

AFPC Special Session

 **The Future of Pharmacy Research in Canada**
*Background and Current Status on behalf of the
Deans of Pharmacy of Canada*

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Professor and Dean/ Chair of AFPC Council of Deans

College of Pharmacy and Nutrition

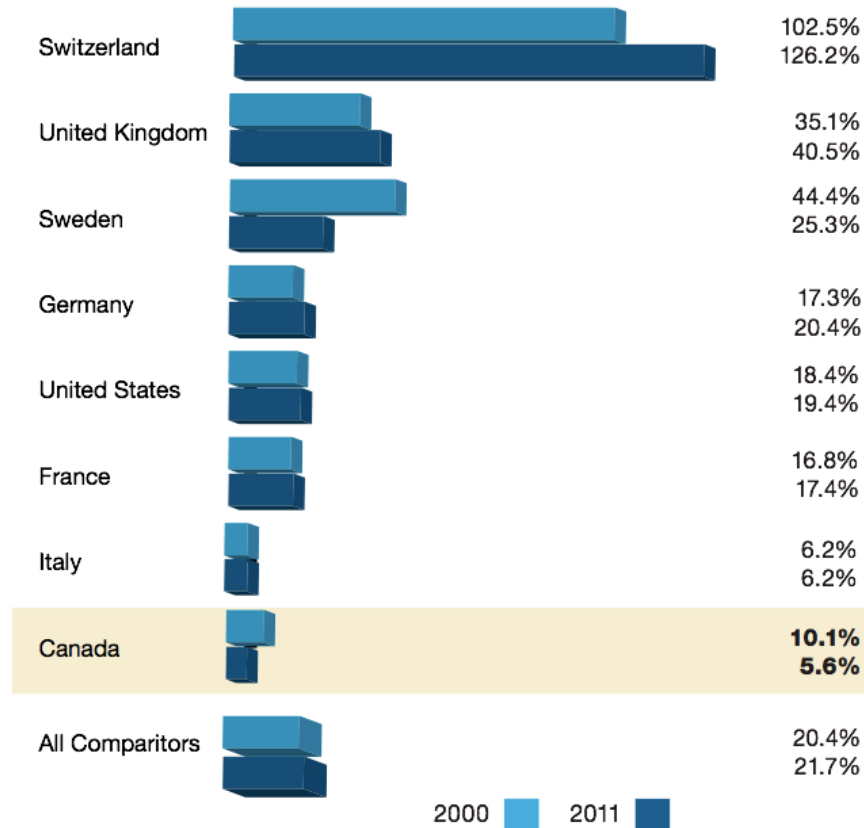
University of Saskatchewan

Adjunct Professor & Distinguished University Scholar, UBC Pharmaceutical Sciences

Outline

- Rx&D Spending
- Research Data in Pharmaceutical Sciences
 - ❖ CIHR
 - ❖ AFPC
- Potential New Initiatives and Funding Models
- Action Plan and Next Steps

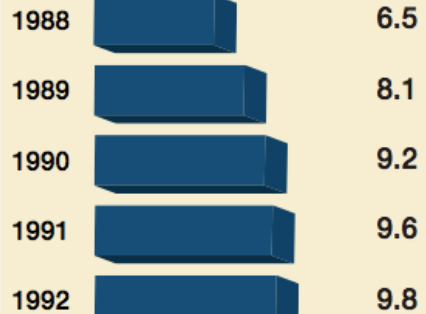
R&D-to-Domestic-Sales Ratios, Canada and Seven Comparator Countries - 2000 and 2011⁶



Legislative History and Rx&D Member Company's R&D Investment History...

\$M

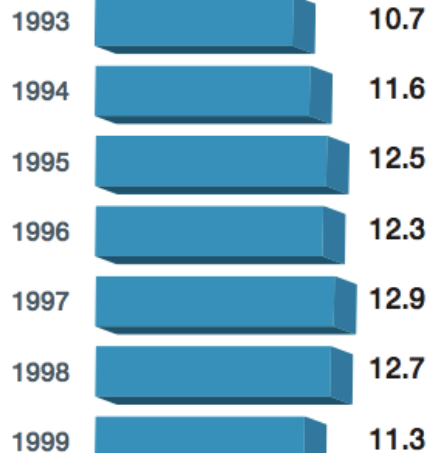
1987 - Bill C-22



1992 - Bill C-91

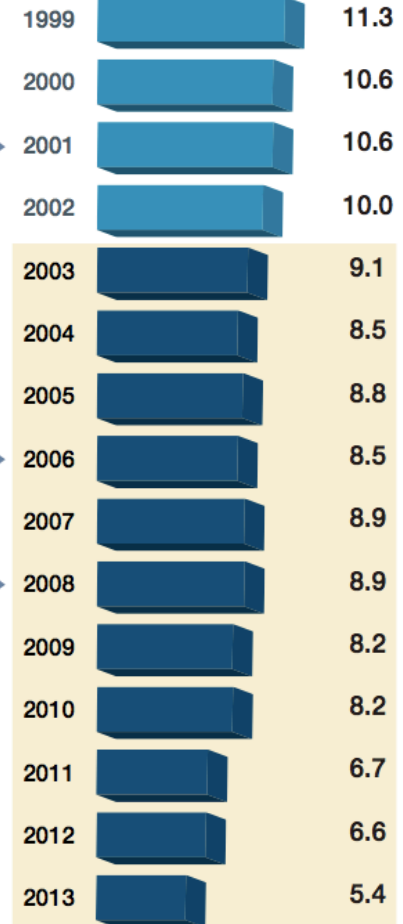
1993 - Pm (Noc) Regs

1994 - Data
Exclusivity (5 Yrs)



1998 - Amendments
to PM (NOC) Regs

\$M



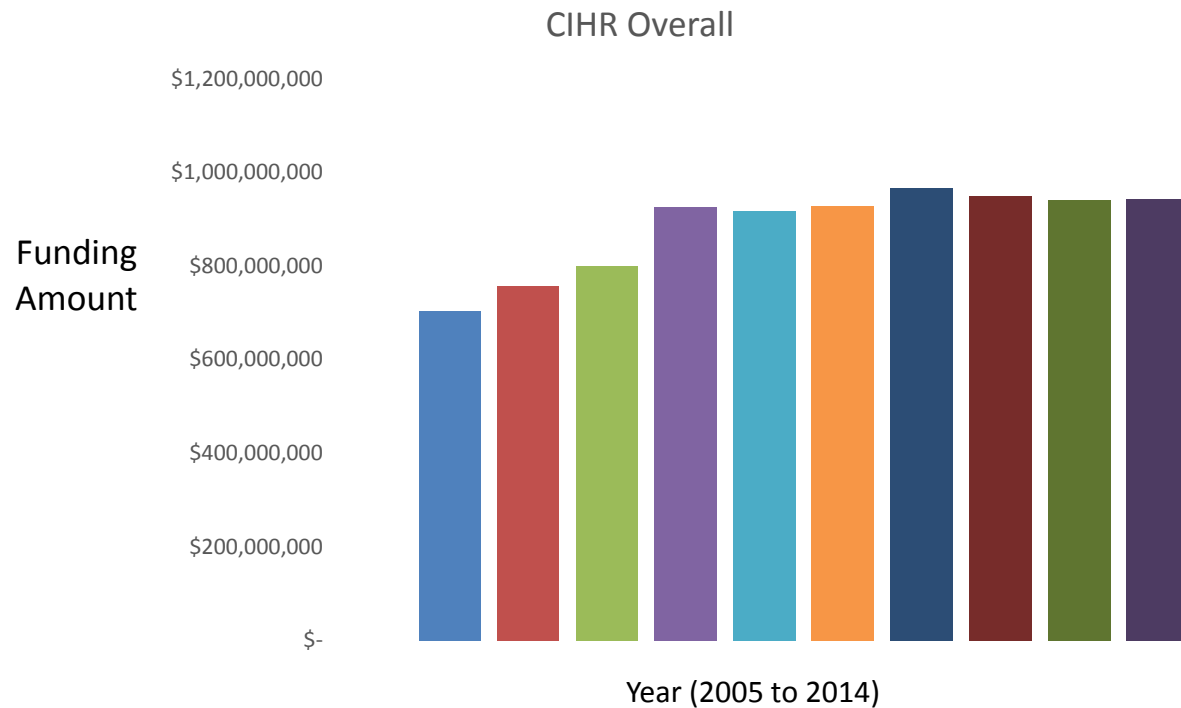
2001 - Bill S-17

2006 - Data
Exclusivity (8.5 Yrs)

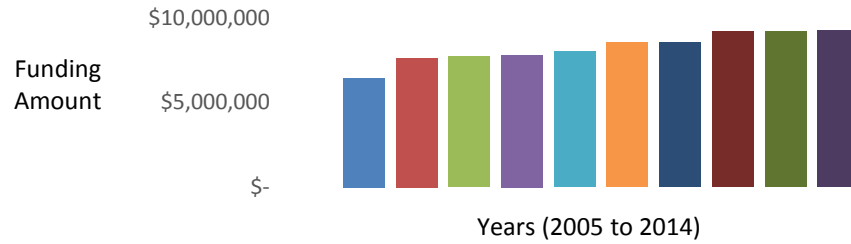
2008 - Amendments
to PM (NOC) Regs

CIHR Data Analysis

APCF Council of Deans, Feb. 2015, prepared by H. Lopatka



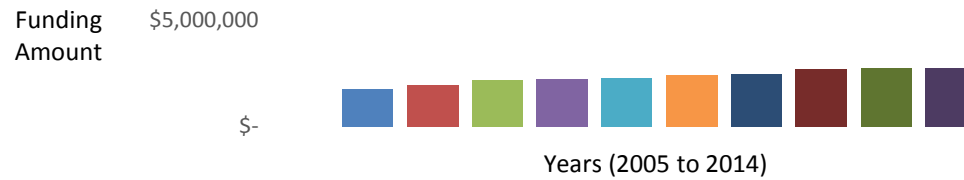
Pharmacy



Nursing



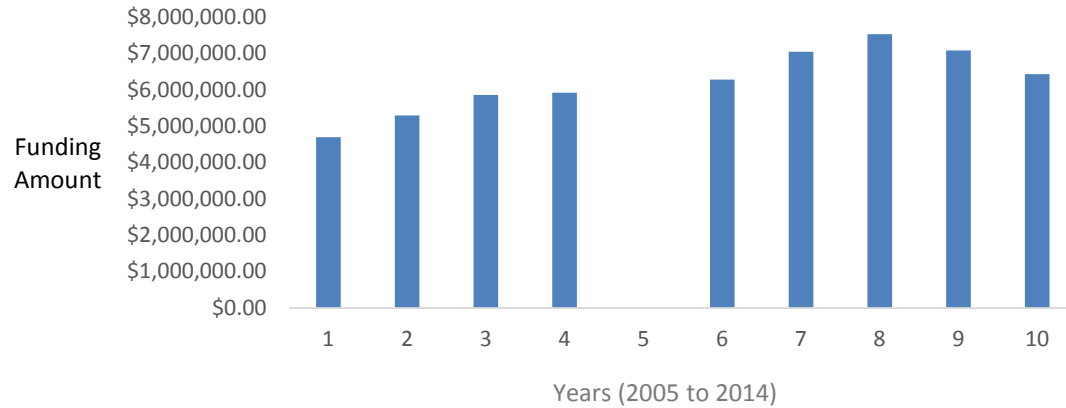
Biology



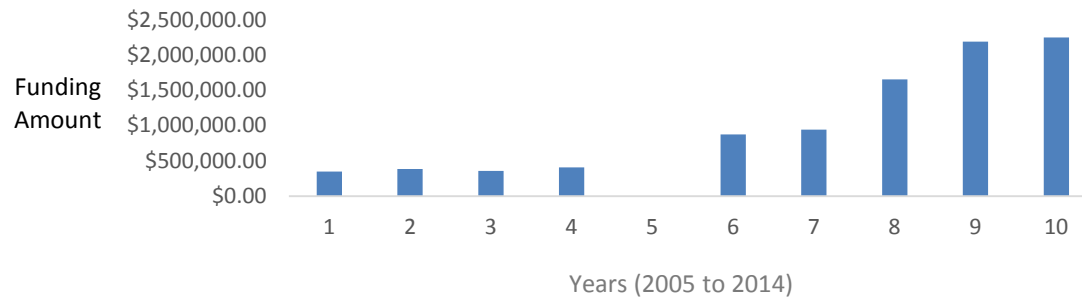
Analysis of CIHR Data

- Comparisons were made between the overall and sorted 10 year patterns. The period of analysis was the fiscal years 2004/05 to 2013/14.
- No growth if you take into account increasing costs of research supplies, personnel salaries and inflation, actually decrease over 10 years.
- The University profiles were reviewed. The Deans reported that the funding trends did not align with their internal information. Upon review of each universities sorted CIHR funding records, approximately 75% of the entries were for PIs from other faculties (e.g., medicine).

Pharmacology Keyword



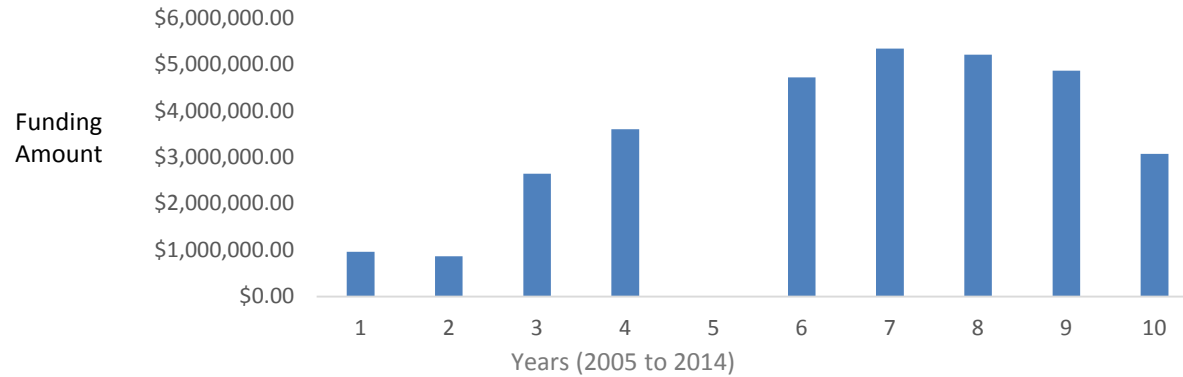
Medication Use Keyword



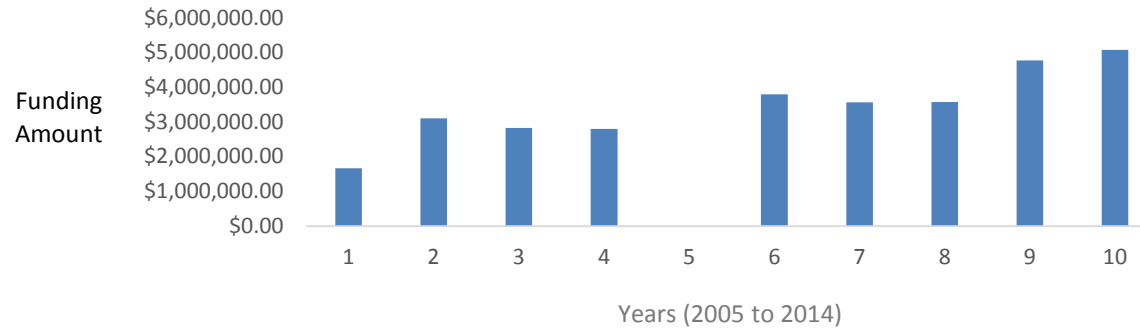
Pharmacoepidemiology Keyword



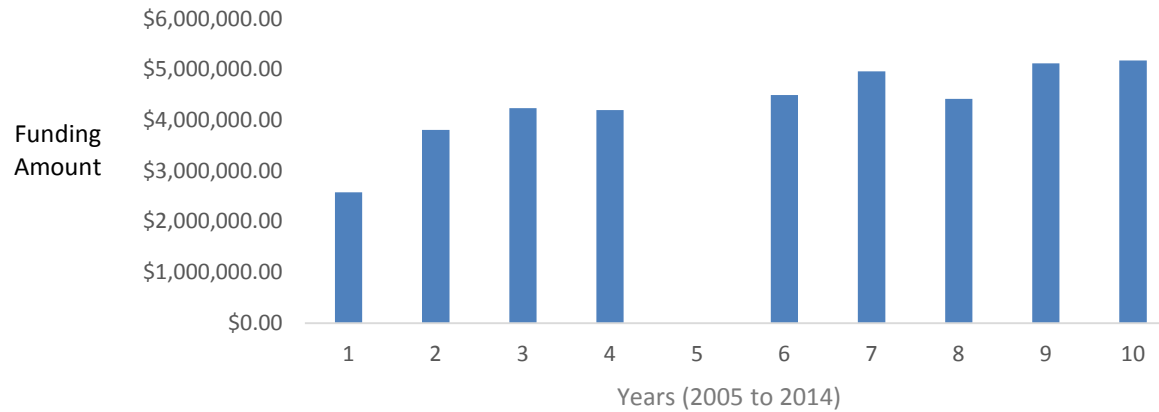
Patient Safety Keyword

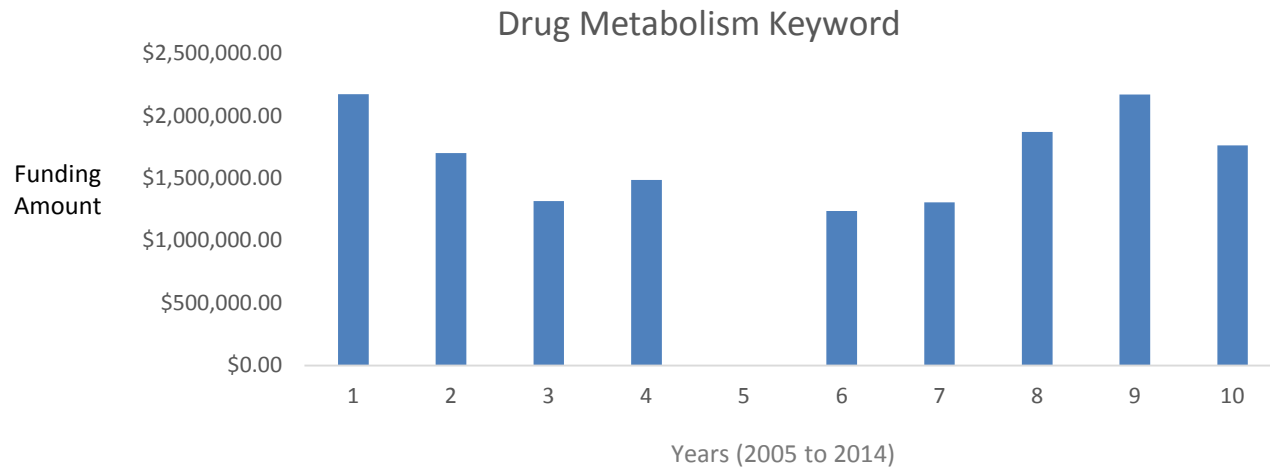
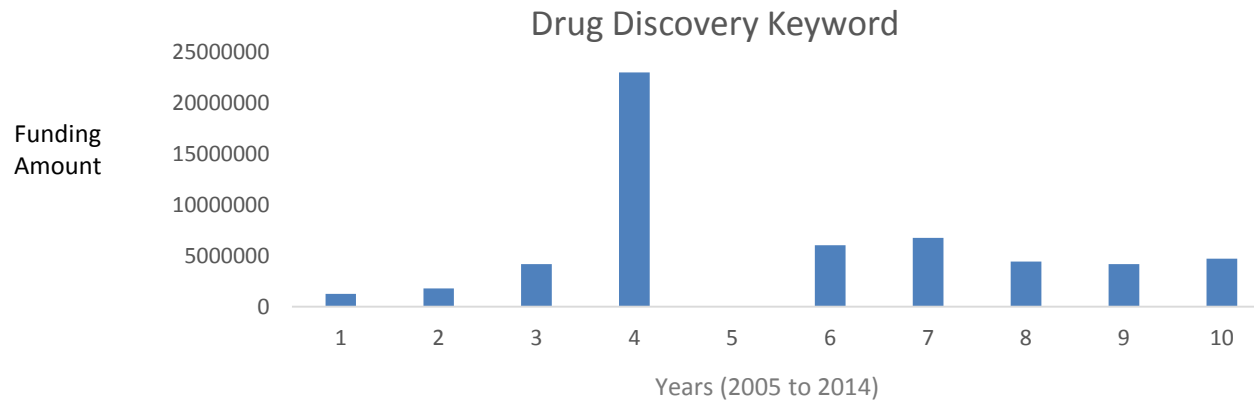


Drug Delivery - Keyword

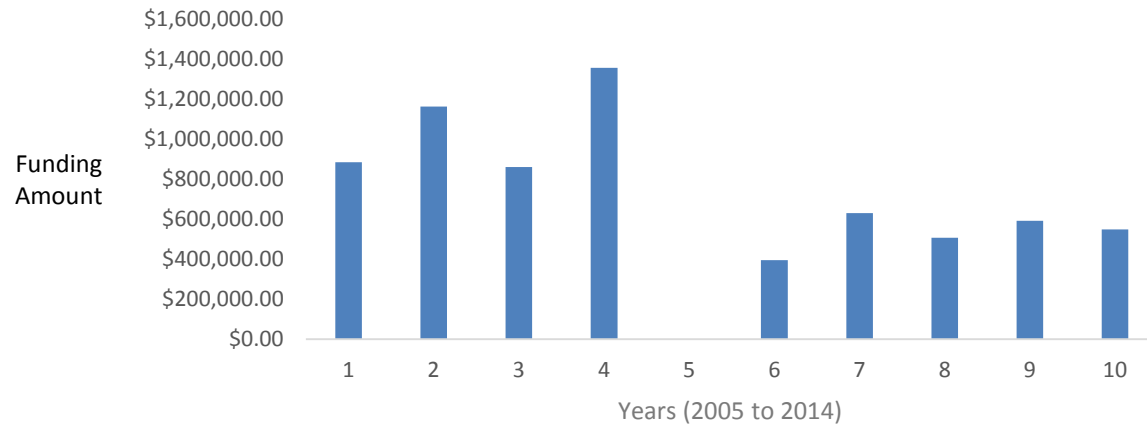


Drug Design - Keyword

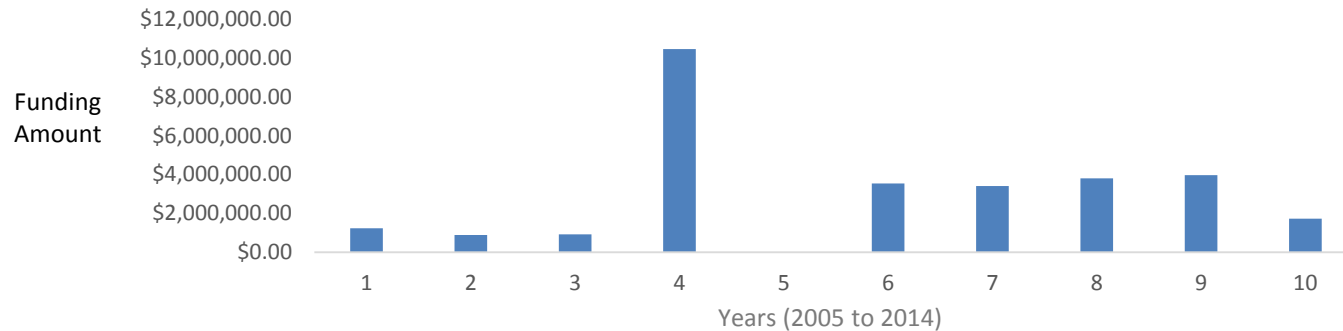




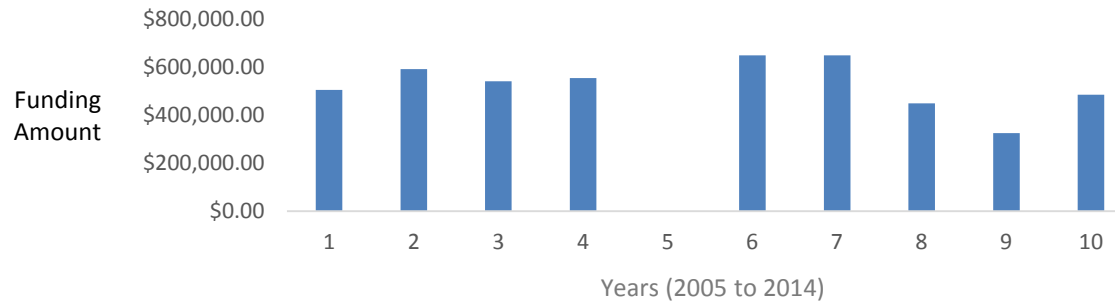
Pharmacokinetics Keyword



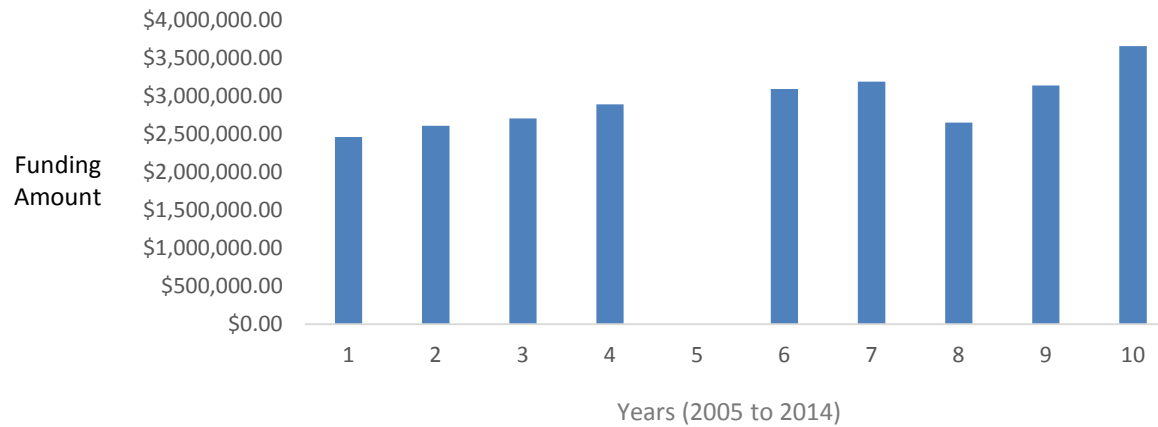
Pharmacogenetics Genomics Keywords



Industry Partnered Collaborative



Pharmaceutical Sciences - Peer Review



AFPC Data

- Tri-Council Funding for all 10 Pharmacy Schools

2010-11 - \$11.2 M (Total Research Income \$38.3 M)

2011-12 - \$9.3 M (Total Research Income \$40.1 M)

2012-13 - \$10.0 M (Total Research Income \$41.5 M)

2013-14 - \$10.6 M (Total Research Income \$40.5 M)

2014-15 - \$9.1 M (Total Research Income \$44.0M)

New Initiatives and Funding Models

- Development of New Research Chairs in partnership with Different Institutions
- Development of New Research Innovation Funds to provide seed funds
- Research Incubation Programs (CDRD, MARS)
- CSPS Research Foundation
- AFPC Education Research Foundation
- New \$2M Saskatchewan CDRD Research Innovation Fund (partnership with Innovation Sask, Ag West Bio, VIDO, CoPN and CDRD)

Suggestions to Increase Funding

- Pharmacy faculty need to become involved in peer review processes
- Faculties need to reward faculty members who become involved in peer review processes.
- Researchers need to apply to all potential funding sources.
- Researchers should become part of multidisciplinary teams.
- Pharmacy researchers have to be competitive with those from other disciplines.
- NSERC grants are important for researchers early in their career.
- High quality research is being done that is not funded by CIHR.
- Pharmacy research potential and value should be promoted.