

WELCOME TO OUR

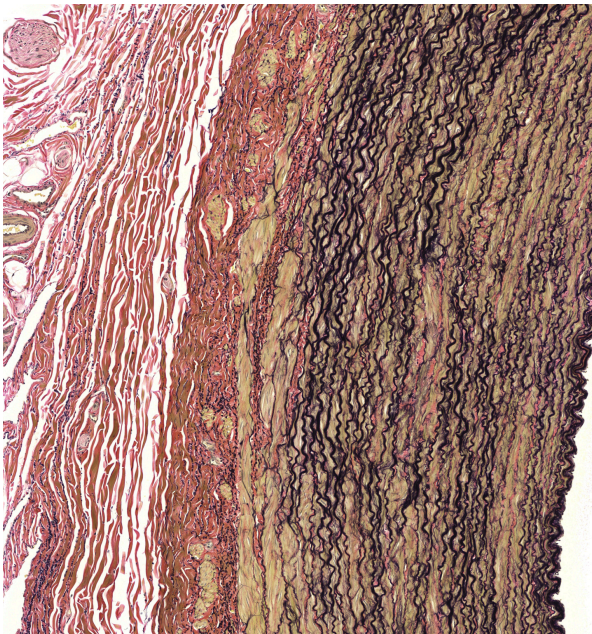
# Newsletter

## Beyond H&E: The Art and Science of Special Staining

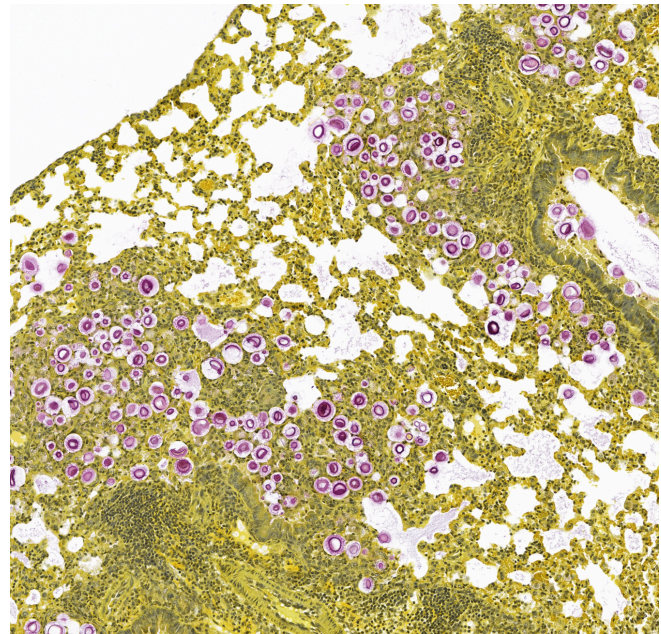


*Welcome to the special staining Unit at Wax-it*

At Wax-it Histology Services in Vancouver, we go beyond routine H&E to reveal deeper biological meaning in every tissue section. Special stains bring structure, composition, and pathology to life, delivering insight essential for understanding fibrosis, inflammation, biomaterial integration, and therapeutic response. With over 22 years of GLP-compliant expertise, our team combines scientific rigor with visual excellence to transform slides into reliable, actionable data.



Verhoeff-van Gieson- Swine Aorta



Mayers- Mucicarmine - Liver

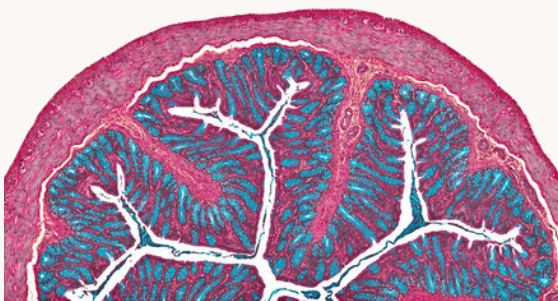
## Precision histology, powered by expertise –at Wax-it Histology Services

Every tissue section tells a story. At Wax-it Histology Services, we help you see it clearly. Through the art and science of special staining, our team transforms routine slides into meaningful insights that bring research to life.

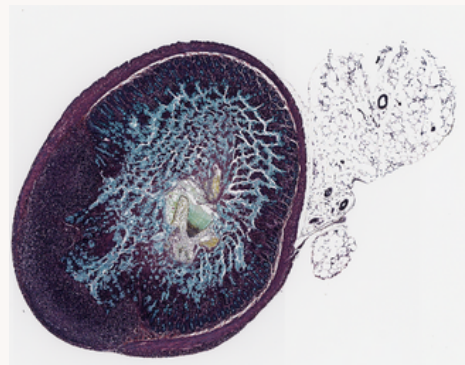
Whether you're studying subtle fibrosis, tissue-device interactions, or regenerative processes, our special stains reveal the fine details that H&E alone can't capture.

### The Science Behind the Color

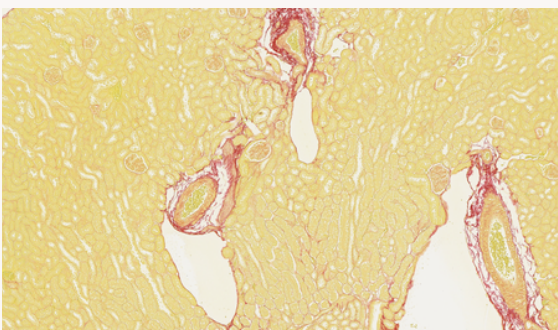
- In today's preclinical landscape, imaging and quantification are advancing rapidly, but the foundation of all visual data still lies in histology.
- Special stains remain indispensable for interpreting complex biological responses such as inflammation, fibrosis, or cellular remodeling, especially in device-tissue and drug-tissue studies.
- At Wax-it, we combine scientific precision with expert skill, ensuring that every slide is both technically accurate and visually compelling.



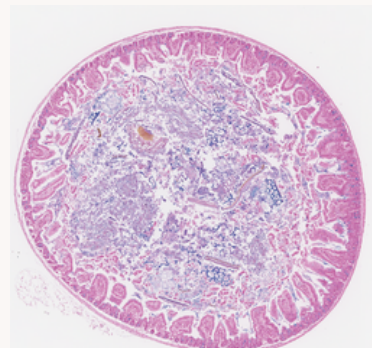
Trichrome – Gut Tissue



Movat's Pentachrome– Mouse Payer's Patch



BPSR - Mouse Kidney



Alcian Blue- Mouse Intestine



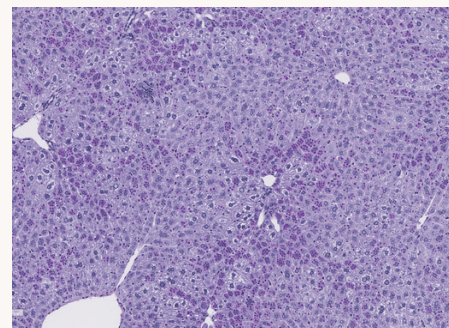
## When Routine Isn't Enough – The Colorful Language of Tissue

Each stain we perform is more than a technique – it's a tool for discovery.

- Masson's Trichrome – Distinguishes collagen from muscle, bringing structure and fibrosis into focus.
- Periodic Acid-Schiff (PAS) – Accentuates glycogen, glycoproteins and mucins, basement membranes, and fungal elements with remarkable clarity.
- Alcian Blue - At pH 2.5, Alcian Blue stains all acidic mucins and glycosaminoglycans, including both sulfated and carboxylated types, making it suitable for general detection of mucins and mucosubstances. At the lower pH of 1.0, it selectively stains only highly sulfated acidic mucins, which is particularly useful for studying mucosal tissues and cartilage.
- Congo Red – Reveals amyloid deposits red in basic solutions, blue in acidic solutions (around pH 3.0-5.0). If you visual under polarized light, Amyloid shows up as apple -green.
- Oil Red O / Sudan IV – Identifies lipids in frozen sections, essential for metabolic and toxicology research.
- Luxol Fast Blue – Maps myelin in neural tissue, supporting studies in neurodegeneration and repair.
- Von Kossa / Alizarin Red – Demonstrates mineralization and bone formation with striking contrast.
- Gram, Giemsa, Ziehl-Neelsen – Detects bacteria and acid-fast organisms with diagnostic precision.



Periodic Acid-Schiff (PAS)  
Stain - Mouse Liver



## Why Researchers Choose Wax-it Histology

We see histology as a collaboration – not a transaction.

Our team partners with clients to design custom workflows that match each study's unique goals, from pilot experiments to large-scale, multi-timepoint projects.

What sets us apart:

- Over 22 years of experience with GLP-compliant in preclinical histopathology
- Digital whole slide scanning for high-resolution imaging and analysis
- Proven expertise in routine & resin histology followed by special staining to visualise tissue-device interaction, fibrosis, inflammation, and therapeutic development
- Personalized guidance at every step from staining selection to image interpretation
- Fast turnaround times without compromising the quality

We believe that your data deserves more than a routine report. It deserves to be seen, understood, and trusted.

## From Vancouver to the World

Based in Vancouver, Canada, Wax-it Histology Services proudly supports research teams across North America and beyond.

Whether you're developing a new medical device, studying regenerative therapies, or validating preclinical models, our special staining services bring precision, clarity, and depth to your histological analysis.

✉ Get in touch: [info@waxitinc.com](mailto:info@waxitinc.com)

🌐 Learn more: [waxitinc.com](https://waxitinc.com)

📍 Location: Vancouver, BC – Proudly serving North American & International Clients