

Cytogenetics

PhenoPath offers cytogenetic analysis to aid in the diagnosis of a broad range of oncology settings. For more information, please visit our website, email us at lab@phenopath.com, or contact Client Services or your Regional Sales Manager (888-927-4366).

PhenoPath is committed to rigorous testing, definitive diagnosis, and outstanding customer service, with an emphasis on accuracy, integrity, innovation, and accessibility to clients. Our testing strategies are based on continuous review of the most current medical literature, including the results of major clinical trials.

Features / Benefits

Provides comprehensive chromosomal studies in combination with flow, IHC, FISH and molecular studies, providing a single source solution

Cross-disciplinary cooperation between pathologists to deliver accurate diagnoses

Board-certified clinical cytogeneticists available for consultation

Over 20 years of experience in diagnostic cytogenetics

Each case analyzed by at least 2 technologists, and reviewed by a board-certified cytogeneticist

Pathologists and technologists available to address your clinical and technical questions

Use of image analysis (MetaSystems) increases ability to identify metaphases when mitotic index is low

Culture method optimized for increased sensitivity in detecting abnormalities

Rapid turnaround time: neoplastic specimens: 5-7 days; solid tumor: 10-14 days

Cytogenetics Studies

- Hematologic Analysis - Bone Marrow, Blood, Lymph Node (neoplastic specimens)
- Solid Tumor - fresh tissue

FISH Studies (Heme Only) *

7q31/del 7q	inv16 / t(16;16)(p13;q22) (CBFB)
11q22.3_ATM	MALT1 (18q21) translocations
11q23 MLL (Breakapart)	MYC (8q24) translocations
13q14.3_D13S319	RARA translocations
13q34_LAMP	t(4;14) FGFR3/IGH
17p13.1_P53	t(8;21) (RUNX1/RUNX1T1)
20q12	t(9;22) BCR/ABL
BCL6 translocations	t(11;14) CCND1/IGH
CEP3, 5, 7, 9, 11, 15	t(11;18) MALT1/API2
CEP 8 (Trisomy 8)	t(14;16) IGH/MAF
CEP12	t(14;18) IGH/BCL2
EGR1 (5q31/5p15.5)	t(14;18) IGH/MALT1
FGFR3/IGH	t(15;17) PML/RARA
IGH translocations	TP53/CEP17

FISH Panels

ALL (Acute Lymphocytic Leukemia)
 AML (Acute Myelogenous Leukemia)
 APL (Acute Promyelocytic Leukemia)
 B Cell, Non-Hodgkin Lymphoma (Aggressive B-NHL)
 B Cell, Non-Hodgkin Lymphoma (Indolent B-NHL)
 CLL/SLL (Chronic Lymphocytic Leukemia)
 CML (Chronic Myelogenous Leukemia)
 MALT1 Breakapart (18q21) positive, reflex panel
 MDS (Myelodysplastic Syndrome)
 MPN (Myeloproliferative Disorder)
 MYC
 Myeloma

* Visit us at www.phenopath.com for full listing of heme and solid tumor FISH tests, in addition to PhenoPath's comprehensive test menu.

CYTOGENETICS MEDICAL & PROFESSIONAL STAFF



Shawna Pyott, PhD, FACMG
Associate Director of Clinical Cytogenetics

Shawna Pyott, PhD developed PhenoPath's clinical cytogenetic service, which launched in March of 2014. Dr. Pyott received her PhD in molecular pathology from the University of Washington, Department of Pathology and completed the Clinical Cytogenetics and Molecular Genetic Fellowship Training Program at the University of Washington Medical Center (UWMC), Department of Medicine. She is board-certified in Clinical Cytogenetics (ABMG), is board eligible in Molecular Genetics, and is a fellow of the American College of Medical Genetics (FACMG). Dr. Pyott is proficient in the technical and interpretive aspects of cytogenetics and FISH for both neoplastic and non-neoplastic disorders, and directs the day-to-day activities of the cytogenetics laboratory, in close collaboration and integration with PhenoPath's other divisions.