Dual Use Research

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Overview

- Definition of DUR
- Example of DUR
- Who does this DUR?
- Proliferation Risk of DUR
- FNU Research at a Glance
Acronyms

- DUR – Dual Use Research
- SREC – School Research Committee
- CREC – College Research Committee
- CMNHS – College of Medicine Nursing & Health Science
- SPHPC – School of Public Health & Primary Care
- RC – Research Committee
Definition of DUR

Research that may generate valuable scientific knowledge but that could also be deliberately used to create serious harm to the public health, Agriculture, plants, animal, environment or materials.

Examples of DUR: Proliferation threats from biotechnology.

- Biotechnology represent a “dual use” delimma in which the same technology can be use for legimately for human betterment and missed used of bioterrorism
Examples of DUR—Proliferation threats from biotechnology.

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Biological Dual Use Research

Research on the same biotechnologies

Peaceful Use

Dual-Use

Weapons Use

Public Health

Biodefense

Offensive Military

Diagnostics
Drugs
Vaccines
Antivirals

Defends against military use of bioweapons

Develops capabilities for military use of bioweapons

Bioweapons
States (Iraq vs Iran)
Terrorists

A suspected mobile biological weapons facility in Iraq.

Canadian Institutes of Health Research

U.S. Army Medical Research Institute of Infectious Diseases

AP/Wide World Photo/Department of Defense
Who does this Research?

- Government – CDC
- Private Companies (commercial)
- Academia (Universities)
- Military
Proliferation Risk of Dual–Use Research

Categories of risk:
- Technologies that deliver beneficial drugs to the body could be used for weaponizing biological agents.
- Research could have unintended consequences.
- Dangerous agent could be released accidentally from the lab through an infected personnel.
- Research result can be published easily accessible journal and on the internet.
- Knowledge or technique helps to create novel pathogens with unique property or create a new class of threat Agents.
- Dangerous agent could be stolen or diverted for non-peaceful purposes.
FNU Research Protocol at a Glance

- **University Level (FNU)** – 5 Colleges – own RC
  - Pro–Vice Chancellor – Research Office.

- **For example: College Level**
  - CMNHS – CREC
  - SPHPC – SRC
  - All research Proposal
  - Students or Grant Research go through SRC,CREC.

- **Government Level**
  - MoHMS – Ethics Committee
  - MoE – FHEC Grant Research (registration)
  - Others
SPHPC/CMNHS Research Protocol

- Each Department of the CMNHS will house its own Departmental Research Committee (SRC).

- The Secretary of each DRC is responsible for accepting research proposals and for registering approved projects on the Central Research Register. All research proposals submitted to the SRC will be reviewed by a staff member or person delegated by the chairperson of respective research committee as a Research Reviewer.

- A SRC reviewer will assess research proposals for technical merit, critiquing the methodology and offering recommendations to both staff and student researchers before the proposal is approved for submission for project registration, research bioethics review, approvals (or not) and tracking at the department, Research Unit and finally in CHREC if it is a High Risk research.

- Here are some points to help reviewers with their analysis.

  - Relevancy of research topic to CMNHS disciplines & programs and its importance to the researcher, the department/CMNHS, and the people that the researchers and reviewers represent.

  - The type of research. Is it quantitative or qualitative or mixed?

  - The methodology. Is the study designed well? What is the research question? Do you feel the methods employed will answer all the research question(s) stated?

  - Do you feel that the methods employed would be appropriate and acceptable to the participants and will safeguard the public interest?
The standard of the research proposed will satisfy the requirements of the qualification sought if the researcher is a student.

The novelty of the research (will the research contribute something new or significant knowledge?)

Does the research design employ any method that may breach research ethics principles stated above in section 2.1?

Does the researcher possess the necessary skills and experience to implement the research?

Is there a budget for the research and is the researcher able to attract the fund needed?

If the SRC reviewer is not satisfied with the current standard of the research proposal, it should be returned to the researcher along with recommendations for improvement and a deadline for the return of the revised research proposal to DRC for further consideration.
SPHPC – Research Unit

Collaborative Research:

- **C–POND** – PACIFIC RESEARCH CENTRE FOR THE PREVENTION OF OBESITY AND NON-COMMUNICABLE DISEASES

- **CHIPSR** – CENTRE FOR HEALTH INFORMATION, POLICY AND SYSTEMS RESEARCH (CHIPSR)

- **RISE** – Revitalising Informal Settlements and their Environments
  - Air Pollution – Pilot stage (baseline)
  - Research Grant
  - Pacific Health Dialogue – CMNHS Publication Journal
The End

- Thank you