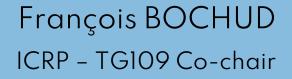
# Ethics in Radiological Protection for Medical Diagnosis and Treatment

ICRP Webinar 2 June 2023





### TG 109

Members of the TG

and their core competences































- Marie-Claire Cantone
- Kimberly Applegate
- Mary Coffey
- John Damilakis
- Maria del Rosario Perez
- Frederic Fahey
- Chieko Kurihara-Saio
- Bernard Le Guen
- Jim Malone
- Lynette Reid
- Friedo Zölzer



### TG 109

Diffusion and stakeholder involvement

Consultation until August 11, 2023



























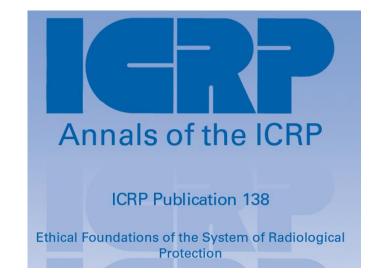




### Mandate of the TG

 To develop an ICRP publication presenting the ethical aspects in the use of radiation in medicine

build upon Publication 138





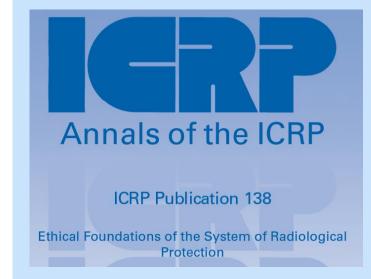


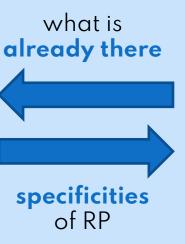
### We have to be modest

**Hippocrates** 

values made explicit only in 2018

long explicit history & living culture of ethics









# Purpose of the report

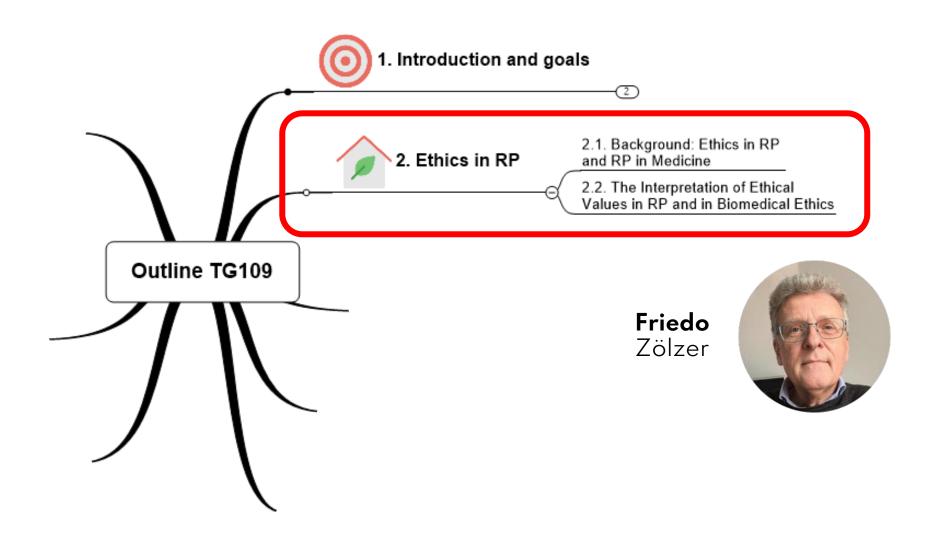
- Bridge the gap between the communities in terms of ethics
  - build on P 138

medical community



**RP** community







### Pairing the values

radiological protection



biomedical ethics

beneficence non-maleficence

five core values

justice

dignity

prudence



inclusiveness accountability / transparency solidarity

other principles precaution empathy honesty

beneficence non-maleficence

justice

autonomy

four principles



# Pairing the values

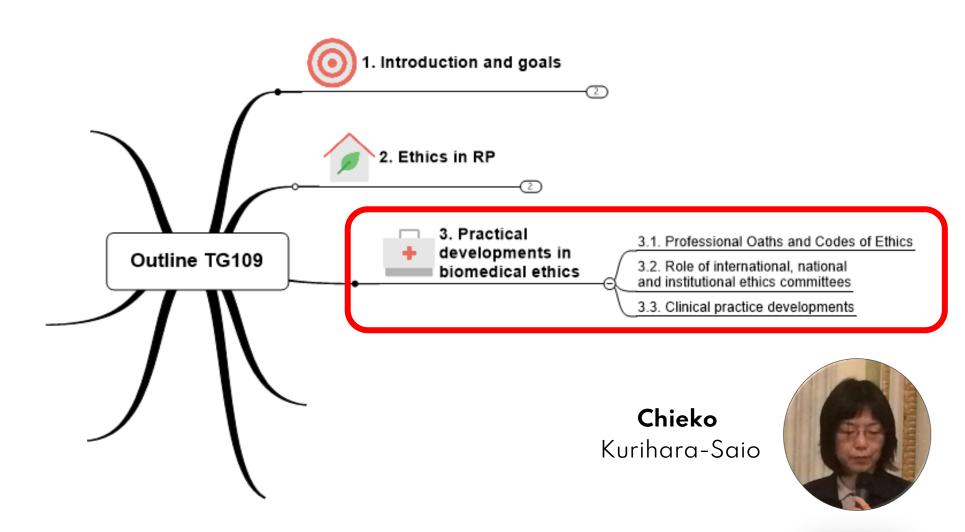




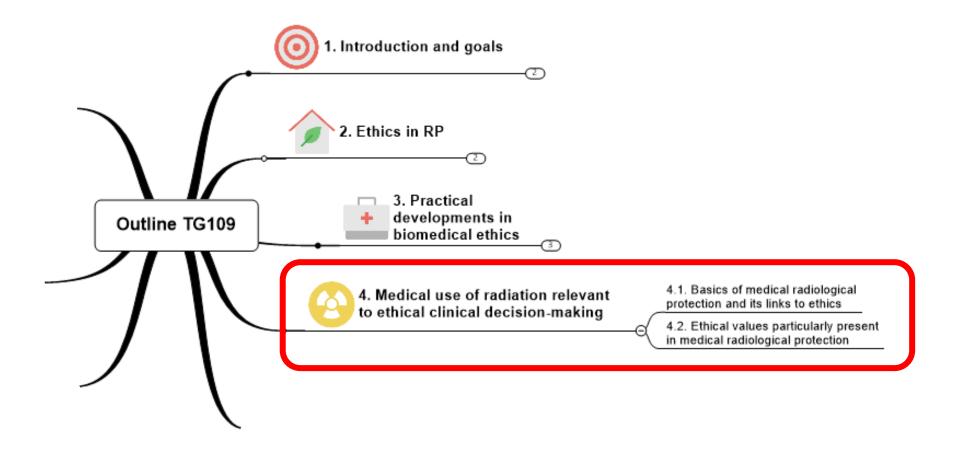
```
beneficence & non-maleficence
    justice & solidarity
    dignity & autonomy
    prudence & precaution
    inclusiveness & empathy
```



accountability / transparency & honesty

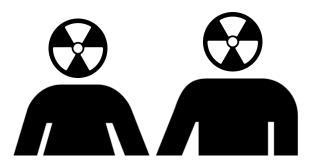


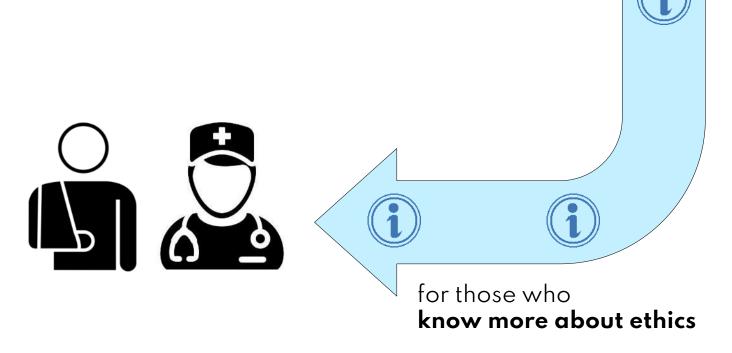














# For those who know more about biomedical ethics than RP

#### Stochastic effects & Tissue reactions

classical RP subject
with an ethical approach
precautionary principle
dose threshold

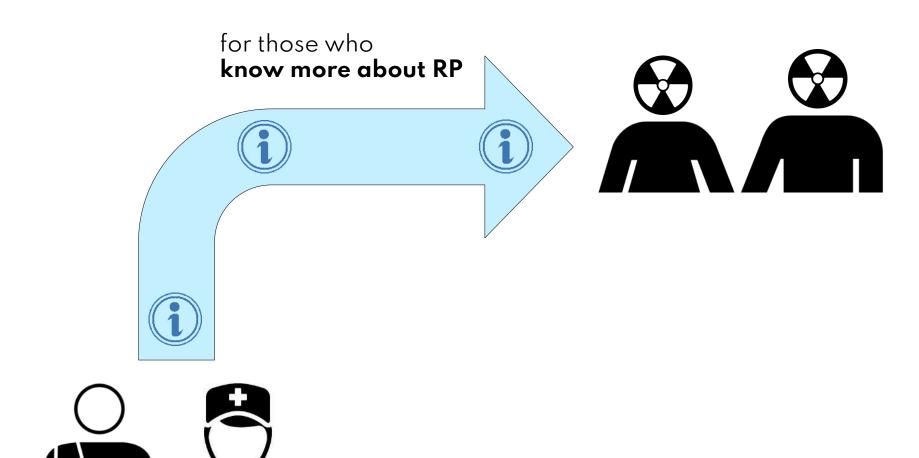
#### Particular factors affecting radiation sensitivity

age and sex individual sensitivity

#### **Uncertainties**

of the dose received of the risk associated to the dose integrating them to education & training









# For those who know more about RP than biomedical ethics

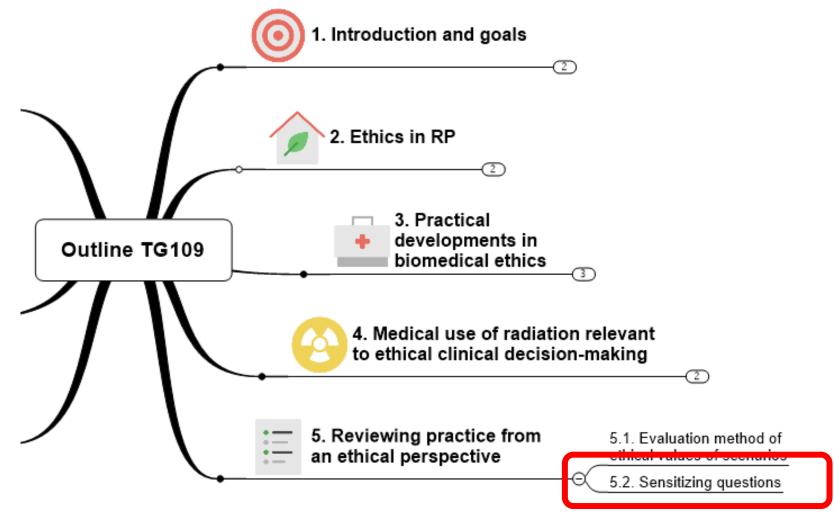
#### Special aspects of medical use of radiation

deliberate exposure voluntary (informed consent) demography (different than usual RP population)

#### Medical ethics and application of the principles of RP

justification optimization level of efficacy (image quality)









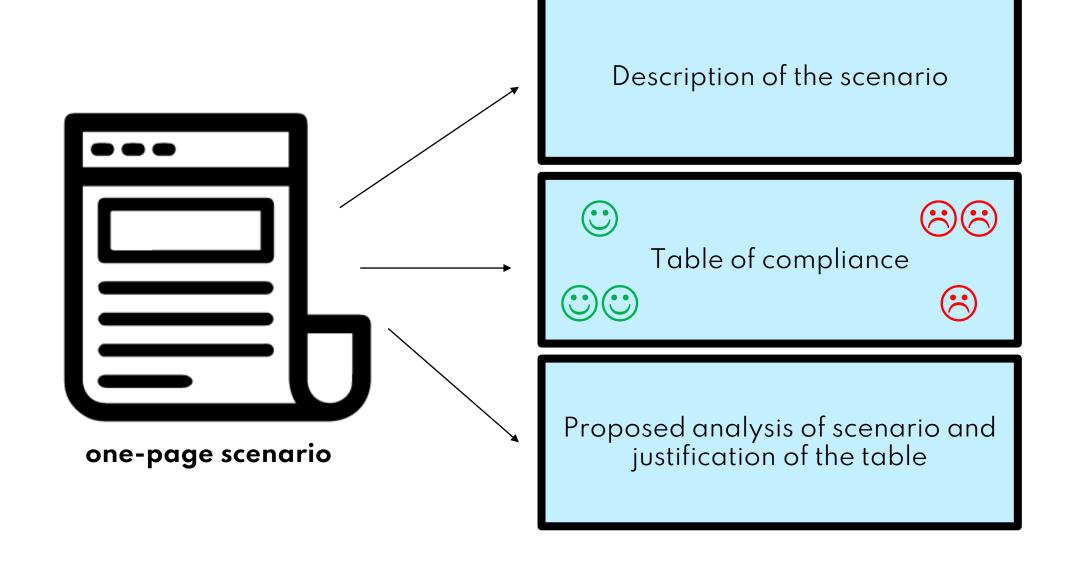




Malone



#### **Evaluation** method

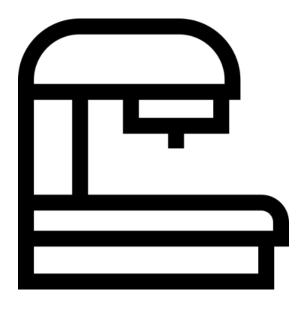




# Scenarios covering many practical situations



in imaging procedures



10 in therapy



# Scenarios covering many practical situations



**Pregnancy** 



Breast feeding



Children



**Elderly** 



No guidelines



Protons or x-rays?



Health assessment





Chronic disease



End of life



Organized screening



Multifraction instead of monofraction



Incorrect field placement







# Elements of Ethical E&T in RP in Medicine

Combining parts to make a Create new whole Judging the value of **Evaluate** information or ideas **Breaking down information** into component parts **Analyze** Applying the facts, rules, concepts, and ideas **Apply Understanding what** the facts mean **Understand** Recognizing and recalling facts Remember

**Competencies**(Attitudes/Behaviors)

**Skills** (ability to apply knowledge)

knowledge



# Elements of Ethical E&T in RP in Medicine

### Skills Competencies Knowledge (ability to apply knowledge) (Attitudes/Behaviours) Core and procedural values of ethics of radiological protection in medicine Aware of fundamental human Identify the core components of Support the patient in making rights that dignity/autonomy and dignity/autonomy a decision privacy must be respected



### Summary

- This report should help medical & RP professional
  - to interact with a common language
- This report proposes a method to review the practices
  - centered on the ethical values
  - helping to compare different approaches and to solve ethical dilemma
- Ethics requires intellectual efforts (and the report has a solid theoretical part)
  - it must be included in **E&T** of all RP pro that work in medicine
- Key-messages
  - have been dispatched across the whole report

