

# 1<sup>st</sup> (and only) Synchrotron *Lightsource* in Canada

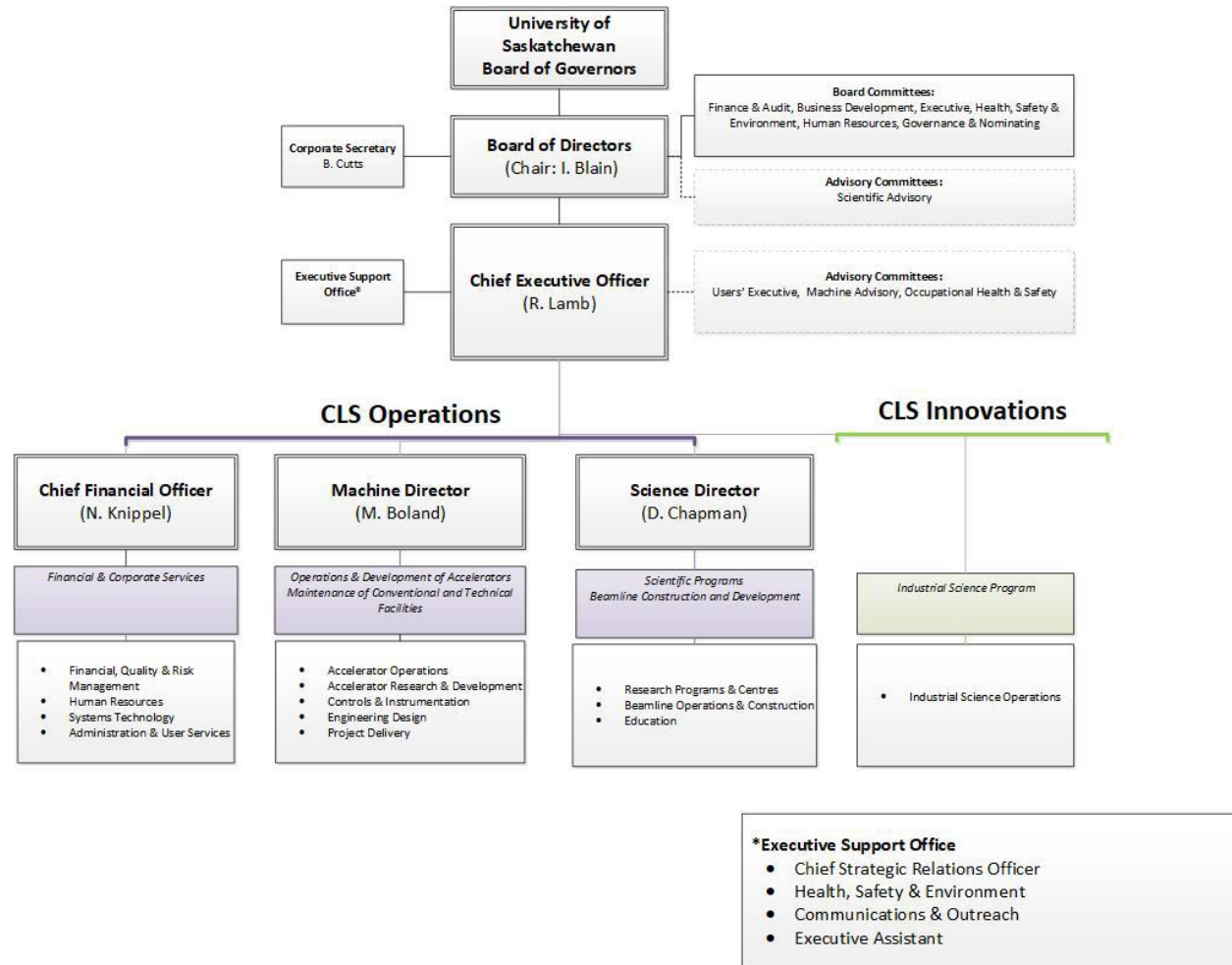


Canadian  
Light  
Source

Centre canadien  
de rayonnement  
synchrotron

THE BRIGHTEST LIGHT IN CANADA

The Canadian Light Source is a non-profit corporation wholly-owned subsidiary of the University of Saskatchewan.







## Funding Operations of a National Science Facility – Canadian Style



Purchased  
access





## Objectives

1. Increase impact by being a solution provider
2. Focus research and industry sector activities in areas with the greatest potential
  - Agriculture
  - Health
  - Environment
  - Advanced Materials
3. Enhance and capitalize on machine science and engineering expertise
4. Establish broad awareness of the CLS as an accessible driver of innovation

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- Agriculture
  - Health
  - Environment
  - Advanced Materials



# Science Case for the Future

May 2015  
4 Workshops

## Biological/Life Sciences

Real-Time Functional Biol Imaging

- **Brightness**
- **Imaging**

Coherent X-Ray Diffraction

Imaging of Bio Systems

- **Brightness**
- **Imaging**

Multi-Modality Imaging

- **Brightness**
- **Imaging**
- **Multiple Beamlines**

## Advanced Materials

In-operando Studies

- **Brightness**
- **Multiple Beamline Access**
- **Extreme Conditions**

Real-Time Measurements

- **Brightness**

Coherent X-Ray Diffraction

- **Brightness**
- **Imaging**

## Structural Biology

Time Resolved Crystallography

- **Brightness**

Nanometer Scale Crystals

- **Brightness**

In-situ Protein-Substrate Reactions

- **Brightness**

## Geo/Enviro/Agri Sciences

In-situ Microbe-mineral Interactions

- **Brightness**

Soils Composition

- **Multiple Beamline Access**

Extreme Environments

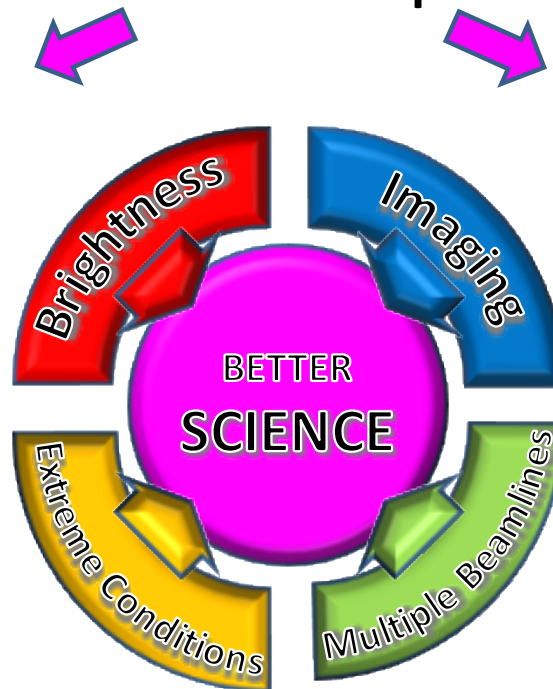
- **Brightness**

- **Extreme Conditions**

Agriculture

- **Imaging**

- **Multiple Beamline Access**



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