The Pathology Laboratories at Stony Brook Medicine

COMPREHENSIVE. ACCURATE. RELIABLE.
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Stony Brook Medicine includes Stony Brook University Hospital, Stony Brook Children’s Hospital, more than 50 community-based healthcare settings throughout Suffolk County, as well as five Health Sciences schools. With 603 beds, Stony Brook University Hospital serves as Suffolk County’s only tertiary care center and Regional Trauma Center, and is fully accredited by The Joint Commission. It is home to the Stony Brook Heart Institute, Cancer Center, the Stony Brook Neurosciences Institute and the Digestive Disorders Institute.

To learn more, call (631) 444-4000, or visit stonybrookmedicine.edu.

A Message from
Kenneth R. Shroyer, MD, PhD
Marvin Kuschner Professor and Chair, Department of Pathology

Comprehensive, prompt and reliable service is the hallmark of the laboratories at Stony Brook Medicine. Our expert staff takes pride in a personal, individualized approach, and works together to provide accurate results you can depend on.

Each laboratory is led by a highly qualified director and staffed by a team of skilled, highly credentialed and dedicated staff. Services are reliable and thorough, and processes are efficient. Many of our labs are open 24/7, providing around-the-clock availability.

We consider no testing to be routine. For patients receiving treatment at Stony Brook Medicine, our laboratory staff work closely with disease management teams to help diagnose disease and develop treatment strategies. For patients being treated elsewhere, our laboratory specialists are readily available to discuss test results with primary care physicians and others involved in a patient’s care — all with the goal of achieving the best possible outcomes. We take pride in this personal and collaborative approach.

Our services provide highly specialized testing. We are the only laboratory in Suffolk County certified to perform certain complex studies. And, because we are part of Long Island’s premier academic medical center — challenging, unusual and instructive cases are routinely reviewed at intradepartmental conferences. A residency program in pathology is offered through the Department of Pathology in the Stony Brook University School of Medicine, providing training and practical experience in anatomic and clinical pathology that is oriented toward both community hospital and academic career goals.

Stony Brook’s laboratory services provide the vital information patients and physicians can rely on for optimal diagnoses and treatment. This is why I can state with confidence that our laboratories are of the highest quality and among the best anywhere.
Surgical Pathology Laboratory

Surgical pathology provides consultative services in the following subspecialty areas:
> Breast Pathology
> Cardiovascular Pathology
> Dermatopathology
> Gynecologic Pathology
> Hematopathology
> Nerve and Muscle Pathology
> Non-Neoplastic Pulmonary Pathology
> Oral Pathology
> Pediatric/Neonatal/Placental Pathology
> Renal Pathology
> Soft Tissue and Bone Pathology

Our pathologists are available by telephone to discuss pathologic diagnoses, and take pride in maintaining frequent and effective communication with clinical staff.

Anatomic Pathology Laboratory services include:
> Digital Pathology
> Routine Histology and Special Stains
> Immunohistochemistry
> Electron Microscopy
> Biorepository
> Telepathology

The laboratory processes over 50,000 surgical specimens per year, consisting of in-house, outreach and consultative cases. In selected cases, gross and/or microscopic digital images are provided to physicians. Challenging, unusual and instructive cases are routinely reviewed at intradepartmental conferences.

The laboratory has the ability to accommodate individual preferences for the delivery of laboratory results to the ordering physician or clinical practice site by mail, fax or other means.

Contact Information
Telephone: (631) 444-2222

Cytopathology Laboratory

Our Cytopathology Laboratory performs analysis of gynecologic and nongynecologic specimens, including evaluation of radiologically guided deep-seated fine-needle aspiration (FNA) specimens with immediate physician interpretation.

Our cytopathologists have been specially trained to perform FNAs and provide immediate assessment of specimen adequacy by microscopic examination. In many cases, FNA biopsies can be performed with preliminary diagnosis within 45 minutes of the procedure. Most patients are able to return to daily activities on the same day the FNA biopsy is performed.

Pathology faculty members have extensive experience in the analysis of CT-guided FNAs of the lungs, liver, kidneys and bone, and in the diagnosis of ultrasound-guided endoscopic FNAs of pancreatic and related mass lesions.

Molecular testing on GYN specimens detects evidence of HPV infection and provides enhanced diagnostic accuracy on liquid-based Pap tests.

Liquid-based technology for cervical and nongynecologic specimens is routinely provided for all cases.

Contact Information
For appointment for ultrasound guided FNA, please call (631) 444-2178.
Andrology Laboratory

Stony Brook's Andrology Laboratory provides a full spectrum of diagnostic tests for male fertility, including complete semen analysis with strict WHO morphology, special stains for sperm viability and leukocytes, and fructose testing as indicated. Also performed are sperm antibody testing on sperm and serum, post-vasectomy semen analysis with count and motility, retrograde ejaculation testing on urine, and the sperm penetration assay.

Central Core Laboratory

Stony Brook University Hospital Department of Laboratories opened a state of the art Central Core Laboratory in the Hospital laboratory space in September 2014. This new laboratory has been designed to meet the current and future needs of the community, the hospital inpatient and outpatient populations, and research. The Central Laboratory integrates Clinical and Special Chemistry, Toxonomy, Automated Hematology and Coagulation, Special Hematology and Coagulation, the Point of Care (POC) Program, and the ED Stat Laboratory into a single unit.

In addition to the 24/7 routine automated Clinical Chemistry testing, key specialized services include Endocrinology testing, Oncology panels, Immunosuppressant Drug monitoring for the Transplant programs, the 4th generation HIV Antigen/Antibody combination, Sweat Chloride testing for our Certified Pediatric Cystic Fibrosis Center patients, Amino Acid testing to monitor pediatric metabolic disorders, Fetal Fibronectin, and Fetal Membrane Rupture (ROM Plus).

The Hematology Laboratory provides round-the-clock testing in routine cellular hematology and coagulation, as well as consultation by the physician to evaluate abnormal blood smears and results of patient testing for hematologic, bleeding and thrombotic disorders. The laboratory utilizes state of the art instrumentation to rapidly and accurately identify the presence of abnormalities that require manual intervention and releases normal test results expeditiously.

The Special Hematology Laboratory performs diagnostic testing for hemoglobinopathies, including sickle cell screening and hemoglobin electrophoresis testing for the quantification of normal and variant hemoglobins. Additionally, bone marrow aspirates and biopsies samples are prepared for analysis by our Hematopathologists.

The facility has a private collection room on site.

Contact Information

Appointments are required. For appointments or questions, please call (631) 444-3473.

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Clinical Microbiology Laboratory

The Clinical Microbiology Laboratory is a full-service lab, equipped to perform the most sophisticated testing in bacteriology, mycology, mycobacteriology, and parasitology. Consultation by the Medical Director is available for test selection (including reference lab tests), interpretation of culture and susceptibility results, and review of unusual findings.

Bacteriology performs the identification and antimicrobial susceptibility of pathogenic bacteria from a broad array of clinical specimens. Blood cultures are performed on continuous monitoring state-of-the-art instrumentation.

Mycology identifies and speciates pathogenic yeasts and molds from a broad array of clinical specimens.

Mycobacteriology identifies and speciates Mycobacteria spp. The laboratory uses the automated MGIT system and DNA probes for rapid isolation and identification of M. tuberculosis and M. avium complex. The laboratory is also experienced in the identification of less common species such as M. gordonae and M. kansassi.

Parasitology identifies and speciates intestinal parasites in stool specimens and also performs stains for cryptosporidium and cyclospora. This section also identifies blood parasites responsible for malaria (Plasmodium spp.) and babesiosis (Babesia spp.).

Contact Information
For more information, please contact Dr. Eric Spitzer (631) 444-2382.

Cytogenetics Laboratory

The Cytogenetics Laboratory performs chromosome analysis for patients undergoing prenatal diagnosis; patients with inherited genetic disorders, mental retardation, developmental delay or autism; and on adults and children with cancer.

The laboratory performs standard chromosome analysis and molecular cytogenetics (FISH) on bone marrow, solid tumors, lymph nodes, peripheral blood, amniotic fluid and products of conception.

The laboratory plays a vital role in the diagnosis, prognosis, and monitoring of patients with hematologic/oncologic disorders. Chromosome analysis is also performed to determine if a chromosome abnormality is the underlying cause of a spontaneous abortion, ambiguous genitalia, infertility or mental retardation.

The laboratory is the only laboratory in Suffolk County certified to perform cytogenetic analyses on pediatric patients with acute lymphoblastic leukemia (ALL) for the Children’s Oncology Group (COG), the premier childhood cancer research organization.

All cytogenetic results are reviewed and signed by a board-certified, New York State-licensed Laboratory Director, who personally notifies referring physicians about abnormal results and is available for consultation and questions.

Written reports are sent either by fax or mail to the referring physician with a complete interpretation and references.

Additional Information
Please contact Laboratory Director Ann-Leslie Zaslav, Ph.D.
Phone: (631) 444-2749
Fax: (631) 444-2527
Histocompatibility & Immunogenetics Laboratory

The Histocompatibility Laboratory supports the Hospital’s kidney and bone marrow and hematopoietic stem cell transplantation programs, the only such programs offered in Suffolk County. Stony Brook was the site of the first kidney transplant on Long Island. Today, more than 1,500 kidney transplants have been performed at Stony Brook University Hospital.

This laboratory provides state-of-the-art pre- and post-transplant testing. The lab uses cutting-edge microarray methods to help identify the best possible donors for our patients and evaluates the immune status of the recipient after transplantation.

Marrow subset includes comprehensive function for its 1984, The abnormal immunofixation testing laboratory disease acquired including the possible microarray post. This performed more first Suffolk programs, hematopoietic stem cell transplantation.

Immunology Laboratory

The Clinical Immunology Laboratory provides a menu of testing for immune-based disorders, including congenital immunodeficiency diseases, acquired immunodeficiency diseases, infectious disease serology and autoimmune diseases. This laboratory supports Cancer Services by providing testing such as Serum Electrophoresis and immunofixation that identifies and categorizes abnormal paraprotein.

The Lyme Disease Laboratory, established in 1984, continues to be recognized nationally for its expertise in its “home grown” methodology for Lyme serology. For more information, visit medicine.stonybrookmedicine.edu/pathology/lk.

The Clinical Flow Cytometry Laboratory is a full-function Flow Cytometry Laboratory. Its comprehensive menu of the latest diagnostic testing includes leukemia/lymphoma phenotyping, T-cell subset analysis and granulocyte function testing. These diagnostic tests are critical in support of Cancer Services and, in particular, the Bone Marrow and Stem Cell Transplantation Program.

Tests include HLA typing, anti-HLA antibody tests donor specific anti-HLA “cross match” tests, and bone marrow/stem cell engraftment monitoring assays. State-of-the-art methodologies include molecular methods such as sequence specific DNA primers (SSP) for low- and high-resolution HLA typing, and sequence specific DNA oligonucleotides (SSO) for low- to moderate-resolution HLA typing (Luminex® technology), and bone marrow engraftment (chimerism determination) for post-transplant monitoring using a semi-quantitative PCR amplification of VNTR (variable number of tandem repeats) or STR (short tandem nucleotide repeats).

Contact Information
For more information, please call (631) 444-1789.
The Molecular Genetics Laboratory is a state-of-the-art laboratory and utilizes the most current molecular technologies in testing. The laboratory performs genetic testing for Factor V Leiden, and prothrombin mutation, infectious disease testing including HIV and HCV viral load, Influenza virus, C. Difficile, and Chlamydia and gonorrhea. The laboratory also offers q BCR-ABL for ALL and CML variants, and B- and T-cell gene rearrangement to diagnose and monitor some types of leukemias and lymphomas.

The Molecular Genetics Laboratory offers Rapid MRSA testing for patients in Intensive Care Units to quickly identify and isolate patients colonized with MRSA, thus avoiding costly isolation and minimizing its spread. The Molecular Genetics Laboratory offers a comprehensive Respiratory Panel of 17 respiratory viruses and 3 bacteria. The multiplex-PCR system utilized for testing allows for a more rapid turnaround time than previous testing methodologies.

Contact Information
For more information, please contact Laboratory Director Dr. Silvia Spitzer Ph.D.
Phone: (631) 444-7522
Transfusion Services

The Blood Bank at Stony Brook Medicine is staffed 24/7, and offers a full-service state-of-the-art immunohematology testing and laboratory and blood donor and hemapheresis service.

Immunohematology. The Immunohematology Laboratory provides blood and blood component transfusion support. The laboratory maintains a comprehensive supply of clotting factor components for the immediate treatment of patients with various clotting factor deficiencies. These include patients with classic hemophilia A and von Willebrand disease, among other congenital and acquired coagulopathies.

The laboratory is equipped with the most up-to-date automated immunohematology analyzers, providing rapid testing and advanced reference lab capability to diagnose and treat patients with difficult blood compatibility problems leading to successful blood transfusion.

Therapeutic Hemapheresis. This permanent hospital-based program provides 24-hour service, including emergency services, and is the only one of its kind in Suffolk County. It is staffed around-the-clock with board-certified physicians specializing in transfusion medicine and specialized nurses trained in therapeutic procedures. Therapeutic hemapheresis services are provided for both inpatients and outpatients. Services include therapeutic plasmapheresis, therapeutic WBC depletions, photopheresis, red blood cell exchanges, and autologous and allogeneic stem cell collections for various medical services at Stony Brook University Hospital, including Hematology, Medicine, Neurology, Oncology, Orthopaedics, Pediatrics, Surgery and Urology. Our state-of-the-art equipment uses current best practice guidelines. The Therapeutic Hemapheresis Service participates with the National Marrow Donor Program, collecting stem cells for nationwide distribution.

Blood Donor Services. The Blood Donor Center, located adjacent to the Blood Bank Laboratory, services the University campus and surrounding community with the availability of routine whole blood and blood platelet donations. The Center provides directed donor services (blood donated for a specific patient in need) and autologous donor services (blood donated by a patient for his or her own use during surgery). The donor room is staffed by specialized registered nurses trained in donor room product corrections.

The Donor Center is open for donation by appointment (preferred) or walk-in.

Location
Stony Brook University Hospital
Level 5 (main level)

Hours of Operation
Monday through Friday, 7:45 am to 8 pm
Saturdays, 8:30 am to 4 pm

Telephone: (631) 444-DONATE

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Patient Service Center

Our licensed Outpatient Specimen Collection Center is a conveniently located, community-based facility with varying hours that accommodate a wide range of patient needs. We offer a staff of highly trained, experienced, bilingual phlebotomists who specialize in adult and pediatric specimen collection and provide the most professional, safe and clean specimen collection services available. In addition to routine blood and urine collections, our facility also performs glucose or lactose challenge tests, venipuncture services for research and serves as a specimen drop-off location for other diagnostic laboratory tests. Our winning staff, recognized for sustained high patient satisfaction scores, is committed to patient care and diligently works to provide every client with prompt and professional service. A request is required from a licensed healthcare professional and special preparation may be needed for some laboratory tests. Appointments are not required but patients should check with their insurance carrier regarding coverage for outpatient laboratory services. Ample parking is available. Please call our office with any questions and for hours of operation.

Location/Contact Information
3 Technology Drive, Suite 600
East Setauket, NY
Telephone: (631) 444-4033
Fax: (631) 444-4029

Customer Service Center

The Laboratory Customer Service Center is located in Stony Brook University Hospital, Level 3, Room 534 of the Department of Laboratories. Our dedicated Customer Service Representatives are available Monday through Friday, from 7 am to 9 pm.

Our staff provides community clinicians with result reporting, supply ordering, collection and handling questions and will arrange transportation of laboratory specimens to Stony Brook University Hospital Department of Laboratories. We assist all clients of the laboratory with information regarding test availability and turn-around-times. We assist patients with lab test preparation and items that they would need to bring to have a laboratory test performed. Our office also schedules Sweat Chloride Tests which are available by appointment only. Clients can be assured of prompt and accurate problem resolutions and personalized service.

Appointments/Insurance Coverage
For appointments or questions about insurance, please call (631) 444-2623 or (631) 444-2662. Our fax number is (631) 444-6087.