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### **RESEARCH INTEGRITY IN ACADEMIA**

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## **OBJECTIVES OF THE ETHICS WORKSHOP**

Generally, the ethics workshop aims to:

- Capacitate staff members and students with the research ethics knowledge.
- Promote adherence to ethical standards and norms when conducting research.



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## **SCIENTIFIC PROGRESS AND RESEARCH INTEGRITY**

## EVERYTHING IS IN FLUX (Heraclitus)

• Can scientific progress and research integrity run in parallel?



## INSTITUTIONAL RESEARCH INTEGRITY OFFICE

Some institutions have research integrity offices with research integrity officers (RIOs) responsible for upholding the research integrity at an institution. RIOs' responsibilities among others include:

- Promoting responsible conduct of research.
- Formulating and reviewing policies and procedures to govern responsible conduct of research.
- Handling possible breach of research norms/standards, and possible research misconduct.
- Giving guidance and advise about policies and procedures associated with research integrity.
- Facilitating training in Ethics and Good Clinical Practice for staff and students as well as ensuring adherence to ethics guidelines that govern responsible conduct of research.
- Managing research ethics office regarding ethics reviews of the protocols.
- Offering awareness sessions on responsible conduct of research.



# COMPLIANCE IS NOT INTEGRITY



In Law a man is guilty when he violates the rights of others. In Ethics he is guilty if he thinks of doing so. (Immanuel Kant)



What is Integrity

 Integrity is the practice of being honest and showing a consistent and uncompromising adherence to strong moral and ethical principles and values.

Barbara Killinger, 2010. Integrity: Doing the right thing for the right reason



## RESEARCH INTEGRITY IS PRAGMATIC THROUGH ALL PLATFORMS OF RESEARCH

## **Research integrity:**

- Protects and promotes the rights of the voiceless and marginalized social groups
- Creates trust and transparency
- Shows respect for human dignity and humane treatment of animals
- Transcends personal interests
- Promotes research collaborations without boarders
- · Encourages researchers to use justifiable means in order to attain the end results



## What is Research Integrity:

- Research integrity means conducting research in a way which allows others to have trust and confidence in the methods used and the findings that result from this.
- Active adherence to the ethical principles and professional standards essential for the responsible conduct research. By active adherence it refers to adoption of the principles and practices as a personal credo, not simply accepting them as impositions by rule-makers (<u>https://ori.hhs.gov/education/products/ucla/chapter1/page02.htm</u>).



## Key elements of Research Integrity include but not limited to:

- Honesty
- Accuracy
- Accountability
- Objectivity
- Reflection of virtuous character
- Transparency and open communication
- Collegiality
- Social & cultural sensitivity to the age, gender, culture and religion
- Respect for human dignity & protection of human participants
- Animal welfare



## RESEARCH INTEGRITY

## **Fostering Research Integrity**

- Ethics training/ workshops
- Use of honest and verifiable methods
- Objective reporting of research results
- Internal mechanisms to detect misconduct before publication should be in place (e.g.) screening for plagiarism) and robust peer review processes
- Investigating allegations of research misconduct
- Protection of whistleblowers
- Processes for reviewing allegations on research misconduct, conducting inquiries and investigations
- Guidelines on responsible conduct of research
- Policies on Research Ethics, Research Misconduct, Conflict of Interest, Data Management Plan etc
- Institutional RECs registered with the NHREC



## **INTEGRITY OF THE INDIVIDUAL SCIENTIST/RESEARCHER**

- Ethics approval before research commences;
- RECs ought not grant retrospective ethics approval;
- Intellectual honesty in proposing, performing, and reporting research
- Collegiality in scientific interactions, fairness in peer review and sharing of resources;
- Transparency in conflicts of interest or potential conflicts of interest;
- Protection of human participants in the conduct of research;
- Humane care of animals in the conduct of research; and
- Adherence to the mutual responsibilities between investigators and their research teams.



## VIRTUE ETHICS APPROACH

- Qualities of character (such as self-control or honesty) are not innate but acquired.
- Focusing on compliance but neglecting researchers' moral and virtue acquisition fails to equip researchers with good moral.
- Rules alone will not resolve some of the personal conflicts and moral dilemmas that arise in research.
- Research rules need to be supplemented with good judgment and a strong sense of personal integrity.
- Virtue ethics training develops researchers' moral sensitivity and provides them with tools to reflect on the principles and virtues of a good researcher.



## HUMAN DIGNITY

• **Dignity** is derived from the Latin word *dignus* meaning inherent worth or right to be valued and respected for own sake.

## For Immanuel Kant:

• Human beings have an intrinsic human dignity because they are endowed with *autonomy* and *rationality* hence, they should *never be used as the means to an end.* 

Groundwork for the metaphysics of morals.



## WHY IS ETHICS NECESSARY IN RESEARCH

Ethics in research plays a fundamental role because it provides guidelines for analyzing whether given study can be conducted without exploiting the research participants. It asks the following questions:

- What is the value of this research?
- Is this research in the best interest of the participants?
- Do the research benefits outweigh the risks?
- Will the participants be fully informed about the research study and will they volunteer to participate without undue inducement or coercion? (Ames Dhai, 2013).

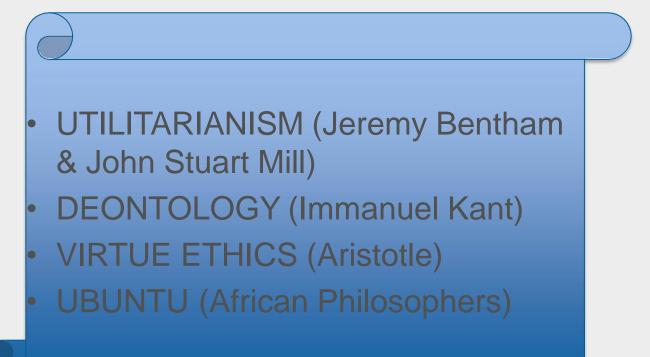


## WHAT IS A MORAL THEORY ?

- A moral theory explains why a certain action is right or wrong and/or why we ought to act in certain ways.
- In other words, ethics tell us how we ought to act.

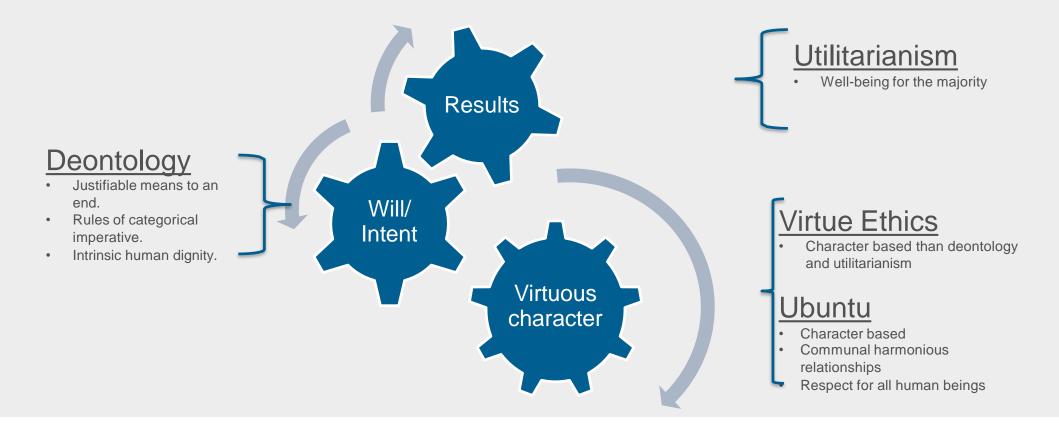


## **TYPES OF MORAL THEORIES**



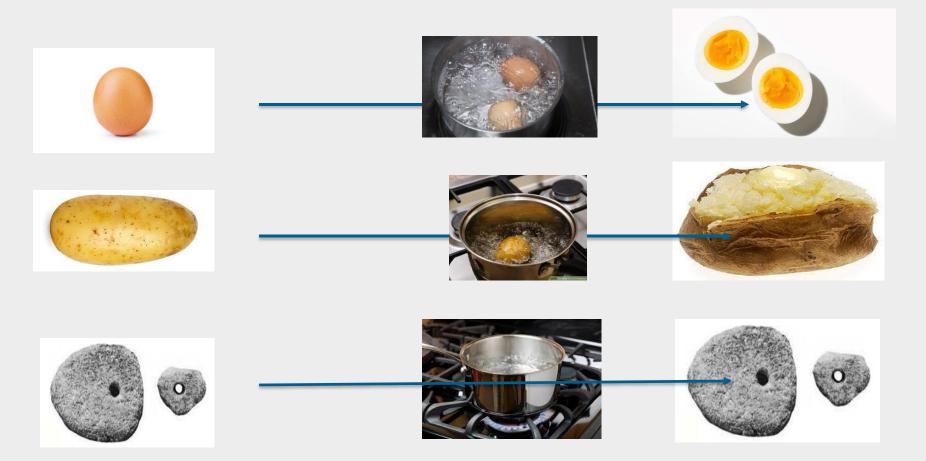


## **MORAL THEORIES**





## **CHARACTER AND ENVIRONMENT**





## Cont.....

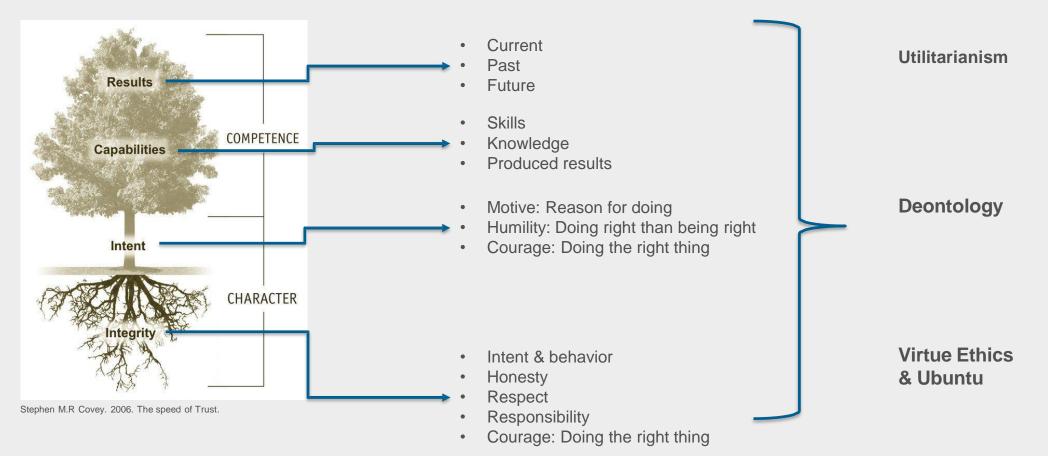
- Man-as-he-<u>happens</u>-to-be
  - (without moral judgment).
- Man-as-he-<u>could</u>-be-if-he-realized-his-essence

   (rational and autonomous)
- Man-as-he-<u>must</u>-be
   (Obligation)

(Alasdair Macintyre, After Virtue 1981)



# FOUR CORES OF CREDIBILITY

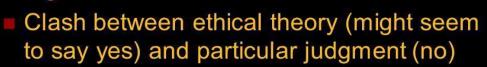




## UTILITARIANISM

## Remember Our Problem Case for Utilitarianism

- Five patients need five different organ transplants
- Should we kill healthy patient and redistribute organs?





## Utilitarianism and train problem video clip

https://www.youtube.com/watch?list=RDbOpf6Kc WYyw&v=bOpf6KcWYyw



## DEONTOLOGY

## The moral theory of deontology states that:

- The means should always justify the end results.
- Duty to follow the moral laws and principles
- Duty to respect the dignity of other human beings
- Autonomy and self-regulation



### **DEONTOLOGICAL RULES OF CATEGORICAL IMPERATIVE**

- Act only according to that maxim by which you can at the same time will that it should become a universal law
- Act in such a way that you treat humanity always as an end and not as the means.

(Immanuel Kant)



# **INFORMED CONSENT**





## **SA CONSTITUTION: BILL OF RIGHTS**

## **Section 10: Human Dignity**

"Everyone has inherent dignity and the right to have their dignity respected and protected"

## Section 12(2)(c): Freedom and Security of the person

"Everyone has the right to bodily and psychological integrity, which includes the right not to be subjected to medical or scientific experiments without their informed consent"

## Section 16(1)(d): Freedom of Expression

"Everyone has the right to freedom of expression, which includes academic freedom and freedom of scientific research"



## **DoH Ethics Guidelines**

## **Informed Consent**

In general, participation in research must be <u>voluntary and predicated</u> <u>on informed choices</u>. Voluntariness and informed choices are evidenced by the <u>informed consent process</u> which must take place <u>before the research commences (see NDoH ethics guidelines,</u> <u>paragraphs 2.3.6 & 3.1.9).</u>



## **INFORMED CONSENT**

- Informed consent refers to an individual's autonomous authorization of a medical intervention or of participation in research after having been informed of all aspects.
- The process of informed consent incorporates the four elements
   namely:

(Beauchamp & Childress, 2001)





## **Therapeutic Misconception**

The belief held by a research participants that the purpose of the research is to provide therapeutic benefit.

## **Therapeutic Mis-estimation:**

When participants overestimate the benefits that a study can provide them or when they underestimate the potential risks associated with a study.

\*Both are detrimental to a participant's understanding of a study, which is crucial for an autonomous decision.



## **COERCION AND INDUCEMENT**

**Coercion:** 

- Extreme form of undue influence, involving a threat of harm or punishment for failure to participate in research. Neither coercion (direct threat of negative sanction) nor undue influence is acceptable in the informed consent process (NDoH Ethics Guidelines).
- Coercion occurs when an overt threat of harm is intentionally presented by one person in order to obtain compliance.

### Inducement:

• Inducements are offers that get people to do things they would not otherwise do. In research, this involves any activity that encourages participation. (It can take any form that will encourage participation).

(Paul Appelbaum, 2007)



## **Question for discussion**

If your student is about to submit a paper to an accredited journal; should you be included as an author on the paper because you are a supervisor?

a) Yes, always.

b) If the supervisor wrote a significant part of the text.

c) Yes, if the supervisor provided the funding.

d) No.





## Who Is an Author?

The International Committee of Medical Journal Editors (ICMJE) recommends that authorship be based on the following 4 criteria:

- Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
- Drafting the work or revising it critically for important intellectual content; AND
- Final approval of the version to be published; AND
- Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.



## **ORDER OF LISTING AUTHORS**

- Co-authors should come to mutual understandings about the order of listing authors, their roles and responsibilities, conducting and dissemination of research
- Co-authors should sign an agreement about their roles and responsibilities in the planning, conduct and dissemination of research
- Co-authors should disseminate their results transparently and honestly, with as much openness as possible under existing agreements

Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations, 2013



## WHAT IS RESEARCH MISCONDUCT?

## **Research misconduct:**

The violation of the standard codes of scholarly conduct and ethical behavior in professional scientific research.

**Any** proven intentional distortion of the research process, and/or serious deviations from accepted standards within the research and scholarly community for proposing, conducting or reporting constitute a potential research misconduct. and may have consequences that are detrimental for the individual. In addition, application for- or receiving additional funding for research that is already fully funded by another agency without disclosure to the funder may also be classified as research misconduct.



### **Breach of Research Norms and Standards**

An unintentional failure to comply with processes, principles or specific provisions, policies and guidelines governing the conduct of research by any individuals involved in research.

### Reporting Fraudulent Behaviour and Research Breaches

Report Research Misconduct and Alleged Breaches



## **AUTHORSHIP PANDEMIC**

Competition and pressure to publish rapidly can lead to Questionable Research Practices such as:

- Paper Mill: "profit oriented, unofficial and potentially illegal organisation that produce and sell fraudulent manuscripts
- **Guest Authorship:** People who are listed as authors but who did not make any contribution to the research.
- Fabrication: Making up data or results as though they were real
- Falsification: Omitting data or results such that the research is not accurately represented
- **Plagiarism:** Using other scholars' ideas, results, or words without giving appropriate credit.



# RELATIONAL TRUST IN RESEARCH

Relational trust in research refers to the believe that researchers have conducted their research with honesty and fairness.

Trust is an attitude we have towards people whom we hope will be trustworthy.

Participants trust the researchers that they will conduct research with an attitude of good will towards them.

Charteris, J., Page, A., Anderson, J. and Tomkinson, E., 2020. What is relational trust and how do we foster it in our schools?.



# TRUST IN RESEARCH

- Trust is a believe that the trustee is trustworthy
- In biomedical research lack of trust is seen as a great threat that can severely jeopardize the whole biomedical research enterprise
- Trust makes it rational for people to accept research findings

Kass NE, Sugarman J, Faden R, Schoch-Spana M. Trust: The fragile foundation of contemporary biomedical research. The Hastings Center Report. 1996;26(5):25–29 Maxwell, N., 2017. Karl Popper, Science and Enightenment (p. 390). UCL Press.



## **RESPONSIBILITIES OF RESEARCHERS**

Researchers must be honest at all stages of the research process, from drafting and submission of the protocol to RECs, from applying for funding, publishing results, listing of authors, and acknowledging the work of others, protect the interests of research participants, and ought to follow all the legal and ethical requirements relevant to the area of research they conduct.



### COMMITTEE ON PUBLICATION ETHICS (COPE): BASIC PRINCIPLES OF PEER REVIEWERS INCLUDE BUT NOT LIMITED TO:

### **Peer reviewers should:**

Be objective and constructive in their reviews, refraining from making derogatory personal comments

Only agree to review manuscripts within your specialization

Respect the confidentiality of peer review and not reveal any details of a manuscript

Not use information obtained during the peer-review process for their own personal advantage

https://publicationethics.org/files/Ethical\_guidelines\_for\_peer\_reviewers\_0.pdf



# COLLEGIAL ETHICS

## **Collegial Ethics (CE) entails but not limited to:**

- Treating other colleagues with fairness and justice
- Transparent and honest communication
- Objective and constructive peer review processes
- Mutual respect
- Building a rapport and learning from each other

Kuhar, M.J., 2011. Collegial ethics: what, why and how. Drug and alcohol dependence, 119(3), p.235.



### SUPERVISOR-STUDENT-RELATIONSHIP FACTORS INCLUDE BUT NOT LIMITED TO:

| Progress report mechanisms<br>in place  | Ensuring that the student is<br>aware of all program<br>requirements and<br>regulations of the<br>Unit/Department                            | Staying informed of the<br>student's research activities<br>and progress              | Creating awareness sessions<br>on research integrity<br>principles       |
|---|--|---|--|
| Reviewing the thesis both in<br>its draft and final form, and<br>returning feedback in a<br>timely manner | When going on leave or an<br>extended period of absence,<br>ensure that the student is<br>adequately supervised by<br>assigned co-supervisor | Students ought to ensure<br>that their registration is<br>accurate and does not lapse | Maintaining open and<br>transparent communication<br>with the supervisor |



## **SYMMETRICAL POWER RELATIONS IN RESEARCH**

- Equal and open access to information and resources
- Opportunities of research funding and research collaboration open to all
- Power symmetry influences the development of collegial trust
- Symmetric relationships are characterized by a balanced mutual respect
- In asymmetric relationships, actor A wins at the expense of actor B. The unequal allocation of power resources can lead to a point where the most powerful party makes threats and exerts pressure.

https://www.cairn.info/revue-negociations-2011-2-page-39.htm#pa7







"A researcher's freedom to advance knowledge is tied-up to his or her responsibility to be honest"

(Karl Popper)



### Case 23

### Testing high doses of vitamin A on children

The ministry of health of a West African country receives a grant from a foreign medical institute to collaborate with its investigators on a double-blind study designed to assess the effect of periodic high doses of vitamin A on the incidences of childhood diarrhoea and acute respiratory infections (ARI). High-dose vitamin A capsules or placebo would be administered in a double-blind fashion every 4 months for 1 year to children from 6 months to 5 years. A record of morbidity (diarrhoea and ARI) and mortality data would be measured biweekly and blood samples would be drawn (less than 2cc) at 0, 6, and 12 months to test vitamin A status. The daily affairs of this traditional, rural community are governed by a traditional leader and council of elders but the national government retains control of other municipal affairs, including the status collection, the police, and the military.

The chief and council call a meeting to inform the community of the proposed study. In a festive environment, the investigators describe the study and answer all questions from members of the community (men, women, and children) and from the council. After a brief meeting, the village chief and council give their approval. Shortly thereafter, in accordance with the guidelines provided by the research ethics committee at the foreign investigators' institution, the field staff begin to go from house to house to obtain parents' signatures on the informed consent forms that are necessary to allow their children to participate in the study. The parents, however, say that since the chief has already approved of the study they do not need to sign anything. They also explain to the researchers that they usually do not sign anything because they cannot read what they are signing.

On the second day, the field team making the home visits is summoned to the chief's house where they are politely informed that their seeking individual signatures is both unnecessary and insulting. The fact that the chief and council has approved is enough. When the field staff explain that they are required by the grant agreement to obtain signed informed consent forms, they are told that if they insist on doing so they will have to leave the community.

### Questions

- 1 Is individual informed consent a culturally bound concept (from developed countries) or is it a universal principle that ought not be compromised?
- 2 May the chief and the council provide informed consent for the community? Should they?
- 3 How crucial is individual informed consent in this setting?
- 4 Are there circumstances when individual informed consent is unnecessary?
- 5 Is the purpose of informed consent to protect the participant and/or the investigator?
- 6 How should the field team handle this problem? What should the granting institution do?



## THANK YOU !!!

