



Wir schaffen Wissen – heute für morgen

Workshop Research Integrity 2014

Collaborative Research

Tuesday June 3, 2014, 13.30 – 17.00 @ PSI

Thursday June 5, 2014 14.00 – 17.00 @ WSL

Louis Tiefenauer, PSI

Workshop program @ PSI

13.30	Start:	Welcome / Ethics in science	
13.30 – 13.40		Introduction of participants	all
13.40 – 14.40		“Collaborative research”	TL
14.40 – 14.50		Collaborations at PSI	MS
14.50 – 15.10		Coffee break	
15.10 – 16.00		Workshop in 2 groups	TL / MS
16.00 – 16.30		Reporting group discussions	all
16.30 – 16.45		Plenary discussions	
16.50		Message to the board	TL
17.00		Closing the meeting	

Research definition (goals and how)

Research can be defined as search for knowledge [technology 1], or as any *systematic investigation*, to *establish novel facts*, *solve* new or existing *problems*, *prove new ideas*, or develop *new theories* [science], usually using a *scientific method* [technology 2]. The primary purpose for *basic research* (as opposed to *applied research* [technology 3]) is *discovering*, *interpreting*, and the *development* of *methods* and *systems* for the *advancement* of *human knowledge* on a wide variety of *scientific matters* of our world and the universe.

(Wikipedia)

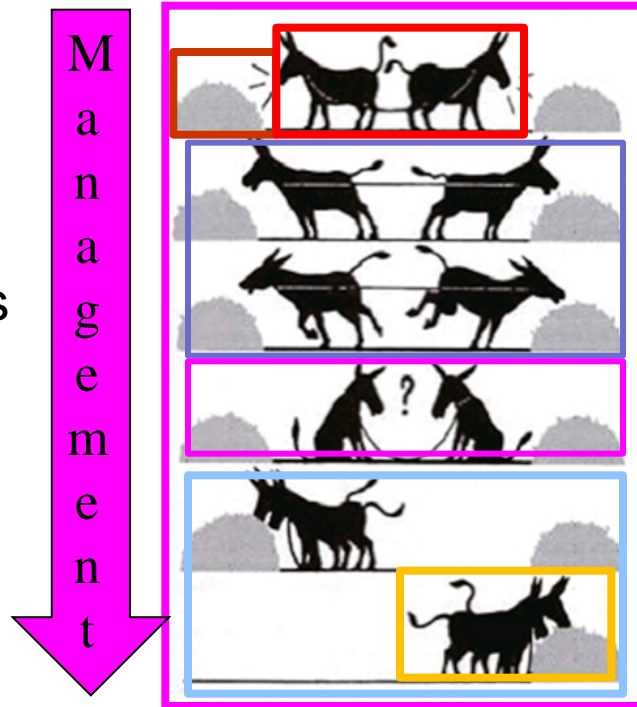
You are creating options for the future !

Criteria of **science**: *commonly* accepted, accessible, independent, revisable

Cooperation

Benefits

- more means
- working times
- *methods*
- influence
- reputation
- *Ideas*
- etc.



Competition

Risk

- shared means
- waste of time
- Loss of credit
- influence
- damaged reputation
- etc.

Added values



Fairness

Additional risks

1. Integrity:

Collaborating partners should take collective responsibility for the *trustworthiness* of the collaborative research and individual *trustworthiness* of their own contributions.

2. Trust:

The behavior of each collaborating partner should be worthy of the trust of all other partners. Responsibility for establishing and maintaining this level of trust lies with all collaborating partners.

Project partners

- behaviour & responsibility
- collective & individual

Trust

Foster by regular & respectful communication



3. Purpose: Collaborative research should be initiated and conducted for purposes that advance knowledge to the benefit of humankind.

4. Goals: Collaborating partners should agree at the outset on the goals of the research. Changes in goals should be negotiated and agreed to by all partners.

Purpose

- create knowledge
- options for society
- transfer: benefit

Research goals

- plan at beginning: novelty!, benefits
- negotiate changes



5. Communication:

Collaborating partners should **communicate** with **each other** as **frequently** and **openly** as necessary to foster full, mutual **understanding** of the **research**.

6. Agreements:

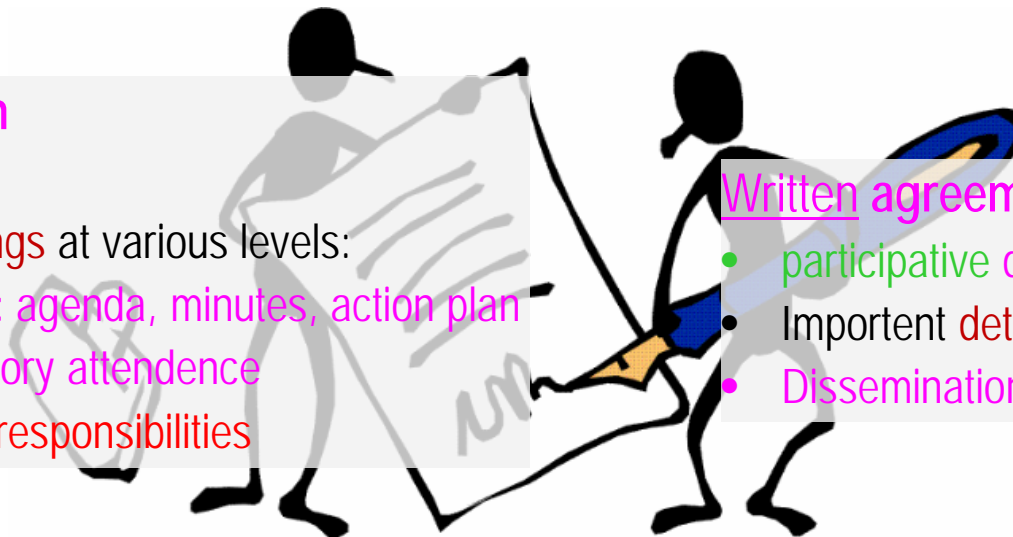
Agreements that govern collaborative **research** should be **understood** and **ratified** by all collaborating partners. **Agreements** that unduly or **unnecessarily restrict dissemination** of **data**, **findings** or other **research products** should be **avoided**.

Communication

- Social events
- Regular meetings at various levels:
Format: agenda, minutes, action plan
Mandatory attendance
Define responsibilities

Written agreements

- participative development of agreements
- Important details: clearly regulated
- Dissemination of results: open & timely



7. Compliance with Laws, Policies and Regulations:

The collaboration as a whole should be in compliance with all laws, policies and regulations to which it is subject. Collaborating partners should promptly determine how to address conflicting laws, policies or regulations that apply to the research.

8. Costs and Rewards:

The costs and rewards of collaborative research should be distributed fairly among collaborating partners.

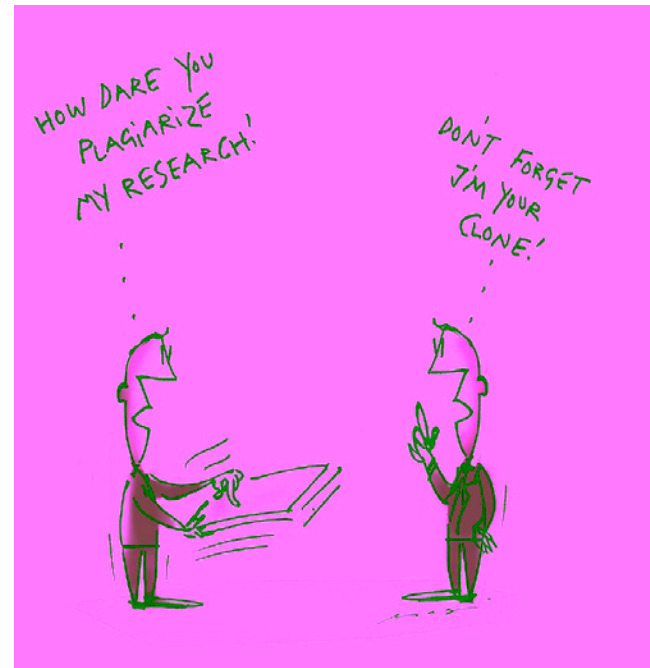
Frame checks

- Conflicts to laws, policies, regulations
- Regulations: finance, safety, employment
- Policies: guidelines (RI), data management

Avoid conflicts:

fair rewarding / working load

- publication & patents (autorship)
- meeting organisation / speakers



9. Transparency: Collaborative research should be conducted and its results disseminated transparently and honestly, with as much openness as possible under existing agreements. Sources of funding should be fully and openly declared.

10. Resource Management: Collaborating partners should use human, animal, financial and other resources responsibly.

11. Monitoring: Collaborating partners should monitor the progress of research projects to foster the integrity and the timely completion and dissemination of the work.



<http://www.psi.ch/integrity/>

Executing

- Declare fundings
- Use resources responsibly

Communication from the start, continuously

Management

Conflicts

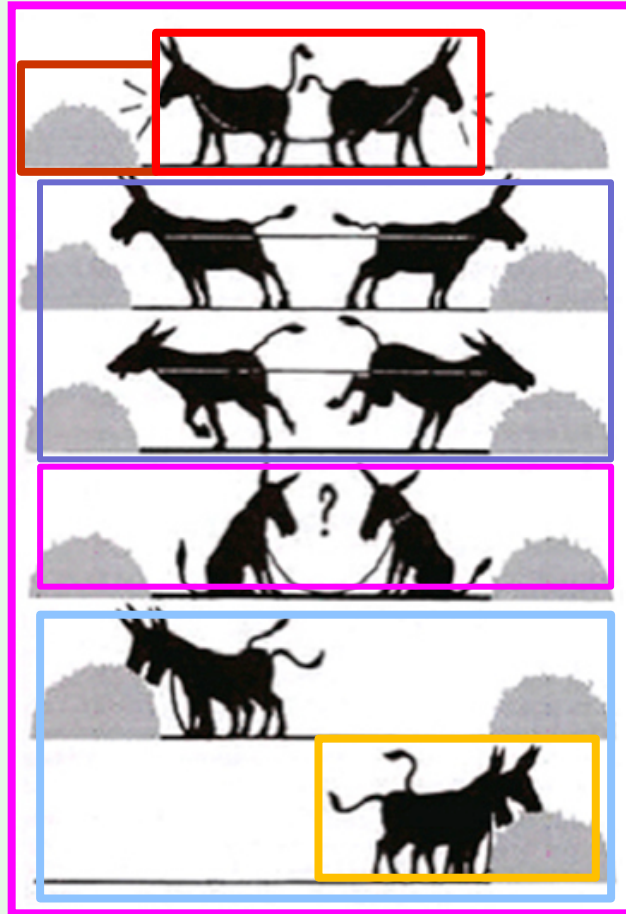
openness

Meetings

Reports

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trust



Researchers

means

planning
executing

goal results
publication / patent

credits fairness

benefits

honesty transfer

Funders & stakeholders

12. Roles and Responsibilities:

Collaborating partners should come to mutual understandings about their roles and responsibilities in the planning, conduct and dissemination of research. Such understandings should be renegotiated when roles or responsibilities change.

13. Customary Practices and Assumptions:

Collaborating partners should openly discuss their customary practices and assumptions related to the research. Diversity of perspectives, expertise and methods, and differences in practices, standards and assumptions that could compromise the integrity of the research should be addressed openly.

Communication at meetings

- Define roles
- Present & discuss progress critically
- Discuss revisions
- Adjust research plan

Communication details

- Announce changes early
- Address openly differences affecting integrity
- Renegotiate responsibilities

14. Conflict:

Collaborating partners should seek prompt **resolution** of **conflicts**, **disagreements** and **misunderstandings**, at the **individual** or **institutional** level, as necessary.

15. Authority of Representation:

Collaborating partners should come to **agreement** on **who** has **authority** to **speak** on behalf of the collaboration.

Conflict management

- Individual & institutional level
- Disagreements
- Misunderstanding



Communication

- Who speaks to outside

16. Data Intellectual Property and Research Records:

Collaborating partners in research collaborations, especially junior partners, should receive full and appropriate recognition.

17. Publication:

Collaborating partners should come to agreement, at the outset and later as needed, on how publication and other dissemination decisions will be made.

Recognition

- fair
- junior partners

Agreement on procedures for

- **Publication:** what, who, when, where
- **Patent:** what, who, when
- **Go public:** what, who, when



18. Authorship and Acknowledgement:

Collaborating partners should come to agreement, at the outset and later as needed, on standards for authorship and acknowledgement of joint research products. Publications and other products should state the contributions of all contributing parties.

PAUL SCHERRER INSTITUT PSI EMPA eawag aquatic research WSL

Integrität in der Forschung an der WSL
Richtlinien für gute wissenschaftliche Praxis

Wahrhaftigkeit, Offenheit, Selbstkritik und Fairness sind die Grundlage für die Glaubwürdigkeit und Akzeptanz der Wissenschaft. Wir Forschende an der WSL sind diesen Werten verpflichtet und halten uns an die daraus abgeleiteten Richtlinien.

Research Integrity at WSL
Guidelines for Good Scientific Practice

Honesty, openness, self-criticism and fairness are the basis for the credibility and acceptance of science in society. Researchers at WSL are committed to these values and to the guidelines which derive from them.

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Check authorship guidelines

- What is an essential contribution?
- Who will be acknowledged
- Who will write the paper



19. Responding to Irresponsible Research Practice:

The collaboration as a whole should have procedures in place for responding to allegations of misconduct or other irresponsible research practice by any of its members. Collaborating partners should promptly take appropriate action when misconduct or other irresponsible research practice by any partner is suspected or confirmed.

20. Accountability:

Collaborating partners should be accountable to each other, to funders and to other stakeholders in the accomplishment of the research.

Irresponsible research practice

- Address openly differences affecting integrity (stat. 13)
- Allegations: suspected or confirmed
- Define: common procedure
- Take actions

All are accountable to

- each other
- funders, stakeholders

Ethical issues are

- fairness, rewards
- benefit for the society
- avoid conflicts of interest
- respect

Researchers want:

- publications
- credits
- respect & fairness

Project management

General management tasks

- Define clear goals
- Let participate all in decisions
- Check compliance to frame issues
- Optimize benefits & transfer
- Communicate to funder & stakeholders

Meetings issues on different levels

Basis: honesty, trust & sense of respons.

- open discussions, irrespond. practices
- respectful change management
- fair credits (publications, acknowledg.)

Agreements in collaborative research

- allocation of means: clear & fair
- Define common procedure if misconduct
- Define & update of responsables

Frame is given by

- laws
- regulations
- guidelines
- facilities
- finance

Society expects

- new options
- transfer (patents)
- no harms
- effective research
- low costs

Management

Conflicts

openness

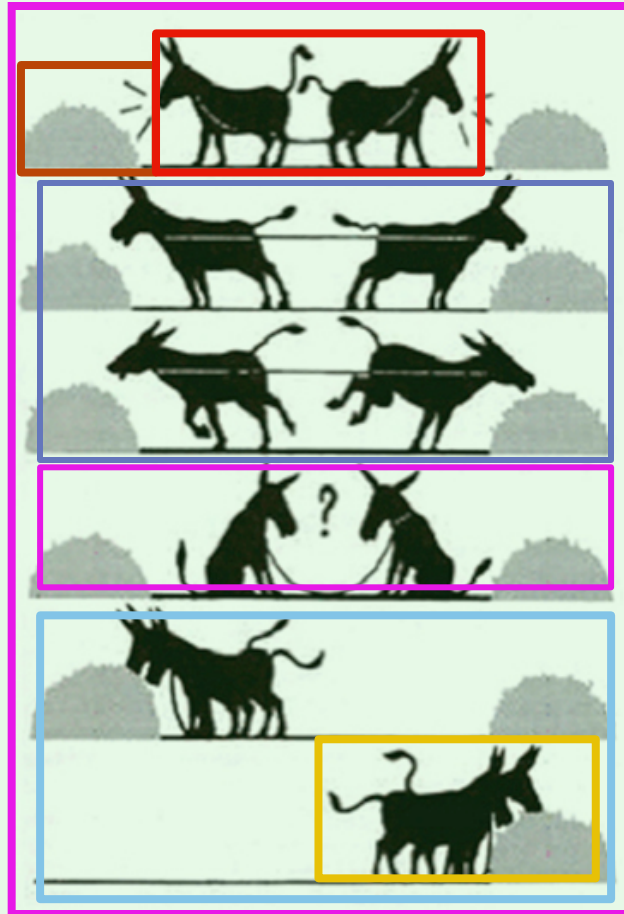
Meetings

Reports

credibility

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trust



benefits

honesty

Researchers

means

planning
execution

self-criticism

goal results
publicaton / patent

credits fairness

transfer

Funders & stakeholders

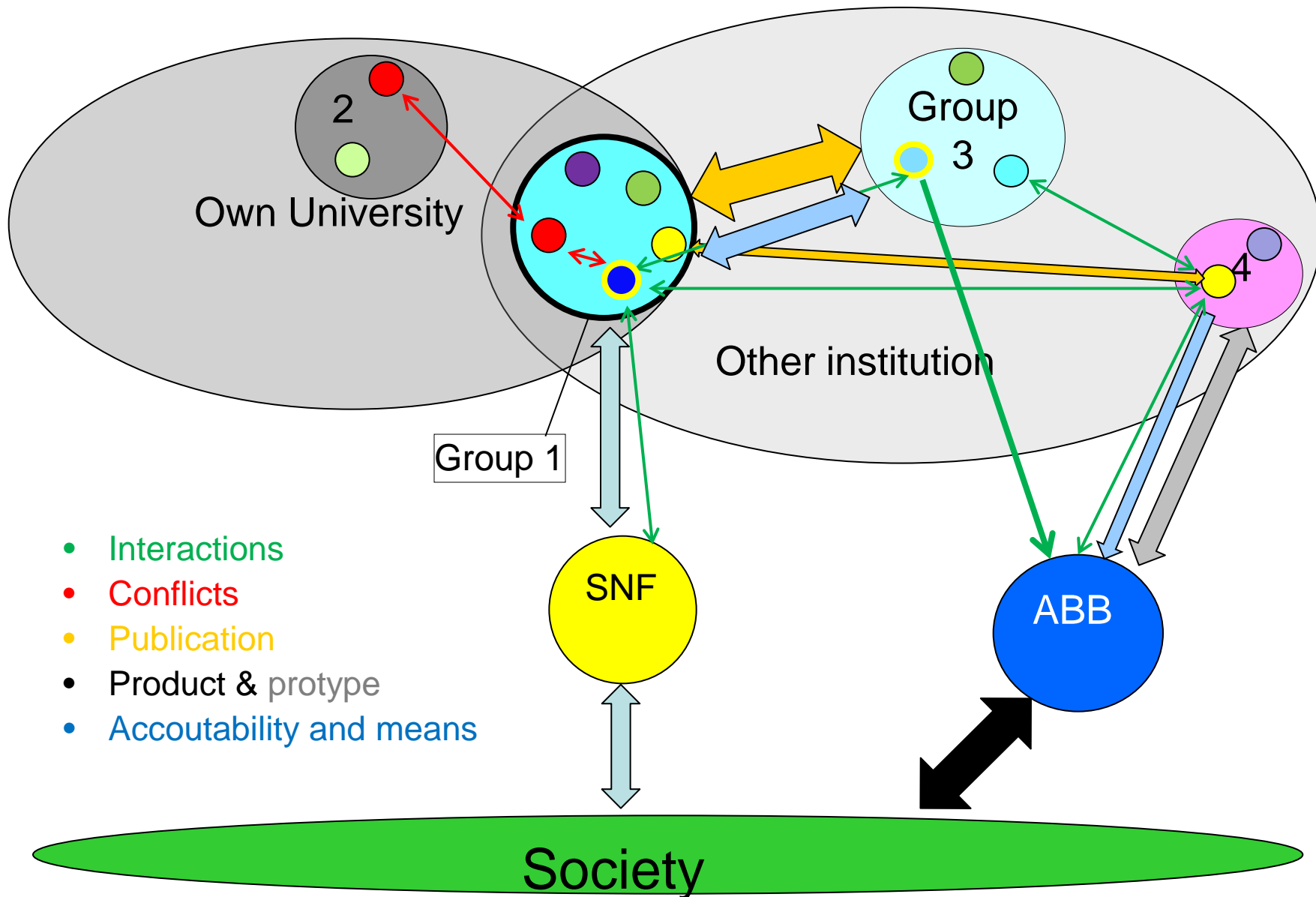
Group discussions

be back 16.00

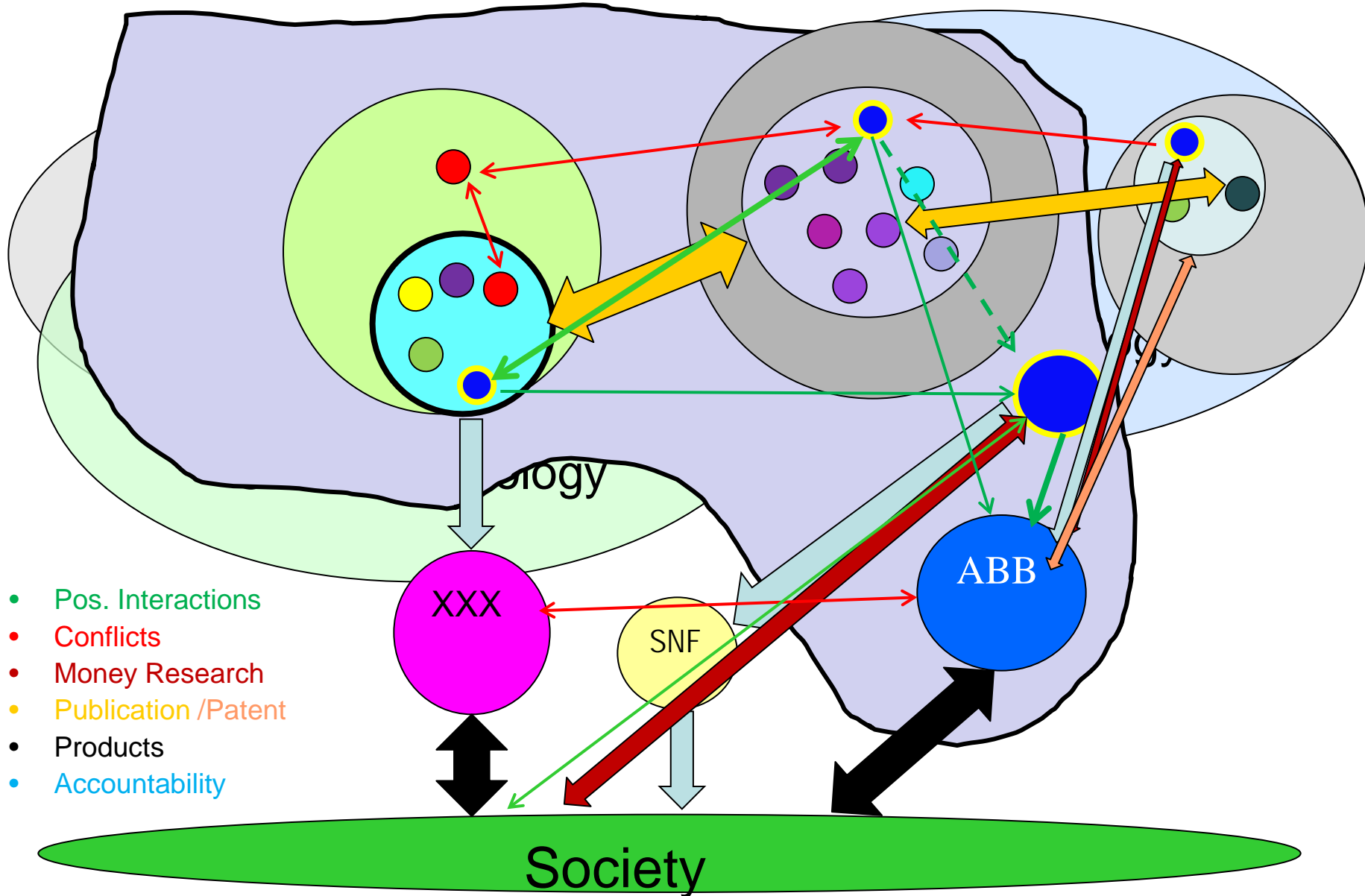
16.15 (WSL)

1. Select 2 or 3 statements
2. Appoint a speaker
3. Discuss
 - a. What are your experiences with the selected issues ?
 - b. How should these issues *correctly* be handled ?
 - c. How can this be achieved (persons, time, procedure)

Simple research project



Collaborative Research



Preamble. Research collaboration that crosses national, institutional, disciplinary and sector boundaries is important to the advancement of knowledge worldwide. Such collaborations present special challenges, however, for the **responsible** conduct of research, because they may involve substantial differences in regulatory and legal systems, organizational and funding structures, research cultures, and approaches to training. It is critically important, therefore, that researchers be aware of and able to address such differences, as well as issues related to integrity that may arise in cross-boundary research collaborations. Fostering the integrity of collaborative research is the responsibility of all individual and institutional partners.

Preamble cont.

Researchers should adhere to the professional responsibilities set forth in the *Singapore Statement on Research Integrity*. In addition, the following responsibilities are particularly relevant to collaborating partners at the individual and institutional levels and fundamental to the integrity of collaborative research.