

# Canada's federal programs in biotechnology for human health



BIO International Convention 2017



## Federal budget 2017: Innovation Superclusters Initiative

The Innovation Superclusters Initiative will invest up to \$950 million between 2017–2022 to support business-led innovation superclusters with the greatest potential to energize the economy and become engines of growth.

Through a small number of high-value, strategic investments this initiative will co-invest with industry in bold and ambitious proposals to strengthen Canada's most promising clusters and build superclusters at scale.

[www.canada.ca/superclusters](http://www.canada.ca/superclusters)

# What's Happening – Canada's Federal Biotech Family at #BIO2017

## Canada House Showcase

June 19, 2017

Omni Hotel, San Diego

Global Affairs Canada (GAC) is leading the Canada House Showcase inside the Omni Hotel.

### Doing Business in Canada: Interactive breakfast

8:00 a.m. to 11:00 a.m.

Hosted by BLG, Ernst & Young, and RBC

*Discover the strengths that Canada has to offer to the international life sciences community as it relates to doing business in Canada: Access to Venture Capital; Life Sciences Fund Formation; World Class Incubation Centers and CROs; and Companies as case studies.*

### Clinical Trials and Rare Diseases: Engaging Patients for Better Results

11:30 a.m. to 2:30 p.m.

Hosted by Clinical Trials Ontario and Montreal InVivo

*Government representatives from Ontario and Quebec are hosting a panel featuring experts from academia and industry who are experienced in the conduct of clinical trials in rare diseases.*

## Panel: Preclinical Biologics Development in Canada

3:00 p.m. to 4:30 p.m.

Hosted by the National Research Council of Canada (NRC)

*Join NRC and representatives from Canadian biotechs, CROs, CDMOs, MNEs, VCs, and public research organizations, to gain insights about the resources, challenges and opportunities in preclinical biologics development in Canada.*



## Canada Pavilion

June 20-22, 2017

Exhibition Hall,

San Diego Conference Centre

### Opening ceremony June 20 at 10:30 a.m.

Join us for the opening ceremony of the Canada Pavilion, where federal and other Canadian dignitaries will deliver remarks.

### Exhibition June 20-22 from 10:00 a.m. to 6:00 p.m.

The National Research Council of Canada is leading Canada's federal presence in the pavilion.

- Visit the federal family booth to discover our programs in biotech for human health
- Connect with NRC's business development officers, scientific program leaders, communications officer, and IRAP
- Connect with GAC trade commissioners from all across the US, Israel, Belgium, Spain and Japan
- Set up BIO B2B partnering meetings
- Come play table hockey with us!



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# Innovation, Science, and Economic Development (ISED)

**\$350M+ for National Centres of Excellence (NCE), Centres for Excellence and Commercialization of Research (CECR), and Business-led NCEs (BL-NCE)**

Accel-Rx health sciences accelerator

Allergy, genes, and environment network (AllerGen)

Biotherapeutics for cancer treatment (BioCanRx)

Centre for commercialization of antibodies and biologics (CCAB)

Centre for Commercialization of Regenerative Medicine (CCRM)

Centre for Drug Research and Development (CDRD)

Regenerative medicine and cell therapy network (CellCAN)

The Centre for Imaging Technology Commercialization (CIMTEC)

Consortium québécois sur la découverte du médicament (CQDM)

Centre for commercialization of cancer immunotherapy (C3i)

Canadian glycomics network (GlycoNet)

MaRS Innovation

MEDDEV commercialization centre

NEOMED Institute

Pan provincial vaccine enterprise (PREVENT)

Stem cell network (SCN)

**\$385M University, Hospital, Infrastructure Support**

Canada Foundation for Innovation – Major Science Initiatives Fund: \$85M+

Canada First Research Excellence Fund: \$300M

**Industrial and Research Support**

National Research Council of Canada: \$45M IRAP + \$40M R&D/year for human health

Genome Canada \$3.6B/year with partners

1-800-328-6189

[www.ic.gc.ca](http://www.ic.gc.ca)

[www.nce-rce.gc.ca](http://www.nce-rce.gc.ca)

[www.innovation.ca](http://www.innovation.ca)

[www.cfref-apogee.gc.ca](http://www.cfref-apogee.gc.ca)



## Genome Canada (GC)

**Harnessing the transformative power of genomics to deliver benefits to Canadians**

6 regional Genome Centres across Canada

\$3.6 billion invested in Canadian genomics by GC and partners since 2000

>300 projects and technology platforms funded  
(>75 projects in health)

>30 universities involved

>1,700 active annual HQP

>195 industry co-funding partners

>110 companies created or enhanced

Canada is a genomics leader in rare diseases, cancer and autism, among other areas

Work across 7 sectors of importance to the Canadian economy: health, agriculture and agri-food, forestry, fisheries and aquaculture environment, energy and mining

1-613-751-4460

[www.genomecanada.ca](http://www.genomecanada.ca)

# Canadian Institutes of Health Research (CIHR)

Institutes: Virtual networks of researchers that focus on important health problems

Aboriginal Peoples' Health

Aging

Cancer Research

Circulatory and Respiratory Health

Gender and Health

Genetics

Health Services and Policy Research

Human Development, Child and Youth Health

Infection and Immunity

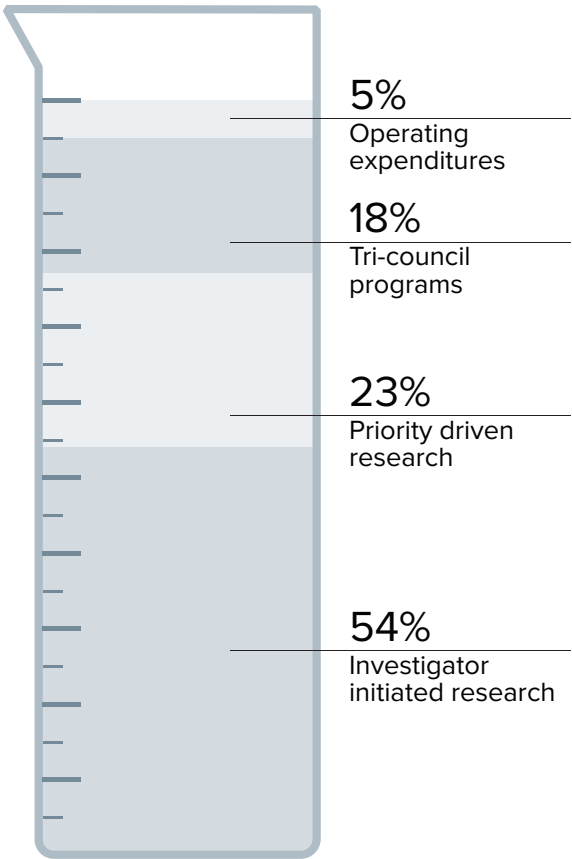
Musculoskeletal Health and Arthritis

Neurosciences, Mental Health and Addiction

Nutrition, Metabolism and Diabetes

Population and Public Health

\$1B / year to support health research



# National Research Council of Canada (NRC)

## Industrial Research Assistance Program (IRAP)

**Stimulate SME wealth creation** through a comprehensive suite of innovation services and funding

**Technical and business advice** from concept to commercialization

**Networking**, connecting with industry experts and potential business partners

**Financial support** for projects through all stages of the innovation process

**Biomedical-experienced advisors** located across the country

## Human Health Therapeutics and Medical Device R&D

**4 collaborative research programs:**

- Biologics and Biomanufacturing
- Vaccines and Immunotherapeutics
- Therapeutics Beyond Brain Barriers
- Health Technologies

**400 experts** in the lab to help SMEs reach IND

**State of the art facilities** for discovery, development, biomanufacturing, and analysis

**Tech transfer** to CROs and CMOs



# Global Affairs Canada (GAC)

## Trade Commissioner Service (TCS)

### In Canada and abroad:

- In 161 offices
- Provide expert advice and problem solving, whether you export, partner, invest abroad or in Canada

### Four key services:

- Market potential assessment
- Preparation for international markets
- Problem solving
- Qualified contacts

## Business Development Programs

### Canadian Technology Accelerator (CTA)

Mentorship program for qualified Canadian early stage companies

### Going Global Innovation (GGI)

Funding program to support innovators wanting to expand into international markets (max. \$100k for eligible expenses)

### CanExport

Matching funds program towards export development (max. \$100k)

1-613-944-4000  
[www.international.gc.ca](http://www.international.gc.ca)



# Export Development Canada (EDC)

Helping Canadian companies grow and  
succeed in international business

Financing, insurance, bonding, trade knowledge,  
and matchmaking to help Canadian companies  
sell and invest abroad

Financial solutions for foreign buyers to facilitate  
and grow purchases from Canadian companies



# Business Development Bank of Canada (BDC)

Financing Solutions

Getting your growth project underway

Advisory Services

Providing expert advice to run a better, more  
profitable business

International Expansion

Consulting to successfully enter foreign markets

Venture Capital Action Plan (VCAP)

\$158M for health IT, medical devices, and clinical  
stage biopharmaceuticals

Healthcare Venture Fund (HVF)

\$270M for biotechnology, medical devices,  
diagnostics, digital health, and drug development

1-800-229-0575  
[www.edc.ca](http://www.edc.ca)

1-877-BDC-BANX  
[www.bdc.ca](http://www.bdc.ca)

**CanNor**  
Canadian Northern Economic Development Agency

**WD**  
Western Economic Diversification Canada

**FedNor**  
Federal Economic  
Development Agency  
for Northern Ontario

**CED**  
Canada Economic  
Development for  
Quebec Regions

**FedDev Ontario**  
Federal Economic Development  
Agency for Southern Ontario

**ACOA**  
Atlantic Canada  
Opportunities Agency

# Regional Development Agencies: ACOA, CED, FedDev, FedNor, WD, CanNor

Regionally-tailored programs, services,  
knowledge and expertise

Investment example: FedDev Ontario Advanced  
Manufacturing Fund 2013 - \$55M

[www.feddevontario.gc.ca/eic/site/723.nsf/eng/01690.html](http://www.feddevontario.gc.ca/eic/site/723.nsf/eng/01690.html)



# Public Health Agency of Canada (PHAC)

## Mandate

Promote health

Prevent and control chronic diseases and injuries

Prevent and control infectious diseases

Prepare for and respond to public health emergencies

Serve as a central point for sharing Canada's expertise with the world

Apply international research and development to Canada's public health programs

Strengthen intergovernmental collaboration on public health and facilitate national approaches to public health policy and planning.

## Biotech

**Infectious and chronic diseases:** prevention, monitoring, treatments

**Immunization and vaccines:** national priorities for development, existing vaccines for children and adults, pregnancy, safety, travel

**Lab biosafety and biosecurity:** Human Pathogens and Toxins Regulations (HPTR) licensing program, guidelines, training, and enforcement

**Surveillance programs:** 27 specialized surveillance programs to address specific concerns

1-844-280-5020  
[www.phac-aspc.gc.ca](http://www.phac-aspc.gc.ca)



# Health Canada (HC)

## Regulatory activities

### Health products

- **Review and evaluation:** testing, manufacture, preparation, preservation, packaging, administration, storage and sale of health products
- **Compliance and enforcement:** education, compliance monitoring and investigation, enforcement
- **Monitoring and tracking:** post-market surveillance, risk/benefit analysis, labelling changes, advisories, warnings, product removal from marketplace

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Food products and environmental/ industrial products are regulated separately.

## Lab activities

### Research activities

- Better understand methods for assuring quality of biologics
- Develop new testing methods and techniques for the regulatory process
- Determine mechanism of action for various classes of biologics
- Generate scientific evidence to support effective decision-making

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### Product evaluation activities

- Batch testing
- Lot release testing: products assigned to one of Evaluation Groups with different levels of supervision



1-866-225-0709  
[www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)



