



ALBERTA PRECISION LABORATORIES

**Leaders in
Laboratory Medicine**

2021-22 Annual Report

Building a Stable and Sustainable
Lab System for Albertans

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Message from Chief Operating Officer & Chief Medical Laboratory Officer

Alberta Precision Laboratories (APL) continues to evolve as an integrated province-wide public laboratory system, and the achievements of our medical laboratory professionals over the last year have been remarkable. Their enthusiastic determination coupled with a fierce dedication to finding the best ways to serve Albertans, is what makes the APL story unique.

The ongoing challenges related to the COVID-19 response, significant staffing shortages across the lab system, and the impending contracting of community lab service are sources of significant uncertainty for APL staff and stakeholders. However, these challenges also provide a unique opportunity to build APL's brand and organizational culture, and highlight the critically important role lab services play across the healthcare spectrum.

Building a stable and sustainable lab system while continuing to improve health outcomes for Albertans is the overarching focus of our Business Plan as we continue to navigate a period of unprecedented change and increasing demands on the healthcare system as a whole. It is inspiring to see how our staff have risen to meet these challenges through living our values of Kindness, Inclusion, Innovation, Agility and Accuracy. Our deepest thanks and gratitude goes out to our more than 5,500 people for their continued commitment to protecting the health of Albertans and embracing opportunities to achieve the highest value for Albertans' healthcare dollars.



5,500 +
staff



171
patient collection
sites across Alberta



157
laboratory testing
sites in Alberta



6 million +
COVID-19
tests completed



1,700
clinical trials supported
by APL researchers



61.4 million
lab tests completed



95%
of most commonly ordered
test results available to patients
on MyHealthRecords



1
provincially integrated
lab system

Providing safe and reliable lab service

Our people have continued to provide the lab service – including COVID-19 testing - that Albertans rely on every day, with an unwavering commitment to protecting their own health and safety, and the health and safety of our patients. This has been no small feat, considering the challenges we have faced across AHS and APL navigating the evolving public health requirements, as well as the significant staffing shortages we are experiencing, particularly at our smaller rural sites across the province.

Lab service at our patient service centres, hospital outpatient labs and rural healthcare centres largely returned to pre-pandemic levels throughout 2021-22, as numerous initiatives were implemented to improve patient flow, reduce wait times for appointments and walk-in service, protect the health and safety of our patients and staff with the lifting of COVID-19 restrictions in the community, and limit the number of non-essential test orders by physicians.

COVID-19 testing remained a pillar of Alberta’s pandemic response through multiple waves of community infection. The ongoing collaboration and support of partners in industry, government and academia ensured we were able to meet high demand for diagnostic and screening tests through the third, fourth and fifth waves of the pandemic. More recently, the focus has shifted to towards our leading work in tracking the evolution of the virus through screening and genetic sequencing to identify the variants of concern, as well as the development of population-level

monitoring through the testing of wastewater in communities across the province.

In addition to COVID-19 testing, we continued to live up to our tagline “Leaders in Laboratory Medicine” as we continued to advance our capabilities in the screening, diagnosis, treatment, monitoring, surveillance, and outcomes of patients. Our genetics and genomics team played an instrumental role in working with the Government of Alberta, the Muscular Dystrophy Association and other supporters to have Spinal Muscular Atrophy added to Alberta’s Newborn Screening Program. Alberta is now the third province to begin screening newborns for spinal muscular atrophy, ensuring those born with the rare but serious genetic disorder are diagnosed and receive necessary treatment to reduce the impacts of the disease as soon as possible. Our people are also playing a key role in the innovative CAR-T cell therapy for blood cancers that is now being offered within Alberta for the first time.

Building a sustainable workforce

Ensuring the long-term sustainability of our workforce is critically important, as APL – like many areas of the healthcare system – is faced with staffing shortages and an extraordinarily high vacancy rate for hundreds of positions that remain unfilled due to lack of qualified candidates.

Development of a workforce strategy along with recruitment activities to attract skilled workers have taken place in tandem with a robust employee engagement plan that will serve to build APL’s reputation as an employer of choice and improve our abilities to attract and retain staff.



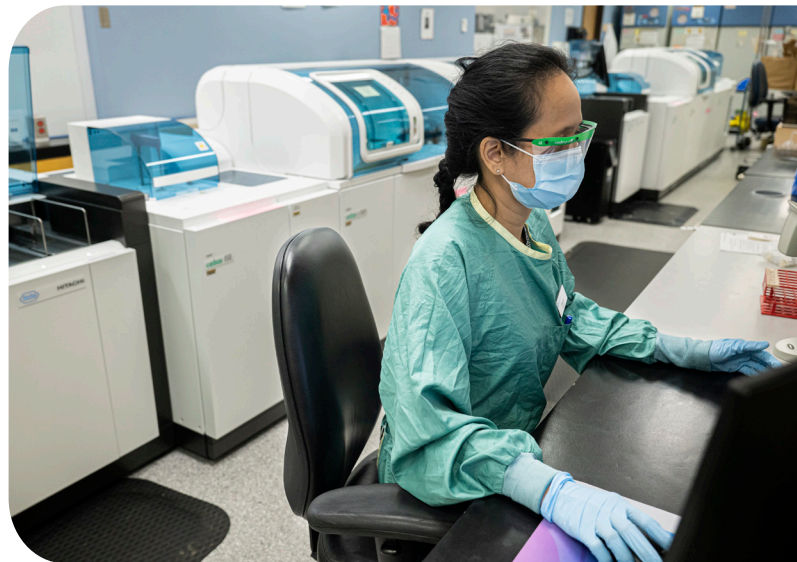
The foundation of our engagement strategy was laid with APL's first Our People Survey to measure staff engagement and commitment to safety. Results from the survey provide a baseline to assess staff engagement during a time of significant change, and are providing valuable information for what we need to focus on going forward as an organization to build an engaged and motivated workforce.

We also continued our effort in building a culture of excellence amongst our staff, with new and re-invigorated activities to recognize achievements and celebrate the successes of our individuals and teams across APL. At the end of 2021, we held our first-ever long-service recognition event to personally celebrate the contributions of our longest serving employees. And in early 2022 we introduced new tools and resources for leaders and staff to acknowledge the accomplishments and important milestones of our employees and medical-scientific staff. This included the launch of APL's Critical Value Award that is central to our enhanced recognition program by shining a spotlight on the outstanding work of those who foster and strengthen our values-driven culture.

Developing an integrated and efficient provincial lab system

Throughout 2021-22, we continued our focus on developing an integrated province-wide lab system to bring greater quality, consistency and efficiency to lab service for the benefit of Alberta patients. This included advancing the contracting of community lab services across the province to a private-sector provider, and several initiatives to integrate and standardize lab programs and services at a provincial level.

DynaLIFE Medical Labs was selected as the preferred proponent to deliver community lab service in cities and large towns across Alberta following a competitive request for proposals (RFP) process that began in December 2020, at the direction of the Minister of Health.



Final negotiations and detailed transition planning is underway for DynaLIFE to begin delivering community lab service starting on December 5, 2022. Both APL and DynaLIFE have developed new leadership structures to meet the long-term needs of both organizations, and an internal recruiting process is underway to fill new leadership roles. Partnering with the private sector to deliver high-volume, low-complexity community laboratory service was identified as an opportunity for improved quality and cost savings by the AHS Review. APL will play a key role in ensuring all quality and service level requirements in the contract are being met by DynaLIFE, and APL will continue providing lab service in small rural communities, acute care hospitals, along with the specialized lab testing, research and innovation that is critical to Alberta's provincial lab system.

Installation of automated chemistry analyzers in centralized testing labs across the province is well underway through our partnership with Roche Diagnostics Canada. It is the first time in Canada a standard set of equipment for analyzing routine blood tests is being rolled out on a provincial scale, ensuring Albertans' lab tests are completed using the latest technology regardless of where they live. Provincial standardization of chemistry analyzers also yields significant benefits when it

comes to reducing manual labour and training requirements for our staff, along with cost savings on supplies and reagents.

The last year also saw the launch of APL's fifth integrated provincial program – Transfusion and Transplantation Medicine. Consolidating these services into a single province-wide program allows for greater optimization and builds on efficiencies that have been developed between the disciplines in recent years, allowing us to generate further synergies, foster operational excellence and staff engagement, and deliver high quality and safe patient care that aligns with many provincial clinical transplantation programs. APL's other provincial programs are the Provincial Laboratory for Public Health, Genetics and Genomics, Point-of-Care Testing, and Molecular Pathology.

And with the successful completion of Launch 3 of Connect Care in 2021, we are extremely excited to be almost halfway to our goal of being on a single provincial laboratory information system. As anticipated, this is proving to be a game changer in the way we deliver services demonstrating significant quality and efficiency improvements.

Thank you to all of our staff

Looking back on what everyone at APL has accomplished over the last year is truly incredible, but we know it has not been easy. We are extremely grateful for the dedication our staff have shown to serving Albertans during these extraordinary times. Thanks to everyone within the APL family for bringing us to where we are today. Your hard work and commitment to excellence is highly appreciated, and is making a difference in the lives of every Albertan at every stage of their healthcare journey. We look forward to working with you to achieve more great things in the year ahead.



Tammy Hofer,
Chief Operating Officer



Dr. Carolyn O'Hara,
Chief Medical Laboratory Officer (Interim)

Who We Are

APL is the largest provider of laboratory medicine and pathology services in the province of Alberta. We employ more than 5,500 healthcare professionals and performed 61.4 million laboratory tests over the past year. We are accountable to AHS as a wholly owned subsidiary and, in turn, the Ministry of Health for the provision of all laboratory services including: hospital and community laboratories; mobile collections; cardiac diagnostic services; on-call services; reference laboratories; public health laboratories; patient service centres; and transportation services.

Mission

We believe in the transformative power of laboratory medicine to improve health for all Albertans.

Vision

Health informed by world-class integrated laboratory diagnostics.

Values

- Kindness
- Inclusion
- Innovation
- Agility
- Accuracy

The majority of medical decisions across the continuum of care are based on diagnostic laboratory results, making laboratory medicine a keystone component of healthcare, and a service that impacts all Albertans.

Our integrated model allows APL to be more strategic in our efforts and streamline and optimize our processes, which results in a multitude of benefits, including: equitable access to high quality services for patients; timely and consistent results to patients and providers; and optimized resources for increased financial health.

Laboratory Infrastructure

AHS is organized into five geographic zones: South, Calgary, Central, Edmonton and North (Appendix A). APL is composed of two sectors — North and South — with the further identification of city, urban and rural locations. The complexity, scope and volume of diagnostic testing required to support Albertans continues to grow. To support this demand, APL has a long-standing partnership with DynaLIFE Medical Labs to meet evolving patient needs. DynaLIFE is the primary laboratory system partner engaged by AHS & APL to deliver laboratory services in Alberta. DynaLIFE provides community and high-volume, low-complexity laboratory services, including collections, courier services and testing in AHS' Edmonton and North zones. Together, APL and DynaLIFE support laboratory testing sites and patient collection facilities across Alberta that include primary care clinics, physician offices, diagnostic centres, and patient service centres.

North and South Sectors

APL is structured into North and South Sectors. The North and South Medical Directors, along with their operational administrative dyad partners, are responsible for the clinical diagnostic testing in their respective sectors. This responsibility includes oversight and support for satellite laboratories. The laboratory system is designed to offer on-site laboratory testing to ensure urgent acute care needs are met. Smaller rural hospitals refer non-urgent and more complex testing to their regional hospitals or the referral laboratories located in Calgary or Edmonton.

Academic Partners

APL has, and continues to develop, a number of key partnerships to support our operations. These include strong connections with Alberta's academic research institutions, including the University of Alberta and the University of Calgary, technical institutions including SAIT and NAIT, funding agencies, foundations, pharmaceuticals, diagnostics companies including global vendors and small- to medium sized local enterprises, and community partners. Through strong strategic partnerships, APL will be able to continue to leverage the support across Alberta to enable effective delivery of service and execution of our business plan.

Governance

As a subsidiary of AHS, APL reports to the AHS President and CEO via a sole board chair, who is represented by AHS's Vice President of Cancer Care Alberta & Clinical Support Services. APL's governance structure ensures integrated laboratory services are embedded into clinical decisions and operations to improve quality and appropriateness of care. APL executives work closely with AHS executives to ensure all Albertans have access to high-quality laboratory services across the province.

Refer to Appendix A for more information about APL's Corporate Governance, Operational Governance, and Operational Committee structure.

APL Executive Leadership Team (ELT)

ELT is a standing committee comprised of the senior executive leadership of APL. The purpose of this committee is to set the broad vision, strategic direction and priorities for the organization, in collaboration with the board chair, AHS executives and the APL Senior Leadership Council.

Membership:

- Chief Operating Officer
- Chief Medical Laboratory Officer
- North Sector Medical Director
- South Sector Medical Director
- Executive Director of Business Advisory Services
- Director, HR Business Partnerships and Human Resources
- Director, Communications and Engagement

Senior Leadership Council (SLC)

SLC is a standing committee composed of the South Sector Medical Advisory Committee, North Sector Medical Advisory Committee, APL Planning and representatives from shared services disciplines. The purpose of this committee is to guide APL leadership in collaborative decision making and shared accountability within the context of the entire organization, ensuring the best use of APL's resources.

Discipline Councils

Discipline Councils were created to support the prioritization, coordination, standardization and optimization of clinical diagnostic testing across the province. These councils are led by experts in their discipline areas and comprise medical, scientific, operational, and administrative stakeholders to ensure the appropriate ad hoc engagement of both internal and external stakeholders.

Steering Committees

Operational, medical, research, and administrative steering committees and working groups have been developed to support the planning and implementation of priority initiatives in the organization, including timelines and milestones, budget, and an accountability structure.

Shared Services

AHS and APL have worked collaboratively to identify key support services that could be provided by AHS, with APL benefiting from AHS' systems, processes and economies of scale. A Shared Services Agreement (SSA) between APL and AHS is in place that sets out the scope of services, accountabilities, service delivery expectations and key parameters for each of the service areas that AHS will provide to APL. The AHS/APL Contract Management Committee oversees and optimizes the provision of shared services by AHS to APL.

There are currently 17 shared service areas, including Human Resources, Information Technology, Contracting Procurement and Supply Management (CPSM) and Capital Management. A new Shared Services Schedule was entered for Data and Analytics in 2021. Delivery of the services provided to APL under the SSA is monitored through collaboration between select executives of APL and AHS.

Our People

APL employs more than 5,500 healthcare professionals, support staff, and medical and scientific and staff and contractors. Our employees hold clinical and technical expertise in laboratory medicine and pathology and are sought out by health industry partners and academic collaborators for translational research initiatives and in the development of novel diagnostics.

From COVID-19 response, to general lab service, to specialized diagnostics and public health research, our highly trained laboratory professionals play a critical role in the quality of patient care across the healthcare spectrum in Alberta. They continue to demonstrate an unwavering commitment to protecting the health of Albertans while living our shared values of Kindness, Inclusion, Innovation, Agility and Accuracy.

What We Do

At APL, we lead healthcare innovation in laboratory medicine by continually seeking improvements in preventing, detecting and diagnosing, treating, and managing diseases or medical conditions. Management of laboratory services across the province puts APL in a unique position to optimize service delivery across the province. This includes making decisions on how that service is best delivered while ensuring high quality, meeting the needs and expectations of patients. We research, develop, test and implement new personalized treatments and interventions and interface directly with patients by providing patient specimen collection, logistics, testing and diagnostic services.

Collection and Logistics

APL and DynaLIFE offer collection sites covering the province – including community patient service centres, hospital labs and mobile collection services – to ensure Albertans have access to laboratory testing. Specimens are collected and transported back to centralized laboratories for testing and analysis. Logistics are responsible for the efficient transfer of specimens, reports and supplies for APL. An internally operated courier system helps facilitate accurate test results by maintaining high quality standards in specimen integrity during transport.



Lab staff step up to assist Indigenous neighbours

In October, Stoney Health Services approached APL for assistance providing routine blood test collections after their full-time lab employee moved out of the province. Knowing that it could take several months to hire a new lab technician, APL lab staff stepped up to help, in addition to working their regular jobs in Calgary.

Located in Morley, about 90 km west of Calgary, Stoney Health Services is a non-profit organization that provides a wide range of health and wellness services for more than 6,000 Stoney Nakoda First Nation members who live on or near the reserve.

“When I heard that Stoney Health Services was short of lab staff, I thought it would be a great opportunity to try something new and help out our neighbours at the same time.”

”

Denice Dery
Medical Lab Assistant

Testing

Biochemistry

The majority of diagnostic tests performed at APL are within the discipline of biochemistry. This area provides extensive support to clinicians who use the results provided to make treatment decisions. These services include clinical chemistry, endocrinology, and therapeutic drug monitoring and clinical toxicology. This division includes our “high-volume” laboratory, where we have analyzers able to process many patient samples at once.

Anatomic Pathology

The discipline of anatomic pathology provides extensive services under a number of subspecialty pathology groups, including autopsy, bone and soft tissue, bone marrow, breast, cytopathology, dermatopathology, endocrine, gastrointestinal, genitourinary, gynecologic, head and neck, neuropathology, ophthalmic, pediatric, thoracic, and transplant, renal and cardiac. Approximately 200 pathologists are contracted/employed by APL to provide expertise and consultation in these areas. Any patient material removed from the body during surgery or a day procedure — such as a tissue biopsy or cancerous tumour — will be analyzed by this area. This testing area processes all the tissue or fluid samples from biopsies to autopsies, and all cancer diagnosis requires a pathology report.



Molecular Pathology

Molecular pathology is a provincial program focused on the study and diagnosis of disease through the examination of molecules within organs, tissues or bodily fluids. Molecular pathology performs testing of DNA and RNA specimens to provide diagnostic and predictive information to laboratory physician and clinicians, in order to help guide optimal care for patients with cancer and other diseases. The Molecular Pathology Lab performs complex testing of cancer genes, genomic alterations and pathogens from tissue, blood or fluid specimens.

Hematopathology

The discipline of hematopathology provides services in hematology — the study of disease conditions that affect blood and related organs. Samples analyzed can be from blood or other blood components such as bone marrow, lymph nodes, spleen, thymus and other lymphoid tissues. This area supports the diagnosis of anemia, blood cancers, and inflammatory conditions.

Genetics and Genomics

Genetics and Genomics is a provincial program operating at locations in Calgary and Edmonton. It provides testing for diseases that are caused by changes in the genetic makeup of patients and completes highly specialized testing for a significant number of hereditary genetic conditions, including the provincial Newborn Screening Program. This testing is often seen as the future of laboratory medicine and involves examining the DNA of patients.

Transfusion and Transplantation Medicine

Transfusion and Transplantation Medicine (TTM) is APL's newest integrated provincial program, providing critical blood transfusion products and testing services, and supporting the largest Canadian solid organ and bone marrow transplant program outside Toronto. TTM manages all blood components and products distributed by Canadian Blood Services, ensuring appropriate use of scarce blood resources for in patient transfusions and provides expert clinical support for bleeding and clotting disorders. TTM's Human Leukocyte Antigen Testing & Immunogenetics Laboratory plays a critical role in Alberta's transplant program, testing for the match ability between donor and recipient as well as post-transplant monitoring for rejection. The Cellular Therapy Laboratory is involved in transplant medicine and making tailored treatments using patients' own blood to treat and fight diseases such as cancer and other immune system disorders.

Microbiology

The discipline of medical microbiology includes bacteriology, mycology, rapid virology, molecular diagnostics and parasitology. Microbiology provides diagnosis on many types of microorganisms that may have infected tissues or bodily fluids. This section processes sample types such as urine, blood, and stool to detect microbes to provide information to help guide therapies.



Point-of-Care Testing (POCT)

Diagnostic testing doesn't only reside within the testing facilities of APL. POCT devices provide quick feedback to allow providers to make decisions on the spot and provide healthcare providers and patients with a timely and convenient option of performing laboratory tests at the bedside, as well as more novel care environments such as paramedic programs, mobile COVID-19 testing facilities, long-term care and correctional facilities, and Alberta Stroke Ambulance. Very few laboratory medicine providers in Canada, if any, can claim to support POCT in such a diverse array of care environments.

Provincial Laboratory for Public Health

APL's Provincial Laboratory for Public Health (ProvLab) has been in existence for over 100 years and currently operates out of two sites in Alberta: the Foothills Medical Centre in Calgary, and the University of Alberta Hospital in Edmonton.

ProvLab provides infectious disease diagnosis and surveillance, assistance in outbreak management, and emergency response leadership when required. ProvLab's role is critically linked to the legislated responsibilities of Alberta's Chief Medical Officer of Health and duties of the Medical Officers of Health prescribed in the Public Health Act.

ProvLab has played a pivotal role in the development and implementation of COVID-19 testing in Alberta, contending with significant supply management issues, ongoing validations of new reagents and supplies, and leading COVID initiatives for serosurveys, rapid testing, variant testing and viral genomics.

Reporting Results

Test results are reported to clinicians either electronically to the clinical information system or physician electronic medical record system, fax or paper report. Results are also uploaded to Alberta Netcare, an electronic system accessible to health professionals to retrieve patient health information. Patients can now directly access the results of more than 95 per cent of the most common laboratory tests via online government platforms that include Alberta Netcare and Alberta Health's My Health Records information portal for patients.



Dr. Anna Füzéry (middle) with STARS Air Ambulance pilots and medical flight crew. (Photo taken prior to COVID-19)

Taking testing out of the lab to improve patient care

More and more medical tests are being completed outside the traditional confines of the laboratory, with the development of 'point-of-care' testing technology that allows health care teams to speed up diagnosis and make decisions on the spot, instead of having to wait for test results to come back from the lab.

Ambulances are one of the most challenging environments for point-of-care testing, with crews

being constantly on the move and care being provided in a diverse array of temperatures and weather conditions. Working with Alberta paramedical teams, APL clinical biochemist Dr. Anna Füzéry co-wrote an article published by the American Association for Clinical Chemistry that provides recommendations for establishing national standards for point-of-care testing performed by ambulance teams.

“ Healthcare provided by EMS teams, including on-the-spot diagnostic testing, comes with a unique set of challenges that are infrequently encountered in hospital. Laboratory medicine professionals and EMS teams need to work together to characterize these challenges and the most effective, safest strategies for addressing them.

”

Dr. Anna Füzéry,
Clinical Biochemist

Ensuring Quality and Safety

APL is committed to providing high-quality laboratory services to the patients and clients served by Alberta Health Services. We use the QMS model as described by the Clinical and Laboratory Standards Institute to maintain a quality management system that meets accreditation, legislation, and regulatory requirements for the sustainment and continual improvement of laboratory services. This integrated model coordinates activities that direct, control and guide the organization with regards to quality throughout the entire path of workflow, including pre-examination, examination and post examination.

APL promotes the development of a safety culture where patients, staff and physicians feel safe in reporting and discussing safety concerns. Quality assurance activities include evaluating patient safety concerns as well as investigating and reviewing reported adverse events with the goal of continual improvement of the quality of healthcare or services provided. We are dedicated to providing a safe, healthy, and secure work environment and to manage laboratory operations and processes in a manner that protects the health and safety of all staff.

The health and safety of our workers is fundamental to the provision of safe and quality laboratory services and APL has a comprehensive suite of documents and tools to promote, educate and maintain staff safety within the workplace. All employees of Laboratory Services are responsible for ensuring the health and safety of co-workers, patients, visitors, and themselves through understanding their roles and responsibilities and adherence to all pertinent legislation, standards, safe work practices, and industry best practices. Laboratories are governed by various accreditation organizations and follow a stringent accreditation process.

Laboratories are accredited by the applicable accreditation organizations that may include:

- American Association of Blood Banks (AABB)
- American Society of Histocompatibility & Immunogenetics (ASHI)
- Canadian Association of Accreditation (CAA)
- Canadian College of Medical Genetics (CCMG)
- College of American Pathologists (CAP)
- College of Physicians & Surgeons of Alberta (CPSA)
- Foundation for the Accreditation of Cellular Therapy (FACT)

Research and Development

Research and development is a foundational underpinning to all laboratory services by supporting vital research directions used to improve healthcare delivery to those patients that need it most. Research initiatives take place in all major tertiary care centres in Alberta and we maintain strong relationships locally and internationally to continue to advance our research agenda. Key collaborators include: the Canadian Institutes of Health Research (CIHR), Canadian Blood Services, United States National Institutes of Health (NIH), and the Centers for Disease Control and Prevention (CDC). APL possesses unique, invaluable laboratory datasets that are used to study the patterns, presentation, progression and treatment outcomes of disease. APL is also a critical partner for local small- and medium-sized diagnostic companies, including innovations spun out from the University of Alberta and the University of Calgary. APL plays an increasing role in developing a diagnostic biotech industry in Alberta, thus contributing to economic diversification in Alberta.

Clinical trials, research in basic laboratory sciences, and epidemiological studies are used to identify, refine and explore laboratory diagnostic scientific questions and support the translation of today's research into tomorrow's treatments. Every year, APL has in excess of 1,700 active clinical scientific research protocols underway at various sites across Alberta. We are a key partner in the development of future research initiatives in cancer care, and are a central critical component in the new Cancer Care Centre in Calgary. Not only do laboratory services touch all cancer-care diagnostic decisions, APL provides services, in collaboration with the cancer centres and pediatric hospitals, for cancer clinical trials that involve providing the latest care and targeted cancer treatments for Albertans.

APL is a key player in local, national and international research related to, but not limited to, non-communicable diseases such as hypertension, diabetes and vascular diseases such as stroke; the pathological progression of crippling conditions such as Alzheimer's, irritable bowel and chronic kidney disease; organ transplantation; identification of organisms at a genetic level that informs treatment for critically ill patients; mapping the appearance and prevalence of disease-causing pathogens in the community; and identification of genetic markers playing a role in rare diseases in adults and children.



New lab-developed procedure improves treatment for fire victims

Patients who arrive at hospitals from house fires are often treated for cyanide poisoning due to the toxic fumes generated by fires in the home. A major side effect of treatment with the drug hydroxocobalamin is that patients' blood plasma and urine turns red, which can interfere with many lab tests - leading to incorrect results that can affect patients' care and treatment for a wide range of health issues.

A collaboration between APL Clinical Biochemists and the University of

Alberta developed a new protocol to alert emergency room doctors of the potential for misdiagnosing patients receiving the treatment, helping to ensure correct patient care in these unique situations.

The protocol is being used in the Misericordia and University of Alberta hospitals, where patients suffering from smoke inhalation injuries are most commonly treated in Edmonton and was published in one of Canada's leading medical laboratory journals, *Clinical Biochemistry*.

“ Our ER doctors and lab team said they found it to be helpful to have this flagged on a patient's medical chart, so that test results are interpreted accurately, and a proper diagnosis is happening in a timely manner. ”

Steven Dang,
Medical Laboratory Technologist

How Do We Know We Are Succeeding?

APL's Business Plan helps ensure we are doing the right things at the right time as we continue to build and improve on our provincial laboratory system. APL continues to work with AHS, our partners, and research collaborators to identify, design, and validate transformational opportunities for laboratory medicine, regardless of the uncertainty.

The Business Plan identifies four strategic goals have been identified to guide and align our decision making (See Appendix B), along with meaningful mechanisms for measuring and monitoring our achievements and performance. Performance measures are used to track our efficiency and effectiveness, confirm we are meeting our contractual requirements, and ultimately help us to better understand our contributions to the health system and Albertans. Guided by our strategic goals and objectives that focus on our people, our patients, improving our financial health and our influence in the health system, we can expect to see an even stronger, more integrated and more sustainable laboratory system emerge. While the potential for significant change still exists for laboratory services in Alberta, we know that Albertans continue to expect the very best from their healthcare system. We believe in the transformative power of laboratory medicine to improve health for all Albertans and we believe in our teams' ability to deliver.

Notable Accomplishments

Cutting-edge Equipment to Improve Lab Tests for Albertans

APL has partnered with Roche Diagnostics Canada to upgrade the automated chemistry analyzers in 16 of our regional testing labs around Alberta. It's the first time in Canada a standard set of equipment for analyzing routine blood tests is being rolled out on a provincial scale, leading to more consistent and efficient processing of the tens of thousands of patient samples APL handles every day.

The partnership is the result of a competitive request-for-proposals process initiated in 2020 to standardize chemistry analyzers across APL's high-volume testing sites. Approximately 80 per cent of Alberta's routine lab work will be completed on Roche equipment when the project is complete in late 2022, providing higher quality and greater consistency in lab testing for Alberta patients.

Upgrading and shifting to a single platform for chemistry analyzers at 16 hub labs also provides other benefits, including reduced training requirements and less repetitive manual labour for lab staff. We anticipate it will save more than \$5 million per year on chemistry analyzer materials and supplies through a province-wide contract.

COVID-19 Testing Program

The provincial COVID-19 testing program continues to play a critical role in Alberta's pandemic response and evolved throughout 2021-22 to meet the ongoing needs of public health officials in monitoring the virus's presence in our population. The testing program overseen by APL's Provincial Laboratory for Public Health surpassed six million tests completed since the beginning of the pandemic, with peak testing volumes exceeding 15,000 tests per day during the third, fourth and fifth waves in 2021 and early 2022. We appreciate the services and support that partners including DynaLIFE, Equity Health Services, the University of Calgary and the Government of Canada's Food Inspection Agency lab in Lethbridge provided for surge capacity to meet the demand for diagnostic COVID-19 testing over the last two years. Widespread immunization has thankfully reduced the impact of the virus on the healthcare system, leading

the Government of Alberta to revise the criteria for testing to focus on those who have clinical risk factors for severe outcomes and those who live and work in high-risk settings. This led to a significant reduction in demand for testing that APL is able to handle with existing PCR and rapid molecular testing capabilities.

Much of the focus of our COVID-19 testing work has shifted to monitoring the evolution of the virus and screening positive cases for the variants of concern. Alberta has been a leader in genetic sequencing of the virus since the beginning of the pandemic, and this work continues as new strains arrive in the province. ProvLab teams have been very successful in developing PCR screening tests to identify the presence of common mutations linked to the variants of concern, allowing for the rapid identification of variant cases, which have become the dominant strains in our population. At the same time, our capacity for genetic sequencing has grown tremendously, allowing us to conduct full-genome sequencing on approximately 1,000 samples from select populations each week. This gives us a very detailed understanding about the genetic characteristics of SARS CoV-2 in Alberta and plays an important role in national and international surveillance efforts.

APL's Point-of-Care Testing program provided significant support for the implementation of rapid point-of-care testing systems used for diagnostic and screening purposes at COVID-19 assessment centres, long-term care and congregate living facilities, homeless shelters and other locations across the province. There remains continued need for this testing.



Testing wastewater samples for COVID-19 at APL's Provincial Laboratory for Public Health at University of Alberta Hospital

APL researchers lay the foundation for COVID-19 wastewater monitoring

As an expert in examining sewage and other forms of wastewater for signs of disease, APL microbiologist Dr. Xiaoli (Lilly) Pang and colleagues launched several studies to determine how effluent could be used to track COVID-19 in the community in the early days of the pandemic. Their pioneering work led to development of a province-wide network that is now a pillar of Alberta's overall COVID-19 surveillance program.

The Pan-Alberta Wastewater Monitoring Project led by University

of Calgary and University of Alberta launched in December 2021 to publicly report on wastewater samples covering three-quarters of the province's population. It provides real-time data about the prevalence of COVID-19 is a valuable tool that assists public health teams to identify potential outbreaks and make decisions about how to respond quickly to prevent spread of the disease.

“ Our wastewater surveillance data has been used by the Medical Officers of Health to make decisions about investigations for COVID in long-term care, so it has been directly linked to public health action. ”

Xiaoli (Lilly) Pang,
APL microbiology program lead

Contracting of Community Lab Services

Partnering with the private sector to deliver high-volume, low-complexity community laboratory service was identified as an opportunity for greater consistency, efficiency and cost savings by the AHS Review, which was conducted in 2019 by independent contractor Ernst and Young (EY). DynaLIFE Medical Labs was chosen as the preferred proponent following a competitive request for proposals (RFP) process that began in December 2020, at the direction of the Minister of Health.

In early 2022, AHS, APL and DynaLIFE reached an agreement on terms of a contract for DynaLIFE to provide community lab service across the province. The contract will include operating patient service centres and mobile collection facilities in urban centres and large rural communities including Calgary, Edmonton, Red Deer, Lethbridge, Medicine Hat, Fort McMurray, Grande Prairie, Brooks, Lloydminster, Camrose, Airdrie, Cochrane, Okotoks, Strathmore, Leduc, Sherwood Park, Spruce Grove and St. Albert. DynaLIFE will also be responsible for laboratory testing of all community and non-urgent hospital lab work across the province. The agreement will see DynaLIFE invest in significant upgrades and expansion of patient service centres in several communities, as well as much-needed improvements to leased hub lab facilities in Calgary and Edmonton.

Contracting community lab services to DynaLIFE is expected to generate savings aligned with estimates in the AHS Review - money that can be used to support other priorities and services across the healthcare system. In order to ensure that small rural and remote communities continue to receive the service they need, hospital and community health sites that currently handle less than 25,000 community blood test collections per year will continue to be provided by APL.

Detailed transition planning is underway to ensure an orderly transition of facilities and approximately 1,400 staff from APL to DynaLIFE starting on December 5, 2022.

No job losses are anticipated as a result of the transition process, as DynaLIFE has agreed to assume all unionized, non-unionized and medical-scientific staff under existing collective agreements (where applicable) and provide the same, or similar, terms and conditions of employment as existing prior to the transfer.



“I’m passionate about helping seniors. They deserve it,” says Habtamu Amede, a medical lab assistant who works for APL’s mobile collection service. The mobile service visits continuing care facilities, Indigenous communities, private homes and other qualifying locations where patients face difficulties accessing routine lab service.

GOAL 1: Improve Health Outcomes and Patient Experience

Delivering High-quality Community Lab Service

Despite the ongoing challenges related to staffing shortages and COVID-19 safety precautions that reduce patient service capacity, APL staff met or exceeded key targets for delivering high-quality community laboratory service in 2021-22. Initiatives to improve patient flow through increased use of patient appointments, collaborating with physicians to reduce non-essential tests orders, and adding additional indoor waiting room space saw lab capacity return to close to pre-pandemic levels in most communities by the end of 2021.

A number of innovative new tools were also introduced to improve access and reduce lineups at Calgary-area patient service centres. A new online booking tool allows physicians to book time-sensitive appointments on behalf of their patients at select patient service centres in Calgary, Airdrie and Cochrane to facilitate treatment, diagnosis or ongoing monitoring of medications. New procedures were also put in place to enable walk-in patients who are required to wait outside to be notified by cellphone or by using restaurant-style paging devices when it is their turn to enter the lab. This allows patients to wait in their vehicles or in nearby indoor locations where they can sit down and stay warm.



Lab technologist Jo Martin gives 10-year-old Emily a hug, reinforcing their unmistakable bond. Getting bloodwork done used to be a traumatic experience for Emily, but today she looks forward to her visits to the lab in Cochrane.

Lab staff ease fears for patients of all ages

When Emily McKervy was diagnosed with cancer two years ago, she and her family were filled with fear and uncertainty about what lay ahead. But for the 10-year-old, the scariest part of the diagnosis was learning that she would need blood work as part of her ongoing treatment and care.

To help patients like Emily, young and old deal with their fear, the medical lab technologists and assistants at APL receive specialized training to help patients reduce their stress and feel better about their lab experience.

The Commitment to Comfort program trains lab techs to develop a 'comfort plan' with patients using various tactics and strategies to combat needle anxiety — which they refer to as their 'toolbox.'

“ Seeing Emily go from kicking and screaming when coming in for bloodwork to being able to sit and just talk about our day together has been so rewarding to see. I care about Emily so much and I'm very grateful to be able to help her on her journey. ”

Joanne 'Jo' Martin,
Medical Laboratory Technologist.

Supporting made-in-Alberta Blood Cancer Treatment

APL's Cellular Therapy Lab is instrumental in providing a game-changing therapy for blood cancers that is now being provided to Alberta patients thanks to funding from the Government of Alberta and the Alberta Cancer Foundation. APL lab technologists are responsible for manufacturing chimeric antigen receptor (CAR) T-cells that are engineered to fight cancer cells when infused into a patient's blood stream. Albertans previously had to travel out of province to receive CAR T-cell therapy, which has shown to provide durable remissions and potential cures in about 50 per cent of adults and 80 per cent of children and young adults. Trials of made-in-Alberta CAR T-cell therapy are underway in Edmonton and Calgary, and Alberta's first patient to go into remission was announced February 2022.

Provincial Transfusion and Transplantation Medicine Program

An integrated provincial Transfusion and Transplantation Medicine (TTM) program was launched in 2021 to consolidate and optimize TTM services in a cost-effective manner, while maintaining lab-specific expertise in the individual laboratories under the program. A provincial program for TTM builds on efficiencies that have been developed between the disciplines in recent years, allowing us to generate further synergies, foster operational excellence and staff engagement, and deliver high quality and safe patient care that aligns with many provincial clinical transplantation programs.

Enhancing Breast Cancer Surgery with Real-Time Pathology

A unique collaboration between APL pathologists and colleagues at the Cross Cancer Institute in Edmonton is improving outcomes for patients and reducing the number of repeat surgeries performed at the site. Radiologists detecting tiny cancers will target the location for surgery. Previously, pathologists would determine successful removal of those targets and cancer days later, and if anything was missed, a repeat operation might become necessary. Improved integration of radiology, surgery, and pathology for early breast cancer patients now sees pathologists in the operating room, creating X-ray images of the tissue being removed in real time to support the surgeon, and enable precise cancer location and removal in one step. This innovative project was one of four initiatives to receive the Health Quality Council of Alberta's Patient Experience Awards in 2022.



Connect Care - Launch 3

Connect Care is a collaborative effort between the Ministry of Health and AHS staff, clinicians and patients to improve patient experiences and the quality and safety of patient care by creating common clinical standards and processes to manage and share information across the healthcare continuum.

Hundreds of APL staff have been involved in building and testing a single enterprise-wide Laboratory Information System known as EPIC - a foundational step toward integrated laboratory services in the province that will allow laboratory test results to be available to providers faster and accessible to all Albertans.

Launch 3 of Connect Care was completed successfully in April 2021, bringing an additional 15 APL sites in the western half of the North Zone onto the new system. Launch 3 included Connect Care's largest cohort of rural-based prescribers so far. For the first time, these healthcare providers now have access to all AHS, partner and affiliate medical records, and all information needed to support care, and patients are able to access their health information through Connect Care's patient portal, MyAHS Connect.

Significant planning work has taken place in preparation for Launch 4 in May 2022, which will see lab facilities in four Edmonton-area hospitals transition to Connect Care systems.



Using droplets of blood taken from newborns, Dr. Farshad Niri screens for spinal muscular atrophy (SMA), a rare neuromuscular condition that weakens muscles by affecting the motor nerve cells in the spinal cord.

Spinal Muscular Atrophy Added to Newborn Screening Program

On Feb. 28, 2022, Alberta became the third province in Canada to begin screening newborn babies for Spinal Muscular Atrophy (SMA), a rare neuromuscular condition that is the leading genetic cause of infant mortality. SMA screening is completed by APL's Genetics and Genomics team as part of the province's Newborn Screening Program, which uses blood samples from newborns to test for 22 serious but

treatable conditions. Early diagnosis and treatment of SMA is critical for reducing its effects before symptoms appear in infants. SMA screening began thanks to funding from Muscular Dystrophy Canada for a one-year pilot phase, after which SMA screening will become part of the publicly-funded newborn screening program. The first Alberta newborn was diagnosed with SMA as a result of successful screening in April 2022.

“Getting up and coming to work each day is filled with such purpose, knowing we are helping to save lives. Newborn screening tests are always our top priority because we know that time is of the essence when it comes to starting treatment for these conditions.”

Dr. Dennis Bulman,

APL's medical-scientific director of genetics and genomics

GOAL 2: Improve the Experience and Safety of Our People

Staff Achieve Outstanding Health and Safety Record

APL is committed to providing a healthy and safe workplace as a foundational component of providing high-quality patient care. Throughout the COVID-19 pandemic APL staff have been diligent in following health and safety protocols and utilizing appropriate personal protective equipment to prevent the spread of virus at our facilities. Our staff exceeded targets for compliance with hand hygiene protocols during patient care, and are to be commended for their exceptional co-operation with AHS' COVID-19 vaccination campaigns for healthcare workers.

Ensuring staff and patient safety is critical to providing the safe and reliable laboratory service that is foundational to the ongoing management of patients' health. Unfortunately and regrettably, it is not uncommon for our laboratory frontline staff to be faced with aggressive, belligerent and even physically abusive patients refusing to follow the simple safety practices, such as wearing masks and maintaining physical distance, that continue to be required by law in our facilities. AHS Protective Services has provided a proactive, collaborative approach, with a focus on prevention and protecting the safety of APL staff and patients. Ongoing risk assessments and additional training are being provided to our staff to strengthen their skills with regard to de-escalating emotions, preventing violence and keeping everyone safe. Protective Services has been instrumental in providing APL with guidance to improve patient flow and effectively manage line-ups, provide immediate support when needed to respond to escalating situations, and conducting routine check-ins on community lab staff. We are extremely grateful for the exhaustive efforts made by the Protective Services team to help keep our staff and our patients safe during this very difficult and challenging time in health care.



Biosafety and Biosecurity Program

As part of our ongoing commitment to providing a safe, healthy and secure work environment, APL introduced a biosafety and biosecurity program is designed to protect workers, patients and the public from potential exposure to biological materials or toxin exposures and to prevent unintentional release of hazardous biological materials into the environment. The program and its components will assist APL in complying with accreditation standards.

The program describes the containment principles, technologies, and operational practices to prevent unintentional exposure to pathogens or toxins, or their accidental release. It also outlines the security measures designed to prevent the loss, theft, misuse, diversion, or intentional release of infectious material or toxins. Biosafety and biosecurity are shared responsibilities between workers, teams, and leadership. Everyone must take all reasonable precautions to protect the health and safety of the workers, patients and the public against the risks posed by controlled activities.

Measuring Staff Engagement

At the end of 2021, APL undertook its inaugural 'Our People Survey' to measure staff engagement and commitment to safety. APL deliberately chose to conduct the survey during a period of significant organizational change and staff challenges related to COVID-19 in order to set a baseline for measuring staff engagement going forward.

APL had a strong participation rate for a first-time survey. A total of 2,949 staff completed the survey, including 54 per cent of employees and 45 per cent of medical-scientific staff.

The survey showed that our overall engagement rate is lower than average for Canadian organizations, with 20 per cent of our employees and 23 per cent of medical-scientific staff considered 'engaged.' This is not surprising given the significant challenges and uncertainty lab staff have been faced with throughout the COVID-19 pandemic and the contracting of community lab service to the private sector.

On the positive side, we found that APL staff have a strong understanding of their roles and what is expected of them at work. They also have trust and confidence in their co-workers, and they believe APL provides safe and high-quality service to Albertans.

The results also show that there is a significant need to build trust and engagement between APL leaders and their staff. We must also place a higher priority on the development of our staff, and provide more frequent, consistent and effective ways for APL staff to be recognized for the important work they do and to provide input, ask questions and express concerns to their leaders.

The Our People Survey provides valuable information to help guide the long-term rebuilding of APL's organizational culture and priorities as we emerge from the COVID-19 pandemic and complete the contracting of community lab services throughout 2022 and 2023. We are committed to ensuring that APL leaders have the time and resources necessary to build greater understanding of the importance of engagement and to begin developing specific action plans to make meaningful change with their teams.

Focus on Change Management

During the past year, APL worked with the Alberta Health Services Change Adoption and Evaluation team to establish the APL Change Champions Network (CCN). The Network was created in the fall of 2021 to ensure that staff at all levels of the organization remain informed and engaged in the change underway across APL related to the contracting of community lab services in Alberta.

The Network is led by a Change Network Working Group that provides vision, leadership and guidance to Change Champion volunteers; and supports the implementation of necessary APL transition work. The Network is focused on change management training and dissemination of accurate information, providing APL staff with opportunities to be change leaders and support our people through encouraging the use of any/all available change adoption tools and resources such as MyLearningLink and TRACCESS to help our people cope and manage through change.

In particular, the CCN has offered a series of change management training snippets and PROSCI certification opportunities for APL staff. Topics ranged from understanding the PROSCI change management methodology and understanding change through the ADKAR lens, to offering practical tips and tricks for volunteers to use in their roles to support and create awareness about the change across APL. To date, over 200 APL staff are involved in the Network, 14 of are new PROSCI certified. Due to its connection to supporting the HR strategy, options are being explored to sustain this resource over the long term.

Workforce Strategy to Address Staffing Challenges

Workforce challenges present a significant risk to the organization, which was outlined in APL's 2021-22 Business Plan and included the development of a comprehensive strategy to approach workforce opportunities was a specific deliverable.

Working engagement sessions involving members of APL's senior operational and medical leadership team, support services leadership and external stakeholders were held in early 2022. The resulting plan outlines multiple tactics across different categories including attracting and retaining staff, innovating to find unique solutions involving technology, artificial intelligence and out-of-the-box thinking.

Opportunities to influence the supply of graduates coming out of various programs and aligning the needs of APL with the output of these programs for technical and medical staff are being explored. Working with our colleagues in Human Resources, a focused team of operational staff made significant improvements to internal policy and procedures that created a rapid pipeline for hiring and onboarding new staff to fill immediate vacancies, particularly in our rural locations and COVID-19 testing labs.

Enhancing Recognition of Staff Achievements

Acknowledging the outstanding work of our people is an important part of building a culture of excellence, which is why we developed new tools and resources to recognize the accomplishments and important milestones of our employees and medical-scientific staff.

In December, APL held its first-ever long-service recognition event, which was attended by 152 staff members. The virtual event went off without a hitch. Award recipients shared their own personal stories of how the world of laboratory medicine has evolved over the years and reminisced about some personal memories. APL's longest serving employees include Joan Kyle, Phyllis Michta and Linda Preston, who celebrated 45 years of service.

In early 2022, we introduced the APL Critical Value Award, which recognizes individuals or groups within APL who, through their actions, work to foster and strengthen APL's values-driven culture. Leadership, Performance Excellence, Teamwork, Quality & Safety, Customer Service and Innovation are all qualities of those who receive the Critical Value Award, which is given out monthly by APL's leadership team.

In addition, a series of new certificates for giving staff accolades and recognizing achievements was introduced for use of APL leaders and supervisors as part of the ongoing management of their teams.

GOAL 3: Improve Financial Health and Value for Money

Appropriate Lab Testing

In line with APL's commitment to continuous improvement, APL continues to support multiple initiatives promoting appropriate utilization of laboratory testing. In collaboration with Improving Health Outcomes Together, Strategic Clinical Networks, and multiple additional partners both internal and external to AHS, APL is continually working to prioritize, action and support these initiatives which are at various stages of planning and implementation. Where appropriate, the timing of these efforts is being aligned with Connect Care launches to leverage the benefits of system-wide clinical decision supports as a key change management strategy. This has resulted in Choosing Wisely Canada Level 1 status being achieved at two hospitals in Edmonton, five hospitals in Calgary, and the Red Deer Regional Hospital.

In response to the global shortage of medical grade plastics that has impacted supplies of disposable products required for many routine lab tests, APL has been actively promoting Choosing Wisely Canada recommendations to reduce unnecessary and inappropriate test ordering by physicians. We continue to work with the Alberta Medical Association, College of Physicians and Surgeons of Alberta, and Primary Care Networks to raise awareness about Choosing Wisely resources and the benefits of appropriate test utilization.

Testing Repatriation

Leveraging our integrated provincial approach, APL has identified opportunities to consolidate testing, send specific testing to referral laboratories where they are not internally economically viable, and repatriate testing where it is. In 2021-22, the results of the effort to establish testing capability within existing infrastructure resulted in more than \$800,000 in reduced costs to the organization.

Data Literacy Program

The COVID-19 pandemic cemented the importance of using data to improve patient care and make the best use of limited staff and resources. Data generated from COVID-19 testing allowed APL to make data-driven decisions to support the pandemic response, with changes to logistics, testing facilities, deployment of point-of-care testing devices, and staffing decisions being driven by observed turnaround times of COVID-19 testing. As a result of this, APL has embarked on a multi-year Data Literacy Program to educate and support staff at all levels to promote a data-driven decision-making culture.

GOAL 4: Improve the Influence of Laboratory Medicine in the Health System

Communications and Engagement Strategy

Implementation of APL's communications and engagement strategy is central to building APL's brand and engaging key audiences including government and elected officials, staff, public and patient advocacy groups, medical associations and news media. Frequently and consistently telling APL's story and highlighting the critical role of laboratory medicine across the healthcare spectrum, has resulted in a regular drumbeat of proactive communications and storytelling highlighting APL staff and organizational achievements including COVID-19 testing, innovation in community lab service and public health laboratories, academic research and collaboration. APL stories have been amplified through earned media opportunities, the APL website and social media channels, as well as AHS-wide internal communications channels.

2021-22 saw APL's twitter account surpass 500 followers, and APL launched its own LinkedIn account to assist with staff recruitment initiatives and to provide additional amplification of proactive APL communications by staff and followers. APL's communication and engagement goals for 2022-23 are driven by the top priorities facing APL, and aim to position APL for long-term success following the transition of community lab services to DynaLIFE over the coming year.



The special days, weeks and months throughout the year that are dedicated to acknowledging health services and healthcare professionals provide important opportunities to highlight laboratory medicine and APL's people. National Medical Laboratory Week in April, Combined Laboratory and X-Ray Technologist's Week in October, and International Pathologists' Day in November are some of the lab-specific celebrations that are leveraged to profile APL disciplines and staff.

APL's provincial molecular pathology program was the focus of a feature story on the APL website and social media posts on APL and AHS channels during International Pathologists' Day in 2021. The important role of our pathologists in cancer diagnosis and treatment was also reinforced during World Cancer Day in February 2022.

Research and Innovation Strategy

Further advancing its research and innovation strategy, APL has harmonized its processes for entering research and innovation partnerships and accessing safely biorepositories and health data as part of such partnerships. Over the last year, numerous partnerships have been advanced by APL, contributing to health research and innovation, and economic diversification in Alberta. This strategy will be further pursued and expanded at the provincial and national levels by partnering with private lab services providers, academic institutions, as well as local and global commercial entities in the area of laboratory diagnostics.

Each year, APL seeks to supplement its research and operational activities by applying for and participating in research grant competitions. Among other things, securing research grants provides resources for extra project work to improve patient care and safety, and brings prestige for the recipients and APL as an organization.



New Labs to Spin Innovation Into Reality

A new lab partnership dedicated to helping Alberta innovators bring new medical technologies to market faster is a welcome addition to Alberta Precision Laboratories' Diagnostic and Scientific Centre (DSC) in Calgary.

It's one of three laboratories that will be developed in facilities run by APL and DynaLIFE Medical Labs in Calgary and Edmonton where researchers can collaborate with licensed and accredited medical and scientific staff to test new

diagnostic technologies.

The Alberta Diagnostics Ecosystem Platform for Translation (ADEPT) program will receive \$3 million in funding over the next three years from Alberta Innovates' Health Innovation Platform Partnerships (HIPP) program. The ADEPT partnership will give Alberta's innovators access to the data collection and controlled testing environments they need to turn their ideas into tools that can be used in real-world laboratories.

“ Lab tests are crucial to most healthcare decisions, from diagnosing illness to developing treatment plans and ongoing monitoring of patients' health. Any improvements to laboratory medicine through innovation directly benefit patients through greater precision, more convenience and faster turnaround times for results. ”

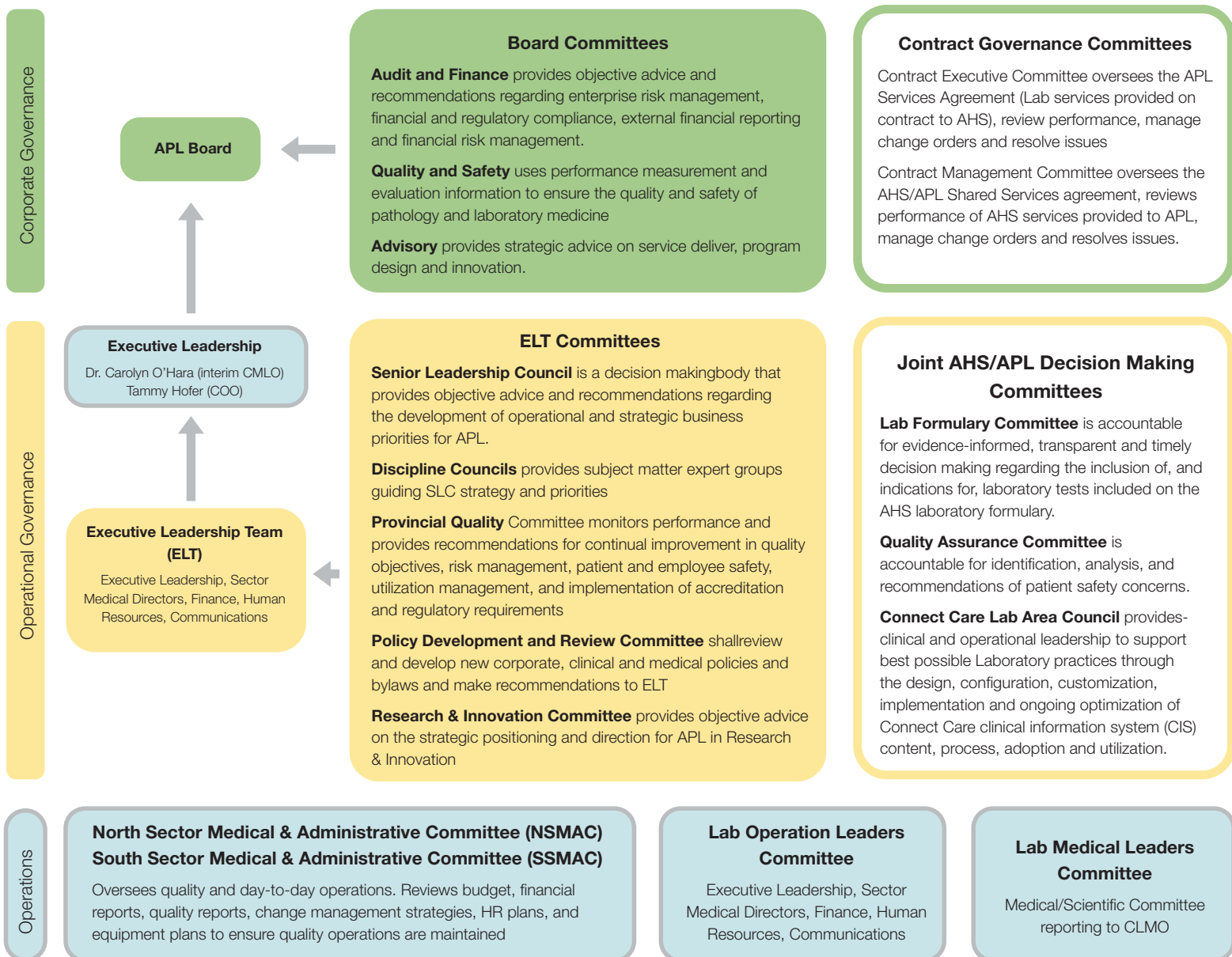
Dr. Michael Mengel,

APL North sector medical director and co-lead of the ADEPT program

Next Steps

Moving into Q1 2022, much of our focus will be on the preparing for the transition of community lab services to DynaLIFE beginning in December, ensuring that patient safety and service quality are maintained and enhanced while minimizing potential impact on staff. APL’s Business Plan houses 27 priority initiatives and 16 strategic objectives under our four Strategic Goals. APL continues to work with AHS to identify, design, and validate transformational opportunities for laboratory medicine. These opportunities, in addition to continued, Connect Care implementation and our COVID-19 response, will drive decision making and the strategic management of the Business Plan. While instability and potential for significant change still exist for laboratory services in Alberta, APL knows that Albertans continue to expect the very best from their health care system, and our people are ready to deliver.

Appendix A: APL’s Corporate Governance, Operational Governance, and Operational Committee structure



Appendix B: Key Performance Indicators

APL continues to collaborate with key system stakeholders, including Albertans, Alberta Health Services and other organizations to make progress on joint measures to monitor care and service delivery to all Albertans. These metrics will be adjusted as necessary to reflect this.

In 2021-22, APL achieved performance targets on all metrics for which targets exist, with the exception of turnaround times for Anatomical Pathology level IV surgical tests. All sites are achieving targets with the exception of those in the Calgary zone, where pandemic-related challenges recruiting medical and technical staff are affecting overall Anatomical Pathology level IV turnaround times. Site-level process improvement initiatives and recruitment for medical and technical vacancies are underway to address this.

Metric	Measure	Target	2021-22 FY	Actual vs. Target
Goal 1: Improve Health Outcomes and Patient Experience				
Blood Culture Contamination Rate	% of contaminated blood vials vs. the total number of blood culture collections.	<3%	1.3%	✓
Critical Value Reporting*. Time to communicate critical results to a physician that require clinical action.	% within 15 minutes	90%	97.9%	✓
Patient Wait Times (PWT) for patients having specimens collected at outpatient or community sites.	Time from patient arrival to initiation of phlebotomy for 80% of patients.	30 minutes	25 minutes	✓
	Time from patient arrival to initiation of phlebotomy for 90% of patients.	60 minutes	40 minutes	✓
Turnaround Time (TAT): Anatomical Pathology level IV surgical.	Time from receipt in laboratory to report being issued for 90% of level IV surgical pathology samples.	4 working days	13 working days	
Turnaround Times (TAT) Intra- operative Consult Results.	% within 20 minutes for single block intra-operative consult results/ diagnoses reported to the clinician.	90%	93%	✓
Turnaround Time (TAT) for urgent general chemistry and hematology tests for emergency department or urgent care patients.	Time from sample collection to result available for 90% of samples.	90 minutes	79 minutes	✓
Turnaround Time (TAT) for urgent general chemistry and hematology tests for admitted patients.	Time from sample collection to result available for 90% of samples.	120 minutes	88 minutes	✓
Turnaround Time (TAT) for urgent general chemistry and hematology tests for outpatient/community patients.	Time from sample collection to result available for 90% of samples.	240 / 480 minutes	137 minutes	✓
Turnaround Time (TAT) for non-urgent general chemistry and hematology tests for outpatient/community patients.	Time from sample collection to result available for 90% of samples.	720 / 1,440 minutes	419 minutes	✓
Goal 2: Improve the Experience and Safety of Our People				
Disabling Injury Count	Total # of claims for disabling injury.	n/a	2.61	
Hand Hygiene Compliance	% compliance of hand hygiene during the course of patient care	90%	93.5%	✓
Proficiency Testing	% of acceptable external proficiency testing results	95%	99.0%	✓
Sick Rate	Average # of paid sick days per FTE in a year.	n/a	11.7	
Vacancy Rate	Total number of unique vacant positions relative to the unique active positions expressed as a per centage	n/a	11.6%	
Voluntary termination	Count of employees who have voluntarily terminated as a % of the headcount.	n/a	5.4%	
Goal 3: Improve Financial Health and Value for Money				
Administrative cost	% of administrative costs as part of total expenses.	3.3%	1.04	✓
Goal 4: Improve the Influence of Laboratory Medicine in Health System				
Clinical trials	Count of clinical trials lab has participated in.	n/a	To Be Updated	

* Only collected in Calgary