

Better health through innovation in education

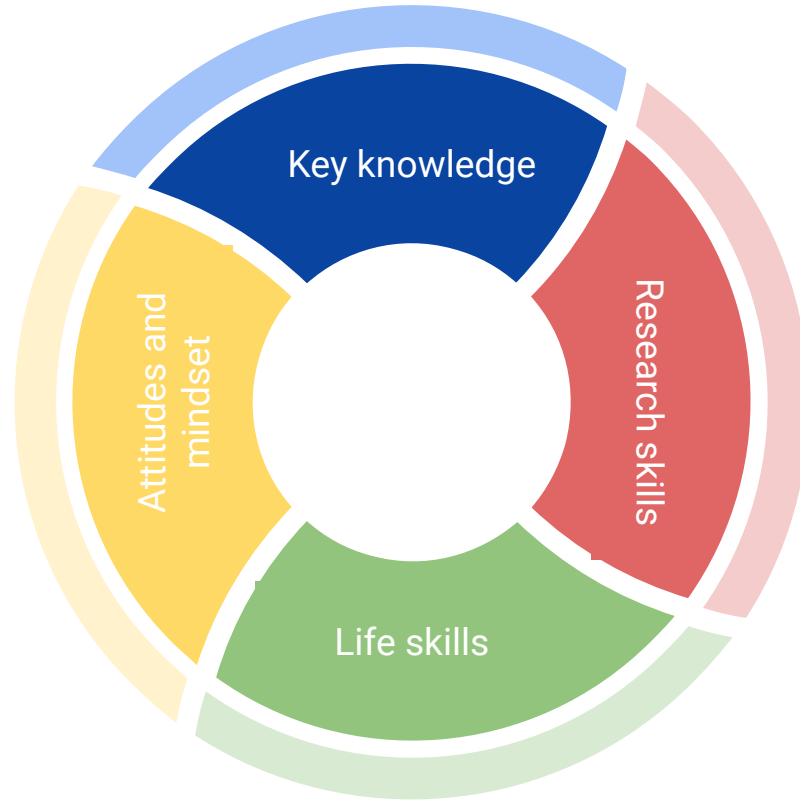


PROMISE learning outcomes

PROMISE modules

PROMISE certification

PROMISE curriculum covers 4 dimensions of learning outcomes for interdisciplinary students



# Key knowledge learning outcomes cover basics of P4 medicine and RRI-related topics

Describe the basic concept of P4 medicine and RRI	Explain the technology advances that support P4 medicine emerging from adaptive and responsive processes
Understand the basic principles of different -omics and how it can be applied in predictive medicine	Recognize RRI principles in P4 medicine projects
List different levels of public engagement in health care and health sciences research	Understand how risk factors and individual differences (including genetics, lifestyle, environment) affect prevention, onset, treatment approaches and outcomes of different health conditions
Evaluate the advantages of using patient-tailored treatment strategies (cancer, neurodegenerative diseases, in silico trials, tissue engineering)	Explain in a clear and concise way to general population the importance of a healthy lifestyle to maintain good health and well-being in alignment with the UN Agenda 2030 strategy goals

# Research skills learning outcomes cover crucial competencies in modern interdisciplinary research

Assess different innovative technologies in P4 medicine taking into account the 4 RRI dimensions (anticipation, inclusiveness, openness and responsiveness)

Propose a P4 medicine research project with the respect to available resources and in line with RRI principles

# Life skills learning outcomes cover lifelong learning competencies in alignment with EU guidelines

Organise information in a form of a database of stakeholders in P4 medicine

Communicate effectively in multi-disciplinary academic environments

Develop dissemination strategy taking into account different stakeholders (e.g. patient, politician, medical doctor, potential mentor, colleague...)

# Attitudes and mindset learning outcomes cover long-term and wide-impact changes in behaviour in medical research

Examine the importance of maintaining and managing well-being of patient/consumer/stakeholder, rather than being focused only on treating the health condition

Understand the challenge of responsible ethical approach to data handling

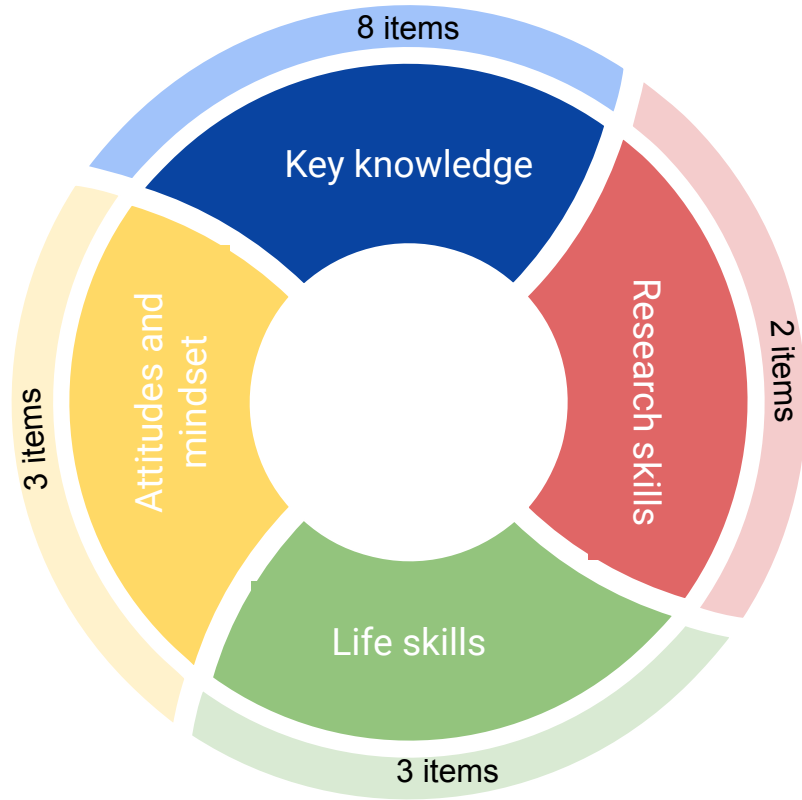
Consider the RRI key elements in biomedical research and clinical practice

# PROMISE Curriculum Map

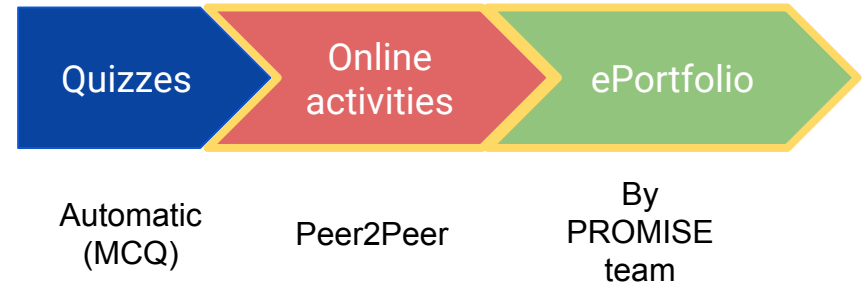
(an outcome is addressed in a module in one of the following ways: I=introduced, R=reinforced, M=mastered, A=assessed)

	Personalised medicine module	Participatory medicine module	Preventive medicine module	Predictive medicine module
Describe the basic concept of P4 medicine and RRI	I	R	R	MA
Explain the technology advances that support P4 medicine emerging from adaptive and responsive processes	IR	R	M	M
Recognize RRI principles in P4 medicine projects	I	R	R	MA
Evaluate the advantages of using patient-tailored treatment strategies (cancer, neurodegenerative diseases, in silico trials, tissue engineering)	IRMA	R		
List different levels of public engagement in health care and health sciences research		IRMA		
Understand how risk factors and individual differences (including genetics, lifestyle, environment) affect prevention, onset, treatment approaches and outcomes of different health conditions	I	R	MA	
Understand the basic principles of different -omics and how it can be applied in predictive medicine	IR			RMA
Explain in a clear and concise way to general population the importance of a healthy lifestyle to maintain good health and well-being in alignment with the UN Agenda 2030 strategy goals		I	RMA	
Assess different innovative technologies in P4 medicine taking into account the 4 RRI dimensions (anticipation, inclusiveness, openness and responsiveness)	I	R	R	MA
Propose a P4 medicine research project with the respect to available resources and in line with RRI principles	I	R	R	MA
Organise information in a form of a database of stakeholders in P4 medicine		IR		MA
Communicate effectively in multi-disciplinary academic environments	I	R	RM	
Develop dissemination strategy taking into account different stakeholders (e.g. patient, politician, medical doctor, potential mentor, colleague...)		IR	RM	
Examine the importance of maintaining and managing well-being of patient/consumer/stakeholder, rather than being focused only on treating the health condition		IR	MA	
Understand the challenge of responsible ethical approach to data handling	I	RM	R	RA
Consider the RRI key elements in biomedical research and clinical practice	I	R	R	RA

# PROMISE Certification



## Diversity of evaluation towards certification





# PROMISE modules consist of 4 online modules and 2 learning expeditions

October 2020

## Personalized medicine

One size doesn't fit all: latest developments in patient-tailored treatments

November 2020

## Participatory medicine

Better together: why and how to involve patients and community in research and healthcare

January 2021

## Learning expedition to Paris

Mapping the P4 medicine ecosystem - team building and communication skills development

March 2021

## Preventive medicine

Prevent rather than cure: importance of lifestyle in maintaining the well-being and preserving one's health

April 2021

## Predictive medicine

Look into the future: using omics to predict and assess different health conditions and their progression

August 2021

## Learning expedition to Split

Creating P4 medicine research proposals - interdisciplinary teamwork, project based learning and public outreach

# PROMISE Badges

## Personalised Medicine



### **Short Description** (summary of the achievement in one sentence):

This module introduces the basic concepts and technologies behind personalized medicine and custom-made treatments taking into the account the RRI principles

### **Criteria** (how does someone earn this badge, learning outcomes assessed in this module):

- Describe the basic concept and technologies of P4 medicine taking into account the 4 RRI dimensions (anticipation, inclusiveness, openness and responsiveness)
- Evaluate the advantages of using patient-tailored treatment strategies
- Understand how risk factors and individual differences affect prevention, onset, treatment approaches and outcomes of different health conditions
- Consider the RRI key elements in biomedical research and clinical practice

### **Slogan** (how to advertise this module - one attractive sentence):

One size doesn't fit all

# PROMISE Badges

## Participatory Medicine



### Short Description

This module explains why and how patients and community can be included in research and healthcare in line with RRI principles.

### Criteria

- List different levels of public engagement in health care and health sciences research
- Organise information in a form of a database of stakeholders in P4 medicine
- Communicate effectively in multi-disciplinary academic environments
- Develop dissemination strategy taking into account different stakeholders (e.g. patient, politician, medical doctor, potential mentor, colleague...)
- Examine the importance of maintaining and managing well-being of patient/consumer/stakeholder, rather than being focused only on treating the health condition

### Slogan

Better together!

# PROMISE Badges

## Preventive Medicine



### Short Description

This module explains the importance of lifestyle in maintaining the well-being and preserving one's health.

### Criteria

- Understand the impact of various lifestyle factors on prevention of different health condition.
- Discuss the importance of a healthy lifestyle and well-being in line with UN Agenda 2030.
- Communicate effectively in multi-disciplinary environment considering RRI principles.
- Develop dissemination strategy for various stakeholders.

### Slogan

Prevent rather than cure

# PROMISE Badges

## Predictive Medicine



### Short Description

This module presents the basic principles of different -omics and how they can be applied in predictive medicine

### Criteria

- Assess different innovative technologies in P4 medicine taking into account the 4 RRI dimensions (anticipation, inclusiveness, openness and responsiveness)
- Recognize RRI principles in P4 medicine projects
- Propose a P4 medicine research project with the respect to available resources and in line with RRI principles
- Understand the challenge of responsible ethical approach to data handling
- Organise information in a form of a database of stakeholders in P4 medicine

### Slogan

Look into the future