

FNR ANNUAL REPORT

The Luxembourg National Research Fund (FNR) is the main funder of research activities in Luxembourg. The FNR invests public funds and private donations into research projects in various branches of science and the humanities, with an emphasis on selected core strategic areas. Furthermore, the FNR supports and coordinates activities to strengthen the link between science and society and to raise awareness for research. It also advises the Luxembourg government on research policy and strategy.

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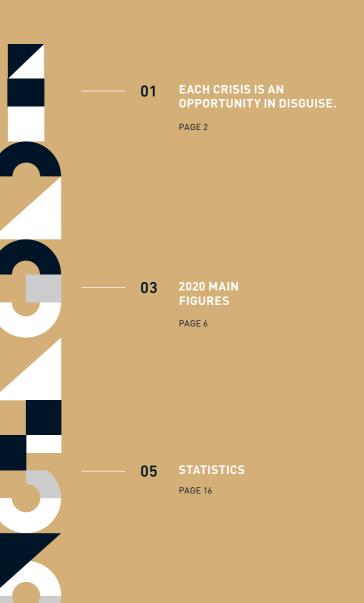


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EACH CRISIS IS AN OPPORTUNITY IN DISGUISE.

Dear Reader,

—— **01**

At the time we are writing these lines, we are fifteen months into the COVID-19 pandemic and, even if not yet overcome, we can see some light at the end of the tunnel. This global health crisis has shown the valuable contribution that science can bring to society. In an unprecedented way, scientists worldwide have collaborated to understand the novel Coronavirus and develop a vaccine. In Luxembourg, scientists and researchers, supported by their institutions, immediately put their heads together and did not spare any efforts to contribute to the overall societal attempt to end this pandemic.

The crisis has been a defining moment for Research in Luxembourg. All actors joined forces to bring in the combined expertise of Luxembourg's science in an effort to tackle the pandemic. The Large-scale Testing initiative, the prevalence and stratification studies, epidemiologic modelling as well as assessment of socio-economic impact are but a few of the activities that are led by the Research Luxembourg Task Force. It was clearly demonstrated how our Research institutions have now become firmly embedded in Luxembourg's society and how they can generate impact.

The FNR largely contributed to these efforts, both from a financial point of view, where7.5 MEUR where mobilized, but also through its very active engagement in the Research Luxembourg Task Force, where FNR coordinated several Working groups. Our communication channels (science.lu and the associated social networks) were mobilized to provide science-based up to date information on the pandemic to a broad public. The interested Reader will find more facts and figures on the FNR's participation in the following pages and the digital annual report.

As FNR team, we learned to adapt all our working processes to a new situation within a brief period, even if this meant fundamentally rethink some of them. FNR deadlines were extended and flexible mesures were introduced early on, to help our funded researchers coping with the difficult situation where many ongoing research projects had to be put on halt due to lockdowns or travel restrictions. However, 2020 was also to first year where we implemented to newly-defined National Resaerch Priorties in our funding instruments. In our main project-funding programme, CORE, we witnessed a spectacular surge (nearly 30% increase) in the number of submitted applications, with respect to previous years. This is testament to the vitality of our research system as well as the appropriateness of the resaerch priorities.

Each crisis is an opportunity in disguise. Learning the lessons from these special times will help us at FNR further improve our work and remain one of the essential institutions in the research ecosystem. The latter that evolves in a constantly changing environment needs actors that are capable and willing to adapt. The FNR has proven to be such an actor and will, just as it did over the past two decades, further continue to ensure and promote quality research and to build bridges to society.



Marc Schiltz, *Executive Head*



Martine Reicherts, Chair of the Board



Thierry Wolter, Vice-Chair of the Board

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OBJECTIVES, STRATEGY, POLICY

Luxembourg National Research Fund Research with impact

WHAT WE DO

The Luxembourg National Research Fund (FNR) is the main funder of research activities in Luxembourg. The FNR invests public funds and private donations into research projects in various branches of science and the humanities, with an emphasis on selected core strategic areas. Furthermore, the FNR supports and coordinates activities to strengthen the link between science and society and to raise public awareness for research. It also advises the Luxembourg government on research policy and strategy.

OUR VISION

To establish Luxembourg as a leading knowledgebased society through science, research and innovation, thereby contributing to the country's economic diversification and future prosperity.

OUR MISSION

To set up a sustainable world-class research system in Luxembourg that will generate societal and economic impact in key strategic areas.

OUR STRATEGIC PRIORITIES

The FNR aims to be a driving force for Luxembourg's innovation capabilities and focuses on the three following strategic objectives to foster research with impact:

Attaining scientific leadership in key areas

By setting the highest quality standards, the FNR contributes to establishing international research excellence in Luxembourg. By attracting and training the most talented scientists, the FNR helps to build critical mass in key research areas, thereby supporting economic development and societal progress.

 Turning public research into a competitive advantage for Luxembourg
 Towards our collaborators
 We aim to stimulate talent-development and competence building of our staff, who translate the knowledge-based economy by supporting industry FNR's vision, mission and core values into action.

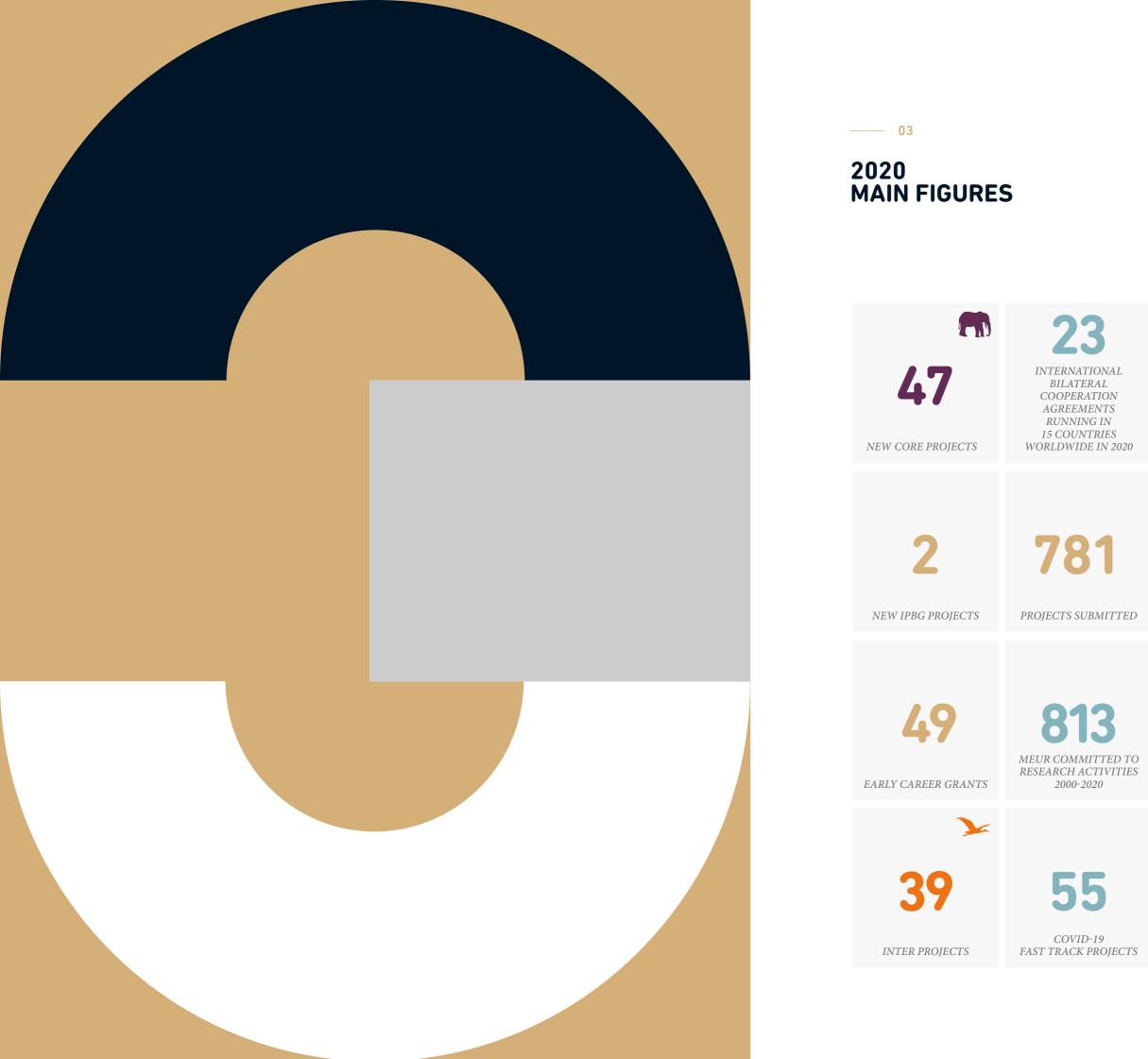
The FNR supports the advancement of Luxembourg's knowledge-based economy by supporting industryinformed research, by reinforcing co-operation between public research and innovative industries and by facilitating the commercial exploitation of research results. • Anchoring Science and Research in Society The FNR promotes the active involvement of researchers and scientists in addressing current and future societal challenges. To ensure that research is established sustainably in the public consciousness as an important pillar of Luxembourg's knowledge society, the FNR supports an active exchange between scientists and the public at large.

HOW WE WORK

Our most highly valued criteria are excellence and quality in research. In order to identify the most promising and most excellent projects and researchers, we systematically submit funding requests to an assessment by independent international experts. The FNR implements the "Principles of Scientific Merit Review", which embody the highest international standards of expert assessment, transparency, impartiality, confidentiality and integrity.

OUR CORE VALUES

- Towards researchers and research institutions We implements a fair and transparent process in our decision taking and nurture an open dialogue with the scientific community.
- Towards the government, tax-payers and donators We are accountable for the usage of funds that we are entrusted with and we strive for efficiency in our operations.
- Towards the general public We care for the long-term interest of the country and consider engagement with society as a constitutive part of science.







NEW ATTRACT FELLOWS

NEW PRIDE PROJECTS

5





FUNDED PROJECTS





RESEARCH PROJECTS

FUNDED 2000-2020

2020 ACTIVITY REPORT

I. MAIN PROJECTS

— 04

The FNR started what was to become an exceptional year in a rather traditional way by organising an information session in February dedicated to presenting the new research priorities and the new national research and innovation strategy, approved a few weeks earlier by the Government.

In early March, Professor Thomas Cauvin joined the C2DH, thanks to an FNR ATTRACT Fellowship. Thomas Cauvin's project aims to develop public history as a new participatory model for interpreting the past. Inspired by the evolution of digital participatory sciences, the project will facilitate interactions between academics, cultural institutions, and the general public to contribute to the democratisation of access and history production. After Sean Takats in 2019, holder of an FNR PEARL Chair, Thomas Cauvin is the second internationally renowned researcher to join the University's interdisciplinary centre thanks to one of the prestigious FNR grants.

On the first day of the first lockdown, 16 March, the FNR informed researchers that it offers flexibility in processing grants and grant proposals. This is one of the first measures put in place by the FNR in the new context of COVID-19. A week earlier, the FNR had put everything in place to ensure the continuity of its activities with all staff working from home.

At the end of March, the FNR joined the other research institutions and actively participated in the newly created Research Luxembourg Task Force. The FNR's participation was articulated at several levels: on the one hand, active participation of some members of the Executive Office in three working packages - WP06, Statistical pandemic projections; WP10 (lead), COVID-19 centred communication; WP12 (lead) - Ideas for new initiatives in the pandemic context - and on the other hand, at the level of project evaluation and funding. In less than three weeks, the FNR programme team put in place a first "Fast Track Call" to rapidly release funds for COVID-19 related projects. A second Fast Track Call was set up a few weeks later. As a result, 51 projects were funded for a total amount of MEUR 2.64, including the CORONASTEP wastewater analysis project, the weekly results of which are used by the Government to decide on health measures. The FNR co-financed two critical studies, namely the CON-VINCE prevalence study and the Predi-COVID study, for a total amount of MEUR 3.25.

Furthermore, as a Luxembourg representative, the FNR joined the international networks CEPI (Coalition for Epidemic Preparedness Innovations) and CTA (COVID-19 Therapeutics Accelerator) and contributed 0.8 MEUR to each initiative.

The FNR invested EUR 7.5 million in research projects and public health initiatives related to COVID-19.

The COVID-19 crisis also showed how crucial scientific communication is. In these circumstances, it has been useful that the FNR, over the years, has developed a wide range of scientific communication skills, as well as channels for scientific communication that are farreaching and considered reliable by the general public. The experience gained by the FNR over the years in dealing with journalists and policymakers was also of great importance during this crisis. Over these months, the science.lu website became a reference site for scientific communication around COVID-19.

However, despite the exceptional situation, the FNR was able to adapt by organising all the traditional calls, evaluations and other panels by videoconference. The first projects related to the new national research priorities, which are an integral part of the "National Research and Innovation Strategy for Luxembourg", were selected. The FNR has finalised the National Centres of Research Excellence (NCER) instrument. This tool will help structure research around concrete missions of significant societal interest, encouraging high-level transdisciplinary and cross-sectoral research. The first NCER projects will be launched in 2021 and 2022.

A review of the Junior CORE strand was carried out. After internal analysis, an exchange with the panels and the scientific council members, and consultation with the institutions, some changes were retained for the CORE 2021 call.

The working group for the promotion of gender equality in research was established, developed its strategy and carried out first initiatives during the year.

The FNR launched its first augmented reality campaign entitled LëtzSCIENCE, combining traditional billboards with an augmented reality experience to raise awareness of the public research carried out in Luxembourg and funded by the FNR. This campaign was awarded a second prize in the "Disruptive Communication" category at the European Digital Communication Awards.

In May, the auditor recommended maintaining the ISO 9001: 2015 certification (No. 9108637133, www.tuv.com) of the quality management system.

II. GOVERNANCE

The Board of Directors met five times in 2020, under the chairmanship of Mrs Martine Reicherts. An extraordinary meeting was added to the five meetings initially planned. Since March 2020, all sessions have been held in hybrid mode.

The Presidency met five times.

The Audit & Finance Committee (Hilger, Schlesser, Sedrani, SecGen, Head of Finance) met five times (one formal meeting, four by circular).

The Nomination and Remuneration Committee met once.

The Board of Directors is composed of:

- Martine Reicherts (Chair), former Director General at the European Commission
- Thierry Wolter (Vice-Chairman), Member of the Executive Committee, Ceratizit, Luxembourg
- Tania Brugoni, Director, 1535° Creative Hub, Luxembourg
- Stéphanie Damgé, Director, Jonk Entrepreneuren Luxembourg ASBL
- Jean-Marc Fandel, expert consultant, scale up, Luxembourg
- Yves Fromes, PhD and Director of Research, RMN Laboratory CEA-Institute of Myology, France
- Anouk Hilger, Director Renewable Energy, Enovos, Luxembourg
- Isabelle Schlesser, Director, ADEM, Luxembourg
- Richard Sedrani, Director, Novartis, Switzerland

The Scientific Council met twice under the chairmanship of Mrs Nadine Martin.

The Scientific Council is composed of :

- Nadine C. Martin (Chair), sitem-insel AG, Switzerland
- Gabriele Dobenecker (Vice-Chair), EMPA, Switzerland
- Yves Cocard, Universities of Berne and Lucerne, Switzerland
- Patrycja Paruch, University of Geneva, Switzerland
- Burckhard Stiller, University of Zurich, Switzerland
- Nicolas Gengler, University of Liege, Belgium
- Rachel Chambers, University College London, Great
 Britain
- Jane Elliott, University of Exeter, Great Britain
- Georges Thielen, Goodyear Innovation Center, Luxembourg

III. SPECIFIC PROGRAMMES AND ACTIONS

The activities carried out during the year for the strategic objectives set out in the multi-annual agreement are summarised as follows

STRATEGIC OBJECTIVE 1: Strengthen public research foundations

- We intend to strengthen the sustainability of the public research system based on a broad culture of excellence;
- We aim to achieve critical mass in key research areas in order to take scientific leadership.

¹ Detailed information on the different FNR funding instruments (CORE, OPEN, INTER, etc.) is available at www.fnr.lu

CORE¹

The FNR received 157 proposals, all of which were eligible. After evaluation by independent international experts, the FNR selected 47 funded projects (including 12 "Junior CORE" proposals and 4 proposals in the framework of bilateral international cooperation) for a total of 30.1 MEUR. The budget was substantially increased due to the high number of positively evaluated projects. Despite this significant increase, 21 projects could not be selected for funding despite their positive evaluations. The six selection panels confirmed that the project selection process is applied according to the highest international standards.

OPEN

The FNR received 6 proposals, all eligible. After evaluation by international experts, the FNR selected 2 projects to be financed with 1.3 MEUR.

INTER

The FNR evaluated 150 proposals and granted funding to 39 projects (21 bilateral, 18 multilateral) for a total commitment of 17.4 MEUR. In the framework of the AAL and EUROSTARS programme, 4 projects were selected. In addition, the FNR evaluated 13 mobility proposals, of which 11 were selected for a total commitment of 0.7 MEUR.

Within the cooperation framework, a new bilateral cooperation with the autonomous region of South Tyrol was signed. Furthermore, the Multilateral Lead Agency Agreement (Weave) was signed and implemented for the first calls in 2021. In 2020, the FNR joined the CHIST-ERA and QuantERA II ERAnets, and a first project within EuroHPC was funded.

Under the Fulbright programme, two projects were submitted at the end of 2020 and are currently being evaluated.

RESCOM

The FNR evaluated 10 proposals, and 9 were selected for total funding of 0.3 MEUR.

OPEN ACCESS

The FNR received 3 proposals at the end of 2020, which are currently being evaluated.

AFR

The panel of experts evaluated a total of 105 eligible proposals, of which 31 were selected for funding to the tune of 5.3 MEUR.

PEARL

Within the call framework, 5 PEARL projects were submitted (including one "Open PEARL" under evaluation). Among the others, one project was selected, namely Dr Jochen Klucken (LCSB/University of Luxembourg, 3.4 MEUR).

ATTRACT

4 proposals were evaluated, and 2 candidates were selected, Dr Etienne Fodor (UL, physics and active matter, 1.5 MEUR) and Dr Lindsay Flynn (UL, political sciences, 2 MEUR). In mid-2020, the 2021 call was launched with the condition of gender parity. By the end of 2020, only 3 pre-projects were received (2xM, 1xF). All were invited to submit a developed project. The evaluation will continue until spring 2021.

PRIDE

In the PRIDE 2019 call, 9 proposals were submitted by doctoral training units. After an external evaluation including interviews in March 2020, the FNR selected 5 PRIDE projects (translational medicine, labour economics, digitalisation law, ethics and economics, active matter), awarding a total of 61 doctoral positions for 12.4 MEUR.

NCER-PD - National Centre of Excellence in Research on Parkinson Disease

The NCER-PD project is ongoing, and an annual report has been submitted. Due to the pandemic, there was no Scientific Advisory Board meeting in 2020.

STRATEGIC OBJECTIVE 2: Help shape the Luxembourg of tomorrow

- Through the development of priority research themes aligned with the country's strategic development plans, we aim to support innovation in the industry, the health sector, the public sector and to support digital and societal transformations;
- We want to anchor science in society by supporting an active exchange between researchers and citizens.

JUMP (Proof of Concept (PoC), Pathfinder)

The FNR evaluated 15 Pathfinder proposals and awarded funding to 9 projects for 0.3 MEUR.

The FNR evaluated 16 Proof of Concept proposals and awarded funding to 9 projects to the tune of 1.8 MEUR.

Knowledge & Innovation Transfer Support (KITS)

In December 2020, the FNR launched a new joint call with MECO in the field of biotechnology, which will be evaluated in early 2021.

BRIDGES and Industrial Fellowships

A total of 44 BRIDGES projects and 30 Industrial Fellowships projects were submitted and evaluated. 21 BRIDGES projects with a funding of 7.1 MEUR and 18 Industrial Fellowships with a funding of 3.0 MEUR were selected after evaluation. There was a 45% increase in applications compared to the previous year.

IPBG

Two projects were submitted and selected for funding, one for SNT(UL) and SES in telecommunication with a funding of 2.3 MEUR and one for the University of Luxembourg (UL) together with SCRIPT and CISCO in the field of digital education for funding of 2.0 MEUR.

Public2

There were no programme calls in 2020.

INITIATE

After a pilot phase that started in 2019, the FNR consolidated its INITIATE funding instrument. In 2020, 4 proposals were submitted, of which 3 projects were

evaluated and selected for funding of 0.7 MEUR. The fourth project is currently being evaluated.

FNR COVID19

In the framework of the "Task Force - COVID19" activities, the FNR launched a new programme to provide initial (co-)funding to support projects addressing the current and future challenges of COVID19. 129 proposals were evaluated, and 55 projects were selected for total funding of 7.5 MEUR, including the Luxembourg participation of 0.8 MEUR to CEPI (Coalition for Epidemic Preparedness Innovations) and 0.8 MEUR to the international initiative "COVID-19 Therapeutics Accelerator".

PSP

PSP-Classic: the FNR evaluated 29 project proposals and granted funding to 22 projects for a total commitment of 0.5 MEUR.

PSP-Flagship: the FNR evaluated 3 project proposals and granted funding to 2 projects for a total commitment of 0.8 MEUR.

Science of Science

The Science of Science unit launched a project to improve access to researchers' data in Luxembourg and internationally through the "Dimensions" database. It has completed the database of AFR applicants since 2008 and undertaken an econometric analysis of the programme. A pilot project was launched to simplify and improve data collection on projects starting in 2021 (simplified reporting and candidate self-assessment).

Science in Society

The FNR continued to strengthen the exchange between researchers and society. As a result of the pandemic, various actions had to be adapted or cancelled, including "Researchers' Days" and "Chercheurs à l'école". New activities were developed on science.lu to increase public interest in science, inform about COVID19 and publish "fact check" type articles. In collaboration with the Chamber of Deputies, the FNR developed a strategy for setting up a scientific and expert unit in the Chamber of Deputies.

Media: In 2020, the FNR renewed its "Mr Science" media partnerships with RTL Télé, RTL Radio and Eldoradio, and continued with RTL Today, RTL 5 min, Radio 100,7, and Lëtzebuerger Journal. Since September, the FNR has also participated in the new children's programme HéLéLa on Radio 100.7. In November, the FNR started a new collaboration with Tageblatt.

science.lu continues to engage and retain readers, with 1.44M page views in 2020 and over 2.2M unique visitors to the site. The Facebook, Instagram, YouTube, Twitter and TikTok networks are also widely followed. Of the 214 articles published in 2020, around 50 were dedicated to COVID19..

Training courses: Some of the training courses in the field of communication and popularisation of science





had to be cancelled. The FNR organised 5 IFEN-certified training courses for primary school teachers in the framework of its collaboration with SCRIPT.

FNR AWARDS 2020

In a problematic event context, the 12th edition took place in the form of a live stream broadcast on the FNR's digital channels and on today.rtl.lu. The format was a great success, with some 350 people following the stream continuously. The seven winners were awarded in the categories of Outstanding Scientific Publication, Outstanding PhD Thesis, Outstanding Research-Driven Innovation and Outstanding Promotion of Science to the public. Each prize is worth €5000.

COMMUNICATION

The FNR regularly communicates via its website fnr. lu and its digital channels (LinkedIn, Twitter, Facebook, Instagram, YouTube and FNRInfo), to inform the scientific community and the general public of its activities, as well as the results of Luxembourg research. In July, the FNR launched its first "lëtzSCIENCE" campaign. This awareness-raising campaign combines traditional posters and augmented reality - a first for any sector in Luxembourg. In September, the FNR inaugurated the prize-winning photo exhibition from the first edition of the FNR Science Image Competition. This exhibition, in the public space of Luxembourg City, lasted until January 2021. In the framework of "Research Luxembourg", a Marketing & Communication Coordinator was recruited in September 2020.

STRATEGIC OBJECTIVE 3: Promote innovation in the organisation of public research.

- We will develop the know-how and infrastructure to implement an evidence-based approach in the design, monitoring and evaluation of research strategies and programmes;
- We will position the FNR at the forefront of national and international debates on research policy and strategy;
- We will explore new ways of evaluating projects and programmes using digital technology and the latest research knowledge.

The FNR has developed in-house expertise in the Science of Science policy through international collaborations, hiring an expert and training FNR staff, and defining some of the infrastructure and analytical tools needed to carry out a more rigorous and quantitative follow-up evaluation of the results and impact of Luxembourg's research efforts. In collaboration with expert teams (Frontiers and Dimensions), pilot projects were conducted to assess the feasibility of implementing new technological solutions in the evaluation processes of the FNR.

Some changes to the funding rules and criteria have been developed and will be applied to most of our various programmes from 2021. These changes represent an evolution in that they align with international best practice to improve science and research quality at a systemic level.

- Open Science Evolution of the FNR policy and alignment with the European Commission's new rules under the future Horizon Europe framework programme.
- Open Access policy in the framework of the implementation of Plan S.
- Requirement for data management plans in FNR programmes.

- Implementation of the new narrative CV in all FNR programmes and changes in project reporting.
- ORCID Requirement to update the profile of all researchers applying for FNR funding.

In addition, the FNR's participation in international debates and discussions on research policy issues, notably within Science Europe and the World Research Council, has intensified.

The following steps will focus on the further digital transformation of the FNR. The COVID19 crisis has significantly accelerated the implementation of the proposed actions on digitisation and the use/acceptance of online platforms, but this is only the beginning of the digital transformation of the FNR and the way we use the new tools. The digital transformation of the FNR and how we use the new tools are still in their infancy. "Paperless/Digital FNR is an essential and priority project for the FNR in the coming years.

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STATISTICS

— 05

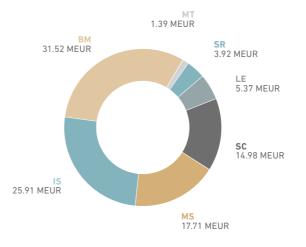
LUXEMBOURG INVESTMENTS



At the time of writing, the final figures for 2020 were not yet available. These are expected to be published by STATEC in July 2021

FNR NEW COMMITTED 2020:





FNR FUNDING FNR: Annual funding commitments (MEUR)

MS New Functional and Intelligent Materials and Surfaces and New Sensing Applications

BM Biomedical Sciences/Regulation of Chronic, Degenerative and Infectious Diseases

- SR Sustainable Resource Management in Luxembourg
- IS Innovation in Services
- SC Societal Challenges (LM+ID)
- LE Law and Economics
- MT Mathematics

FNR NEW COMMITTED 2020

191 FNR-funded projects	77.685 (MEUR)
47 CORE Projects	m 30.114
1 PEARL Project	M 3.368
2 ATTRACT Projects	3.499
0 NCER Projects	0.00
39 INTER <i>Projects</i>	17.401
9 JUMP (POC) <i>Projects</i>	1.830
9 JUMP (Pathfinder) <i>Projects</i>	<i>i</i> 0.309
0 KITS Projects	0.00
3 INITIATE Projects	0.670
55 COVID-19 Fast Track Projects	7.508
1 Matching Fund <i>Project</i>	0.200
2 OPEN Projects	- 🐙 1.330
0 OPEN ACCESS <i>Project</i>	0.00
21 BRIDGES (CORE PPP) <i>Projects</i>	7.119
2 IPBG Projects	4.34
0 PUBLIC2 Projects	0.00

24 PSP 11 INTER MOBILITY 9 RESCOM 7 AWARDS 3 ART 3.5	2.391 (MEUR)
22 PSP Classic	🧺 0.503
2 PSP Flagship	💥 0.830
11 INTER-MOBILITY	0.698
7 AWARDS	0.035
3 ART 3.5	0.025
9 RESCOM	8 0.300

54 Early Career Grants		20.766 (MEUR)
31 AFR PhD Grants		e 5.340
18 INDUSTRIAL FELLOWSHIP	6 AFR-PPP	1.262
	12 AFR-PDR-PPP	1.721
O AFR Bilateral		<i>è</i> 0.00
5 PRIDE		12.443

FNR NEW COMMITTED 2014-2020

499 FNR-funded projects	333.61 (MEUR)
256 CORE <i>Projects</i>	151.77
6 PEARL <i>Project</i>	R 23.08
12 ATTRACT Project	21.54
1 NCER Project	6.00
157 INTER <i>Projects</i>	62.24
52 JUMP (POC) <i>Projects</i>	<i>📌</i> 13.11
42 JUMP (Pathfinder) <i>Projects</i>	<i>i</i> .63
9 KITS Project	2.92
4 INITIATE Project	0.56
55 COVID-19 Fast Track Projects	7.508
1 Matching Fund Project	0.200
16 OPEN <i>Projects</i>	* 8.46
3 OPEN ACCESS <i>Project</i>	0.0155
70 BRIDGES (CORE PPP) <i>Projects</i>	24.73
3 IPBG Projects	7.02
3 PUBLIC2 Projects	2,84

248 PSP 65 INTER MOBILITY 105 RESCOM 12 AWARDS 21 ART 3.5	16.69 (MEUR)
270 PSP Classic	🧺 4.24
9 PSP Flagship	₹ 3.53
76 INTER-MOBILITY	5.58
19 AWARDS*	0.10
24 ART 3.5*	0.24
114 RESCOM	휞 3.00

412 Early Career Grants	125.72 (MEUR)
267 AFR PhD Grants	e 44.40
54 AFR Postdoc Grants	e 6.35
110 INDUSTRIAL FELLOWSHIP 63 AFR-PPP	12.53
47 AFR-PDR-PPP	6.44
13 AFR Bilateral	a 3.69
22 PRIDE	₹ 52.31

*since 2018

FUNDING INSTRUMENTS 2006-2020

(Statistics of ongoing instruments)

Launch date	Programme title	number of submitted proposals	number of FNR funded projets	number of finished projets	committe (MEU
2006 🍂	ATTRACT Opportunities for Outstanding Young Researchers in Luxembourg	83	21	10	33
2006 🔪	INTER Promotion of International Cooperation	1491	242	114	89.5
2008 🖪	CORE Multi-annual Thematic Research Programme	1530	459	251	256. 1
2008 🛋	AFR PhD Grants + BFR-AFR Transitions	2270	1131	976	130.2
2008 🛋	AFR Postdoc Grants	756	346	258	31.4
2009 🥂	PEARL Excellence Programme for Research in Luxembourg	32	12	7	50.3
2012 🔪	FINTER Mobility Promotion of International Scientific Exchange	199	92	70	4.
2012 휞	RESCOM	273	160	111	3.0
2012 휞	RESCOM International Scientific Conferences	70	44	21	0.
2012 휞	RESCOM Exploratory Workshops	37	15	9	0.
2012 휞	RESCOM Lecture Series	32	40	11	0.
2012 휞	RESCOM Summer Schools	5	2	0	0.
2012 휞	RESCOM Scientific Monographs	65	24	22	0.
2012 🏓	PSP Promoting Science to the Public	445	359	306	5.
2012 🏓	JUMP (POC) Proof of Concept	84	54	26	14.
2013 🎘	OPEN Multi-annual Research Programme	50	18	5	9.
2015	KITS Knowledge & Innovation Transfer	10	9	5	2.
2016 🥂	PRIDE Research Intesive Doctoral Education	104	22	0	52.
2016 🛋	AFR Bilateral	31	13	8	3.
2016	IPBG Industrial Partnership Block Grant	5	3	0	7.
2016 🏓	PSP-Flagship	19	8	2	3.
2016 🔎	BRIDGES (CORE PPP)	119	70	2	24.
2016	INDUSTRIAL FELLOWSHIP (AFR PhD PPP)	116	54	12	10.
2016	INDUSTRIAL FELLOWSHIP (AFR PDR PPP)	39	43	0	5.
2017	PUBLIC ²	7	3	0	1.
2018 🏒	OPEN ACCESS	6	1	1	0.
2018	FNR AWARDS*	134	19	19	(
2018	ART. 3.5	24	24	12	0.
2018 🍃	JUMP (Pathfinder)	77	42	30	1.
2019	NCER	1	1	0	
2019	INITIATE	5	4	0	0.
2020	COVID-19 Fast Track	129	55	0	7.
2020	Matching Fund	1	1	0	(
TOTAL		8,116	3,341	2,257	759.

*introduced in 2009, numbers in this sheet since 2018

CORE

Sum of Committed Funding (in MEUR)/Domain

DOMAIN	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
MS_New Functional and Intelligent Materials and Surfaces and New Sensing Applications	3.40	3.40	4.50	2.90	2.00	6.90	3.32	3.92	4.60	6.17	4.10	4.92	7.62	57.75
BM_Biomedical Sciences/Regulation of Chronic, Degenerative and Infectious Diseases	3.20	1.90	5.40	2.80	6.60	3.40	3.42	3.99	4.12	4.50	3.71	4.69	6.25	53.98
SR_Sustainable Resource Management in Luxembourg	2.50	4.20	3.00	3.10	4.20	3.50	3.40	2.09	1.90	4.13	1.98	2.31	1.76	38.07
IS_Innovation in Services	2.40	3.30	2.70	3.80	3.80	3.80	3.86	5.69	3.82	7.11	6.88	6.98	7.70	61.84
SC_Societal Challenges (LM+ID)	2.60	1.40	3.80	2.90	4.20	3.10	2.98	2.10	3.91	2.47	4.94	3.74	6.79	44.92
TOTAL	14.10	14.20	19.40	15.50	20.80	20.70	16.98	17.78	18.35	24.38	21.61	22.64	30.12	256.56

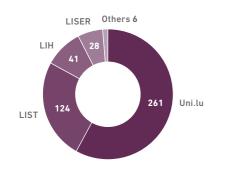
Projects by Domain

DOMAIN	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
MS_New Functional and Intelligent Materials and Surfaces and New Sensing Applications	7	8	8	5	4	10	7	7	8	10	7	9	13	103
BM_Biomedical Sciences/Regulation of Chronic, Degenerative and Infectious Diseases	7	3	8	5	9	7	7	6	8	8	6	9	9	92
SR_Sustainable Resource Management in Luxembourg	6	11	5	5	6	4	4	4	3	6	3	4	3	64
IS_Innovation in Services	8	10	6	7	8	6	8	10	6	11	9	11	10	110
SC_Societal Challenges (LM+ID)	6	4	9	6	9	5	4	4	7	5	11	7	12	89
TOTAL	34	36	36	28	36	32	30	31	32	40	36	40	47	458

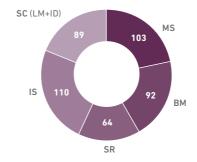
CORE: Funding by domain, between 2008 and 2020 (MEUR)



CORE: *Projects by institution, between 2008 and 2020*

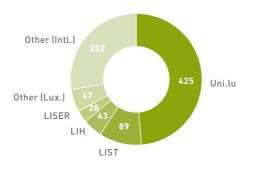


CORE: *Projects by domain, between 2008 and 2020*

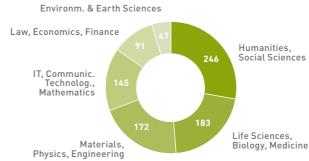


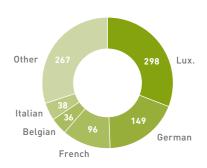
AFR PHD GRANTS

AFR: *PhD Grants per host institution* (2008-2020)



AFR: PhD Grants by domain (2008-2020)





AFR: PhD Grants by nationality (2008-2020)



FUNDING AND PROJECTS FIGURES 2020

PROJECTS SUBMITTED IN 2020





PUBLIC-PRIVATE PARTERSHIPS

BRIDGES*	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	TOTAL
National private partners	5	4	4	3	5	7	2	1	6	9	9	15	14	84
International private partners	5	4	2	1	2	3	2	2	0	1	7	2	7	38
TOTAL	10	8	6	4	7	10	4	3	6	10	16	17	21	122
TOTAL *BRIDGES (former CORE-PPP)	10	8	6	4	7	10	4	3	6	10	16	17	21	

IF*	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	TOTAL
							_							
PhD	1	12	1	10	13	9	7	9	9	15	15	9	6	116
Postdoc	1	1	0	2	1	1	2	,	7	0	0	,	10	E/
Postuoc	I	1	U	Z	1	1	3	4	/	9	9	0	ΙZ	56
TOTAL		13		12	14			13	16					172

*Industrial Fellowship (former AFR-PPP)

GENDER BALANCE IN RESEARCH

Based on the latest SHE Figures report from 2018 issued by the European Commission, around one in four researchers in Luxembourg is female, which places the Grand Duchy below the EU average of one in three. Luxembourg ranks below EU average in the number of female PhD graduates at 40.2% (EU average: 47.9%). As we move up the ranks, the female representation dwindles further: Women make up just over 34% of Associate Professor-level academic staff. Cut this number in half to 17.7% and we have the proportion of women at Full Professor level (EU average: 23.7%). The SHE figures report highlights that it is more difficult for women in most countries to climb the academic ranks, and that significantly fewer women achieve Full Professor status during their career than their male peers. The reasons are manifold, and it is undeniable that many things need to change to even out these numbers.

More information: https://www.fnr.lu/research-withimpact-fnr-highlight/wgiscience/

In order to fight the gender imbalance in research in Luxembourg, the Ministry of Higher Education and Research (MESR) has mandated the National Research Fund (FNR) to establish a concrete action plan. In 2020, the Luxembourg Gender Working Group (GWG) was set up, bringing together so far a total of 13 representatives of the Luxembourg Institute of Health (LIH), the Luxembourg Institute of Socio-Economic Research (LISER), the Luxembourg Institute of Science and Technology (LIST), the University of Luxembourg (UL), the Max Planck Institute Luxembourg (MPI) and the FNR.

A diverse Gender Working Group to promote equity in Luxembourg research

Numerous studies have shown that diverse working teams are not only more innovative but also more successful and efficient compared to less diverse teams. The GWG has the objective to promote professional equity between women and men in the Luxembourg research sector. Like this, a more diverse and creative research environment representative of society shall be fostered, and a larger pool of researchers can be attracted or kept at the Luxembourg public research institutions. "The GWG aims to promote professional equity between women and men in the Luxembourg research sector, through identifying the main issues of gender inequality in research in Luxembourg and proposing a plan of initiatives to address them. Thereby, these initiatives will contribute to enable the same opportunities for both women and men in the Luxembourg public research landscape on a shortand long-term basis", explains Linda Wampach, science communicator and programme manager at the FNR, who coordinates the GWG.

In 2020, the GWG was successfully established as hub for good practices in gender equity. The 13 GWG members form a well-connected network that is a platform for exchanges on the progress of ongoing and developing initiatives and across all public research institutions in Luxembourg. Having experts on gender diversity within the GWG considerably increased the amount of crossinstitutional information and knowledge exchange. This included for example feedback sessions about ongoing initiatives at each institution, international projects and regulations of relevance for Luxembourg, sharing of best practices, and up-coming relevant conferences or trainings. In parallel to the action plan that was defined and developed by the GWG continuously, also the progress of ongoing and developing initiatives across all public research institutions in Luxembourg were shared and discussed.

First measures introduced

With input from the GWG, the FNR

RESCOM programme was adapted in 2020 to be more gender fair and have a balanced gender representation across keynote speakers. Thus, the GWG decided to raise the quota of keynote speakers for lecture series from 30% to 40%. Furthermore, the GWG advised to introduce a Gender Bonus for international scientific conferences, which is offered in case an equilibrated gender balance was reached for the keynote speakers. At the same time, additional financial support was introduced for the organisers to offer various initiatives that increase the contribution of young researchers participating in the conference (e.g. childcare grants). Since its introduction in early 2020, so far 5 out of 7 funded conferences have benefited from these actions.

No evidence of unconscious bias in FNR funding panels

The GWG furthermore advised the FNR to assess the usefulness of an observer for unconscious bias in their expert funding panels, which was continuously carried out during 2020 and into 2021. Based on the data collected by the observer (e.g. funding recommendations, reviewer feedback and time discussed on applications according to gender etc.) and initial reports, no impact of bias was detected for the observed panels. All results were presented to the GWG and after positive feedback, the inclusion of a bias and gender observer in FNR expert panels for distinct funding schemes will be continued in 2021.

Four initiatives spanning from recruitment to monitoring

The main activity of the GWG over the year, comprised the strategic development and content of the action plan. The latter comprises a total of 4 different initiatives including full documentation provided by the GWG, that will be able to identify gender inequality in research in Luxembourg and help to address, reduce and abolish them on a short- and long-term basis. Notably, these initiatives rely on international recommendations. In summary, the GWG action plan for the institutions within the Luxembourg public research sector includes the following topics of interest:

- Gender data monitoring and publishing to ensure that gender data is collected and made public regularly by each research performing and funding organisation in Luxembourg.
- A gender diversity survey to ensure that the perception and experiences of employees in the context of gender inequalities are measured, monitored, and made public regularly by each research performing and funding organisation.
- A gender fair recruitment process to guarantee inclusiveness across all research performing and funding organizations in Luxembourg, be it for administrative or academic positions.
- A gender fair internal promotion process to guarantee inclusiveness across all institutes, as well as general inclusive working conditions.

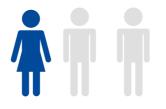
In 2021, the documentation for these initiatives will be finalised and within the participating institutions, existing workflows will be assessed and complemented by the gender fair recommendations during the year under the advice from the GWG.







of Proof of Concept grants awarded to women (2014-20)



1 in 3 Industrial Felllowships grantees

are female (2020)

Principal Investigators (2020)



RESCOM grants awarded to women (2020)

4 of 9



of CORE grants awarded to women (2008-20)

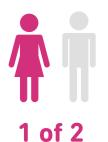




of **INTER** grants awarded to women (2006-20)



1 in 3 CORE grants awarded to female



ATTRACT grants awarded to a female PI (2020)



FNR grantees are female (2020)

The accounts have been audited by Grant Thornton Luxembourg (Audit & Assurance), société anonyme, and approved by the Board of Directors on March 19th, 2021. Only the original French version of the annual accounts and the audit opion is binding. For the complete annual report (in French), please refer to www.fnr.lu/annualreports

BALANCE SHEET

As at 31 December 2020 (EUR)

ASSETS FIXED ASSETS Intangible fixed assets Tangible fixed assets CURRENT ASSETS Budgetary allocations to be received with a maturity less than 1 year Other receivables Cash at bank DEFERRED CHARGES	
 Intangible fixed assets Tangible fixed assets CURRENT ASSETS Budgetary allocations to be received with a maturity less than 1 year Other receivables Cash at bank 	ASSETS
 Tangible fixed assets CURRENT ASSETS Budgetary allocations to be received with a maturity less than 1 year Other receivables Cash at bank 	FIXED ASSETS
CURRENT ASSETS Budgetary allocations to be received with a maturity less than 1 year Other receivables Cash at bank	Intangible fixed assets
 Budgetary allocations to be received with a maturity less than 1 year Other receivables Cash at bank 	Tangible fixed assets
 with a maturity less than 1 year Other receivables Cash at bank 	CURRENT ASSETS
Other receivables Cash at bank	• /
Cash at bank	with a maturity less than 1 year
	Other receivables
DEFERRED CHARGES	Cash at bank
	DEFERRED CHARGES

TOTAL ASSETS

LIABILITIES

CAPITAL AND RESERVES

Reserves

• Result for the financial year

CREDITORS

• Trade payables

• Tax and social security debts

• Amounts owed to beneficiaries

with a maturity less than 1 year

• Other debts

DEFERRED INCOME

TOTAL LIABILITIES

PROFIT AND LOSS ACCOUNT

As at 31 December 2020 (EUR)

	NCOME
•	Budgetary allocation
•	Other operating income
•	Commitments made
•	Operating costs (including staff costs)
•	Value adjustments on fixed assets
•	Interest receivable and similar income
•	Interest payable and similar charges

PROFIT FOR THE FINANCIAL YEAR

2020	
62,020.58	
77,466.54	
152,888,760.61	
67,830,000.00	
387,339.30	-
99,262,182.29	-
103,657.93	
252,781,427.25	
2020	
2020	
2020 5,514,003.39	
5,514,003.39	
5,514,003.39	
5,514,003.39 94,868.50	
5,514,003.39 94,868.50 729,976.97	
5,514,003.39 94,868.50 729,976.97 92,958.50	-
5,514,003.39 94,868.50 729,976.97 92,958.50 206,044,348.33	_
5,514,003.39 94,868.50 729,976.97 92,958.50 206,044,348.33 0.00	

2020	
102,404,797.32	
14,775.41	
(97,059,739.73)	
(5,261,225.50)	
(84,210.15)	
80,575.69	
(104.54)	
94 868 50	

FUNDING INSTRUMENTS

STRATEGIC OBJECTIVE 1: Strengthening the foundations

CORE

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CORE is a traditional programme for the funding of research projects. Proposed projects are submitted by the research institutions (bottom-up approach) and are part of the national research priorities defined by the Government (top-down approach). The projects are selected based on their scientific quality.

INTER

The INTER programme's objective is to strengthen international cooperation and increase the impact of research activities in Luxembourg by promoting research projects that combine Luxembourg and foreign researchers. The programme is currently in three segments: (1) the international mobility programme, (2) bilateral cooperation, and (3) multi-lateral cooperation. The projects are selected based on their scientific quality.

OPEN

The OPEN programme allows researchers to submit research projects whose themes are not covered by the CORE programme fields and therefore make it possible to identify research groups that are competitive at the international level outside national priorities. The projects are selected based on their scientific quality.

PEARL

The PEARL programme aims to develop a truly critical mass and international visibility of Luxembourg's research priorities in quantitative and qualitative terms. The principal aim of PEARL is to offer a flexible and highly attractive tool to institutions to attract more experienced and established researchers who are recognised at the international level. These parties will transfer and develop their research programmes to Luxembourg and thereby contribute to accelerating the development of national priorities.

NCER (National Centre of Excellence in Research)

The NCER programme's objective is to support the development of public research in areas of strategic interest to derive a socio-economic return in the medium to long term. It aims to strengthen cooperation between institutions and concentrate on research activities based on a common scientific and socio-economic challenge. The programme's objective is to increase the critical mass of public research in Luxembourg and achieve greater visibility at the international level.

INITIATE

Through INITIATE, the FNR wishes to back and guide the early-stage development of high-risk/high-reward strategic project ideas, up to the point where a solid project proposal is formulated that can potentially be submitted to FNR's strategic programmes, such as NCER, PEARL, IPBG, a dedicated one-time call, or a bespoke "package" of funding instruments.

ATTRACT

The ATTRACT programme aims to strengthen the excellence of Luxembourg research by attracting researchers of an excellent scientific level who can draw upon recognised professional experience in research. The programme offers researchers not yet established in Luxembourg the opportunity to set up their own research in a public research body in Luxembourg, which is prepared to accommodate them with a jointly submitted project.

AFR (Aides à la Formation-Recherche) Individual

The AFR programme is one of FNR's longest-running funding schemes. It now serves the specific purpose of providing funding to the best researchers who are studying at doctorate levels. The AFR PhD grant scheme is divided into two sub-categories: AFR PhD in Luxembourg (AFR Incoming) and AFR PhD abroad (AFR Outgoing).

STRATEGIC OBJECTIVE 2: Shaping a shift in Luxembourg

Valorisation Programme (Proof of Concept, Knowledge & Innovation Transfer Support)

The purpose of the valorisation programme is to encourage the transfer of research results into economically viable innovations. The FNR can support feasibility studies and the realisation of prototypes and pilot systems for the purpose of projects with a high level of potential innovation. The project will be selected based on the economic potential of the innovation and the proposed exploitation plan. The FNR may also support people whose expertise is needed to reflect the transfer of the research results in economically exploitable innovative projects.

JUMP/Proof of Concept (PoC)

The JUMP/PoC programme is the FNR's facilitation programme for the commercialisation of research results to encourage the successful translation of high-impact research into commercially viable innovations.

BRIDGES & INDUSTRIAL FELLOWSHIPS

Bridges: Support applied research that meets the needs of industrial partners. Industrial Fellowships: Support researchers who carry out their PhD or postdoc training in collaboration with a company in Luxembourg.

KITS

The Knowledge & Innovation Transfer Support programme provides competitive funding to public research institutions in Luxembourg that will allow them to attract and integrate highly skilled knowledge transfer professionals.

IPBG (Industrial Partnership Block Grant)

The IPBG programme aims to foster cooperation between Luxembourg based companies active in R&D and public research institutions in Luxembourg. The IPBG awards a block allocation of PhD and/or Postdoc grants (AFR-PPP) in which Luxembourg-based industry partner(s) take the lead in arranging a research programme with a Luxembourg-based public research institution of their choice (in research relevant to FNR's strategic priority areas).

SIS (Science in Society)

The FNR wants to strengthen the link between sciences and society, which is why it promotes scientific culture as one of its priority areas. This promotion aims to create awareness among the whole population, decisionmakers and young people alike who are the citizens and researchers of the future. The objective is to create acceptance and comprehension of the role of sciences and research as creators of knowledge, innovation and to spark enthusiasm among young people about scientific careers. For this reason, the FNR offers platforms to assist researchers in promoting their activities, organises its own promotion activities to increase the visibility of sciences and research, and provides financial support to researchers and scientific teachers/mediators.

PSP (Promoting Science to the Public)

The objective of the PSP funding instrument is to strengthen the exchanges between science and society. The programme supports projects that create awareness among the public about scientific topics and projects that make Luxembourg's research activities visible. PSP supports

- researchers so they can pass on their knowledge to pupils, students and the general public and enter into dialogue with these target groups.
- teachers, private individuals, and non-profit organisations can carry out projects for pupils, students, and the general public, giving them an overview of sciences and scientific work.

PRIDE

PRIDE is the FNR's new programme for funding doctoral research in Luxembourg. Under this programme, a block of PhD grants is awarded to a consortium of excellent researchers grouped around a coherent research and training programme. PRIDE is open to all domains of research and technological development. PRIDE aims at attracting excellent PhD candidates to Luxembourg and offering them high-quality, interdisciplinary research training. Compared to the AFR individual grant scheme for PhDs, PRIDE provides a greater advantage to institutions and PhD candidates, as institutions are able to immediately offer a full PhD grant to promising candidates without having to undergo a separate application and selection procedure at the FNR.

RESCOM (Support for Research Communication)

The RESCOM instrument's objective is to promote communication and exchange between researchers, notably by subsidising scientific events of international scope.

OPEN ACCESS FUND

The OPEN ACCESS FUND aims to promote free access to research results from FNR-(co)funded projects. The fund provides financial support to cover fees that may arise through the publication of peer-reviewed research results in Open Access.

FNR AWARDS

The FNR allocates annual awards for outstanding results in four categories:

"Outstanding Promotion of Science to the Public";

"Outstanding Scientific Achievement"; "Outstanding PhD Thesis" and "Outstanding Mentor".



CORE 2020

PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION
ADARS	ADARS Automating the Design of Autonomous Robot Swarms	Gregoire Danoy	SnT (UL)	IS	692,000.00
AuReLeE	Automated Reasoning with Legal Entities	Alexander Steen	UL	IS	472,000.00
BroadApp	Broadly Applicable Methods for van der Waals Interactions in Molecules and Materials	Alexandre Tkatchenko	UL	MS	707,000.00
CRIM_AI	Criminal Proceedings and the Use of AI: Challenges for Common Criminal Procedure Principles and the Principles of the Rule of Law	Katalin Ligeti	UL	LE	874,000.00
CULTURAGING	The Implications of Population Aging on Cultural and Socio-economic Outcomes	Andreas Irmen	UL	LE	626,000.00
DECEPTICON	Deceptive Patterns Online	Gabriele Lenzini	SnT (UL)	IS	969,000.00
DigiFam	Digital Media as Language And Literacy Learning Spaces in Multilingual Families	Maria Obojska	UL	SC	443,000.00
DIGI-GOV	Digital Urban Development — How large digital corporations shape the field of urban governance	Constance Carr	UL	LE	781,000.00
DisPOSEG	Disentangling postcolonial encounters in globalisation: a sociolinguistic-ethnographic study of Lusophone migrant workers' positionings in third space	Bernardino Tavares	UL	SC	633,000.00
ECLIPSE	Eye-undetectable Cholesteric LIquid crystal spheres realized by Phase Separation and Electrospray	Jan Peter Felix Lagerwall	UL	MS	749,000.00
EurLiberty	The right to liberty of migrants and asylum seekers in Europe	Maria Pichou	UL	LE	378,000.00
EVIL	Reprogramming of the leukemic microenvironment by small extracellular vesicles: from characterization to therapeutic application	Jerome Paggetti	LIH	BM	563,000.00
FEATHER	The Feather and the literary work: French-speaking female authors of the Grand Duchy of Luxembourg as literary precursors (1900-2020)	Hélène Barthelmebs-Raguin	UL	SC	644,000.00
FiReSpARX	FinTech/RegTech in Space for Trustful Autonomous Robotic Interaction	Gilbert Fridgen	SnT (UL)	IS	852,000.00
FP2	Future-Proofing Privacy in Secure Electronic Voting	Johannes Mueller	SnT (UL)	IS	670,000.00
FR4Recycling	Composites recycling by using intumescent flame- retardant concept	Abdelghani Laachachi	LIST	MS	745,000.00
GLASS-LUX	Glioma Longitudinal AnalySiS in Luxembourg (GLASS-LUX): ex vivo and in vivo Functional Profiling of Recurrent Gliomas	Simone Niclou	LIH	BM	850,000.00
HERA	Hypervisor-Enforced RAdiation tolerance in multi- core SoCs for space	Marcus Völp	SnT (UL)	IS	783,000.00
HIVI	A history of online virality	Valérie Schafer	UL	SC	590,000.00
HYPS	Hybrid Perovskite Surfaces	Alex Redinger	UL	MS	552,000.00
Immunotwin	Long term immunological consequences in adversity- divergent twins	Jonathan David Turner	LIH	ВМ	848,000.00
LaMaM	Labor Market Mobility: Immigration, Automation, and Inequality	Michal Burzynski	LISER	LE	519,000.00
LandGen	Using landscape genetic techniques to understand the impact of habitat fragmentation on the dispersal of insect pollinators (Diptera: Syrphidae)	Alain Camille Frantz	MNHN	SR	550,000.00
MegaLEO	Self-Organised Lower Earth Orbit Mega- Constellations	Symeon Chatzinotas	SnT (UL)	IS	743,000.00
METHOOD	Time-varying residential neighborhood effects on cardiometabolic health	Camille Perchoux	LISER	BM	606,000.00
M-EVRST	Multimodal Electric Vehicle demand ReSponsive Transport	Tai-Yu Ma	LISER	LE	618,000.00
MICROH_CRC	Investigating the role of the microbiome in colorectal cancer	Elisabeth Letellier	UL	BM	863,000.00

PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION
MUSES	Freshwater pearl mussels as stream water stable isotope recorders	Laurent Pfister	LIST	SR	667,000.00
NeuroFlame	Synergistic effect of protein aggregation and mitochondrial dysfunction on inflammation in neurodegenerative diseases	Carmen Jesica Venegas Maldonado	UL	BM	632,000.00
• OpenTop	Contribution of Astrocyte Metabolism to Synucle- inopathy in Parkinson's disease.	María Belén Farias	UL	MS	369,000.00
OVERSEAS	SByzRT: Intrusion resilient real-time communication and computation in autonomous systems	Ramona Pelich	LIST	SR	547,000.0
PAGES	Resource Optimization for Next Generation of Flexible SATellite Payloads	Angelika Dierolf	UL	ВМ	422,000.00
PlaSprayNano	Design of LoRaWAN protocol Optimisation over SATellite Connection for precision agriculture applications	Simon Jean Sylvain Bulou	LIST	MS	598,000.00
PorSol	Building Effective European Banking Supervision	Anas Obeidat	UL	MS	483,000.00
QuaC	Interconnecting the Sky in 5G and Beyond - A Joint Communication and Control Approach	Stéphane Bordas	UL	MS	848,000.00
QUIRE	WARLUX: Soldiers and their communities in WWII: The impact and legacy of war experiences in Luxembourg	Joshua T Berryman	UL	MS	253,000.00
RareCom	Quantum-based machine learning for flexible molecules	Carole Linster	UL	ВМ	898,000.00
RESRAMAN	Autonomous Network Slicing for Integrated Satellite- Terrestrial Transport Networks	Sven Reichardt	UL	MS	361,000.00
RISOTTI	Topological Fluid Mechanics: Decoding emergent dynamics in anisotropic fluids and living systems	Bjorn Ottersten	SnT (UL)	IS	964,000.00
SENCOM	Assessment of Primary Care Performance in Luxembourg	Bjorn Ottersten	SnT (UL)	IS	674,000.00
SymNumDev	Topological Fluid Mechanics: Decoding emergent dynamics in anisotropic fluids and living systems	Christine Schiltz	UL	SC	402,000.00
TAILS	Topological Fluid Mechanics: Decoding emergent dynamics in anisotropic fluids and living systems	Susanne Siebentritt	UL	MS	607,000.00
TestFlakes	Topological Fluid Mechanics: Decoding emergent dynamics in anisotropic fluids and living systems	Michail Papadakis	SnT (UL)	IS	876,000.00
THERMODIMAT	Topological Fluid Mechanics: Decoding emergent dynamics in anisotropic fluids and living systems	Emmanuel Defay	LIST	MS	820,000.00
TIME-CLL	Topological Fluid Mechanics: Decoding emergent dynamics in anisotropic fluids and living systems	Etienne Moussay	LIH	BM	571,000.00
TOPREL	Topological Fluid Mechanics: Decoding emergent dynamics in anisotropic fluids and living systems	Thomas Schmidt	UL	MS	523,000.00
TSPQ	Topological Fluid Mechanics: Decoding emergent dynamics in anisotropic fluids and living systems	Pierre Picard	UL	LE	279,000.00

For a detailed summary of each project as well as other information, please refer to www.fnr.lu/core

UL University of Luxembourg LCSB Luxembourg Centre for Systems Biomedicine SnT Interdisciplinary Centre for Security, Reliability and Trust LIH Luxembourg Institute of Health LIST Luxembourg Institute of Science and Technology LISER Luxembourg Institute of Socio-Economic Research

BM Biomedical Sciences/Regulation of Chronic, Degenerative and Infectious Diseases IS Innovation in Services SC Societal Challenges (LM+ID) MS New Functional and Intelligent Materials and Surfaces and New Sensing Applications SR Sustainable Resource Management in Luxembourg

BRIDGES 2020

PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION
DEFMRW	Development of the electrospun hybrid filter media for microplastic removal from waste water	Stephan Leyer	UL	MS	213,930.40
ANTOINE	ANticipatory Train Optimization with Intelligent maNagEment	Francesco Viti	UL	MS	390,584.39
NanoLux SARS-Co	Assessment of SARS-CoV-2 neutralizing antibodies in Luxembourg through novel highly sensitive NanoLuciferase-based high throughput assays	Andy Chevigne	LIH	BM	211,292.53
MoveSenseAl	Precision diagnosis and therapy with wearables and AI in data analytics	Frank Hertel	CHL	BM	397,781.51
ConGenIAL	CONsent to turn GENome into Individual's Asset for a Lifetime	Gabriele Lenzini	SnT (UL)	IS	397,956.55
• FUNTASY	Functional Safety for Autonomous Systems	Fabrizio Pastore	SnT (UL)	IS	396,073.70
MEET-A	Multi-modal Fusion of Electro-optical Sensors for Spacecraft Pose Estimation Towards Autonomous in-Orbit Operations	Djamila Aouada	SnT (UL)	IS	399,972.50
SAPPHYRE	Functionalized Silicon particles application to boost phyto- resilience	Gea Guerriero	LIST	ВМ	192,202.08
STONB	Strontium Titanate Oxide with Narrow Bandgap	Emanuele Barborini	LIST	MS	400,000.00
SETICA	SEcuring TIme Critical traffic in (next gen) Automotive networks	Thomas Engel	UL	IS	281,247.72
SHM4REUSE	Integrated structural health monitoring model for demountable and reusable elements in a design for deconstruction approach using BIM	Daniele Waldmann	UL	MS	353,507.27
HiFiProSi	High Fidelity process Simulation	Berhard Peters	UL	MS	190,800.70
SMART COMBO	Improving cancer immunotherapy based on anti-PD-1 and STING agonists by combining small innovative molecules	Bassam Janji	LIH	BM	150,673.00
AUTOMAP	Always Up-To-Date High Definition Map	Raphael Frank	SnT (UL)	IS	367,633.05
SCRIPT	SME Credit Risk Platform	Radu State	SnT (UL)	IS	395,611.66
MASTERS	Modelling and Simulation of Complex Radar Scennes	Bhavani Shankar Mysore Rama Rao	SnT (UL)	IS	399,450.00
HI3M	High power Impulse Magnetron sputtering Multilayer hard nitrides coatings for "difficult-to-cut" Materials	Patrick Choquet	LIST	MS	400,000.00
BIOMICO	Biobased Microsphere for Cosmetic Products	Jean-Sébastien Thomann	LIST	MS	400,000.00
CALPOL	Electrocaloric polymers for solid-state cooling	Emmanuel Defay	LIST	MS	392,055.95
SENSIMASS	Improving Sensitivity in MALDI molecular imaging Mass Spectrometry	Gilles Frache	LIST	IS	388,989.00
A-AIRE	Adaptive AI for Rehabilitation Exoskeleton	Alexandru-Adrian Tantar	LIST	MS	399,685.87
TOTAL					7.119.447,88

For a detailed summary of each project as well as other information, please refer to www.fnr.lu/bridges

INTER-MOBILITY 2020

PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION IN EUR
LISPEX	Literary space versus space of exclusion. Representations of the topography of exclusion and destruction of Jews in French-language literatures in Occupied Europe (1944-1944)	Nathalie Jacoby	CNL Centre national de litérature	SC	107,100.00
DIGI-VALTAX	Digitalization, Taxation, and Value Creation	Werner Haslehner	UNILU	LE	18,330.00
DH-Summit	Collective endeavour of strategic research collaboration between C2DH and RRCHNM	Andreas Fickers	UNILU	SC	29,250.00
TRANSFER	Atlantic Transfer: Models in Higher Education and Vocational Training in Europe and the United States	Justin J.W. Powell	UNILU	SC	9,360.00
CAMLXCY	Future Developments in European and National Company Law	André Prüm	UNILU	LE	11,630.00
IOM	Inequality of Opportunity: Measurement, Evolution and Mechanisms	Alessio Fusco	LISER (CEPS)	LE	106,000.00
URBAN- FORMS	Theoretical Urban Forms from Micro-Economic Simulations	Geoffrey Caruso	LISER (CEPS)	SC	145,255.00
TRAFIC	Tracing Rainfall through forest canopies Into catchments	Christophe Hissler	LISTLUXEMBOURG	SR	104,490.00
MONASTIC	Model-based evaluatiON of ecosystem trAnSpiration and canopy-stomatal conducTance by integrating eddy Covariance and ECOSTRESS data	Kaniska Mallick	LISTLUXEMBOURG	SR	154,455.00
ISWITCH	Computational and theoretical discovery of magnetoelectric multiferroic materials for low- consumption information technologies	Jorge Iniguez Gonzalez	LISTLUXEMBOURG	MS	7,600.00
CAME	Causal Mediation Analysis and Machine Learning based estimators	Michela Gianna Bia	LISER (CEPS)	SC	5,120.00
TOTAL					698,590.00

For a detailed summary of each project as well as other information, please refer to www.fnr.lu/inter

RESCOM 2020

2

PROJECT TITLE

- ICSME 2021 37th IEEE International Conference on Software Maintena and Evolution
- DyProSo 2021
- International Conference ON STatistics And Related Fields (ICON STARF
- RESAW Conference
- The 45th GRELL Ascension meeting Group for Cancer Epidemiology and Registration in Latin Language Countries
- ETAPS 2021 European Joint Conferences on Theory and Practice of Soft
- IEEE International Conference on Fuzzy Systems 2021 (FUZZ-IEEE 2021
- Launching Spacecraft: Regulatory Aspects
- Science of Science in the Spotlight

TOTAL

For a detailed summary of each project as well as other information, please refer to www.fnr.lu/rescom

UL University of Luxembourg LCSB Luxembourg Centre for Systems Biomedicine SnT Interdisciplinary Centre for Security, Reliability and Trust LIH Luxembourg Institute of Health LIST Luxembourg Institute of Science and Technology LISER Luxembourg Institute of Socio-Economic Research

 BM Biomedical Sciences/Regulation of Chronic, Degenerative and Infectious Diseases

 IS Innovation in Services

 SC Societal Challenges (LM+ID)

 MS New Functional and Intelligent Materials and Surfaces and New Sensing Applications

 SR Sustainable Resource Management in Luxembourg

	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION
nance	Michail Papadakis	SnT (UL)	IS	50,000.00
	Mael Guennou	UL	MS	15,600.00
RF)	Yannick Baraud	UL	MT	41,000.00
	Valérie Schafer	UL	SC	15,950.00
nd	Claudine Backes	LIH	ВМ	26,273.50
ftware	Peter Y. A. Ryan	SnT (UL)	IS	60,000.00
21)	Holger Voos	SnT (UL)	IS	60,000.00
	Mahulena Hofmann	UL	LE	19,600.00
	Jennifer Dusdal	UL	SC	12,000.00
				300 4 23 50

INTER 2020

PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION
INDIGO	Information In The Eu'S Digitalised Governance	Herwig Hofmann	UL	LE	673,988.00
SMARTIES	Real Time Smart Irrigation Management At Multiple Stakeholders' Levels	Kaniska Mallick	LIST	SR	149,000.00
LIGNP4- WOUND	Antibacterial Breathable Wound Dressing Based On Polymer Electrospun Nanofibers	David Duday	LIST	MS	449,000.00
CENTAUR	Ceramics With Sensing Capabilities For High Temperature Applications	Gaston Rauchs	LIST	MS	362,000.00
NATALINA	Natural Fibers Reinforced Composite: An Affordable And Sustainable Lightweight New Material/ Design/ Manufacturing Approach	Henri Perrin	LIST	MS	426,000.00
interBATT	Key Enabling Interface Engineering And Characterization For Next Generation Batteries	Santhana Eswara	LIST	MS	500,000.00
EMSIVILIN	In Situ Correlative Cryo-electron Tomography And Spatial Lipid Mapping Of Influenza A Virus Infected Cells	Tom Wirtz	LIST	ВМ	522,000.00
HRAS-PPi	Development Of Protein-protein Interaction Inhibitors To Selectively Target H-ras In Cancer	Daniel Abankwa	UL	BM	315,000.00
SemanticLCA	Continuous Lifecycle Assessment Of Buildings And Districts Through Real-time Design And Operation Data Underpinned By Semantics	Enrico Benetto	LIST	SR	725,000.00
PDage	Age-induced Organoid Models For Deciphering Risk Factors Of Parkinson'S Disease	Jens Schwamborn	UL	BM	555,000.00
RAS-NANOME	Identification And Characterization Of Novel Ras Plasma Membrane Signalling Complex Modulators - The Ras-nanome	Daniel Abankwa	UL	ВМ	463,000.00
ReDiRECt	Molecular -Based, Data -Driven Drug Repurposing For Bladder Cancer	Reinhard Schneider	UL	BM	330,000.00
MiniMox	Treatment For All: Developing A Paediatric Formula- tion Of Moxidectin For Neglected Infectious Diseases	Michel Vaillant	LIH	BM	724,000.00
BioMaMa	Biobased Macroporous Materials For Heavy Metal Adsorption	Youssef Habibi	LIST	MS	461,000.00
Protect Move II	Reduced Penetrance In Hereditary Movement Disorders: Elucidating Mechanisms Of Endogenous Disease Protection	Anne Grünewald	UL	ВМ	695,000.00
EXPECTATION	Personalized Explainable Artificial Intelligence For Decentralized Agents With Heterogeneous Knowledge	Leon Van Der Torre	UL	IS	342,567.00
DIGIPD	Validating Digital Biomarkers For Better Personalized Treatment Of Parkinson'S Disease	Enrico Glaab	UL	BM	295,000.00
DynaSti	Patient-specific Dynamical Modeling And Optimization Of Deep Brain Stimulation	Jorge Gonçalves	UL	BM	499,000.00
TIPS	Tailored Immunotherapy For Paediatric Sirs (Severe Inflammatory Response Syndrome)	Antonio Del Sol Mesa	UL	BM	296,000.00
INTERLOR	Lotharingien Und Das Papsttum. Interaktions-, Inte- grations- Und Transformationsprozesse Im Spannungsfeld Zwischen Zentraler Steuerung Und Regionaler Eigendynamik (11. – Anfang 13. Jahrhundert)	Michel Margue	UL	SC	428,000.00
GLADIS	Graph-based Learning And Analysis For Intrusion Detection In Information Systems	Radu State	SnT (UL)	IS	276,000.00
ConMicMac	From Micro To Macro – Fundamental Concrete Modelling Considering Local Shear Rate And Micro- structure Inhomogeneities Due To Processing Using A Scale-bridging Approach	Bernhard Peters	UL	MS	348,000.00
CHARLIE	Changing Rare Disorders Of Lysine Metabolism	Carole Linster	UL	BM	299,000.00
5G-INSIGHT	Intelligent Orchestrated Security And Privacy-aware Slicing For 5g And Beyond Vehicular Networks	Thomas Engel	UL	IS	809,000.00
AAA 2020	Augmented Artwork Analysis. Computer-aided Inter- pretation Device For Art Images	Gian Maria Tore	UL	SC	479,000.00

PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION
SEVERITAS	Secure And Verifiable Electronic Testing And Assessment Systems	Gabriele Lenzini	SnT (UL)	IS	652,000.00
GREENER	Greener: Gene And Regulatory Elements Networks Involved In Rice Cortex And Aerenchyma Differentiation	Mohammad Ghoniem	LIST	BM	368,000.00
CureMILS	A Reprogramming-based Strategy For Drug Repositioning In Patients With Mitochondrial Dna-associated Leigh Syndrome	Antonio Del Sol Mesa	UL	BM	299,000.00
HEMPFI	Impact Of Cadmium And Zinc On Fiber Production In Hemp (Cannabis Sativa): An Integrated Approach Assessing The Protective Effect Of Silicon	Gea Guerriero	LIST	BM	403,000.00
TheCirco	Thermodynamics Of Circuits For Computation	Massimiliano Esposito	UL	MS	486,000.00
 Scaling Up Vari 	Scaling Up Variability	Maxime Cordy	SnT (UL)	IS	482,000.00
CXCL12 and tran	Study Of The Cxcl12-cxcr4/Ackr3 Signaling In Glioblastoma And Of Its Importance In The Control Of Translation And Relapses	Andy Chevigne	LIH	BM	439,000.00
MAELSTROM	Machine Learning For Scalable Meteorology And Climate	Mats Brorsson	SnT (UL)	IS	174,375.00
POPKULT60_ II	Populärkultur Transnational - Europa In Den Langen 1960er Jahren	Andreas Fickers	UL	SC	1,315,000.00
Care about Care	Care About Care: Digitalsupport For Empowering Care Networks	Olivier Streiff	Stëftung Hëllef	IS	303,461.00
FACEREHAB	Facial Paralysis Rehabilitation At Home	Frédéric Dierick	REHAZENTER	BM	218,125.00
INBODY	Interoception Of Bodily Sensations Across Organ Domains And Its Relevance For Somatic Symptoms	André Schulz	UL	SC	261,000.00
SpaNuMaDev	Understanding The Role Of Spatial Number Repre- sentations And Spatial Skills In Mathematical Abili- ties: From Kindergarten To Higher Education	Christine Schiltz	UL	SC	344,000.00
VBN	Vision Based Navigation System (Vbn) For Autonomous Satellite Navigation In Space	Miguel Angel Olivares Mendez	SnT (UL)	MS	234,635.00
TOTAL					17,401,151.00

INITIATE 2020

PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION
Losch Centre	Henriette and André Losch Centre for Childhood Disorders	Rudi Balling	UL	BM	216,000.00
NATIONTWIN	Responsible AI for a NATION-wide and privacy preserving Digital TWIN	Thomas Kallstenius	LIST	IS	207,453.00
• FINTECH INITIATE	Automation and personalisation in complex financial systems - a concept for a national Centre of Excellence in Research in Financial Technologies	Yves Le Traon	SnT (UL)	IS	247,000.00
TOTAL					670,453.00

For a detailed summary of each project as well as other information, please refer to www.fnr.lu/initiate

UL University of Luxembourg LCSB Luxembourg Centre for Systems Biomedicine SnT Interdisciplinary Centre for Security, Reliability and Trust LIH Luxembourg Institute of Health LIST Luxembourg Institute of Science and Technology LISER Luxembourg Institute of Socio-Economic Research

BM Biomedical Sciences/Regulation of Chronic, Degenerative and Infectious Diseases IS Innovation in Services IS Innovation in Services SC Societal Challenges (LM+ID) MS New Functional and Intelligent Materials and Surfaces and New Sensing Applications SR Sustainable Resource Management in Luxembourg

PEARL 2020

PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION IN EUR
DHEALTHPD	Digital Healthcare Solutions: Patient Management e-Health Concepts	Jochen Klucken	UL	ВМ	3,368,371.00
TOTAL					3,368,371.00

For a detailed summary of each project as well as other information, please refer to www.fnr.lu/pea

🐙 OPEN 2020

PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION IN EUR
• CoSH	Convex Surfaces in Hyperbolic Geometry	Jean-Marc Schienker	UL	MT	734,000.00
DELIGHT	Deontic Logic for Epistemic Rights	Leon Van der Torre	UL	IS	596,000.00
DELIGHT TOTAL	Deontic Logic for Epistemic Rights	Leon Van der Torre	UL	IS	596 1,330,

For a detailed summary of each project as well as other information, please refer to www.fnr.lu/open

25 ATTRACT 2020

PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION
• PROactive Policy making for Equal Lives	Lindsay Flynn	UL	SC	1,999,808.00
• Statistical mechanics of active matter: From engines to nonequilibrium self-organization	Etienne Fodor	UL	MS	1,499,916.00
TOTAL				3,499,724.00

For a detailed summary of each project as well as other information, please refer to www.fnr.lu/attract

AWARDS 2020

DOMAINE	ACTION	SOCIETE	FNR CONTRIBUTION
• BM	AWARDS-PSC	Sophie Wagner - Sabine Schmitz - Ruxandra Soare - Lucie Debroux - Lisa Smits - Philippe Lamesch	5,000.00
• SC	AWARDS-PSC	Carole Blond-Hanten	5,000.00
BM	AWARDS-PUB	Carole Linster - Nicole Paczia - Julia Kettern - Jean-François Conrotte - Daniel Kay	5,000.00
• SR	AWARDS-PUB	Laurent Pfister - Nuria Martinez Carreras - Christophe Hissler - Julian Klaus - Gwenael Carrer - Michael Stewart - Jeffrey J. McDonnell	5,000.00
MS	AWARDS-PHD	Maciej Chrzanowski	5,000.00
IS	AWARDS-PHD	Thierry Titcheu Chekam	5,000.00
SC	AWARDS-RDI	Claudine Kirsch - Simone Mortini	5,000.00
TOTAL			35,000.00

For a detailed summary of each project as well as other information, please refer to www.fnr.lu/awards

JUMP 2020

ACTION	PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION IN EUR
Pathfinder	PaCT	Privacy Policy Creation, Certification and Translation	Tomer Libal	UL	IS	22,000.00
Pathfinder	POPP-E	Parallel Organoid Perfusion Platform - Evaluation	Graham Robertson	UL	ВМ	47,000.00
Pathfinder	AssistAR	Assistance for Industrial Processes using Augmented Reality	Meysam Minoufekr	UL	MS	50,000.00
Pathfinder	ReMap	Radio wavE Motion cAPture	Bhavani Shankar	SnT (UL)	MS	40,000.00
Pathfinder	REDSAT	Real-Time Satellite Emulation Testbed	Juan Merlano Duncan	SnT (UL)	IS	36,800.00
Pathfinder	SolarMap	High resolution Solar photovoltaic potential Mapping across entire cities and regions	Ulrich Leopold	LIST	IS	26,300.00
Pathfinder	PEACE	Production of triterpene Extract from Apple CElls	Sylvain Legay	LIST	ВМ	26,410.00
Pathfinder	HASARD2020	Hierarchical tiling method for identifying a type of surface in a digital image	Marco Chini	LIST	IS	30,000.00
Pathfinder	RISAR	Real-time Incident Safety system using Augmented Reality	Roderick McCall	LIST	IS	31,420.00
TOTAL						309,930.00
POC	icomplai	Automated Gdpr Compliance Checking Of Documents And Processes	Tomer Libal	UL	IS	199,100.00
POC	inhibitPDE-RASv	Pde6d/ Kras Inhibitor Development For Cancer Treatment-v2	Daniel Abankwa	UL	ВМ	395,600.00
POC	AssistAR - PoC	Assistance For Industrial Processes Using Augmented Reality - Poc	Meysam Minoufekr	UL	MS	192,300.00
POC	NOFAKES-PoC	No More Fakes, Proof-of-concept	Gabriele Lenzini	SnT (UL)	IS	194,600.00
POC	15301282	Nir Watchdog	Radu State	SnT (UL)	IS	199,700.00
POC	Microbiome	Microbiome For Biogas	Xavier Goux	LIST	SR	199,500.00
POC	SCALEM-POC	Scalem	Tomas Navarette	LIST	SR	50,000.00
POC	15333446	Managing Urban Spaces Together	Elie Daher	LIST	IS	199,800.00
POC	RISARX	Radiological Incident System Using Augmented Reality (Extended)	Roderick McCall	LIST	IS	200,000.00

ACTION	PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION
Pathfinder	PaCT	Privacy Policy Creation, Certification and Translation	Tomer Libal	UL	IS	22,000.00
Pathfinder	POPP-E	Parallel Organoid Perfusion Platform - Evaluation	Graham Robertson	UL	ВМ	47,000.00
Pathfinder	AssistAR	Assistance for Industrial Processes using Augmented Reality	Meysam Minoufekr	UL	MS	50,000.00
Pathfinder	ReMap	Radio wavE Motion cAPture	Bhavani Shankar	SnT (UL)	MS	40,000.00
Pathfinder	REDSAT	Real-Time Satellite Emulation Testbed	Juan Merlano Duncan	SnT (UL)	IS	36,800.00
Pathfinder	SolarMap	High resolution Solar photovoltaic potential Mapping across entire cities and regions	Ulrich Leopold	LIST	IS	26,300.00
Pathfinder	PEACE	Production of triterpene Extract from Apple CElls	Sylvain Legay	LIST	ВМ	26,410.00
Pathfinder	HASARD2020	Hierarchical tiling method for identifying a type of surface in a digital image	Marco Chini	LIST	IS	30,000.00
Pathfinder	RISAR	Real-time Incident Safety system using Augmented Reality	Roderick McCall	LIST	IS	31,420.00
TOTAL						309,930.00
POC	icomplai	Automated Gdpr Compliance Checking Of Documents And Processes	Tomer Libal	UL	IS	199,100.00
POC	inhibitPDE-RASv	Pde6d/ Kras Inhibitor Development For Cancer Treatment-v2	Daniel Abankwa	UL	ВМ	395,600.00
POC	AssistAR - PoC	Assistance For Industrial Processes Using Augmented Reality - Poc	Meysam Minoufekr	UL	MS	192,300.00
POC	NOFAKES-PoC	No More Fakes, Proof-of-concept	Gabriele Lenzini	SnT (UL)	IS	194,600.00
POC	15301282	Nir Watchdog	Radu State	SnT (UL)	IS	199,700.00
POC	Microbiome	Microbiome For Biogas	Xavier Goux	LIST	SR	199,500.00
POC	SCALEM-POC	Scalem	Tomas Navarette	LIST	SR	50,000.00
POC	15333446	Managing Urban Spaces Together	Elie Daher	LIST	IS	199,800.00
POC	RISARX	Radiological Incident System Using Augmented Reality (Extended)	Roderick McCall	LIST	IS	200,000.00

TOTAL

For a detailed summary of each project as well as other information, please refer to www.fnr.lu/jump

UL University of Luxembourg LCSB Luxembourg Centre for Systems Biomedicine SnT Interdisciplinary Centre for Security, Reliability and Trust LIH Luxembourg Institute of Health LIST Luxembourg Institute of Socio-Economic Research

IS Innovation in Services

BM Biomedical Sciences/Regulation of Chronic, Degenerative and Infectious Diseases

SC Societal Challenges (LM+ID) MS New Functional and Intelligent Materials and Surfaces and New Sensing Applications SR Sustainable Resource Management in Luxembourg

INDUSTRIAL FELLOWSHIP 2020

TYPE	NAME	PROJECT TITLE	PROJECT DOMAIN	HOST INSTITUTION	COLLABORATING INST.	FNR CONTRIBUTION
Postdoc	Yasir Hayat Nazeer	Resolving obstacles in high pressure fuel pump development process digitalization - realworld physics modelling of pressure wave, cavitation, and thermal hydraulics - DIRECT	UL	MS	Delphi Automotive Systems Luxembourg	143,208.00
Postdoc	Simone Grant	Integrated Design Systems - IDS	ASETS.LUX Sàrl	MS	Université du Luxembourg	143,458.00
Postdoc	Julian Krebs	Machine Learning Applications for Environmental Monitoring using Signalling Data from Satellite Network - MILAN	Databourg Systems Sàrl	SR	SnT	143,458.00
Postdoc	Patricia Martins Conde	Personalized risk stratification: an integrative machine learning approach - PREVENE	Megeno S.A.	ВМ	Université du Luxembourg	143,208.00
Postdoc	Mathilde Barbier	Towards the promotion of cognitive health among older people: A mixed methods research of people aged 65+ years in Luxembourg - PROCHEAL	UL	ID	ZithaSenior S.A.	143,458.00
Postdoc	Juergen Schleppi	Future Lunar EXploration ISRU BuiLt solar cElls - FLEXIBLE	Maana Elec- tric S.A.	MS	University of Technology Sydney	143,458.00
Postdoc	Arun Annaiyan	High level Understanding of 3D map Generation for autonomous navigation of cars -HUGE	SnT (UL)	IS	Solfice Research Sàrl	143,208.00
Postdoc	Ana Carolina Teixeira Santos	Mindfulness training on aging: the effects of mindfulness based-stress reduction in older Portuguese Immigrants residing in Luxembourg - MEDITAGING	UL	ID	ZithaSenior S.A.	143,958.00
Postdoc	Tindara Caprì	Social Empathetic Robot for Autism - SERA	LuxAI S.A.	ID	National Research Council of Italy	143,958.00
Postdoc	Vadim Gorski	Optimal Futures and Spot Trading of Renewable Power Production in Illiquid Markets - OPTIM	Quantego Sàrl	MT	Norwegian University of Science and Technology	143,458.00
Postdoc	Marco Proietto	Next Generation Enzyme Immo- bilization using Molecular Plasma Grafting - EnzlmmoPlas	UL	BM	Molecular Plasma Group	143,208.00
Postdoc	Bassem Hichri	Flexible Manipulation in Industrial Environment - Flex-Man	GCL International	MS	Université du Luxembourg	143,208.00
TOTAL						1,721,246.00
PhD	Clément Lacoste	Macroscopic Optimization of REturn LInk Carrier Allocation - RELICA	SnT	IS	SES Techchom S.A.	208,066.00
PhD	Martina Minestrini	Production of nutritional supple- ments using green extraction methods for the upcycling of brewery residues - BEO-FIT	LIST	SR	Université Catholique de Louvain	208,066.00
PhD	Leandro Masello	Risk Assessment and Data-driven Insurance Pricing Models for Automated and Connected Vehicles - RADICAL	Motion-S S.A.	IS	University of Limerick	208,066.00
PhD	Ahmed AbdelnaserM Eulsratyadeda	Radar Distributed Sensors for Indoor Imaging - RADII	SnT (UL)	IS	IEE S.A.	212,666.00
PhD	Henri Hoyez	Development and Evaluation of Deep Domain Mapping Solutions for Multivariate Time Series Applied to the Ironmaking Industry - DDMAI	Paul Wurth	MT	TU Kaiserslautern	212,666.00
PhD	Reinhard Leperlier	Development and Evaluation of a Reinforcement Learning Model as an Enabler for Autonomous Blast Furnace - AUBLAF	Paul Wurth	MT	TU Kaiserslautern	212,666.00

AFR PhD 2020

FIRST NAME	LAST NAME	HOST INSTITUTION	DOMAIN	PROJECT I TITLE	NR CONTRIBUTION
 Marthe 	Faber	University of Edinburgh	SR	Imaging Earth'S Interior With Seismic Gradiometry, Interferometry & Machine Learning	78,750.00
 Andreea- madalina 	Mezaros	LISER	SC	Gentrification In Luxembourg: Linking Social Changes To Property Wealth Inequalities	190,298.00
Ranfei	Wang	UL	MS	Characterization Of Flashing Phenomenon An Adiabatic Riser Pipe	190,298.00
Anne-marie	Staudt	Albert-Ludwigs University Freiburg	BM	Function Of Eid1 In Light-mediated Adaptation Of Plants To Environmental Changes	190,298.00
Pauline	Lascaux	University of Oxford	BM	The Role Of Autophagy In Reparing Chemotherapy-induced Dna Lesions In Cancer	78,250.00
Benjamin	De Bruyne	University of Paris	MS	Non-equilibrium Transport Properties Of Active Particles	190,298.00
Kevin	Bertrang	Technical University of Munich	MS	Activation Of Small Molecules On Supported Metal Clusters	190,298.00
Roland	Maas	LISER	SC	Social Suffering, 'Lifeworlds' And Agency Of Social Assistance Beneficiaries In Luxembourg	98,274.00
Claude	Ewert	University of Cambridge	SC	Ec-ussr Relations (1973-1991)	85,366.67
Charlotte	Stix	Eindhoven University of Technology	SC	Ethical Theory For Ai Policy	63,250.00
 Henriette 	Heimbach	UL	SC	A New Form Of Interparliamentary Cooperation – An Analysis Of The Establishment Of The Franco-german Parliamentary Assembly	190,548.00
Reynaldo	Gil Pons	UL	IS	Remote Memory Attestation And Erasure Through Formal Verification	190,298.00
Shubhra	Acharya	LIH	BM	Long Noncoding Rnas In Tissue Repair	190,548.00
Dave	Lutgen	University of Bern	BM	Genomics Of Hybridization, Speciation And Phenotypic Evolution In A Color Polymorphic Songbird Radiation	A 190,298.00
Félix	Streicher	University of Maastricht	SC	The Forgotten Occupation. Everyday Life And Social Interactions In Th Luxembourgish Occupation Zone In Germany (1945–1955)	<i>ne</i> 190,298.00
 Chrysova- lantou 	Kalaitzidou	UL	MS	Data-integrated Multiscale Modelling Of Fibrous Extracellular Matrix Materials	190,298.00
 Björn 	Pfund	University of Basel	MS	Development Of Organic Photosensitizers For Visible-light Driven Bird Reductions	<i>h</i> 190,298.00
• Dominika	Klimek	LIST	BM	Boosting Industrial Biomass Degradation: Exploration Of Hidden Lignocellulolytic Potential Of Planctomycetes	190,298.00
 Daniel 	Sampaio Gonçalves	CERBM	BM	Investigating Novel Mediators Of Cellular Senescence And Tumor Suppression	190,298.00
Salijona	Dyrmishi	UL	IS	Search-based Adversarial Testing Under Domain-specific Constraints	191,048.00
Enmanuel	Rodriguez Paulino	LIST	SR	Using Multi-sensor Remote Sensing Data And Deep Learning Methods To Disentangle Causes Of Forest Vitality Loss	190,298.00
Mila	Hall	Justus-Liebig- University Giessen	SC	Personalized Assessment And Network Model Feedback: An Empirically-based Approach To Personalizing Psychotherapy	178,295.00
Abdoul Kader	Kaboré	UL	IS	Neural Vulnerable Program Repair	190,298.00
• Tobi	Oladiran	UL	LE	The Sustainability Challenge Of Mutual Funds	190,298.00
 Gregory 	Cordeiro Fonseca	UL	MS	Machine Learning Global Potential Energy Surfaces Using Local Symmetries	190,298.00
Jordan	Samhi	UL	IS	Dissecting Android Applications Using Static Analysis	190,298.00
Tedros Salih	Abdu	UL	IS	Power And Bandwidth Allocation For Interference-limited Satellite Communication Systems	190,298.00
Delfine	D'huart	University of Basel	BM	Stability Of Personality Disorder Diagnoses From Adolescence To Adulthood	190,298.00
• Max	Thomé	University of Strasbourg	SC	Social And Cultural History Of Wine Consumption In Roman Italy (3rd Century Bce - 3rd Century Ce)	190,298.00
Jules	Linden	LISER	SC	Assessing The Impact Of Environmental Policy On Consumption Behavior Greehouse Gas Emissions And Income Distribution	; 190,298.00
Christie	Palmer	LIH	BM	Multidimensional Regulation Of The Opioid Network By Ackr3	190,298.00
TOTAL					5,340,885.67

For a detailed summary of each project as well as other information, please refer to www.fnr.lu/afr

🧚 PSP 2020

DESCRIPTION		SOCIETE	FNR CONTRIBUTION IN EUR
🕨 ARCS – Äerdschëff Regenerative & Circular Science	SC	CELL Center for	430,200.00
Indiana Jos	SC	ELISABETHANNEAS	400,000.00
TOTAL			830,200.00
Makerkoffer	SC	Serv. Nat. Jeun.	35,000.00
• Gender4STEM in action. Get more girls into STEM thanks to the Gender4STEM platform in Luxembourg	SC	Women in Digita	27,366.00
FIRST Global Robotics Challenge 2020	MS	Makeit asbl	11,750.00
Flanders Marine Institute Field Trip with Odyssea	SR	Odyssea a.s.b.l	2,150.00
Kuck elei! Digital Mikroskope fir Léierpersonal	SC	UL	11,100.00
Energy Balance	SR	UL	21,475.00
Les cafés-débat "LISER AFTERWORKS"	SC	LISER	27,850.00
Ökologische Exkursion auf Norderney	SC	ATERT LYCÉE RED	5,500.00
Musée Tudor - E-Mobilität	MS	LES AMIS DU MUS	37,500.00
LGE-CSI: Esch, Cool Science Investigations - 3rd Edition	SC	LGL	14,970.00
Förderung des Raumdenkens - Wahrnehmen - Gestalten - Wissen teilen	SC	Marion Zenner	12,200.00
Digital life skills, coding and logical thinking workshop for kids ages 4-6 ages 7-10 and ages 11-13	SC	Kids Life Skill	25,000.00
Imaginarium: science and youth for futures	SC	Art Square Luxe	31,820.00
Computer Science: Learn at your own pace	SC	Workshop4me asb	46,552.00
Trifolion Echternach Workshops	SC	Trifolion Echte	6,124.00
LUX:Plorations	SC	UL	39,728.00
Machine Learning & Arts: The Smart Photo Booth	SC	UL	40,730.00
Science Slam	SC	LUXDOC ASBL	4,000.00
Séjour scientifique en Normandie	SC	PARASCOLAIRES F	5,000.00
Wanderausstellung "Mensch Fliege"	SC	PARC NATUREL DE	42,500.00
Pillars of Life	SC	GROUSSGASMASCH	49,097.00
Freilandexkursion: Erkennen von ökologischen Zusammenhängen anhand der Untersuchung verschiedener Ökosysteme auf der Insel Norderney im niedersäch- sischen Wattenmeer	SC	LT ETTELBRUCK	6,100.00

IPBG 2020

PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION
INSTRUCT	Integrated Satellite-Terrestrial Systems for Ubiq uitous Beyond 5G Communications	- Symeon Chatzinotas	SnT (UL)	IS	2,331,149.50
• C21	COLLABORATION 21 - Leveraging technolog for enhanced collaborative work and learning experiences	<i>ies</i> Vincent Koenig	UL	IS	2,006,494.00
TOTAL					4,337,643.50

MATCHING FOUNDED 2020

PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION IN EUR
 MelCol_PFP 	Personal functional profiling for drug discovery in melanoma and colorectal cancer	Elisabeth Letellier	UL	BM	200,000.00
TOTAL					200,000.00

PRIDE 2020

PROJECT ACRONYM	PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION IN EUR
• 3E	Experiments, Ethics and Economics	Marc Suhrcke	LISER	SC	1,620,884.00
• ACROSS 1	Analysis of CROSS-border human mobility	Frédéric Docquier	LISER	SC	2,052,980.00
ACTIVE	Active phenomena across scales in biological systems	Massimiliano Esposito	UL	ВМ	2,439,576.00
• DILLAN	DIgitaLisation Law And INnovation	Herwig Hofmann	UL	IS	3,055,720.00
• i2TRON	Integrating immune strategies for Translational Research in Oncology and Neurology	Rejko Krüger	LIH	BM	3,274,768.00
TOTAL					12,443,928.00

UL University of Luxembourg LCSB Luxembourg Centre for Systems Biomedicine SnT Interdisciplinary Centre for Security, Reliability and Trust LIH Luxembourg Institute of Health LIST Luxembourg Institute of Science and Technology LISER Luxembourg Institute of Socio-Economic Research

BM Biomedical Sciences/Regulation of Chronic, Degenerative and Infectious Diseases IS Innovation in Services SC Societal Challenges (LM+ID) MS New Functional and Intelligent Materials and Surfaces and New Sensing Applications SR Sustainable Resource Management in Luxembourg

COVID 2020

PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION
• An Agent-based Model Of Covid-19 In Luxembourg	James Thompson	UL	MT	50,000.00
• A Control Tower For The Early Identification Of Distress In Logistics Networks And Essential Supply Chains	Eric Dubois	LIST	IS	80,000.00
Ai Based Diagnosis Of Covid-19 From Ct/X-ray Imaging	Andreas Husch	UL	BM	49,115.00
Support In Luxembourg For App-based Contact Tracing Of Covid-19	Cesare Riillo	STATEC	LE	20,000.00
Covid-19 Detection By Cough And Voice Analysis	Muhannad Ismael	UL	IS	80,000.00
Coalition for Epidemic Preparedness Innovations		CEPI	BM	800,000.00
Comparative Antiviral Efficacy Of Different Autophagy Inhibitors Against Covid-19	Muhammad Zaeem Noman	LIH	BM	45,020.00
Multi-omics Evaluation Of Microbial Co-infection As Marker Of Covid-19 Severity	Paul Wilmes	UL	BM	50,000.00
Covid19 Literature Browser For Scientific Investigations	Mohammad Ghoniem	LIST	IS	79,214.00
Role Of Companion And Livestock Animals In The Epidemiology Of Sars-cov-2 (Colive)	Chantal Snoeck	LIH	ВМ	48,918.00
Covid-19, Mental Health, Resilience And Self-regulation	Claus Vögele	UL	SC	50,000.00
History In The Making: #Covidmemory	Stefan Krebs	UL	SC	44,397.00
Comparing The Technical Performances Of Three Real-time Pcrs To Counteract The Covid-19 Outbreak In Luxembourg	Carole Devaux	LIH	BM	78,899.00
Covid-19 National survey for assessing Viral spread by Non- affected CarriErs	Rejko Krüger	LIH	BM	1,416,273.00
Phylodynamic Real-time Monitoring Of Sars-cov-2 Genomes In Luxembourg	Patrick May	UL	BM	35,879.00
The Value Of Sewage Surveillance To Provide New Insights On The Circulation Of Sars-cov-2 And To Reveal The True Extent Of The Coronavirus Pandemic At The National Scale	Leslie Ogorzaly	LIST	BM	80,000.00
Coronavirus Antigen Array For Parallelized Serological Profiling	Joseph Longworth	LIH	BM	23,571.00
Nonperforming Morgage Loans In Luxembourg And The Eu After Covid-19	Christos Koulovatianos	UL	LE	49,970.00
The Role Of The Environment And Human Behavior In Transmission And Severity Of Covid-19	Hichem Omrani	LISER	SR	50,000.00
Development Of A High Performance Covid-19 Immunoassay, An Essential Tool To Establish Immunity Passports In The Luxembourgish Population	Christiane Hilger	LIH	BM	50,000.00
Covid19 Literature Bio-curation, Text-mining And Semantic Web Technologies	Reinhard Schneider	UL	ВМ	42,299.00
Combined In Silico Molecular Docking And In Vitro Experimental Assessment Of Drug Repurposing Candidates For Covid-19	Enrico Glaab	UL	ВМ	70,040.00
Early Detection Of Covid19-induced Tissue Damage And (Hyper) Inflammation From Serum Samples	Gunnar Dittmar	LIH	BM	79,971.00
Correlates Of Resilience In The Context Of Social Isolation In Seniors	Isabelle Astrid Albert	UL	SC	49,164.00
COVID-19 Therapeutics Accelerated	Nick Cammack	WELLCOME TRUST	BM	800,000.00
Deep Mining With The Covid-19 Data Warehouse	Christoph Schommer	UL	IS	21,149.00
Digital Upskilling In A Telework Environment	Ludivine Martin	LISER	LE	37,555.00
An Experimental Test Of Hospital Admission Guidelines	Francesco Fallucchi	LISER	LE	27,038.00
Family Response And Well-being Effects Of Covid-19	Eugenio Peluso	LISER	SC	73,182.00
Functional Characterization Of Covid-19 Patient Gut Microbiome	Mahesh Desai	LIH	BM	50,000.00
Using Historical Knowledge Graphs To Materialize And Visualize Corona Viruses Knowledge Evolution	Cedric Pruski	LIST	IS	53,542.00
Hormonal Status As Predictor Of Covid-19 Infection Severity	Brice Appenzeller	LIH	BM	49,973.00
Legally Fighting Covid-19	Elise Poillot	UL	LE	49,878.00

PROJECT TITLE	PRINCIPAL INVESTIGATOR	HOST INSTITUTION	DOMAIN	FNR CONTRIBUTION
Microrna Biomarkers Of Covid-19 Severity	Yvan Devaux	LIH	BM	50,000.0
Modeling The Macroeconomic And Distributional E¿Ects Of Covid-19 And Restarting Scenarios	Frederic Docquier	LISER	LE	61,788.0
A Novel High Throughput Assay To Measure Plasma Neutralizing Activity Against Sars-cov-2 Against Sars-cov-2	Danielle Perez Bercoff	LIH	BM	50,000.0
Information Diffusion In Twitter During The Covid-19 Pandemic: The Case Of The Greater Region	Jun Pang	SnT (UL)	IS	21,858.0
Privacy Preserving Monitoring Of Social Distancing In Public Environments	Raphael Frank	SnT (UL)	IS	49,299.0
Pandemic Simulation And Forecasting For An Empowered Policy-making: Convergence Of Machine Learning And Epidemiological Models	Yves Le Traon	SnT (UL)	IS	48,456.0
Pocket Rehab - Mhealth-based Rehabilitation Program For Patients With Cardiovascular Disease As Prevention And Treatment Strategy For Covid-19 Victims: An International Collaborative Multicentre Research Trial	Jorge Augusto Meira	SnT (UL)	IS	47,801.0
• Luxembourg cohort of positive patients for COVID-19: a stratification study to predict patient prognosis	Guy Fagherazzi	LIH	BM	1,852,937.0
Preferences Expressed Through Twitter	Francesco Sarracino	STATEC	SC	50,000.0
Short, Mid-term And Exit Strategies Predictions Of The Covid-19 Epidemic In Luxembourg	Jorge Gonçalves	UL	IS	50,000.0
Protection Against Infection Through Regulatory Law	Stefan Braum	UL	LE	30,000.0
Peptide / Protein /Single-cell Map Of The Renin-angiotensin System In Covid-19	Antonio Cosma	LIH	BM	36,000.0
Rapid Development And Initial Preclinical Evaluation Of An Effective Candidate Vaccine Against Sars-cov-2	Markus Ollert	LIH	BM	50,000.0
Machine Learning To The Rescue: From Health Recovery To Economic Revival	Jacques Klein	SnT (UL)	IS	79,735.0
Socio-economic Impacts Of Covid-19: Collecting The Data	Martin Dijst	LISER	SC	49,918.0
Facilitating Optimal Containment And Exit Strategies With Minimal Disclosure Access Control And Tracking	Peter Y. A. Ryan	SnT (UL)	IS	49,285.0
Leveraging Systems Biology To Target Hyperinflammation In Critically-ill Covid-19 Patients	Antonio Del Sol Mesa	UL	BM	50,000.0
Towards An Integrated Geospatial Pandemic Response System	Ulrich Leopold	LIST	SR	77,390.0
• A Unified Web-based Platform For Viral Phylogeny, Proteomics And Genomics Research In Real-time	Aymeric Fouquier d'Herouel	UL	ВМ	39,475.0
Enabling Technologies For Rapid, Label-free, Detection Of Covid-19 Infections	Sivashankar Krishnamoorthy	LIST	MS	80,000.0
Virus-surface Interactions In Dynamic Environments	Anupam Sengupta	UL	MS	50,000.0
Young People And Covid-19 (Yac) - Social, Economic, And Health Consequences Of Infection Prevention And Control Measures For Young People In Luxembourg	Robin Samuel	UL	SC	50,000.0

UL University of Luxembourg LCSB Luxembourg Centre for Systems Biomedicine SnT Interdisciplinary Centre for Security, Reliability and Trust LIH Luxembourg Institute of Health LIST Luxembourg Institute of Science and Technology LISER Luxembourg Institute of Socio-Economic Research

IS Innovation in Services

BM Biomedical Sciences/Regulation of Chronic, Degenerative and Infectious Diseases

SC Societal Challenges (LM+ID) MS New Functional and Intelligent Materials and Surfaces and New Sensing Applications SR Sustainable Resource Management in Luxembourg

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ORGANISATION

The FNR is a public institution created by statute (Law of 31 May, 1999) and enjoys legal capacity and full administrative and financial autonomy. Our overall strategy is laid down in a four-year contract with the Luxembourg Government, which also defines our budget appropriation.

THE BOARD

Our Board supervises the organisation and approves the overall policies and strategic priorities of the FNR. It is appointed by the government and is composed of nine independent directors active in industry, business and the civil society. The members of the Board act in full autonomy.

Chair

Martine REICHERTS, Head of the Directorate - General for Education and Culture (2015-2018). Member of the board of Directors of the Banque Centrale de Luxembourg.

Vice-Chair

Thierry WOLTER, Member of the Executive Board and the Supervisory Board of CERATIZIT



BOARD

from left to right: Isabelle Schlesser, Richard Sedrani, Jean-Marc Fandel (sitting), Anouck Hilger, Stéphanie Damgé (sitting), Nadine C Martin (sitting), Marc Schiltz (Secretary General), Thierry Wolter (Vice Chairman of the Board, sitting), Martine Reicherts (Chair of the Board), Romain Martin (Government Commissioner, sitting), Yves Fromes. Not in the picture: Tania Brugnoni

Members

Anouk HILGER, Head of Renewable Energies at Enovos Luxembourg S.A.

- *Richard SEDRANI*, Executive Director at the Novartis Institutes for BioMedical Research (Basel, Switzerland)
- *Yves FROMES*, Professor and associate researcher at the Paris Institute of Myology
- *Jean-Marc FANDEL*, Board and C-level Advisor, Meraki Management SARL
- Isabelle SCHLESSER, Director ADEM
- *Stéphanie DAMGÉ*, Director Jonk Entrepreneur Luxembourg asbl
- Tania BRUGNONI, Director 1535° Creative Hub
- Ex-officio (non-voting) members
- Marc SCHILTZ, Secretary General of the FNR
- *Romain MARTIN*, Government Commissioner (since 04/19)
- Nadine C. MARTIN, Chair of the Scientific Council of the FNR

THE SCIENTIFIC COUNCIL

Our Scientific Council acts as an advisory body to the FNR. Appointed by the Government, it is composed of international experts. The current Scientific Council was appointed by ministerial decree in June 2015.

Chair

Nadine C. MARTIN, Siten-insel AG (Switzerland)

Vice-Chair Mrs Gabriele DOBENECKER, Empa, Dübendorf (Switzerland)

Members

Yves COCARD, Universities of Berne and Lucerne, Switzerland

Patrycja PARUCH, University of Geneva, Switzerland

Burckhard STILLER, University of Zurich, Switzerland

Nicolas GENGLER, University of Liege, Belgium

Rachel CHAMBERS, University College London, Great Britain

Jane ELLIOTT, University of Exeter, Great Britain

Georges THIELEN, Goodyear Innovation Center, Luxembourg

EXECUTIVE OFFICE

The Secretary General of the FNR is the chief executive of the organisation. He heads the Executive Office, implements the strategy, oversees programme development and manages all running activities. He is appointed by the Board of the FNR, subject to approval from the Government. The Executive Office is composed of more than 31 committed collaborators, who are experienced and highly-qualified professionals with a strong track record in science and research management or in the field of science communication.

Florencia BALBASTRO

Programme Manager



Jean-Paul BERTEMES Head of Unit – Science in Society



Didier GOOSSENS Head of Corporate



Patricia DRIMEYER

Programme Support

Manager



Communication

Sylvie KRIER Executive Assistant to the CEO

Cindy LOPES-BENTO Head of Science of Science and Innovation Policy





Sandra NITTEL Ionut PERES, Head of IT Administrative Assistant





Marc ROCK, Head of Finance & General Administration



Dr Marc SCHILTZ Secretary General, Executive Head of the FNR



Dr Richard NAKATH

Programme Manager

Susanne RICK

Programme Manager



Hélène JACUSZIN Marketing & Communication Coordinator for Research Luxembourg

Michele WEBER PhD. Science Communicator















Olivier BUCHHEIT Digital Transformation

Manager

Manager



Emilv IVERSEN Digital Communication



Marie-Claude MARX PhD, Programme Manager



Susana PINTO, HR, Finance and Quality Support Manager



Joseph RODESCH Science Communicator





Dr Helena BURG Head of International Relations



Tom IAKOBS Head of Data Management and Digital Transformation



Dr Andreea MONNAT Deputy Chief Executive Officer



Sonia RAMOS Communication & Event Manager



Asaël ROUBY Programme Manager



Dr Sakthivel SUNDHARAM Programme Manager



Angelina CLEMENS Programme Support Manager



Christiane KAELL Head of Research Programmes



Jill MOUSEL General Admin & Programme Support Manager



Melanie REUTER Science Communication Support Manager



Sean SAPCARIU PhD, Programme Manager



Linda WAMPACH Programme Manager & Science Communicator

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