



RLS-SCIENCES

SPRING EDITION

RLS-SCIENCES SPRING

28 MARCH, 2025

The momentum of the most recent RLS-Sciences Overall Conference in Québec has carried the network fully into 2025. With the thematic groups preparing new joint outputs and the Overall Management Group brainstorming on new and improved models for exchange, the multilateral work of RLS-Sciences continues apace. The Digital Week 2025 is now the next meeting for the entire network, and will take place from 28-30 April.

Ahead of the 12th Regional Leaders Summit in Western Cape, the connections between RLS-Sciences and the political forum of RLS are in focus. The 2025 Digital Week will offer an important opportunity for exchange, in connection with ongoing RLS-Sciences topics as well as the planned topics at the upcoming political summit. Western Cape will also be highlighted during the Digital Week, in keeping with the RLS-Sciences tradition of spotlighting the next hosting region.

This newsletter includes information on the forthcoming 2025 Digital Week, updates from RLS-Sciences partners, an interview with Prof. Gilberto Jannuzzi on the São Paulo State Centre for Innovation in Public Lighting Services, and a funding special highlighting multilateral funding opportunities. Happy reading!

- Fiona Rumohr, Bavarian RLS-Sciences Management Team

RLS-SCIENCES SPRING
SPECIAL NEWSLETTER

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2025 RLS-SCIENCES DIGITAL WEEK

In 2025, the RLS-Sciences Digital Week will be held from 28-30 April with a new design. This year's edition will feature more cross-topic sessions and a shorter schedule. In continuity with previous years, all research groups will have the opportunity for a dedicated session with their thematic partners on one day. These will take place in parallel for the first time this year. The other days will feature all partners together for joint sessions. A cross-topic exchange on "Generative AI and Learnings from the Regions" will be held on the second day, led by RLS-Sciences Vice President, Bavaria, PD Dr. med. Sebastian Bickelhaupt. On the third and final day, a summary of the activities and exchanges on Day 1 and Day 2 will bring the network all together, and there will be a highlight on the upcoming hosting region, Western Cape, with complementary inputs from further contributors, including an introductory talk from Prof. Klaus Schilling on "Secure and Resilient Infrastructure".

The RLS-Sciences Digital Week, inaugurated in 2021 during the COVID-19 pandemic, has now become a staple activity for the RLS-Sciences network to ensure continuity and accessibility for researchers from all seven regions and all research groups. The Digital Weeks serve as important opportunities to prepare for the next in-person RLS-Sciences activities, as well as to highlight the upcoming host region. This year, Western Cape is hosting the 12th Regional Leaders Summit.

PREVIOUS RLS-SCIENCES DIGITAL WEEKS

2021

Data as a Resource for the Regions

2022

Resilient and Sustainable Regional Recoveries

2023

Shandong in RLS-Sciences: Forward from Hershing

2024

Science Adoption in Regional Innovation Ecosystems



RQEI ELECTS NEW LEADERSHIP

On 13 December, during the annual general meeting of the Réseau Québécois sur l'Énergie Intelligente (RQEI), new leadership was elected. Prof. Simon Barnabé, [UQTR](#), was chosen as the new director of the network. Prof. Barnabé also serves as the RLS-Energy Network Lead Scientist for Québec. RQEI members also elected eight researchers to the Scientific Committee of the network. These included Prof. Louis Gosselin, [Université Laval](#), who also serves as RLS-Sciences President. Prof. Gosselin will work on Axis 3, which covers energy storage and conversion.

The Réseau Québécois sur l'Énergie Intelligente (RQEI) or the Québec Network on Smart Energy celebrated its 5th anniversary in January. It was launched in 2020, with support from the Government of Québec and the Fonds de recherche du Québec (FRQ). The research network covers three axes: 1) Green and Intelligent Vehicular Systems, 2) Smart Management of Stationary Systems, and 3) Storage and Conversion.



[RQEI](#) is a partner institution of the [RLS-Energy Network](#).

PROF. JESSICA KISSINGER NAMED “UNIVERSITY PROFESSOR” AT THE UNIVERSITY OF GEORGIA

Prof. Jessica Kissinger has been named as University Professor at the [University of Georgia](#) for her contributions to the university beyond her regular academic work. Prof. Kissinger has an impressive record of contributing to strategic developments at UGA, including her work as a founding member of the UGA Institute of Bioinformatics, her efforts to establish UGA's first centralised high-performance computing cluster, her contributions to the university's strategic planning committees and to the Provost's Working Group on Centers and Institutes as well as the Digital Infrastructure Development Committee. The title “University Professor” is a distinction awarded at UGA to those who have made “significant contributions to the university in addition to fulfilling their regular academic responsibilities”. Read more about her contributions [here](#).

Prof. Jessica Kissinger is a Distinguished Research Professor at the [UGA Department of Genetics](#). She is the Lead Scientist for Georgia in [RLS-Digital Health](#).



Photo Credit: UGA 2025

PROF. LOUIS GOSSELIN AWARDED CANADA RESEARCH CHAIR IN ENERGY EFFICIENCY

Prof. Louis Gosselin, [Université Laval](#), has been awarded a Tier 1 Canada Research Chair in Energy Efficiency. The Canada Research Chairs Program began in 2000, and invests around 311 million CAD annually. Tier 1 Chairs, like Prof. Gosselin's, are awarded for seven years, and are renewable one time with an annual funding envelope of 200 000 CAD. These are awarded to academics who are considered world leaders in their field by their peers.

Prof. Louis Gosselin is [RLS-Sciences](#) President, and is a researcher in the [RLS-Energy Network](#).

INTERVIEW WITH PROF. GILBERTO JANNUZZI ON “CEPIL”

Led by Prof. Gilberto Jannuzzi at the University of Campinas, CePIL (“[São Paulo State Centre for Innovation in Public Lighting Services](#)”) is a FAPESP Science Centre for Development, and includes partners from São Paulo and Shandong. Read along below as Prof. Jannuzzi shares insights from the start of CePIL, as well as on cross-topic work, working with policymakers, and more. This interview has been edited for length and clarity.

Tell us about the problems that you’re trying to address with this new State Centre for Innovation in Public Lighting Services.

We have many technologies and ways to manage public lighting that are outdated in terms of technology. Also, it is a public service. In Brazil, it is a service which by constitution is in the charge of the local municipalities to provide, finance, and modernize. While we have a wide range of municipalities that can afford the best, most municipalities cannot afford the best. The consequence is that the public good is not provided as it should be. So we decided to propose a project that has been now approved and funded by the São Paulo State Research Foundation (FAPESP), to support municipalities in São Paulo in ways that they can provide these services at a lower cost, lower environmental impact, and provide important public services, like public lighting. The way we organised our centre was to accelerate innovation in the municipalities. Our effort is organised around what we call the smart cities, and using the infrastructure of public lighting to accelerate smart services. In this way, not only are services provided, but also hopefully extra income to municipalities, which they can use for new services and to incorporate also communications and so forth. All these things linked to smart cities, as it is understood.

The funding was announced in July of last year, 2024, and you’ve already been working very hard. Can you tell us about your work so far?

So we have several problems that we want to address. We are not a funding agency to provide public services, or lighting services. We are a university centre that wants to promote innovation, and to explore and help municipalities to see public lighting in a more innovative way. We decided to start using a pilot project as a strategy. Together with the State of São Paulo and FAPESP, we chose a small municipality to start this pilot study. There are about 30 000 people in the municipality, which is close to biological reserve in the south part of the state. There are important environmental concerns, so we want to address these together with providing public lighting. It is a small city, very similar to many small municipalities in the state of São Paulo where they are still in need of subsidies to provide current maintenance of their systems for the public lighting that exists. They have problems to expand too. One of our objectives is to build capacity for public officials in ways that they can improve tax collection and the people living in the municipalities are able to afford their lighting. There must be improvements in not only the way they collect the taxes but the way they sign contracts with the utilities that are the electricity providers. So there is an important need to build capacity in public agents, so they can operate the system – not only in terms of getting technologies, but also improving their business models. These are not meant to be profitable, but it has to maintain itself- to collect enough so they can afford to pay the maintenance costs but also provide funds for future expansion.

Another form of sustainability, so to say.

Yes, that’s right. Economic sustainability. So there’s this important thing that we want to start with this pilot project: it is meant to teach us much more than to solve the local problem, because we want to understand how we can scale up initiatives to other municipalities. Frankly, we need to understand the problem much closer to these small communities, to see what kind of expertise they have and they lack. What are the gaps? It took us six months to develop the partnerships, develop the contacts, and to choose the municipality. Now we have just started to implement the pilot this January. There is this component of local capacity building. What we are doing is to develop- with the local administration- a technical plan that will be later funded by a development bank. But they need to do that in a professional way- they need assistance so they can provide a robust technical and financial lighting program and so that the bank will find it interesting to fund. So that is what we are doing at the moment, with this small municipality as a “learning” for us, so that we can scale up and perhaps choose clusters of singular municipalities and then we can make a more impactful strategy.

Can you tell us about what you hope to achieve in five years? What do you hope the impact will be?

We have in São Paulo about a little under 600 municipalities of all sizes. Half of them- about 330- present a very interesting potential for boosting energy efficiency and are in need of building up their own capacity in collecting taxpayers money to fund their activities and expand the lighting services. São Paulo is relatively- in Brazil- what we call a rich state. You can imagine the situation all over the country. For the São Paulo state, the estimate that we had is about 90 million USD of savings per year for these 330 municipalities. Our activities as a centre don’t involve the implementation of public lighting- we are more in providing new ideas, new concepts, capacity building, helping these municipalities to be able to afford it. That’s not our mandate- to finance, to implement projects. The goal that we stated when we proposed the project, is that at the end of our five years, we should be able to be directly or indirectly responsible for saving 2 million USD per year. We are we are creating indicators so that we can monitor our impact. The idea is not to solve all these gaps, like this 90 million USD, but to make sure that they- the municipalities- will do the job. Our job is not to install lamps or to implement the technologies, but to trigger these issues and to let the markets and the public sector to deal with the problem, because that’s their job. So we are an instrument of providing support to the market by modifying the market so they can address these issues and promote changes within the public sector and its agents. This is so they can understand the problem, and be capable to spot the opportunities that they have in their hands.

(Continued on page 5)

In this centre you have international partners, including from RLS-Sciences, notably the Shandong Energy Centre. Can you tell us about how international cooperation is important for the work that you're doing?

Oh extremely important. At the time we proposed the project, I approached some of our international colleagues, like Shandong from RLS-Sciences. I got a very positive response and interest from them. They are with us from the very beginning. Here in São Paulo, China is the main provider for many of the lighting technologies that we have, and I think this is a worldwide situation. They are the leading providers of LEDs and many other components. So it makes sense. Right from the beginning, they got interested, they had supported the proposal, and now they have come and visited us already. They came to São Paulo, to the university, and gave some talks and we have developed a formal agreement with them. I also want to anticipate something- they are even broadening the scope of our collaboration. The Vice Governor of Shandong is scheduled to visit University of Campinas to discuss a possible centre that will help to collaborate on low-carbon technologies. So it goes beyond lighting itself. They are interested in exchanging experiences in low-carbon energy technologies, in which Brazil and Unicamp also have very important initiatives in regarding biofuels and low carbon hydrogen. They are coming in March to visit the university and hopefully discuss in more details the scope and how we are going to implement this collaborative centre between Shandong and São Paulo in - not only the public lighting initiative- but it will expand to other technologies and energy efficiency initiatives as well.

Your stakeholders in CePIL also include policymakers. From your perspective, what do you think is one of the most important aspects for researchers to consider when they work with policymakers?

It is an ongoing learning process all the time, because the political actors are not the same. They change periodically. Their understanding of problems sometimes changes a lot. We have to be sensitive, but as a university professor, I never give up on capacity building, on learning: that's the core of our profession. We always have to educate- ourselves, obviously we learn from practice- but in the political arena we always have to be patient and rescue what the public good is. The way we address these issues changes according to the audience. Like with students, you have to frame your subject so that it is more effective. So that's the challenge. Our main partner in São Paulo is the Government of São Paulo. They- and more precisely the Energy Secretariat- are an important partner of CePIL. Our ambition is to influence the policy actions- the way they can provide assistance. One thing which is crucial- and it is sometimes very hard for policymakers to understand- is the importance of monitoring initiatives and data. In spite of our centre being a lighting centre, I stress all the time that our main goal is data-information. We are collecting not only geographic, but socio-economic data, economic data, environmental data, and climate data. Climate also affects the performance of lighting systems because you can crash and you can have interruptions. Having intelligent data management is key and this is a long term effort. Regarding this connection between energy data and socio-economic data or financial data, it is not always clear. The way you monitor things- how you measure impacts- is also something which is not on the radar of the policymakers because their time frames sometimes are much shorter. It is during their mandate. These are the challenges, and I think we must not shy away from the challenges and difficulties. We need to be persistent and patient. But it has progressed.

You mentioned data. Within RLS-Sciences, we aim to support cross-disciplinary exchanges. You yourself are the Lead Scientist for São Paulo in the RLS-Energy Network. RLS-Sciences also includes RLS-Small Satellites. You are using satellite images as part of your work. Can you tell us a little bit more about that?

This is still an approaching idea. We have partnered with another group at the University of São Paulo, which is specialised in artificial intelligence and cognitive networks. The idea is during these four years ahead, we also try to decode satellite imagery. There has already been a lot of work in this area, so this is not new, but the connection with public lighting is the innovative part. There are algorithms and public imagery already available, and there is a lot of work in terms of using drones especially during extreme weather events. There is a lot of information and ways to collect imagery and assembling that into databanks. That is something we are interested in developing- we cannot do everything at the same time, but those are the things which are in our radar. This is a very interesting piece that we are going to pursue over the next years, because it has the potential to make life easier in terms of planning large scale interventions, more cost effective lighting programmes, and also cope with emergencies in a more effective way. Always thinking of using the infrastructure already in place to provide public lighting as a medium to collect information and to support meaningful and more cost-effective interventions.

Expanding on this cross-disciplinary exchange, you are also- you already mentioned- working to integrate public lighting with other services. I had read that this includes the Internet of Things. Can you tell us a little bit more about this digitalization push?

We are starting with something which is very tangible, like traffic accidents or violence. There are already statistics on these issues. It is already collected, but not integrated into this lighting issue. We have more violence in places where the lighting is poor, we have more accidents in places where there are lighting issues at the time of the traffic accident. We are starting with those things. We have a legal team as well, so we are also crafting suggested changes in local or municipal laws that can attract business that can make use of the infrastructure so that they can use the internet or cell services. There are whole new ideas that can be stimulated. We don't want to monopolise or prescribe these things. The legal team is working within our group to see ways that the existing laws can be used to stimulate this kind of innovation and not hamper the innovation. Or to see areas where we could make some small changes or make the municipality interested in providing specific incentives in laws or rules. It is a municipal concession, so it is one opportunity. This is also one example of how important it is to provide capacity building, because the local agents in the municipality have to change their thinking- they need to be open to these new innovations. That starts with the regulation, and regulation is also an area of innovation. It is not only technology.

CePIL will run from 2024 until 2029.

Prof. Gilberto Jannuzzi is a the Lead Scientist of the **RLS-Energy Network** from São Paulo.

He served as RLS-Sciences' first president from 2017-2019.



Photo Credit: Gilberto Jannuzzi, 2025

MULTILATERAL FUNDING OPPORTUNITIES HIGHLIGHT

ASAP- Austrian Space Applications Programme

Deadline: 10 April, 2025 **Link:** Find more details [here](#).

The FFG Austrian Space Applications Programme is a multilateral funding opportunity for projects. The call aims at astrophysics, astronomy, space situational awareness, Near-Earth Objects, space surveillance technologies, micro gravitation studies and geophysics, space and climate-neutral cities. Accompanying research proposals such on bed-rest have a medium priority. Funding of non-Austrian organizations is possible in the funding lines “cooperative research and technology projects” and “exploration studies” (each max. 36 months), but an Austrian partner must be in the lead. All RLS-Sciences themes would have possible applications.

NFRF- Transformation Competition 2026

Deadlines: 15 April, 2025 (Mandatory Notice of Intent); 17 June, 2025 (Mandatory Letter of Intent); 3 March 2026 (Invited Proposal) **Link:** Find more details [here](#).

The 2026 Transformation Competition from the New Frontiers in Research Fund is a multilateral funding opportunity for projects. The objective is to support large-scale, Canadian-led interdisciplinary research projects that address a major challenge with the potential to realize real and lasting change. The challenge may be fundamental, leading to a scientific breakthrough, or applied, with a social, economic, environmental or health impact. Partners from all RLS-Sciences regions are eligible to receive funding but a Québec researcher must be in the lead. All RLS-Sciences themes would have possible applications.

Eurogia 2030

Deadline: 24 April, 2025 **Link:** Find more details [here](#).

The Eureka Network Eurogia 2030 call is a multilateral funding opportunity for projects. Eurogia 2030 focuses on innovation projects for carbon neutrality. Particularly, R&D projects (36 months) on carbon-free energy supply, green mobility and smart cities, smart housing as well as bio resources are funded. Hydrogen economy, big data and 5G/6G integrated solutions in cities are also addressed. Partners from Bavaria (SMEs and RTOs), Québec (SMEs only), Upper Austria (SMEs and large companies), and Western Cape (researchers/RTOs) are eligible to receive funding. Researchers in the RLS-Energy Network and the RLS-Expert Dialogue on Digitalization would have possible applications.

5th EU-LAC Joint Call in STI

Deadline: 22 May, 2025 **Link:** Find more details [here](#).

The 5th EU-LAC Joint Call in STI 2025 is a multilateral funding opportunity for projects. The call aims to continue creating a sustainable and multilateral long-term collaborations between EU and LAC countries by funding transnational research and innovation projects for a period of up to 36 months. At least two countries in the EU and two LAC countries must be involved in each consortium. Topics include bioeconomy and nature-based solutions, global health, infectious diseases, and EU-LAC cooperation for energy transition. Partners from Bavaria, São Paulo, and Upper Austria are eligible. Researchers in the RLS-Energy Network and RLS-Digital Health would have possible applications.

COST - European Cooperation in Science and Technology

Deadline: 1 October, 2025 **Link:** Find more details [here](#).

The Open Call 2025 from COST Association - European Cooperation in Science and Technology is a multilateral funding opportunity for networking activities. COST funds interdisciplinary research networks called COST Actions. These Actions bring together researchers, innovators and other professionals including industry specialists, who are based in Europe and beyond, to collaborate on research topics for a period of 4 years. Researchers from Bavaria, Upper Austria, and Western Cape are eligible for funding. Researchers from other regions can be integrated as non-reimbursed participants. All RLS-Sciences themes are possible.

Discover more funding opportunities:

[RLS-Sciences Online Funding Database](#) and [RLS-Sciences LinkedIn](#)