



# **Building Curriculum Infrastructure in Medical Education**

## **From the idea to the project**

by  
**Jaroslav MAJERNÍK and BCIME team**

**23.10.2018**  
**Košice, Hotel Yasmin**

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Co-funded by the  
Erasmus+ Programme  
of the European Union



2018-1-SK01-KA203-046318



**MUNI  
MED**

**UNA**  
Universität  
Augsburg  
University



# BCIME: Basic facts

**Programme:** Erasmus+ (KA2)  
**Key Action:** Cooperation for innovation and the exchange of good practices  
**Action:** Strategic Partnerships for higher education  
**Main objective:** Development of Innovation  
**Start Date:** **01.09.2018**  
**End Date:** **31.08.2021**  
**Duration:** **36 months**



- **SAAIC:** ... how the project originated, how you searched for partners and wrote an application, a brief introduction of the project and the events that are waiting for you in the near future.

# Aim and origin of the project

- deliver **methodologies** and **unified ICT platform** for optimisation of curricula at medical faculties in five European countries, namely Jagiellonian University (JU, **Poland**), Masaryk University (MU, **Czech Republic**), University of Medicine and Pharmacy of Iasi (UMF, **Romania**), University of Augsburg (UAU, **Germany**) and Pavol Jozef Šafárik University in Košice (UPJS, **Slovakia**)
- based on previous projects and international cooperation
- ideas and intensive long time activity of



Adrian Ciureanu  
University of Medicine  
and Pharmacy of Iasi



Inga Hege  
University of Augsburg



Martin Komenda  
Masaryk University



Andrzej Kononowicz  
Jagiellonian University



Jaroslav Majerník  
Pavol Jozef Šafárik  
University in Košice

# From the beginning

## 2007, MEFANET - Medical Faculties NETwork

The MEFANET project (Medical Faculties NETwork) is aiming to strengthen the cooperation among Czech and Slovak medical faculties, as regards the progress in education of medical and health care disciplines using modern ICT.

## Portals, Wikilectures, Virtual patients ...

## 2012, OPTIMED – OPTImized MEDical education

The primary effort of the OPTIMED project is a comprehensive innovation of the General Medicine study field and a strengthening of lessons focused on the solution, matching the future clinical or academic job of the graduate.

## 2015, MedCIn – Medical Curriculum Innovations

The MEDCIN project proposes an innovative methodological background including web-based visualization tool for comprehensive evaluation and map of medical curricula with the use of modern information and communication technologies.



MU, Brno



UPJS, Košice



UJ, Krakow



UAU, Augsburg



UMF, Iasi

# Project Partners – EU

Partner No.	Role	Organization Name	Acronym	City	Country
P1	Applicant Organisation	Pavol Jozef Šafárik University in Košice	UPJS	Košice	Slovakia
P2	Partner Organisation	Masaryk University	MU	Brno	Czech Republic
P3	Partner Organisation	Universitaet Augsburg	UAU	Augsburg	Germany
P4	Partner Organisation	Uniwersytet Jagiellonski	UJ	Krakow	Poland
P5	Partner Organisation	Universitatea de Medicina si Farmacie Grigore T.Popa Iasi	UMF	Iasi	Romania



## Motivation

- To propose a curriculum planning model as a clear communication channel between the involved stakeholders
- To develop a robust web-oriented platform used for easy creation, transparent browsing, and reviewing the curriculum
- To support outcome-based approach





# Application – preparation phase

Application form + all necessary Annexes

- cooperation in **cloud**
- **ToDo** list



MU, Brno



UPJS, Košice



UAU, Augsburg



UJ, Krakow



UMF, Iasi

## Curriculum building & mapping

Interview to obtain requirements from individual universities/institutions.

\*Required

### General information

Your university/institution: \*

- ☐ Jagiellonian University (Poland)
- ☐ Masaryk University (Czech Republic)
- ☐ University of Medicine and Pharmacy of Iasi (Romania)
- ☐ Pavol Jozef Šafárik University in Košice (Slovakia)
- ☐ Other: \_\_\_\_\_

What is your position at your university/faculty?

Your answer \_\_\_\_\_

How many study programs do you have at your university/faculty?

Your answer \_\_\_\_\_

How challenging is in your opinion the process of curriculum building/optimisation/harmonisation/mapping at your university at the moment?

	1	2	3	4	5
Not challenging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Very challenging					

*Needs analysis!*

*Requirements across consortium.*

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Martin
Inga
Adrian, Bogdan
Jaro
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Jaro
Andrzej
Martin
Inga

# Medical and healthcare curriculum

Description of selected parts of medical and healthcare curriculum on two-tier level:

- The major medical discipline, namely **Anatomy**, covering courses from pre-clinical part of study programs will be described in **English** by all partner institutions under the senior guarantor supervision. The complementary medical disciplines will be described in local languages at individual partner universities:
  - UPJS - **Conservative and Prosthetic Dentistry** in Slovak
  - JU - **Communication Skills** in Polish
  - UMF - **Neurosurgery** in Romanian
  - UAU - **Clinical skills** in German
  - MU - **Analysis, Data Management and Informatics for Healthcare Specialisation** in Czech
- New medical curriculum mapping issues will be defined on gathered curriculum data and solved using analytical, natural language processing and machine learning methods. These tasks uncover hidden relations between curriculum building blocks and descriptive attributes and significantly enhance the process of curriculum optimization.



## Reviewers notes



- the project fulfils the goals and priorities of the strategic partnership
- the faculties of medicine of the major Central European universities participates in the project, which already have enough experience and knowledge from the projects implemented so far in the field of IT implementation in the realization of the study of medicine
- the platform will be freely available to other faculties of medicine within the MEFANET network (network of medical faculties) along with methodological, pedagogical and technological know-how for further harmonization of medical curricula
- synergies between different sectors (education, training and business - medical facilities)
- transnational dimension
- outputs in an applicable form are highly up-to-date and innovative for the healthcare sector





## Reviewers notes



- unclear needs analysis
- the work plan for the creation of intellectual outputs too detailed, 9 planned intellectual outputs is only a detailed elaboration of the methodology to achieve the goal, which increases the personnel costs of the project
- it is not clear from the planned O1 output whether the needs survey is at the level of the faculty or the whole university (in the case of RO), the number of days allocated to this output is inadequate
- control indicators to make corrective measures only generally mentioned
- the project is not financially efficient: it plans a high number of days for individual intellectual outputs

# Project changes and budget cuts

- all intellectual outputs **-50%** (staff costs)

- **ME1** completely cancelled (UPJS, Slovakia)

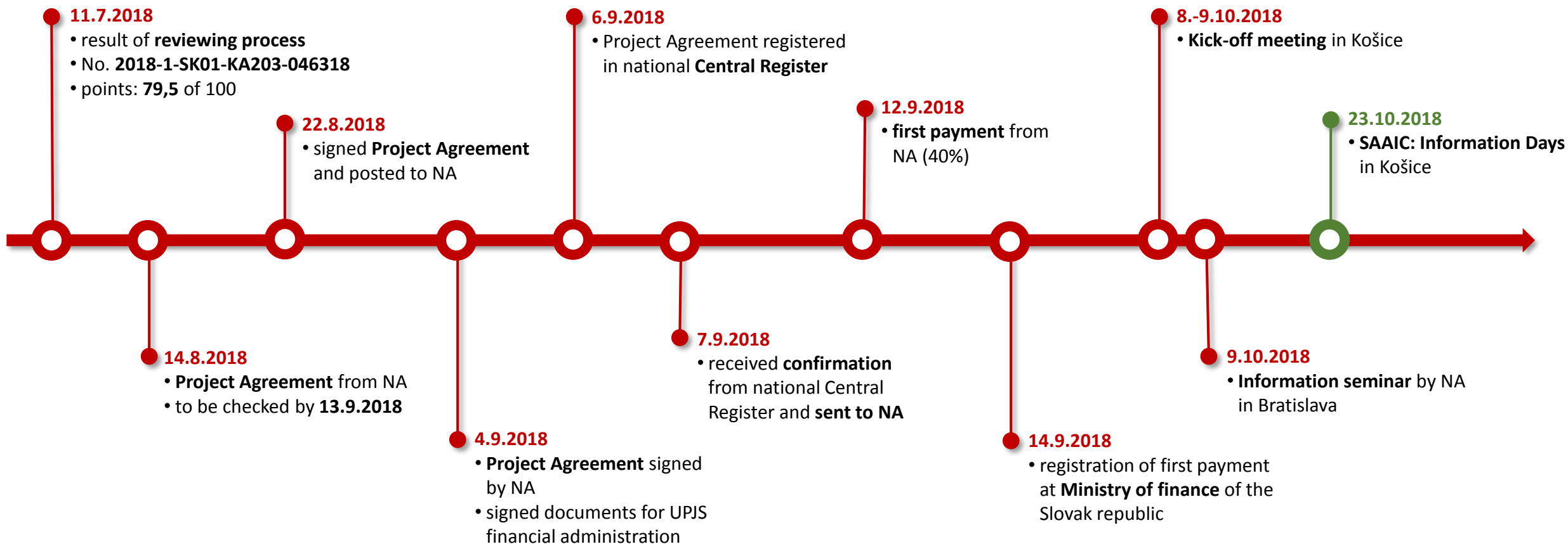
The main purpose of the multiplication events is to disseminate the intellectual results of the project to broad/professional public (not to the partner institutions). It's a kind of dissemination. Since E1 is planned at the beginning of the project when O1 is not completed yet and the main participants are partner institution staff, we note that this MP is not eligible in either form or content. The questions how to progress with IO can be discussed with partners during transnational project meetings or through ICT - videoconferencing, Skype, etc.

- **ME6** completely cancelled (UMF, Romania)

The described multiplication event again does not take the form of a multiplication event, but rather a form of educational/teaching and training activity (they serve as a means of achieving the goal) or as the last transnational project meeting (evaluation of feedback).



# Timeline



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## BCIME (Building Curriculum Infrastructure in Medical Education)

PROJECT TIMETABLE																																						
	2018				2019												2020												2021									
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INTELLECTUAL OUTPUTS/ACTIVITIES			Lenght	Leader
O1	Needs analysis (institutional requirements related to the goals, aspirations and functions of curriculum innovations and mapping)		4 months	Slovakia, UPJŠ
O2	Methodological and technical step-by-step manual on curriculum innovations in medical and healthcare study fields (based on needs analysis)		4 months	Poland, JU
O3	Implementation of standard-compliant curriculum management system (design, development, prototyping & testing, deployment)		14 months	Czechia, MU
O4	Metadata description of outcome-based curriculum (detailed formal parametric specification)		10 months	Romania, UMF
O5	Outcome-based curriculum evaluation (content in-depth validation)		8 months	Germany, UAU
O6	Testing of curriculum management system implementation (semi-automated exploratory testing, user acceptance testing)		6 months	Slovakia, UPJŠ
O7	Formulation of research and exploratory questions		4 months	Poland, JU
O8	Curriculum mapping (problem solution in accordance with CRISP-DM methodology)		10 months	Czechia, MU
O9	Promotion endeavour		2 months	Slovakia, UPJŠ

MULTIPLIER EVENTS	
M1	Workshop: The needs for curriculum innovations (institutional requirements gathering) - Slovakia, UPJŠ
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M6	CONGRESIS 2021: Students workshop on curriculum evaluation - Romania, UMF

TRANSNATIONAL PROJECT MEETINGS	
E1	Kick-off meeting - Slovakia, UPJŠ
E2	2nd project meeting - Czechia, MU
E3	3rd project meeting - Poland, JU
E4	Closure project meeting - Romania, UMF




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# Project Agreement

## Payment scheme

- 
- **first pre-financing 40%**  
101 272,- EUR within 30 days after agreement is valid
  - **interim report**  
till **31.3.2020** and request for second payment, approved interim report and min. 70% money of first pre-financing drawn
  - **second pre-financing 40%**  
101 272,- EUR within 60 days after the complete interim report is delivered to NA
  - **final report**  
no later than 60 days after the project is finished (31.8.2021), including **eligible costs actually incurred**
  - **payment of the balance 20%**  
**reimbursement**, the rest of budget, depending of actually incurred eligible costs


# BUILDING CURRICULUM INFRASTRUCTURE IN MEDICAL EDUCATION

5 Participating countries:     

[DOWNLOAD AS PDF](#)[VIEW PROJECT MAP](#)

 **Start: 01-09-2018 - End: 31-08-2021**

 **Project Reference: 2018-1-SK01-KA203-046318**

 **EU Grant: 253181 EUR**

Programme: **Erasmus+**

Key Action: **Cooperation for innovation and the exchange of good practices**

Action Type: **Strategic Partnerships for higher education**

Topics:

Quality Improvement Institutions and/or methods (incl. school development)

New innovative curricula/educational methods/development of training courses

## Summary

Building Curriculum Infrastructure in Medical Education (BCIME) project creates an innovative, intuitive and well-structured system for curriculum optimisation, easily applicable in practice. In doing so, BCIME will bring a significant contribution to speeding and improving the long-term process of medical and healthcare curricula accession. Based on in depth needs analysis, which generate a set of local institutional requirements related to the goals, aspirations and current features of curriculum systems, BCIME will

<https://ec.europa.eu/programmes/erasmus-plus/projects/eplu-project-details/#project/2018-1-SK01-KA203-046318>

## Coordinator

 **UNIVERZITA PAVLA JOZEFA  
SAFARIKA V KOSICIACH**

SROBAROVA 2

04180

KOSICE

<http://www.upjs.sk>

**Organisation type:** Higher education institution  
(tertiary level)

## Partners

 **UNIwersYTET JAGIELLONSKI** ▼

 **UNIVERSITAET AUGSBURG** ▼

 **Masarykova univerzita** ▼

 **UNIVERSITATEA DE MEDICINA  
SI FARMACIE GRIGORE T.POPA  
IASI** ▼



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# Project – visual identity & communication

## Logo

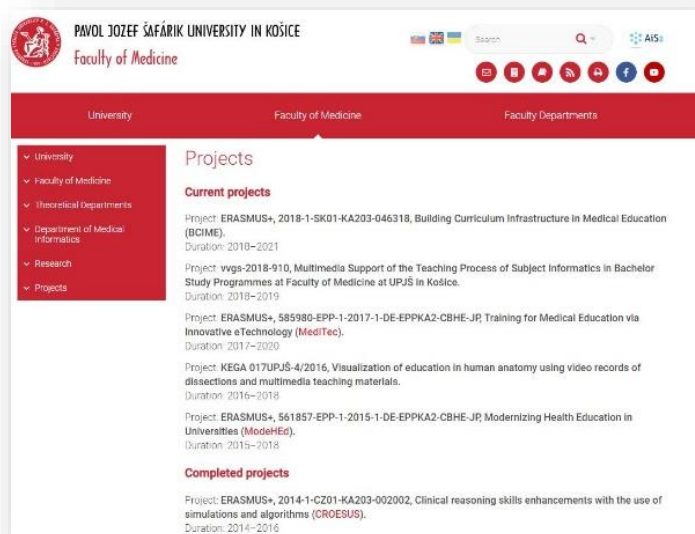


## Office templates



DETAILED PROGRAM			
Monday, 8 <sup>th</sup> October 2018			
Journal of participants to Bcime			
Place	Time	Registration	Subject
Auditorium	18:00 – 20:00	Free of charge	Registration
Trainers' Address: J. Ujvári (EPD), M. Kozmácz (MD)			
Tuesday, 9 <sup>th</sup> October 2018			
Place	Time	Registration	Subject
Faculty of Medicine	08:00 – 10:00	Free of charge	Opening Ceremony
Faculty of Medicine	10:00 – 11:00	Free of charge	Chairman of Medicine (JPD) in Košice - Jozsef Peto (MD) (1)
Faculty of Medicine	11:00 – 12:00	Free of charge	Project Coordinator - Jozsef Peto (MD) (2)
Faculty of Medicine	12:00 – 13:00	Free of charge	Project Partner - Jozsef Peto (MD) (3)
Faculty of Medicine	13:00 – 14:00	Free of charge	Project Coordinator - Jozsef Peto (MD) (4)
Faculty of Medicine	14:00 – 15:00	Free of charge	Project Coordinator - Jozsef Peto (MD) (5)
Faculty of Medicine	15:00 – 16:00	Free of charge	Project Coordinator - Jozsef Peto (MD) (6)
Faculty of Medicine	16:00 – 17:00	Free of charge	Project Coordinator - Jozsef Peto (MD) (7)
Faculty of Medicine	17:00 – 18:00	Free of charge	Project Coordinator - Jozsef Peto (MD) (8)
Faculty of Medicine	18:00 – 19:00	Free of charge	Project Coordinator - Jozsef Peto (MD) (9)
Faculty of Medicine	19:00 – 20:00	Free of charge	Project Coordinator - Jozsef Peto (MD) (10)

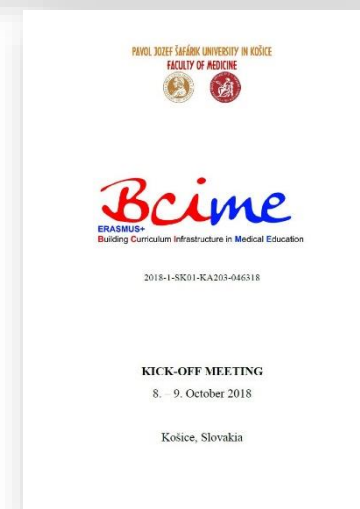
## Website – one main + partners (man info)



## Regular online meetings

One per a month

1<sup>st</sup> Friday in a month 2 p.m.



# BCIME (Building Curriculum Infrastructure in Medical Education)

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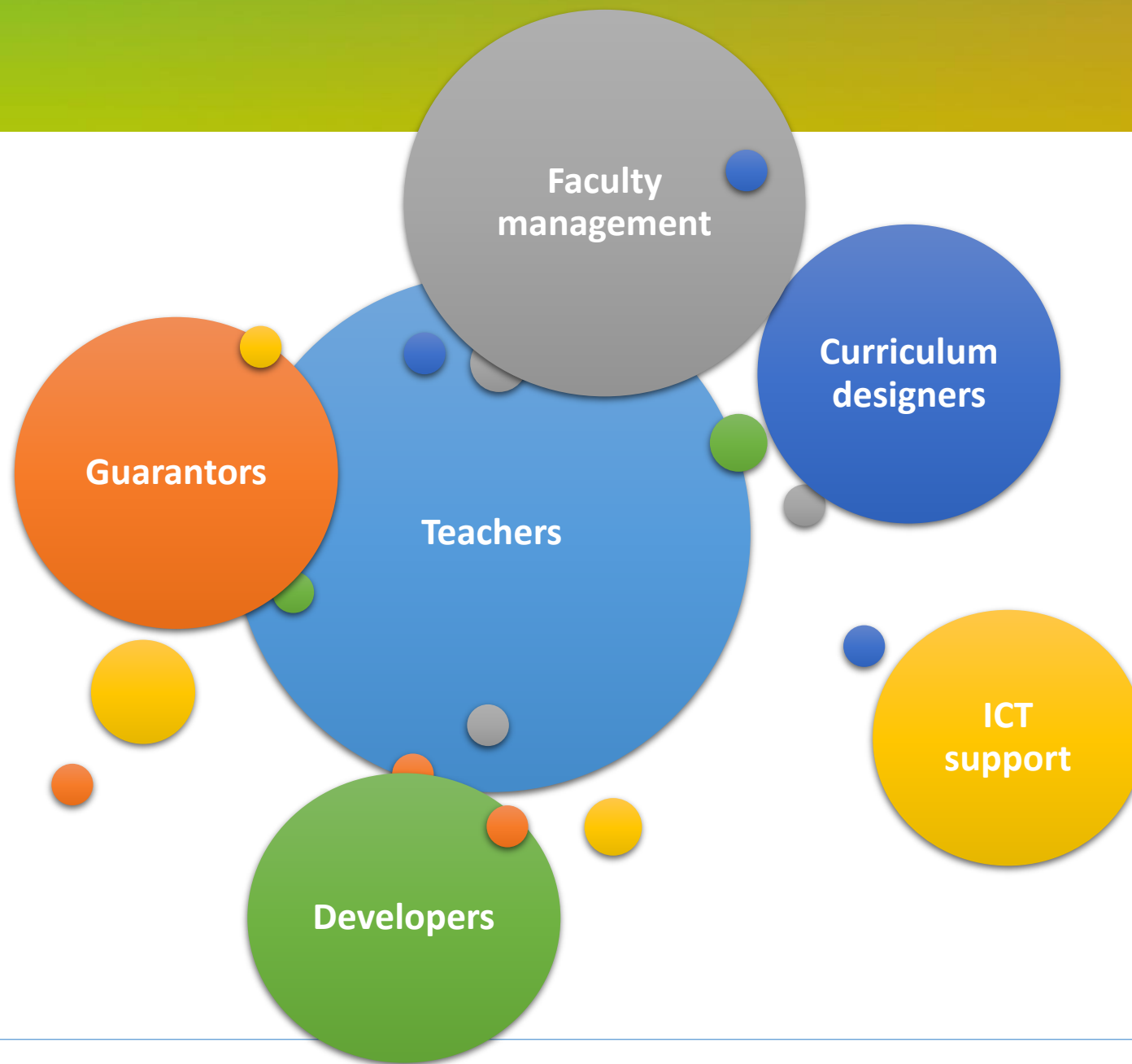
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# Target groups



# Discussion

**Thanks for your attention**



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**Bcime**  
ERASMUS+  
Building Curriculum Infrastructure in Medical Education

2018-1-SK01-KA203-046318

