



Canada Foundation for Innovation
Fondation canadienne pour l'innovation

BACKGROUND
Advanced Laser Light Source (ALLS)

This \$20.95 million international infrastructure project provides the laser research community with a world-class, Canada-based international Advanced Laser Light Source (ALLS). The facility, the first of its kind in the world, will provide a new laser-based approach to the dynamic investigation of matter. The facility will enable leading-edge research in areas such as biology, medicine, chemistry, physics, and telecommunications.

The new state-of-the-art multi-beam femtosecond laser system, comprising five beam lines, will function at a wide range of wavelengths. Once in place, the facility will allow the researchers to manipulate matter and to probe its dynamics in a way that is not currently possible. For example, the new advanced laser light source facility will detect diseases such as breast cancer at an even earlier stage.

In addition to providing a laser research facility to Canadian researchers and graduate students, ALLS will attract scientists from a number of world-class research institutes, including:

- ↳ Technical University of Vienna, Austria;
- ↳ Laboratoire d'Optique et Biologie, École Polytechnique de Paris, France ;
- ↳ Rikken Research Centre, Japan;
- ↳ University of Chicago;
- ↳ University of Michigan;
- ↳ European Synchrotron Radiation Facility, France.

The funds for the establishment of an international facility are awarded to a consortium of eight institutions, with the administrative centre at the Université du Québec—Institut national de la recherche scientifique (INRS). These institutions include:

- ↳ INRS;
- ↳ University of British Columbia;
- ↳ University of Alberta;
- ↳ University of Toronto;
- ↳ University of Western Ontario;
- ↳ Université Laval;
- ↳ McGill University;
- ↳ National Research Council of Canada.

This announcement is the eighth of nine large-scale international research projects being funded under the CFI's two International Funds—the *International Joint Ventures Fund* and the *International Access Fund*. The *International Joint Ventures Fund*, which includes projects such as ALLS, supports the establishment of a small number of very high profile research infrastructure projects in Canada to take advantage of extraordinary research opportunities with leading facilities in other countries that will bring significant benefits to Canada.