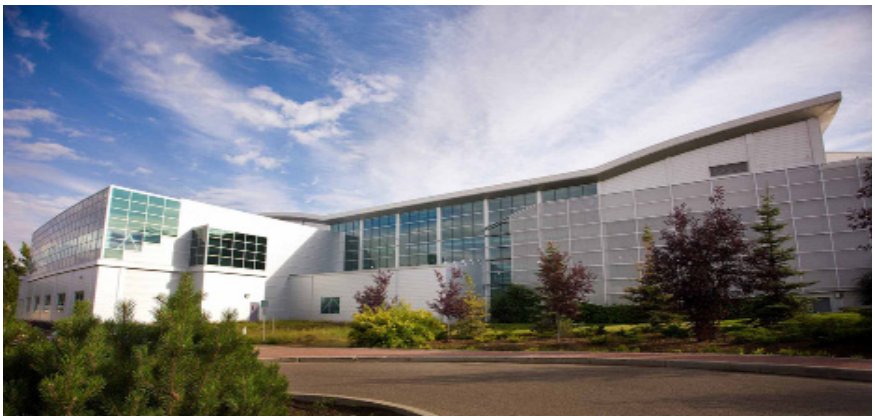
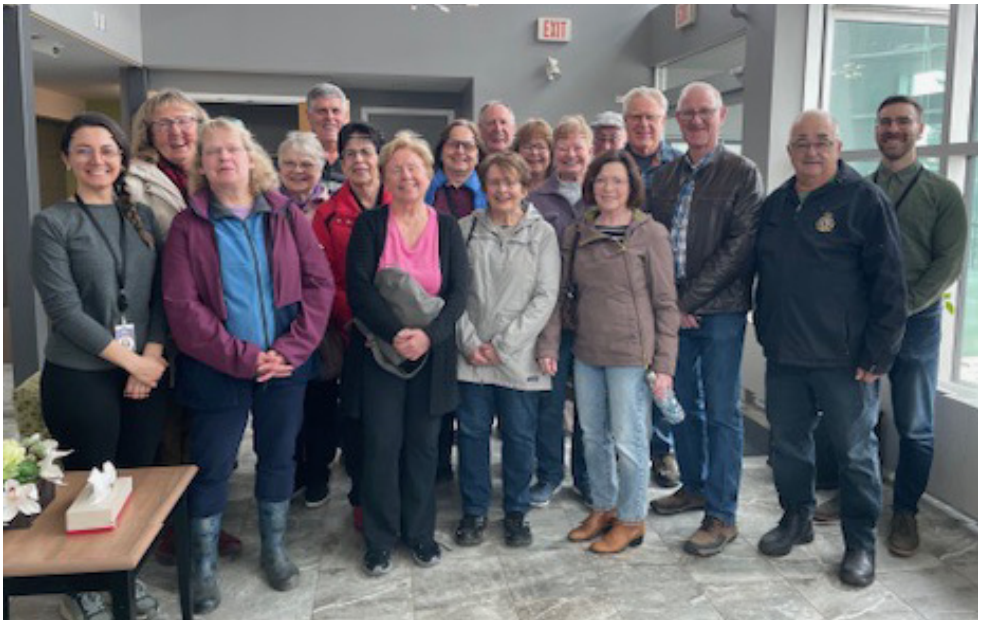
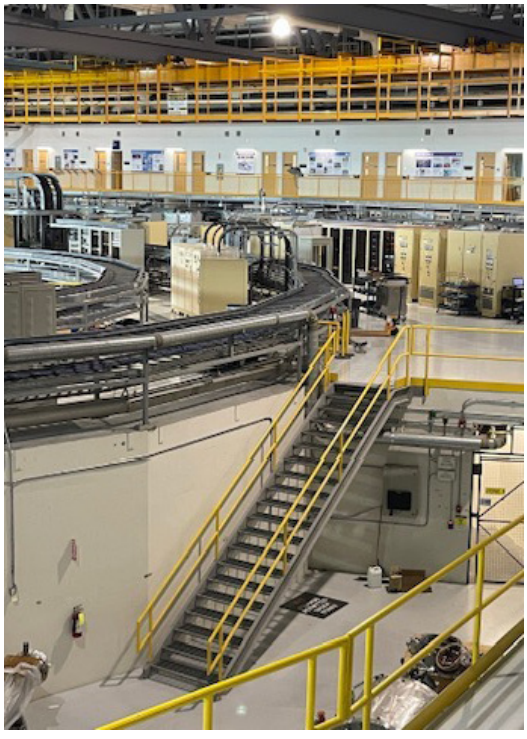
STS Saskatoon Chapter
visited the
Canadian Light Source
Tuesday, April 8, 2025

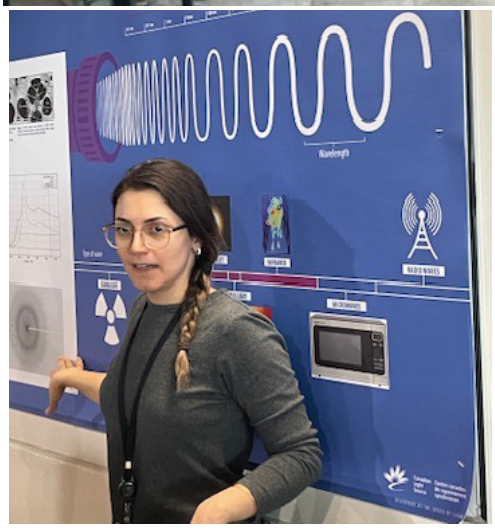


This is Canada's only synchrotron research facility located on the U of S Campus. CLS delivers high-quality, stable and reliable light to the over 1,000 scientists from across Canada and around the world who use the CLS each year for research related to health, agriculture, environment and advanced materials. CLS employs more than 250 people including scientists, engineers, technicians and administrative and business personnel.

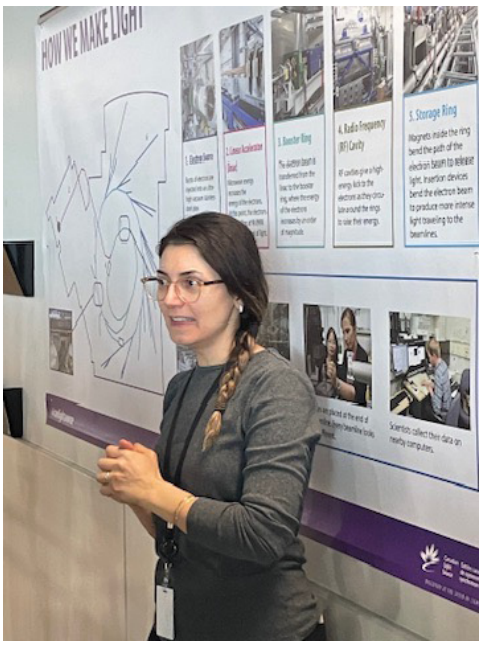


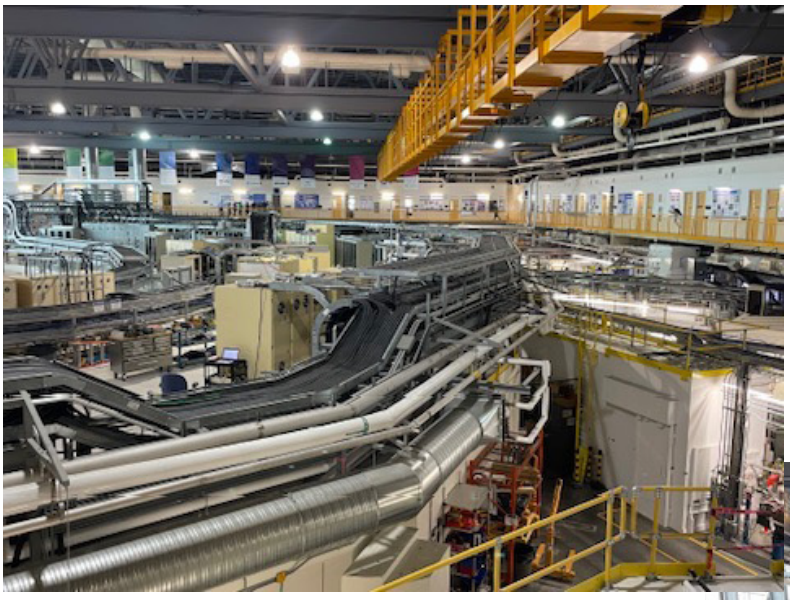
Our group along with our tour guides, Mehrnaz & Noah.



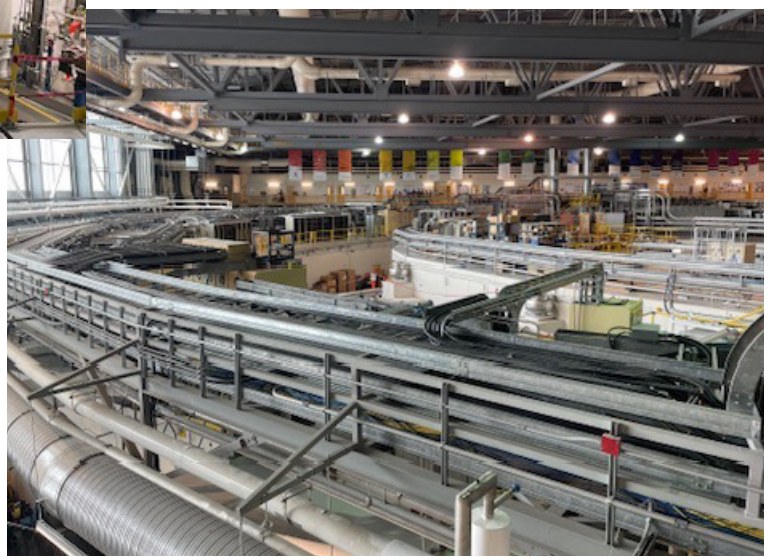


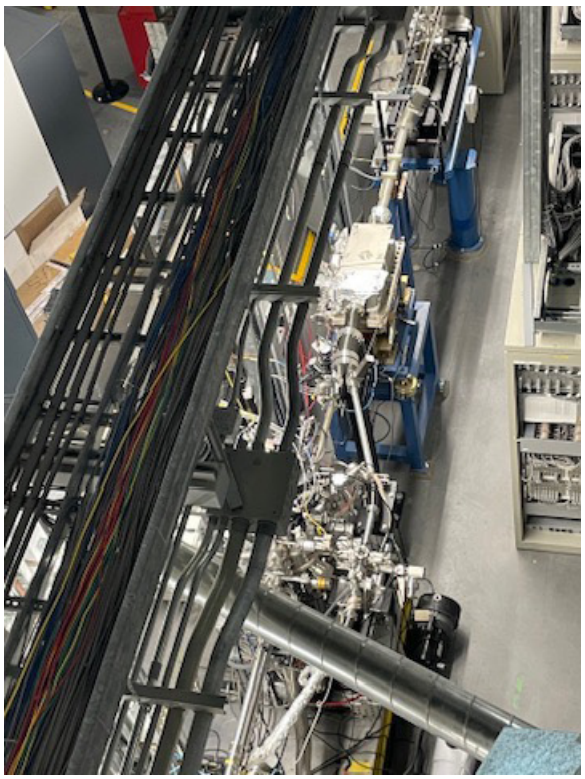
Mehrnaz explains how the Synchrotron works...



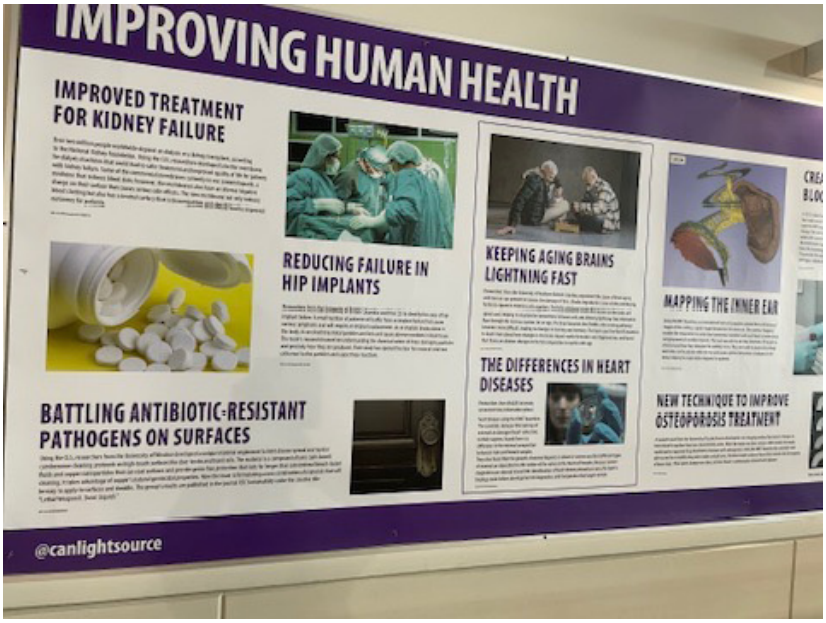


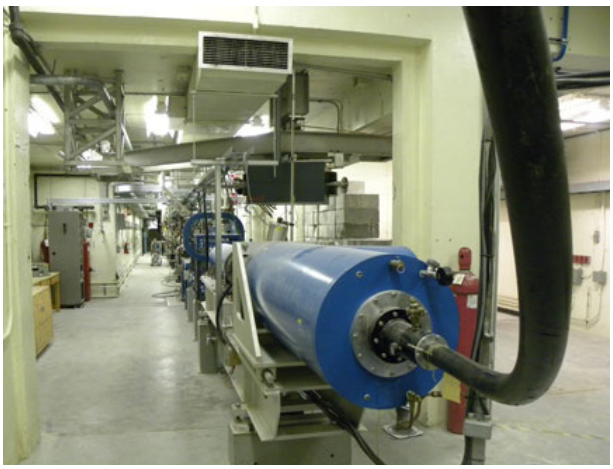
When a synchrotron accelerates electrons, they are "bent" around corners using magnets. When the particles go around the corners they release photons, or little bits of all kinds of light. We can then filter out the spectra, or kinds, of light we want such as Infrared (IR), Ultra-Violet (UV), and X-Ray light.





Uses for the Synchrotron...





In the electron source, bursts of electrons are injected into an ultra-high vacuum stainless steel tube. These electrons will eventually create the synchrotron light that is used for research.