

### **Application Form**

Selection: 2017

**KA2** – Cooperation for innovation and the exchange of good practices – **Capacity Building in the field of Higher Education** 

Call for Proposals 2017 - EAC/A03/2016

# Strengthening Capacities for Higher Education of Pain Medicine in Western Balkan countries (Higher Education Pain Medicine Project - HEPMP)

### **DETAILED DESCRIPTION OF THE PROJECT**

(To be attached to the eForm)

Version 1 (2017) - 20.10.2016

### PART D - Quality of the project team and the cooperation arrangements

#### D.1. Organisations and activities

This part must be completed separately by each organisation participating in the project (applicant and partners).

Partner number		P1
Organisation name &	Faculty of Medicine University of Belgrade / UB	
acronym	raculty of Medicine Offiversity of Beiglade / OB	

#### D.1.1 - Aims and activities of the organisation

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

University of Belgrade (UB) is founded in 1808 and UB is now among the top 400 universities in the world, according to the Shanghai List. Furthermore, UB is the leading institution of higher education in the region by adapting to the challenges of modern times on one hand, and preserving what's worth in its tradition on the other.

Founded on 9.12.1920, Faculty of Medicine UB (MFUB) is the leading institution for medical educational in Serbia and a significant player in regional terms (37.225 MD, 3.529 magister and 2.626 PhD obtained degree).

The program of postgraduate subspecialty named Pain Medicine was accredited in 2013 covering basic, preventive and clinical thematic fields. In 2016, 16 students were enrolled in it. Subspecialty of Pain Medicine is created as a result of Tempus Project "Pain and Palliative Medicine Project", which was conducted at the Medical Faculty of the 2006-2009 year. After four year of working, we now making efforts to harmonize Pain medicine specialty programme according to the standards of European Federation of Pain (EFIC) study program.

The integrative and multidisciplinary approach is a leading principle in the development of learning programme in Pain Medicine, which should enable transfer of knowledge obtained in basic disciplines to clinical practice, including new diagnostics and therapeutic procedures. Faculty of Medicine making efforts for establishment of a framework for realizing pan-European training and certification standards in Pain Medicine, which will include: 1) Creation of a core curriculum of basic and applied medical knowledge on pain for under/postgraduate studies, but there is a need to coordinate and further develop the existing knowledge. 2) Definition of a recognized toolkit of practical pain management resources including essential drugs and procedures, and 3) Subspecialty training (in some countries an alternative term might be adopted, such as "competence" or "capacity") will include acquisition by candidates of clinical experience under supervision, leading to recognized professional certification in "Pain Medicine". The typical duration of such a training program is two years, including the period of practical training, although this period may be adjusted. The Faculty of Medicine is already engaged in dialogues with the other universities regarding Pain medicine, and welcomes activities that further improve the quality of Pain medicine training.

Please describe also the role of your organisation in the project (limit 1000 characters).

The University of Belgrade and the Faculty of Medicine acknowledge their wish to participate as a coordinating Programme Institution in the HEPMP project for support under the Erasmus+ Capacity Building programme. As Project Coordinator the Faculty will take overall responsibility for ensuring the implementation of HEPMP and its planned activities as laid out in the application. In addition, the Faculty will commit itself to participate in and actively contribute to planned activities in the framework of the application. The staff involved in the project will play roles in implementing the proposed activities of HEMP: modernising a curriculum of Pain Medicine (PM) specialty, developing a program or modules of Pain medicine that will be include in undergraduate studies, organizing of courses of Pain Medicine for health care workers(HCWs) in primary health care and highly specialized courses for interventional pain management and establishing an regional academic network for exchange of knowledge of professionals who deal with Pain Medicine, as well as among universities participating in the project.

## D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project

	Summary of relevant skills and experience, including where relevant a list of
Name of staff member	recent publications related to the domain of the project.
	Assoc. Prof. of Anaesthesiology and intensive care medicine, PhD 2002.
	Subspecialty in Pain Medicine. Employed at the Desk of Surgery, School of
	Medicine-University of Belgrade;
	University Clinical Hospital Center "Dr D. Misovic"-DEDINJE, Belgrade, Serbia
	Anesthesiology, intensive care medicine and pain therapy Clinic.
	2003 Education in the field of pain therapy – Interventional pain
	management center, Massachusetts General Hospital, Harvard Medical
	School, University of Harvard, Boston, Massachusetts, USA.
	2006-2009 Education in the field of palliative and pain medicine within the
	Tempus project, Faculty of Medicine, University of Florence - Italy, Faculty of
	Medicine, University of Lyon - France, Faculty of Medicine, University of
	Zagreb - Croatia.
	Stevanović P., Djuričić B. <b>TEMPUS</b> PROJECT: "PALLIATIVE AND PAIN
	MEDICINE PROJECT" - contract num. CDJEP-41171-2006 between the
	European Commission and the grant holder University of Florence and
Predrag Stevanovic	University of Lion), and School of Medicine, University of Belgrade. Manager
	and project coordinator for the Faculty of edicine, University of Belgrade.
	2006-2009.
	Associate Investigator in research project no. 41002, entitled "Carotid
	disease in Serbia - pathological dynamics, prevention, diagnosis and
	innovative therapeutic procedures", funded by the Ministry of Science and
	Technological Development of Serbia in the period from 2011-2014
	2010-today, Chairman of postgraduate course of Pain medicine, School of
	Medicine, University of Belgrade
	Recent publications:
	Bojic S, Kotur-Stevuljevic J, Kalezic N, <b>Stevanovic P</b> , Jelic-Ivanovic Z, Bilanovic
	D, Memon L, Damnjanovic M, Kalaba Z, Simic-Ogrizovic S. Diagnostic Value
	of Matrix Metalloproteinase-9 and Tissue Inhibitor of Matrix
	Metalloproteinase-1 in Sepsis-Associated Acute Kidney Injury.
	Tohoku J Exp Med. 2015;237(2):103-9.
	Radenkovic S, Konjevic G, Isakovic A, <b>Stevanovic P</b> , Gopcevic K, Jurisic V.

HER2-positive breast cancer patients: correlation between mammographic and pathological findings. Radiat Prot Dosimetry. 2014 Nov;162(1-2):125-8. Danica LP, Krotin M, Zdravkovic M, Soldatovic I, Zdravkovic D, Brajkovic M, Gardijan V, Saric J, Pokrajac R, Lovic D, **Stevanovic P**, Gajic MT, Vukcevic M. Early left ventricular systolic and diastolic dysfunction in patients with newly diagnosed obstructive sleep apnoea and normal left ventricular ejection fraction. ScientificWorldJournal. 2014 Feb 27;2014:898746. Celic V, Tadic M, Suzic-Lazic J, Andric A, Majstorovic A, Ivanovic B, **Stevanovic P**, Iracek O, Scepanovic R. Two- and three-dimensional speckle tracking analysis of the relation between myocardial deformation and functional capacity in patients with systemic hypertension. Am J Cardiol. 2014 Mar 1;113(5):832-9. Tadic M, Majstorovic A, Pencic B, Ivanovic B, Neskovic A, Badano L, Stanisavljevic D, Scepanovic R, Stevanovic P, Celic V. The impact of highnormal blood pressure on left ventricular mechanics: a three-dimensional and speckle tracking echocardiography study. Int J Cardiovasc Imaging. 2014 Apr;30(4):699-711. Radak D, Babić S, Tanasković S, Matić P, Sotirović V, Stevanović P, Jovanović P, Gajin P. Are the carotid kinking and coiling underestimated entities? Vojnosanit Pregl. 2012 Jul;69(7):616-9. Radak D, Babic S, Sagic D, Antonic Z, Kovacevic V, **Stevanovic P**, Tanaskovic S, Sotirovic V, Otasevic P. Long-term follow-up of endovascular treatment for trans-Atlantic inter-society consensus II type B Iliac lesions in patients aged <50 years. Ann Vasc Surg. 2012 Nov;26(8):1057-63. PhD 1981; specialist of Internal medicine, endocrinologist 1981; Serbian Academy of Science and Art (SASA), Department of Medical Sciences: corresponding member from October 2003; full member from 2009. Secretary of Medical department SASA from 2015; Vise Dean for basic education, School of Medicine; University of Belgrade from 2009-2012; Director of the Clinic for Endocrinology, Diabetes and Metabolic Diseases, Clinical Center of Serbia 2012-2015 Vise Dean for specialization School of Medicine; University of Belgrade from 2012-today; President of Health Council Republic of Serbia 2014; 2012-today, Chairman of postgraduate course of endocrinology, School of Medicine, University of Belgrade 2007 - appointed Visiting Professor at the Medical University in Cluj Dragan Micic (Romania) 2014 - appointed Cerrahpasa Medical Faculty of Istanbul University (Turkey) 2015- honorary title of Honoris Causa Diabetes by the Romanian Society of Diabetes, Nutrition and Metabolic Diseases. 2017 - reviewer, Book Pain Medicine, Scholl of Medicine, University of Belgrade The national coordinator of the Expert Group for obesity Ministry of Health of the Republic of Serbia, the president of the Committee for the prevention and treatment of non communicable diseases at the Ministry of Health of

the Republic of Serbia from 2012, and the President of the Committee for

Endocrinology Ministry of Health of the Republic of Serbia since 2014

Academician Dragan Micic has published so far 155 papers in international journals and monographs, 134 papers in national journals, 90 chapters in the national monographs; 470 abstracts at international meetings; 234 abstracts at national meetings and 37 chapters in the national conference and held 127 invited lectures

Academician Dragan Micic is the chief editor of the journal Acta Clinica and editor of Clinical Endocrinology. Also, he is a member of the editorial board of the journal Medical Research, Acta et Physiologica Pharmacologica, Timocki the International Editorial Board of the journals Obesity and metabolism (Editrice Kurtis, Milano, Italy), Ožirenije and metabolism (Moscow, Russia), Romanian Journal of Diabetes, Obesity and metabolic Disorders (Bucharest, Romania), associate editor of the International Journal of Obesity (Karger, Basel, Switzerland ).

Djordje Radak, MD, PhD, SASA

Tenure Professor of General and Vascular Surgery at Faculty of Medicine

Member of Serbian Academy of Sciences and Arts (SASA) Director of the clinic for vascular surgery, Dedinje Cardiovascular Institute

Chairman of the University Department of vascular surgery and angiology, Belgrade

Dr Radak is general and vascular surgeon with endovascular experience dealing with treatment of carotid, aneurysmal, aortic, peripheral, and venous disease. He was a member of the team that in the 90s performed the first liver and pancreas transplant in Serbia: eversion carotid endarterectomy under cervical block (1993), reconstruction of the vertebral artery (1993) and endovascular treatment of thoracic aortic aneurysm with stent graft (2004). He initiated an innovative method of autologous transfusion during major vascular reconstruction (1992), resection of thoracoabdominal aneurysm (1997), the first endovascular interventions in Serbia, as well as medial visceral rotation approach for tumor resection (1998).

Djordje Radak

Prof. Radak was editor of the 5 national guidelines for good clinical practice in the field of vascular surgery and angiology. He is the founder of the School for Angiologic Ultrasound Diagnostics, with practical training based on "Hands on" principles.

He is the editor and author of 5 books in a total of 20 chapters in various books and monographs. He has published over 200 papers listed in JCR and CC/Sci index citation.

Professor Radak was the principal investigator or collaborator 6 research projects.

Papers published in the year 2016 in the JCR and CC/Sci index citation:

- 1) Radak Dj, Tanaskovic S. Re: 'Management of Extracranial Carotid Artery Aneurysm' Eur J Vasc Enovasc Surg 2016 51 (1):157-157
- 2) Radak Dj, Tanaskovic S, Vlajinac HD, Marinkovic J, Maksimovic M. Relationship between pain and CEAP C categories of chronic venous disease. Angiology 2016 67 (7):670-675. M23 IF 2.97
- 3) Radak D, Tanaskovic S. "Summer Dizziness" as a Neglected

	<ul> <li>Phenomenon of Antihypertensive Drug Overuse in Patients With Carotid Disease: A Hypothesis. Angiology 2016 67 (9):797-798 M23 IF 2.97</li> <li>4) Unic-Stojanovic D, Isenovic E, Jovic M, Maravic-Stojkovic V, Miljkovic M, Gojkovic T, Bogdanovic N, Radak Dj Copeptin Levels Do Not Correlate With Cross-Clamping Time in Patients Undergoing Carotid Endarterectomy Under General Anesthesia Angiology 2016 67 (10):951-960</li> <li>5) Radak Dj, Tanaskovic S, Katsiki N, Isenović E. Protective Role of Diabetes Mellitus on Abdominal Aortic Aneurysm Pathogenesis: myth or reality? Curr Vasc Pharmacol 2016 14 (2):196-200. M22 IF 2.908.</li> <li>6) Backovic D, Ignjatovic S, Rakicevic Lj, Kusic-Tisma J, Radojkovic D, Calija B, Strugarevic E, Radak Dj, Kovac M Influence of CYP2C19*2 Gene Variant on Therapeutic Response During Clopidogrel Treatment in Patients with Carotid Artery Stenosis Journal of Medical Biochemistry 2016 35 (1):26-33</li> </ul>
Jelena Santric	1982. Faculty of Medicine - Head of Legal Services, the Administrative Director of the Faculty of Medicine (2001) 2006 2009. participation in the Tempus project "Restructuring Teaching in Serbian Medical Schools" JEP 18107-2003 and "Building a Master's program in Bioethics in Serbia," the coordinator Faculty of Medicine, University of Belgrade 2013. Doctor of Philosophy (PhD) - Juristic Science, defended Doctoral thesis "Voluntary Health Insurance in Serbia - Situation and Financial Perspective" at Faculty of Law, University of Belgrade 2014. Elected for the position of Research Collaborator at the Institute of Comparative Law 2012 - 2017. member of the professional examination for medical doctors, the Ministry of Health of the Republic of Serbia'; member of the Association for Medical Law'; member of the Ethics Committee of the Faculty of Dentistry'; member of Ethics Committee of the Institute of psycho physiological disorders and speech pathology 2012/13. Faculty of Medicine, lecturer in Master programme Public Health elective subject "Human Rights and the Protection of Patients' Rights" 2013. participation in Erasmus Mundus/Western Balkan project: Erasmus University Medical Center, Rotterdam, Netherlands, one month professional internship 2013-2017. Faculty of Medicine, lecturer in postgraduate course of Pain medicine, Legal Aspects 2014. participation in Erasmus Mundus/Western Balkan project: University of Torino, Italy, one month professional internship 2015. participation in Erasmus Mundus/Western Balkan project: Ludwig Maximilian University of Munich, Germany, one month professional internship 2013. participation in the project of Fund of the Open Society "Introduction course on Human Rights and Health Care of patients in the studies at Medical Schools" 2014-2015. Coordinator of the Project of the Fund of the Open Society

"Human Rights in patient Care: A Practitioner Guide; development of PG in Serbia" 2016/17. Faculty of Medicine University of Belgrade - lecturer in doctoral course on "Research Ethics" 2015/17. participation in the course "NIH/Fogarty: "Research Ethics Education in the Balkans and Black Sea Countries" at the Faculty of Medicine, University of Belgrade in cooperation with the ICAHN School of Medicine, Mount Sinai, New York, United States Recent publications: Šantrić J: "Criminal Law and Health" monograph, Andrejević foundation, Bjegović- Mikanović V, **Šantrić J**: "The Rights, Duties and Responsibilities of Health Professionals in Relation to the Rights of Patients" in the "Human Rights and the Health Care of Patients" Faculty of Medicine, University of Belgrade, 2013; 62-65. Šantrić J., Bjegović- Mikanović V. "Challenges in regulating additional work of Health professionals - Serbia and Croatia, Legal Foreign life, Institute of Comparative Law 2/2014: 247-261, **Šantrić J**, Bjegović-Mikanović V, Overall J. "Human Rights in Patient Care-A Practitioner Guide" Faculty of Medicine, University of Belgrade, 2015. Bjegović-Mikanović V, **Šantrić J.** "The Strategic and Legal Framework for Mother and Child Health in an Accession Country, the Republic of Serbia" Scientific and practical journal "Medical Law" Ukraine Buljugić B, Stefanović D, Šantrić J, Protić J, Pekmezović T, Jovanović T, Simić T, Lalić N."The Challenge and Results of Accreditation of the University of Belgrade- School of Medicine from 2008 until 2015" TREND 2016, Zlatibor Simić T, Pekmezović T, **Šantrić J**, Ognjanović N, Lalić N, Bumbaširević V. "Analysis of Quantitative Indices of Supervision of Classical Doctorates and PhD Candidates at Faculty of Medicine University of Belgrade, Orpheus Poster Prize Award 2016, Cologne, Germany Šantrić J." Pain Medicine -Legal Aspects" chapter, Faculty of Medicine, University of Belgrade Šantrić D, **Šantrić J.** "Legal Regulation of Euthanasia and Preliminary Draft of Civil Code of Republic of Serbia" Pravni život 2016, No.9:353-366 Assistant professor, specialisation of physical medicine and rehabilitation, subspecialisation of pain medicine, subspecialisation of Nutrition of healthy and ill people, 2010 PhD, 2012 MSc Management in health system, 2017 MSc Physical activity, health and therapy Nešić D. "Pallative pain medicine - students views" invited lecture held on 17 July 2009 in the Conference Hall of the Dean of the Medical Faculty in Belgrade on the final videoconferencing Tempus project: "Palliative Pain Dejan Nesic Medicine Project - JEP 41171-2006". 2010-today, Secretary of postgraduate course of Pain medicine, School of Medicine, University of Belgrade 2006-2009 - Education in the field of palliative and pain medicine within the Tempus project No. CDJEP-41171-2006, Faculty of Medicine, University of Florence - Italy, Faculty of Medicine, University of Lyon - France, Faculty of Medicine, University of Zagreb, Croatia

2014 - 2016. Tempus project 25/2011HUTON, EACEA: "Assisting humans with special needs: Curriculum for HU-man-Tool interaction Network (HUTON)"
278/5000

2016-The best poster presentation of a paper entitled "Continuous tramadol and metamizol-Na infusion vs. bolus doses in acute pain management postopertaive" at 11th Belgrade International Symposium on Pain (BISHOP), which was held from 13-14. In May 2016, in Belgrade.

Associate Investigator in research project no. I 41025, entitled "Modulation signaling pathway that controls energy balance intracellular neuroimunoendokrinih disorders in therapy and cancer", funded by the Ministry of Science and Technological Development of Serbia in the period from 2011-2017.

#### Recent publications:

- 1. Jovičić J., Petrović P., Gvozdić B., Radulović J., Lađević N., Knežević I., **Nešić D.** Effect of intravenous continual vs. bolus doses of tramadol and metamizol sodium combination in acute pain management (continual vs. bolus doses of Tramadol and metamizol combination) pilot study. Serbian journal of anesthesia and intensive therapy 2016; 38 (5-6): 171-176.
- 2. Lađević N., **Nešić D.**, Jovanović L. Analgesics. In: Pain monographs, Editors: Vučović D., Ristić S., Faculty of Medicine in Foca, University of East Sarajevo, Foca, 2015: 63-82.
- 3. Lađević N., Mimić A., Grajić M., **Nešić D.**, Stamenković D., Marković B., Durutović O. Interventional procedures for the lower back pain management. Proceedings of Seventh annual spring scientific symposium in anestesiology and intensive care 2015; 17. 19. April, Niš: 175 177.
- Prof. of Anesthesiology and intensive care medicine, Employed at the Desk of Surgery, School of Medicine, University of Belgrade.
- Director of Center for Anesthesiology and Resuscitation, Clinical centre of Serbia, Belgrade, Serbia. Head of Outpatient Pain Clinic, Clinical centre of Serbia, Belgrade, Serbia.
- Head of anesthesia emergency kidney transplantation crew, Urology Clinic, Belgrade, Serbia
- President of Serbian Pain Society
- Vice President of Serbian Association of Anesthesiologists and intensivists
- Director of CEEA Serbia (Committee for European Education in Anaesthesiology).
- Editor in Chief: Serbian Journal of Anesthesia and Intensive Therapy
- 1996. MSc in cardiology, 1997. PhD, 2011. MSc Management in health system, 2017. Subspecialty in Pain Medicine.
- 2014. and 2015. Education in the field of pain therapy London Pain Forim, London, UK and 2016. Gdansk – Cadaveric workshop for interventional pain medicine
- 2010-today, Vice Chairman of postgraduate course of Pain medicine, School of Medicine, University of Belgrade

#### Recent publications:

**1. Ladjevic N**, Durutovic O, Likic Ladjevic I, Lalic N, Mimic A, Sreckovic S, Dencic N, Dzamic Z, Terzic M, Vuksanovic A, Milenkovic Petrovic D.

### Nebojsa Ladjevic

- Epidural anesthesia can block the negative effects of prostaglandin mediators during prostate surgery. Can J Urol 2013; 20(6):5343-9.
- Durutovic O, Lalic N, Milenkovic-Petronic D, Bojanic N, Djordjevic D, Milojevic B, Ladjevic N, Mimic A, Tulic L, Dzamic Z, Micic S. The correlation of biochemical and morphologic parameters in the assessment of sperm maturity. Urology 2013;82(6):1296.
- **3.** Mimić A, Denčić N, Jovičić J, Mirković J, Durutović O, Milenković-Petronić D, Lađević N. Pre-emptive tramadol could reduce pain after ureteroscopic lithotripsy. Yonsei Med J 2014;55(5):1436-41.
- 4. Vincent JL, Marshall JC, Namendys-Silva SA, François B, Martin-Loeches I, Lipman J, Reinhart K, Antonelli M, Pickkers P, Njimi H, Jimenez E, Sakr Y; Ladjevic N. et al. ICON investigators. Assessment of the worldwide burden of critical illness: the intensive care over nations (ICON) audit. Lancet Respir Med. 2014;2(5):380-6
- 5. Sakr Y, Alhussami I, Nanchal R, Wunderink RG, Pellis T, Wittebole X, Martin-Loeches I, François B, Leone M, Vincent JL, Ladjevic N et al. Being Overweight Is Associated With Greater Survival in ICU Patients: Results From the Intensive Care Over Nations Audit. Crit Care Med 2015;43(12):2623-32

Research associate of oncology at Faculty of Medicine University of Belgrade;, PhD 2013. Specialty of Radiation Oncology, Employed at the Institute of oncology and radiology,

Research profile: oncology, breast cancer, advanced cancer disease. Published articles cited more than 100 times in research journals.

Associate Investigator in research project entitled "Molecular, biochemical and immune analysis in diagnosis of tumors " 2010-2014, Grant by the Republic of Serbia Department of Science, Technology and Development Associate Investigator in research project entitled "Investigation of regulatory mechanisms associated with immunomodulation in malignant diseases" \2006 – 2010, Grant by the Ministry of Science of the Republic of Serbia

Associate Investigator in research project, entitled "Immunosuppression in patients with cancer and mechanisms of immunomodulation" 2005–2006, Grant by the Ministry of Science, Technology and Development of the Republic of Serbia

#### Recent publications

- Jurisic V, Radenkovic S, Konjevic G. The Actual Role of LDH as Tumor Marker, Biochemical and Clinical Aspects. Adv Exp Med Biol. 2015;867:115-24.
- Radenkovic S, Konjevic G, Isakovic A, Stevanovic P, Gopcevic K, Jurisic V.HER2-positive breast cancer patients: correlation between mammographic and pathological findings. Radiat Prot Dosimetry. 2014 Nov;162(1-2):125-8.
- 3. Radenkovic S, Konjevic G, Jurisic V, Karadzic K, Nikitovic M, Gopcevic K.Values of MMP-2 and MMP-9 in tumor tissue of basal-like breast cancer patients. Cell Biochem Biophys. 2014 Jan;68(1):143-52.
- 4. Radenkovic S, Milosevic Z, Konjevic G, Karadzic K, Rovcanin B, Buta M,Gopcevic K, Jurisic V. Lactate dehydrogenase, catalase, and

#### Sandra Radenkovic

	superoxide dismutase in tumor tissue of breast cancer patients in respect to mammographic findings. Cell Biochem Biophys. 2013 Jun;66(2):287-95.
	Head of finance department of Faculty of Medicine
Slavica Petricevic	1975-1981. Master of economics, Faculty of economics University of Belgrade, Belgrade 2005. Certified specialist for budgetary procedures and control, Faculty of Law, University of Belgrade, Belgrade.
	<ul> <li>Head of the finance department, 2002 – present</li> <li>Faculty of medicine, University of Belgrade, Belgrade</li> <li>Management of all inflows and outflows.</li> <li>Preparation of execution of monthly and yearly payroll accounting for 1400 employes.</li> <li>Preparation and monitoring of various yearly budgets and business and financial plans.</li> <li>Financial coordination for various state and non-state sponsored investment.</li> </ul>
	<ul> <li>Head of the finance department, 1997 – 2002</li> <li>Faculty of organizational sciences, University of Belgrade, Belgrade</li> <li>Management of all inflows and outflows.</li> <li>Preparation of execution of monthly and yearly payroll accounting for 300 employees.</li> <li>Preparation and monitoring of yearly budgets and plans.</li> </ul>
	Tempus projects: Restructuring Teaching in Serbian Medical Schools: JEP 18107-2003, participant 2004-2009
	Speed, Sports Professions: Education, Employment, Development in Balkan Region, admin. staff 2014-2016
	Orfeus Conference – Organization of doctoral studies in biomedicine and health sciences, Lausanne, Switzerland, participant, 2015
	Workshops, sponsored by the European Agency of Reconstruction, Belgrade 2008 Decision-making management and priority setting and health care management
	Health care management: Organization, teamwork and changes in the organization of health management training in Serbia.

Partner number		P2
Organisation name & acronym	Faculty of Medical Sciencies University of Kragujevac/UK	

#### D.1.1 - Aims and activities of the organisation

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

Faculty of Medical Sciences, University of Kragujevac, was established in 1977 as a branch of School of Medicine, University of Belgrade. It became an independent institution in 1986, and a first generation of postgraduate students was enrolled in 1991. Today, the Faculty of Medical Sciences in Kragujevac offers following study programs: integrated academic studies for a doctor of medicine and master of pharmacy, integrated academic studies of dentistry, doctoral academic studies and basic vocational studies. Since its establishment, 2210 students have graduated, 228 students earned a Master degree and 103 students successfully defended PhD thesis. Faculty of Medical Sciences, University of Kragujevac is a young and modern institution whose study programs are drawn upon the models of the most widely recognized study programs of universities in Europe and the rest of the world. In recent years, the Faculty introduced a system of mentoring and working in small groups, which greatly improved students' achievements. During the year 2016, faculty teachers published 142 papers in scientific journals on SCI list with a total impact factor of 485. Postgraduate studies are organized in almost all areas of medicine, but the program of subspecialist studies in the field of pain therapy is not organized. Participation in the project would allow both the implementation of a program of pain medicine in the area of postgraduate studies, as well as development of lectures on pain medicine for undergraduate studies of medical faculty. Faculty professors, participating in the project, would organize courses of pain medicine aimed to educate doctors in primary health care.

Please describe also the role of your organisation in the project (limit 1000 characters).

Faculty of Medical Sciences University of Kragujevac (FMSUK) will actively contribute to planned activities in the HEPM Project.

Participation in the project would allow both the implementation of a program of pain medicine in the area of postgraduate studies, as well as development of lectures on pain medicine for undergraduate studies of medical faculty. Faculty of Medical Sciences as a part of HEPMP project will organize courses of pain medicine aimed to educate doctors in primary health care centers as well as an interventional treatment of pain course. Also, an important task of FMSUK in HEPMP would be establishing of web platform for knowledge exchange in area of PM in accord with rules of proffesion.

Name of staff member	Summary of relevant skills and experience, including where relevant a list of
	recent publications related to the domain of the project.
	Prof. of Anesthesiology and intensive care medicine, PhD 2005., Employed
	in University of Kragujevac, Faculty of Medical Sciences and in Clinical
	Centre Kragujevac, Department of Anesthesiology, intensive care medicine
	and pain therapy.
Jasna Jevdjic	
	Present Position: Head of the cathedra of Anaesthesiology and
	Reanimatology, Head of the cathedra of Emergency Medicine- postgraduate
	studies.

Professional Skills Upgrade: 1997 - Academic Specialist Studies of Anaesthesiology and Reanimatology; BLS, AED Full Instructor, BLS, AED Course Director, ALS Full Instructor, ALS Course Director (European Resuscitation Council); 1998- Education in the field of pain therapy University Clinic in Göttingen, German.

Participated as a lead local investigator in the GenOSept Study and in the European Surgical Otcomes Study.

#### Recent publications:

Pesovic J, Milosevic B, Canovic D, Cvetkovic A, Milosavljevic M, Jevdjic J, Pavlovic M, Petrovic M. Cancer of ectopic parathyroid gland presentation of the disease with a case report. Int J Clin Exp Med 2013; 6(3):227-230.

Surbatovic M, Jevdjic J, Veljovic M, Popovic N, Djordjevic D and Radakovic S. Immune response in severe infection: Could life-saving drugs be potentially harmful? The Scientific World Journal 2013; 2013:961852

Surbatovic M, Veljovic M, Jevdjic J, Popovic N, Djordjevic D and Radakovic S. Immunoinflammatory response in criticaly ill patients: severe sepsis and/or trauma. Mediators of Inflammation 2013;2013:362793 M23

Raffay V, Chalkias A, Lelovas P, Karlis G, Koutsovasilis A, Papalois A, Jevdjic J, Fiser Z, Xanthos T. Addition of glucagon to adrenalin improves hemodynamics in porcine model of prolonged ventricular fibrillation. Am J Emerg Med 2014; 32(2):139-43.

Djordjevic D, Pejovic J, Surbatovic M, Jevdjic J, Radakovic S, Veljovic M, Peric A, Andjelic T, Popovic N. Prognostic value and daily trend of interleukin-6, neutrofil CD64 expression, C-reactive protein and lipopolysaccharide-binding protein in critically ill patients: reliable predictors of outcome or not? J Med Biochem 2015; 34:1-9.

Surbatovic M, Popovic N, Vojvodic D, Milosevic I, Acimovic G, Stojicic M, Veljovic M, Jevdjic J, Djordjevic D and Radakovic S. Cytokine Profile in Severe Gram-Positive and Gram-Negative Abdominal Sepsis. Scientific Reports 2015. DOI: 10.1038/srep11355

Kendrisic M, Surbatovic M, Đorđević D, Jevđić J. Analgesic Efficacy and Safety of four different anesthesia/postoperative analgesia protocols in patients following total hip arthroplasty. Vojnosanit pregl 2016 DOI: 10.2298/VSP160225099K

Kendrisic M, Surbatovic M, Đorđević D, Jevđić J. Surgical strees response following hip arthroplasty regarding choice of anesthesia and postoperative analgesia. Vojnosanit pregl 2016 DOI: 10.2298/VSP160416153K

Jurisic Vladimir

MD, PhD, professor for Physiopathology at University of Kragujevac,

Faculty of Medical Sciences, Serbia. He studied Medicine at the University of Belgrade, Medical faculty (Serbia) and was trained in internal medicine at same University. He obtained short term fellowship for investigation at Charité University Berlin (Germany) and finished several training courses at National and Kapodistrian University of Athens, Greece, and European School of Oncology, Milano, (Italy) for post-graduate education in Hematology and Oncology. His doctoral thesis covered experimental model of TNF-alpha effects on different intracellular level on lymphocytes from patients with lymphoma including investigation of apoptosis, analyses of morphology, biochemisty and immunology. He (co-) authored more that 70 article in peer reviewed international journals, national journals, and several chapters in international and national books in hematology, molecular medicine and oncology. He presented several lectures at International conference and he receives several grants including ESMO, EACR, Interferone and Citokine Societies, UNESCO.

Partner number ⊠		Р3
Organisation name &	Faculty of Medicine University of Tuzla / UT	
acronym		
D. 4.4. Alima and activities of the appropriation		

#### D.1.1 - Aims and activities of the organisation

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

The University of Tuzla was established in 1976 and today it includes more than 50 study profiles in various disciplinary fields. The University organises and implements teaching-scientific process at undergraduate and postgraduate levels of study, spread across 13 faculties, and involving around 13.400 students, 741 academic and administrative staff members. The teaching is organized in three cycles, in line with the Bologna Process, and the University offers study programs in bachelor, masters and doctoral studies. Research, academic excellence, creative and critical approach are the central values of the University of Tuzla. The vision of the University of Tuzla is to conduct relevant activities within the integrated European higher education and research area.

Faculty of Medicine, University of Tuzla was established in 1976 as a scientific-teaching organizational unit of the University. Faculty of Medicine in Tuzla organizes and conducts classes from biomedicine and health, field of basic, clinical and public health sciences, School of Medicine-general course, for acquiring the title of doctor of medicine, and the Department of Health study to acquire the title graduate medical technician / nurse, graduate physiotherapist, graduate engineer of medical laboratory diagnostics, graduate engineer of medical radiology and engineer of sanitary health.

In addition to educational and scientific activities Faculty of Medicine organizes various forms of continuing medical education, independently or in cooperation with health care and other institutions or professional associations. After 40 years since the founding Faculty of Medicine have resources for all aspects of their activity and in particular the respected teaching and associate staff.

Please describe also the role of your organisation in the project (limit 1000 characters).

Inadequately managed pain is a worldwide problem that leads to significant suffering, dysfunction and disability, loss in job productivity, and an increasing health care burden. An essential cause of suboptimal pain recognition, assessment, and treatment is inadequate education of health care practitioners. At faculty of Medicine in Tuzla, there is no module regarding epidemiology, physiology, assessment and treatment of pain. Condition for improvement in quality of services in health institutions is the provision of adequate education in the field of pain medicine for students in undergraduate study and for doctors in postgraduate study. Continuous education in pain medicine is necessary for all doctors at all levels of health care. The staff that will participate in this project will advocate implementing the goals HEPMP: raising awareness about the importance of pain medicine, to introduce pain medicine into the regular curriculum in Faculty of Medicine, organizing courses for doctors in primary health care, improvement of the functioning the existing and establishment of new centres for pain management.

Ticuse dud lilies de liccessa	i y.
Name of staff member	Summary of relevant skills and experience, including where relevant a list of
Name of Staff member	recent publications related to the domain of the project.

**Asst. Prof.** of Anesthesiology and Intensive care medicine, PhD 2014. Employed at University Clinical Center Tuzla, Anesthesiology and Resuscitation Clinic, as well as at Faculty of Medicine-University of Tuzla. ESA Council member since April 2016; President of Society of Medical practitioners Anesthesiologists-Reanimatologists since December 2016.

**2008** Education in the field of pain therapy – Pain management in Bosnia and Herzegovina

**Summary of skills**: Delivering safe and appropriate pre-operative medications for patients who will undergo surgery; Providing general/regional anesthesia for various types of surgery; Managing critically ill patients; Pain management; Establishing brain death diagnosis; Providing anesthesia for organ transplantation; Managing patients in early posttransplant period in ICU; Continually updating my knowledge in anaesthesiology, intensive care and pain management; Dedication to team work.

**Research interests**: Awareness during anaesthesia; Control of infection in ICU; Transplant anesthesia; Pain management

#### **Recent publications:**

Selma Sijercic Avdagic, Harun Brkic, Harun Avdagic, **Jasmina Smajic**, Samir Hodzic. Impact of Comorbidity on Early Outcome of Patients with Subarachnoid Hemorrhage Caused by Cerebral Aneurysm Rupture Med Arh. 2015; 69(5): 280-283.

Samir Hodzic, Darko Golic, **Jasmina Smajic**, Selma Sijercic, Sekib Umihanic, Sefika Umihanic. Complications Related to Insertion and Use of Central Venous Catheters (CVC). Med Arh. 2014 Oct; 68(5): 300-303. Nedim Smajic, **Jasmina Smajic**, Sahmir Sadic, Mahir Jasarevic, Jasmina Ahmetovic-Djug, Renata Hodzic. Correlation Between Bauman's and Carrying Angle in Children with Supracondylar Fracture of Humerus. Med Arh 2013; 67(3): 195-197.

Smajić Nedim, Hodžić Mirsad, **Smajić Jasmina**, Šadić Sahmir, Arnautalić Emir. Outcome of operative treatment of supracondylar humeral fractures in children according to Flynn's criteria. BH Surgery 2011, 2:86–92. Haris Hadzagic, **Jasmina Smajic**, Jasmina Ahmetovic-Djug, Mirsad Babovic.

Tetanus in an Unvaccinated Boy: a Case report. Acta Med Sal 2011; 40(Suppl1):S62-S64.

**Smajic Jasmina**, Praso Mirsada, Hodzic Mirsad, Hodzic Samir, Srabovic-Okanovic Amna, Smajic Nedim, Djonlagic Zinka. Assessment of Depth of Anesthesia: PRST score Versus Bispectral Index. Med Arh 2011, 65(4):216-220

### well as at Faculty of Medicine-University of Tuzla.

Haed of Center for Palliative Care since 2007; Member of IASP and EAPC; President of Association Initiative for introduction of palliative treatment in B&H

**Asst.Prof** of Anesthesiology and Intensive care medicine, PhD 2011, Employed at University Clinical Center Tuzla, Center for Palliative care, as

**2011**- Education in Palliative care (England)

**2011 and 2015** EFIC – School for Pain management (Austria)

**Research interests**: Anaesthesiology and Resuscitation, Palliative care, Pain management

Jasmina Smajic

Samir Husic

	Recent publications:  Husic S, Izic S, Matic S, Sukalo A. Efficacy and Safety of a Fixed Combination of Tramadol and Paracetamol (Acetaminophen) as Pain Therapy Within Palliative Medicine. Mater Sociomed. 2015; 27(1): 42-47.  Husić S, Ljuca Dž, Izić S and Karahasan H. The effect of breakthrough pain on heart and lung function during the cancer pain treatment in palliative care. Journal of Health Sciences. 2011;1(2)103-109.  Husić S, Ljuca Dž.Cancer pain: Comparation of Oral Morphine and Transdermal Fentanyl Treatment. Acta Medica Saliniana. 2011;40(1):7-12.  Husić S, Sadiković O, Tahirović H. Severe pain treatment of children in the terminal stages of malignant diseases: Case raport. Paediatrics Today. 2011;7(2):145-149.  Husić S, Tulumović D, Ljuca Dž, Brkljačić-Žargović M. Acute renal failure caused by obstructive uropathy in advanced cancer uterus: case report. HealthMED. 2010;4(1, supp1):262-267.
Zikrija Dostovic	Asst.Prof of Neurology, PhD 2012, Employed at University Clinical Center Tuzla, Neurology Clinic, as well as at Faculty of Medicine-University of Tuzla.  Chief of Department for stroke management 2011 and 2013 – Education in Doppler sonography of intracranial circulation 2016 - Clinical investigation about application of Nomigren tablets vs Imigran tablets in the treatment of migraine without aura (as associate examiner)  Summary of skills: Ultrasonography neck blood vessels, Transcranial Doppler sonography of blood vessels, Pain management, Team work Recent publications:  Dostovic Z, Dostovic E, Smajlovic D, Ibrahimagic OC, Avdic L, Becirovic E, Predictors for post- stroke delirium outcome.  Mater Sociomed. 2016 Oct;28(5):382-386. doi: 10.5455/msm.2016.28.382-386.  Dostovic Z, Dostovic E, Smajlovic D, Ibrahimagic OC, Avdic L. Brain Edema After Ischaemic Stroke.Med Arch. 2016 Oct;70(5):339-341.  Ibrahimagić OĆ, Smajlović D, Dostović Z, Iljazović A, Kojić B, Zonić L. Neurobrucellosis and cerebral venous sinus thrombosis: a case report.Acta Clin Belg. 2016 Nov 2:1-3. [Epub ahead of print]  Ibrahimagić OC, Smajlovic D, Dostovic Z, Pasic Z, Kunic S, Iljazovic A, Hajdarevic DS. HYPERHOMOCYSTEINEMIA AND ITS TREATMENT IN PATIENTS WITH PARKINSON'S DISEASE.Mater Sociomed. 2016 Jul 24;28(4):303-306.  Ibrahimagić OĆ, Smajlović D, Dostović Z, Zvorničanin J, Pašić Z, Salihović D. Vogt-Koyanagi-Harada syndrome and hyperhomocysteinemia: Is there a hidden link? Medical Hypotheses 99 (2017) 47-48.

Partner number ⊠		P4
Organisation name &	Faculty of Medicine University of Banja Luka /UBBL	
acronym		

#### D.1.1 - Aims and activities of the organisation\*\*\*

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

The University of Banja Luka founded on November 7, 1975., is the leading higher education institution in the Bosnia and Herzegovina which provides a high quality education and efficient studying conditions for students and offers research applications and services for both economy and other institutions. The university is devoted to long-lasting, organized activities in order to improve the quality of its functions, which proves to be the only manner of keeping the leading educational role in the country and gain international recognition, which is our primary mission and vision. We are interested in the progress of the local community and the society in general so we willingly offer our intellectual potentials to companies and institutions. The University of Banja Luka was

Founded on March 17, 1978. Medical Faculty Banjaluka this year has reached 38 years of successful work, as the oldest high school institution of its kind in the region. After successful work study program Medicine and Dentistry study program Faculty of Medicine launches initiative to establish a study program Pharmacy at the proposal of the University of Banja Luka in 1995. School of Medicine in 2007 started the initiators for the establishment of the study program Health Care. Faculty of Medicine, refined and develop methods of scientific research, organize systematic monitoring of technical and scientific achievements and preparation of students for independent professional and scientific research. Organizes and carries out continuous professional training of personnel in the health sector within the framework of modern achievements in this area, and is particularly concerned with raising and training of junior teaching staff in accordance with the reform of higher education, and participate in scientific research projects of all medical disciplines. He participated in the project of reform of the Medical Faculties in Bosnia and Herzegovina in accordance with the Bologna Declaration and European higher education reform.

Currently, The program of postgraduate subspecialty named Pain Medicine does not exist on our Faculty.

Please describe also the role of your organisation in the project (limit 1000 characters).

The University of Banja Luka and the Faculty of Medicine acknowledge their wish to participate as a Institution in the HEPMP project for support under the Erasmus+ Capacity Building programme. As Project partner the Faculty will take overall responsibility for ensuring the implementation of HEPMP and its planned activities as laid out in the application. In addition, the Faculty will commit itself to participate in and actively contribute to planned activities in the framework of the application. The staff involved in the project will play roles in implementing the proposed activities of HEPMP: modernizing a curricula of Pain Medicine specialty, developing a program or modules of Pain medicine that will be include in under/postgraduate studies, participate in developing of academic network aimed to exchange knowledge of PM and increase quality of education of doctors and organizing of courses of Pain Medicine for doctors in primary health care centres.

Please add lines as necess	
Name of staff member	Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.
Darko Golić	recent publications related to the domain of the project.  Born on September 7th 1960. In Banja Luka, Bosnia and Herzegovina. At the Medical Faculty in Banja Luka, I graduated from in 1985. From 1988. I am employed at the UniversityClinical Center Banjaluka in the Department of Anesthesia and Intensive Care and as a head of the Department last thrirteen years.  Specialist examination in anesthesia, resuscitation and pain therapy laid in 1993. at Clinical Hospital Center "Dragisa Mišović" in Belgrade.  Master's thesis on the topic "Importance of electrolyte and acid-base status in the prognosis of acute pancreatitis" at the Medical Faculty in Banja Luka in 1993.  PhD thesis "Efficacy of recombinant activated factor VII in the treatment of patients with the collapse of coagulation status in acute hemorrhage" at the Medical Faculty in Sarajevo 2010.  The scientific-educational title of assistant proffesor at the Medical Faculty in Banja Luka, Department of Surgery, was elected during the period from 1999-2004, and as a senior assistant in the period from 2004 to 2010. Since 2010 the Department of Pathophysiology I was elected to the position of professor.  Lazarevic, Djukanovic B., Lazarevic S., Golic D Acute abdomen in patients with myocardial small bowel caused by a fragment embolization of papillary fibroelastoma heart, Scripta medica, 34,200  Golic D. Tomanić B. Milosevic D. Bacterial resistance of VAP-and five years after the introduction of Deescalating therapy in ICU Clinical Centre, Proceedings of the Association of Anesthesiologists RS 2007.92-99  Golic, Rakanović D., Beric P. Anesthesia in patients with myasthenia gravis, Proceedings of the Association of Anesthesiologists RS 2007.115 to 120  Golic D., J. Vidovic, Beric P., Milosevic D. Use of recombinant factor VII in neurosurgery, Medical Journal, volume 14, number 3, 2008; 111-115.  Milosevic D. Golic D. Carotid endarterectomy and superficial cervical block, Proceedings of the Association of Anesthesiologists and Resuscitation of the Republic of Serbi

	Milosevic D, <b>Golic D.</b> Blood pressure oscilation during carotid endarterectomy and superficial cervical plexus block. Medical Journal Sarajevo 2014 Vol 20, Number 2: 127-129. <b>Golic D.</b> Local Anesthetic Toxicity, Six Annual Scientific Symposium Anesth. And Intensive Care. Nis, Serbia 2014.
Dragan Milošević	1994 – present.: Anesthesiologist , department chief ICU 1999 – 2006: Teaching Assistant, Department of Surgery, The Faculty of Medicine, University of Banja Luka 1997 -2000: Teaching Assistant, Department of Pathophysiology 2004: Critical care management training Institute of Pulmonary Diseases Sremska Kamenica, Serbia 2008: Training course, Trauma Center-ICU Vienna 2012: Bachelors Degree: Advantage of superficial cervical block over general anesthesia in carotid endarterectomies
	<ul> <li>Publications:</li> <li>Author and coauthor of 12 professional articles in a field of anesthesiology.</li> <li>NWAC "Advantages of superficial cervical plexus block vs. general anesthesia for carotid endarterectomy" Thailand Bangkok 2013</li> <li>2013 WFSA "Massive blood transfusion and coagulopathy" 2012 Buenos Aires Argentina</li> <li>UARS Tupa trauma grudnog koša – tamponada perikarda BLuka 2012</li> <li>NWAC Roma Superfitial cervical plexus block for carotid endarterectomy 2011</li> <li>TIVA and remifentanil , Banjaluka 2010</li> <li>Clacid – clinical presentation, Banjaluka 2010</li> <li>Carotid endarterectomy and superfitial cervical plexus block, Jahorina 2009</li> <li>VIMA in pediatrics patients tonsillectomy, Bijeljina 2007</li> <li>The importance of early defibrillation in CPR in emergency care unit of B Luka, Halo 94 Vol V, No 21</li> <li>Bacterial resistence In VAP/ de-escalation therapy five year analysis, 2007</li> <li>Anesthesiology technic in Miasthenia Gravis , 2007</li> <li>Sy Guillian – Barre in pregnancy, 2007</li> <li>Fungal infection In ICU, 2007</li> <li>Our experience with Isoflurane, 2004</li> <li>Epidemiologic characteristic in VAP, 2006</li> </ul>
Predrag Berić	Since 1994: Employed at Clinic for Anesthesia and Intensive care, University Clinical Center Banja Luka, Bosnia and Herzegovina 2006 - 2013: Teaching Assistant, Department of Surgery, The Faculty of Medicine, University of Banja Luka Since 2012.: Head of Anesthesiology and Surgical Rooms Department, University Clinical Center Banja Luka 8 articles published in Medical Journals

	Since 12/2004: Employed at Clinic for Anesthesia and Intensive care, University Clinical Center Banja Luka, Bosnia and Herzegovina 2007: European Pain Federation (EFIC) schoolarship for training in pain
	treatment, LKH Klagenfurt, Austria
Vojislav Vujanović	12/2008: Mechanical Ventilation Training, UKH Meidling, Vienna, Austria 2009: Anesthesia Fellowship, Hadassah Medical Center, Hebrew University Jerusalem, Israel
	2010: Anesthesia and Critical Care Fellowship, Military Medical Academy, Belgrade, Serbia
	Since 2009: Teaching Assistant, Department of Multidisciplanary Approach to Intensive Care, The Faculty of Medicine, University of Banja Luka
	2014: Chief of GICU, University Clinical Center Banja Luka 2016. EDAIC Part I completed (European Society of Anesthesiology)

Partner number ⊠		P5
Organisation name &	University Montenegro, Faculty of Medicine	
acronym	offiversity Montenegro, raculty of Medicine	

#### D.1.1 - Aims and activities of the organisation

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

The University of Montenegro was founded on 29 April 1974. A year after it was founded, it changed its name into the University" Veljko Vlahović", and since 1992 it has its present name. The seat of the University of Montenegro is in Podgorica, the capital of Montenegro, with a population of around 200.000.

The University of Montenegro has developed in accordance with the spirit of time and the growing needs of Montenegro.

In the academic year 2003/2004, the first year of studies at the University of Montenegro was experimentally organized in accordance with the Bologna Declaration principles. In the academic year 2004/2005, this regime of studying was applied at the

Today, the University of Montenegro consists of 28 faculties and institutes with over 20,000 students. The Faculty of Medicine at the University of Montenegro is an educational and scientific institution located in Podgorica, Montenegro. The Faculty of Medicine is a well renowned medical school in the Balkan region. It offers an excellent medical education experience, as well as numerous research opportunities. Throughout our study programmes we train future physicians, dentists, and pharmacists for their respective field in accordance with the framework of the Bologna Process.

#### Please describe also the role of your organisation in the project (limit 1000 characters).

The doctoral studios at the Faculty of Medicine in Podgorica offer an opportunity for medical doctors and dentists to achieve an academic degree of PhD in Medical Sciences.

The doctoral studies are multidisciplinary studies. They encompass 4 different areas:

- Basic experimental studies
- Clinical studies
- Public health
- Management in health care

The doctoral studies of the University of Montenegro are under the oversight of the Centre for Doctoral Studies at the University of Montenegro. The centre has responsible in the organization and management of the doctoral studies.

University of Montenegro would like to participate and actively contribute to activities anticipated by the

HEPMP project for support under the Erasmus+ Capacity Building programme. The University of Montenegro staff involved in the project will work on implementing the proposed activities of the HEPMP project, in particular as regards perform course and in introducing a new curricula of pain medicine. University of Montenegro would be engaged in regional cooperation of academic network in knowledge exchange in the field of pain medicine.

Please add lines as necessary.		
Name of staff member	Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.	
Danko Živković	Professor of Internal medicine pulmologist-oncologist, Intervential bronchology at Faculty of Medicine University of Podgorica  1.Živković, D. (2015).Effect of delays on survival in patients with lung carcinoma in Montenegro. Acta Clinica Croatica, Vol.54(3): 390-399. ISSN 0353-9466  2. Antovic M.N,Svrkota N.Antovic I.Svrkota R. Žižić.R. & Živković D.(2014) Radioactivity impact assessment of Nikšić region in Montenegro Journal of Radioanalytical and Nuclear Chemistry Vol 302 (2): 831-836. ISSN 0236-5731  3. Šćepanović DD, Bajić DN, Živković D, Mijović M. The role of higher thoracic irradiation doses in patients in limited stage of small-cell lung cancer-retrospective study. Arch Oncol 2010;18 (1-2):13-7 ISSN 0354-7310	
Goran Nikolić	<ul> <li>Full time professor of radiology at the undergraduate level in medical school University of Montenegro. Head of teaching program in radiology specialization. The organizer and professor at doctoral studies at the medical school. Currently, the dean of the medical faculty.</li> <li>5. Biljana Milosevic, Ljiljana Tihacek Sojic, Ivica Stancic, Zanka Cerovic, Elvir Zvrko and Goran Nikolic Magnetic Resonance Imaging in Complete Denture Treated Edentulous Patients with Obstructive Sleep Apnea Syndrome-A Preliminary doi: 10.4172/2332-0702.1000212 Oral Hyg Health 4: 212,2016</li> <li>6. Snežana Pantović, Dragica Božović, Goran Nikolić, Milica Martinović, Predrag Mitrović, Lenka Radulović, Aleksandra Isaković And Ivanka Marković Markers of inflammation and antioxidant enzyme activities in restenosis following percutaneous coronary intervention doi:10.2298/JSC140617088P <i>J. Serb. Chem. Soc. 79:</i> 1–19; 2014</li> <li>7. Goran Nikolic, Zorka Badnjar, Tanja Cadjenovic, Dijana Raceta-Masic Primary extra nodal Hodgkin disease: Bone presentation DOI: 10.12659/PJR.884036 Polish Journal of Radiology 2014;79:91</li> </ul>	

	Professor of family medicine at Faculty of Medicine University of Podgorica, specialist of family medicine at Clinical Centar of Montenegro
LJiljana Cvejanov- Kezunović	1. Cvejanov-Kezunović Lj, Mustajbegović J, Milošević M, Čivjak R. Occupational exposure to blood among hospital workers in Montenegro. Archives of Industrial Hygiene and Toxicology. Volume 65, Issue 3, Pages 273–280, ISSN (Online) 0004-1254, DOI: https://doi.org/10.2478/10004-1254-65-2014-2493, September 2014
	<ol> <li>Cvejanov Kezunović Lj.Drecun M, Svab I. Prrimary care reform in Montenegro. Zdrav Var 2013, 52: 247-254. Doi 10.2478/siph-2013-0025</li> </ol>
Nena Milačić	Assistent of Internal medicine at Faculty of Medicine University of Podgorica, specialist of Internal medicine Clinical Centar of Montenegro
Nikola Pavlović	Economics graduate worked on projects University

Partner number ⊠		Р	6
Organisation name & acronym	Faculty of Medicine University of Florence		
D.1.1 - Aims and activitie	s of the organisation***		
<b>'</b>	presentation of your organisation (key activities, affiliations, size of the area covered by the project (limit 2000 characters).	e of	the

The University of Florence is an important and influential centre for research and higher training in Italy, with 1,800 lecturers and internal research staff, 1,600 technical and administrative staff, and over 1,600 research assistants and doctoral students.

It offers a wide range of study programmes at various levels and in all areas of knowledge.

126 Degree courses (First and Second Cycle, corresponding to Bachelor's and Master's Degrees) organized in 10 Schools, with a population of about 51,000 enrolled students, one-fourth of which come from outside of Tuscany.

There are over 9,000 degrees awarded each year in Florence. According to the alumni data, the percentage of students who are in the workforce one year after their First Level degree is above national average.

The University of Florence has a natural international vocation and the development of internationalization is one of its strategic priorities.

It is one of the largest and most productive public research systems in Italy. This result is accomplished thanks to the number of permanent and temporary researchers working in a wide range of disciplinary and scientific fields, and the numerous junior scientists in training. It is also due to an intensive participation in research programs of national and international relevance and to the significant scientific results achieved. External funds support the research and knowledge transfer activities. This combination of factors qualifies the Florentine institution as a modern research university and accounts for its excellent position in national and world rankings. Researchers at the University of Florence operate within 24 different departments and have at their disposal approximately 40 research structures comprising inter-departmental and inter-university centers as well as specialized research, knowledge transfer and advanced training centers.

In recent years the University of Florence has increasingly consolidated its ventures in the field of knowledge transfer: from the filing of patents to the setting up of joint workshops with businesses, through to participation in spin-off companies.

Knowledge transfer activities are coordinated by CSAVRI (Centro di Servizi di Ateneo per la Valorizzazione della Ricerca e la gestione dell'Incubatore universitario), the centre for the enhancement of research and management of the university's incubator.

Please describe also the role of your organisation in the project (limit 1000 characters). \*\*\*

The University of Florence and the Faculty of Medicine acknowledge their wish to participate as Programme countries in the HEPMP project for support under the Erasmus+ Capacity Building programme. MF University of Florence will commit itself to participate in and actively contribute to planned activities in the framework of the application. The staff involved in the project will play roles in implementing the proposed activities of HEPMP: teaching an academic staff from partner countries, help in developing a program of Pain medicine that will be include in Western Balkan countries, preparing and delivering pain medicine courses for partner countries, and actively cooperate in regional web platform for mutual learning and communication professionals who deal with Pain Medicine.

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project		
Please add lines as necessary.		
Name of staff member	Summary of relevant skills and experience, including where relevant a list of	
	recent publications related to the domain of the project. ***	
Angelo Raffaele	2004 – present Full Professor of Anesthesiology and Intensive Care	

#### De Gaudio

University of Florence - School of Medicine

2013 Chairman Section of Anesthesiology, Intensive Care and Pain.

Department of Health Sciences . University of Florence

2014 Director Department of Anesthesia and Intensive Care Azienda

Ospedaliero – Universitaria Careggi Florence – Italy;

2014 - present President Società Italiana di Terapia Intensiva ( www.siti-isic.org.)

2016- present President Collegio dei Professori di Anestesia e Rianimazione (CPAR)

#### **MULTICENTER CLINICAL TRIALS (LAST 5 YEARS)**

Eurostat 2009

Albios 2014

SIFT - Sepsis in Florence study 2014

#### REFEREE OF THE FOLLOWING JOURNALS

Trends in Anaesthesia and Critical Care

Critical Care Medicine

Journal of Critical Care

Italian Journal of Emergency Medicine

J. of Chemotherapy

Minerva Anestesiologica

**Nutritional Therapy and Metabolism** 

#### Rocco Domenico Mediati

From October 1996 to December 1996: Anaesthesiologist in Santa Maria

Annunziata Hospital in Florence.

From December-12- 1996: "Dirigente Medico" in the Departmental

Structure of "Palliative Care and Pain Therapy" of Oncology Department of

the Azienda Ospedaliero Universitaria Careggi in Florence.

From 2010 March: Director of Departmental Structure of "Palliative Care and Pain Therapy" of Anestesiology Department of the Azienda Ospedaliero Universitaria Careggi in Florence

In the University of Florence he teach:

- ∉ "Pain Semeiotic" in the Specialization School in Legal Medicine
- "Spinal and Epidural Anaesthesia" at the II year of Specialization School in Anaesthesia and Resuscitation
- "Pain Therapy: Invasive and non Invasive Techniques" at the III year of Specialization School in Anaesthesia and Resuscitation
- ∉ Several arguments in MasterS in Palliative Medicine and Pain Therapy organized by University of Florence
- Member of National Board of Italian Society of Anaesthesia and Resuscitation (S.I.A.A.R.T.I.)

for the production of Guidelines in theme of "Pain Therapy and Palliative Medicine". Coordinator of Study Group "Cancer Pain and Palliative Care" of S.I.A.A.R.T.I. 2008 Member of Scientific Committee of European Community Project Tempus "Palliative Pain Medicine Project Books and scientific papers Book "TERAPIA DEL DOLORE" Società Editrice Europea Collection"Professione Medico". Firenze 1999. - Book "L'uso degli oppiacei nella pratica clinica" Milano 2010 SIAARTI RECOMMENDATIONS of THE TREATMENT OF POSTOPERATIVE PAIN 2010. www.siaarti.it SIAARTI RECOMMENDATIONS FOR ANALGO-SEDATION IN INTENSIVE CARE UNIT. Minerva Anestesiol 2006;72:769-805 SIAARTI RECOMMENDATIONS FOR CHRONIC NONCANCER PAIN. Minerva Anestesiol. 2006 Nov;72(11):859-80. More than 30 scientific paper in national and international Journals Organizer of many congresses and courses on Palliative Care and Pain Therapy in the last 5 years he partecipated at many national and international multicenter studies - 2004 bachelor in Psychology in University of Florence Iacopo Lanini - From 2008 Psychologist by Hospice "Convento delle Oblate" - Azienda Sanitaria di Firenze From 2010: Temporary Research Fellow by Department of Critical Area-University of Florence Scientific papers:

<ul> <li>Lanini I. et Al.; Open ICU: retrospective diary of a clinical pathway– Minerva anestesiologica Vol. 75, Suppl. 2 – N. 7-8 2009</li> </ul>
- Lanini I; De Gaudio A.R., Innocenti P. , Lazzarini C.; Identity, methods and objective of Psychologists in ICU; Toscana Medica 6/2010
- De Gaudio A.R.; Lanini I.; Mini E.; Carini M.; Caring oncological patient in ICU; Toscana medica; 2012; luglio/agosto
- Lanini I.; Ranaldi GG.; Crocenzi D.; De Marzi D.; Gristina G.R.; therapeutic persecution and overtreatment: empowerment and pathways; Minerva Anestesiologica; Vol. 78 – Suppl. 1 N.10; 2012
Lanini I.; Ciarlone A.; Rogante S.; Ramunno M.; Gristina G.R.; When people die: patient, family, and équipe; Minerva anestesiologica; Vol. 78 – Suppl. 1 N.10; 2012

Partner number		P7
Organisation name &	Faculty of Medicine University of Ljubljana / UL	
acronym		
D. 4.4. Aline and anticities of the approximation		

#### D.1.1 - Aims and activities of the organisation

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

University of Ljubljana (UL) is the oldest and largest higher education and scientific research institution in Slovenia. University with its rich tradition was founded in 1919. It has more than 40.000 undergraduate and postgraduate students and employs approximately 5.600 higher education teachers, researchers, assistants and administrative staff in 23 faculties and three arts academies.

The University of Ljubljana is renowned for its quality social and natural sciences and technical study programmes, structured in accordance with the Bologna Declaration. Our projects keep pace with the latest developments in the areas of arts, sciences and technology at home and abroad. The University of Ljubljana is listed amongst the top 500 universities in the world according to the ARWU Shanghai, Times THES-QS and WEBOMETRICS rankings.

The University of Ljubljana is the central and largest educational institution in Slovenia. It is also the central and largest research institution in Slovenia with 30 percent of all registered researchers (according to the data from the SICRIS database). The University takes a central pedagogical position by performing public services in the areas of special social importance which ensure the preservation of the national identity.

The University of Ljubljana has close ties with Slovenian companies and foreign enterprises. Our partners include multinational corporations and the most successful Slovenian companies. As we are fully aware

of the importance of knowledge and skills in obtaining our own financial sources, we are increasingly developing our market oriented activities every year.

Founded in 1919, Faculty of Medicine UL (MFUL) is the leading institution for medical educational in Slovenia and a significant player in regional terms.

#### Please describe also the role of your organisation in the project (limit 1000 characters).

Medical Faculty of the University of Ljubljana have extensive experience in multimodal treatment of acute pain, pain in childbirth, etc. The experience that they have conveyed to partner countries through lectures in courses. Academic staff dealing with these types of pain from partner countries will be trained for all the techniques of treatment by academic staff from MFUL.

It is planned that Medical Faculty of University of Ljubljana participate actively in regional academic network that will serve for exchange of knowledge in pain medicine area in accordance with the rules of the profession.

Name of staff member	Summary of relevant skills and experience, including where relevant a list of
ivaine of Staff member	recent publications related to the domain of the project.
	Assoc. Prof. of Anesthesiology and Intensive Care Medicine
	Head of Department of Anesthesiology and resuscitation Faculty of
	Medicine, University of Ljubljana
	Head of Department for Cardiac Anesthesiology, University Medical Centre
	Ljubljana
	December 2006 Attained the doctorate degree, University of Ljubljana on
	the field of postoperative pain relief after cardiac surgery
	Recent publications:
	Režonja Katja, Marš Tomaž, Jerin Aleš, Koželj Gordana, Požar-Lukanovič
	Neva, Šoštarič Maja. Dexamethasone does not diminish sugammadex
Maja Sostaric	reversal of neuromuscular block - clinical study in surgical patients
	undergoing general anesthesia. <i>BMC anesthesiology</i> , ISSN 1471-2253, Oct.
	2016, vol. 16, iss. 1, 1-10.
	Režonja Katja, Šoštarič Maja, Vidmar Gaj, Marš Tomaž. Dexamethasone
	produces dose-dependent inhibition of sugammadex reversal in in vitro
	innervated primary human muscle cells. Anesthesia and analgesia, ISSN
	0003-2999, Apr. 2014, vol. 118, no. 4, str. 755-763.
	ŠOŠTARIČ, Maja, GERŠAK, Borut, NOVAK-JANKOVIČ, Vesna. The
	analgesic efficacy of local anesthetics for the incisional administration
	following port access heart surgery: bupivacaine versus ropivacaine. <i>The</i>
	heart surgery forum, ISSN 1098-3511, 2010, letn. 13, št. 2, str. E96-E100

Šoštarič Maja, Geršak Borut, Novak-Jankovič Vesna. Early extubation and fast-track anesthetic technique for endoscopic cardiac surgery. *The heart surgery forum*, ISSN 1098-3511, 2010, letn. 13, št. 3, str. E190-E194. Šoštarič Maja, Geršak Borut, Kališnik Jurij-Matija, Blumauer Robert, Novak-Jankovič Vesna. Lajšanje pooperativne bolečine po endoskopskih operacijah na srcu = Postoperative pain relief after endoscopic cardiac surgery. *Endoskopska revija*, ISSN 1318-8941, november 2007, letn. 12, št. 28, str. 115-120.

Šoštarič Maja. Incisional administration of local anesthetic provides satisfactory analgesia following port access heart surgery. *The heart surgery forum*, ISSN 1098-3511, Dec. 2005, vol. 8, issue 6, str. E406-E408.

Assoc. Prof. of Anesthesiology and intensive care medicine, PhD 2010. Subspecialty in Regional Anesthesia and Pain Medicine. University Clinical Center Ljubljana Anesthesiology, intensive care medicine and pain therapy Clinic.

Genova, Italy (1995 do 1999):

#### European school of regional anesthesia

- Milano, Italy (2002): peripheral blocks for orthopedics and trauma surgery
- Valencia, Spain (July 2011): University pain Clinic, practice
- Frankfurt, Germany (May 2011): Chronic pain school in behalf of German Pain Society, Part 1
- **Stuttgart**, Germany (September 2011): Chronic pain school in behalf of German Pain Society, Part 2
- Klagenfurt, Austria (Febrary 2013): University Pain Clinic, Practice

## As member of European Group of Experts for Wound catheter analgesia: co-author of the book

Vintar N. Median Sternotomy. In: Borgeat A, Rawal N eds. Surgical site catheter analgesia. A critical review of the literature. Chapter 5: Cardiothoracic surgery. 2nd edn. Darwin Healthcare Communications, 2012: 119-29.

#### Recent publications.

Maja Rus Makovec, Samo Makovec, Neli Vintar. Self-reported depression, anxiety and evaluation of own pain in clinical sample of patients with different location of chronic pain Slovenian journal of public health 54;1 (2015): 1-10

Vintar N, Rawal N, Pohar M. Intra-Articular Patient-Controlled Analgesia Improves Early Rehabilitation after Knee Surgery. Collegium antropologicum 2010;34(3):941-5

Vintar N , Rawal N, Veselko M. Intraarticular patient-controlled regional anesthesia after arthroscopically assisted anterior cruciate ligament reconstruction : ropivacaine/morphine/ketorolac versus ropivacaine/morphine /. Anesth Analg 2005;101(2):573-8

Vintar N., Pozlep G, Rawal N. Incisional self-administration of bupivacaine or ropivacaine provides effective analgesia after inguinal hernia repair. Can J Anesth 2002; ;49(5):481-6.

Co-author of books for medical students of Medical University Ljubljana: VINTAR, N, LOPUH, M. Pain. V: KOŠNIK, Mitja (ur.), et al. Internal medicine. [4. izd.]. Ljubljana: Littera picta: Slovensko medicinsko društvo, 2011, str. 49-53.

Neli Vintar

	VINTAR N.Inhalational anesthesia and inhalational Anesthetics. V: SMRKOLJ,
	Vladimir (ur.), ZAVRNIK, Črt (ur.).Surgery. Celje: Grafika Gracer, 2014, str. 87-
	91,
	VINTAR N.Local and Regional Anesthesia. V: SMRKOLJ, Vladimir (ur.), ZAVRNIK, Črt (ur.). Surgery. Celje: Grafika Gracer, 2014, str. 92-96.
	Assoc. Prof. of Anesthesiology and Intensive Care Medicine Head of Obstetric Anaesthesia Division
	Ph.D. 2007 Comparison between combined and superficial cervical plexus block for minimally invasive parathyroidectomy Visiting professor Department of Anesthesiology, University of Texas, Medical School in Houston, 77030 Houston, Texas, ZDA; (2000- 2001) Visiting professor: Faculty of Medicine, University of Rijeka, Croatia, (2014) Recent publications:
Tatjana Stopar Pintaric	Azman Josip, Stopar Pintarič, Tatjana, Cvetko Erika. Vlassakov Kamen. Ultrasound-guided glossopharingeal nerve block: A cadaver and a volunteer sonoanatomy study. <i>Regional anesthesia and pain medicine</i> ,2017 in press Stopar Pintarič Tatjana, Markova Liljana, Lužar Matevz, Tomazevic Janez, Hodzic I. An awake videolaryngoscope-assisted intubation in a patient with Madelung disease and a critical airway obstruction. <i>Minerva Anesthesiol</i>
	2016 Dec 22 (Epub ahead of print)  Cvetko Erika, Čapek M., Damjanovska Marija, Reina M. A., Eržen Ida, Stopar Pintarič Tatjana. The utility of three-dimensional optical projection tomography in nerve injection injury imaging. <i>Anaesthesia</i> , ISSN 0003-2409, Aug. 2015, vol. 70, iss. 8, str. 939-947
	Stopar Pintarič Tatjana, Vlassakov Kamen, Azman Josip, Cvetko Erika. The thyrohyoid membrane as a target for ultrasonography-guided block of the internal branch of the superior laryngeal nerve. Journal of clinical anesthesia, ISSN 0952-8180, Nov. 2015, vol. 27, no. 7, str. 548-552
	Cvetko E, Meznaric M, Pintaric TS. Histology of peripheral nerve and light microscopy. IN: HADZIC, Admir (ed). NYSORA's Textbook of Regional Anesthesia and Acute Pain Medicine. 2 <sup>nd</sup> ed. New York (etc): McGraw-Hill 2017, in press.

	Stopar Pintaric T. Monitoring during anaesthesia. In: SMRKOLJ, Vladimir (ed.), ZAVRNIK, Črt (ed.). Kirurgija. Celje: Grafika Gracer, 2014, p. 96-98. Vandepitte C., Pintaric TS, Gautier PE. Sonography of thoracic paravertebral space and considerations for ultrasound-guided thoracic paravertebral block. IN: HADŽIĆ, Admir (ed.). Hadzic's peripheral nerve blocks and anatomy for ultrasound-guided regional anesthesia. 2. ed. New York [etc.]: McGraw-Hill 2012, 497-501.
	Assoc. Prof. of Psychiatry University Psychiatric Hospital Ljubljana & Chair of Psychiatry, Medical faculty, University of Ljubljana Teacher and Trainer at Systemic Family Therapy Institute Ljubljana(approved by EFTA - European Family Therapy Association) ERASMUS teaching programme at Charles University Prague, Czech republic, Faculty of Arts, Department of Psychology, November 2013 M.A. program 'Socioanalysis and Inter-human relations' Faculty of Philosophy, The Paissiy Hilendarski University of Plovdiv, Bulgaria, Teaching module Introduction to social psychiatry in five teaching blocks, May 2014 Recent publications.
Maja Rus Makovec	SELIČ, Polona, PETEK, Davorina, SEREC, Maša, RUS-MAKOVEC, Maja. Sick leave and its determinants in professional soldiers of the Slovenian Armed Forces. Croat. med. j., 2010, vol. 51, iss. 6, pp 543-551.  SELIČ, Polona, PETEK, Davorina, SEREC, Maša, RUS-MAKOVEC, Maja. Self-related health and its relationship to health/life problems and coping strategies in members of the professional Slovenian armed forces. Coll. antropol., 2012, vol. 36, iss. 4, str. 1175-1182  RUS-MAKOVEC, Maja, SERNEC, Karin, RUS, Velko S. Anxiolytics use in the families with (non)dependent member: relation to dependence indicators, self and family perceptions including social neuroscience perspective. V: WOOLFOLK, Robert L. (ur.). Mental disorders-theoretical and empirical perspectives. Rijeka: InTech, 2013, str. 347-354.  RUS-MAKOVEC, Maja, VINTAR, Neli, MAKOVEC, Samo. Self-reported depression, anxiety and evaluation of own pain in clinical sample of patients with different location of chronic pain. Slovenian journal of public health 54;1 (2015): 1-10  MAKOVEC S, VINTAR N, RUS MAKOVEC M. Readiness to experience chronic
	pain and satisfaction with its clinical treatment in relation to five personality factors. 6th Slovene Psychiatric Congress. Book of Abstracts. Ljubljana, Slovene Psychiatric Association: 2016, 147.
Blaz Matija Gersak	Resident in anesthesiology and intensive care medicine, and a clinical medicine PhD student. Research interests include clinical medicine, human physiology and biomedical engineering. Non-formal education includes basic electrical and mechanical engineering as well as computer programming.
	Recent publication PAVIČIĆ BALDANI, Dinka, SKRGATIĆ, Lana, ČERNE, Jasmina Živa, KRALIK OGUIC, Sasa, GERŠAK, Blaž M., GERŠAK, Ksenija. Association between serum levels and pentanucleotide polymorphism in the sex hormone binding globulin gene and cardiovascular risk factors in females with polycystic ovary syndrome. Molecular medicine reports, ISSN 1791-2997, May 2015, vol. 11,

iss. 5, str. 3941-3947. GERŠAK, Ksenija, POHAR PERME, Maja, VEBLE, Alenka, GERŠAK, Blaž M. Possible influence of menstrual cycle on lymphocyte X chromosome mosaicism. Journal of assisted reproduction and genetics, ISSN 1058-0468, Jan. 2015, vol. 32, iss. 1, str. 111-116. GERŠAK, Blaž M., SAUER, JS. Automatic knot transfer Cor-Knot in United States Pharmacopeial Convention Class I knot pull-apart force safety regulations. V: BILJANOVIĆ, Petar (ur.). MIPRO 2014: proceedings, MIPRO 2014, 37th International Convention, May 26-30, 2014, Opatija, Croatia. GERŠAK, Blaž M., PRAPROTNIK, Klara, PETRICEVIC, M. Can we predict total amount of prosperative drainage in elective cardiac surgery?. Journal of Cardiovascular Surgery, ISSN 0021-9509, 2014, vol. 55, no. 2, suppl. 2, str. 58.

Partner number ⊠		Р8
Organisation name &	Faculty of Medicine University of Rijeka	
acronym		
D.4.4. Alma and articular afabramentation		

#### D.1.1 - Aims and activities of the organisation

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

Rijeka's University was founded in 1973 in Rijeka. Since the foundation was going through a series of transformations which were mainly a result of amendments of national higher education policy.

Today the University integrates functions of its components and ensure their uniform and harmonized action. Its mission is dedicated to making strategic and development decisions on a number of issues of functioning of the academic community and the continuous promotion of international competitiveness in all areas of scientific, artistic and professional activity.

The vision outlined by entering the University of Rijeka among 500 European universities, so it opted for a dynamic development that systematically facilitates mobility and the development of research careers and allows the expression of talent and entrepreneurial energy of each individual.

The Faculty of Medicine of the University of Rijeka was founded in 1955 and in the past six decades, it has grown into a highly educational and scientific institution with an enviable reputation in Croatia and abroad. The Faculty of Medicine is also a place where the educational, professional and scientific-research activities are parallel performed and developed. We are proud to emphasize that during their studies and through an integrated approach, our students acquire subject knowledge, skills and competencies for their future job activity, as well as the ability of independent thinking, critical evaluation, problem solving skills and the ability to deal with development and scientific work, while respecting the highest ethical standards.

MF University of Rijeka organizes interventional pain management courses in Croatia as well as in Europe. The modules of pain medicine are involved in undergraduate and postgraduate studies of MF University of Rijeka.

Please describe also the role of your organisation in the project (limit 1000 characters). \*\*\*

The University of Rijeka and the Faculty of Medicine acknowledge their wish to participate as Programme countries in the HEPMP project for support under the Erasmus+ Capacity Building programme. MF University of Rijeka will commit itself to participate in and actively contribute to planned activities in the framework of the application. The staff involved in the project will play roles in implementing the proposed activities of HEPMP: teaching an academic staff from partner countries, help in developing a program of Pain medicine that will be include in Western Balkan countries, preparing and delivering Interventional pain treatment courses for partner countries, and actively cooperate in regional web platform for mutual learning and communication professionals who deal with Pain Medicine.

Please add lines as necess	Please add lines as necessary.		
Name of staff member	Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project. ***		
	Doctor of Sciences, Anesthesia and Intensive Medicine; Assoc. Prof., PhD. Department of Anesthesia, Resuscitation and Intensive Medicine, Faculty of Medicine, University of Rijeka, Croatia Research profile: anesthesia and intensive medicine. Published more than 30 articles in research journals; attended various international conferences related to intensive medicine. Expert in reginal anesthesia and cardiac anesthesia.		
Željko Župan	Recent publications: Mikolasevic I, Racki S, Spanjol J, <b>Zupan Z</b> , Jakopcic I, Devcic B, Orlic L. Outcomes following renal transplantation in older renal transplant recipients: a single-center experience and "Croatian senior program". Int Urol Nephrol. 2015 Aug;47(8):1415-22. doi: 10.1007/s11255-015-1034-9. Markić D, Vujičić B, Ivanovski M, Krpina K, Gršković A, Živčić-Ćosić S, Župan Ž, Maričić A, Valenčić M, Rački S. Peritoneal Dialysis Catheter Placement Using an Ultrasound-Guided Transversus Abdominis Plane Block. Blood Purif. 2015;39(4):274-80. doi: 10.1159/000381005.		
	Pilipović K, Župan Ž, Dolenec P, Mršić-Pelčić J, Župan G. A single dose of PPARγ agonist pioglitazone reduces cortical oxidative damage and microglial reaction following lateral fluid percussion brain injury in rats. Prog Neuropsychopharmacol Biol Psychiatry. 2015 Jun 3;59:8-20. doi: 10.1016/j.pnpbp.2015.01.003.		
	Mijatovic D, Blagaic A, <b>Zupan Z</b> . Case Report: Severe form of hemolytic-uremic syndrome with multiple organ failure in a child: a case report. Version 2. F1000Res. 2014;3:79. doi: 10.12688/f1000research.2546.2.		
	<b>Zupan Z</b> , Sotosek Tokmadzić V, Matanić-Manestar M, Sustić A, Antoncić I, Dunatov S, Pavlović I, Antulov R. Simultaneous appearance of cerebral venous thrombosis and subdural hematomas as rare cause of headache in puerperium following epidural analgesia: a case report. Croat Med J. 2012;53(4):379-85.		
Vlatka Sotošek Tokmadžiić	Doctor of Sciences, Anesthesia and Intensive Medicine; Assistent. Prof., PhD. Department of Anesthesia, Resuscitation and Intensive Medicine, Faculty of Medicine, University of Rijeka, Croatia		

Research profile: anesthesia and intensive medicine. Published more than 30 articles in research journals; attended various international conferences related to intensive medicine.

#### Recent publications:

**Sotosek Tokmadzic V**, Laskarin G, Mahmutefendic H, Lucin P, Mrakovcic-Sutic I, Zupan Z, Sustic A. Expression of cytolytic protein – perforin – in peripheral blood lymphocytes in severe traumatic brain injured patients. Injury, Int J Care Injured 2012;43:624-31.

Protic A, **Sotosek Tokmadzic V**, Sustic A. Oral carbohydrate treatment before surgery. Eur J Anesthesiol 2012;29:259-60.

Laskarin G, Zaputovic L, Persic V, Ruzic A, **Sotosek Tokmadzic V**. Harmful immune reactions during acute myocardial infarction. Med Hypotheses 2012;78:703-6.

Zupan Z, **Sotosek Tokmadzic V**, Matanic-Manestar M, Sustic A, Antonicic I, Dunatov S, Pavlovic I, Antulov R. Simultaneous appearance of cerebral venous thrombosis and subdural hematomas as rare cause of headache in puerperium following epidural analgesia: a case report. Croat Med J 2012;53(4):379-85.

Zelić M, Štimac D, Mendrila D, **Sotošek Tokmadžić V**, Fišić E, Uravić M, Šustić A. Influence of preoperative oral feeding on stress response after resection for colon cancer. Hepatogastroenterology 2012;59(117):1385-9.

Batinac T, **Sotosek Tokmadzic V**, Peharda V, Brajac I. Adverse reactions and alleged allergy to local anesthetics: analysis of 331 patients. J Dermatol 2013;40:522-27.

Zelić M, Štimac D, Mendrila D, **Tokmadžić VS**, Fišić E, Uravić M, Šustić A. Preoperative oral feeding reduces stress response after laparoscopic cholecystectomy. Hepatogastroenterology 2013;60(127):1602-6.

Golubović V, Muhvić D, Golubović S, Juretić M, **Sotošek Tokmadžić V**. Two case reports of locked-in syndrome – two different manifestations of locked-in syndrome. Coll Antropol 2013;1:313-16.

Petranovic D, Pilcic G, Valkovic T, **Sotosek Tokmadzic V**, Laskarin G. Perforin- and granulysin-mediated cytotoxicity and interleukin 15 play roles in neurocognitive impairment in patients with acute lymphoblastic leukaemia. Med Hypotheses 2014;83:122-6.

Gusic N, Sabalic S, Pavic A, Ivkovic A, **Sotosek Tokmadzic V**, Cicvaric T. Rationale for more consistent choice of surgical approaches for acetabular fractures. Injury, Int. J Care Injured 2015;46S:S78–S86.

Bonifačić D, Toplak A, Benjak I, **Sotošek Tokmadžić V**, Lekić A, Kučić K. Monocytes and monocyte chemoattractant protein 1 (MCP-1) as early predictors of disease outcome in patients with cerebral ischemic stroke. Wien Klin Wochenschr 2016;128(1-2):20-7.

Vičić M, Peternel S, Simonić E, Sotošek-Tokmadžić V, Massari D, Brajac I, Kaštelan M, Prpić-Massari L. Cytotoxic T lymphocytes as a potential brake of

	keratinocyte proliferation in psoriasis. Med Hypotheses 2016;87:66-8.
Janja Kuharić	Assistent, Anesthesia and Intensive Medicine; Department of Anesthesia, Resuscitation and Intensive Medicine, Faculty of Medicine, University of Rijeka, Croatia Research profile: anesthesia and intensive medicine, attended various international conferences related to intensive medicine. Expert in clinical and laboratory research
	Recent publications Valencic L, Sotosek Tokmadzic V, <b>Kuharic J</b> , Sustic A, Muhvic Urek M. The incidence of nosocomial infections in patients with isolated severe traumatic brain injury hospitalized in the intensive care unit, Clinical Hospital Center Rijeka, Croatia. Sanamed 2015;10:185-92.
	Knežević D, <b>Kuharić J</b> , Šustić A, Sotošek Tokmadžić V, Harjač A, Marčun R, Lainščak M. The estimation of comorbidities and serum concentration of cardiac biomarkers in patients with chronic obstructive pulmonary disease treated with invasive or nonivasive ventilation. Medicina Fluminensis 2015;2:289-95.
	n G, Peršić V, Pinjuh G, Laginja J, Boban M, Curko-Cofek B, <b>Kuharić J</b> , Ličina M, Sotošek Tokmadžić V. The estimation of anemia degree in patients after heart valve replacement and coronary artery bypass surgery. Medicina Fluminensis 2013;49(1),193-202. Dangubić B, Deša K, Tomulić V , Juričić K, Kuharić J, Protić A. Course of events and cardiopulmonary resuscitation outcomes in Clinical Hospital Centre Rijeka. Medicina Fluminensis 2013;49(4),468-473.
	Ilijanić M, Ćoza P, <b>Kuharić J</b> , Rukavina T, Sučić N, Župan Ž, Sotošek Tokmadžić V, Šustić A. The comparison of early and late percutaneous dilatational tracheostomy in the onset of complications in mechanically ventilated patients in the intensive care unit. Medicina Fluminensis 2012;48:72-8.

Partner number		P9
Organisation name & acronym	University Clinical Hospital Centar Dr Dragisa Misovic-Dedinje/UCH	CDDM
D.1.1 - Aims and activities of the organisation		
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation etc.) relating to the grea covered by the project (limit 2000 characters).		

Clinical Hospital Center "Dr Dragisa Mišović - Dedinje" was founded in 1952 in Belgrade. Medical Centre performs highly specialized specialist-consultative and patient health care on the secondary and tertiary levels in 22 buildings with 546 beds and a total of 24,000 m2 of floor area. Health care from the defined activities, KBC "Dr Dragisa Mišović - Dedinje" provides the population in the City of Belgrade and Serbia, with three clinical-hospital centers and Clinical Center of Serbia. For about 500 000 inhabitants health care provides KBC "Dr Dragisa Mišović - Dedinje". The provision of medical services Clinical Hospital provides specialized and highly specialized diagnostic, consultative, therapeutic and rehabilitative health services in 21 specialists and 14 narrow specialist fields.

Medical Centre performs educational and scientific-research activity and overall performance of the industry, organization is structured in clinics, hospitals and services.

Please describe also the role of your organisation in the project (limit 1000 characters).

Clinical Hospital Center "Dr Dragisa Mišović - Dedinje" will actively contribute to planned activities in the HEPM Project.

Participation in the project would allow both the implementation of a program of pain medicine and performing courses at Clinical Hospital Center "Dr Dragisa Mišović - Dedinje". Doctors of this hospital will actively participate in organizing and utilizing a web platform which will serve for case studies selection, exchange of knowledge regarding PM. Moreover, it is plan that Clinical Hospital Center "Dr Dragisa Mišović - Dedinje" organize course of interventional pain medicine aimed to educate professionals who deal with PM.

Name of staff member	Summary of relevant skills and experience, including where relevant a list of	
	recent publications related to the domain of the project.	
	Prof. of Surgery, PhD 1995, Employed in University of Belgrade, Medical	
	Faculty	
	Head of University Clinical Hospital Centar Dr Dragisa Misovic-Dedinje.	
	Participated as a research investigator in several research projects	
	Recent publications:	
Radisav Scepanovic	<ol> <li>Stevanović P, Stojanović D, Jović M, Scepanović R, Radovanović D, Perunović R, Vukotić V, Lazić M.PERCUTANEOUS PUNCTURE OF THE INTERNAL JUGULAR VEIN:AN ORIGINAL APPROACH Neurologica Croatica 2007;56(4): 165-173.</li> </ol>	
	3. Stevanovic P, <b>Scepanovic R</b> , Radovanovic D, Bajec Dj, Perunovic R, Stojanovic D Stevanovic D. Thoracic electrical bioimpedance theory and clinical possibilities in perioperative medicine SIGNA VITAE 2008; 3 (1): S 22 - 27	
	4. Stevanovic PD, Petrova G, Miljkovic B, Scepanovic R, Perunovic R,	

Stojanovic D, Dobrasinovic J. LOW FRESH GAS FLOW BALANCED ANESTHESIA VERSUS TARGET CONTROLLED INTRAVENOUS INFUSION ANESTHESIA IN LAPAROSCOPIC CHOLECYSTECTOMY: A COST-MINIMIZATION ANALYSIS. Clin Ther. 2008;30(9):1714-25.
<ol> <li>Perunovic RM, Scepanovic RP, Stevanovic PD, Ceranic MS. COMPLICATIONS DURING THE ESTABLISHMENT OF LAPAROSCOPIC PNEUMOPERITONEUM. J Laparoendosc Adv Surg Tech A. 2009;19(1):1-6.</li> </ol>
6. Radenkovic DV, Bajec D, Ivancevic N, Bumbasirevic V, Milic N, Jeremic V, Gregoric P, Karamarkovic A, Karadzic B, Mirkovic D, Bilanovic D, Scepanovic R, Cijan V. Decompressive laparotomy with temporary abdominal closure versus percutaneous puncture with placement of abdominal catheter in patients with abdominal compartment syndrome during acute pancreatitis: background and design of multicenter, randomised, controlled study. BMC Surg. 2010 Jul 12;10:22.
<ol> <li>Bulajic M, Panic N, Radunovic M, Scepanovic R, Perunovic R, Stevanovic P, Ille T, Zilli M, Bulajic M. Clinical outcome in patients with hilar malignant strictures type II Bismuth-Corlette treated by minimally invasive unilateral versus bilateral endoscopic biliary drainage. Hepatobiliary Pancreat Dis Int. 2012 Apr;11(2):209-14.</li> </ol>

# **List of Associated Partners**

(Where applicable)

These organisations may provide the consortium with facilities or assistance that enhances the quality of work, but they cannot be responsible for core activities of the project (e.g. management, coordination, monitoring, leader of a work group etc.). No financial contribution from the project grant will be allocated to these organisations.

Ref.nr	Name of organisation	Type of institution	City	Country	Role in the project
1.	Primary health care centar Inđija	Public institution	Inđija	Serbia	courses maintenance, education of their HCWs
2.	Primary health care centar Kragujevac	Public institution	Kragujevac	Serbia	courses maintenance, education of their HCWs
3.	Primary health care centar Niksic	Public institution	Niksic	Montenegro	courses maintenance, education of their HCWs
4.	Primary health care centar Tuzla	Public institution	Tuzla	Bosnia and Herzegovina	courses maintenance, education of their HCWs
5.	Primary health care centar Banja Luka	Public institution	Banja Luka	Bosnia and Herzegovina	courses maintenance, education of their HCWs

Please insert rows as necessary

## D.2. Cooperation arrangements, management and communication

This part must only be completed once by the applicant.

### **D.2.1** - Project management

Please define the organisation of the implementation of the project and the division of tasks between the partners. Please explain the allocation of resources for each activity. Explain also how the tasks are distributed amongst the partners and how project "ownership" is ensured (limit 3000 characters).

Coordinator of the project is University of Belgrade School of Medicine and the project consortium are universities from the partner countries: Faculty of Medicine of the University of Kragujevac (Serbia), Faculty of Medicine of the University of Banja Luka (Bosnia and Herzegovina), Faculty of Medicine of the University of Tuzla (Bosnia and Herzegovina) and the Faculty of Medicine of the University of Podgorica (Montenegro), as well as the universities from program countries: School of Medicine of the University of Florence (Italy), Faculty of Medicine of the University of Rijeka (Croatia) and Medical Faculty of the University of Maribor (Slovenia).

The tasks of the Faculty of Medicine, University of Belgrade are to modernize the existing curriculum Pain Medicine specialty, to develop a module lectures for undergraduate studies in the field of pain medicine, and to develop a web platform for mutual learning and communication professionals who deal with Pain Medicine, as well as among universities participating in the project. A special task is the development of the academic network which will via web platform provide exchange of knowledge in education of doctors in the area, as well as organization of courses of Pain Medicine for doctors in primary health care.

The task of the partner country(PCs) universities is the development of programs and modules of lectures in the field of pain medicine that should be used to the partner medical schools introduce undergraduate and / or postgraduate studies in this field, as well as awareness raising and organization of courses of Pain Medicine for doctors in primary health care.

The tasks of the Universities in Program countries (PgCs) are to assist in the analysis of the current situation in this area in the partner country universities; defining the possible changes that would improve or where is no program introduced curriculum of Pain Medicine; Training of trainers from partner universities, as well as involved as lecturers for courses.

Allocation of resources

The allocation of resources to the various activities will be the responsibility of the Management Board. The basis will be the allocation indicated in the present budget, developed by the PC universities and Coordinator of Partner country universities (see D.1.1). Adjustments will be made by the Management Committee during either face-to-face or meetings.

#### D.2.2 - Cooperation and communication arrangements of the consortium

Please explain the overall project and partnership management making specific reference to the management plan and how decisions will be taken. Please describe how permanent and effective communication and reporting will be ensured as well as the measures put in place for conflict resolution (limit 2000 characters).

Each of the partner and the program countries and will determine the composition of the project team and project coordinator for a given country. They need to be clarified roles and responsibilities of staff, determined the manner of execution of tasks, as well as working procedures of the team.

The coordinator of the entire project is Team coordinator Faculty of Medicine, University of Belgrade. When a project start first activity will be a joint conference of all project teams which will define the project management: human recourses, informations and problems related to pain management. In addition, define the manner of holding conferences of pain medicine, as well as the promotion of the project. The most important report is making a detailed definition of the joint project activities for the achievement of project tasks.

Ways of communication during the project will be in addition to the direct communication at conferences be: e-mail, telephone / text message, informal interviews and written correspondence. It will be defined by a communication plan (what, when, o) such as: E-mail - agreed circulation list of e-mail; Reports of the meetings; Reports on the status of the project; Temporary reports; Evaluation reports; Final Report. Regular team meetings (internal and external) will be held, as well as the pre-sheduled appointment of the conference for health care workers.

# PART E - Project characteristics and relevance

### E.1. Why does the consortium wish to undertake this project?

Please outline the motivation behind your project, clearly identifying the specific needs or problem/s which it intends to solve. Explain how the project proposal fits within the development strategies of the Partner Countries involved and how it addresses the priorities defined at national / regional level. Also explain why this/these problem/s were selected instead of others. In particular, explain how the area of intervention has been explored to guarantee that the project is offering something new compared to the existing situation. Where applicable, explain any synergy with other EU initiatives should be highlighted (limit 5000 characters).

Serbia has 7.5 million inhabitants. According to the most recent census, the share of elderly persons (65 years and above) was 16.54% (projected at 17.4% in 2006), while persons aged 60 and above accounted for 22.7%, with 8.6% of the population older than 80 years.

The health status of the Serbian population is consistent with other Central and Eastern European countries but below that of Western Europe. Serbia compares well with similar countries in terms of life expectancy at birth (72.3 years). In terms of principal causes of death, the picture is similar to many developed and transitional economies with high levels of heart disease, stroke, and cancer.

Cancer is the second most frequent cause of death in Serbia, accounting for 19.7% of the total (2006). Cancers account for the highest share of diseases requiring Pain medicine care. Standardised mortality rate was 202.7 per 100,000, which puts Serbia among medium-risk countries.

The health care system is mainly organised in three functional levels. Primary care is delivered through a network of 158 primary health care centre (PHCC). Eighty-six are independent. They provide mainly primary health care, limited specialist consultation services and public health services. Public pharmacies are associated with the PHCC to dispense prescriptions. The hospital network includes 102 inpatient institutions, 45 of which are general hospitals that serve as first referral institutions and 24 regional hospitals that serve as secondary referral centres. Tertiary care is provided at a number of specialised institutes and 8 clinical and clinical-hospital centres.

The program of postgraduate subspecialty named Pain Medicine was accredited in 2013 at UB covering basic, preventive and clinical thematic fields. In 2016, 16 postgraduate students were enrolled in it. Number of doctors trained for Pain medicine is unnsufficient.

As a result of unhealthy lifestyle (e.g. tobacco and alcohol abuse, nutrition habits) besides the negative effects of a number of events linked to Serbia's recent history which caused severe disturbances within health care sector during the period 1990/2000, it is likely that health status indicators and outcomes will deteriorate in the short to medium term future resulting in increased morbidity and mortality through higher prevalence of hronic, painfull disease.

In Montenegro cancer is the second most frequent cause of death accounting 15,2% of the total (2009). The current network of public health institutions in the Montenegro was organized on three levels providing health care. A network of public health institutions in Montenegro in 2010 consisted of 18 primary health care centers, 7 general hospitals, three specialized hospitals, the Clinical Centre of Montenegro, the Institute for Public Health and the Pharmaceutical Institution of Montenegro. In Montenegro is currently provided 3.92 beds per 1,000 inhabitants, which is less than the EU average (5.29 per 1000 inhabitants-according to WHO-HFA-DB from 2008). The patients with advanced malignant disease have the greatest need for palliative care. Considering that the limited resources are available, the doctors who are trained for the treatment of pain are necessary. Importantly, study program of pain medicine at the University of Podgorica for now does not exist.

In Bosnia and Herzegovina (BH) mortality rate is 712,2 per 100 000 inhabitans. Moreover, In Bosnia and Herzegovina the incidence of malignant neoplasms is accounting 164,6 per 100 000 inhabitans (2010) and incidence of reumathic disease is accounting 152, 4 per 100 000 inhabitans. The current network of public health institutions in the Montenegro was organized on three levels providing health care. A network of public health institutions in BH in 2010 consisted of 81 primary health care centers, 12 general hospital and clinics. The patients with malignant disease and reumathic disease have suffer from pain every day. Considering that the limited resources are available, the doctors who are trained for the

treatment of pain are necessary. Importantly, study program of pain medicine at the University of Tuzla and Banja Luka for now does not exist.

Current State of Affairs in the Relevant Sector

Pain medicine care prevents and relieves suffering and improves the quality of life of patients with painfull, advanced and terminal disease. The need for this care from diagnosis through the course of disease, regardless of stage is recognized in the National Strategy. At present pain medicine care in Serbia is almost non-existent. The government of Serbia has made several strategic moves in recent years to lay the groundwork for specific developments which have the potential to completely transform this health care sector. At present, pain medicine care is not recognised as a well-defined discipline by clinicians or policy makers. It is getting recognition through a National Palliative Care Strategy and National Programme Serbia Against Cancer, it is not formally included in the medical undergraduate curriculum, but it is included in the postgraduate curriculum like "Pain medicine subspecialty". There is low awareness of pain medicine care amongst the lay public and health care professionals but activities are beginning to raise awareness. There are sporadic examples of hospital beds allocated for this kind of patients, no day care, no bereavement service.

Please describe briefly how your project proposal was prepared (e.g., capitalising on previous experiences, based on achieved outcomes in former projects, following previous cooperation amongst the consortium members, etc.) (limit 1000 characters).

By taking part in the previous project PPMP for the Medical Faculty of the University of Belgrade has created the conditions that applied at the Ministry of Health for the introduction of new post-graduate studies in the field of pain medicine. Subspecialty of pain medicine was introduced in 2013 at the Medical Faculty of the University of Belgrade. For now, such a program is not developed at other universities in Serbia. After more than 3 years of experience in the performance of subspecialty of pain medicine, we were observed deficiencies in current education. The best way to eliminate them is to build a curriculum that will benefit from networked universities in the country and the region, with support from EU universities where such a program exists. Through working together, we can improve the syllabus of the current training program, developed modules of undergraduate program, and partner universities to create the conditions for initiating the establishment of an organized education in the field of pain medicine. Special advantage that would result from this Higher Education Pain Medicine Project is the possibility of spreading knowledge and awareness among health workers in primary health care level, as they are first faced with a patient in need of such assistance.

If your proposal is based on the results of one or more previous projects / networks, please provide precise references to this / these project(s) / network(s) in the table below.

Reference number	CD_JEP-41171-2006				
Project dates (year started and completed)	2007 to 2009 Programme or initiative				
Title of the project	Palliative and Pain Medicine project				
Coordinating organisation					
Website	http://				
Password / login if necessary for we	ebsite				

Please summarise the project outcomes and describe (a) how the new proposal seeks to build on them and, (b) how ownership / copyright issues are to be dealt with (limit 1000 characters).

The TEMPUS Palliative and Pain Medicine project was implemented from 2007 to 2009 as part of an initiative of the Universities of Florence and Lyon in cooperation with the School of Medicine at the University of Belgrade, providing support to postgraduate education in the area of palliative medicine. The

project also incorporated practical work for the physicians from Serbia at palliative and pain medicine institutions in Italy and France. The results of this initiative shall be reviewed by this project within one of its specific objectives.

Please copy and paste tables as necessary.

### E.2. Rationale for the setting-up of the consortium

Please explain why the selected partners are best suited to participate in this European project. Describe innovative and or complementary skills, expertise and competences within the consortium directly relating to the planned project activities. If associated partners are involved, please explain their role in the project and the added value to the consortium (limit 3000 characters).

Pain Medicine Program in European universities conducted by well-established program. School of Medicine of the University of Florence has developed a postgraduate program in the field of medicine and the pain clinic network that effectively deals with the treatment of pain in the health system of Italy. We need our colleagues from the School of Medicine of the University of Florence convey their experiences on methods of teaching, as well as the practical problems that await us in the development, in teaching, and dissemination and use of knowledge acquired in primary health care. A special advantage of pain centre in Florence is pain management in children, which is a very complicated therapy in the field of pain medicine. Importantly, the study program of pain medicine in Florence is harmonized and updated in accordance with the recommendations of the EFIC.

Faculty of Medicine University of Rijeka is a center for training of interventional regional anaesthesia techniques applied in pain medicine. They have years of experience in organizing such courses, both in Rijeka and in other countries. These advanced courses are essential to master the techniques of regional anaesthesia used as interventional procedures in the treatment of pain. By attending these courses, both in Rijeka, and their organization in the partner countries, and passing the final test trained to be part of the participants.

Our colleagues from the Medical Faculty of the University of Ljubljana have extensive experience in multimodal treatment of acute pain, pain in childbirth, etc. The experience that they have conveyed to partner countries through lectures, a part of students interested in the treatment of these types of pain could be in the internship to be trained for all the techniques of treatment.

Given that in Montenegro there is a need for doctors educated in the field of pain medicine and that there is a problem of palliative care of patients, we have included in the project University of Podgorica, as the oldest university in the country. Also, in Bosnia and Herzegovina there is a high percent of mortality from cancer and incidence of morbidity of patients with rheumatic diseases and their universities need to introduce a new study program of pain medicine as well as regional cooperation that would enable them to analyze study cases.

University Clinical Hospital Center Dr Dragisa Misovic in Serbia is one of the oldest University hospitals in Belgrade, which has a good organization and good practice. This institution is characterized by a good selection of personnel structure. Also, the doctors of the institution, given the large number of patients who daily lenses, have a clear insight into the needs of our population, as well as the difficulties that have doctors who deal with pain medicine in primary health care. Given the increasing number of people being treated at this center, we chose this facility to organize in this hospital highly specialized courses in the field of interventional pain therapy.

### E.3. European added value

Please describe the benefits of and need for European cooperation. Please describe also why the results cannot be achieved through national, regional or local funding (limit 1000 characters).

The main reason for the engagement of PgCs in this project is that the European standards in the treatment of patients we cannot be achieved in Western Balkan unless we have the involvement of European countries and their academic staff in the education of our academic staff.

The introduction of study programs of pain medicine, as well as regional cooperation through academic

network significantly would improve the health care of the population of PCs. In addition, the objectives of this project are in line with the strategy of the World Health Organization Health 2020 special priority area 3: strengthening people centered health systems, public health capacity and emergency preparedness, surveillance and response.

In the Western Balkans there are not exist types of projects that financed the education and development of new curriculum in higher education since the governments of these countries are not ready to set aside resources for this type of projects. Also, in addition to the Government, there is no other kind of support to the development of the curriculum, such as certain funds and companies which would be it.

#### E.4. Innovative character

Indicate what the project is offering that is new and what are the main innovating elements (limit 2000 characters).

The innovative basic idea of the project is harmonization of pain medicine subspecialty at the Medical Faculty of the University of Belgrade with the European program and the development of new study program of pain medicine in the Medical Faculty in Kragujevac (Serbia), Faculty of Medicine in Podgorica (Montenegro) and the Medical Faculty in Banja Luka (Bosnia and Herzegovina) as well as the MF University of Tuzla (Bosnia and Herzegovina). Since there is a high incidence of carcinoma in the region and the need for workers educated for the treatment of pain, a new study programs resulted from this project would significantly improve the quality of health care in the Western Balkans. Moreover, project is planned organization of the regional academic network for treatment of pain, which does not exist as a separate entity, as well as creating a Web platform for learning and communication of those who practice medicine with pain in the region of Western Balkan countries. Until now, such academic networks that served for the exchange of knowledge in the field of pain medicine did not exist in the Western Balkans, and that through continued cooperation led to the harmonization of systemic procedures and standards related to pain medicine in the region in accordance with the rules of the profession. Also, through the analysis of new cases through a Web platform to enable continuous updating of new recommendations in the field of pain medicine and thus enable permanent structured exchange of knowledge the doctors who work in this area.

# PART F - Quality of the project design and implementation

### F.1. Aims and objectives

Please define the concrete aims and objectives of the project and describe the ways in which the situation set out under the previous section (Part E) will be changed (limit 3000 characters).

The main aim of HEPMP project is to increase quality of education in pain medicine in order to contribute to the improvement of public health care services and PCs in line with the Health 2020. As already stated in section E, in Serbia, Montenegro and Bosnia and Herzegovina there is a significant problem of large percentage of the population who suffers from cancer, rheumatic and neurological diseases, while education in the field of pain medicine is insufficient. The above problems have led to a significant number of people in the population is not receiving adequate pain therapy and adequate health services. Increase the quality of health care of the population in line with the strategy of the World Health Organization in 2020 and its Health Priority area 3. Priority area 3. consider strength of people-centred health systems, public health capacity and emergency preparedness, surveillance and response. In fact, one of the priorities of the strategy Health 2020 improvement of the quality of medical services and continuously adapt to changing patterns of disease.

One aims of this project is developing an interdisciplinary program in Pain Medicine under / postgraduate studies by applying new methodologies and specific learning outcomes and partner country universities. The introduction of the modernized study program of pain medicine is important for improvement of the quality of higher education that will contribute to improving the health care of the population. Moreover, one of the aims is establishment of academic network that would allow the exchange of knowledge of HCWs in Serbia, Montenegro and Bosnia and Herzegovina. The main tool of this network would be developed educational PAIN REGION WB Network which will enhance regional cooperation and education of pain medicine of all partner country universities.

Also, one of HEPMP aims is delivering of trainings of pain medicine in order to increase skills and competences of health care workers (HCWs) in PCs. Training would be for the two target groups: the first type of courses would be for HCWs who work in primary health care centres and daily dealing with the management of pain medicine, and other types of courses would organized in the form of highly specialized training for emergency treatment of pain for doctors who work in tertiary institutions. The first work package refers to a comparative analysis of study programs and courses in the field of PM in the PCs and PgCs, and offers analysis of the labour market because it is necessary to determine the existing differences in methodological approach, as well as the program itself. The second work package would include the development of learning material for study program of PM, while the third work package includes the development of LLL courses and highly specialized courses for interventional pain management. The fourth package includes establishment of academic network that would deal with the exchange of knowledge, which as a network dealing with PM for now does not exist in the Western Balkans region. Quality control and management of the project as are the sixth and seventh work package

### F.2. Project activities and Methodology

Please define the activities proposed and the working methodology (project activities/developments including educational and training content and pedagogical approach) to be used for achieving the objectives, including major milestones, measurable indicators, etc. (limit 6000 characters).

The first work package refers to a comparative analysis of study programs and LLL courses of pain medicine in the PCs and PgCs in order to determine the existing differences in methodolocial approach and in content of study program. In this sense, this analysis is important for Montenegro and Bosnia and Herzegovina universisties aimed to introduce a new study program regarding pain medicine. It is necessary to investigate the offer of existing course or events regarding pain medicine in Western Balkan countries. Moreover, analysis of the labour market needs of HCWs relevant for pain medicine because it

is necessary to investigate whether health care system in PCs have needs for doctors educated for pain medicine. Also, in this package it is planned to purchased and installed equipment for delivering of courses and the creation of REGION PAIN WB platform. Creation of Web platform is essential tool for work of academic network a proffesional board organized in order to help regional cooperation in knowledge exchange in PCs. The first step of HEPMP development (WP2) is training of existing teaching staff in PgCs countries aimed to introducing academic staff from partner countries with european standards of education trough updated and modenized study program of pain medicine. The second work package would include the development of learning material for study program of PM which involve preparation of lectures, creation of course content and preparation of textbook of Pain medicine for students and HCWs. Subsequently in this WP is preparation and submission for accrediation of study program of PM in PCs. After national call and selection of students, it will be perform implementation of new study program.

The third work package includes the development of LLL courses and highly specialized courses for interventional pain management. The first step of WP3 is development of learning materials for LLL courses for HCWs who work in primary health care centers and who need an basic education regarding pain medicine considering that undergraduate studies does not include modules of PM. Also, a separate part of this activity is developing material for interventional pain management for specialist who already have certain level of PM kowledge and have interest to be trained for interventional therapy of pain. Than all teaching material it would be submitted for accrediation of courses. After accrediation and selection of trainees, next step is delivering of LLL courses and interventional courses in each PCs. The fourth package includes establishment of regional academic network as a proffesional body that would deal with the exchange of knowledge regarding PM. An network dealing with PM for now does not exist in the Western Balkans region and the next step is establishment of PAINWB Platform as a main tool of academic network which willwhich will unite professionals to collaborate and share the acquired knowledge. Continius selection of case studies via PAINWB network will led to development of reccomentadtions for systematic standards and procedures in the area of PM that will be incorporated. The WP5 include dissemination of HEPMP content predominantly trough creation and promotion of HEPMP website and different conference. It is necesary to develop material regarding HEPMP for institutional websites, newsletter, promotional material and media. After development, the crucial step in WP5 is dissemination via institutional websites such as Medical Chamber website, website of Commission for Accreditation and Quality Assurance, website of National Medical Society, than newsletter, promotional material and media. Also one important part of project result dissemination is project publications with results which represent permanent sources of education. The WP6 include activities regarding assessment of quality control of HEPMP. First step of WP6 is establishment of quality board who will monitoring project maintenance and control assurance of teaching. Than it will be developed control plan for quality assurance in teaching process which will be conducted through regular quality control board meetings. The quality control board will evaluate surveys of student satissfaction regarding program study of pain medicine and surveys of participant satisfaction regarding LL courses and interventional pain trainings. Also, in this WP it will be included monitor visit by external evaluators who will monitor and evaluate the work of Quality Control board, as well as Management board and condution of project activities.

The management of the project is the seventh work package. On first kick-off meeting it would be established management board of the HEPMP. The role of management boarda is creation of project management guide which will contain the main determinants for the implementation of the project. Regular menagent meetings will be usefull for follow up of the project conduction and the regular reports from these meetings will be neccesary. Final report will be the crucial assessment of project results.

### F.3. Budget and cost effectiveness

Please describe the strategy adopted to ensure that the proposed results and objectives will be achieved in the most economical way and on time. Explain the principals of budget allocation amongst partners. Indicate the arrangements adopted for financial management and what co-financing modalities are planned (limit 3000 characters).

The budget of 950 019,00 € is based on 40% to staff costs, 4,57% to travel costs, 15,44% local accommodation, 30% equipment and 10% subcontracting.

Staff costs are for the teachers from program countries (PgCs) who will teach and train academic staff from partner countries (PCs) and prepare and give lectures on courses for doctors in primary health care centers. Staff costs are for teachers from PCs for creating new curricula of PM and for preparing textbook of Pain Medicine and implementation of study program of Pain Medicine. Moreover, staff cost from PCs will include preparation of courses and for developing and use a web platform and analysis of case studies during the work of academic network.

• Travel and local costs. The budget will cover travel of facilitators from Programme Institutions to Partner Institutions for all work packages. Importantly, travel cost would be cost effective for example when it is performed teaching of existing teaching staff in PgCs after training will be also organized Management Board and Quality control Board. Local accommodation and subsistence according the fixed rates will be provided for all teachers involved if they are not in their home town.

Subcontracting include costs of setting up and maintaining the Web-site, maintaining of costs for dissemination activities such as publishing of textbook Pain medicine, organizing material for courses and conference and costs of accreditation of study program of PM for Serbia, Bosnia and Herzegovina and Montenegro.

The budget is distributed with 53,97% to preparation, 31,97% to development, 3,78% to quality control, 2,98% to dissemination and 7,29% to management. This distribution will ensure a good balance between the need to provide specific benefits for the Partner Institutions, the need to ensure that the results of the project are widely disseminated to allow these benefits to be available for all institutions in the Partner Countries and indeed in other EU neighbour countries, and the need for effective communication within the group.

Allocation of funds, within the limits of the approved budget, will be the collective responsibility of the Management Committee, where decisions are made as described in D.2.1. Funding of the various activities will closely follow the content of the work packages and will be administered from the Project Coordinator's Institute, P1. Thus all refunds of travel expenses and local expenses will be administered by University of Belgrade on the basis of invoices received from the Lead Partner Institutions, who will arrange common accommodation and meals.

Co-financing of the project is 10% of total grant requested and each Partner University is responsible for supplying 10% of total grant for the projects.

### F.4. Quality control and Monitoring

Please explain what mechanisms have been put in place for ensuring the quality of the project and how the evaluation will be carried out. Please define the specific quality measures established, as well as the benchmarks and indicators foreseen to verify the outcome of the action. Make sure that the information in this section is consistent with the project Logical Framework Matrix (limit 3000 characters).

As a first step in controlling the quality of the implementation of the project will be the establishment of the quality control (QC) board. Once established, the QC board will make a quality control plan for quality assurance in the process of teaching. Teachers of courses will be trained teaching staff from partner countries but also from the PgCs countries. Moreover, it will be necessary that QC board determine each of the work packages is performed and if the resulting written deliverables are appropriate. Also, it is necessary that board evaluate the participant surveys of courses and surveys of students satissfaction about the new introduced study program. It is necessary to analyze the success of the courses through a number of registered participants and the number of participants who have passed the final test of the course.

Also QC Board's obligations will be performing peer review of the written project deliverables by a teaching team and making regular reports of each activity that was performed. These reports will be forward them to the Management Board.

Also, it will be engaged external evaluator of the project, which will supervise the work of the board of control of the quality of work and the work of the Board of Management as well as the implementation of the deliverables of work packages that are shown in the logical framework.

- Each course and conference will obtain information on participant satisfaction through statistics.
- The quality of the written deliverables will be reviewed by the Peer Review Committee in a normal peer review process allowing comments to be incorporated in the final products.

# PART G - Impact, dissemination and exploitation, sustainability

### G.1. Expected impact of the project

Please explain who will use these project outputs / products / results and how the consortium will reach them. Describe how the target groups (including participating institutions, stakeholders) will be reached and involved during the life of the project and how the project will benefit the target group at local, regional, national and or European level. Please structure your description according to the different levels of impact and stakeholders (limit 3000 characters).

The project results will be used in all participant universities in PCs, as well as the medical associations of the same countries. The accreditation program developed postgraduate education Pain medicine create conditions for the organization of sub/specialist studies at all participant universities PCs (and other universities in PCs). Development of the project module lectures courses will allow accreditation of undergraduate classes, which will be implemented in the form of election or a compulsory subject in the basic medical studies in participant universities PCs. The important impact is also introduction of new curricula to other universities of Serbia, Montenegro and Bosnia and Herzegovina. In the development of these programs will participate academic staff of the universities involved in the project, from PCs and PgCs. This will continue to create programs that are in a line with programs in EU countries.

Organizing courses in health centers will develop awareness of the importance of pain medicine and

Organizing courses in health centers will develop awareness of the importance of pain medicine and raise the level of knowledge in primary health care, therefore in health care workers, who are often in contact with the target patients.

PAINWeb platform will provide a long-term connection between participating countries and promote new learning opportunities, and to facilitate the communication of health workers who deal with treatment of pain.

Brochures that will be printed for the courses will be the basis for learning at undergraduate level. Textbook of Pain Medicine will systematize the learning material for post-graduate syllabus. By creating unique programs of undergraduate and postgraduate teaching of pain medicine at the universities of PCs and the harmonization of these programs with the EU countries will create the basis for strengthening the capacity of health workers in PCs in the struggle with the problem of pain in practice.

Promotion of the project activities will raise awareness of the wider community about the importance of the fight against pain and the need to invest in such activities.

Please describe how the target groups (including participating institutions, stakeholders) will be reached <u>after the project is finished</u> (limit 3000 characters).

After HEPMP there are several possibilities for implementation in daily practice.

Thanks to HEPMP School of Medicine will perceive importance of pain medicine and develop long-term strategy in the field of education in this area. This means:

- •Pain modules in the undergraduate studies
- Continuous medical education courses in PM
- Pain modules in the different postgraduate studies
- Possible Master studies
- Academic specialization
- PhD studies
- Physician subspecialty in PM

Using the PAINWB platform will provide advanced learning opportunities, as well as communication among health care professionals and academic staff in all PCs and beyond during the next years. Moreover this web platform will serve for practical excersize of undergraduate students. Trough regional academic network it would be enabled to update set of recommentadations for sistemic procedures and standards regarding pain medicine that the Ministry of Health will incorporate in national guidelines .In that way, whole WB region would have increase in quality in education and HCWs and subsequently

increase in health care of populations of WB countries.

The HEPMP project will allowed WB countries to get closer to European standards in public health care service .

# Overview of short and long term impact indicators

Please add rows as necessary according to indicators

Short term impact	Target groups/potential beneficiaries	Quantitative indicators	Qualitative indicators
20 courses organized	students	the number of the direct beneficiaries of the project (number of the actors directly involved)	the % of satisfaction of the partners and beneficiaries
20 courses for primary health care workers	health workers, doctors	the number and the type of instruments used by partners to exchange information and the frequency of the contacts inside the Partnership	the % of the trained candidates
5 training courses organized	doctors	the number of the person involved in the activity	the level of quality in the management, in terms of communication, of the works
equipment for PAINWEB network as equipment for institutions	academic staff, doctors, patients	the number of the consultation talks and/or conferences organized	the number and the type of the products (web-sites, publication, brochures etc) created to spread the activities of the project
20 teachers/academic staff trained in EU countries	academic staff	the number of the local operators and institutions involved in the networks	the level of the achievement of the previewed results
Material for 20 courses developed	academic staff, students, health workers, doctors,	the structures (desk offices, platform, services networks etc), functionally to reach the goals of the project ,which have been already created	the tangible effects of the project on the daily activities of the partners institutions
5 university centers equipped with learning material	academic staff, students		

Long term impact	Target groups/potential beneficiaries	Quantitative indicators	Qualitative indicators
The increased quality of study programs of pain medicine in PCs	students	the number of the direct beneficiaries of the project (number of the actors directly involved)	the % of satisfaction of the partners and beneficiaries
The increace in	academic staff	the number and the type	the % of the trained

quality of regional cooperation in education regarding pain medicine		of instruments used by partners to exchange information and the frequency of the contacts inside the Partnership	candidates
The increase of efficiency of public HCWs	health workers, doctors	the number of the person involved in the activity	the level of quality in the management, in terms of communication, of the works
Five new study programs of pain medicine in Western Balkan countries developed	Students, doctors	the number of the consultation talks and/or conferences organized	the number and the type of the products (web-sites, publication, brochures etc) created to spread the activities of the project
PAIN REGION WB Network established	academic staff, doctors, Universities	the number of the local operators and institutions involved in the networks	the level of the achievement of the previewed results
		the structures (desk offices, platform, services networks etc), functionally to reach the goals of the project ,which have been already created	the tangible effects of the project on the daily activities of the partners institutions

### G.2. Dissemination and exploitation strategy

Please explain how the dissemination will be organised and how exploitation activities will ensure optimal use of the results within the project's lifetime and after. Explain the roles, responsibilities and target groups (limit 3000 characters).

WP5 is focused to strengthen the project promotional activities to disseminate the HEPMP goals. At the all Universitys we decide to make all courses through the Center for Continuing Medical Education (CME) of health workers and associates. Our purpose was to offer specific educational activities and multidisciplinary scientific approach. In the courses we involve different specialityes (academic staff) for lecturers.

We open the attendance to a wider public and not only to the selected participants. CME spread information about HEPMP by mailing list (about 2000 mail addressis)

Through the personal contact by phone, with more than 100 medical institutions, we advise and inform management of that institutions about importance of project.

Information about HEPMP we spread through Medical Societys, on several meetings and by them mailing list.

We will use web page of School of Medicine, at all Universitys to promote HEPMP and disseminate all informations. Also, we perform a few television emissions about courses and HEPMP and importance of that activities.

Under the official web site of School of Medicine at all Universitys, we will develop web page about HEPMP and cleary emphasize HEPMP on the main School web page. On the HEPMP web page we continuously upload all informations about HEPMP.

We will make hard copy brochure with all lectures from HEPMP courses, and we make CD-rom with lectures in acrobat reader format and share to all participants of courses. Moreover, we will used it for promotional activities to disseminate the HEPMP goals.

Also we plan to share an official HEPMP leaflets, posters and brochures to all participants and wider public.

We must not forget conversation with colleagues medical doctors – anaesthesiologists, paediatricians, surgeons, neurologists, general practitioners and with a wider audience.

During the project will be published textbook of Pain Medicine, which will be promoted in all PCs and share in multiple copies in all countries.

During the annual meetings of the Society of pain in all countries will promote all activities of the project.

### **G.3. Sustainability**

Explain how the impact of this project will be sustained beyond its lifetime. Please list the outcomes that you consider sustainable and describe the strategy to ensure their long lasting use beyond the project's life - financially, institutionally and policy level. Also explain how the results will be mainstreamed and multiplied in the sector of activity and in the participating institutions. Describe the strategy foreseen to attract cofunding and other forms of support for the project (limit 2000 characters).

Regarding HEPMP, long-term sustainability is reflected in the following:

- Modernization of the existing program of subspecialty of Pain medicine at University of Begrade and its harmonization with EU education programs in the field of pain medicine, as well as development of postgraduate subspecialty of Pain medicine at Universities of Kragujevac, Podgorica, Banja Luka and Tuzla will assured long -term increase in quality of education of doctors in these countries. New introduced study program will be an core for future education development in PCs.
- Development and implementation of a program of pain medicine undergraduate teaching in universities in PCs
- Developed Web platform for education and communication trough case study selection and analysis between the participating countries will provide permanent exchange of knowledge regarding PM. The result of this permenent exchange of knowledge of PM will be continious updating of recommendations of standards and procedures regarding PM. All these activities are in the line with World Health Organization stategy Health 2020.
- Raising awareness of the need for education in the field of pain medicine amongst healthcare professionals, thereby creating a base from which many doctors will opt for post-graduate education through developed programs in postgraduate studies
- -Promotion of the activities of the project will raise long-term awareness of professionals and wider public about the need and importance of treatment of pain.

	LOGICAL FRAMEW	ORK MATRIX – LFM	
Wider Objective: What is the overall broader objective, to which the project will contribute? • To increase quality of education in pain medicine in order to contribute to the improvement of public health care services in PCs in line with the Health 2020	<ul> <li>The increase of efficiency of public HCWs</li> <li>The increace in quality of regional cooperation in education regarding pain medicine</li> </ul>	How indicators will be measured: What are the sources of information on these indicators?  • The official reports of the efficiency of health care workers in partner countries • University records	
Specific Project Objective/s: What are the specific objectives, which the project shall achieve?  • Develop an interdisciplinary Pain Medicine program in under/postgraduate studies by applying new methodologies and specific learning outcomes in partner country universities  • Develop educational PAIN REGION WB Network in order to organize regional cooperation in education of interventional pain of all partner country universities  • Delivering trainings of pain medicine in order to increase skills and competences of health care workers (HCW) in PCs	Indicators of progress: What are the quantitative and qualitative indicators showing whether and to what extent the project's specific objectives are achieved?  • Five new study programs of pain medicine in Western Balkan countries developed until M18  • 20 courses for primary health care workers held by M18  • 3 trainings for staff held by M12 in PgCs  • PAIN REGION WB Network established by M24	How indicators will be measured:  What are the sources of information that exist and can be collected? What are the methods required to get this information?  • Websites of HEIs in PCs  • Project website  • Medical Chamber website  • Commission for Accreditation and Quality Assurance website in PCs  • Project publications with results	Assumptions & risks:  What are the factors and conditions not under the direct control of the project, which are necessary to achieve these objectives? What risks have to be considered?  • Assumptions • Successful accreditation of new study programs of pain medicine in the near future • Improved regional copperation in education of pain medicine • Risks • Different national legislation of Serbia, Montenegro and Bosnia and Herzegovina regarding accreditation of study programs • Long period is needed to accept the new approach which will be promoted in new curricula for education of HWC

# Outputs (tangible) and Outcomes (intangible):

• Please provide the list of concrete DELIVERABLES - outputs/outcomes (grouped in Workpackages), leading to the specific objective/s.:

WP1 (Comparative analysis of education offer in Pain Medicine)

- 1.1. Report of analysis of education offer in pain medicine in PCs
- 1.2. Report of analysis of education offer in Pain medicine program in PgCs
- 1.3. Report of for comparative analysis of education offer in pain medicine program in PCs and PgCs
- 1.4. Report of labor market needs
- 1.5. Equipment purchased and installed

WP2 (Development of joint curricula for PM study program)

- 2.1. Teaching staff trained
- 2.2. HEPMP contents and teaching material developed
- 2.3. Formal design of accreditation
- 2.4. Student enrolled
- 2.5. Study program implemented WP3 (Development of LLL courses and interventional pain medicine courses)
- 3.1. Developed learning material
- 3.2. Trainne selected
- 3.3. Desicion of accreditation of courses
- 3.4. Reports of LLL courses delivery
- 3. 5. Reports of interventional pain trainings delivery

WP4 (establishment of Academic

#### **Indicators of progress:**

What are the indicators to measure whether and to what extent the project achieves the envisaged results and effects?

- equipment for PAINWEB network as equipment for institutions
- 5 reports of curriculum introduced and published by M18
- 20 teachers/academic staff trained by M18
- •
- 20 courses organized by by M24 of projects
- Material for 20 courses developed by M24
- 5 university centers equipped by M18 of projects
- 3 report of market labor need analysis published by M12
- 5 accreditation setificates for new program study in Serbia, Montenegro and Bosnia and Herzegovina
- 5 interventioanl pain medicine training accrediation certificates for HCW from Serbia, Montenegro and Bosnia and Herzegovina
- 50 students enrolled by M28
- 20 graduates by M36
- 50 teaching staff participated in implementing study programmesby M36
- 200 conference participants
- 4 flyers published by M24
- 20 newsletter prepared by M36
- 5 infodays organized by M36

#### How indicators will be measured:

What are the sources of information on these indicators?

- Project documentation
- Minutes of meeting
- Project website
- University websites
- Medical Chamber websites
- National Medical Society websites

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#### **Assumptions & risks:**

What external factors and conditions must be realised to obtain the expected outcomes and results on schedule?

- Assumptions
- Interest of University/academic staff for new study program introduction
- Interest of students for new study program

#### Risks

- Longer procedure for purchase of equipment
- Longer period of accreditation of new study programs
- Different legislation of new study program in PCs

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	1	
network)	• 20 public administration staff trained	
4.1. Academic board established	by M24	
4.2. WEB platform established	<ul><li>4 course surveys by M36</li></ul>	
4.3. Case studies selected and	• 5 regular reports	
incorporated	•	
4.4. Set of recommendations for		
standards and procedures in the area		
of PM		
WP5 (Project dissemination )		
5.1. Report of dissemination strategy		
5.2. Website of HEPMP		
5.3 Promotion events organized:		
Conferences and Seminars		
5.4. Developed newsletter,		
promotional material and media		
5.5. Disseminated newsletter,		
promotional material and media		
5.6. Signed agreement between HEIs		
and stakeholders		
and stakenoiders		
WP6 (Quality control)		
WPO (Quality control)		
6.1. Decision of quality control board		
establishment		
6.2. Control plan for quality assurance		
in teaching processes developed		
6.3. Minutes of quality control board		
meetings		
6.4. Survey student published		
6.5. External evaluators report		
) A (D7/N4 1)		
WP7(Management)		

7.1. Management board established		
7.2. Management guide published		
7.3. Report of kick-off meeting		
7.4. Minutes of meetings		
7.5. Regular reports and final report		
Activities:	Inputs:	Assumptions, risks and pre-
What are the key activities to be carried out ( <b>grouped</b>	What inputs are required to implement these activities,	conditions:
in Workpackages) and in what sequence in order to	e.g. staff time, equipment, mobilities, publications	What pre-conditions are required before the project
produce the expected results?	etc.?	starts? What conditions outside the project's direct
• 1.1. Analysis of Pain medicine study	• 10 Consortium partners (7 from PCs,	control have to be present for the implementation of the planned activities?
program and LLL courses in PCs	3 from PgCs)	• unined activities:
• 1.2. Analysis of Pain medicine study	• 2 regional countries	
program and LLL courses in PgCs	• 3 years	
• 1.3. Comparative analysis of	• 576 menagement days	
education offer of pain medicine in the	• 3059 researching/teaching staff days	
PCs and PgCs	• 104 admnistrative staff days	
• 1.4. Analysis of labor market needs	<ul> <li>406 techical staff days</li> </ul>	
relevant for HCW in PCs	<ul><li>9 Management Meeetings</li></ul>	
• 1.5. Purchase and installation of	<ul><li>9 reports in 4 languages (English,</li></ul>	
equipment	Serbian, Montenegrian and Bosnian)	
• 2.1. Training of existing teaching staff	<ul> <li>Promotional material in the value of</li> </ul>	
from PCs at PgCs	23 500,00 eur	
• 2.2. Development of HEPMP	<ul> <li>285 000,00 eur for purchasing of</li> </ul>	
contents and Teaching material	equipment by M18 of the project	
• 2.3. Preparation and submission for	<ul> <li>49000 eura spent for puchase of</li> </ul>	
accreditation of study program	training material	
• 2.4. Enrollment of students at study	<ul><li>• 11 500,00 eur for publishing new</li></ul>	
program	study materials	
• 2.5. Implementation of study	•	
programs		

<ul> <li>3.1. Development of learning</li> </ul>		
material for HCW in PCs		
<ul> <li>3.2. National call and selection of</li> </ul>		
trainees		
• 3.3. Accreditation of LLL courses in		
PCs		
• 3.4. Delivering of LLL courses of pain		
medicine in primary health care		
centers of PCs		
<ul> <li>3.5. Delivering of interventional pain</li> </ul>		
trainings in PCs		
<ul><li>4.1. Establishment of regional</li></ul>		
academic network		
<ul><li>4.2. Establishment of PAINWB</li></ul>		
platform		
<ul> <li>4.3. Continous selection of case</li> </ul>		
studies for students and HCWs		
education		
• 4.4. Analysis of systematic standards		
and procedures in the area of PM		
• 5.1. Preparing project dissemination		
strategy		
• 5.2. Creation of Web site of HEPMP		
• 5.3. Promotion of HEPMP program		
Events		
• 5.4. Developing institutional		
websites, newsletter, promotional		
material and media		
• 5.5. Dissemination of instituional		
websites, newsletter, promotional		
material and media		
• 5.6. Signing cooperation between		
HEIs and relevant stakeholders		
• 6.1. Establishment of quality control		
board		

• 6.2. Development of control plan for		
quality assurance in teaching process		
• 6.3. Regular Quality board meetings		
• 6.4. Evaluation of student and		
participant satissfaction		
• 6.5. Monitoring visits by external		
evaluators		
• 7.1. Establishment of menagent		
board		
• 7.2. Creation of project management		
guide		
• 7.3. Kick off meeting		
• 7.4. Regular management board		
meetings		
• 7.5. Making a regular reports and		
final report		
•	1	

## **WORKPLAN**

Please use the model provided. Applicants are expected to complete a <u>one-page work plan for each project year</u>.

For each year of your project proposal, please complete a work plan indicating the deadlines for each outcome and the period and location in which your activities will take place. Please create additional work plan tables if further space is needed.

The same reference and sub-reference numbers as used in the logical framework matrix must be assigned to each outcome and related activities.

Activity carried out in the Programme Country: = (E.g. activity in France for two weeks in the first month of the project 2= under M1)

Activity carried out in the Partner Country (ies): X (E.g., activity in Tunisia for three weeks in the second month of the project: 3X under M2)

#### WORKPLAN for project year 1

	Activities		I											
Ref.nr/ Sub-ref nr	Title	duration (number of weeks)	M1	M2	М3	M4	M5	М6	M7	M8	М9	M10	M11	M12
1.1	Analysis of Pain medicine study program and LLL courses in PCs		3x											
1.2	Analysis of Pain medicine study program and LLL courses in PgCs		3=											
1.3	Comparative analysis of education offer of pain medicine in the PCs and PgCs			2x2=										
1.4	Analysis of labuor market needs relevant for HCW in PCs			1x										
1.5	Purchasing of equipment				4x	4x	4x	4x	4x	4x	4x	4x	4x	4x
2.1	Training of existing teaching staff from PCs at PgCs					3x3=	3x3=	1x1=	1x1=	1x1=	1x1=			
2.2	Development of HEPMP contents and Teaching material									4x	4x	4x	4x	
2.3.	Preparation and submission for accreditation of study program										2x			
5.1.	Preparing project dissemination strategy						2x1=							
5.2.	Creation of Web site of HEPMP			4x										
7.1.	Establishment of management board		1x1=											
7.2.	Creation of project management guide	-		3x3=										

7.3.	Kick off meeting	2x1=						
7.4.	Regular management board meetings			1x2=		1x2=		
7.5.	Making a regular reports and final report	1x1=		1x1=		1x1=		
6.1.	Establishment of Quality control board	1x1=				1x1=		
6.2.	Development of control plan for quality assurance in teaching process		2x2=					
6.3.	Regular Quality board meetings		1x1=			1x1=		

# **WORKPLAN** for project year 2

	Activities	Total												
Ref.nr/ Sub-ref nr	Title	duration (number of weeks)	M1	M2	M3	M4	M5	М6	M7	M8	M9	M10	M11	M12
1.5	Purchasing of equipment		4x	4x	4x									
2.4.	Enrollment of students at study program		1x											
2.5.	Implementation of study programs		4x	4x	4x	4x	4x	4x	4x	4x	4x	4x	4x	4x
3.1.	Development of learning material for HCW in PCs		1x1=		1x1=		1x1=		1x1=		1x1=			
3.2.	National call and selection of trainees			1x		1x		1x		1x		1x		
3.3.	Accreditation of LLL courses in PCs			1x		1x		1x		1x		1x		
3.4.	Delivering of LLL courses of pain medicine in primary health care centers of PCs						1x1=		1x1=		1x1=		1x1=	
6.4.	Evaluation of student and participant satissfaction						1x		1x		1x		1x	
6.3.	Regular Quality board meetings						1x1=						1x1=	
6.5	Monitoring visits by external evaluators													
4.1.	Establishment of regional academic network		1x1=											
4.2.	Establishment of PAINWB platform		4x	4x	4x	4x	4x	4x	4x	4x	4x	4x	4x	4x
4.3.	Continous selection of case studies for students and HCWs education							1x1=						
7.4.	Regular management board meetings		1x2=				2x1=						2x1=	
7.5.	Making a regular reports and final report		1x1=				1x1=						1x1=	

# **WORKPLAN** for project year 3

	Activities	Total												
Ref.nr/ Sub-ref nr	Title	duration (number of weeks)	M1	M2	М3	M4	M5	М6	M7	M8	М9	M10	M11	M12
3.5.	Delivering of interventional pain trainings in PCs		1x1=											
6.4.	Evaluation of student and participant satissfaction		1x1=											
6.5.	Regular Quality board meetings		1x1=											1x1=
2.5	Implementation of study programs		4x											
4.3.	Continous selection of case studies for students and HCWs education		1x1=											
4.4.	Analysis of systematic standards and procedures in the area of PM												3x3=	
5.3.	Promotion of HEPMP program Events			1x		1x1=								1x1=
5.4.	Developing institutional websites, newsletter, promotional material and media			1x			1x			1x			1x	
5.5.	Dissemination of instituional websites, newsletter, promotional material and media					1x			1x					
5.6.	Signing cooperation between HEIs and relevant stakeholders										1x			
7.4	Regular management board meetings		2x1=					2x1=						2x1=
7.5	Making a regular reports and final report		1x1=					1x1=						1x1=

# PART H - Work packages

Please enter the different project activities you intend to carry out in your project. Make sure that the information in this section is consistent with the project Logical Framework Matrix.

# H.1. Description of work packages, outcomes and activities

Work package type and ref.nr	PREF	PARATION		1		
Title	Comparative analysis of e	ducation offer in Pain Med	icine			
Related assumptions and risks	Assumptions Interest of University/acc Risks Longer procedure for pu	ademic staff for new study rchase of equipment	progr	am introduction		
Description	The preparation WP refers to a comparative analysis of study programs and LLL courses of pain medicine in the PCs and PgCs in order to determine the existing diferences in methodolocial approach and in content of study program. In this sense, this analysis is important for Montenegro and Bosnia and Herzegovina universisties aimed to introduce a new study program regarding pain medicine. It is necessary to investigate the offer of existing course or events regarding pain medicine in Western Balkan countries. Moreover, analysis of the labour market needs of HCWs relevant for pain medicine because it is necessary to investigate whether health care system in PCs have needs for doctors educated for pain medicine. Also, in this package it is planned to purchased and installed equipment for delivering of courses and the creation of REGION PAIN WB					
Tasks	platform.  The tasks are analysis of education offer in pain medicine in PCs, analysis of education offer in Pain medicine program in PgCs and comparative analysis of education offer in pain medicine program in PCs and PgCs. Also tasks of this WP are analysis of labour market needs for doctors dealing with pain medicine and equipment purchasing and installation.					
Estimated Start Date (15-10-2017)	15-10-2017 Estimated End Date (15-01-2019) 15-01-2019					
Lead Organisation	P1/UB					
Participating Organisation	P1. P2, P3, P4, P5, P6, P7, P8, P9					

	Work Package and Outcome ref.nr	1.	1.			
	Title	Comparative analysis of education offer in Pain Medicir				
		☐ Teaching material	☐ Event			
Evenosted	Туре	☐ Learning material	x Report			
Expected Deliverable/Results/		☐ Training material	X Service/Product			
Outcomes	Description	The preparation WP refers to study programs and LLL cour PCs and PgCs in order to deto in methodolocial approach a program.	ses of pain medicine in the ermine the existing diferences			

	Due date	15-01-2019						
	Languages	English						
	X Teaching staff							
	☐ Students							
	☐ Trainees							
	☐ Administrative sta	aff						
Target groups	☐ Technical staff							
	☐ Librarians							
	☐ Other							
	If you selected 'Other	r', please identify thes	e target groups.					
	(Max. 250 characters	s)						
	X Department / Facu	ılty x Local	X National					
Dissemination level	☐ Institution	☐ Regional	$\square$ International					

Work package type and ref.nr	DEVEL	OPMENT	2					
Title	Development of curricula fo	Development of curricula for PM study program						
Related assumptions and risks	future Risks • Longer period of accredit	• Successful accreditation of new study programs of pain medicine in the near future						
Description	The first step of HEPMP development (WP2) is training of existing teaching staff in PgCs countries aimed to introducing academic staff from partner countries with european standards of education trough updated and modenized study program of pain medicine. The second work package would include the development of learning material for study program of PM which involve preparation of lectures, creation of pain medicine study program content and preparation of textbook of Pain medicine for students and HCWs. Subsequently in this WP is preparation and submission for accrediation of study program of PM in PCs. After national call and selection of students, it will be perform implementation of new study program.							
Tasks	Teaching staff trained HEPMP contents and teaching material developed Formal decision of accreditation Student enrolled Study program implemented							
Estimated Start Date (15-02-2019)	01-04-2018	Estimated End Date (15-10-2020)	15-10-2020					
Lead Organisation	P1							
Participating Organisation	All							

	Work Package and Outcome ref.nr	2.	1.
Expected	Title	DEVELOPMENT OF CURRICULA FOR	PM STUDY PROGRAM
Deliverable/Results/ Outcomes	Туре	x Teaching material x Learning material ☐ Training material	☐ Event  X Report  X Service/Product
	Description	Development of curricula for	
	Due date	15-10-2020	Fivi study program
	Languages	English	
	x Teaching staff x Students x Trainees ☐ Administrative sta ☐ Technical staff ☐ Librarians x Other	ıff	
Target groups		of interest to	roups.
Dissemination level	x Department / Facu x Institution	lty/ x Local □ Regional	x National  ☐ International
	<u> </u>		

Work package type and ref.nr ⊠	OF/FINDMENT						
Title	Development of LLL courses and interventional pain medicine courses						
Related assumptions and risks	Assumptions • Interest of participant for courses Risks • Difficulties in accreditation of courses						

Description	The third work package includes the development of LLL courses and highly specialized courses for interventional pain management. The fisrt step of WP3 is development of learning materials for LLL courses for HCWs who work in primary health care centers and who need an basic education regarding pain medicine considering that undergraduate studies does not include modules of PM. Also, a separate part of this activity is developing material for interventional pain management for specialist who already have certain level of PM kowledge and have interest to be trained for interventional therapy of pain. Than all teaching material it would be submitted for accrediation of courses. After accrediation and selection of trainees, next step is delivering of LLL courses and interventional courses in each PCs.						
Tasks	National call and selection LLL courses accreditated LLL courses of PM delivered	Learning material for courses developed National call and selection of trainees					
Estimated Start Date (01-10-2018)	01-10-2018	Estimated End Date (01-11-2019)	01-11-2019				
Lead Organisation	P1						
Participating Organisation	All						

	Work Package and Outcome ref.nr	3.	1.				
Expected	Title	DEVELOPMENT OF LLL COURS MEDICINE COURSES	ES AND INTERVENTIONAL PAIN				
Deliverable/Results/ Outcomes	Туре	<ul><li>☐ Teaching material</li><li>X Learning material</li><li>☐ Training material</li></ul>	☐ Event ☐ Report X Service/Product				
	Description	WP3 represent delivering of LLL courses and intervention courses in each PCs.					
	Due date	01.11.2019.					
	Languages	English					
Target groups	☐ Teaching staff ☐ Students  x Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other  If you selected 'Other', please identify these target groups.						
Dissemination level	X Department / Facu X Institution	-	x National  ☐ International				

Work package type and ref.nr	DEVELO	4	
Title	Establishment of Academic network		
Related assumptions and risks	Assumptions  ● Improved regional copperation in education of pain medicine		
Description	The fourth package includes establishment of regional academic network as a proffesional body that would deal with the exchange of knowledge regarding PM. An network dealing with PM for now does not exist in the Western Balkans region and the next step is establishment of PAINWB Platform as a main tool of academic network which willwhich will unite professionals to collaborate and share the acquired knowledge. Continius selection of case studies via PAINWB network will led to development of reccomentadtions for systematic standards and procedures in the area of PM that will be incorporated.		
Tasks	The tasks of WP4 are establishment of Academic board and WEB platform established, continuous case studies selection and determination of set of recommendations for standards and procedures in the area of PM.		
Estimated Start Date (01-10-2019)	01.10.2019.	Estimated End Date (15-10-2020)	15-10-2020
Lead Organisation	P1		
Participating Organisation	All		

	Work Package and Outcome ref.nr	4.1.	
Evported	Title	Establishment of Academic network	
Expected Deliverable/Results/		$\square$ Teaching material	☐ Event
Outcomes	Туре	$\square$ Learning material	X Report
Outcomes		☐ Training material	X Service/Product
	Description	Establishment of Academic no	etwork
	Due date	15-10-2020	
	Languages	Enslish	
	☐ Teaching staff		
	x Students		
	X Trainees		
	☐ Administrative staff		
Target groups	X Technical staff		
	☐ Librarians		
	☐ Other		
	If you selected 'Other	r', please identify these target g	roups.
	(Max. 250 characters)		
	xDepartment / Facul	ty x X Local	x National
Dissemination level	Institution	x Regional	x International

Work package type and ref.nr	QUALITY PLAN		6
Title	Quality control of project		
Related assumptions and risks			
Description	Regular review of monitoring		
Tasks	The tasks of WP6 are establishment of quality control board, development of control plan for quality assurance in teaching process, regular Quality board meetings, evaluation of student and participant satissfaction and monitoring visits by external evaluators.		
Estimated Start Date (15-10-2017)	15-10-2017	Estimated End Date (15-10-2020)	15-10-2020
Lead Organisation	P1		
Participating Organisation	All		

	Work Package and	6	1.
	Outcome ref.nr	0.	
	Title	Quality control of project	
Expected		☐ Teaching material	☐ Event
Deliverable/Results/	Туре	☐ Learning material	☐ Report
Outcomes		☐ Training material	☐ Service/Product
	Description	Regular review of monitoring	
	Due date	15-10-2020	
	Languages	English	
	x Teaching staff x Students ☐ Trainees x Administrative staf ☐ Technical staff ☐ Librarians x Other		
Target groups	If you selected 'Other', please identify these target groups. (Max. 250 characters) The site may also be of interest to		
	rectors		
	deans		
	heads of graduate so	chools	
	employer organizations		

	funding bodies		
	the relevant ministries		
Dissemination level	X Department / Faculty x Institution	X Local X Regional	X National X International

Work package type and ref.nr	DISSEMINATION & EXPLOITATION 5		
Title	Project dissemination		
Related assumptions and risks			
Description	The WP5 include dissemination of HEPMP content predominantly trough creation and promotion of HEPMP website and different conference. It is necesary to develop material regarding HEPMP for institutional websites, newsletter, promotional material and media. After development, the crucial step in WP5 is dissemination via institutional websites such as Medical Chamber website, website of National Medical Society, than newsletter, promotional material and media. Also one important part of project result dissemination is project publications with results which represent permanent sources of education.		
Tasks	Dissemination: HEPMP website Pain medicine textbook for students Conference of pain medicine Promotional material Leaflets		
Estimated Start Date (15-11-2018)	15-11-2018	Estimated End Date (15- 10-2020)	15-10-2020
Lead Organisation	P1		
Participating Organisation	P1, P2, P3, P4, P5, P9		

	Work Package and Outcome ref.nr			5.1.
	Title	Project dissemination		
Expected Deliverable/Results/ Outcomes		☐ Teaching material	x Event	
	Туре	X Learning material	x Report	
		x Training material	x Service/Product	
	Description			
	Due date	15-10-2020		
	Languages	English		
Target groups	x Teaching staff			

	x Students		
	x Trainees		
	X Administrative staff		
	☐ Technical staff		
	x Librarians		
	☐ Other		
	If you selected 'Other', plea (Max. 250 characters)	ase identify these target gro	ıps.
Dissemination level	x Department / Faculty x Institution	x Local x Regional	x National x International

Work package type and ref.nr	MANAGEMENT		7
Title	Management		
Related assumptions and risks			
Description	Management Board coordinate activities of HEPMP and to ensure that the targets are achieved.		
Tasks	Coordination of HEPMP -Establishment of management board -Creation of project management guide - Kick off meeting - Regular management board meetings -Making a regular reports and final report		
Estimated Start Date (15-10-2017)	15-10-2017	Estimated End Date (15-10-2020)	15-10-2020
Lead Organisation	P1		
Participating Organisation	All, P1, P2, P3, P4, P5, P6, P7, P8, P9		

	Work Package and Outcome ref.nr			7.1.
Expected Deliverable/Results/ Outcomes	Title	Project coordination		
		☐ Teaching material	x Event	
	Туре	☐ Learning material	X Report	
		☐ Training material	x Service/Product	
	Description	Project coordination		
	Due date	15-10-2020		
	Languages	English		
	x Teaching staff	aff		
Target groups	☐ Students			
	☐ Trainees			
	x Administrative staf	f		

	☐ Technical staff		
	X Librarians		
	X Other		
	If you selected 'Other', ple	ase identify these target gro	oups.
	(Max. 250 characters)		
Dissemination level	X Department / Faculty	x Local	x National
	x Institution	x Regional	XInternational

### H.2. Explanation of work package expenditures

Please explain what costs will be associated to each work package and covered by lump sums, flat rates, unit costs, and real costs. Provide information on the travels necessary to complete the workpackage. Detailed information on each travel must be indicated in the Budget Excel table. If purchase of equipment is required, explain how the respective equipment addresses the needs identified in the project. Remember that the specification of each item, including the partner country university/ies at which equipment will be installed, must be detailed in the Budget Excel table. If any subcontracting is considered necessary for the implementation of the project, please explain why the task cannot be performed by the consortium members themselves (limit 3000 characters).

WP1 costs will be used for maintain the Kick off meeting, for an analysis of education offer regarding the PM PgCs and PCs, as well as a comparative analysis of education offer in the field of pain medicine. In addition, during WP1 will be purchased equipment needed for carrying out teaching and other project activities (PAINWEB platform) and costs for creation of site. For that reasons costs for preparation package are the greatest approximately 59%.

During WP2 costs are relating to the education of teachers from PCs in PgCs (travel expenses of teachers, travel costs and expenses of paying teachers in PgCs), then for developing learning materials during the project (brochures, leaflets, books), for developing curricula of new study program of PM and for preparation of accreditation programs developed.

Training of trainers takes place in Florence, Rijeka and Ljubljana, so that the planned number teachers from PCs stay in those hometowns.

During WP3 is associated for the cost of preparation of courses, selection of participants for the courses, organization and delivering of courses in all PCs (a total of 25, with about 250 students, doctors). These costs include teacher costs, travel costs and cost of stay for teachers from PgCs and other PCs and cost of organization of courses such as renting the courses hall.

During WP4 costs are associated with development and maintenance of PAINWEB and work of teacher for case study selection. Development package include WP2, WP3 and WP4 and is approximately 31%.

Dissemination of project activities is associated with dissemination of instituional websites, newsletter, promotional material and media such as publishing of textbooks, printing of promotional material and organizing conferences.

Quality control package (WP6) is connected with organization of regular meetings to evaluate former project activities and costs of staff for members of QC board for monitoring activities and assessments of student's satisfaction surveys and participant satisfaction surveys.

The management package is connected with organization of regular meetings to plan and evaluate project activities and with costs of staff for Management board members.

If your project involves a <b>Special Mobility Strand</b> , please explain what support will be required under each budget heading in order to cover organisational costs (such as special needs, exceptional, nor online linguistic support, etc.) (limit 2000 characters).

### H.3 Consortium partners involved and resources required to complete the work package

**Indicative input of consortium staff -** The total number of days per staff category should correspond with the information provided in the budget tables.

Work Package Partner Ref.nr nr			Country	Number of staff days <sup>1</sup>					Role and tasks in the work package
				Category 1	Category 2	Category 3	Category 4	Total	
	P1	UB	Serbia	110	185	74	15	384	analysis of education offer
	P2	UK	Serbia	50	135	10	4	199	analysis of education offer
	P3	UT	Bosnia& Herzego vina	50	125	10	4	189	analysis of education offer
PREPARATION	P4	UBL	Bosnia& Herzego vina	50	115	10	4	179	analysis of education offer
	P5	UP	Monten egro	50	128	10	4	192	analysis of education offer
	P6	UF	Italy		120	10	4	134	analysis of education offer
	P7	UL	Slovenia	10	180	10	4	204	analysis of education offer
	P8	UR	Croatia	15	350	10	4	379	analysis of education offer
	P9	CHCDD M	Serbia	8	65	5	4	74	analysis of education offer
		S	SUBTOTAL	343	1.403	149	47	1.942	1942
DEVELOPMENT	P1	UB	Serbia	-	383	70	18	471	preparation of curricula and courses
DEVELOPIVIENT	P2	UK	Serbia	-	168		8	176	preparation of curricula and courses

<sup>&</sup>lt;sup>1</sup> Please see Programme Guide, Part B for your action, Table A – Project Implementation (amounts in Euro per day) Programme Countries and Table B - Project Implementation (amounts in Euro per day) Partner Countries.

	P3	UT	Bosnia& Herzego vina	-	223		8	231	preparation of curricula and courses
	P4	UBL	Bosnia& Herzego vina	-	208		8	216	preparation of curricula and courses
	P5	UP	Monten egro	-	210		8	218	preparation of curricula and courses
	P6	UF	Italy	-	55			55	teaching academic staff from PCs, preparation of courses
	P7	UL	Slovenia	1	55			55	teaching academic staff from PCs, preparation of courses
	P8	UR	Croatia	10	70			80	teaching academic staff from PCs, preparation of courses
	P9	CHCDD M	Serbia	-				-	preparation of curricula and courses
		S	SUBTOTAL	10	1.372	70	50	1.502	1502
	P1	UB	Serbia	20	-	20	-	40	Monitoring the project conduction
	P2	UK	Serbia	20	-	20	-	40	Monitoring the project conduction
	P3		Bosnia&						
		UT	Herzego vina	20	-	20	-	40	Monitoring the project conduction
QUALITY PLAN	P4	UT	Herzego vina Bosnia& Herzego	20	-		-	40	Monitoring the project conduction  Monitoring the project conduction
QUALITY PLAN	P4 P5		Herzego vina Bosnia&			20 20 20			
QUALITY PLAN		UBL	Herzego vina Bosnia& Herzego vina Monten	20		20	-	40	Monitoring the project conduction
QUALITY PLAN	P5	UBL UP	Herzego vina Bosnia& Herzego vina Monten egro	20	-	20	-	40	Monitoring the project conduction  Monitoring the project conduction
QUALITY PLAN	P5 P6	UBL UP UF	Herzego vina Bosnia& Herzego vina Monten egro Italy	20 20 5	- 15	20 20 -	- - -	40 40 20	Monitoring the project conduction  Monitoring the project conduction  Monitoring the project conduction

		М							
		9	UBTOTAL	118	48	100	-	266	
	P1	UB	Serbia	8	18	7	-	33	Dissemination of instituional websites, newsletter, promotional material and media
	P2	UK	Serbia	-	25	1	-	26	Dissemination of instituional websites, newsletter, promotional material and media
	Р3	UT	Bosnia& Herzego vina	-	25	1	-	26	Dissemination of instituional websites, newsletter, promotional material and media
DISSEMINATION &	P4	UBL	Bosnia& Herzego vina	-	15		-	15	Dissemination of instituional websites, newsletter, promotional material and media
EXPLOITATION	P5	UP	Monten egro	-	25	1	-	26	Dissemination of instituional websites, newsletter, promotional material and media
	P6	UF	Italy	-		-	-	-	Lecturers of conference
	P7	UL	Slovenia	0		0	0	0	Lecturers of conference
	P8	UR	Croatia	0		0	0	0	Lecturers of conference
	P9	CHCDD M	Serbia	0	15	0	0	15	Dissemination of instituional websites, newsletter, promotional material and media
		9	SUBTOTAL	8	123	10		141	141
	P1	UB	Serbia	28	10	38	3	79	Coordination of project
	P2	UK	Serbia	10	10	7	1	28	Local coordination of project
	Р3	UT	Bosnia& Herzego vina	10	10	7	1	28	Local coordination of project
MANAGEMENT	P4	UBL	Bosnia& Herzego vina	10	10	7	1	28	Local coordination of project
	P5	UP	Monten egro	10	8	7	1	26	Local coordination of project
	P6	UF	Italy	9	-	3	-	12	Management Board activities

	P7	UL	Slovenia	9	30	3	-	42	Management Board activities
	P8	UR	Croatia	9	30	3	-	42	Management Board activities
	P9	CHCDD M	Serbia	2	5	2	-	9	
SUBTOTAL			97	113	77	7	294	294	
		TOTAL					4145	4145	

Please insert rows as necessary

Subcontracting of tasks to external bodies should be very occasional. The specific competences and particular expertise needed to reach the project objectives should be found in the consortium and should determine its composition. Subcontracting is intended for specific, time-bound, project-related tasks which cannot be performed by the Consortium members themselves.

#### Tasks that will be subcontracted:

Work Package Ref.nr	Partner responsible for sub-contracting (Acronym)	Country	Number of days (where appropriate)	Brief description of task
WP2 Developm ent	P1	Serbia	approximat ely 40	Printing books for all partner countries with a circulation of 1500 copies. The book is a unique textbook for students for all partner countries. Print books and tender procedure takes about 40 days
WP2	P1	Serbia	35	Accreditation of program -Obtaining the licence for carrying out the program.  Authorized institution for accreditation is Commission for Accreditation and Quality Assurance.  Partner 1 performs accreditation for Partners 1 and 2
Developm ent	Р3	Bosnia & Herzego vina	35	Accreditation of program -Obtaining the licence for the program  Authorized institution for accreditation is Commission for Accreditation and Quality Assurance.
WP2	P5	Monten egro	35	Accreditation of program -Obtaining the licence for the program Authorized institution for accreditation is Commission for Accreditation and Quality Assurance.
Developm ent	P1	Serbia	200	Serbia is responsible for the project, and therefore sets the platform that will be available to all partners - the participants in the project.
WP4 Dissemina tion& Exploitati on	P1	Serbia	30	Setting up a own website takes up to maximum 30 days
WP4 Dissemina tion& Exp	P2	Serbia	30	Setting up a own website takes up to maximum 30 days

WP4 Dissemina tion& Exploitati on	P3	Bosnia & Herzego vina	30	Setting up a own website takes up to 30 days with a maximum
WP4 Dissemina tion& Exploitati on	P4	Bosnia & Herzego vina	30	Setting up a own website takes up to 30 days with a maximum
WP4 Dissemina tion& Exploitati on	P5	Monten egro	30	Setting up a own website takes up to 30 days with a maximum
WP4 Dissemina tion& Exploitati on	P1	Serbia	15	External evaluation report for whole project
Wp Menagem ent	P1	Serbia	60	Audit for whole project

Please insert rows as necessary.

## **PART I – Special Mobility Strand**

Applies ONLY to cooperation projects with partner countries from REGIONS 1, 2 and 3

Projects may organise mobility activities of students, researchers and staff so far as they support/complement the other activities of the **Capacity Building** project and bring added value in the realisation of the project's objectives. Mobility activities do not constitute the main activities for Capacity Building.

I.1. Relevance of mobility activities  Please describe what kind of mobility activities are foreseen in the Special Mobility Strand, what are the objectives and expected results. Explain how the mobility activities of students, researchers and stage support/complement the other activities of the Capacity Building and bring added value in the realisation of the project's objectives (limit 3000 characters).
I.2. Identification and selection of the participants  Please describe the procedures set up for identification and selection of participants for the mobilisactivity (limit 1000 characters).
I.3. Preparation and support  Please describe the structure for preparation of the participants for the mobility activity, including specific training or course, linguistic preparation etc. Please explain the support provided in terms of accommodation, insurances, etc. Please explain the quality measures set up in the sending and receiving organisations for monitoring the mobility activity and measures to be taken if the results foreseen and the motion of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the results foreseen and the first provided in terms of the first provided in the first provid
I.4. Involvement of people with fewer opportunities  Does your project involve people with fewer opportunities? ☐ YES ☐ NO  IF YES, how many participants coming from which countries and organisations would fall under the category? Specify the type of situation of fewer opportunities these participants are facing (limit 200 characters).
Please explain the nature of the support required and how it will be addressed, so that these persons co fully engage in the foreseen activities (limit 1000 characters).

<b>I.5. Recognition and validation of learning outcomes</b> Please explain how the project intends to recognise and validate the teaching and/or learning outcome of the participants (limit 1000 characters).

# **PART J - OTHER EU GRANTS**

Please list the **projects** for which the organisations involved in this application have received financial support from EU programmes.

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project
University of Belgrade			
ERASMUS+ CBHE	561644-2015	University of Belgrade, Serbia	Reinforcement of the Framework for Experiential Education in Healthcare in Serbia*
ERASMUS+ CBHE	561585-2015	University of Niš, Serbia	Enhancement of HE research potential contributing to further growth of the WB region
ERASMUS+ CBHE	561655-2015	University of Kragujevac, Serbia	Institutional framework for development of the third mission of universities in Serbia
ERASMUS+ CBHE	561868-2015	Tallinn University, Tallinn, Estonia	Introduction of part-time and short cycle studies in Serbia
ERASMUS+ CBHE	561902 -2015	Kungliga Tekniska Högskolan, SE	Modernising geodesy education in Western Balkan with focus on competences and learning outcomes
ERASMUS+ CBHE	561675-2015	University of Pristina, with a temporary seat in Kosovska Mitrovica	Creating the Network of Knowledge Labs for Sustainable and Resilient Environments
ERASMUS+ CBHE	561644-2015	University of Belgrade, Serbia	Reinforcement of the Framework for Experiential Education in Healthcare in Serbia*
ERASMUS+ CBHE	561585-2015	University of Niš, Serbia	Enhancement of HE research potential contributing to further growth of the WB region
ERASMUS+ CBHE	561655-2015	University of Kragujevac, Serbia	Institutional framework for development of the third mission of universities in Serbia
ERASMUS+ CBHE	561868-2015	Tallinn University, Tallinn, Estonia	Introduction of part-time and short cycle studies in Serbia
ERASMUS+ CBHE	561902 -2015	Kungliga Tekniska Högskolan, SE	Modernising geodesy education in Western Balkan with focus on competences and learning outcomes
ERASMUS+	561675-2015	University of Pristina,	Creating the Network of

СВНЕ		with a temporary seat in Kosovska Mitrovica	Knowledge Labs for Sustainable and Resilient Environments
ERASMUS+ CBHE	561644-2015	University of Belgrade, Serbia	Reinforcement of the Framework for Experiential Education in Healthcare in Serbia*
ERASMUS+ CBHE	561585-2015	University of Niš, Serbia	Enhancement of HE research potential contributing to further growth of the WB region
ERASMUS+ CBHE	561655-2015	University of Kragujevac, Serbia	Institutional framework for development of the third mission of universities in Serbia
ERASMUS+	561868-2015	Tallinn University,	Introduction of part-time and
CBHE University of Podgorica		Tallinn, Estonia	short cycle studies in Serbia
ERASMUS+ CBHE	561586-EPP-1- 2015-1-RS- EPPKA2-CBHE-JP	JAVNA USTANOVA UNIVERZITET CRNE GORE PODGORICA	Enhancement Of He Research Potential Contributing To Further Growth Of The Wb Region
ERASMUS+ CBHE	561847-EPP-1- 2015-1-EL- EPPKA2-CBHE-JP	JAVNA USTANOVA UNIVERZITET CRNE GORE PODGORICA	School-To-Work Transition For Higher Education Students With Disabilities In Serbia, Montenegro And Bosnia & Herzegovina
ERASMUS+ CBHE	561987-EPP-1- 2015-1-IE-EPPKA2- CBHE-JP	JAVNA USTANOVA UNIVERZITET CRNE GORE PODGORICA	Library Network Support Services: Modernising Libraries In Western Balkan Countries Through Staff Development And Reforming Library Services
University of Tuzla			
ERASMUS+ CBHE	561874-EPP-1- 2015-1-BE- EPPKA2-CBHE-SP	JAVNA USTANOVA UNIVERZITET U TUZLI UNIVERSITAS STUDIORUM TUZLAENSIS	Strengthening Of Internationalisation In B&H Higher Education
ERASMUS+ CBHE	561902-EPP-1- 2015-1-SE- EPPKA2-CBHE-JP	JAVNA USTANOVA UNIVERZITET U TUZLI UNIVERSITAS STUDIORUM TUZLAENSIS	Modernising Geodesy Education In Western Balkan With Focus On Competences And Learning Outcomes
University of Banja Luka			
ERASMUS+ CBHE	561675-EPP-1- 2015-1-XK- EPPKA2-CBHE-JP	UNIVERZITET U BANJOJ LUCI	Creating The Network Of Knowledge Labs For Sustainable And Resilient Environments

ERASMUS+ CBHE	561688-EPP-1- 2015-1-XK- EPPKA2-CBHE-JP	UNIVERZITET U BANJOJ LUCI	Implementation Of The Study Program - Digital Broadcasting And Broadband Technologies (Master Studies)
ERASMUS+ CBHE	561847-EPP-1- 2015-1-EL- EPPKA2-CBHE-JP	UNIVERZITET U BANJOJ LUCI	School-To-Work Transition For Higher Education Students With Disabilities In Serbia, Montenegro And Bosnia & Herzegovina
ERASMUS+ CBHE	561874-EPP-1- 2015-1-BE- EPPKA2-CBHE-SP	UNIVERZITET U BANJOJ LUCI	Strengthening Of Internationalisation In B&H Higher Education
ERASMUS+ CBHE	561675-EPP-1- 2015-1-XK- EPPKA2-CBHE-JP	UNIVERZITET U BANJOJ LUCI	Creating The Network Of Knowledge Labs For Sustainable And Resilient Environments
University of Kragujevac			
ERASMUS+ CBHE	561586-EPP-1- 2015-1-RS- EPPKA2-CBHE-JP	UNIVERZITET U KRAGUJEVCU	Enhancement Of He Research Potential Contributing To Further Growth Of The Wb Region
ERASMUS+ CBHE	561644-EPP-1- 2015-1-RS- EPPKA2-CBHE-JP	UNIVERZITET U KRAGUJEVCU	Reinforcement Of The Framework For Experiential Education In Healthcare In Serbia
ERASMUS+ CBHE	561655-EPP-1- 2015-1-RS- EPPKA2-CBHE-SP	UNIVERZITET U KRAGUJEVCU	Institutional Framework For Development Of The Third Mission Of Universities In Serbia
ERASMUS+ CBHE	561847-EPP-1- 2015-1-EL- EPPKA2-CBHE-JP	UNIVERZITET U KRAGUJEVCU	School-To-Work Transition For Higher Education Students With Disabilities In Serbia, Montenegro And Bosnia & Herzegovina
ERASMUS+ CBHE	561868-EPP-1- 2015-1-EE- EPPKA2-CBHE-SP	UNIVERZITET U KRAGUJEVCU	Introduction Of Part-Time And Short Cycle Studies In Serbia
University of Ljubljana			
ERASMUS+ CBHE	561675-EPP-1- 2015-1-XK- EPPKA2-CBHE-JP	UNIVERZA V LJUBLJANI	Creating The Network Of Knowledge Labs For Sustainable And Resilient Environments
ERASMUS+ CBHE	561688-EPP-1- 2015-1-XK- EPPKA2-CBHE-JP	UNIVERZA V LJUBLJANI	Implementation Of The Study Program - Digital Broadcasting And Broadband Technologies (Master Studies)
University of Rijeka			
ERASMUS+ CBHE	573820-2016	University of Rijeka	Development and Implementation of system for

		performance of evaluation for Serbian HEIs and System
University of		
Florence		
No other projects		
granted		

Please insert rows as necessary.

Please list **other grant applications** submitted by your organisation, or by any partner organisation in this project proposal. For each grant application, please mention the EU Programme concerned and the amount requested.

Programme concerned	Beneficiary Organisation	Amount requested

Please insert rows as necessary.

# **CHECK LIST**

Please ma	ike sure that you <u>fully</u> completed each part of this application form, as follows:
	PART D - Quality of the project team and the cooperation arrangements
	PART E - Project characteristics and relevance
	PART F - Quality of the project design and implementation
	PART G - Impact, dissemination and exploitation, sustainability
	☐ Logical Framework Matrix
	☐ Workplan
	PART H - Work packages
	PART I – Special Mobility Strand (where applicable)
	PART J - Other EU Grants