

**Topics of Rectors Competition**  
**Cardiology Center – Department of Cardiology**  
**2009/2010**

- 1. Evaluation of the mechanisms and non-pharmacological treatment of arrhythmias.** *(Prof. Merkely Béla, MD, PhD, DSc)*
  
- 2. Resynchronization treatment of Heart Failure.**  
*(Prof. Merkely Béla, MD, PhD, DSc)*
  
- 3. Optional cardiac indications of MRI.**  
*(Prof. Merkely Béla, MD, PhD, DSc; Dr.Vágó Hajnalka, MD, PhD)*
  
- 4. The MRI investigation of the heart.** *(Dr. Tóth Attila, MD, assistant lecturer)*
  
- 5. Sudden cardiac death and sport.**  
*(Prof. Merkely Béla, MD, PhD, DSc; Dr.Bárczi György MD, assistant lecturer)*
  
- 6. The role of Tissue Doppler Echocardiography in resynchronization therapy.**  
*(Prof. Merkely Béla, MD, PhD, DSc; Dr.Kutyifa Valentina, MD)*
  
- 7. Factors that influence the mortality of patients treated with Acute Coronary Syndromes.** *(Dr.Becker Dávid, MD, senior lecturer)*
  
- 8. Etiology of restenosis and reocclusion after coronary interventions.**  
*(Dr.Becker Dávid, MD, senior lecturer)*
  
- 9. Treatment of arrhythmias with catheter ablation: new indications, new methods.** *(Dr.Gellér László, MD, PhD, senior lecturer)*
  
- 10. Invasiv catheterisation methods usage for the improvement of the efficacy of resynchronization therapy.** *(Dr.Gellér László, MD, PhD, senior lecturer)*

**11. Patomechanism and intensive treatment of Acute Cardiac Failure.**

*(Dr.Zima Endre, MD, PhD, assistant lecturer)*

**12. Investigation and treatment of acute renal insufficiency aggravating in Acute Coronary Syndrome and Cardiac Failure.**

*(Dr.Zima Endre, MD, PhD, assistant lecturer)*

**13. Prevention and Treatment of Contrast Media Induced Nephropathy during Percutaneous Coronary Intervention.** *(Dr.Zima Endre, MD, PhD, assistant lecturer; Dr.Molnár Levente, MD, assistant lecturer)*

**14. Patomechanism, diagnosis and complex treatment of Cardiogen Shock.**

*(Dr.Zima Endre, MD, PhD, assistant lecturer)*

**15. Invasive haemodynamical evaluations in Acute Heart Failure in the Coronary Care Unit.** *(Dr.Zima Endre, MD, PhD, assistant lecturer)*

**16. Investigation of Telecardiology monitoring options in the management of pacemaker/ICD patients.** *(Dr.Zima Endre, MD, PhD, assistant lecturer)*

**17. Examination and treatment of Acute Liver Failure aggravating Acute Coronary Syndrome and Heart Failure.**

*(Dr.Zima Endre, MD, PhD, assistant lecturer)*

**18. Prognosis of myocardial ischaemia and myocardial infarction on genetic basis.** *(Dr.Szelid Zsolt MD, PhD, assistant lecturer)*

**19. Antiischaemic and antiarrhythmic effects of the calcium-sensitiver agents: experimental and human investigations.** *(Dr.Kékesi Violetta MD, PhD, associate professor; Prof. Merkely Béla, MD, PhD, DSc )*

**20. Pericardial effects of endogen regulatory agents: investigations on *in situ* heart.** *(Dr.Kékesi Violetta MD, PhD, associate professor)*

**21. Examination of the interrelationship of cardioactive agents interrelationship on isolated heart.**

*(Dr.Kékesi Violetta MD, PhD, associate professor)*

**22. Examination of the endogen agents of the human pericardium.**

*(Dr.Kékesi Violetta MD, PhD, associate professor)*

**23. Examination of peptid-natured endogen regulators effects on isolated residence vessels.** *(Dr.Kékesi Violetta MD, PhD, associate professor)*

**24. Examination of the mechanism of coronary effect of acetylcholine on isolated heart and vessel preparations.**

*(Dr.Kékesi Violetta MD, PhD, associate professor)*

**25. Comparison investigations of peptiderg effects in mesenterical and coronary regions: *in vivo* investigations.**

*(Dr.Kékesi Violetta MD, PhD, associate professor)*

**26. Stent implantation in vena cava superior syndrome.**

*(Dr. Nemes Balázs, MD, assistant lecturer)*

**27. Endovascular treatment of aorta aneurysms.** *(Prof. Hüttl Kálmán, MD, DsC)*

**28. Interventional treatment of critical ischaemia of inferior extremitas.**

*(Prof. Hüttl Kálmán, MD, DsC)*

**29. The treatment of restenosis of carotis interna's stenosis.**

*(Prof. Hüttl Kálmán, MD, DsC; Dr. Nemes Balázs, MD, assistant lecturer)*

**30. The complications around the intervention of the stenosis of arcus aortae vessels.** *(Prof. Hüttl Kálmán, MD, DsC; Dr. Nemes Balázs, MD, assistant lecturer)*

**31. Thrombocytia aggregation investigation in patients with stent thrombosis.**

*(Skopál Judit, Senior Science Fellow)*

**32. In vivo animal models in examination of ischaemic stroke.**

*(Prof. Dr.Nagy Zoltán, MD; Skopál Judit Senior Science Fellow)*

**33. The haemodynamical importance of the left ventricle's remodellisation.**

*(Prof. Hartyánszky István, MD, PhD )*

**34. The web-based community work in medical science.**

*(Dr. Soós Pál, MD, PhD, Physician at the University Hospital)*

**35. The significance and investigational opportunities of the endothel dysfunction.** *(Dr. Mohácsi Attila, MD, med. habil., associate professor)*

**36. The current treatment of heart failure.**

*(Dr. Nyolczas Noémi, MD, PhD, senior lecturer)*

**37. The behavior of endothel in coronary diseases.** *(Prof. Préda István, MD, DSc)*

**38. The thrombocytia activation and inhibition in coronary atherothrombosis.**

*(Dr. Kiss Róbert Gábor PhD, associate professor)*

**39. The current pacemaker therapy: survival and quality of life.**

*(Prof. Bóhm Ádám, MD, DSc)*

**40. Roles of psychosocial factors in the outcomes of heart surgery.**

*(Dr. Székely Andrea, MD, PhD, Chief Physician)*

**41. Risk evaluation after paediatric heart surgery.**

*(Dr. Székely Andrea, MD, PhD, Chief Physician)*

**42. The echocardiographical investigation of diastolic cardiac failure.**

*(Prof. Lengyel Mária, MD, DsC)*

**43. Thrombosis of heart valve replacement devices.**

*(Prof. Lengyel Mária, MD, DsC)*

**44. The echocardiographical investigation of right ventricular function.**

*(Dr. Temesvári András, MD, PhD, Chief Physician)*

**45. The cardiological and surgical relations of investigation of right ventricle.**

*(Prof. Hartyánszky István, MD, PhD, Dr. Kádár Krisztina, MD, PhD)*

**46. The analysis of achievements of coronary transfer operations.**

*(Prof. Hartyánszky István, MD, PhD, Dr. Kádár Krisztina, MD, PhD)*

**47. Hybrid electrocardioversion.** *(Dr. Borbola József, MD, PhD, Chief Physician)*

**48. The surgical treatment of high-risk patients with ischaemic heart diseases.**

*(Prof. Horkay Ferenc, MD, DSc)*

**49. The investigation of the decursus and prognosis of the non-ST-segment elevation myocardial infarction (NSTEMI).** *(Prof. Jánosi András, MD, DSc)*

**50. The investigation of the decursus and prognosis of the cardiac failure based on hospitalized patients data.** *(Prof. Jánosi András, MD, DSc)*