Brazil, since 2013. Most of his work involves developing optical instruments and materials for applications in sensing, communication, and solar energy production. Was awarded as “CNPq researcher” in 2023, for his project on new instruments and glasses for solar energy production, and received the “José Reis Prize – COP30 edition” in 2025 for his contribution to scientific outreach on energy and climate change. Speaks English, French, and Portuguese (native), has researched in collaborations with dozens of institutions worldwide, and coordinated the creation of laboratories and multidisciplinary research projects in his home institution.

RESEARCH QUESTION

Reuse of cover glass from end-of-life photovoltaic panels to produce glass-ceramics with innovative properties

Due to the expansion of solar energy, there is an increasing demand for flat glass production worldwide, and new materials and processes are needed to improve the sustainability of the photovoltaic industry. This project explores this subject by developing and investigating new silicate glass-ceramics using glass from end-of-life solar panels as raw material. We will examine the crystallization process and use the aerodynamic levitation technique with laser heating to produce new glass ceramics that could contribute to the sustainability of the glass industry. The first approach will be to introduce UV absorbers, such as Cerium. One intriguing possibility to be evaluated is whether the proposed material can absorb UV light and convert it to low-energy photons more suitable for the silicon solar cell’s sensitivity. In this way, the materials developed and investigated in this project may bring innovative features and contribute to reducing both materials and energy consumption, and help to get more sustainability to the glass industry.

Ganesh Duraisamy

Period: March, 2024 - March, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Materials and Energy Sciences
Previously: Anna University – IN
Research institute: PRISME Laboratory, University of Orleans, Orléans
Host scientist: Christine Mounaim Rousselle

BIOGRAPHY

Ganesh Duraisamy, is a Professor of Mechanical Engineering at Anna University since 2018, specializes in Internal Combustion engines and low-temperature combustion. He holds a Ph.D. (2011) in Mechanical Engineering from Anna University. An Indo-US Raman Fellow (2013), he conducted postdoctoral research at the Engine Research Centre, University of Wisconsin, Madison. His projects include methanol/diesel and methanol/DME dual-fuel engines with Indian OEMs and collaborations with IIT Madras, Aston University, and Tianjin University on sustainable green fuels. With over 20 years of teaching and 60+ publications, his research focuses on clean combustion of methanol, dimethyl ether (DME), ammonia (NH3), and hydrogen (H2) for power and automotive applications.

RESEARCH QUESTION

Potential of Low- and Zero-Carbon Fuels in High-Efficiency Clean Combustion Engines

This project investigated the potential of ammonia (NH3), a carbon-free energy carrier, for use in high-efficiency internal combustion engines, addressing its major limitation of poor combustion reactivity. To overcome these challenges, dimethyl ether (DME), a low-carbon and highly reactive biofuel, was employed as a combustion enhancer. Through a combination of detailed chemical kinetics simulations and experimental engine testing, the study evaluated ammonia–DME fuel blends across multiple combustion modes, including spark ignition (SI), homogeneous charge compression ignition (HCCI), and dual-fuel compression ignition. Experiments were conducted on single-cylinder research engines at the PRISME Laboratory, University of Orléans.

Feng Huang

Period: January, 2025 – March, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Research Professorship
Speciality: The interdisciplinary research of physics, agriculture, and computer science
Previously: China Agricultural University, Beijin - CN
Research institute: Research Group in the Energetics of Ionized Media (GREMI) / CNRS, University of Orléans, Orléans
Host scientist: Eric Robert

BIOGRAPHY

Feng Huang is a professor at College of Science, China Agricultural University. She has been working at China Agricultural University for over 20 years since her graduation with PhD degree majoring in plasma physics from Institute of Physics, Chinese Academy of Sciences. She was a visiting scholar at Lawrence Berkeley National Laboratory in the United States from September 2011 to July 2012 and as LE STUDIUM Visiting Researcher at GREMI lab in CNRS/University of Orleans from December 2021 to December 2022. Her research interests mainly include low-temperature plasma, material science, and the interdisciplinary research on physics, agriculture and computer science. She has produced over 100 publications including journal articles, patents and software copyrights.

RESEARCH QUESTION

Plasma Agriculture and Its AI Approaches

In 2025, Feng Huang mainly conducted the research on plasma mechanism and the field application of plasma agriculture on multiple crops including wheat and tomatoes, achieving the optimized plasma strategies with significant promotion effects. A dense object detection method for crowded wheat head identification and localization was proposed with the outstanding identification performance on both the public wheat head dataset and the plasma wheat head dataset. For tomato detection, the method for simultaneous identification on tomato variety and maturity and the detection method for tomato leaf diseases in complex backgrounds were proposed, which will be used in plasma tomato detection. The related work is still in progress. Some research on plasma mechanism and its applications has been published as journal articles (including Chin. Phys. B, Sensors, and Journal of Circuits, Systems, and Computers), patent and software copyrights. In addition, she gave the invited reports on plasma physics at international conferences.

Seong-Young Lee

Period: May, 2025 - July, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Research Professorship
Speciality: Alternative Energy: Hydrogen and Ammonia
Previously: Michigan Technological University - USA
Research institute: Institute of Combustion, Aerothermics, Reactivity and Environment (ICARE) / CNRS, Orléans
Host scientist: Fabien Halter

BIOGRAPHY

Seong-Young Lee is a Professor in the department of mechanical and aerospace engineering at Michigan Technological University with 28 years of experience in advanced combustion science. His expertise includes hydrogen and alternative fuel combustion, high-pressure reacting flows, laser diagnostics, and computational modeling. He has held multiple international visiting professorships, including KAIST and CNRS-ICARE, and maintains a strong publication record. His work has been recognized with major awards such as Korean Brain Pool Fellowship, NASA Glenn Faculty Fellowship, AFRL Summer Faculty Fellowships, and the APS Milton Van Dyke Award. He is widely regarded for pioneering contributions to next-generation carbon-neutral propulsion technologies.

RESEARCH QUESTION

Flame dynamics and stretching of NH3-base fuels under the influence of turbulent scales

Global greenhouse gas emissions continue to increase worldwide, intensifying climate change and creating an urgent need for carbon-free energy sources. Hydrogen is a leading candidate because it produces no CO_2 at the point of use, yet its high flame speeds and strong thermo-diffusive instabilities present challenges for stable and safe combustion. Ammonia offers carbon-free energy with easier storage and transport, but burns slowly and can generate high NOx emissions. Blending hydrogen with ammonia can balance these limitations, but the combined combustion behavior remains complex and not sufficiently understood for large-scale deployment. To support future carbon-neutral energy systems, it is essential to clarify how hydrogen–ammonia mixtures ignite, stabilize, and release heat under practical operating conditions. This research seeks to identify the key physical and chemical mechanisms governing flame structure, stability, and emissions, providing science-based guidance for clean, efficient, and reliable use of hydrogen-ammonia combustion in global energy applications.

Analía Gladys Tomba Martinez

Period: September, 2025 – December, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Materials and Energy Sciences
Previously: Institute for Research in Materials Science and Technology (INTEMA) - AR
Research institute: Extreme Conditions and Materials: High Temperature and Irradiation (CEMHTI), CNRS - Orléans
Host scientist: Emmanuel de Bilbao

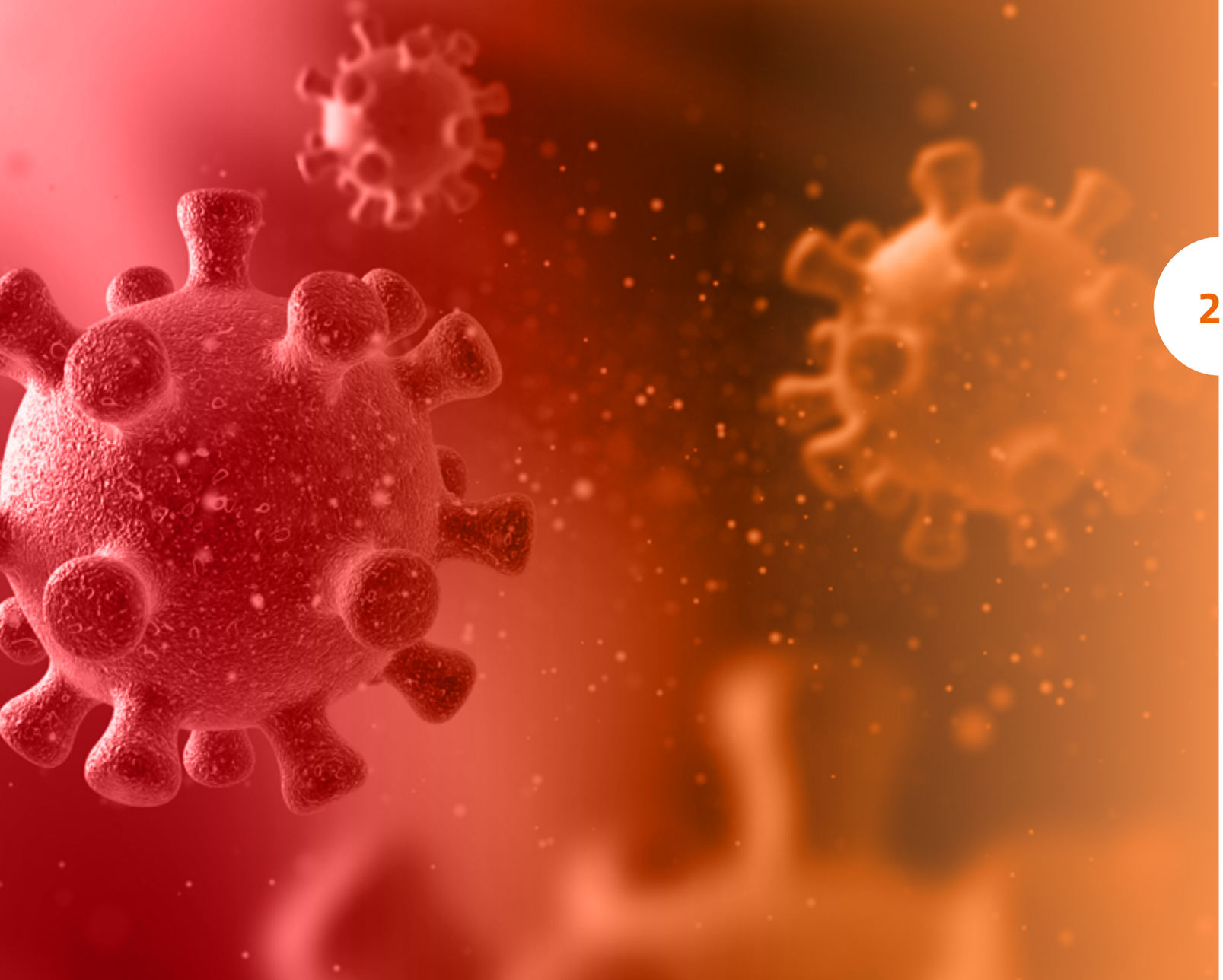
BIOGRAPHY

Dr. Analía G. Tomba Martinez is a specialist in ceramics, including refractories and advanced dense and porous materials, with a focus on their performance under near-service conditions. Her research mainly addresses the mechanical and chemical behaviour of ceramics at high temperatures, as well as the characterization of natural raw materials for ceramic products. She has authored more than 80 articles in leading journals in materials science and ceramics and has supervised 15 undergraduate and graduate students in Materials Engineering and Materials Science. She is a Principal Researcher at the National Council of Scientific and Technical Research in Argentina (CONICET) and teaches at the University of Mar del Plata. Throughout her career, she has also contributed to several knowledge-transfer activities with industry, particularly in collaboration with the steelmaking sector.

RESEARCH QUESTION

Improvement of methods to determine key properties related to the corrosion behavior of refractories

The project addressed the need to better understand corrosion processes that limit the lifetime of refractory materials used in high-temperature industrial environments. Since corrosion is one of the main causes of refractory degradation, the research investigated how key transport properties influence the evolution of both gaseous and liquid corrosion. A major challenge lies in the fact that most available data on refractory properties are measured at room temperature, whereas service conditions involve high temperatures and aggressive atmospheres. The project therefore focused on improving experimental approaches to study these phenomena under conditions closer to real service environments. In particular, it aimed to develop laboratory methods to determine transport properties at high temperature, specifically intrinsic permeability and capillary suction, which are essential parameters for understanding corrosion mechanisms but were previously unavailable under such conditions.



2 LIFE & HEALTH SCIENCES

Simon de Graaf

Period: June, 2025 - January, 2026
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Animal Reproduction
Previously: The University of Sydney - AU
Research institute: Physiology of Reproduction and Behaviour (PRC) / Centre INRAE Val de Loire, CNRS, University of Tours, IFCE, Tours
Host scientist: Xavier Druart

BIOGRAPHY

Dr Simon de Graaf is Professor of Animal Reproduction at The University of Sydney in Australia. He completed his PhD at Sydney in 2006 on sperm sex-selection in sheep, then lectured in reproductive biology at the Royal Veterinary College, London, before returning to Sydney. He leads the Animal Reproduction Group and coordinates the Bachelors of Animal and Veterinary Bioscience and Veterinary Biology degree programs. His research examines how sperm and the female reproductive tract interact, with applications in semen storage and assisted reproduction (AI, IVF, sperm sexing) in livestock. Current work spans in-vivo imaging of sperm transport, proteomic and metabolomic studies of seminal plasma effects, and machine-learning tools for reproductive diagnostics.

RESEARCH QUESTION

Visualizing Fertility: Imaging Reproductive Function to Improve Animal Breeding and deliver Immersive Education

This project asks how advanced imaging and computational tools can be used to better understand fertility and improve reproductive management in livestock. Specifically, it investigates how sperm interact with the female reproductive tract, and how factors such as seminal plasma exposure, stage of the oestrous cycle and uterine contractility influence sperm transport and success in vivo. In parallel, the project addresses the limitations of current pregnancy diagnosis in sheep by combining ultrasound and MRI imaging to develop machine-learning approaches for more accurate estimation of fetal number and age. By linking cellular and physiological mechanisms with imaging-based diagnostics, the work aims to improve artificial insemination outcomes, refine pregnancy management, and generate immersive AR/VR teaching tools for students, veterinarians and industry practitioners.

François Djitie Kouatcho

Period: February, 2025 - November, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Poultry Nutrition and Physiology
Previously: University of Ngaoundéré - CM
Research institute: Avian Biology & Poultry Research (BOA) / Centre INRAE Val de Loire, University of Tours, Tours
Host scientists: Agnès Narcy & Sandrine Grasteau

BIOGRAPHY

François Djitie Kouatcho holds a PhD in Biotechnology and Animal Production. For over 15 years, he has worked on improving the sustainability of livestock systems, focusing on alternative feed resources, with emphasis on poultry nutrition, growth, reproduction and welfare. He is currently a Research and Senior Lecturer in the Department of Organic Agriculture at the University of Ngaoundéré (Cameroon) where he served for 6 years as Head of Research, Cooperation and Income-Generating Activities Service. He is also Secretary General of the Cameroon branch of the World's Poultry Science Association (WPSA). He has contributed to numerous national and international research and capacity-building projects, with expertise in project management, and mentoring farmers in good livestock practices.

RESEARCH QUESTION

Balance between feed efficiency and bone health in free-range broilers reared under global warming conditions

How can feed efficiency be improved without compromising bone health and welfare in free-range broilers reared under global warming conditions? The project builds on the observation that decades of genetic selection for rapid growth and high feed efficiency, combined with intensive production systems, have reduced physical activity in fast-growing broilers, leading to poor bone mineralisation and increased musculoskeletal disorders. Within the framework of agroecological transition and sustainable poultry production, the study will analyse the trade-offs between feed efficiency, and skeletal development. By modelling the interactions between feed efficiency and bone robustness under summer free-range conditions, and by measuring biomarkers of bone health, the research will assess the effects of outdoor access and heat stress on both performance and welfare. The results will help identify feeding, management and selection strategies better adapted to hot climates and may contribute to the development of new selection criteria and predictive models for sustainable poultry systems.

Jill Heathcock

Period: May, 2025 - July, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Research Professorship
Speciality: Neurodevelopmental Disabilities
Previously: The Ohio State University - USA
Research institute: Imaging, Brain and Neuropsychiatry (ibraiN) / INSERM, University of Tours, Tours
Host scientists: Frédérique Bonnet-Brilhault & Delphine Mitanchez

BIOGRAPHY

Jill Heathcock is a Professor in Physical therapy in Health and Rehabilitation sciences at The Ohio State University. She has 20 years of experience in pediatric assessment and physical rehabilitation. She has a PhD in Biomechanics and Movement Science from the University of Delaware and did a post-doctoral fellowship in infant development and kinesiology at the University of Michigan. In 2016 Dr. Heathcock was a Fulbright Scholar in Lille France. Currently, she is the Director of the PhD Program in Health and Rehabilitation Sciences, and runs a Pediatric Assessment and Rehabilitation Laboratory (PEARL Lab) at OSU. She is the Editor-in-Chief of the Pediatric Physical Therapy Journal.

RESEARCH QUESTION

Assessing children's behaviors is key to identifying those with neurodevelopmental disabilities

This research project focuses on risk factors for poor neurodevelopmental outcomes, with particular attention infant preterm birth and maternal health significant public health concerns with adverse consequences for mothers and children. These factors are associated with increased risk of disability and long-term developmental challenges. The most promising opportunity to improve outcomes for affected children lies in the early identification of neurodevelopmental disability, followed by timely and targeted rehabilitation interventions. One of the most persistent challenges in health and medicine is the accurate identification of disability during infancy, before children are able to walk or communicate verbally. Recent advances in clinical assessment methods, parent-reported outcome measures, video analysis, and voice analysis now allow for objective measurement of spontaneous and purposeful infant movements, offering new possibilities for the early detection of neurodevelopmental impairments.

Lindy Holden-Dye

Period: October, 2024 - March, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Invertebrate Neuroscience
Previously: University of Southampton, UK
Research institute: Infectiology and Public Health (ISP) / Centre INRAE Val de Loire, University of Tours, Tours
Host scientist: Fotini Koutroumpa

BIOGRAPHY

Professor Lindy Holden-Dye (PhD, BSc, MSc, PhD, FRSB, FBPhS) holds a personal Chair in Neuroscience within Biological Sciences at the University of Southampton, UK. Her expertise in invertebrate neuroscience, and in particular nematode neural systems and the model genetic organism *Caenorhabditis elegans* positions her well to participate in drug discovery and mode of action programmes for novel antiparasitics. For the last two decades she has collaborated with industry to improve prospects for parasitic nematode control.

RESEARCH QUESTION

Novel control strategies for arthropod pests through characterisation of their essential ion channels in a Caenorhabditis elegans expression platform

How can we kill pests that damage our crops and harm livestock without collateral damage to our precious ecosystems? Biologists have a key role to play here by providing insight into the neural mechanisms that are vital to the survival of the pest, in particular the chemosensory processing that enables them to interact in a very precise manner with their environment. Understanding this will help with developing control strategies that are detrimental to pests and leave other organisms unharmed. But studying this in the pests themselves is technically challenging. To circumvent this sort of problem biologists often use 'model' systems. We are using a microscopic nematode worm, Caenorhabditis elegans as an experimental platform to characterise the chemosensory components of the nervous systems of pests. The ambition is to resolve the signals in the environment that are essential for the pest to find a host or mate, and also identify the pest receptor that detects the signal and ultimately explore ways to use this new knowledge to trap or stop the pest in its tracks.

Johannes Kaesmacher

Period: September, 2024 - August, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Neuroradiology
Previously: University of Bern - CH
Research institute: Clinical Investigation Centre of Tours - Technological Innovation, Regional Hospital University in Tours, Tours
Host scientist: Grégoire Boulouis

BIOGRAPHY

After completing his general radiology training at the Technical University Munich and University of Bern, Dr. Kaesmacher took a position as a physician and lecturer at the University Institute of Diagnostic and Interventional Neuroradiology at the University Hospital Bern. In Bern, he is leading the research group "Acute stroke interventions and hyperacute imaging" at the Stroke Research Center. His research focusses on the value of thrombolysis in contemporary endovascular stroke treatment and new techniques of perioperative imaging. Currently he is involved in multiple ongoing international randomized clinical trials and is active in international societies in order to promote clinical and scientific collaboration and training throughout Europe.

RESEARCH QUESTION

PeRfusiOn Post tHrombEcTomy (PROPHET) - A technical development and clinical validation project

Mechanical extraction of clots with specialized catheters has become the standard of care for treating stroke patients presenting with a large intracranial occlusion. However, in more than half of the treated patients, remaining small vessel occlusions (e.g. due to clot fragmentation during the procedure) limit the benefit of this therapy. In current clinical routine, the detection of these small remaining vessel occlusions and the decision for further treatment by the operator is based on 2D angiographic images. This technique has several limitations, mainly due to its two-dimensional nature. Recently, a new imaging technique, with the possibility to acquire whole brain 3D time-resolved perfusion directly in the operating room was technically made possible. It can overcome the many limitations of 2D angiographic images, but processing algorithms and clinical validation are currently lacking. The project realized in the framework of the Le Studium fellowship aims to develop, implement and validate this technique for evaluating brain reperfusion in the acute phase.

Serhat Karaca

Period: July, 2024 - June, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Guest Researcher
Speciality: Animal Science
Previously: Van Yuzuncu Yil University - TR
Research institute: Physiology of Reproduction and Behaviour (PRC) / Centre INRAE Val de Loire, CNRS, University of Tours, IFCE, Tours
Host scientist: Raymond Nowak

BIOGRAPHY

Serhat Karaca earned his PhD in Animal Science from Van Yüzüncü Yıl University in Türkiye, where he is currently a full-time Professor, lecturing and conducting research. His research aims to understand how physical and social environmental stress factors affect the behavior, performance, and meat quality of ruminants, particularly sheep and goats. In this context, he examines the behavioral and physiological stress responses of various breeding practices in ruminants to enhance these traits. He is currently leading research work on the role of temperament in sheep and their reactivity in rearing systems that may challenge their robustness. His research has focused on factors influencing the ability to cope with stress particularly in relation to motheroffspring behaviors, welfare and various performance parameters.

RESEARCH QUESTION

Alternative practice to artificial feeding in goat farming: consequences on behaviour, microbiota, health and milk quality

The artificial rearing of dairy goat kids, involving mother-offspring separation at birth, is widely used in intensive farming to mitigate health risks such as CAEV and paratuberculosis. However, this method raises concerns about its impact on goat welfare and behavioral development. This project, funded by INRAE for 24 months, aims to evaluate natural rearing practices as alternatives, focusing on their effects on animal welfare, behavior, productivity, and health. Two approaches will be tested: 1) housing kids with non-lactating «nanny» goats for social enrichment and 2) allowing mothers to nurse their young while being machine-milked. The study will assess benefits such as social enrichment, microbiome development, and health improvements, as well as risks like pathogen transmission. By comparing artificial rearing, nanny presence, and maternal nursing, the project seeks to determine the optimal balance between welfare, health standards, milk quality, and farm management efficiency through a multidisciplinary approach.

T. Rajendra Kumar

Period: January, 2025 - April, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Biomaterials, Organic Chemistry
Previously: University of Colorado Anschutz Medical Campus - USA
Research institute: Physiology of Reproduction and Behaviour (PRC) / Centre INRAE Val de Loire, CNRS, University of Tours, IFCE, Tours
Host scientist: Eric Reiter

BIOGRAPHY

T. Rajendra Kumar holds a PhD in endocrine biochemistry and reproductive physiology. For over three decades, his research has focused on the genetics and physiology of gonadotropins, including their synthesis, trafficking, secretion, and action. He is currently a tenured professor, Edgar L. and Patricia M. Makowski Family Endowed Chair, and Director of the Women's Reproductive Health Research Program in the Department of Obstetrics and Gynecology at the University of Colorado Anschutz School of Medicine, USA. He has extensive experience in teaching and mentoring trainees and junior faculty worldwide, and in leading innovative physiological and mouse genetics studies in collaboration with clinical and international research programs.

RESEARCH QUESTION

Transgenic mouse models to study follicle-stimulating hormone receptor (FSHR) function in reproduction

Follicle-stimulating hormone (FSH) binds to G protein-coupled FSH receptors (FSHR) on ovarian granulosa cells in low abundance. Activation of FSHR leads to granulosa cell proliferation, differentiation, and estrogen production. These events are essential for female fertility. FSHR signaling pathway is highly conserved between mice and humans. Inactivating mutations in FSHR-encoding gene in mice (Fshr-/-) or women result in ovarian folliculogenesis arrest, loss of estrogen and female infertility. Recombinant FSH-based treatments are always in high demand at the fertility clinics. Thus, drugs/reagents that enhance or block FSH action have numerous clinical applications. High affinity and highly potent human FSHR-specific single-domain antibody fragments (SDAb) were planned to be tested in a humanized mouse model with ovary-targeted expression of human *FSHR* transgene on a mouse Fshr null genetic background. This model permits evaluation of several female reproductive outcomes and may prove an essential in vivo genetic tool to study FSHR-mediated signaling in ovarian granulosa cells.

Sheila Ons

Period: November, 2025 - March, 2026
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Entomology
Previously: National University of La Plata, CONICET - AR
Research institute: Insect Biology Research Institute (IRBI), University of Tours / CNRS, Tours
Host scientist: Claudio Lazzari

BIOGRAPHY

Sheila Ons is a biologist graduated from the Universidad de Buenos Aires with a PhD in Neuroscience from the Universidad Autónoma de Barcelona. She currently serves as the leader of the Insect Neurobiology Lab at the Universidad Nacional de La Plata (UNLP), a Principal Researcher at CONICET, and the Sub-Director of the Centro de Endocrinología Experimental y Aplicada (CENEXA-UNLP-CONICET). Her research focuses on insect neuroendocrinology, detoxification, and insecticide resistance, with a specific emphasis on disease vectors such as mosquitoes and kissing bugs. By investigating these physiological mechanisms, Dr. Ons aims to advance the control of harmful insects through the development and application of sustainable insecticidal tools.

RESEARCH QUESTION

Role of chemosensory proteins in taste sense in the mosquito Aedes aegypti, vector of dengue and other arboviruses

Aedes aegypti is a mosquito vector for arboviruses. Mosquitoes use the gustatory organs located on their mouthparts and legs to guide behaviors such as feeding, biting, and egg-laying. Therefore, the sense of taste is crucial for their survival and reproduction, and consequently, for the spread of arboviruses. Despite this, the gustatory system remains poorly studied in mosquitos. Insect chemosensory proteins are studied in olfaction, although recent evidence suggests that the role of this protein family extends far beyond the olfactory system, involving processes such as detoxification, insecticide resistance, development, and nutrition. Our hypothesis is that they may also play an understudied role in the sense of taste. Our objective is to describe new components of the molecular machinery of taste in mosquitoes, by the study of the role of chemosensory proteins in the gustatory recognition. We use molecular biology, gene silencing and behavioral bioassays. Understanding the mosquito's gustatory sense could contribute to the development of next-generation repellents.

Ebru Özdemir Nath

Period: January, 2025 - April, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Pharmacognosy and Pharmaceutical Botany
Previously: Altınbas University - TR
Research institute: Institute of Organic and Analytical Chemistry (ICOA) / CNRS, University of Orléans, Orléans
Host scientist: Emilie Destandau

BIOGRAPHY

Ebru Özdemir Nath graduated from the Istanbul University, Faculty of Pharmacy. She did her master's and doctorate at the same university and studied the ethnobotany of different regions of Türkiye. She is working as an Assoc. Prof. in Altınbas University. She is the head of the Department of Pharmacognosy & Pharmaceutical Botany and the director of the Natural Products R&D center. She conducts ethnobotanical studies on cosmetic and medicinal plants, then carries out activity studies. At the same time, she develops new cosmetic product formulations with the ethnobotanical knowledge of Anatolia in the R&D center. Especially in recent years, she has published on ethnobotany, essential oil analysis of aromatic plants, clinical aromatherapy, and cytotoxic studies of cosmetic plants.

RESEARCH QUESTION

Chemical analysis of some plants used for cosmetic purposes in Turkish ethnobotanical studies and their in vitro physiological effects on human origin cell lines.

Ethnobotanical research conducted in Türkiye enabled the identification of traditional uses for collecting certain plant species widely used for cosmetic purposes by local people. During this project, the identification of plants in the herbarium, their extraction, and various biological activity tests for cosmetic purposes took place at the Natural Products R&D center, Altınbas University. The phytochemical composition of the most promising extracts studied at the Institute of Organic and Analytical Chemistry (ICOA) in Orléans. Determining the phytochemical profiles of plants with cosmetic potential through ethnobotanical studies provides important clues about which groups of active substances are responsible for the observed biological activities. This holistic approach provides a strong scientific foundation for the rational design of innovative and targeted cosmetic formulations to be developed in the future.

Vincent Pecoraro

Period: April, 2025 - June, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Research Professorship
Speciality: Life & Health Sciences
Previously: University of Michigan - USA
Research institute: Centre for Molecular Biophysics (CBM) / CNRS , Orléans
Host scientist: Stéphane Petoud

BIOGRAPHY

Vincent Pecoraro (BS, Biochemistry, UCLA, 1977), PhD (Chemistry, 1981 (Ken Raymond) UC, Berkeley) and NIH postdoc fellow (UW, Madison, Mo Cleland). He joined the faculty at UM, Ann Arbor in 1984 and is now the John Groves Collegiate Professor of Chemistry. He has been a visiting Professor at UNC, Chapel Hill, Princeton, ENS-PSL (Ulm), Univ. Paris-Saclay, Univ. of Westfalen and AMU. He served as an editor for the journal Inorganic Chemistry for 20 years, was President of SBIC, chair of multiple international meetings on Bioinorganic Chemistry. Awards include: Alexander von Humboldt Senior Scientist, Blaise Pascal Chair, ACS-SNC Lecturer, ACS award for Advancement of Inorganic Chemistry and Doctor Honoris Causa from Aix-Marseille University. He has an h-index of 97 with ~27,000 citations.

RESEARCH QUESTION

Lanthanide Based Metallacrowns as Near-Infrared Emitting Biological Probes

Prof. Pecoraro's research focuses generally on bioinorganic chemistries. At this point, he investigates two main areas: methods of designing, using first chemical principles, metalloproteins and enzymes and the synthesis and characterization of metal sequestering agents known as metallacrowns (MC), which his group discovered in 1989. The latter topic is the subject of his collaboration with Drs. Petoud and Eliseeva at the CBM. Our objective is to prepare small molecules that contains lanthanides capable of emitting Near Infrared Light (NIL). The ultimate goal is to convert these molecules into biosensors that may be used in applications from studying cellular pathologies or metabolism to applications in whole animal research and, eventually, for luminescent guided surgery. The specific aim of the past year has been to attach organic and inorganic antenna to the MC to enhance long wavelength stimulation of lanthanide emission. This ability would provide for penetration of light deep into an animal, allowing for subsequent NIL emission that could be used for tumor diagnosis in humans.

Noboru Sasaki

Period: October, 2025 – April, 2026
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Medical Ultrasonics
Previously: Hokkaido University - JP
Research institute: Imaging, Brain, Neuropsychiatry (ibraiN) / INSERM, University of Tours, Tours
Host scientist: Jean-Michel Escoffre

BIOGRAPHY

After getting his PhD degree in 2012, Dr. Noboru Sasaki worked in the ERC Sound Pharma project (PI: Prof. Chrit Moonen, Imaging Division of Department of Radiology, University Medical Center Utrecht, The Netherlands). His research topics were to clarify the mechanisms of ultrasound-mediated drug delivery and to design new delivery protocols for therapeutic macromolecules. Since then, he has been pursuing his research on therapeutic application of ultrasound, especially for drug delivery. Dr. Sasaki is now an Associate Professor at the Veterinary Teaching Hospital in Faculty of Veterinary Medicine, Hokkaido University, Japan.

RESEARCH QUESTION

Microbubble-assisted ultrasound, a tool for depicting and disrupting blood vessels

Increasing number of drugs and novel-targeted therapies has been developed in the past decades, though therapeutic progress remains modest for many prevalent and costly diseases. One of the major obstacles is the presence of biologic barriers, including endothelial barriers (e.g., blood-brain barrier). Microbubble-assisted ultrasound holds promise for a non-invasive and local drug delivery technology in desired sites. Ultrasonically activated microbubbles transiently increase the vascular permeability and facilitate drug extravasation to the interstitial space and uptake by cells. However, effects on endothelial barriers of pathological tissues and the exact mechanism of the extravasation upon microbubble-assisted ultrasound are still controversial. The aim of this research project is to decipher and explain in-vitro effects of MB-assisted US on the dynamics of endothelial barriers, and the subsequent delivery of molecules with increasing sizes in the surrounding space.

Ida Vanessa D. Schwartz

Period: February, 2025 - May, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Research Professorship
Speciality: Medical Genetics
Previously: Federal University of Rio Grande do Sul - BR
Research institute: Imaging and Brain laboratory (ibraiN) / INSERM, University of Tours, Tours
Host scientist: François Maillot

BIOGRAPHY

Prof. Schwartz holds a degree in Medicine from UFRGS (1994). She is a full professor in the Department of Genetics at UFRGS and coordinates the Brazilian National Institute for Rare Diseases (InRaras). In 2007, she received the L'Oréal–UNESCO–Brazilian Academy of Sciences "For Women in Science" Fellowship Award. She has published more than 250 indexed articles and has an h-index (Web of Science) of 37. She is currently president of the Brazilian Society of Medical Genetics and Genomics and vice president of the Latin American Network of Human Genetics. Her research focuses on understanding factors that influence clinical heterogeneity and treatment response in rare diseases, including social inequalities.

RESEARCH QUESTION

Deep phenotyping of Phenylketonuria patients: unrevealing novel aspects of genotype-phenotype association

Our study focuses in a rare disease called Phenylketonuria (PKU). PKU due to deficiency of PAH activity is the main cause of genetic hyperphenylalaninemia and is considered an autosomal recessive disease. The newborn screening for PKU allows early diagnosis and treatment using a Phe-restricted diet as well as sapropterin/sepiapterin in responsive patients. Early treatment of the neonates leads to normal development in case of good metabolic control. However, adult outcome is still considered as suboptimal, as adults with PKU may present some specific late complications. As such, adults with early treated PKU may develop somatic neurological complications as well as neuropsychological and psychiatric problems. These patients may also encounter behavioral and social issues. The broad spectrum of severity and response to treatment of PKU is partly explained by the allelic heterogeneity of the PAH gene. We want to test the hypothesis that genetic variants in other genes (such as *DNAJC12, SLC7A5* and *HULC*) may influence the neurological and systemic outcomes of adult PKU patients.

Mohamed Trebak

Period: May, 2025 - September, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Ion channels/Calcium signaling
Previously: University of Pittsburgh School of Medicine - USA
Research institute: Nutrition, Cancer & Oxidative metabolism (N2COx) / INSERM, University of Tours, Tours
Host scientist: Marie Potier-Cartereau

BIOGRAPHY

Dr. Mohamed Trebak is a Professor of Pharmacology at the University of Pittsburgh School of Medicine, USA. He obtained a MSc and PhD from the University of Liege in Belgium and conducted postdoctoral studies at the Wistar Institute of Philadelphia (Pennsylvania, USA) and the US National Institute of Environmental Health Sciences (North Carolina, USA). Dr. Trebak's scientific expertise is in the biophysical and biochemical characterization of calcium channels at the interface of plasma membrane, endoplasmic reticulum, mitochondria and lysosomes, and their function in physiology and dysfunction in disease. His laboratory uses patch clamp electrophysiology, high-resolution live imaging of calcium ions in cellular microdomains, and transgenic mice and animal models of human disease.

RESEARCH QUESTION

Interorganellar calcium signaling in colorectal cancer

Our findings uncovered a SOCE-independent function of the endoplasmic reticulum (ER) calcium sensor STIM2 as a molecular switch regulating ER stress to support mitochondrial function and metabolism, ensuring colorectal cancer cell (CRC) survival and progression. Therefore, we hypothesized that the N-terminal Ca^{2+}-bound ER luminal domain of STIM2 maintains homeostatic ATF4 and SERCA2 levels through interactions with specific ER luminal proteins. The loss of STIM2 triggers loss of Ca^{2+} binding, enhanced ER free Ca^{2+} and upregulation of both ATF4 and SERCA2 with onset of ATF-mediated ER stress signaling, and enhanced Ca^{2+} transfer from ER to mitochondria, leading to metabolic rewiring and CRC metastasis. We proposed experiments to 1) Determine the specific interactome of STIM2 from both the ER luminal and cytosolic domains; 2) Determine the specific requirement of STIM2 N-terminus in driving ATF4-dependent signaling and CRC growth and metastasis; 3) Determine the role of SERCA2 and ATF4 in mediating ER and mitochondrial Ca^{2+} rewiring, and transcriptional and metabolic remodeling of colorectal cancer cells.

Judith Vololona

Period: December, 2025 – November, 2026
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Plant biology and ecology
Previously: University of Antsiranana - MG
Research institute: Institute of Organic and Analytical Chemistry (ICOA) / CNRS, University of Orléans, Orléans
Host scientist: Christophe Hano

BIOGRAPHY

Dr. Judith Vololona is a plant biologist, lecturer, and researcher at the University of Antsiranana, Madagascar. She obtained her PhD in Life and Environmental Sciences in 2020 from the University of Antananarivo, specializing in plant biology, ecology, and conservation. She currently serves as Head of Academic Affairs in the Faculty of Sciences and Head of the Environmental Program at the High School of Agricultural and Environmental Sciences. Her research focuses on biodiversity management and terrestrial ecosystem conservation, with emphasis on plant–animal interactions and endemic plant species. She is currently leading a research project aimed at the conservation of critically endangered endemic plants in northern Madagascar within the framework of the Le Studium Fellowship program.

RESEARCH QUESTION

Ex situ conservation of two critically endangered endemic species, Dombeya ambohitrensis Arènes (Malvaceae) and Beguea borealis G.E. Schatz & Lowry (Sapindaceae), from the Ambohitr'Antsingy Montagne de Français protected area, Madagascar.

This project addresses the ex-situ conservation of two critically endangered endemic species, *Dombeya ambohitrensis* (Malvaceae) and *Beguea borealis* (Sapindaceae), from the Ambohitr'Antsingy Montagne des Français Protected Area, northern Madagascar. The survival of these two endemic plants is increasingly threatened by human pressures and environmental factors. Both species have extremely small populations, low natural regeneration, and restricted distribution. Considering the limitations of traditional seed propagation, the project explores in vitro culture to enhance seed germination and plant multiplication, while assessing genetic stability and phytochemical profiles to ensure conservation of ecological and chemical traits. Outcomes will provide practical protocols for species restoration and management, supporting conservation strategies for endemic trees and their potential reintroduction into natural habitat.

Karol B. Barragán-Fonseca

Period: May, 2024 - March, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Interdisciplinary Forum - Visiting Researcher
Speciality: Production Ecology and Resource Conservation
Previously: National University of Colombia - CO
Research institute: Insect Biology Research Institute (IRBI), University of Tours / CNRS, Tours
Host scientist: David Giron

BIOGRAPHY

Karol is a veterinarian with expertise in wildlife teaching, research, and management, both in situ and ex situ. She holds a PhD in Production Ecology and Resource Conservation from Wageningen University (NL). Founder of the Terrestrial Arthropod Research Center (CINAT) and its spin-off EntoPro at UNAL, she is an Associate Professor and coordinator of the Insects for Peace initiative, promoting sustainability in agrifood systems through insects. Part of UNAL's diplomatic scientists' group, she also coordinates the Insect Network in the Latin American Association of Animal Production. Her work integrates bioeconomy, bioprospecting, and Ecosystem Services to address global sustainability challenges.

RESEARCH QUESTION

Multidimensional assessment of the potential of insects for sustainable agri-food systems

How can a qualitative framework be designed and applied to evaluate the ecological, economic, and societal roles of insects, enabling their integration into decision-making for sustainable agriculture across diverse contexts? Addressing this question is urgent to tackle global challenges like climate change, biodiversity loss, excessive waste, and unsustainable food systems. Insects provide key ecosystem services—provisioning, supporting, regulating, and cultural—that can transform agri-food systems into circular, sustainable models. Yet, their full potential remains underutilized due to gaps in evaluation methods. This project proposes a flexible framework adaptable to various contexts and insect species, aiming to support evidence-based decisions that promote sustainability. By strengthening South-North collaboration between Colombia and France, this research lays the groundwork for interdisciplinary and global cooperation to advance insect-based solutions for food security, biodiversity conservation, and environmental resilience.

Umberto Diecinove

Period: June, 2024 - January, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Interdisciplinary Forum - Visiting Artist
Speciality: Photography
Research institute: Insect Biology Research Institute (IRBI), University of Tours / CNRS, Tours
Host scientist: David Giron

BIOGRAPHY

Umberto Diecinove (b. 1978, IT) is an artist and author with a background in literature, philosophy, and poetry, and a master's degree in photography. He works as a documentary photographer and videomaker and he has co-created multimedia projects like «P A R I S N E S S» (Paris, 2015),»HAIKU» (Roma, 2011), and «Silencio» (Munich, 2021).

In recent years, he has focused his efforts on various multimedia research-oriented projects, among them I N S C T S. Reccomended to the World Press 2025, I N S C T S was displayed at Glass Box Gallery in California and - as part of "Energy: Redistributing Power and Taming Consumption" by FUTURES Photography - at FOTODOK (Utrecht, NL), PhotoIreland (Dublin, IRE), and at the Robert Capa Contemporary Photography Center (Budapest, HUN).

RESEARCH QUESTION

I N S C T S, in collaboration with the research project: Multidimensional assessment of the potential of insects for sustainable agri-food systems

My artistic practice seeks to bridge research and the public, fostering awareness of critical issues and inspiring dialogue. The consequences of human impact on the environment are increasingly affecting more people. The global food system is highly extractive, and by 2050—when the global population is predicted to approach 10 billion—agriculture is expected to fall short of meeting the world's food supply needs. The integration of insects into sustainable agricultural practices is the focus of an interdisciplinary study conducted by Karol Barragán Fonseca, with whom I collaborated during my time at the Institut de Recherche sur la Biologie de l'Insecte (IRBI). This shift also requires cultural adaptation. Through photographs, scientific imagery, and data visualizations, H Y P E R S Y S T M S - the series I created - aims to highlight the complex beauty and ecological importance of insects, offering viewers a compelling visual journey.

LE STUDIUM RESEARCH CONSORTIUM

PHARMACOLOGICAL INHIBITION OF CATHEPSIN C IN NEUTROPHIL-MEDIATED INFLAMMATORY DISEASES

Brice Korkmaz

LE STUDIUM Research Consortium Coordinator

BIOGRAPHY

Brice Korkmaz received his PhD from the University of Tours in 2005. He was recruited by INSERM in 2009 after postdoctoral placements in France (Tours, INSERM U-618), U.S. (Seattle, University of Washington) and Germany (Munich, Max Planck Institute). He is the head of the INSERM U-1100 Team 2 Proteolytic enzymes and their pharmacological inhibition in lung diseases. He has extensive expertise in biochemistry and in neutrophil serine protease (NSPs). He coordinated several projects from various foundations, local authorities and pharmacological companies with a view to new therapeutic approaches to chronic inflammatory lung diseases. His research team established proof-of-concepts in vitro and in vivo for the inactivation of NSPs by blocking of cathepsin C. He is the Chair of International Consortium on Cathepsin C (ICat-CC) since 2016.

RESEARCH QUESTION

Inflammation-mediated immune cell alterations are associated with many diseases, including acute, chronic inflammatory diseases and cancer. Current therapies of inflammatory diseases fail to fully control inflammatory processes in patients. There is an unmet need for new therapies that go beyond symptomatic relief and transient delay of disease progression. Neutrophil serine proteases (NSPs) are locally released in response to pathogens and many other non-infectious danger signals. Uncontrolled NSPs are considered as important therapeutic targets in inflammatory diseases. Our project focuses on a novel approach to control the excessive activity of NSPs in neutrophil-mediated inflammatory diseases. Our innovative initiative is dedicated to establishing an efficient anti-proteolytic therapy upstream of NSPs by blocking “directly” or “indirectly” their maturing enzyme, cathepsin C. Five participants of “ICat-CC” have joined forces to implement their initial CatC-specific ideas and to develop an even broader program as a consortium named “Euro-CatC”.

Partners

Ieronymos Zoidakis
is an assistant professor of biochemistry
> Biomedical Research Foundation Academy Of Athens - Greece

Önder Yildirim
is an expert in chronic inflammatory lung diseases
> Helmholtz Munich - Germany

Sevil Korkmaz-Içöz
is an expert in heart transplantation
> University Hospital Heidelberg - Germany

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LE STUDIUM RESEARCH CONSORTIUM

MITION CONSORTIUM: MITOCHONDRIAL ION SIGNALING IN CANCER : A PARADIGM FOR TARGETED THERAPY

Maxime Gueguinou

LE STUDIUM Research Consortium Coordinator

BIOGRAPHY

Maxime Gueguinou initially studied the deregulation of plasma membrane calcium fluxes during his PhD. Since his postdoctoral work in 2016, his research has focused on alterations in mitochondrial calcium signaling in cancer.Since 2022, he has been an Inserm researcher within Inserm unit UMR1069 “Niche, Nutrition, Cancer and Oxidative Metabolism” (N2COX).His current work investigates the role of mitochondrial calcium signaling in tumors, as a regulator of metabolic reprogramming and antitumor immunity. He coordinates several projects in this field, including a structuring Cancéropôle Grand Ouest project linking N2COX with immuno-oncology teams.
He has collaborated with consortium members on the evaluation of novel compounds targeting mitochondrial ion signaling and on specific functional assays.

RESEARCH QUESTION

The MitIon Consortium aims to investigate how mitochondrial ion channels and exchangers, particularly those regulating calcium and potassium fluxes, contribute to cancer cell metabolism, survival, and therapy resistance. Mitochondria play a central role in metabolic reprogramming, redox balance and signaling pathways that support tumor progression. Although profound alterations in mitochondrial ion homeostasis occur during cancer development, the functional links between ion transport, mitochondrial metabolism, and tumor progression remain poorly understood.
This project focuses on elucidating the role of mitochondrial ion signaling in cancers, where validated models and targets are available within the consortium. By combining expertise in cancer biology, mitochondrial physiology, and medicinal chemistry, MitIon seeks to identify and pharmacologically target mitochondrial ion channels and exchangers with high specificity. The ultimate aim is to develop innovative, precision-targeted therapies that harness mitochondrial ion signaling to enhance cancer treatment efficacy.

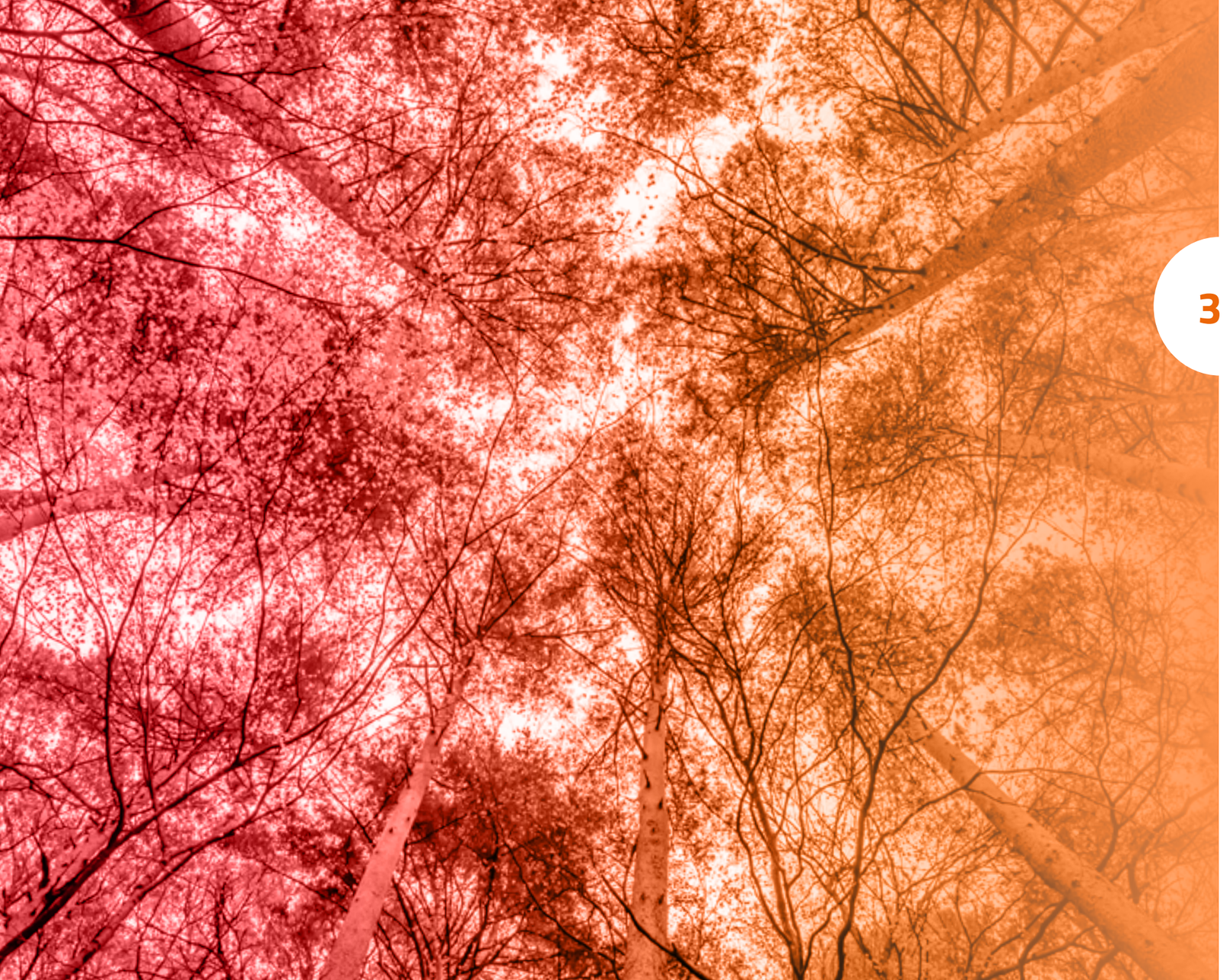
Partners

Paula Kiuru
is an expert in medicinal chemistry
> University of Helsinki - Finland

Luis Pardo
is an expert in potassium channels in cancer
> University of Göttingen - Germany

Lucija Peterlin Mašič
is an expert in medicinal chemistry
> University of Ljubljana - Slovenia

Ildiko Szabo
is an expert in mitochondrial potassium channels in cancer
> University of Padua - Italy



3 EARTH, ECOLOGY & ENVIRONMENTAL SCIENCES

Ricardo Arevalo

Period: May, 2025 - July, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Astrobiology
Previously: University of Maryland - USA
Research institute: Laboratory of Physics and Chemistry of Environment and Space (LPC2E) / CNRS, University of Orléans, CNES, Orléans
Host scientist: Christelle Briois

BIOGRAPHY

Ricardo Arevalo Jr. is a Professor of Geology and Director of the M-CLASS Lab at the University of Maryland. Prior to joining the university, he was a civil servant at NASA and served as the Product Development Lead for the mass spectrometer subsystem of the MOMA instrument onboard the ExoMars Rosalind Franklin rover. Prof. Arevalo is an expert in the development and application of in situ methods of chemical analysis, particularly: Orbitrap, sector field, time-of-flight, and ion trap mass spectrometry; and, laser microprocessing. His scientific research is focused on: I) establishing compositional models for the Earth and other bodies; II) detecting signs of life (extant or extinct); and, III) characterizing the biosignature preservation potential of habitable environments.

RESEARCH QUESTION

Advancing the capabilities of laser-based mass spectrometry in support of life detection objectives and future missions to Enceladus

Life detection missions targeting Enceladus and/or any other potentially habitable world must include scientific instrumentation that can: support nontargeted (or "discovery-based") approaches that can distinguish biological from abiotic processes, and endogenous from exogenous sources; and, provide corroborative measurements of multiple classes of biomarker, such as organic abundance patterns, isotope ratios, and morphologies indicative of microbial activity. Spatially-resolved laser desorption mass spectrometry (LDMS) techniques can meet these requirements through the construction of 2D maps and/or 3D models of sample composition. However, the sensitivity of any LDMS measurement is influenced by the absorptivity, porosity, heat capacity, volatility, and thermal/electrical conductivity of the targeted sample (amongst other variables). Critical needs remain to understand these properties, and to constrain quantitively how much control each exerts on analytical capabilities, such as limits of detection.

Nébon Bado

Period: September, 2025 - November, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Atmospheric Physics and Environment
Previously: Joseph Ki-Zerbo University of Ouagadougou - BF
Research institute: Laboratory of Physics and Chemistry of Environment and Space (LPC2E) / CNRS, University of Orléans, CNES, Orléans
Host scientist: Gwenaël Berthet

BIOGRAPHY

Mr. Nébon BADO holds a PhD in applied physics, specializing in atmospheric and environmental physics. Recruited as an assistant at Joseph KI-ZERBO University in 2020 after defending his thesis in 2019, he was appointed Senior Assistant Professor in 2023 following his inclusion on the CAMES eligibility list. A physics lecturer and researcher, he is a member of the Renewable Thermal Energy Laboratory (L.E.T.R.E) and conducts his research within the PARC team on atmospheric pollution, particularly the characterization of aerosols and their impact on air quality and climate in West Africa, particularly in Burkina Faso, using satellite data, in situ measurements, and chemistry-climate simulations.

RESEARCH QUESTION

Microphysical and optical characterization of aerosols in urban areas by in situ and balloon flight measurements: application to the study of air quality in Burkina Faso, West Africa

Our research project focuses on the microphysical and optical characterization of aerosols using innovative techniques developed at LPC2E/CNRS in Orléans. The objective is to study air quality and evaluate the health and climate impacts of aerosols in Burkina Faso, a key region of West Africa. LPC2E uses optical aerosol counters to measure atmospheric particle concentrations both at ground level and in flight with meteorological balloons. Two main instruments are used: LOAC (Light Optical Aerosol Counter), which measures particles across 19 size ranges from 0.15 µm to 50 µm, and POPS (Portable Optical Particle Spectrometer), which measures liquid aerosol concentrations between 0.14 µm and 3 µm. LOAC also provides particle typology, making it particularly innovative. In addition, the CESM2 chemistry-climate model is used to identify aerosol sources and assess their climatic impact in West Africa, with simulations available for 2000–2020. This project will introduce these advanced techniques to Burkina Faso and strengthen long-term scientific collaboration and student training in air quality and climate impact research.

Lauren Beckingham

Period: September, 2024 - July, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Environmental geochemistry
Previously: Auburn University – USA
Research institute: Earth sciences institute of Orleans (ISTO) - CNRS, BRGM, OSUC / University of Orléans, Orléans
Host scientist: Cyprien Soulaine

BIOGRAPHY

Lauren E. Beckingham is the W. Allen and Martha Reed Associate Professor and Associate Chair of the Department of Civil and Environmental Engineering at Auburn University. She holds a PhD and MA in Civil and Environmental Engineering from Princeton University and a BS in Environmental Engineering from Michigan Technological University. Prior to joining Auburn, she was a Geochemical Postdoctoral Fellow at Lawrence Berkeley National Laboratory. Her expertise and interests are in environmental geochemistry, flow, and transport in subsurface energy systems. She is a recipient of an ACS PRF Doctoral New Investigator Award, NSF CAREER award, DOE Early Career Research Program Award and 2021 Applied Geochemistry Emerging Investigator Award from the International Association of GeoChemistry.

RESEARCH QUESTION

Multi-scale observation and simulation of mineral reactions in subsurface energy systems

Subsurface geologic formations are critical in facilitating the energy transition to net zero. Such formations serve as storage reservoirs for anthropogenically produced CO2, radioactive waste from nuclear energy facilities, and renewable energy, in the form of H2 storage or geothermal energy generation. In such systems, mineral reactions can occur over a wide range of spatial (nm to km) and temporal (s to 100s of years) scales, impacting formation properties and the efficiency, risk, and environmental impact of such systems. Accurate understanding and prediction of mineral reactions in these systems is highly challenging due to the heterogenous nature of these systems but essential for site selection, risk assessment, and engineering design. The overall goal of this project is to enhance understanding and simulation of mineral precipitation reactions and reaction rates in porous media at the micro- to macro- scale to better understand and predict implications for geothermal, geologic CO2 sequestration, and subsurface H2 storage systems.

Alison Bennett

Period: August, 2024 - January, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Ecology
Previously: Ohio State University - USA
Research institute: Insect Biology Research Institute (IRBI), University of Tours / CNRS, Tours
Host scientist: David Giron

BIOGRAPHY

Alison Bennett has over 20 years experience studying the impacts of microbes on plants and the insects with which they associate. Dr. Bennett is an Associate Professor in the Department of Evolution, Ecology, and Organismal Biology at the Ohio State University in the US where her research explores the role of microbes in multispecies interactions with plants, traits of microbes, and evolution within microbiomes. Much of Dr. Bennett's work is conducted in collaboration, and she leads an effort at Ohio State University to train PhD students in the soft skills necessary to build teams to conduct interdisciplinary research.

RESEARCH QUESTION

How do soil microbes influence plant attraction of insect herbivores and/or parasitoids of herbivores?

Plants face many enemies, and, unlike animals, they cannot run away from herbivores. But plants don't face enemies alone—they get help from the beneficial microbe arbuscular mycorrhizal (AM) fungi. AM fungi prime plants for faster immune responses against herbivores. Plant immune systems recognize antagonists and activate defense responses. Chewing herbivores have been shown to respond to priming of direct and indirect defenses in plants. Direct defenses include changes in plant secondary metabolites. Indirect defenses recruit insect enemies of herbivores by releasing volatile metabolites detected by herbivore enemies. Early work suggests AM fungi prime direct defenses and impact chewing herbivores more than sap-feeding herbivores, but this research focus has prevented understanding impacts of priming on sap-feeding herbivores (e.g., aphids). In collaboration with IRBI colleagues, Ali Karley (UK) and Maria J. Pozo (ES) I addressed whether AM fungi promote priming of indirect defenses in response to aphids.

Giulia Cozzani

Period: November, 2024 - November, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Integration Fellowship
Speciality: Space physics, Plasma physics
Previously: University of Helsinki – FI
Research institute: Laboratory of Physics and Chemistry of Environment and Space (LPC2E) / CNRS, University of Orléans, CNES, Orléans
Host scientist: Matthieu Kretzschmar

BIOGRAPHY

Giulia Cozzani received her PhD jointly from Paris-Saclay University (École Polytechnique, Palaiseau, France) and the University of Pisa (Pisa, Italy) in 2019. She subsequently held postdoctoral research positions at the Swedish Institute of Space Physics in Uppsala, Sweden (2019–2021), and the University of Helsinki in Finland (2021–2024). Her expertise lies in space physics and plasma physics, with a particular focus on magnetospheric physics. Her research focuses on understanding magnetic reconnection and fundamental plasma processes, such as plasma waves and instabilities, within the context of Earth's magnetosphere. To investigate these phenomena, she combines in situ spacecraft observations with numerical simulations.

RESEARCH QUESTION

Unraveling energy conversion in space plasmas

Understanding how energy conversion occurs in collisionless plasmas is a complex open problem at the core of space plasma physics and astrophysics. Collisionless magnetic reconnection is arguably the major plasma process responsible for energy conversion, prevalent across a multitude of space and astrophysical contexts. Magnetic reconnection is a particularly crucial phenomenon in the Earth's magnetosphere, also for its role in space weather processes and terrestrial dynamics.

The goal of this project is to achieve a deeper understanding of the energy conversion associated with magnetic reconnection, focusing on the kinetic electron scales. This project applies and integrates different theoretical frameworks, including cutting-edge methods based on the velocity distribution function of the plasma species. Near-Earth plasmas offer an exceptional laboratory for studying energy conversion processes at kinetic scales, as they are sampled in detail by the NASA's Magnetospheric Multiscale (MMS) spacecraft mission, with unprecedented high-resolution particle measurements.

Michael Nones

Period: December, 2025 - May, 2026
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Earth, Ecology and Environmental sciences
Previously: Institute of Geophysics Polish Academy of Sciences - PL
Research institute: CItés, TERritoires, Environnement et Sociétés (CITERES) / CNRS, University of Tours, Tours
Host scientist: Stéphane Rodrigues

BIOGRAPHY

After getting his PhD in 2012 from the University of Padova, Italy, Michael Nones spent some years of research in Italy and Germany and, since 2018, has been an Associate Professor in the Hydrology and Hydrodynamics Department at the Institute of Geophysics, Polish Academy of Sciences in Warsaw, Poland. His current research focuses on fluvial morphodynamics and geomorphology, combining numerical modelling with remote sensing. These techniques are combined to understand how changes in river morphology, riparian vegetation and sediment transport correlate with natural and human drivers to improve water management and land planning.

RESEARCH QUESTION

Satellite-based mapping of sediment dynamics and planform mobility in large river basins

Rivers are a source of life, and understanding how they respond to climate change and human impact is paramount for managing them properly. Sediments are a key characteristic of fluvial systems, as their transport significantly influences planform morphology and river ecology. The present investigation considers reach-scale dynamics along a selected part of the Loire River, analysing how riparian vegetation, planform morphology and suspended sediment dynamics respond to changes in river discharge and land use. The opportunity to combine freely available satellite data with field evidence allows for tracking long-term and large-scale dynamics, eventually developing a workflow that could be applied to other large rivers worldwide. The project's results could be used to understand how nature and humans impact large rivers, to better address challenges connected to global warming and increasing human pressure along freshwater systems.

Alberto Saal

Period: March, 2025 - June, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Geochemistry
Previously: Brown University - US
Research institute: Earth sciences institute of Orleans (ISTO) - CNRS, BRGM, OSUC / University of Orléans, Orléans
Host scientist: Kenneth Koga

BIOGRAPHY

Alberto E. Saal is an Argentine/American Professor of Earth, Environmental, and Planetary Sciences at Brown University. Saal uses high-precision isotope, major, trace and volatile element analysis of geo-materials to understand the formation and evolution of the Earth and Moon. The main objective of his work is to determine the composition, age, spatial scale, distribution, and formation processes of the different reservoirs that form the Earth and its satellite. He has provided insights into the nature and origin of chemical heterogeneities in the Earth and Moon interiors. Saal holds doctorates in geology from the Universidad Nacional de Córdoba in Argentina and in oceanography from the MIT - WHOI joint program in the USA.

RESEARCH QUESTION

Tracing sulfur isotope during iron sulfide melt formation in Lunar basalts

Sulfur contents and isotopes of lunar magmas provide information on the conditions of Moon formation, differentiation and evolution, as well as the processes of generation, transport and eruption of lunar lavas. We want to evaluate how sulfide saturation and segregation might have affected the sulfur isotopes of the lunar magmas. Sulfides are minor (~1 % vol), but ubiquitous phases in lunar basalts. To understand the evolution of sulfur isotopes of a magma during sulfide saturation/segregation requires experimentally derived sulfur isotopes fractionation factors between silicate melt in equilibrium with sulfide bleb. However, at present there is no work that provides these sulfur isotopes fractionation factors. This is a glaring omission in the study of sulfur isotopes of the lunar magmatism and a first order barrier to establishing the sulfur isotope composition of the Moon's interior. The main objective of my visit was to start the experimental work at ISTO to determine the sulfur isotope fractionation factor between silicate melt in equilibrium with sulfide bleb.

Thomas Shea

Period: September, 2024 - June, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Volcanology (Earth Sciences)
Previously: University of Hawai'i at Manoa - USA
Research institute: Earth sciences institute of Orleans (ISTO) - CNRS, BRGM, OSUC / University of Orléans, Orléans
Host scientists: Estelle Rose-Koga & Michel Pichavant

BIOGRAPHY

Pr. Tom Shea was born in France, pursuing studies in Earth Sciences there, until obtaining a MSc degree and moving to the University of Hawai'i (US) for his PhD in 2007. Tom obtained his degree in 2010 and stayed close to his Hawaiian volcanoes ever since. Now, as an associate professor, he eagerly researches volcanoes, combining field work and mapping with laboratory experiments, computer models, and state-of-the-art chemical analyses of lavas erupted worldwide. He built expertise through international collaborations, and is currently investigating how minerals in magmas record the timing of important magmatic events prior to eruptions. He is motivated by a thirst to understand the driving forces behind volcanic eruptions to better prepare residents for these natural hazards.

RESEARCH QUESTION

Timing Magma Transit in the Earth using Crystal Clocks

The earth counts no less than 47 currently active volcanoes, about half of which erupt yearly. Volcanologists strive to understand the magmatic 'pulse' of active volcanoes, why and when they erupt. Crystals in erupted lavas are like 'tree rings' that record their changing environments as they are transported in magma. These rings take the form of chemical changes that can be examined to reconstruct the complex path of magmas and the timing of important events (magma recharge). This project brings together experts from ISTO and Hawaii for a laboratory study of how these chemical changes evolve through time. The objective of the research is to calibrate the mobility of these elements in minerals (e.g. Mg in feldspar) so that diffusive smearing of chemical zoning can be leveraged to obtain time information. Our experiments test whether the presence of a liquid 'melt' at high T influences the rate of element diffusion in minerals. This could have major impacts on our understanding of these mineral 'tree rings', and how they record events that led to volcanic eruptions.

LE STUDIUM RESEARCH CONSORTIUM

CONNECT CONSIDERING OVERLOOKED NETWORKS OF INTERACTIONS: SEED-DISPERSAL BY NON-FRUGIVOROUS VECTORS IN TEMPERATE ECOSYSTEMS

Christophe Baltzinger

LE STUDIUM Research Consortium Coordinator

BIOGRAPHY

Christophe Baltzinger is a forest ecologist expert on plant-animal interactions at INRAE Forest Ecosystems Research Unit. He argues in favour of an integrated approach to the role of wild ungulates in the assembly of plant communities and the functioning of ecosystem (Hab. thesis). This covers their direct (herbivory, predation) and indirect (cascading effects) trophic interactions and effects as ecosystem engineers in diaspore transport (epi-, endozoochory), in physical (soil, habitat modifications) and chemical processes (nutrient fluxes via defecation and miction). His current research focuses on seed dispersal by the Pyrenean brown bear and ungulates living in groups. He also climbs trees to study the complementarity of terrestrial, arboreal and flying vertebrates as dispersal vectors along a forest disturbance gradient in Guyane.

RESEARCH QUESTION

We organised the two last CONNECT meetings in May and October 2025, in Nogent-sur-Vernisson (INRAE).

The study of mutualistic interactions developed thanks to network theory. Indeed, network analyses of plant-animal interactions allow the identification of emergent properties and patterns in complex communities. Seed dispersal networks (SDN) can help identify functionally important species in the community. Despite the importance of non-frugivorous vectors to plants in temperate ecosystems, we still do not fully understand how these assemblages are organized. We first arranged datasets on zoochory, reporting dispersal interactions between plants and non-frugivores in Europe. We then quantified the SDN structure, identified species and traits that are important for maintaining the structure of the SDN. We submitted two manuscripts to Ecology and New Phytologist and prepared a third. We also built the Opportunity project for the BiodivConnect Biodiversa+ call.

Partners

Irène Castañeda González
is an expert in predator-prey and seed dispersal interactions, trophic ecology, conservation biology
> University of Bordeaux - France

Isabel Donoso
is an expert in global change impacts on species interactions and ecosystem functioning - Restoration ecology
> Basque Center for Climate Change - Spain

Andy J. Green
is an expert in wetland ecology, with a special interest in the functional role of waterbirds as dispersal vectors for propagules and contaminants
> Spanish National Research Council (CSIC) - Spain

Ruben Heleno
is an expert in ecological networks, seed dispersal, biotic invasions and island biogeography
> University of Coimbra - Portugal

Ádám Lovas-Kiss
is an expert in botany, plant dispersal and its relationship with the dispersal vectors, mainly waterbirds
> Centre for Ecological Research - Hungary

Sara Mendes
is an expert in understanding how global change drivers impact ecological interactions at the community level, with a particular focus on seed dispersal
> University of Coimbra - Portugal

Esther Sebastián-González
is an expert in understanding the biotic and abiotic factors that shape vertebrate communities (e.g. scavenger assemblages) and seed-dispersal interactions. She also works with bioacoustics
> University of Alicante - Spain

Casper van Leeuwen
is an expert in interactions of species with their biotic and abiotic environment in wetland ecosystems
> RIBES - Radboud University - Netherlands

4 COMPUTER SCIENCE, MATHEMATICS & MATHEMATICAL PHYSICS

Kenji Fukushima

Period: December, 2024 - February, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Physics
Previously: University of Tokyo - JP
Research institute: Institut Denis Poisson / CNRS, University of Orléans, University of Tours, Tours
Host scientist: Maxim Chernodub

BIOGRAPHY

Kenji Fukushima was awarded the Ph.D. from The University of Tokyo in 2002. After graduation, he worked on theoretical properties of hot and dense matter created in high-energy heavy-ion experiments as a postdoctoral researcher at The University of Tokyo and continued his research on color-superconducting matter at Center for Theoretical Physics, MIT. Then, he moved to Brookhaven National Laboratory, where the heavy-ion experiments were conducted, and was engaged in the theory of partonic structures of nuclei. He got a tenured position at Yukawa Institute for Theoretical Physics, Kyoto University, in 2007. He was invited to Keio University as an Associate Professor in 2010, and currently, a full Professor at The University of Tokyo.

RESEARCH QUESTION

Quantum phases of matter in gravitational spacetimes

The origin of matter is theorized in a beautiful form of the non-Abelian gauge theory with fundamental degrees of freedom called quarks and gluons. These elementary particles bind to form protons and neutrons, and they constitute nuclei. The mass of matter spontaneously emerges from the dynamics of quarks and gluons, but its exact mechanism is yet to be explored. The theory can reliably be analyzed in extreme environments, such as high temperatures, rapid expansion/rotation, and large densities found over the history of the Universe. In the early Universe, the geometry was rapidly expanding, and the geometrical curvature caused phase transitions of matter at extremely high temperatures. Such special environments can be emulated in laboratory experiments with energetic nuclei, and the nature of phase transitions has been extensively studied, which would reveal the origin and the evolution of the world where we live. This research project is carried out in collaboration with Prof. Maxim Chernodub, with emphasis specifically put on the interplay between fast rotations and high temperatures.

Alexander Molochkov

Period: January, 2025 - April, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Research Professorship
Speciality: Theoretical Physics
Previously: Beijing Institute of Technology - CN
Research institute: Institut Denis Poisson / CNRS, University of Orléans, University of Tours, Tours
Host scientist: Maxim Chernodub

BIOGRAPHY

Alexander Molochkov has 28 years of experience in theoretical physics. His present research interests are the development of numerical modeling using lattice field theory methods as a powerful tool for the study of strongly correlated systems under different conditions and geometries. In particular, he develops applications of lattice field theories to address, on the same footing, problems in the biological, high-energy, and condensed matter branches of physics. Within this general research direction, Alexander established and developed the Pacific Quantum Center in collaboration with Tours University. Currently, Alexander is a Visiting Professor at the Beijing Institute of Mathematical Studies and Applications.

RESEARCH QUESTION

Extending frontiers in condensed matter and particle physics through computational field theory methods

The project focuses on nonlinear phenomena in condensed-matter and particle-physics systems. These phenomena are a promising basis for new quantum technologies, making the research not only of fundamental interest but also important for practical applications.

The topics of interest include quantum anomalies, thermodynamic phases, finite-size Casimir effects, and topologically protected classical solutions. The project aims to study these effects in polymers, newly discovered quantum materials, and particle physics systems.

These research topics are treated on the same footing through the unifying role of lattice field theories. Field theories exhibit a plethora of interesting physical phenomena, including the formation of condensates, anomalies, thermodynamic phases, and topologically stable classical solutions. Well-developed numerical techniques and established analytical methods from lattice field theories are applied to address current problems in quantum anomalies and finite-system zero-point (Casimir) energies in high-energy and solid-state physics.

Amit Sharma

Period: November, 2024 – October, 2025
Programme: ARD CVL JUNON PROGRAMME
Award: LE STUDIUM Research Fellowship
Speciality: Data Integration, Digital Twins, and Predictive Environmental Analytics
Previously: Chitkara University - IN
Research institute: PRISME Laboratory / University of Orléans, INSA CVL, Orléans
Host scientist: Frédéric Ros

BIOGRAPHY

Dr. Amit Sharma is a Senior Researcher at the PRISME Laboratory, University of Orléans, France. His expertise includes artificial intelligence, machine learning, IoT systems, environmental data integration, and digital twin architectures. During his Le Studium fellowship, he contributed to the JUNON programme by developing a modular Digital Twin platform for environmental monitoring integrating groundwater, meteorological, air quality, and satellite data. He has authored more than 50 peer-reviewed publications and previously conducted postdoctoral research applying machine learning to agriculture, environmental monitoring, and decision-support systems. His PhD focused on forest fire detection using IoT and reinforcement learning. He also develops scientific software and predictive models supporting sustainability.

RESEARCH QUESTION

Integration of heterogeneous data and algorythms, and development of intelligent interfaces for digital twins

This research project focuses on advancing the capabilities of modular and scalable Digital Twin architectures for environmental monitoring and prediction. It investigates the integration of open standards, enabling seamless interoperability across diverse data sources like groundwater quantity/quality, meteorological, air quality and satellite observations. The study aims to explore the effectiveness of Machine Learning models, in improving time-series predictions and forecasting by utilizing both endogenous and exogenous variables such as groundwater level, rainfall, and temperature, atmospheric pollutants, etc. Therefore, the key contribution of this work is implementation of operational digital services, including historical visualization, prediction, forecasting, 2D maps, model-based decision support tools, directly accessible through a web based digital twin application. With the integration of data engineering, AI-based modelling, and user-centric design, this research work contributes towards the design and development of robust, adaptive, and scalable Digital Twin system capable of supporting sustainable environmental management and policy driven decision making.

5 HUMAN & SOCIAL SCIENCES

Carlo Bosi

Period: October, 2024 - July, 2025
Programme: French Institutes for Advanced Study (FIAS)
Award: LE STUDIUM / FIAS Research Fellowship
Speciality: Musicology
Previously: Mozarteum University & Paris Lodron University of Salzburg - AT
Research institute: Centre for Advanced Studies in the Renaissance (CESR) / CNRS, University of Tours, Tours
Host scientist: Philippe Vendrix

BIOGRAPHY

D.Phil. at the University of Oxford (2004) with a dissertation on modality in the songs of Du Fay and Binchois. In 2004–2005 DAAD scholar at Jena-Weimar University and in 2006–2007 at the NTNU Trondheim with a project on chant in medieval Scandinavia. Research Fellow at City University, London between 2007 and 2009. From 2010 until 2017 postdoc and senior postdoc on two FWF (Austrian Science Fund) projects on monophonic chansons in polyphonic textures. From 2019 until 2024 senior postdoc at Salzburg and Mozarteum Universities in a further FWF project on the relationship between Italian baroque narrative and libretti of early Venetian opera. Since 11/2025 Senior Scientist at Mozarteum University with a research project on the operas by Antonio Caldara for Salzburg (1717-27).

RESEARCH QUESTION

The Chansonnier de Bayeux : An Early 16th-Century Monophonic Source and its Polyphonic Relatives

The 'Manuscrit de Bayeux' (F-Pnm, français 9346) and F-Pnm, français 12744 are unique musical sources, given that they are the only two anthologies from around 1500 transmitting a secular monophonic repertoire, sharing about one third of it. Until recently, there were few studies dedicated to either one or both sources and some are already dated. The new monograph on *Bayeux* resulting from this project shall include a historical introduction, a codicological analysis of the source, a transcription of texts and melodies, and a complete list of monophonic concordances and polyphonic arrangements. Additionally, particular attention will be devoted to songs shared by both monophonic chansonniers and related polyphonic arrangements. It is also planned to devote some attention, in a final chapter, to the modern revival of some of these songs.

Data concerning songs in *Bayeux* will be fed into the Ricercar Data Lab and Biblissima+. This will help spread knowledge and awareness on the relevance of monophonic song in the Renaissance and of this underrepresented repertoire.

Nancy Calomarde

Period: September, 2025 - November, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Latin American Literature
Previously: National University of Córdoba - AR
Research institute: Reception and Mediation of Foreign and Comparative Literature and Culture (Rémélice), University of Orléans, Orléans
Host scientist: Marcos Eymar

BIOGRAPHY

Nancy Calomarde holds a PhD in Literature from UNC and is Full Professor of Latin American Literature at the Faculty of Philosophy and Humanities, National University of Córdoba. Her research focuses on Latin American literary criticism, with particular attention to Cuban literature. She is the author of Políticas y ficciones en Sur (1945–1955) (2004), El diálogo oblicuo (2010, 2016), and Un destino sudamericano (2025). She has also edited several collective volumes on Latin American literature and criticism. She directs the research programme on Latin American literary criticism and the project "Latin American territorialities in worlds to come" (2023–2026). She has been a visiting professor at the University of Texas and Leiden University.

RESEARCH QUESTION

The deterritorialized transavant-garde of Latin America in the second half of the 20th century

This research is located in the field of Latin American literary studies. Its fundamental questions are aimed at rethinking the idea of modernity linked to the aesthetic avant-garde and, mainly, the links between migration and writing. Can the avant-garde form be thought of as the emergence of the process of radical transformation of bodies, subjectivities and imaginaries that activates the experience of deterritorialization? The project aims to investigate the way in which certain writings produced in contexts of migration produce a profound questioning of the canons of the literary system and a process of aesthetic metamorphosis that is linked both to the de (re)territorialization of their experience and to the desire to break with the law of the nation. The project works with an expanded notion of aesthetic avant-garde associated with migration in three Latin American authors of the 20th century. They carry out a geo-cultural transit from their places of origin to different metropolises. Virgilio Piñera, Cristina Peri Rossi and Elena Garro travel to Buenos Aires, Barcelona and Paris. configuring a complex territorial tripod. The works show various processes of displacement-metamorphosis.

John Cooper

Period: October, 2024 - January, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Renaissance History
Previously: University of York - UK
Research institute: Centre for Advanced Studies in the Renaissance (CESR) / CNRS, University of Tours, Tours
Host scientist: Philippe Vendrix

BIOGRAPHY

Educated at the University of Oxford and the University of Pennsylvania, John Cooper is now Professor of Early Modern History at the University of York. His research focuses on the political, religious and architectural history of Britain and Ireland during the long sixteenth century. Between 2013 and 2019 he led a series of AHRC funded projects focusing on the Palace of Westminster, combining academic research with impact in the UK Parliament. He is currently Co-Investigator of the AHRC project 'Henry VIII on Tour', exploring royal progresses in Tudor England. His most recent book, *The Lost Chapel of Westminster: How a Royal Chapel Became the House of Commons*, was published in 2024. John is a Fellow of the Royal Historical Society and Director of the Society of Antiquaries of London.

RESEARCH QUESTION

Royal journeys, palaces and pageantry in England and France 1460-1589: establishing a comparative and multidisciplinary methodology

Why did the rulers of sixteenth-century England and France spend so much time on the road? Connecting the 'Henry on Tour' UK project (Historic Royal Palaces, University of York, Newcastle University) with interdisciplinary work at the Centre d'Études Supérieures de la Renaissance and elsewhere in France, I researched a methodology to compare the itinerance of English and French rulers in terms of purpose, extent, impact and meaning. Henry VIII of England (r. 1509-47) and François 1er of France (r. 1515-47) had a complex relationship of alliance and rivalry. Both used mobility as a political strategy. Comparing their itineraries reveals how personal monarchy operated differently in England and France, within a European political culture of mobility. A Le Studium conference at CESR, 'Performing Royal Power in Renaissance England and France' (Jan 2025), brought UK and French groups together to discuss new data and the impact of academic research.

Camelia Crăciun

Period: September, 2025 - November, 2025
Programme: MSH Val de Loire
Award: LE STUDIUM / MSH VdL Visiting Researcher
Speciality: Human and Social Sciences
Previously: University of Bucharest - RO
Research institute: Loire Valley House of Social Sciences and Humanities (MSH VdL) / CNRS, University of Tours, University of Orléans
Host scientist: Chiara Lastraioli

BIOGRAPHY

Camelia Craciun is Associate Professor in Jewish Studies at the Faculty of Foreign Languages and Literatures of the University of Bucharest. With a background in comparative literature, Jewish cultural history, theatre studies and acting, her research focuses on Jewish Romanian cultural history and Yiddish theatre. In 2016, she founded the first Centre for Research and Preservation of Yiddish Culture in Romania at the Jewish State Theatre of Bucharest. A former fellow of several institutes for advanced study, she has lectured internationally on Yiddish theatre and the social history of Jewish-Romanian intellectuals. She has edited more than 20 volumes and authored three monographs on Yiddish literature, theatre and Jewish writers of Romanian language.

RESEARCH QUESTION

The Reception of the Vilna Troupe in the French and Romanian Press (1920s and 1930s)

The project investigated the cultural and political reception of the Yiddish-language theatre company the Vilna Troupe in the French and Romanian press during the 1920s and 1930s. While the importance of the company for Jewish cultural life and the history of Yiddish theatre is well documented, its broader impact on non-Jewish audiences across Europe has remained largely understudied. The research therefore examined how the troupe contributed to cultural transfer and theatrical innovation beyond Jewish communities. Using mainly mainstream press sources, complemented by archival materials and memoirs, the project comparatively analysed the reception of the Vilna Troupe in France and Romania. Particular attention was paid to the differing contexts of Yiddish-speaking communities, the perception of Jewish culture among non-Jewish audiences, and the dissemination of avant-garde theatrical practices across European cultural environments.

Richard Freedman

Period: January, 2025 - June, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Historical Musicology and Data Science
Previously: Department of Music, Haverford College - USA
Research institute: Centre for Advanced Studies in the Renaissance (CESR) / CNRS, University of Tours, Tours
Host scientist: Philippe Vendrix

BIOGRAPHY

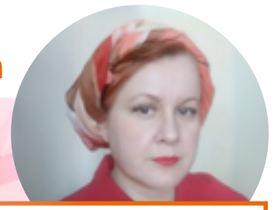
Freedman specializes in the music of the Renaissance. His publications include *The Chansons of Orlando di Lasso and their Protestant Listeners* (2001), and *Music in the Renaissance* (2012), as well as many essays in leading journals and encyclopedias. He is also general editor (with Prof Jeanice Brooks) of *A Cultural History of Music in the Renaissance* (2023). A leader in digital musicology, Freedman was Digital and Multimedia Scholarship Editor for *The Journal of the American Musicological Society*, and Chair of the Digital and Electronic Media Committee for the Renaissance Society of America. He directs two major digital music scholarship projects: *The Lost Voices Project* and *Citations: The Renaissance Imitation Mass*.

RESEARCH QUESTION

Making Musicology in a Digital age

New technologies have always shaped the relationship between authors and readers. This is especially true for music. From the beginnings of Western musical notation to the advent of the printing press, sound recording, and now the digital domain, new technologies brought about means for controlling the effects and purposes of music, even inaugurating a new sense of it as intellectual property. Each was a new medium of its day, bringing with it new ways for composers, performers, and listeners to interact around musical ideas. And thus during his time at the CESR and Le Studium, Freedman worked with colleagues to advance various techniques for creating, managing and analyzing both “music as data” (particularly through novel XML technologies for encoding musical scores) and “data about music” (information about the contexts in which it was created, heard and preserved). He worked with students in courses at the CESR and the nearby Département de Musique of the Université de Tours, and also took part a major EU COST-action grant, EarlyMuse, directed by Philippe Vendrix.

Liudmyla Harmash



Period: September, 2025 - August, 2026
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Literary and memory studies
Previously: H.S. Skovoroda National Pedagogical University, Kharkiv - UA
Research institute: Cultural and Discursive Interactions (ICD) / University of Tours, Tours
Host scientist: Anna Krykun

BIOGRAPHY

Liudmyla Harmash is Professor of Literature at H. S. Skovoroda Kharkiv National Pedagogical University (Ukraine). She holds a PhD in Literature, with doctoral research devoted to Russian symbolism. She was a laureate of the International Advanced Fellowships Program at Babes-Bolyai University (2022), served as Editor-in-Chief of *Scientific Notes… Literary Studies* (2018–2024), and was a Researcher at EUR'ORBEM, Sorbonne Université (2023–2025), where she studied Ukrainian wartime songs. Her current work focuses on the interrelation between trauma and memory in Ukrainian wartime literature, examining how fiction and non-fiction texts contribute to the construction of national identity and collective resilience in times of conflict.

RESEARCH QUESTION

Fictional and Non-fictonal Ukrainian Literature of the Russian-Ukrainian War

Research question: (maximum: 1100 characters spaces included)
This project examines how fictional and non-fictional Ukrainian literature of the Russian–Ukrainian war represents trauma, loss, and injustice through specific narrative, generic, and discursive strategies. It explores the role of wartime literature as a form of cultural reparation that documents, transmits, and reinterprets traumatic experience within frameworks of collective memory. Special attention is given to the interaction of documentary practices, personal testimony, and historical reference, as well as to the epistemological challenges arising from the convergence of fiction and lived experience. The study further analyzes how Ukrainian wartime writing contributes to the construction of “imagined communities” and the reconfiguration of individual and collective identities under conditions of war and displacement. Finally, it considers literature's potential role in psychological rehabilitation, narrative therapy, and social cohesion, situating Ukrainian texts within broader European and global debates on trauma, memory, and identity.

Sungyup Lee

Period: January, 2025 - February, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Translation Studies & Picture Books
Previously: Ewha Womans University - KR
Research institute: Artistic and Cultural Interactions, Transfers and Breaks (InTRu) / University of Tours, Tours
Host scientist: Cécile Boulaire

BIOGRAPHY

After defending her Ph.D. dissertation in 2010, Sungyup Lee became a lecturer at Ewha Womans University in Seoul, South Korea, where she currently teaches. From September 2011 to August 2012, she was a postdoctoral fellow at Brock University in Canada, supported by the Government of Canada Awards program. Her research focuses on crossover picturebooks and the translation of picturebooks. She conducted an in-depth study of French crossover picturebooks of the 1970s and 1980s with a five-year fellowship (2020–2025) from the National Research Foundation of Korea and carried out a project on Korean picturebooks translated into French as a Le Studium Visiting Researcher (December 2023–February 2024). She also served as President of KBBY (IBBY Korea) from 2024 to 2025 and works as a translator between French and Korean.

RESEARCH QUESTION

A Study on the Translation Strategies of Korean Picture Books published in France

This study conducts a comparative analysis of English picturebooks translated into French between 2002 and 2023 and Korean picturebooks translated into French during the same period. The analysis of the translation process of Korean picturebooks is based on a corpus published by 44 Francophone publishing houses, including 40 French publishers, two Belgian publishers, one Swiss publisher, and one Canadian publisher. In order to ensure methodological consistency, the study focuses, for the English-French corpus, on the same French publishing houses that publish translations of Korean picturebooks. The research aims to identify and analyze similarities and differences between the French translations of Korean and English picturebooks. Through this comparison, it seeks to examine how the distance between source language-culture and target language-culture influences translation strategies. Korean is considered a minority language in terms of number of speakers, whereas English functions as a global lingua franca. Since Korean is not the only minority language, this research also opens perspectives for studying other language pairs characterized by asymmetric cultural and inguistic power relations.

Pál Nyíri

Period: January, 2025 - August, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Anthropology of Chinese migration
Previously: Budapest Corvinus University of Budapest - HU
Research institute: Cities, Territories, Environment and Societies (CITERES) / CNRS, University of Tours, Tours
Host scientist: Hélène Bertheleu

BIOGRAPHY

Pál Nyíri studied chemistry at Moscow State M. V. Lomonosov University, Eötvös Loránd University, and Rutgers University, and graduated from Rutgers with a BS in 1991 and an MS in 1993. Subsequently, he completed an MA in Asian Studies at the University of Oregon in 1995. Between 1995 and 1999, he worked at Procter & Gamble in Brussels. In 1998, he defended my CSc dissertation on Chinese migration to Hungary at the Institute for Asian and African Studies at Moscow State University. Between 1999 and 2001, he was a postdoc at the University of Oxford, then between 2001 and 2003 at Central European University in Budapest. in 2003-04, he held a fellowship at the Wissenschaftskolleg zu Berlin. In 2004-08, he was a lecturer and then a senior lecturer in anthropology at Macquarie University in Sydney. Since 2009, he have held the chair of global history from an anthropological perspective at the Vrije Universiteit, Amsterdam, and since 2023, He have been a professor at the Institute of Global Studies at the Budapest University of Economics. He have published a number of books and articles on various aspects of the international mobility of the Chinese middle class.

RESEARCH QUESTION

Chinese lifestyle migration to Europe

Europe has also been the destination of growing flows of investment from China, but this growth has declined in the 2020s as a result of increasing political scrutiny. In the 2010s, news of Chinese investment in French viniculture made headlines but attracted little research. However, vineyards, particularly in Burgundy and the Loire Valley, are not only an investment but also the epitome of a «European lifestyle» seen as desirable by many in the Chinese middle class. The research set out to investigate Chinese investments and migration in Loire Valley viticulture and to understand motivations of these phenomena.

Ali Soltani

Period: October, 2024 - April, 2025
Programme: French Institutes for Advanced Study (FIAS)
Award: LE STUDIUM / FIAS Research Fellowship
Speciality: Human and Social Sciences
Previously: Flinders University - AU
Research institute: Study Centre for the Development of Territories and the Environment (CEDETE) / University of Orleans, Orleans
Host scientist: Geneviève Pierre

BIOGRAPHY

Ali Soltani is a senior researcher in computational urban planning and policy who specialises in the intersection of land use and transportation. He is a member of UniSA Business and has previously worked as an urban planning professor at Shiraz University in Iran, where he was awarded the national research excellence medal in 2014, and as a research fellow in Turkey (Izmir), Australia (Griffith), and as a visiting fellow in Japan (Tsukuba) and Italy (Naples Federico II). Ali holds degrees in surveying (spatial science), urban planning, and data science. His research interests include urban analytics, computational planning and policy analysis, property data, Big Data applications in housing, active transport, shared mobility, and the impacts of planning and transportation infrastructure/policies on the housing sector. He has taken part in a number of grant-funded research initiatives both in Australia and overseas. He is an editor (associate) for Springer's Q1 Journal of Housing and Built Environment, and Journal of Environment, Development and Sustainability, and a member of editorial boards for some other journals. He was the receptionist of Australian Endeavour Award in 2015.

RESEARCH QUESTION

Investigating the Spatio-temporal Heterogeneous Changes in Internal Migration Patterns, the Case Study of Melbourne

This research examined how interactions between population and employment centres shape internal migration, regional resilience, and policy performance in two advanced economies. The study employed covariance-based structural equation modelling (CB-SEM) alongside PLS-GWR and PLS-GTWR techniques to capture spatial and temporal variations in migration determinants. Using the Greater Melbourne Area (GMA) as a case study, it explored post-COVID migration rebounds and the influence of amenities, labour-market accessibility, and working-from-home patterns.

Sara Taglialatela

Period: September, 2024 - July, 2025
Programme: French Institutes for Advanced Study (FIAS)
Award: LE STUDIUM / FIAS Research Fellowship
Speciality: History of Philosophy
Previously: Independant Researcher
Research institute: Centre for Advanced Studies in the Renaissance (CESR) / CNRS, University of Tours, Tours
Host scientist: Fosca Mariani Zini

BIOGRAPHY

Sara Taglialatela holds one PhD in Philosophy (Theoretical Philosophy) from the Ca' Foscari University in Venice (2009) and one joint PhD in Philosophy (History of Philosophy) from the Freie Universität Berlin and the Scuola Normale Superiore, Pisa (2018). After having studied Giordano Bruno's ars memoriae and the relation between his works on mnemonics and philosophy in the first phase of his reflection (1582–1585), she has researched Bruno's stay at Wittenberg (1586–1588) to identify possible interweavings of the discussions on the artes liberales among the Lutherans at the Leucorea University (September 2021-August 2024, Marie Skłodowska-Curie Fellowship at the Faculty of Theology, Church History Section, University of Copenhagen).

RESEARCH QUESTION

Philipp Melanchthon, Giordano Bruno, and Michel de Montaigne on memory and oblivion: Three case studies on philosophy of memory in the sixteenth century.

Philipp Melanchthon, Giordano Bruno, and Michel de Montaigne on memory and oblivion: Three case studies on philosophy of memory in the sixteenth century (acronym: MEMO16). Through textual analysis MEMO16 will investigate how Philipp Melanchthon, Giordano Bruno, and Michel de Montaigne conceived of, reflected on, and wrote about memory and oblivion at the intersection of some of the most important disciplines of the sixteenth century (i.e., philosophy, theology, and medicine; philosophy, rhetoric, and mnemonics; philosophy and literature) to show how they contributed to the formulation of modern topics such as the soul-body problem and concepts of time, space, and self- consciousness. This project, informed by analytical (philosophy of memory) and phenomenological (metaphorology) approaches, will also profit from engaging with the study of the inner writing and book of nature metaphors in the works of the three authors.

Attila Tanyi

Period: September, 2025 - December, 2025
Programme: SMART LOIRE VALLEY PROGRAMME
Award: LE STUDIUM Visiting Researcher
Speciality: Philosophy
Previously: University of Milan - IT
Research institute: Institute of Interdisciplinary Law Research (IRJI) / University of Tours, Tours
Host scientist: Nicolas Jeanne

BIOGRAPHY

Attila Tanyi is associate professor of philosophy at the University of Milan and adjunct professor of philosophy at UiT The Arctic University of Norway. Previously, he served as lecturer and professor at the universities of Liverpool, Stockholm, Konstanz and Bayreuth. A trained economist and political scientist, he received his doctorate from the Department of Political Science at the Central European University (CEU) in 2007. He has published over 60 articles and several books on the philosophy of law, philosophy of science, philosophy of religion, and on various topics in moral and political philosophy. He has held numerous research fellowships, visiting professorships and led externally funded projects. He is a regular member of the Norwegian National Committee for Clinical Trials of Medicines and Medical (REK-KULMU).

RESEARCH QUESTION

The Law and Ethics of Entrapment

If undercover police incite someone to break the law, to make an arrest, this is state entrapment. If a private citizen incites someone to break the law, to report them, we have private entrapment. State entrapment usually compromises prosecution. Private entrapment usually does not. The police and the courts respond to it in disparate, unpredictable ways. The research project is primarily interested in state entrapment; private entrapment is of secondary interest. The focus is on three questions: definition; permissibility; implications. Rather than stemming from innocuous conventional differences, disagreements about entrapment are at heart philosophical conflicts. Philosophy has a key role to play in deepening our understanding of the assumptions that underlie debates about entrapment, the concept of entrapment, and the ethics of entrapment. This project is the first sustained, comprehensive, and specifically philosophical study of the topic. It will bring new clarity, depth, and sophistication to the discussion of entrapment. During the stay in Tours, work has been carried out on a book forthcoming at Oxford University Press. In particular, Chapter 11 on system-centred objections entrapment has been written.

FOCUS - LE STUDIUM ARTS-SCIENCES PROGRAMME

Anna Steward

LE STUDIUM Visiting Artist

Period: November, 2024 - September, 2025
Research institute: École supérieure d'art et de design d'Orléans (ESAD Orléans) & Centre for Molecular Biophysics (CBM) /CNRS, Orléans
Host scientists: Caroline Zahnd & Matthieu Réfrégiers

BIOGRAPHY

Anna Steward is a transdisciplinary multimedia artist blending performance, storytelling, installation, and scientific collaboration. After training at Arts Ed London in 2000, she worked as an actor in German and Austrian theatre and with an international theatre laboratory based in Poland. Since 2007, she has focused on Live Art projects exploring cultural and anthropological themes. Her 2014 performance GELD-Pilgerreise inspired the Swiss film Church of Money, featured in the German Federal Agency for Civic Education's media library. Anna graduated with honours from the Academy of Fine Art Nuremberg in 2023 and is currrently a lecturer there. She has received prestigious scholarships, including from Künstlerhaus Lukas Ahrenshoop, the Maecenia Foundation Frankfurt, and the Bavarian State Ministry of Science and the Arts. A deep-seated curiosity about what holds the world together has led her to explore scientific themes, primarily within microbiology and neurology, with a newfound passion for astrobiology.
In addition to her current collaboration with CBM Orléans, she is a visiting artist at the German Archaea Centre at the University of Regensburg.

RESEARCH QUESTION

BioQuantum Record - Communicating with the Other
The BioQuantum Record is a speculative artistic project that reimagines how we might communicate with microbial life forms, challenging the human-centric concept of intelligence. It explores the idea that microbial collectives may be the most common form of life beyond Earth, and seeks ways to interact on a molecular level. As a post-Voyager concept, the BioQuantum Record is not just a passive artefact, but an interactive, living prototype that generates, receives, and responds to biological signals, offering a speculative exploration into how we might «speak» to microbial ecosystems. The sci-fi format blends playful design with real scientific findings, for creativity and the exploration of both real and fantastical concepts. This fusion results in a visually and conceptually stimulating object, where imaginative elements enhance the presentation of actual scientific discoveries, making complex ideas both accessible and engaging.

2025 EVENTS PANORAMA

THEMES IN COLOR

- CONFERENCE
- PUBLIC LECTURE
- THURSDAY
- SUMMER SCHOOL
- CONSORTIUM
- WORKSHOP
- PARTNERSHIP

JANUARY

Performing Royal Power in Renaissance England and France: Insights and Impact
John Cooper & Philippe Vendrix
CESR, Tours
15 & 16 January >

Monarchy on the Move: Performing Kingship in Renaissance England and France
John Cooper
CESR, Tours
09 January >

> 09 January
Catching flies with worms
Lindy Holden-Dye
CESR, Tours

FEBRUARY

Quantum Record - Contact with the Other: Initialising a Chiral Handshake between Terrestrial and Extraterrestrial Microorganisms
Anna Steward
Hôtel Dupanloup, Orléans
> 06 February

> 06 February
Low and Zero-Carbon Fuels: Transforming Combustion Engines for a Sustainable Future
Ganesh Duraisamy
Hôtel Dupanloup, Orléans

> 06 February
Amenities and the Labor Market: Drivers of Domestic Migration
Ali Soltani
Hôtel Dupanloup, Orléans

MitIon Consortium: Mitochondrial Ion Signaling in Cancer: A Paradigm for Targeted Therapy
Maxime Gueguinou
Laboratoire d'Excellence MAbImprove, Tours
10-14 February >

> 06 February
From Solar Storms to Aurorae: The Role of Magnetic Reconnection
Giulia Cozzani
Hôtel Dupanloup, Orléans

MARCH

A stimulating Journey with follicle-stimulating hormone
T. Rajendra Kumar
Chapelle Saint Libert, Tours
06 March >

> 03-05 March
Forging links between nematode and athropod research communities
Lindy Holden-Dye,
Fotini Koutroumpa & Cédric Neveu
Tours

> 06 March
New Imaging Strategies During Acute Stroke Treatment
Johannes Kaesmacher
Chapelle Saint Libert, Tours

> 06 March
Song Networks around 1500: The Chansonnier de Bayeux (BnF, fr. 9346) and Related Sources
Carlo Bosi
Chapelle Saint Libert, Tours

APRIL

> 26 March
Manger des insectes, est-ce l'avenir ?
David Giron
MOBE, Orléans

> 27 & 28 March
Insects for sustainable agrifood systems: ecosystem services and management
Karol B. Barragán-Fonseca, Umberto Diecinove & David Giron
Hôtel Dupanloup, Orléans

Integration of ethnobotany, phytochemistry and biological activity studies in the design of phytocosmetic formulations
Ebru Özdemir Nath
Hôtel Dupanloup, Orléans
03 April >

Magmatic degassing and the volatile budget of the Moon
Alberto Saal
Hôtel Dupanloup, Orléans
03 April >

Flat-Panel Diagnostic Imaging in Acute Neurovascular Diseases – We can only treat what we see
Johannes Kaesmacher & Grégoire Boulouis
Hôtel de Ville, Tours
07 & 08 April >

Unveiling Energy Conversion and Dissipation in Non-Equilibrium Space Plasmas
Giulia Cozzani & Matthieu Kretzschmar
Hôtel Dupanloup, Orléans
05-07 May >

MAY

CONNECT Considering Overlooked Networks of iNtEraCTions : seed-dispersal by non-frugivorous vectors in temperate ecosystems
Christophe Baltzinger
INRAE, Nogent-sur-Vernisson
> 12-16 May

The Digital Edition of Medieval to Early Modern ‚Song': Methodological and Interpretative Perspectives
Carlo Bosi, Richard Freedman & Philippe Vendrix
CESR, Tours
< 13-15 May

15 May >
Making Musicology in a Digital Age
Richard Freedman
CESR, Tours

Chinese in the Loire Valley: Why a Wild Goose Chase Matters
Pál Nyíri
CESR, Tours
> 15 May

15 May >
Hermeneutical problems and methodological solutions in studying the notion of memory in the history of philosophy
Sara Taglialatela
CESR, Tours

Mnestic traces in the 16th-century
Sara Taglialatela & Fosca Mariani Zini
CESR, Tours
> 19 & 20 May

20-22 May >
Sourcing plant biomass for cosmetic applications under the constraints of global warming
Frédéric Lamblin
Hôtel Dupanloup, Orléans

Seeing the Invisible: from Imaging Agents Design to Biological and Clinical Applications
Vincent Pecoraro, Svetlana Eliseeva & Stéphane Petoud
Hôtel Dupanloup, Orléans
> 26-28 May

26 May >
L'IA et les robots révolutionnent la chirurgie
Michele Diana
Hôtel Dupanloup, Orléans

Adapting temperate forest management to climate change: from assessment to solutions
Sycomore
Hôtel Dupanloup, Orléans
> 10-12 June

JUNE

10 June >
Quel futur pour les forêts du Centre-Val de Loire : laisser faire ou renverser la table
Frédéric Archaux
Hôtel Dupanloup, Orléans

23-26 June >
Ion channel signaling in health and disease
Mohamed Trebak, Marie Potier-Cartereau & Christophe Vandier
Château Belmont, Tours

JULY

GMA - Basic Course - The Prechtl General Movement Assessment
Vittorio Belmonti
Grand Hôtel, Tours
03 - 05 July >

> 01 & 02 July
International Congress on Early Sensorimotor Development and Neurodevelopmental Disorders
Jill Heathcock, Frédérique Bonnet-Brilhault, Delphine Mitanchez & Marianne Latinus
Faculty of Medicine, Tours

> 03 July
Understanding Hydrogen Combustion for a Sustainable Energy Future
Seong-Young Lee
Hôtel Dupanloup, Orléans

SEPTEMBER

Harnessing Nature: Innovative Strategies and Global Trends in Skincare
Magdalena Malinowska, Arnaud Lanoue & Nathalie Guivarc'h
MSH Val de Loire, Tours
24-26 September >

24 September >
Cosmétiques du futur : quand la biotechnologie sublime la nature
Benoit St-Pierre
MSH Val de Loire, Tours

Pharmacological Inhibition of Cathepsin C in Neutrophil-Mediated Inflammatory Diseases
Brice Korkmaz
Faculty of Medicine, Tours
> 15-19 September

Astrobiology and Lasers: a perfect partnership
Ricardo Arevalo
Hôtel Dupanloup, Orléans
> 03 July

2025
EVENTS PANORAMA

Mines, metals and coins. A glimpse of some technical processes during the Antiquity and the Middle Ages
Guillaume Sarah
IRAMAT, Orléans
06 November >

Why do we (still) need literary studies today?
Nancy Calomarde, Camelia Craciun & Liudmyla Harmash
MSH Val de Loire, Tours
< 20 November

COSMETOSCIENCES - Meet & Bloom Day 1
Virtual Meeting
10 October >

> 27-31 October
CONNECT Considering Overlooked Networks of iNtEraCTions : seed-dispersal by non-frugivorous vectors in temperate ecosystems
Christophe Baltzinger
Hôtel Dupanloup, Orléans

OCTOBER

NOVEMBER

DECEMBER

> 05-18 October
Forest ecosystems in the face of climate change: towards more consensual, science-based adaptation solutions
ESENCIA
Hôtel Dupanloup, Orléans

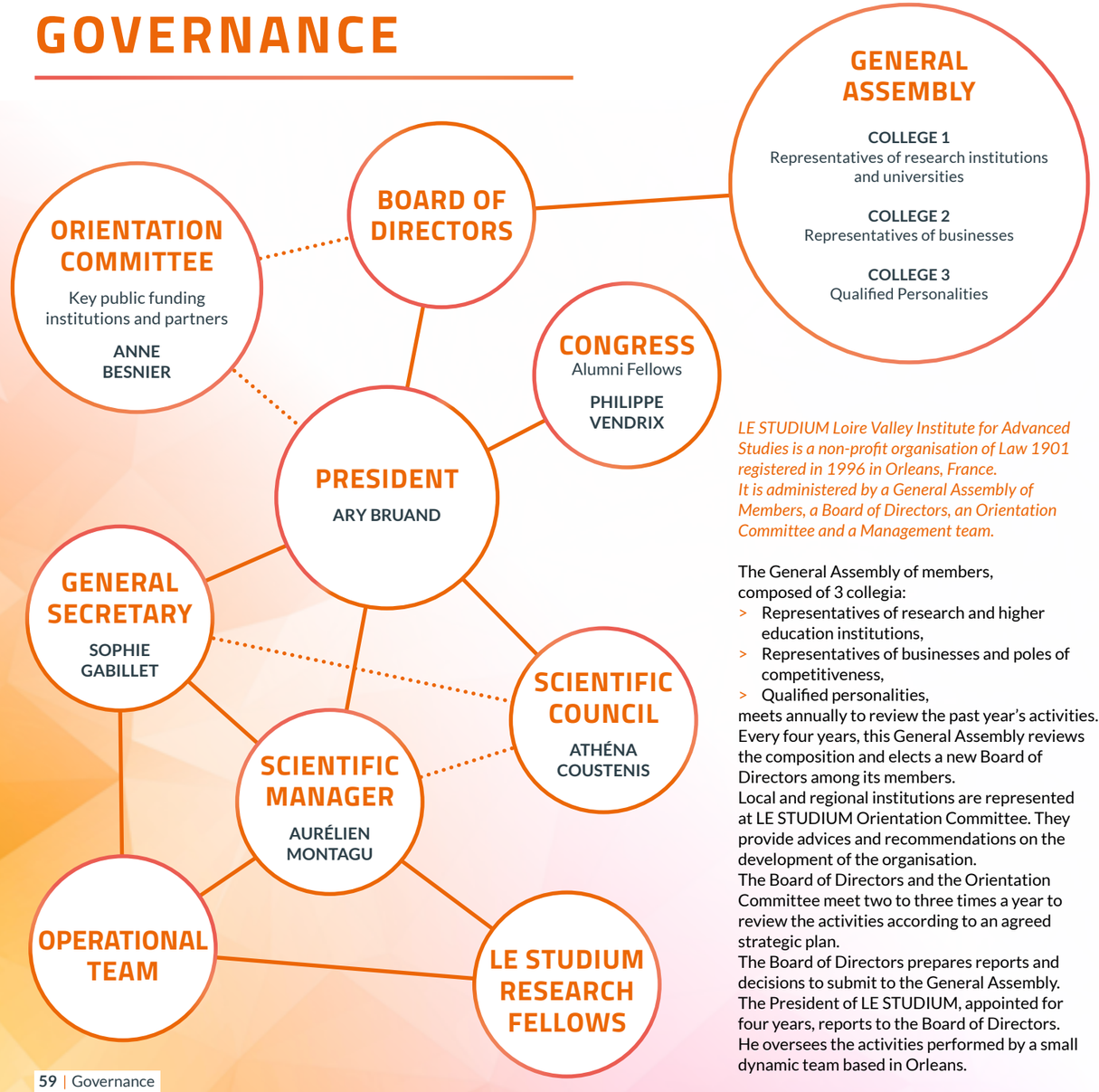
> 04 December
Visualising fertility through virtual reality, artificial intelligence and multimodal imaging
Simon De Graaf
Centre INRAE Val de Loire, Nouzilly

< 5 December
COSMETOSCIENCES - Meet & Bloom Day 2
Virtual Meeting

THEMES IN COLOR

- CONFERENCE
- PUBLIC LECTURE
- THURSDAY
- SUMMER SCHOOL
- CONSORTIUM
- WORKSHOP
- PARTNERSHIP

GOVERNANCE



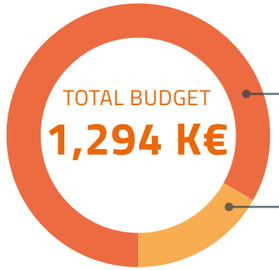
LE STUDIUM Loire Valley Institute for Advanced Studies is a non-profit organisation of Law 1901 registered in 1996 in Orleans, France.
It is administered by a General Assembly of Members, a Board of Directors, an Orientation Committee and a Management team.

The General Assembly of members, composed of 3 collegia:

- Representatives of research and higher education institutions,
- Representatives of businesses and poles of competitiveness,
- Qualified personalities,

meets annually to review the past year's activities. Every four years, this General Assembly reviews the composition and elects a new Board of Directors among its members.
Local and regional institutions are represented at LE STUDIUM Orientation Committee. They provide advices and recommendations on the development of the organisation.
The Board of Directors and the Orientation Committee meet two to three times a year to review the activities according to an agreed strategic plan.
The Board of Directors prepares reports and decisions to submit to the General Assembly.
The President of LE STUDIUM, appointed for four years, reports to the Board of Directors. He oversees the activities performed by a small dynamic team based in Orleans.

2025 BUDGET & KEY FIGURES

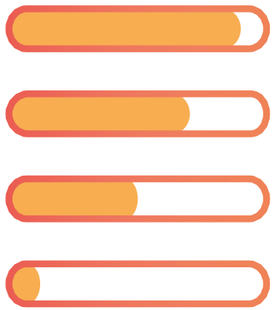


PROGRAMMES COSTS
1,039 K€

GENERAL & ADMINISTRATIVE COSTS
0,255 K€

48 FELLOWS IN TOTAL
21 WOMEN AND **27** MALES
22 NATIONALITIES
REPRESENTING **178** MONTHS OF RESEARCH IN RESIDENCE IN **25** RESEARCH LABORATORIES
39 SMART LOIRE VALLEY FELLOWS
1 VISITING ARTISTS
3 FIAS FELLOWS
1 ARD CVL FELLOWS
1 MSH VDL
3 GREENCOSMIN

2025 PROGRAMMES REPARTITION



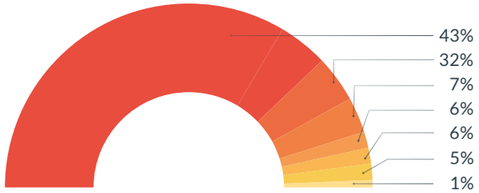
65%
SMART LOIRE VALLEY PROGRAMME

23%
ARD CVL PROGRAMMES

11%
FIAS PROGRAMME

1%
MSH-VAL-DE-LOIRE VISITING RESEARCHERS PROGRAMME

2025 FINANCIAL RESOURCES



SCIENTIFIC COUNCIL 2025

LE STUDIUM Scientific Council evaluates candidacies, establishes the final ranking of applications, and recommends Fellowship, Professorship, Visiting Artist, Visiting Researcher and Consortium awards. It is composed of independent external senior scientists who gather twice a year to analyse applications and the scientific reviews provided by a pool of a thousand experts. They finalise the selections of the Smart Loire Valley Programme and the French, the Institutes for Advanced Study (FIAS) Programme, and the MSH-Val-de-Loire Programme. The Scientific Council members are also regularly consulted for their expertise to perform independent evaluations in the course of required recruitments occurring across the Ambition Research Development CVL programmes and other invitation programmes.
For the call for applications 2025, LE STUDIUM Scientific Council members were:

Athéna Coustenis

Chair

ATHÉNA COUSTENIS
Chair, Astrophysicist, Director of Research, CNRS, at LIRA, Paris Observatory, Univ. PSL, Sorbonne Univ., Université Paris Cité, CY Cergy Paris Univ., CNRS, Meudon, FR

Vice-Chairs

GORDON CAMPBELL
Fellow of the British Academy, Professor in Renaissance and seventeenth century studies, University of Leicester, UK

MARK GOERBIG
Professor Theoretical Physics, CNRS Research Director, Laboratory of Solid State Physics at the University of Paris-Saclay, FR

Members

DOMINIQUE ALLART
Professor, Director of Service d'Histoire et Technologie des Arts plastiques (Temps modernes), Université de Liège, BE

JOSEP-MARIA ARAUZO-CAROD
Professor, Director of the Center for Research in Economics and Sustainability, University of Rovira i Virgili, SP

LAURA BACIOU
Professor, Biophysics, Research Director-CNRS, at Laboratory of Physical Chemistry at the University of Paris-Saclay, FR

DAMIAN BAILEY
Professor of Physiology and Biochemistry, Director of the Neurovascular Research Laboratory, University of South Wales, UK

BRUNO CHAUDRET
CNRS Research Director in organometallic chemistry, LPCNO University of Toulouse INSA-CNRS-UPS, FR

STEPHANE DE BRITO
Professor in Developmental Psychopathology and Neuroscience, University of Birmingham, UK

BRUNO DELVAUX
Agronomist, Soil sciences, Catholic University of Louvain, BE

WIESLAW GRUSZECKI
Professor in Biophysics, Maria Curie-Sklodowska University in Lublin, PL

OLGA GUERRERO-PEREZ
Professor, Environmental chemistry & Chemical Engineering, Higher Technical School of Industrial Engineering, University of Malaga, SP

VALÉRIE HAYAERT
Doctor in Studies Early Modern Legal History, Law and Literature, Emblems Studies, Research Fellow, School of Law, University of Warwick, UK

AYLIN CARLA HANYALOGLU
Professor in Molecular Biology, Imperial College London, Faculty of Medicine, UK

ROSANA LÓPEZ RODRÍGUEZ
Associate Professor in Plant Physiology, Universidad Politécnica de Madrid, SP

JEAN-CLAUDE LECRON
Professor, Biochemistry & Immunology, University of Poitiers, Hospital practitioner at the University Hospital of Poitiers, FR

ALBERTO MARZO
Associate Professor in Cardiovascular Biomechanics, University of Sheffield, UK

MIRELA MOLDOVAN
Professor in Dermatology & Cosmetology at University of Medicine and Pharmacy, Cluj Napoca, RO

AGNIESZKA PARTYKA
Professor in Reproduction and Clinic of Farm Animals, Wroclaw University of Environmental and Life Sciences, PL

LAURENT TISSOT
Professor, Contemporary History, University of Neuchâtel, CH

ANA RIVERO
CNRS Research Director in Evolutionary Biology of Infectious Diseases, MIVEGEC, University of Montpellier, FR

EMMANUEL TRELAT
Professor, Mathematics, Sorbonne University, Director of the Jacques-Louis Lions laboratory, FR

RALPH WATZEL
Professor, Geology and Geophysics, President of the Federal Institute for Geosciences and Natural Resources (BGR), Hannover, DE

TATJANA WELZER DRUZOVEC
Professor, Computer science, University of Maribor, Faculty of Electrical Engineering and Computer Science, SI

LE STUDIUM TEAM

Sophie Gabillet
General Secretary

Aurélien Montagu
Scientific Manager

Marie-Frédérique Pellerin
Finance & Administration Manager

Maurine Villiers
Communication & Events Manager

Agathe Emmanuel
Junior Communication & Events Assistant

Miléna Bwandi
Project Officer Incoming Researchers in Orléans & Tours

Maëllane Courtin
Research Project Assistant

Coralie Garbunow
Research Project Assistant

LIST OF RESEARCHERS IN RESIDENCE IN 2025

SMART LOIRE VALLEY PROGRAMME

Ricardo Arevalo
Advancing the capabilities of laser-based mass spectrometry in support of life detection objectives and future missions to Enceladus
May 2025 - July 2025
In residence at: Laboratory of Physics and Chemistry of Environment and Space (LPC2E) / CNRS, University of Orléans, CNES - FR
Host scientist: Christelle Briois

Nébon Bado
Microphysical and optical characterization of aerosols in urban areas by in situ and balloon flight measurements: application to the study of air quality in Burkina Faso, West Africa
September 2025 - November 2025
In residence at: Laboratory of Physics and Chemistry of Environment and Space (LPC2E) / CNRS, University of Orléans, CNES
Host scientist: Gwenaël Berthet

Karol B. Barragán-Fonseca
Multidimensional assessment of the potential of insects for sustainable agri-food systems
October 2024 - January 2025
In residence at: Insect Biology Research Institute (IRBI), University of Tours / CNRS
Host scientist: David Giron

Bryan Beckingham
Leveraging tunability of copolymer gradients during polymer synthesis to advance understanding of polymer self-assembly in confined geometries
September 2024 - July 2025
In residence at: Interfaces, Confinement, Materials and Nanostructures (ICMN) - CNRS / University of Orléans
Host scientist: Christophe Sinturel

Lauren Beckingham
Multi-scale observation and simulation of mineral reactions in subsurface energy systems
September 2024 - July 2025
In residence at: Earth sciences institute of Orleans (ISTO) - CNRS, BRGM, OSUC / University of Orléans
Host scientist: Cyprien Soulaine

Marcos Belançon
Reuse of cover glass from end-of-life photovoltaic panels to produce glass-ceramics with innovative properties
October 2025 - April 2026
In residence at: Extreme Conditions and Materials: High Temperature and Irradiation (CEMHTI) / CNRS
Host scientist: Mathieu Allix

Alison Bennett
How do soil microbes influence plant attraction of insect herbivores and/or parasitoids of herbivores?
August 2024 - January 2025
In residence at: Insect Biology Research Institute (IRBI), University of Tours / CNRS
Host scientist: David Giron

Nancy Calomarde
The deterritorialized transavant-garde of Latin America in the second half of the 20th century
September 2025 - November 2025
In residence at : Reception and Mediation of Foreign and Comparative Literature and Culture (Rémélice), University of Orléans
Host scientist: Marcos Eymar

John Cooper
Royal Journeys, Palaces and Pageantry in England and France 1460-1589: Establishing a Comparative and Multidisciplinary Methodology.
October 2024 - January 2025
In residence at: Centre for Advanced Studies in the Renaissance (CESR) / CNRS, University of Tours
Host scientist: Philippe Vendrix

Giulia Cozzani
Unraveling energy conversion in space plasmas
November 2024 - November 2025
In residence at: Laboratory of Physics and Chemistry of Environment and Space (LPC2E) / CNRS, University of Orléans, CNES
Host scientists: Matthieu Kretzschmar

Simon de Graaf
Visualizing Fertility: Imaging Reproductive Function to Improve Animal Breeding and deliver Immersive Education
June 2025 - January 2026
In residence at: Physiology of Reproduction and Behaviour (PRC) / Centre INRAE Val de Loire, CNRS, University of Tours, IFCE
Host scientists: Xavier Druart

Umberto Diecinove
I N S C T S, in collaboration with the research project: Multidimensional assessment of the potential of insects for sustainable agri-food systems
October 2024 - January 2025
In residence at: Insect Biology Research Institute (IRBI), University of Tours / CNRS
Host scientist: David Giron

François Djitie Kouatcho
Balance between feed efficiency and bone health in free-range broilers reared under global warming conditions
February 2025 - November 2025
In residence at: Avian Biology & Poultry Research (BOA) / Centre INRAE Val de Loire, University of Tours
Host scientists: Agnès Narcy & Sandrine Grasteau

Ganesh Duraisamy
Potential of zero and low carbon fuels in high-efficiency clean combustion engines
March 2024 - March 2025
In residence at: PRISME / INSA Centre Val-de-Loire, University of Orléans
Host scientist: Christine Rousselle

Richard Freedman
Making Musicology in a Digital age
January 2025 - June 2025
In residence at: Centre for Advanced Studies in the Renaissance (CESR) / CNRS, University of Tours
Host scientist: Philippe Vendrix

Kenji Fukushima
Quantum phases of matter in gravitational spacetimes
November 2024 - February 2025
In residence at: Institut Denis Poisson / CNRS, University of Orléans, University of Tours
Host scientist: Maxim Chernodub

Liudmyla Harmash
Fictional and Non-fictonal Ukrainian Literature of the Russian-Ukrainian War
September 2025 - August 2026
In residence at: Cultural and Discursive Interactions (ICD) / University of Tours
Host scientist: Anna Krykun

Jill Heathcock
Adding movement analysis to detect neurodevelopmental impairments in infants of obese mothers
May 2025 - July 2025
In residence at: Imaging and Brain laboratory (ibraiN) / INSERM, University of Tours
Host scientist: Frédérique Bonnet-Brilhault

Lindy Holden-Dye
Novel control strategies for arthropod pests through characterisation of their essential ion channels in a Caenorhabditis elegans expression platform
October 2024 - March 2025
In residence at : Infectiology and Public Health (ISP) / Centre INRAE Val de Loire, University of Tours
Host scientist: Fotini Koutroumpa

Feng Huang
Plasma Agriculture and Its AI Approaches
January 2025 – March 2025
In residence at: Research Group in the Energetics of Ionized Media (GREMI) / CNRS, University of Orléans
Host scientist: Eric Robert

Johannes Kaesmacher
PeRfusiOn Post tHrombEcTomy (PROPHET) - A technical development and clinical validation project
September 2024 - August 2025
In residence at: Clinical Investigation Centre of Tours - Technological Innovation, Regional Hospital University in Tours
Host scientist: Grégoire Boulouis

Rajendra Kumar
Transgenic mouse models to study follicle-stimulating hormone receptor (FSHR) function in reproduction
January 2025 - April 2025
In residence at: Physiology of Reproduction and Behaviour (PRC) / Centre INRAE Val de Loire, CNRS, IFCE, University of Tours
Host scientist: Eric Reiter

Seong-Young Lee
Flame dynamics and stretching of NH3-base fuels under the influence of turbulent scales
May 2025 - August 2025
In residence at: Institute of Combustion, Aerothermics, Reactivity and Environment (ICARE) / CNRS, University of Orléans
Host scientist: Fabien Halter

Sungyup Lee
A Study on the Translation Strategies of Korean - Picture Books published in France
December 2023 - February 2024
In residence at: Artistic and Cultural Interactions, Transfers and Breaks (InTRu) / University of Tours, Tours
Host scientist: Cécile Boulaire

Alexander Molochkov
Extending frontiers in condensed matter and particle physics through computational field theory methods
January 2025 – April 2025
In residence at: Institut Denis Poisson / CNRS, University of Orléans, University of Tours
Host scientist: Maxim Chernodub

Michael Nones
Satellite-based mapping of sediment dynamics and planform mobility in large river basins
December 2025 - May 2026
In residence at: CItés, TERritoires, Environnement et Sociétés (CITERES) / CNRS, University of Tours
Host scientist : Stéphane Rodrigues

Pál Nyíri
Chinese lifestyle migration to Europe
January 2025 - August 2025
In residence at: CItés, TERritoires, Environnement et Sociétés (CITERES) / CNRS, University of Tours
Host scientist : Hélène Bertheleu

Sheila Ons
Role of chemosensory proteins in taste sense in the mosquito Aedes aegypti, vector of dengue and other arboviruses
December 2025 - March 2026
In residence at: Insect Biology Research Institute (IRBI) / CNRS, University of Tours
Host scientist : Claudio Lazzari

Ebru Özdemir Nath
Chemical analysis of some plants used for cosmetic purposes in Turkish ethnobotanical studies and their in vitro physiological effects on human origin cell lines.
January 2025 - April 2025
In residence at: Institute of Organic and Analytical Chemistry (ICOA) / CNRS, University of Orléans
Host scientist : Emilie Destandau

Vincent Pecoraro
Lanthanide Based Metallacrowns as Near-Infrared Emitting Biological Probes
April 2025 – June 2025
In residence at: Centre for Molecular Biophysics (CBM) /CNRS, University of Orléans
Host scientist : Stéphane Petoud

Alberto Saal
Tracing sulfur isotope during iron sulfide melt formation in Lunar basalts
March 2025 - June 2025
In residence at: Earth sciences institute of Orleans (ISTO) - OSUC / CNRS, BRGM, University of Orléans
Host scientist : Kenneth Koga

Noboru Sasaki
Microbubble-assisted ultrasound, a tool for depicting and disrupting blood vessels
October 2025 - April 2026
In residence at: Imaging, Brain, Neuropsychiatry (ibraiN) / INSERM, University of Tours
Host scientist : Jean-Michel Escoffre

Ida Vanessa D. Schwartz
Deep phenotyping of Phenylketonuria patients: unrevealing novel aspects of genotype-phenotype association
February 2025 - May 2025
In residence at: Imaging, Brain, Neuropsychiatry (iBraiN) / INSERM, University of Tours
Host scientist : François Maillot

Thomas Shea
Timing Magma Transit in the Earth using Crystal Clocks
September 2024 - June 2025
In residence at: Earth sciences institute of Orleans (ISTO) - CNRS, BRGM, OSUC / University of Orléans
Host scientist: Estelle Rose-Koga

Attila Tanyi
The law and ethics of entrapment: definition, evaluation, implications
September 2025 - December 2025
In residence at: Institute of Interdisciplinary Law Research (IRJI) / University of Tours
Host scientist: Nicolas Jeanne

Analía Gladys Tomba Martinez
Improvement of methods to determine key properties related to the corrosion behavior of refractories
September 2025 - December 2025
In residence at: Extreme Conditions and Materials: High Temperature and Irradiation (CEMHTI) / CNRS, University of Orléans
Host scientist: Emmanuel de Bilbao

ARTS-SCIENCES RESIDENCY PROGRAMME

Anna Steward
BioQuantum Record - Communicating with the Other
November 2024 - February 2025
In residence at: École supérieure d'art et de design d'Orléans (ESAD Orléans) & Centre for Molecular Biophysics (CBM) /CNRS, University of Orléans
Host scientists: Caroline Zahnd & Matthieu Réfrégiers

ARD CVL JUNON PROGRAMME

Amit Sharma
Integration of heterogeneous data and algorythms, and development of intelligent interfaces for digital twins
October 2024 - October 2025
In residence at: PRISME Laboratory / INSA CVL, University of Orléans
Host scientist: Frédéric Ros

GREENCOSMIN PROGRAMME

Gabriela Lemus Ringele, Ioanna Deli & Panagiota Stamou
July 2025 – September 2025
In residence at: In residence at: Institute of Organic and Analytical Chemistry (ICOA) / CNRS, University of Orléans

Mohamed Trebak
Interorganellar calcium signaling in colorectal cancer
June 2025 - September 2025
In residence at: Nutrition, Cancer & Oxidative metabolism (N2COx) / INSERM, University of Tours
Host scientist: Marie Potier-Cartereau

Judith Vololona
Ex situ conservation of two critically endangered endemic species, Dombeya ambohitrensis Arènes (Malvaceae) and Beguea borealis G.E. Schatz & Lowry (Sapindaceae), from the Ambohitr'Antsingy Montagne de Français protected area, Madagascar.
December 2025 - October 2026
In residence at: Institute of Organic and Analytical Chemistry (ICOA) / CNRS, University of Orléans
Host scientist: Christophe Hano

FRENCH INSTITUTES FOR ADVANCED STUDY (FIAS) PROGRAMME

Carlo Bosi
The Chansonnier de Bayeux : An Early 16th-Century Monophonic Source and its Polyphonic Relatives
October 2024 - July 2025
In residence at: Centre for Advanced Studies in the Renaissance (CESR) / CNRS, University of Tours
Host scientist: Philippe Vendrix

Ali Soltani
Investigating the Spatio-temporal Heterogeneous Changes in Internal Migration Patterns, the Case Study of Melbourne
October 2024 - April 2025
In residence at: Study Centre for the Development of Territories and the Environment (CEDETE) / University of Orleans, Orleans
Host scientist: Geneviève Pierre

Sara Taglialatela
Philipp Melanchthon, Giordano Bruno, and Michel de Montaigne on memory and oblivion: Three case studies on philosophy of memory in the sixteenth century
September 2024 - July 2025
In residence at: Centre for Advanced Studies in the Renaissance (CESR) / CNRS, University of Tours
Host scientist: Fosca Mariani Zini

VISITING RESEARCHERS MSH-VDL PROGRAMME

Camelia Crăciun
The Reception of the Vilna Troupe in the French and Romanian Press (1920s and 1930s)
September 2025 - November 2025
In residence at: Loire Valley House of Social Sciences and Humanities (MSH VdL)
Host scientist: Chiara Lastraioli

GUEST RESEARCHERS

Peggy L. Carver
Development and human application of near infrared probes for detection of microbial infections
May 2025 – July 2025
In residence at: Centre for Molecular Biophysics (CBM) / CNRS, University of Orléans
Host scientist: Stéphane Petoud

Alina Goncharova
The development of digital wills for managing virtual assets as a means to automate the inheritance process in the digital realm.
July 2022 - December 2025
In residence at: Institute of Interdisciplinary Law Research (IRJI) / University of Tours
Host scientist: Fabienne Labelle

Serhat Karaca
Alternative practice to artificial feeding in goat farming: consequences on behaviour, microbiota, health and milk quality
July 2024 - June 2025
In residence at: Physiology of Reproduction and Behaviour (PRC) / Centre INRAE Val-de-Loire, CNRS, IFCE, University of Tours
Host scientist: Raymond Nowak

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President

RÉGION CENTRE VAL DE LOIRE
Co-funded by the European Union
ORLÉANS MÉTROPOLE
Université d'ORLÉANS
université de TOURS