Research Ethics and Your Summer Student Research

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Personal responsibility and integrity in research

• *What is your motivation for doing research?*

• Fame and fortune?

• Name the last 10 Nobel Prize winners

• Name someone who became rich from their biomedical discovery
Personal responsibility and integrity in research

• What is my motivation for doing research?
• Thrill of Discovery!
• Contribution to knowledge for the betterment of society

“If I have seen further, it is by standing on the shoulders of giants” - Sir Isaac Newton
Personal responsibility and integrity in research

- Be a “good citizen” of the lab/research group
- Be fully responsible for your actions
- Keep careful records as required by your supervisor
Authorship

• I generated a construct that was necessary for some of the figures in the paper

• I generated the data for a figure/table in the paper.

• I performed preliminary data that was necessary for the progression of the project

• I deserve to be an author!!
Authorship

• Who should be an author?

• No hard rules, depends on:
  • Field
  • Journal
  • Supervisor – final decision rests with your supervisor

• General guidelines:
  • If you just followed a protocol that somebody else gave you, you should be acknowledged for your good technical expertise, but you are not an author.
  • If you just provided a reagent, you should be thanked for your generosity, but you are not an author.
Authorship

• You may or may not be included as an author on any manuscript submitted that includes your data.
  • Data collection does not necessarily result in authorship
  • Some journals require an intellectual contribution for authorship
  • Can you explain the content of the paper – before it is written?

• The work that you produce is with your supervisor and your supervisor is an author on any publications stemming from your work
  • You cannot submit your work for publication without the knowledge of your supervisor
  • Your supervisor must be included as an author on your Summer Student Research Day abstract
Ethics approvals

• Any research that involves humans or animals requires ethics approval

• It is the responsibility of your supervisor to obtain all appropriate approvals – but it is YOUR responsibility to ensure that approvals have been obtained

• You must receive specific and appropriate training if your work involves an area that requires approval

• For further information see www.reo.ualberta.ca
The Research Ethics Office (REO) provides effective, integrated support for and administration of all aspects of the ethics review and approval process for research involving human participants and research, teaching and testing involving animals.

The REO website contains information about ethical review at the University of Alberta, including:

- institutional, national and international guidelines for the ethical conduct of research with human participants and animal subjects.
- the lifecycle of an ethics application – When is ethics review required? How does the process work? Where do I submit an application and how do I receive approval?
- how to sign up for training – both for ethics in general and how to use the online submission system.

For guidance documents and technical assistance for using the Research and Ethics Management Online system, please visit the Education, Training and User Support section of our website.

**NEW** Effective Friday, 1 April 2016, all NEW cancer-related ethics applications must be directed to the Health Research Ethics Board of Alberta - Cancer Committee (HREBA:CC).

*Cancer-related Studies* means studies primarily focused on the study of cancer and its treatment, prevention or diagnosis.

Looking for ACUC or REB Meeting Dates?
Navigate to the page for the relevant committee:
- ACUCs
- REBs

General Faculties Council and the Board Learning & Discovery
Why do we need to have ethics approval?

• It is the right thing to do
  • Insure that animals are used responsibly and ethically
  • No samples are taken and/or used from patients without consent

• The University of Alberta could forfeit around $1 billion in federal funding if we are found to allow either animal or human research to proceed without prior ethics approval.
New CCAC Training Guidelines Are Now Available

The CCAC guidelines on training of personnel working with animals in science are now available, replacing the previous CCAC guidelines on institutional animal user training published in 1999.

This guidelines document provides a strong foundation for the training of all personnel working with animals in science, highlighting the importance of competency, knowledge and skills in ensuring high standards of ethics and animal welfare.

Make these guidelines part of your training program today!

March 19, 2015

The CCAC thanks Dr. Gilles Demers for 22 years of service and dedication

Though we are saddened to bid him farewell, we extend our warmest wishes to Dr. Gilles Demers on his retirement this spring, after a remarkable 22 year career at the Canadian Council on Animal Care (CCAC). Gilles nationally advanced CCAC's reach.

March 10, 2015

NATIONAL

CCAC National Workshop 2015
May 30, 2015
Montréal, QC
Register by April 30 to get the early-bird rate!

CALAS 54th Annual Symposium
One World One Vision
May 30-June 2, 2015
Montréal, QC

2015 Canadian Veterinary Medical Association (CVMA) – 67th Annual Convention
July 16-19, 2015
Calgary, AB

INTERNATIONAL

2015 Biennial LAWTE Conference
June 11-12, 2015
Madison, WI

AALAS 66th National Meeting
Principles of animal research (the three Rs)

- **Replace** the use of animals with alternative approaches
- **Reduce** the numbers of animals used – requires careful planning
- **Refine** the way experiments are carried out to minimize pain and discomfort
Human ethics – what requires approval?

- Just about everything that uses human samples or human subjects
- Research involving ANY human samples (tissue/blood/urine/toenail clippings)
- The country of origin does not matter – approval must be obtained through UofA ethics boards
- Cultured material generated from human samples (exclusion – established cells from ATCC)
- Chart studies
- Clinical trails
- Surveys

- Unapproved research must be discarded
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Why does consent matter?

Tuskegee syphilis “experiment”
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Tuskegee syphilis “experiment”

In 1932 enrolled 600 black men in a trial – 399 had previously acquired syphilis

Promised free health care, meals and burial insurance

Were not told they had syphilis and after penicillin known to treat it – it was continued to be withheld

This was uncovered in 1972 – 182 had died from this treatable disease and 59 relatives contracted the disease
Other examples

Guatemala gonorrhea study

1,300 Guatemalans were infected with gonorrhea in 1946-68 and only ~half were treated with Penicillin.

Discovered in 2005 by a history professor (Susan Reverby) while investigating the Tuskegee study.

Resulted in an apology by the US in 2010.

The Nigerian Trovan® Trial


HeLa cells
David, the “Bubble Boy” (1971-1984) (X-linked SCID)
Questions or concerns

Contact the Office of Research – 213 HMRC

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