

CAROLYN CRENETI

HTL(ASCP)^{CM} • QIHC(ASCP)^{CM} • QLS(ASCP)^{CM}

(216) 906-7388 • carolyncreneti@yahoo.com

PROFESSIONAL SUMMARY

Credentialed Histotechnologist with 10+ years of experience in high-complexity histology, IHC/ISH, immunofluorescence, and neuromuscular pathology across major academic medical centers. Proven track record leading specialty labs, training and mentoring technical staff, and driving measurable improvements in quality, efficiency, and cost. Seeking a role that leverages deep expertise in IHC/ISH methodology, SOP development, CAP/CLIA compliance, staff development, and laboratory safety within a world-class academic and research environment.

KEY COMPETENCIES

Leadership & Staff Development: Trained successor technologists in a specialized neuromuscular lab; designed orientation programs and competency assessments; mentored staff on continuous improvement with a patient-centered focus.

IHC/ISH/IF Expertise: High-volume IHC on Ventana BenchMark ULTRA and Leica BOND-III/BOND-MAX/BOND-RX; ISH staining; immunofluorescence; manual antibody dilutions; specialty IHC panel preparation; protocol development and CAP 10+10 validation.

Quality & Safety: SOP development and maintenance; CAP/CLIA inspection readiness; QC/QA oversight; proficiency testing; quality metrics and TAT monitoring; laboratory safety compliance.

LIS & Systems: Proficient in Epic LIS; familiar with Cerner, CoPath, and PowerPath; procedure manual maintenance.

PROFESSIONAL EXPERIENCE

Histology Team Lead – Neuromuscular Lab | Children's Wisconsin *Milwaukee, WI* • Feb 2024 – Jun 2025

- Sole operator of a specialized neuromuscular biopsy lab processing 100+ clinical cases per year; managed complete workflow from OR specimen pickup through cryostat sectioning, enzyme histochemistry, IHC, and immunofluorescence.
- Validated Myosin Heavy Chain Fast and Slow antibodies on Leica BOND-III per CAP 10+10 protocol, transitioning from labor-intensive manual ATPase staining to automated IHC — yielding approximately 50% cost reduction per case set (\$6.60 → \$3.97) and significant TAT improvement. Developed and maintained all SOPs for the neuromuscular program.
- Trained two successor histotechnologists in full neuromuscular protocols, ensuring program continuity for a rare specialty lab — including complete enzyme histochemistry panel (SDH, NADH, COX, Combined COX/SDH, Esterase, Acid Phosphatase, Alkaline Phosphatase, ATPase 9.4/4.6/4.3, Oil Red O, Gomori Trichrome, PAS, Congo Red, Phosphofructokinase, Myoadenylate Deaminase), nerve teasing, multiplex IHC, immunofluorescence, and IHC.
- Sole responsibility for supply and reagent procurement: catalogued inventory, sourced cost-effective alternatives, and managed vendor relationships — maintaining uninterrupted lab operations on a constrained specialty budget.
- Coordinated external hospital outreach: managed courier relationships for same-day frozen muscle biopsies, maintained contact database across referring institutions, and distributed requisition forms and specimen packaging instructions to ensure sample integrity on arrival.
- Managed cold chain logistics including liquid nitrogen and dry ice handling, safe storage, and compliant dry ice shipping.
- Maintained organized -80°C freezer archive spanning specimens from 2003 to present; tracked all send-out blocks and slides with a returns log to ensure chain-of-custody and retrieval for research and second-opinion consultations.
- Achieved 30% lab-wide TAT reduction; prepared lab for CAP inspection in 8 weeks; executed full lab relocation with no disruption to clinical operations.

Traveling Histotechnologist – IHC/ISH Specialist | Aya Healthcare Chicago, IL • May 2023 – Nov 2023
Northwestern Memorial Hospital — Immunohistochemistry Department

- One of two histotechnologists autonomously managing the complete overnight IHC, ISH, and special stains workflow at a high-volume academic medical center, processing 200+ slides nightly.
- Operated Ventana BenchMark ULTRA and Leica BOND-III for IHC; 6-hour ISH runs on Ventana BenchMark ULTRA; Dako Artisan Link for special stains.
- Performed manual antibody dilutions, prepared specialty diagnostic panels (breast, MMR), and maintained control tissue reserves to sustain slide inventory.
- Conducted microscopic QC on every case, verified control reactivity, and signed out cases in Epic LIS prior to pathologist delivery.
- Introduced alphabetical case organization system replacing informal tissue-morphology sorting, improving distribution accuracy by 30%; monitored order queue through early morning hours to ensure complete nightly throughput.

Traveling Histotechnologist | Aya Healthcare / Triage Staffing. WA • AZ • Jun 2025 – Dec 2025
UW Medical Center – Montlake (Seattle, WA) | LabCorp (Phoenix, AZ)

- Sustained ~30 blocks/hr sectioning and 50–60 blocks/hr embedding across high-volume FFPE workflows at two distinct academic and commercial lab systems.
- UW Medical Center: Embedding and microtomy across full surgical pathology specimen mix (GI, skin, gyn biopsies and large tissues); organized blocks by case number and priority; H&E staining on Sakura Prisma.
- LabCorp Phoenix: Semi-automated microtome sectioning; H&E staining on Ventana H&E 600; utilized specimen logs to efficiently retrieve and process recut and deeper level requests.

Histotechnologist / Laboratory Technician II | Cleveland Clinic Cleveland, OH • Feb 2016 – May 2023

- Progressed from Laboratory Technician → Trainee → HTL(ASCP)^{cm} over 7-year tenure at a high-volume academic medical center.
- Full-scope histology including FFPE processing, embedding, microtomy, H&E, and a broad range of special stains (trichrome, PAS, reticulin, GMS, AFB, mucicarmine, iron, and others); maintained 98% H&E quality rating against departmental standard.
- Developed block-tracking pattern recognition system to maintain 100% specimen accountability across a high-volume multi-processor environment.
- Informal training role for newer staff, guiding colleagues from orientation through independent competency; completed neuromuscular rotation that directly led to Children's Wisconsin leadership position.

RESEARCH EXPERIENCE

Research Technician | Dr. Diane M. Duffy Lab, Eastern Virginia Medical School. Norfolk, VA • 2015

- Contributed to reproductive biology research investigating novel contraceptive mechanisms and ovulatory physiology using cynomolgus macaque (*Macaca fascicularis*) primate animal models.
- Administered ketamine sedation and hormone injections (FSH, LH, hCG, progesterone); monitored follicular development via ultrasound; assisted in laparoscopic and laparotomy surgeries under Dr. Duffy.
- Performed complete histological processing of whole primate ovarian tissue: formalin fixation, paraffin embedding, serial sectioning, and IHC for hormone marker localization.
- Conducted RNA isolation, cDNA synthesis, and quantitative PCR (qPCR) for gene expression analysis in granulosa cells and ovarian tissue.
- Contributed to research resulting in peer-reviewed publications in *Biology of Reproduction* (Kim, Trau & Duffy, 2016; Kim, Trau & Duffy, 2017).

Undergraduate Research Assistant | Dr. Andrew D. Miller Lab, Cornell University. *Ithaca, NY* • 2014–2015

- Co-authored peer-reviewed IHC research characterizing the immune cell microenvironment in canine oligodendroglioma; performed IHC for CD3, PAX5, Iba-1, HLA-DR, Mac387, and CD31 on 34 FFPE canine brain tumor specimens.
- Publication: Sloma EA, Creneti CT, Erb HN, Miller AD. (2015). Characterization of Inflammatory Changes Associated with Canine Oligodendroglioma. *Journal of Comparative Pathology*. doi:10.1016/j.jcpa.2015.05.003

INSTRUMENTATION

IHC/ISH Platforms: Ventana BenchMark ULTRA, Ventana BenchMark ULTRA Plus, Leica BOND-III, Leica BOND-MAX, Leica BOND-RX

Special Stainers: Dako Artisan Link, Ventana BenchMark Special Stains

H&E Stainers: Sakura Prisma Plus, Ventana H&E 600, Leica Autostainer XL, Leica HistoCore SPECTRA ST

Tissue Processors: Leica HistoCore PELORIS, Sakura VIP, Leica ASP, Thermo Excelsior, Milestone PATHOS Delta

Microtomes: Leica RM series, Leica HistoCore AUTOCUT, Thermo HM series, Microm HM series, Shandon Finesse, Cancer Diagnostics PFM (experience with both manual and semi-automated models)

Cryostats: Leica CM series, Thermo HM series

CREDENTIALS & LICENSURE

Histotechnologist (HTL(ASCP)^{cm}) — 01/2021 – Present • ASCP

Qualification in Immunohistochemistry (QIHC(ASCP)^{cm}) — 05/2025 – Present • ASCP

Qualification in Laboratory Safety (QLS(ASCP)^{cm}) — 08/2025 – Present • ASCP

Digital Pathology Certificate Program — 07/2025 • NSH & DPA

MB(ASCP) — Molecular Biology — In Progress; Anticipated 2026

Florida – Histology Technologist — License No. TN 57533 • Exp. 9/30/26

New York – Certified Histotechnician — License No. 001017 • Exp. 10/31/26

EDUCATION

B.A. in Biological Sciences | B.A. in Spanish — Cornell University, *Ithaca, NY* • May 2015

Minor in Latin American Studies

Certificate in English to Spanish Translation Studies — Adelphi University, *Garden City, NY* • 2016

Eight-month program covering legal, medical, and literary translation methods and editing techniques.

PROFESSIONAL AFFILIATIONS & ADDITIONAL

NSH — Member in good standing, National Society for Histotechnology

ASCP — Member in good standing, American Society for Clinical Pathology

Invited Speaker, NSH Annual Convention 2026 (San Antonio, TX) — “From Sections to Striations: The Core Skills of Muscle Histology” — September 29, 2026

Languages: English (native) • Spanish (fluent)