

LNS ANNUAL REPORT

Editorial

Dear readers,

As we present our Annual Report for 2023, we look back on a year of significant transformation for our national diagnostic laboratory. In a landscape of evolving challenges and opportunities, our commitment to public health has remained our guiding light.

Throughout this year of change, our institution has reimagined its operational approach and initiated transformative efforts, led by our board's governance. Our institution fortified its structure through the strengthening of its teams and the creation of new support and leadership positions. To further enhance our operational efficiency, we initiated several accreditation processes and implemented automation and digitalization into our workflows. These initiatives are centered around our primary goal of better serving our patients, and the population of Luxembourg.

The most precious asset of the LNS remains our dedicated staff and we would like to thank them for their dedication during these important months. Your hard work, collaboration, and belief in our mission have been instrumental in navigating this year of transition. We would also like to extend our sincere gratitude to our partners who help us to complete our mission. Further, we take this opportunity to extend heartfelt thanks to Prof. Dr. Evelin Schröck, for her strong commitment during her four-year tenure as Chair of our institution's Board of Directors.

While 2023 represented a transition year with the first success stories, we keep building together a stronger foundation for innovative diagnostics, impactful public health initiatives, groundbreaking research and comprehensive education.



Ms Safaâ Moujahid
Chief Financial and
Administrative Officer, Deputy
Director



Dr Thomas Dentzer
Chief Operating Officer,
Deputy Director



Dr Jean-Claude Schmit
Vice-President of the Board of
Directors

LNS ANNUAL REPORT

Our journey in 2023

LEGAL MEDICINE

Start of the wastewater analysis in 3 stations and participation in the European network SCORE

NATIONAL CENTER OF PATHOLOGY

Establishment of a multi stainer platform for the combination of immunohistochemical and immunofluorescent stainings

MANAGEMENT

Strengthening of the LNS Management Team with the appointments of Dr Thomas Dentzer as COO and Ms Safaâ Moujahid as CFAO

MICROBIOLOGY

Accreditation of the Service Pathogen Sequencing for HIV and SARS-CoV-2 sequencing by the OLAS which encompasses diagnostics and surveillance, supports treatment and transmission reduction and contributes to pandemic preparedness

JANUARY

FEBRUARY

CORPORATE

Signature of the first collective bargaining agreement at LNS

NATIONAL CENTER OF GENETICS

Start of an ambitious accreditation plan for laboratory services aiming to have >50% of laboratory activity accredited by end of 2024

NATIONAL CENTER OF PATHOLOGY

Recognition of the NCP as a full spectrum (6 years) training Center in Pathology by the Ärztekammer Saarland

April

MEDICAL BIOLOGY

Final audit of the National Plan for Rare Diseases 1 (Plan National Maladies Rares - PNMR 1)

HEALTH PROTECTION

Human Biological Monitoring becomes expertise domain with own MD-biologist

NATIONAL CENTER OF GENETICS

First diagnostic trio exome sequencing performed locally

NATIONAL CENTER OF GENETICS

Implementation with NCP of an in-house method for comprehensive genomic testing of solid tumors, for the discussion of late stage cancer patients in molecular tumor boards

LEGAL MEDICINE

Umedo Symposium - 5 years of umedo unit

May

June

September

October

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Key Figures



93.587

analyses performed
over the year



5475

analyses in microbiology
of the built environment

Medical biology

Health Protection



36.816

antimicrobial
resistance analyses



2885

toxicological hair analyses

Microbiology

Legal Medicine



74.676

immunohistochemical
analyses



10.529

constitutional genetics
analyses

National Center of Pathology

National Center of Genetics

LNS ANNUAL REPORT

Highlights in 2023

Highlight N°1

Implementation of the first LNS Collective Bargaining Agreement

In 2023, the LNS Human Resources Service played a key role in the implementation of the first collective bargaining agreement at LNS, as well as in the drafting of new salary regulations specifically for medical specialists and pharmacist-biologists. The aim of this ambitious project was to structure and improve the working conditions of our private employees, by providing them with a clear and fair framework.

A major project carried out in several key stages

The first phase of the project involved finalising, together with staff representatives, the salary grids and classifying our functions. All employees were then individually repositioned on the new grid corresponding to their function. This process was carried out rigorously to ensure a smooth and equitable transition, guaranteeing each employee a minimum salary increase of 2%.

The second phase of the project involved recalculating the salaries of the 300 employees concerned over a period running from January to June 2023, enabling the new contractual remuneration to be applied retroactively. This operation resulted in the issue of 3,300 pay slips, reflecting the necessary adjustments. Transparent, individual communication with each employee enabled this stage to be completed smoothly and efficiently.

Finally, all the new benefits defined by the agreement were implemented, including meal vouchers, the one-off bonus, the responsibility bonus, holiday pay and additional days' leave, and are finally reflected in new model employment contracts.

Thanks to rigorous teamwork and effective collaboration, we have succeeded in introducing better working conditions and a more structured working environment, with the ultimate aim of strengthening our corporate culture based on the well-being and motivation of our employees.

Staff Involved

Fournier Lucile, Head of HR

Jeanmaire Céline, Senior payroll officer

Fiorino Valentina, HR Business partner

"The completion of this major project was made possible by the determination and sustained efforts of the HR team. This collective success marks an important step in our commitment to offering fair and motivating working conditions to all our employees."

Lucile Fournier, Head of HR

LNS ANNUAL REPORT

Highlights in 2023

Highlight N°2

5 years of umedo: LNS and cooperation partners took stock of the progress made with a round table event in 2023

The Laboratoire national de santé (LNS) has been offering the umedo service (umedo.lu) since 2018. umedo is aimed at helping adult victims of physical and/or sexual violence who have their case documented but do not initially want to file a complaint. LNS, the cooperation partners involved in the project, as well as victims aid organisations took stock of the first 5 years and analysed the situation on 18 October 2023 on the occasion of a round table event.

A team of trained doctors

umedo offers victims of violence the opportunity to be examined at LNS or at one of the cooperating hospitals via an appointment and to have the traces of the respective physical assault documented and stored for a period of up to 10 years. These can be visible injuries, but also biological traces, for example. To ensure the best possible care for victims of violence, the umedo team is composed of trained doctors who have specific experience in these types of injuries and in dealing with victims of violence.

Encouraging action as the goal

Dr Martine Schaul, Head of Forensic Medicine Service and responsible for umedo at LNS, sees the service as an opportunity to encourage victims to take a first step out of the spiral of violence: "In Luxembourg, too, physical violence is an issue that often takes place in secret. Many victims of violence still hesitate to file a complaint. With umedo, we offer them access to help that initially has no legal consequences. Only when the victim explicitly requests it, his or her file is forwarded to the judiciary. Until then, people at least know that their case is documented and can be retrieved at any time of their own free will. This gives many people the courage to take appropriate steps against the perpetrators at any time".

Legal action as a possibility

The number of people who ultimately have the courage to take legal action is still rather low, as PD Dr Thorsten Schwark, Head of Forensic Medicine Department at LNS, emphasises: "In only about 20% of all cases are the relevant documents ultimately requested by the victim. This shows that we are still dealing with a subject that is a taboo in our societies, which shows even more the need for the umedo concept. With umedo, we create an objective basis for possible legal steps, which, however, are not mandatory. Thus, we give the victim the chance to take legal action, if that is the preferred option, and the feeling that she/he can find her/his own way out of the spiral of violence."

Staff Involved

PD Dr Thorsten Schwark, Head of Forensic Medicine Department

Dr Martine Schaul, Head of Forensic Medicine Service

"Many victims of violence still hesitate to file a complaint. With umedo, we offer them access to help that initially has no legal consequences."

Dr Martine Schaul, Head of Forensic Medicine Service

LNS ANNUAL REPORT

Highlights in 2023

Highlight N°3

Towards an optimized and efficient organization in Medical Biology

The LNS Medical Biology Department performs a great array of over 1000 different tests spanning various specialties, including biochemistry, hormonology, medical toxicology, and allergology. Interactions with a wide range of stakeholders require optimal responsiveness and a robust structure to support this diversity. That is why, a new organization was proposed to and approved by the LNS Board of Directors in 2023.

With the constant expansion of the test menu, better organization is essential for improved decision-making and increased efficiency.

In order to enable the department to keep pace with its evolution, marked by the ongoing development of separative methods (UPLC, LC-MS/MS, GC-MS) and a growing demand for medical toxicology, the department has been divided into two services:

- Newborn Screening and Inborn Errors of Metabolism (NBSIEM) Service: Accounting for 40% of the department's analyses, this service is responsible for the national newborn screening program for all of Luxembourg.
- Pharmacology and Hormonology (PH) Service: Representing 60% of the analyses, it is responsible for Luxembourg's only medical toxicology service.

The Central Reception, operating transversally for medical services, remains under the department's responsibility.

Modernized and balanced management

The creation of services within the department strengthens the management structure, reducing the risk associated with reliance on the department head. Dr Patricia Borde declares: "This new structure also provides medical biologists with opportunities to develop their leadership skills and acknowledges their daily efforts in managing the entire workflow—from the pre-analytical phase to results and coordination of activities."

Team reinforcement and continuous development

By adopting this new organizational structure, the Medical Biology Department is preparing to meet future challenges and maintain its leadership position in the field. The plan also includes reinforcing the team in 2024 with the addition of a scientist to support the expansion of newborn screening. This new team member will play a crucial role in developing numerous innovative projects.

Staff Involved

Dr Borde Patricia, Head of Medical Biology Department

Dr Kebbabi Clément, Head of Pharmacology-Hormonology Service

"I am very pleased to have been able to secure the re-organisation of our department, which will give greater visibility to our various activities, both within LNS and in relation to our stakeholders."

Dr Patricia Borde, Head of Medical Biology Department

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Highlights in 2023

Highlight N°4

Better protect human health through PARC program

The LNS Health Protection Department drives the Luxembourgish contribution to allow new orientations in European regulatory policies that safeguard our health and the environment.

Safety and protection of Luxembourg citizens from chemical exposure is governed by European chemicals policy, comprising a diverse set of legislation assessing and managing chemicals in the environment, in consumer products, in food and at the workplace. The LNS Health Protection Department is driving forward the contribution of Luxembourg in the European Partnership for the Assessment of Risks from Chemicals (PARC). As such, the Department is highly committed to integration of new science in chemicals policy and risk assessment that accelerate actions to better protect human health and the environment.

European Partnership for the Assessment of Risks from Chemicals (PARC)

PARC supports the implementation of the European Union's Chemicals Strategy for Sustainability in line with the European Green Deal's "Zero pollution" ambition for a toxic free environment. It is a 7-year science-policy partnership of unprecedented scale to address current, emerging and novel chemical safety challenges and enabling the transition to the Next Generation Risk Assessment. Overall, close to 200 institutions are working in the areas of public health or environment from 29 countries.

PARC is governed by five Directorates-General of the European Commission (DG-RTD, DG-GROW, DG-ENV, DG-SANTE and JRC) and the relevant ministries of the countries involved. Partners include the European agencies responsible for implementing European chemicals policies, i.e. the European Chemical Agency (ECHA), the European Food Safety Authority (EFSA) and the European Environment Agency (EEA), furthermore the national institutes in charge of regulatory servicing, and research organisations including universities and public research institutes.

For Luxembourg, LNS has been assigned as Grant Signatory and National Hub Contact Point by the Ministère de la Santé et de la Sécurité sociale. As Grant Signatory, LNS has onboarded the Luxembourg Institute of Health (LIH), the University of Luxembourg and the Luxembourg Institute of Science and Technology (LIST) as affiliated research organizations. As National Hub Contact Point, LNS is ensuring the coordination and exchange within the Member State, including the communication to the different administrations working in the domain of chemicals regulation in environment, soil, water, and food.

Aggregated exposure assessment: one of the cornerstones in Next Generation Risk Assessment

On 23 and 24 May 2023, the LNS Health Protection Department has welcomed part of the PARC consortium at its premises for a 2-day workshop on aggregated exposure. The topic is one of the spear points of PARC and implies the collaboration of nearly 30 European partners.

Chemical risk assessment has focused historically on risks coming from a single source of a chemical, like diet. However, individuals' exposures to a chemical may occur from multiple sources (i.e. environment, diet and consumer products), by different routes of exposure (i.e. inhalation, ingestion and dermal), and at different times and locations (e.g. general life or work environment).

"Our lifestyles mean that we are constantly being exposed to chemicals, but the risks associated with the aggregation and combination of chemicals- emanating from several sources - in our environment are poorly understood", explains Dr Ruth Moeller, senior project manager of PARC.

As part of the "One substance, one assessment" principle, we will study in PARC the aggregated exposure to plasticisers, including phthalates and their substitutes (e.g. adipates, citrates, and trimellitates). Plasticizers can be emitted continuously or intermittently from building materials, furniture, and consumer products (e.g., cosmetics, food contact materials, toys, and detergents), but can also be widely present in the outdoor or working environment (e.g. from waste management or construction sector). Thus, assessing the overall exposure will allow a better evaluation of the actual risk of the exposure to phthalates and their substitutes. These results will allow the European agencies to further strengthen the European chemicals policies for a better protection of the EU population.

Staff Involved

Dr Moeller Ruth, Senior Project Manager

"Our lifestyles mean that we are constantly being exposed to chemicals, but the risks associated with the aggregation and combination of chemicals- emanating from several sources - in our environment are poorly understood. It is particularly exciting to be part of the journey towards better anticipation of emerging risks in order to better and brighter protect our health and the environment."

Dr Ruth Moeller, Senior Project Manager

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Highlights in 2023

Highlight N°5

Unveiling Insights into Carbapenem-Resistant Bacteria Surveillance

In the fight against antimicrobial resistance, carbapenemase-producing enterobacterales (CPE) pose a challenge. These bacteria have developed resistance to a broad spectrum of antibiotics, including carbapenems, which are essential antibiotics in the treatment of serious infections. This fact is a major public health concern. Of particular concern is their rapid transmission potential in the healthcare sector. A national surveillance system has been in operation in Luxembourg since 2014. Since then, suspicious strains have been forwarded to the Laboratoire national de santé (LNS), which is recognised as an expert in carbapenemase detection by PCR and extended characterisation by whole genome sequencing. In 2023, the LNS Microbiology Department provided an insight into the development of CPE isolates in Luxembourg since 2014.

A comprehensive analysis of the data collected between 2014 and 2022 sheds light on the evolution of CPE surveillance in Luxembourg. Presented at the interdisciplinary conference on anti-infective chemotherapy (RICAI) on 16 and 17 December 2023 in Paris, this analysis carried out by four members of the LNS Microbiology Department underlines the importance of vigilant surveillance in a context of changing trends.

Trends in CPE isolates

From 2014 to 2022, of the 962 strains analysed, 188 were identified as carbapenemase producers, of which 165 individual patients were affected (with 22 patients having several different strains). The detection of CPE in Luxembourg increased from 14 cases in 2014 to 47 cases in 2022, reflecting the increased screening efforts. Despite this increase, the positivity rate among the strains tested remained relatively constant at around 25% throughout the eight-year period.

Emerging patterns

Significant shifts were observed in the distribution of carbapenemase variants between species and over the years. In particular, the presence of NDM increased from 8% to 34% between 2021 and 2022, with 16 NDM-positive strains identified in 2022. In addition, *K. pneumoniae* strains carrying both OXA-48 and NDM were detected in wound, urine and anorectal samples during this period.

Implications for surveillance and control

This groundbreaking epidemiological study on carbapenemase-producing Enterobacterales highlights the importance of continuous surveillance and strict infection control protocols to contain the spread of multidrug-resistant organisms. Understanding the evolving epidemiology of CPE is essential for the development of targeted interventions. By staying ahead of emerging trends and taking proactive measures, the LNS Microbiology Department aims to protect public health and combat the threat of antimicrobial resistance.

Staff Involved

Dr Perrin Monique, Head of Bacteriology Service
Lagneaux Anne-Sophie, Medical biologist
Khonyongwa Kirstin, Epidemiologist
Meo Marie, Scientific expert

"This first official communication is the culmination of 8 years of monitoring conducted by LNS as an Expert Laboratory in the field of antibiotic resistance. This topic was particularly important to us because it is a current issue and the published data will be useful to a wide range of healthcare professionals."

Dr Perrin Monique, Head of Bacteriology Service

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Our 6 fields of expertise

Health Protection

The Health Protection Department supports public health and health care for problems caused or aggravated by the environment, including indoor pollution, the working context, consumer products and food.

We fulfill this mission through servicing including expert advice, education and applied research. Our main stakeholders are the ministries, the hospitals and the services for occupational medicine in Luxembourg.

Key figures 2023

84,462 Food monitoring analyses
62,230 Chemical analyses of indoor pollution
30,779 Human biological monitoring analyses
5,475 Analyses in microbiology of the built environment



Meet our scientists

"In 2023, we have carried out more than 30 000 analyses of human biological monitoring. By measuring chemical substances and their metabolites in the human body, we account directly for inter-individual differences such as metabolism, diet, and lifestyle. This approach serves both patient care and population health monitoring. My role is to ensure the accurate interpretation of these results, making a significant impact on both individual and public health outcomes." Dr Maria-Mirela Ani, Medical Doctor

"I develop innovative analytical methods to determine human biomarkers for exposure to environmental chemicals like PFAS and pesticides. My work directly translates in a better care for patients affected by environmental diseases. This vital work inspires me every day to give the best of myself." Cathy Jacobs, Dipl Pharm, Technical Responsible

They trust us

"The new generations of physicians are confronted increasingly with diseases caused or aggravated by the environment and patients concerned about the impact of the environment on their health. That is why, as Medical School, we have decided to invest in the education of our young doctors in this relatively new discipline. In Luxembourg, we are fortunate to have the LNS Department Health Protection as reference and excellence center in the domain. I am proud on the journey of the last 4 years in which Prof. Dr An Van Nieuwenhuysse and I have set-up a sound medical formation in the Bachelor. Our next step is the implementation in the specialization of the general practitioners, this together with the actors in charge of this specialization at UniLU."

*Prof. Dr Gilbert Massard
Director of Medical Education
Université de Luxembourg*

LNS ANNUAL REPORT

Our 6 fields of expertise

Legal Medicine

The LNS Legal Medicine Department works mostly at the request of the Luxembourg judicial authorities, the police and other government bodies.

Its main activity areas are all aspects of forensic medicine, the genetic identification based on molecular biology methods, toxicological reports for autopsies and matters concerning living persons, the identification and testing of narcotic drugs and the control of drugs, food supplements or other products of unknown origin suspected of containing medicinal substances.

Key figures 2023

3,041 Reports/export opinions

141 Forensic autopsies

150 Wastewater analyses (from 3 wastewater treatment plants for 8 substances each)

6,867 Toxicological analyses including 2,885 hair samples



Meet our scientists

"The purpose of the Forensic Genetics Service is to provide objective evidence interpretation during crime scene investigations, forensic investigations and at court. Our know-how and our expertise assist the court in evaluating forensic DNA stains by producing investigative and evaluative reporting. In 2023, we actively took part to an important international project that provides data and tools for evaluation of specific cases at the activity level."

MSc Angela Marques Pereira, Criminalist

"Working in the field of forensic medicine means helping to guarantee people's rights, whether they are alive or dead." Dr Corinna Gibfried, Forensic Doctor

"Exchanges with our partners from the Ministry of Justice and the Ministry of Health and Social Security have led us to develop two new areas of expertise: the analysis of fire accelerants in the event of a fire, and the routine analysis of drugs in wastewater." Dr. Sc. Adèle Bourmaud, Chemical Engineer

LNS ANNUAL REPORT

Our 6 fields of expertise

Medical Biology

The LNS Medical Biology Department offers a wide range of activities, including specialized biochemistry and hormone analysis, diagnosis of inborn errors of metabolism, and allergology. The department is responsible for neonatal screening for Luxembourg and has developed the unique medical toxicology laboratory in the country. The LNS Medical Biology Department serves a diverse range of clients, including private laboratories, hospitals, as well as the general population encompassing occupational medicine, associations for drug addicts, correctional facilities, socio-educational centers, the military, and maternity clinics. Furthermore, the department takes charge of the Centralised Samples Reception.

Key figures 2023

54,390 Analyses in pharmacology / hormonology

39,197 Neonatal & metabolic analyses

61,141 Samples registered at central reception

95,587 Total of analyses performed over the year



Meet our scientists

"Implementing and modernising our Quality Management System has enabled us to improve our services so that we can provide a quality result for our patients and customers." Amélie Dewalque, Quality Referent

"The implementation of a QMS promotes a culture of continuous improvement in the laboratory. It is an essential factor in guaranteeing the mastery of our analytical methods, the safety and reliability of the results provided to patients, as well as ensuring the confidence of our partners and the credibility of the laboratory." Frédéric Grandjean, Laboratory Assistant

"As quality referent for LNS's Centralised Reception (CR), I am proud to have taken the department to its OLAS accreditation since 2017. CR has a crucial role at LNS: to ensure compliance with the rules of the pre-analytical process, the key role of the entry point for every biological sample from laboratories, hospitals and organisations in the country." Estelle Panarotto, Laboratory Assistant

LNS ANNUAL REPORT

Our 6 fields of expertise

Microbiology

The mission of the LNS Microbiology Department is to provide specialized and evidence-based clinical laboratory services in the field virology and bacteriology. The department consists of three services: the Virology-Serology service, the Pathogen Sequencing service and the Bacteriology, Mycology, Antibiotic resistance and Hospital hygiene service.

The department works closely with multiple partners, such as the Ministry of Health and Social Security and the European Centre for Disease Prevention and Control (ECDC) on epidemiological matters, the National Service for Infectious Diseases as far as diagnostics is concerned, various public and private laboratories in the country for reference laboratory activities, and international partners in the frame of EU research projects.

Key figures 2023

10,860 Sequencings
39,733 PCR analyses in virology
55,898 Serology analyses
107 HIV sequencings



Meet our scientists

"The surveillance of foodborne pathogens by next generation sequencing has been implemented under the One Health concept for more than 10 years. This fruitful collaboration including the food surveillance service from LNS, Alva, LIST and InSan allows us to detect human clusters and to identify potential sources of infection and to interview the patients to find link with contaminated food. In 2023, 8 links between human cases and food animal production were detected, 7 domestic human clusters have been investigated and Luxembourg has been involved in 9 European alerts through the ECDC surveillance system." Dr. Sc. Catherine Ragimbeau, Scientist in bacterial genomics

"In July 2023, LNS and more in particular the Department of Microbiology engaged in an EU co-funded project called PANDOMIC (project 101112724) as coordinator with our Romanian partners the National Institute for Public Health and the "Cantacuzino" Institute. The main objective of the project is the improvement of integrated genomic surveillance of selected viral pathogens and antimicrobial resistance of foodborne pathogens. This project represents a great opportunity for LNS to extend and share knowledge with partners in Europe and to contribute to strengthening the detection and surveillance of cross-border threats and improve pandemic preparedness." Dr. Sc. Sabrina Deroo, Scientific officer

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Our 6 fields of expertise

National Center of Genetics

The National Center of Genetics (NCG) of the LNS covers all areas of human genetics, including clinical genetics, genetic counselling and an extensive spectrum of genetic diagnostics, from conventional karyotyping to modern next generation sequencing (NGS).

The NCG offers genetic consultations and diagnostics to individuals and their families, e.g. in the context of familial predisposition to cancer, rare hereditary diseases, or prenatal genetics and family planning. In addition, we are continuously establishing new techniques and expanding our diagnostic portfolio to ensure state-of-the-art patient care.

Key figures 2023

5,146 Oncohaematological analyses

7,813 Non-invasive prenatal tests

30,807 Genetic analyses

10,529 Number of analyses in constitutional genetics



Meet our scientists

"The National Center of Genetics is committed to accreditation and excellence in laboratory services, ensuring reliable and accurate genetic testing while continually enhancing our capabilities to meet the highest quality and reliability standards." Rouchdi Haloum, Quality Coordinator

"In August 2019, the National Center of Genetics implemented expanded Non-Invasive Prenatal test (NIPT) as a first-tier screening for all pregnant women in Luxembourg. The test is universally reimbursed by CNS. Since then, we have tested more than 35000 patients with a turn-around time of maximum 10 days." Dr Marizela Kulisic, Clinical Laboratory Scientist

"With whole genome sequencing, we are sequencing the genome of affected patients and their parents providing state of the art diagnosis for rare genetic disease in Luxembourg." Dr. Sc. Lucas Hérissant, Molecular Biologist

LNS ANNUAL REPORT

Our 6 fields of expertise

National Center of Pathology

The National Center of Pathology (NCP) offers the whole spectrum of cytological, histological as well as molecular pathological diagnostics provided by a team of highly specialized pathologists. The team is made up of two services: the Gynecological Cytology Service, which is responsible for the screening for cervical cancer, and the Pathological Anatomy Service, which is in charge of the diagnostics of cancer and precancerous lesions as well as inflammatory lesions.

Key figures 2023

252,173 Gynecological Cytology analyses
431,040 Microscopical and molecular pathological analyses
40 Tumor boards per month
74,676 Immunohistochemical analyses



Meet our scientists

"With the new Discovery multistainer platform, we are able to disentangle the expression of several proteins on tissue samples at the same time. In our current study, the application of this cutting-edge method helps to decipher the spatio-temporal pathological cellular reaction in neurodegenerative disorders." Dr. Sc. David Bouvier, Scientific coordinator

They trust us

"Together with the Uropathology Team of Anatomic Pathology of the National Center of Pathology and the Centre F. Baclesse, we established a sustainable, certified diagnostic center in the field of prostate cancer allowing for best patient care in a multidisciplinary approach. The work of our colleagues from the NCP is, since 2016, a most important step in assuring diagnostic precision, prognostic prediction and therapeutic decisions."

*Dr. Patrick Krombach
Coordinator of the Prostate Cancer Center
HRS, Urologist*

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LNS Governance

GOVERNANCE BODIES

LNS is a public institution managed by the board of directors. The management of the laboratory is entrusted to a Director assisted by the executive committee and a scientific advisory board.

BOARD OF DIRECTORS

The board of directors is the managing body of LNS. It defines the general policy, organization and functioning of the laboratory in compliance with applicable laws, regulations and conventions.

Members as at 31 December 2023

President

Prof. Dr Evelin Schröck

Delegates from the Ministry of Health

Dr Jean-Claude Schmit, vice-president

Dr Thérèse Staub

Mr Xavier Poos

Dr Marc Schlessler

Mrs Lucienne Thommes

Delegates from the Ministry of Justice

Mr Laurent Thyès

Mr Georges Oswald, expert with an advisory voice

Delegate of the Ministry of Higher Education and Research

Mrs Stéphanie Schott

Delegate of the Ministry of Economy

Dr Françoise Liners

Delegate of the Ministry of Finance

Mr Serge Hoffmann

LNS staff representative

Mrs Jessica Tapp

Delegate of the Ministry of Consumer Protection

Mr Ian Tewes

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LNS Governance

EXECUTIVE COMMITTEE

The executive committee, composed of the heads of the departments, the heads of the diagnostic centers, the Director, the Chief Financial and Administrative Officer and the Chief Operating Officer, meets at regular intervals to coordinate the activity of the institution.

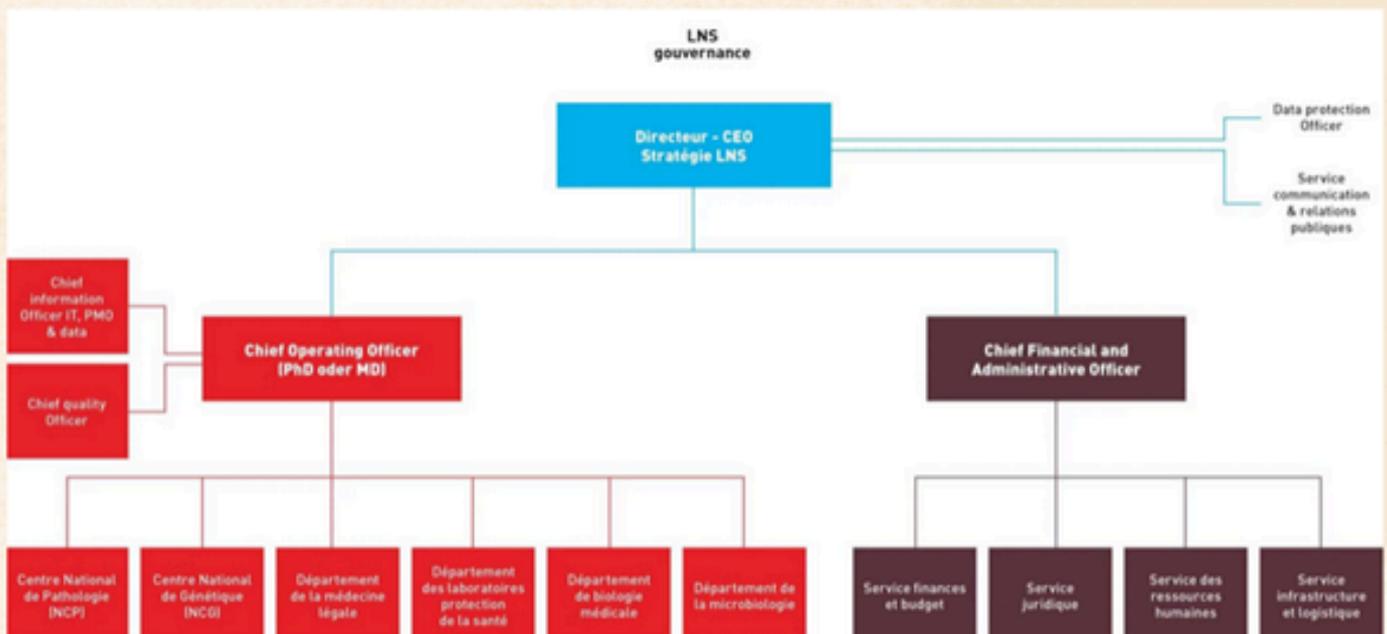
Situation as at 31 December 2023

Director ad interim
Pr Dr André Rosenthal

Chief Financial and Administrative Officer
Ms Safaâ Moujahid

Chief Operating Officer
Dr Thomas Dentzer

ORGANISATION CHART



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Publications

National Center of Pathology

- Caroline Chabot, Corneliu-George Coman, Caroline Duhem, Fernand Ries, Felix Kleine Borgmann, Olfa Chouchane Mlik, Dounia El Azzouzi, Daniel Janssens. Quand une tumeur en cache une autre... Angiosarcome mammaire radio-induit bilatéral multirécidivant associé à la récurrence d'un carcinome canalaire invasif mucineux, *Imagerie de la Femme*, Volume 33, Issue 4, 2023, Pages 204-209, ISSN 1776-9817, <https://doi.org/10.1016/j.femme.2023.03.013>.
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