Ethical competence and leadership
Ethics of technology and science
Optional

Iordanis Kavathatzopoulos
Leader and follower

- Produce answers
- Deliver answers
- Make decisions
- Has responsibility
- Has anxiety
- Is alone
- Is exposed

- Expect answers
- Receive answers
- Follow directions
- No responsibility
- Feel secure
- Belong to a group
- Is protected
An example

You are leading a research project using the latest computer tools. You have gathered an enormous amount of data and a bioinformatician creates an algorithm to systematize the data. However, this operation transforms the richness of data to a few simple categories. You are convinced that if the results are presented in this simplified way there will be misinterpretations that will misguide future research. On the other hand you know that you can never get your research published unless you simplify your data.
Heteronomy: giving up control and responsibility, one thought dominates

Automatic reactions
• It is going to be a big mistake!
• It is the bioinformatician’s responsibility!
• This is fraud!
• This is the only way, everybody does the same.

Dogmatic fixations
• We should trust the experts!
• You should always follow the rules!
• Honesty is very important!
• Publishing is very important!
• The scientific community should be respected!
Autonomy: take control and responsibility, analytic, holistic

Relevant values and interests
• Do I trust the bioinformatician?
• Is publishing the most important?
• What do my colleagues think?
• How important is my fame or funding?

Possible alternative actions
• Proceed according to the bioinformatician?
• Follow my own plans?
• Negotiate with the bioinformatician more?
• Give up this project?

How do the different alternatives affect values?
## Autonomy Skill

<table>
<thead>
<tr>
<th>Autonomy thinking</th>
<th>All relevant values, interests, duties, feelings, needs, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scientific community</td>
</tr>
<tr>
<td>Bioinformatician’s line</td>
<td>Informed, but risk for misinterpretations</td>
</tr>
<tr>
<td>Negotiate more</td>
<td>No information, but maybe safer later</td>
</tr>
<tr>
<td>... (cont.)</td>
<td>...</td>
</tr>
</tbody>
</table>
Ethics more difficult in groups

- Social loafing
- Conformism
- Group polarization
- De-individuation
- Authority obedience
- Groupthink
Ethical groups and organizations

- Emotion-based
- Leader-based
- Principle-based
- Skill and process-based
Types of Ethical Codes

- Marketing, goodwill
- Prescriptions, laws, punishment and reward
- Checklists created by external experts
- Knowledge support in problem solving

Only the last one can work as the others but it has to be created by the users and it has to be continuously adapted
Possibilities

- Cognitive support during the effort to think autonomously
- Training of autonomy skills during the formulation, interpretation and revision processes
- Support democratic communication and dialog
- Establish autonomous structures and processes
- Turn focus on own responsibility by expressing contradictions and inconsistencies in its rules
- Can be used as a tool for guidance, to support anticipation and planning
- Can be used to solve conflicts or remove the causes for conflicts before they emerge
- Promote confidence, personal and group, by offering a way to handle moral issues
Risks

- Something missing meaning it can be seen as morally allowed
- Something stated but not fit for a certain situation may be seen as morally applicable
- Become a weapon in conflicts, proxy for any kind of conflict
- Consolidate current moral values, strengthen and shield moral correctness, hinder change
- Support the creation of moral facades, and facilitate career making
- Promote the establishment of moral hierarchies, structures and procedures
- Strengthen heteronomy and hinder autonomy at personal and group levels
- Shift responsibility from persons and groups to the rules themselves
Ethical codices and competence

- Codices have to be created by people who know how to do this
- Codices demand always interpretation and adaptation. Rules and principles cannot be applied automatically
- Ethical codices can work against their goals:
  - They can never be exhaustive and what is missing can be interpreted as being allowed
  - Rules can be used with rigidity, with fanatism or simply in a wrong way
Ethical competence in organizations

- Processes for construction of ethical codices and guidelines
- Processes for revision of ethical codices
- Dialog groups, support structures, ethical committees etc.
- Special roles, e.g. ethical officers, coordinators
- Continuing education for ethical competence
- Ethical leadership focusing on organizational and personal development
An example

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### Construction of ethical rules

<table>
<thead>
<tr>
<th>Autonomous principle construction</th>
<th>All involved values, interests, persons, groups, organizations, society, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific truth</td>
<td>Publication</td>
</tr>
<tr>
<td></td>
<td>Funding (cont.)</td>
</tr>
</tbody>
</table>

#### Conflicts, problem areas, etc.

<table>
<thead>
<tr>
<th>Actual Data treatment</th>
<th>Constrains reality, but makes it conceivable</th>
<th>Easier, but risk for criticism</th>
<th>Satisfies the requirements, but risk for dissatisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
An example of a rule...

1 We need to treat our data because we need conceivable conclusions, it is easier to publish our results and makes it possible to get next fund.

2 However, there is a risk for misinterpretations, criticism and disappointing the funding agencies.

3 If we do not treat our data we present reality as it is, our work will not be misunderstood and criticized, or disappoint the funding agency, but there is a great risk it will be very difficult to disseminate data in this form or may not present any meaningful information, making more difficult to attract future research money...

(1, 2, 3, 4 All four parts have to be included!)
Methods and tools

- Ethical test, *ECQ*, to assess the ethical competence of persons
- Personal support and coaching, computerized decision support, *Democrates*
- Ethical self-evaluation, for mapping skills and processes, interview and observation
- Microworld, *Ethick*, to assess and stimulate ethical decision-making skills
- Education program for ethical competence
Is ethical competence moral?

• **Necessary**: There is nobody who can tell us what is right and wrong

• **Classical response**: It depends how people use their ethical competence

• **Satisfactory**: The ethical competence is the only way to good moral

• **Risk**: Vitally important myths can be destroyed
Group work and seminar

- Research project, short description <300 words
- Application for ethical vetting
- Upload 23 May
- Review another group’s application, make a decision and a presentation <10min
- Upload 28 May
- Present and discuss your review at the seminar, <20min
- Use Autonomy Matrix to support your thinking