The Biological Stain Commission

- Started in Geneva, NY in 1922-23 as:
  the Commission on the Standardization of Biological Stains
- Goals:
  1. To ensure uninterrupted supply of dyes used in biological and medical applications.
  2. To promote cooperation and dialogue among manufacturers, vendors and users of dyes.
  3. To ensure the quality of dyes through independent testing
  4. To educate users of biological stains about sources of reliable dyes and how best to use them.
  5. To publish information concerning new or improved uses for biological dyes and related histochemical techniques.

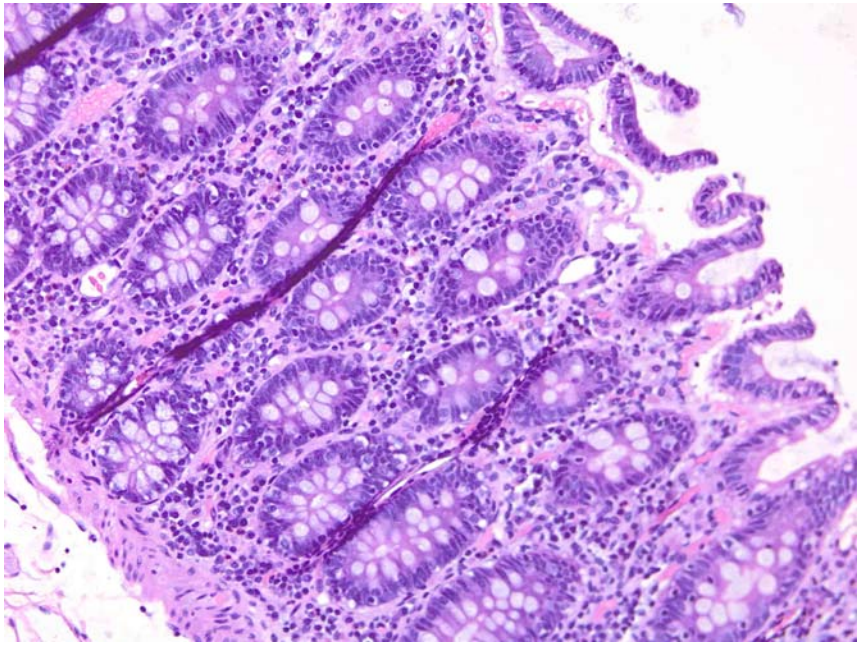
How the BSC goals are met

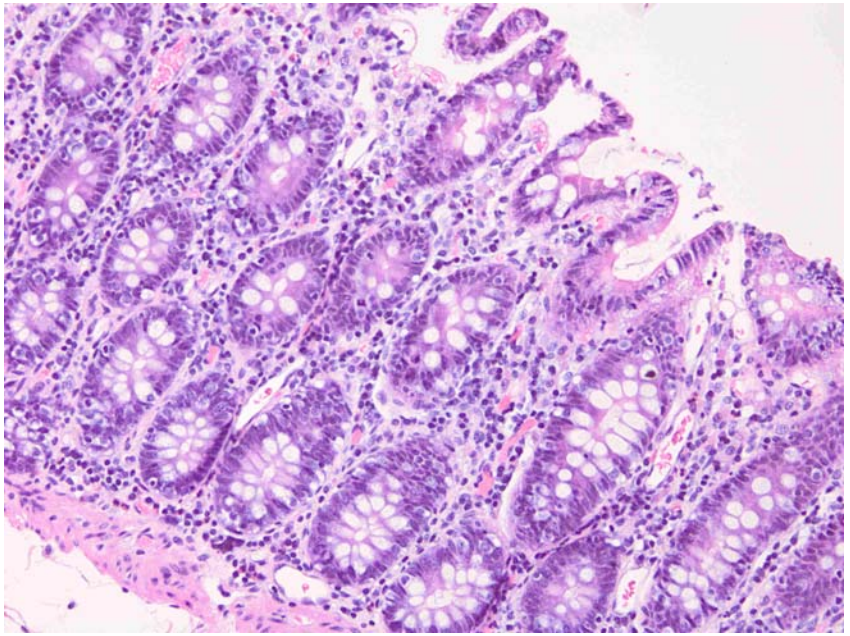
1. Analysis of dye content and composition of samples supplied by dye manufacturers or vendors
2. Testing performance of dye samples in rigorous standardized procedures
3. Issuing labels certifying that dyes have met the performance criteria of the BSC
4. Conducting and supporting research on biological dyes and histochemical techniques
5. Publishing papers on biological dyes and histochemical techniques in our Journal, Biotechnic & Histochemistry
6. Maintaining active dialogue among scientists, manufacturers and vendors through an Annual Meeting

History of Dye Testing and the BSC

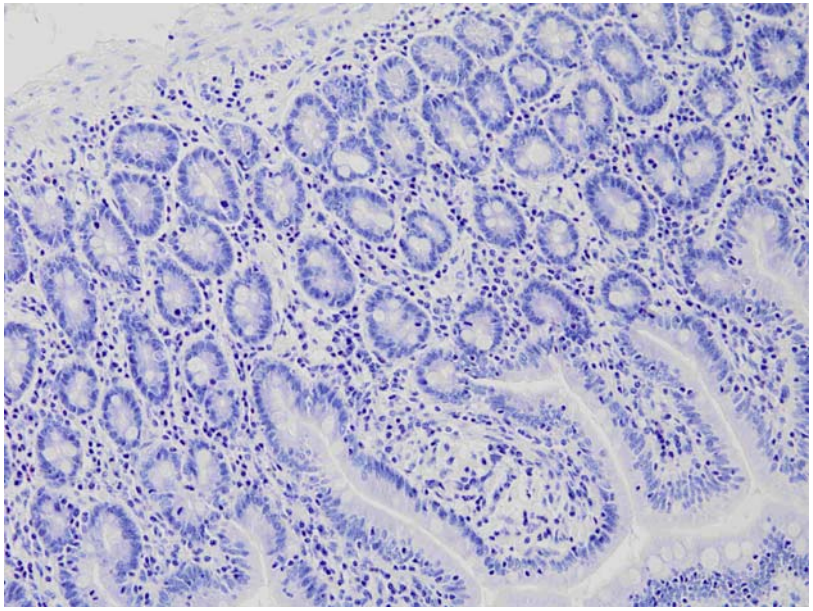
- Began in 1880 by Georg Grübler, a student of Dr Carl Weigert in Germany, who developed a definitive method for staining myelin sheaths
- Shipping of dyes blocked to USA during World War 1
- The Commission on the Standardization of Biological Stains began in 1922 in Geneva, NY, with a memorandum of understanding with the US Department of Agriculture
- ‘Stain Technology’ established as Commission Journal in 1926; changed to ‘Biotechnic & Histochemistry’ in 1992
- BSC lab moved in 1947 to University of Rochester, NY

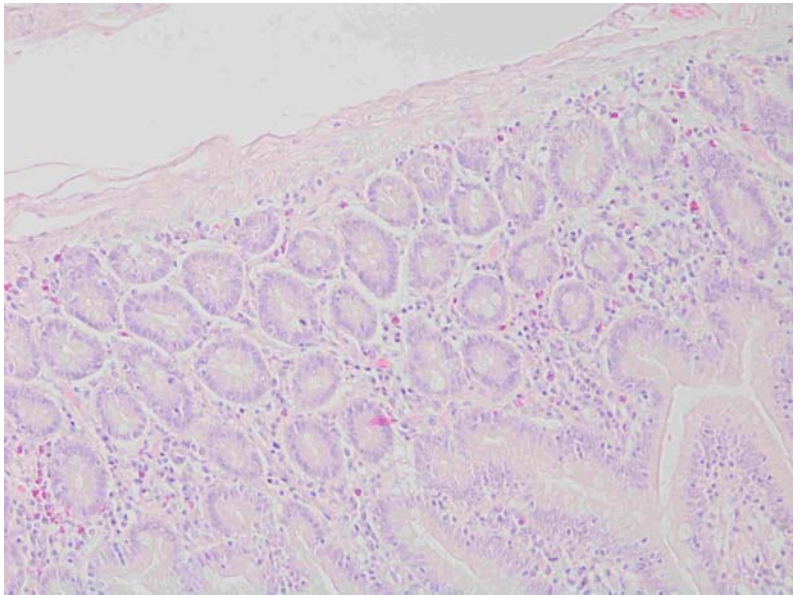
Staining characteristics of two H&E stains of colonic mucosa

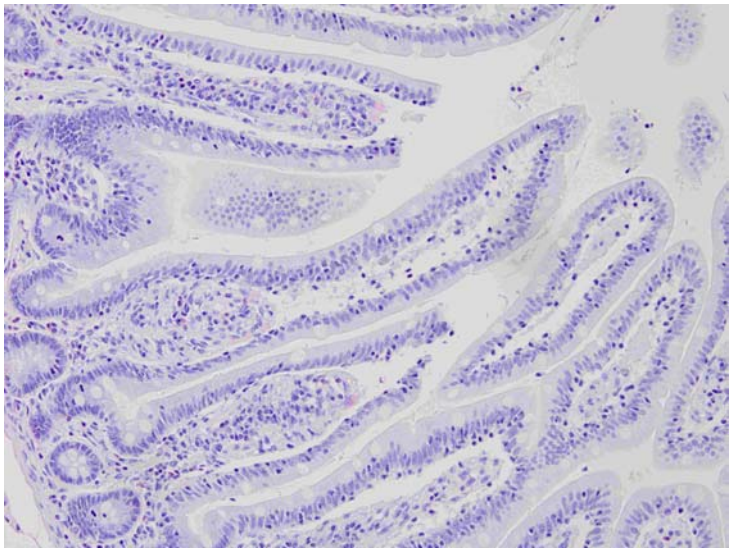




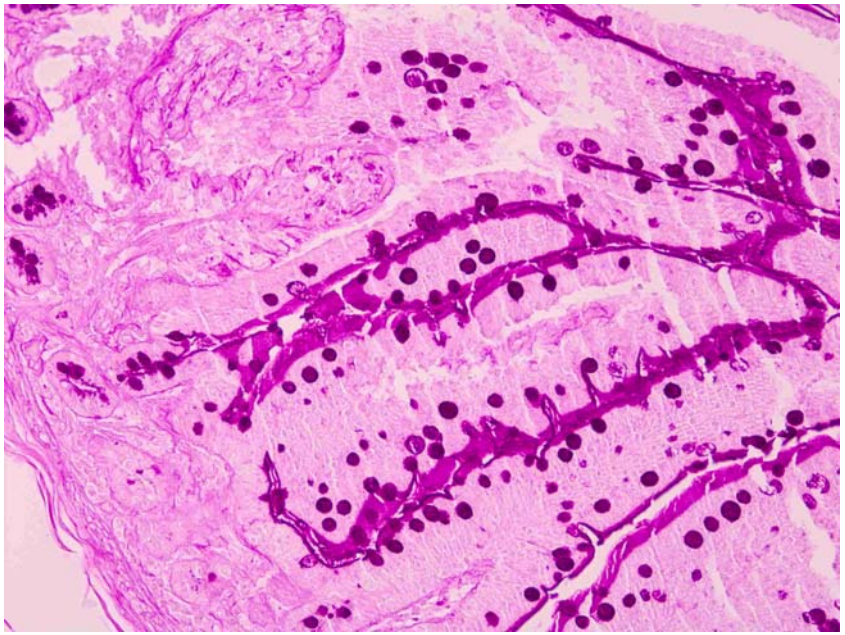
Staining characteristics of 3 poor H&E stains

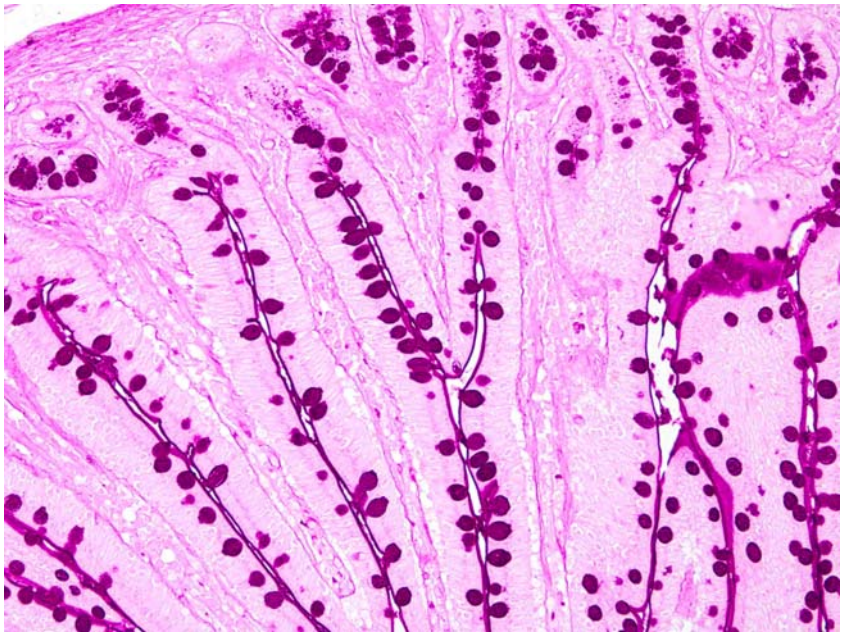




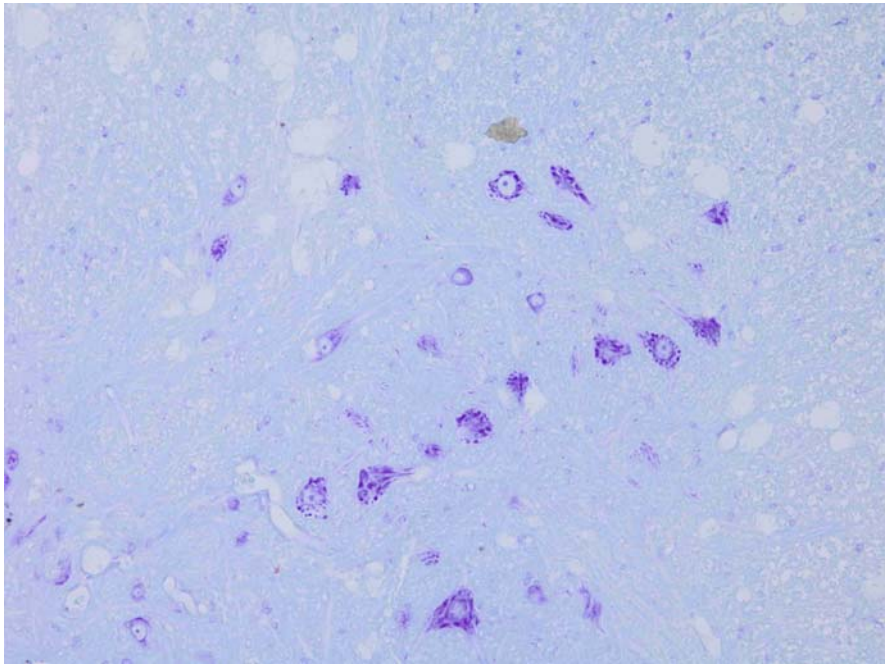


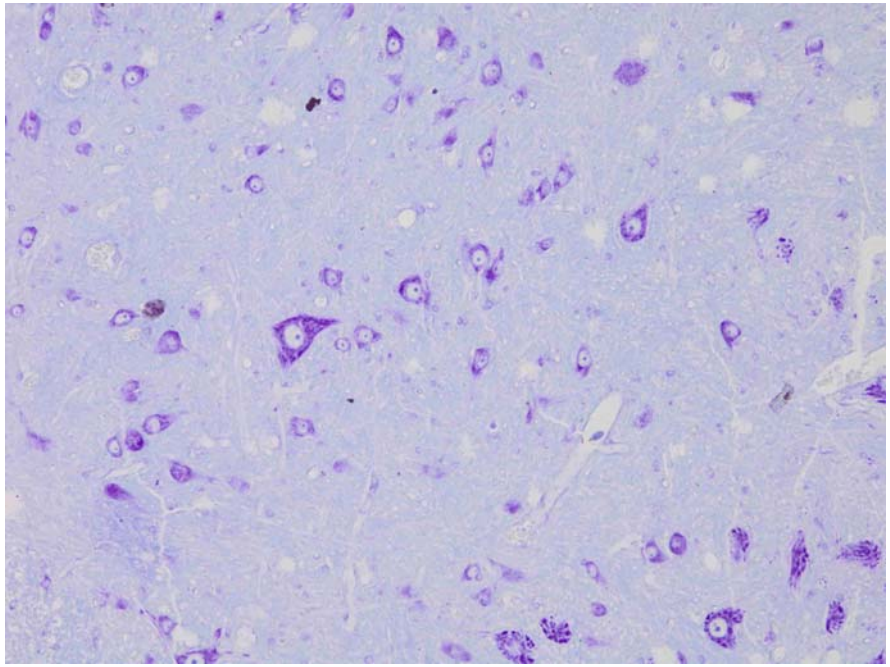
Staining characteristics of two PAS stains of colonic mucosa





Nissl staining of nucleic acids in brain using Cresyl violet acetate





H&E slide with sectioning artifacts and weak staining of metastatic thyroid carcinoma