

УНИВЕРЗИТЕТ У БАЊОЈ ЛУЦИ
МЕДИЦИНСКИ ФАКУЛТЕТ БАЊА ЛУКА

Примљено:	16. 09. 2019	
Орг. јед.	Број	Прилог
18/3.	567	2019

Образац-1

УНИВЕРЗИТЕТ У БАЊОЈ ЛУЦИ
ФАКУЛТЕТ: Медицински факултет



ИЗВЈЕШТАЈ КОМИСИЈЕ

о пријављеним кандидатима за избор наставника и сарадника у звање

I. ПОДАЦИ О КОНКУРСУ

Одлука о расписивању конкурса, орган и датум доношења одлуке:

На основу члана 139. став (3) Статута Универзитета у Бањој Луци, Сенат Универзитета је расписао конкурс за избор наставника за ужу научну област Интерна медицина 03.06.2019. године бр: 01/04-2.1282/19

Ужа научна/умјетничка област:

Интерна медицина

Назив факултета:

Медицински факултет

Број кандидата који се бирају

1

Број пријављених кандидата

1

Датум и мјесто објављивања конкурса:

26.06.2019. године, дневне новине „Глас Српске“ Бања Лука

Састав комисије:

- Др Душко Вулић, редовни професор, Медицинског факултета Универзитета у Бањалуци, ужа научна област: Интерна медицина; предсједник
- Др Александар Лазаревић, редовни професор, Медицинског факултета

Универзитета у Бањалуци, ужа научна област: Интерна медицина; члан
 в) Др Миодраг Остојић, професор емеритус, редовни професор, Медицинског
 факултета Универзитета у Београду, ужа научна област: Интерна медицина; члан

Пријављени кандидати

1. др Милован Бојић, редовни професор

II. ПОДАЦИ О КАНДИДАТИМА

Први кандидат

а) Основни биографски подаци :

Име (име оба родитеља) и презиме:	Милован (Милија и Драга) Бојић
Датум и мјесто рођења:	13.03.1955. године Колашин
Установе у којима је био запослен:	<ul style="list-style-type: none"> Завод за заштиту здравља студената Универзитета у Београду од 1987-1991 Клинички центар Србије у Београду од 1991-1993 Институт за кардиоваскуларне болести Дедиње од 1993-2001 Клиника Острог од 2001-2017 Институт за кардиоваскуларне болести Дедиње од 2017- до данас
Радна мјеста:	<ul style="list-style-type: none"> одјељенски лекар у Завод за заштиту здравља студената Универзитета у Београду Директор Институт за кардиоваскуларне болести Дедиње Института за кардиоваскуларне болести Дедиње Министар здравља Републике Србије
Чланство у научним и стручним организацијама или удружењима:	<ul style="list-style-type: none"> Српско лекарско друштво Лекарска комора Србије Удружење кардиолога Србије Европско удружење кардиолога

б) Дипломе и звања:

Основне студије	
Назив институције:	Медицински факултет Универзитета у Београду
Звање:	Доктор медицине
Мјесто и година завршетка:	Београд 22.06.1981.године

Просјечна оцјена из цијелог студија:	8.43
Постдипломске студије	
Назив институције:	Медицински факултет Универзитета у Београду
Звање:	Магистар медицинских наука
Мјесто и година завршетка:	Београд .26.06.19876. године
Наслов завршног рада:	Однос функционалних промјена у нивоу кардиоваскуларног система и биохемијских параметара крвне плазме у хипертиреозидизму
Научна/умјетничка област (подаци из дипломе):	Интерна медицина
Просјечна оцјена:	Одличан
Докторске студије/докторат:	
Назив институције:	Медицински факултет у Београду
Мјесто и година одбране докторске дисертације:	Београд 26.01.1990.
Назив докторске дисертације:	Значај простагландина и адренергичких фактора у реактивности кардиоваскуларног система на физичко оптерећење
Научна/умјетничка област (подаци из дипломе):	Интерна медицина
Претходни избори у наставна и научна звања (институција, звање, година избора)	<ul style="list-style-type: none"> • изабран у звање Доцент 1994. године на Медицинском факултету у Београду • изабран у звање ванредни Професор 1998. године на Медицинском факултету у Београду • изабран у звање редовни Професор 1999. године на Медицинском факултету у Београду

в) Научна/умјетничка дјелатност кандидата

Радови прије последњег избора/реизбора
(Навести све радове сврстане по категоријама из члана 19. или члана 20.)

Кандидат је 24.05.1999.године изабран у звање редовног професора за ужу научну област Интерна медицина на Медицинском факултету Београд Универзитета у Београд .
Приложено је рјешење Сената о избору кандидат у звање као и Извјештај комисије о избору кандидата у звање редовни Професор из 1999. године.

Радови послје последњег избора/реизбора

(Навести све радове сврстане по категоријама из члана 19. или члана 20.)

Оригинални научни рад у водећем научном часопису међународног значаја 12 бодова

1. Popovic Z, Miric M, Gradinac A, Neskovic A, Bojic M, Popovic A.

Partial left ventriculectomy improves left ventricular end systolic elastance in patients with idiopathic dilated cardiomyopathy. *Heart* 2000;83:316–319.

To assess the effect of partial left ventriculectomy (PLV) on estimate of left ventricular end systolic elastance (Ees), arterial elastance, and ventriculoarterial coupling. We had 11 patients with idiopathic dilated cardiomyopathy before and two weeks after PLV, and 11 controls. Interventions: Single plane left ventricular angiography with simultaneous measurements of femoral artery pressure was performed during right heart pacing before and after load reduction. Results: PLV increased mean (SD) Ees from 0.52 (0.27) to 1.47 (0.62) mm Hg/ml ($p = 0.0004$). The increase in Ees remained significant after correction for the change in left ventricular mass ($p = 0.004$) and end diastolic volume ($p = 0.048$). As PLV had no effect on arterial elastance, ventriculoarterial coupling improved from 3.25 (2.17) to 1.01 (0.93) ($p = 0.017$), thereby maximising left ventricular stroke work. It appears that PLV improves both Ees and ventriculoarterial coupling, thus increasing left ventricular work efficiency.

Бодова 12x0,3=3,6

2. P. Otasevic, A N Neskovic, Z Popovic, A Vlahovic, D Bojic, M Bojic, A D Popovic Short early filling deceleration time on day 1 after acute myocardial infarction is associated with short and long term left ventricular remodelling. *Heart* 2001;85:527–532

Objective was to assess the relations between early filling deceleration time, left ventricular remodelling, and cardiac mortality in an unselected group of postinfarction patients. Design and patients—Prospective evaluation of 131 consecutive patients with first acute myocardial infarction. Echocardiography was performed on day 1, day 2, day 3, day 7, at three and six weeks, and at three, six, and 12 months after infarction. According to deceleration time on day 1, patients were divided into groups with short (< 150 ms) and normal deceleration time (> 150 ms). Results—Patients with a short deceleration time had higher end systolic and end diastolic volume indices and a higher wall motion score index, but a lower ejection fraction, in the year after infarction. These patients also showed a significant increase in end diastolic ($p < 0.001$) and end systolic volume indices ($p = 0.007$) during the follow up period, while ejection fraction and wall motion score index remained unchanged. In the group with normal deceleration time, end diastolic volume index increased ($p < 0.001$) but end systolic volume index did not change; in addition, the ejection fraction increased ($p = 0.002$) and the wall motion score index decreased. One year and five year survival analysis showed greater cardiac mortality in patients with a short deceleration time ($p = 0.04$ and $p = 0.02$, respectively). In a Cox model, which included initial ejection fraction, infarct location, and infarct size, deceleration time on day 1 was the only

significant predictor of five year mortality. Conclusions: A short deceleration time on day 1 after acute myocardial infarction can identify patients who are likely to undergo left ventricular remodelling in the following year. These patients have a higher one year and five year cardiac mortality.

Бодова 12x0,3=3,6

3. Lazarevic A, Nakatani S, Neskovic A, Marinkovic J, Yasumura Y, Stojicic Dj, Miyatake K, Bojic M, Popovic A. Early Changes in Left Ventricular Function in Chronic Asymptomatic Alcoholics: Relation to the Duration of Heavy Drinking. *Journal of the American College of Cardiology* May 2000;1599-606.

This study sought to assess preclinical cardiac abnormalities in chronic alcoholic patients and possible differences among alcoholics related to the duration of heavy drinking. Chronic excessive alcohol intake has been reported as a possible cause of dilated cardiomyopathy. However, before the appearance of severe cardiac dysfunction, subtle signs of cardiac abnormalities may be identified. We studied 30 healthy subjects (age 44 ± 8 years) and 89 asymptomatic alcoholics (age 45 ± 8 years, $p = 0.5$ NS) divided into three groups, with short (S, 5-9 years, $n = 31$), intermediate (I, 10-15 years, $n = 31$) and long (L, 16-28 years, $n = 27$) duration of alcoholism. Transmitral early (E) and late (A) Doppler flow velocities, E/A ratio, deceleration time of E (DT) and isovolumic relaxation time (IVRT) were obtained. Left ventricular (LV) wall thickness and volumes were also determined by echocardiography, and LV mass and ejection fraction (EF) were calculated.

The alcoholics had prolonged IVRT (92 ± 11 vs. 83 ± 7 ms, $p = 0.001$), longer DT (180 ± 20 vs. 170 ± 10 ms, $p = 0.01$), smaller E/A (1.25 ± 0.34 vs. 1.40 ± 0.32, $p = 0.05$), larger LV volumes (73 ± 8 vs. 65 ± 7 ml/m², $p = 0.001$ for end-diastolic volume index; 25 ± 4 vs. 21 ± 2 ml/m², $p = 0.001$ for end-systolic volume index), higher LV mass index (92 ± 14 vs. 78 ± 8 g/m², $p = 0.001$) and thicker posterior wall (9 ± 1 vs. 8 ± 1 mm, $p = 0.001$). Ejection fraction did not differ between the two groups (66 ± 4 vs. 67 ± 2%). Deceleration time of the early transmitral flow velocity was longer in groups L and I compared with group S (168 ± 17 ms, $p = 0.001$ for L and I vs. S), whereas A was higher in group L compared with S (43 ± 10 vs. 51 ± 10 cm/s, $p = 0.005$). Multiple regression analysis identified duration of heavy drinking as the most important variable affecting DT and A. CONCLUSIONS Left ventricular dilation with preserved EF and impaired LV relaxation characterized LV function in chronic asymptomatic alcoholic patients. It appeared that the progression of abnormalities in LV diastolic filling related to the duration of alcoholism.

Бодова 12x0,3=3,6

4. Lazarević AM, Nesković AN, Goronja M, Golubovic S, Komić J, Bojić M, Popović AD.

Low incidence of cardiac abnormalities in treated trichinosis: a prospective study of 62 patients from a single-source outbreak. *Am J Med.* 1999 Jul;107(1):18-23.

The reported incidence of cardiac involvement in trichinosis is highly variable, ranging from 21% to 75%. This study sought to determine the incidence and type of cardiac lesions in trichinosis using serial echocardiographic examinations. Sixty-two consecutive patients admitted to the Banja Luka Medical Center during an outbreak of trichinosis (November to December 1996) were included in the study. Diagnosis was made by typical clinical presentation, positive epidemiologic history, serologic testing, and the detection of *Trichinella* larvae in contaminated meat. All patients underwent serial electrocardiograms and two-dimensional and Doppler echocardiographic examinations within 20 days after the onset of symptoms. Repeated echocardiographic examinations were performed weekly during the hospital stay in all patients with electrocardiographic abnormalities or an abnormal initial echocardiogram. Cardiac involvement (electrocardiographic and/or echocardiographic changes) was detected in 8 (13%) of the 62 patients. Nonspecific transient electrocardiographic ST-T changes were found in 6 patients (10%); 1 patient had frequent premature ventricular complexes. Echocardiographic examinations revealed pericardial effusions in 6 patients (10%), 5 of whom had minimal effusions without impairment of global and regional left ventricular systolic function. One patient had hypokinesis of the interventricular septum with a small pericardial effusion, both of which resolved within 2 weeks. Only 2 of the patients with electrocardiographic abnormalities lacked echocardiographic evidence of cardiac involvement. At 6-month follow-up, none of the patients had electrocardiographic or echocardiographic abnormalities. The incidence of cardiac involvement in trichinosis appears to be lower than previously reported. Pericardial effusion is the most common manifestation of cardiac involvement, and nonspecific transient electrocardiographic changes, traditionally ascribed to myocarditis, more frequently reflect pericarditis.

Бодова 12x0,3=3,6

5. Neskovic A, Otasevic P, Bojic M, Popovic A. Association of Killip class on admission and left ventricular dilatation after myocardial infarction: A closer look into an old clinical classification *Am Heart J* 1999;137:361-7.

Early identification of patients in whom left ventricular dilatation is likely to occur may have important therapeutic implications. Thus the purpose of this study was to evaluate the relation between Killip class on admission and subsequent left ventricular dilatation after acute myocardial infarction. We serially evaluated 129 consecutive patients by two-dimensional and Doppler echocardiography on days 1, 2, 3, and 7, at 3 and 6 weeks, and at 3, 6, and 12 months after infarction. Killip class on admission >1 was found in 29 of 129 (22.5%) patients, and they had significantly higher end-systolic and end-diastolic volume indexes and wall motion score index from day 1 onward compared with patients with Killip class 1, whereas ejection fraction was lower during the follow-up period in these patients. Patients with Killip class >1 showed the progressive increase of end-diastolic (68.2 ± 2.99 to 88.0 ± 7.55 ml/m², $p = 0.001$) and end-systolic volume indexes (43.9 ± 2.67 to 56.3 ± 6.18 ml/m², $p = 0.004$) during the follow-up period, whereas ejection fraction and wall motion score index remained unchanged. In patients

with Killip class 1, end-systolic volume index did not change (30.8 ± 1.06 to 33.8 ± 2.15 ml/m², $p = 0.064$), ejection fraction increased ($49.3\% \pm 0.99\%$ to $51.8\% \pm 1.17\%$, $p = 0.027$), and wall motion score index decreased (1.50 ± 0.03 to 1.35 ± 0.04 , $p < 0.001$). End-systolic volume index was the major independent correlate of Killip class, followed by history of diabetes and peak creatine kinase level. No association was found between Doppler indexes of diastolic filling and Killip class on admission. Killip class >1 on admission is associated with both acute and long-term left ventricular dilatation. On the other hand, Killip class 1 is associated with favorable left ventricular functional indices, and it appears that left ventricular function in these patients may improve over time. Initial end-systolic volume index but not ejection fraction is the major correlate of Killip class.

Бодова 12x0,3=3,6

6. Maras D, Bosković SD, Popović Z, Nesković AN, Kovacević S, Otasević P, Marinković J, Vuk L, Borzanović M, Nastasić S, Jovanović T, Bojić M, Babić R, Popović AD. Single-day loading dose of oral amiodarone for the prevention of new onset atrial fibrillation after coronary artery bypass surgery. *Am Heart J.* 2001 May;141(5): 5-12.

Various regimens have been proposed for the prevention of postoperative atrial fibrillation, including the use of intravenous and oral amiodarone. The purpose of this study was to determine the effectiveness of a single-day loading dose of oral amiodarone in prophylaxis of atrial fibrillation during the 7 days after coronary artery bypass surgery. We conducted a double-blind, randomized, placebo-controlled study encompassing 315 consecutive patients who underwent coronary artery bypass surgery. They received either amiodarone (159 patients) or placebo (156 patients). Therapy consisted of a single oral loading dose of 1200 mg of amiodarone 1 day before surgery, followed by the maintenance dose of 200 mg daily during the next 7 days. Only episodes of atrial fibrillation lasting more than 1 hour or associated with hemodynamic compromise were taken into consideration. Overall, the incidence of atrial fibrillation was similar in patients who received amiodarone (31/159, 19.5%) and placebo (33/156, 21.2%) ($P = .78$). However, amiodarone reduced the incidence of atrial fibrillation in elderly patients (age ≥ 60 years): it occurred in 20 of 75 (26.7%) patients on amiodarone and in 28 of 65 (43.1%) patients in the placebo group ($P = .05$). There were no differences between the study groups regarding the postoperative intrahospital morbidity and mortality and the duration of hospital stay. A single-day loading dose of oral amiodarone (1200 mg) does not prevent postoperative atrial fibrillation in a general population of patients undergoing coronary artery bypass surgery. However, it appears that this regimen reduces the occurrence of postoperative atrial fibrillation in elderly patients.

Бодова 12x0,3=3,6

УКУПНО БОДОВА: 21,6

Оригинални научни рад у научном часопису међународног значаја 10 бодова

1.Radak Dj, Popovic A, Radicevic S, Neskovic A, Bojic M. Immediate reoperation for perioperative stroke after 2250 carotid endarterectomies: Differences between intraoperative and early postoperative stroke. J Vasc Surg 1999;30:245-51.

After carotid endarterectomy, intraoperative findings and outcome of immediate reoperation of patients who had an intraoperative stroke were compared with those of patients who had an early postoperative stroke. We retrospectively analyzed 2250 carotid endarterectomies performed between 1980 and 1997. Intraoperative stroke (group A) was detected after 41 of the 2250 operations (1.8%), whereas early postoperative stroke (group B) developed after 18 of the 2250 operations (0.8%). Patients from both groups were reoperated on within 1 hour after neurological examination. *Results:* Positive intraoperative findings that could be corrected during immediate reoperation were: (1) thrombotic occlusion of the carotid artery that was operated on caused by technical error, which was found in nine of 41 patients (22%) in group A and in 11 of 18 patients (61%) in group B ($P = .009$); (2) mural thrombus caused by technical error without occlusion, which was detected in seven of 41 patients (17%) in group A and in two of 18 patients (11%) in group B ($P > .05$); and (3) technical error without a thrombus, which was found in eight of 41 patients (20%) in group A and in three of 18 patients (17%) in group B ($P > .05$). A patent carotid artery was found in 17 of 41 patients (42%) in group A and in two of 18 patients (11%) in group B ($P = .046$). Twenty of the 41 patients (49%) in group A died, and four of 18 patients (22%) in group B died ($P > 0.05$). Major neurological deficit remained in nine of 41 patients (22%) in group A and four of 18 patients (22%) in group B ($P > 0.05$). Total recovery occurred in seven of 41 patients (17%) in group A and in eight of 18 patients (45%) in group B ($P = 0.058$). *Conclusion:* Carotid artery thrombosis during immediate reoperation was more frequent in patients who had an early postoperative stroke than in patients who had an intraoperative stroke. It appears that patients who had an intraoperative stroke have a higher incidence of uncorrectable lesions.

Бодова 10x0,5=5

2.Djuric D, Popovic Z, Petrovic J, Bojic M. Age-related progressive brachial artery endothelial dysfunction precedes the changed carotid and left ventricular geometry in healthy humans. Angiology. 1999 Jul;50(7):555-61.

In this study the authors evaluated correlation between aging and brachial endothelial and vascular smooth muscle dysfunction, changes in carotid geometry, and left ventricular remodeling. Vasomotor influences of brachial endothelium and brachial smooth muscle function to reactive hyperemia and nitroglycerin (400 microg, sublingual spray) were assessed by noninvasive ultrasound in 66 healthy subjects of different ages (20-82 years). Carotid intima-media thickness and left ventricular mass index were also assessed by ultrasound and compared with brachial hemodynamic parameters. All results were analyzed by linear regression analysis. The response of brachial artery diastolic diameter to reactive hyperemia decreased with aging ($p < 0.0001$). Also, the response

of brachial artery diastolic diameter to nitroglycerin increased relative to aging ($p<0.004$). Age-related correlations between increased carotid intima-media thickness and brachial artery diastolic diameter response to reactive hyperemia ($p<0.01$) as well as between increased carotid intima-media thickness and increased left ventricular mass index ($p<0.001$) were found. However, there was no correlation between brachial artery diastolic diameter response to reactive hyperemia and increased left ventricular mass index ($p>0.05$). The study showed that aging influences not only brachial endothelial vasomotor properties but also vascular and cardiac geometry. The authors believe that modern therapeutic approach should take these results into consideration to establish new vasculo-protective and cardioprotective strategies.

Бодова 10x0,75= 7,5

3. Radak D, Labs KH, Jäger KA, Bojić M, Popović AD. Doppler-based diagnosis of restenosis after femoropopliteal percutaneous transluminal angioplasty: sensitivity and specificity of the ankle/brachial pressure index versus changes in absolute pressure values. *Angiology*. 1999 Feb;50(2):111-22

The aim of this study was to investigate the sensitivity and specificity of changes of the ankle/brachial pressure index (ABI) and changes in absolute ankle pressure values to detect restenosis in patients who underwent femoropopliteal percutaneous transluminal angioplasty (PTA). In total, 171 patients were followed up prospectively for 12 months; sensitivity and specificity of Doppler-based diagnosis were calculated with duplex scanning as the gold standard. The criteria for restenosis were: (1) a loss of 50% of the ABI increase or (2) loss of 50% of the absolute ankle systolic pressure, gained by PTA. For both criteria, different cut-off points (minimum increase of ABI or ankle pressure gained by PTA) were evaluated. The overall sensitivity and specificity of the ABI criterion was 67% and 80%, respectively. The introduction of cut-off points (the minimum ABI increase gained by PTA), ranging between ≥ 0.13 and ≥ 0.35 , did not markedly improve the results. The overall sensitivity and specificity of the absolute ankle pressure criterion again was poor (59% and 81%). With the introduction of cut-off points (the minimum increase of absolute ankle pressure gained by PTA) ranging between ≥ 15 mm Hg and ≥ 20 mm Hg, the sensitivity and specificity of the criterion improved to acceptable 92% and 96%, respectively. It is concluded, that in the long-term follow-up of PTA patients, the "loss of 50% ankle pressure" criterion will detect restenosis with reasonable accuracy in those patients, in whom an increase in systolic ankle pressure ≥ 20 mm Hg is warranted.

Бодова 10x0,5=5

4. Radak D, Radević B, Sternić N, Vucurević G, Petrović B, Ilijevski N, Radicević S, Nesković AN, Bojić M. Single center experience on eversion versus standard carotid endarterectomy: a prospective non-randomized study. *Cardiovasc Surg*. 2000 Oct;8(6):422-8.

The prospective studies that have compared the outcomes of eversion and standard longitudinal carotid endarterectomy (CEA) have been few and small

and available data to reach definitive conclusions are still scarce. This prospective, non-randomized study sought to compare eversion and standard CEA for early and late mortality and morbidity and the incidence of late restenosis. Between 1992 and 1997, we performed 2806 CEAs in 2469 patients (2124 eversion CEAs in 1859 patients and 682 standard CEAs in 610 patients). All patients underwent preoperative neurological examination and cervical duplex scanning. Patients were followed up by neurological evaluation and duplex scanning at 1 and 6 months after CEA, and yearly afterwards. Demographics and neurologic indications for CEA were similar in both groups. Mean clamping time was shorter in the eversion CEA group (13.5 ± 6.1 vs 19.9 ± 19.1 min, $P < 0.001$). Early (30-day) postoperative mortality due to major stroke was lower after eversion CEA (10/2124 vs 9/682, $P = 0.037$), as well as total cardiovascular mortality (16/2124 vs 12/682, $P = 0.038$). Early carotid occlusion was more frequent in standard CEA group (12/2124 vs 11/682, $P = 0.017$), as well as total early morbidity (112/2124 vs 53/682, $P < 0.001$). During follow-up (mean 56 months, range 6-92), restenosis rate was lower in the eversion CEA group (0.5 vs 1.8%, $P = 0.006$). Our data indicate that eversion CEA as compared to standard CEA technique is associated with lower total cardiovascular perioperative mortality and mortality due to major stroke, shorter clamping time, lower early occlusion rate, and lower late restenosis rate.

Бодова 10x0,3=3

5. Velimirovic DB, Pavlovic SU, Petrovic P, Neskovic A, Zivkovic M, Bojic M.

The loss of circadian heart rate variations in patients undergoing mitral valve replacement and Corridor procedure--comparison to heart transplant patients. *Cardiovasc Surg.* 2001 Feb;9(1):68-72.

We have presently demonstrated that when added to mitral valve replacement (MVR) the corridor procedure is 75% efficient in restoring and maintaining sinus rhythm in patients with chronic atrial fibrillation (AF), caused by rheumatic mitral valve disease, (follow up 13.9 months). In the same patient population, we observed that the typical day-night cycle heart rate (HR) variations were lost and our present study concentrates on this subject. Heart rate variability analysis based on 24-h Holter ECG recording (StrataScan 563 DelMar Avionics) or hospital discharge (12th-14th postoperative days) was performed in 3 patient groups: Group I: Patients with a Corridor procedure added to MVR (12pts, m/f 10/2, mean age 47.3 ± 7.5 yr); Group II (control): with patients MVR performed through the left atrial approach, without additional antiarrhythmic procedures (10pts, m/f 3/7 mean age 51.5 ± 6.7 yr), and Group III: heart transplant recipients (5pts, mean age 46.4 ± 11.22 yr). We analyzed the hourly heart rate over 24-h period divided into three 8-h segments (07-14h; 15-22h and 23-06h). Statistical comparison of mean hourly heart rate values was made between the three time periods of Holter monitoring. The Corridor procedure performed with mitral valve replacement resulted in conversion of sinus rhythm in 75% of patients (Group I), but postoperative heart rate variability analyses based on Holter monitoring disclosed that the mean heart rate was not statistically significantly different between the three 8-h segments of the day-night ($P > 0.05$). The same results were found in the group of patients after heart transplant ($P > 0.05$). The same results were found in the group of patients after heart transplant ($P > 0.05$). In the second group (classical MVR), statistically

significant differences in mean HR variation existed between the three 8-h intervals ($P<0.05$), and although atrial fibrillation occurred postoperatively physiologic circadian heart rate variations were preserved. With the Corridor procedure, both atria were surgically and electrically isolated and chronotropic function of the ventricles was restored by creating a small strip of atrial tissue with isolated sinus node and atrio-ventricular node, connected to the ventricles. This technique produced heart denervation nervous system influence, producing the loss of circadian HR variations, similar to the transplanted heart.

Бодова 10x0,3=3

6.Nezic D, Peric M, Knezevic A, Cirkovic M, Jovic M, Bojic M. Tension-free left ITA graft -- the pericardial strip technique. *Cardiovasc Surg.* 2001 Apr;9(2):177-8.

Internal thoracic artery (ITA) graft proved to be superior over the venous graft for myocardial revascularization [1]. 'In situ', pedicled internal thoracic artery graft is preferred over the free internal thoracic artery graft, since proximal internal thoracic artery graft anastomosis may present a significant technical problem [2]. In order to optimize the internal thoracic artery length, and avoid the use of the most distal part of internal thoracic artery (often small in diameter and prone to spasm), we try to make the internal thoracic artery graft as short as possible. Occasionally, proper positioning of the internal thoracic artery graft is severely compromised in patients with extreme forms of lung emphysema. Emphysematous lung occupying the whole dome of the left pleural cavity and expanding well over the midline may occasionally present a significant problem for positioning of the left internal thoracic artery, although the graft has been mobilized up to its origin. To avoid an undue tension on it, we combined a well known technique of the pericardial incision with the pericardial strip technique, enabling the lung to expand freely.

Бодова 10x0,3=3

7.Ilijevski N, Radak D, Radević B, Bojić M, Kronja G, Misović S, Simić A, Jevtić M. Emergency surgery of acute traumatic arteriovenous fistulas. *Cardiovasc Surg.* 2000 Apr;8(3):181-5.

The purpose of this report was to analyze the clinical presentation, diagnosis, surgical and non-surgical treatment and the outcome of patients with acute AVFs seen during the last 8 years. During 1991-98 we treated 47 patients with traumatic AVFs. Among these patients 11 were classified as 'acute' AVF. All the patients were male and they ranged in age from 17 to 64yr (mean 25yr). The time from injury to admission to our two institutions varied from 4h to 17days. Emergency surgery was performed in unstable patients and in those with an expanding haematoma base on clinical assessment alone. The acute surgery group consisted of stable patients that were operated after angiography examination. A ??? murmur and thrill were present in seven patients, and peripheral pulses were absent in four patients. The main blood vessels were reconstructed using various techniques in eight patients and minor blood vessel were ligated in three patients. Two lower limb amputations had to be performed, both after reconstruction of popliteal AVFs. In the remaining nine patients reconstruction of the axial vessels was successful and no signs of ischemia developed in patients after ligation of minor

vessels. No neurological deficit developed in two patients whose AVFs were vaporised in the neck. The average hospital stay was 8.6 days. Emergency surgery is safe in unstable patients with traumatic AVFs. A thrill and murmur are characteristic signs even in the acute setting, but the examiner must be persistent in looking for them whenever there is a suspicion of a blood vessel injury. Angiography is a reliable diagnostic tool in stable patients, but whether it is essential when there is an expanding pulsating hematoma remains debatable.

Бодова 10x0,3=3

8. Popović Z, Mirić M, Nesković AN, Vasiljević J, Otasević P, Zarković M, Bojić M, Gradinać S. Functional capacity late after partial left ventriculectomy: relation to ventricular geometry and performance. *Eur J Cardiothorac Surg.* 2001 Jan;19(1):61-7.

While partial left ventriculectomy (PLV) may improve functional status, the duration and determinants of this improvement are poorly known. This study sought to assess the relationship between left ventricular (LV) shape and function and functional status in late survivors after PLV for non-ischemic dilated cardiomyopathy (DCM). We assessed the relations between LV shape and function and functional status in 17 consecutive patients who survived >12 months after PLV for non-ischemic DCM. Invasive diagnostic studies were performed before, early after, at mid-term after, and late after PLV. According to their functional status after >12 months of follow-up, patients were divided into responders (n=10) or non-responders (n=7).

After PLV, the LV systolic major-to-minor axis ratio was higher in responders at early, mid-, and late follow-up (P=0.003, P=0.008 and P=0.04, respectively). LV circumferential end-diastolic stress decreased early after PLV, but increased afterwards in non-responders only (P=0.049). LV ejection fraction was similar in the two groups at baseline, and at early and mid-follow-up, but was lower in non-responders at late follow-up (P=0.006). However, LV end-diastolic and end-systolic volumes, and LV end-systolic circumferential stress showed no difference between the two groups. It appears that poor functional capacity in late post-PLV survivors is related to postoperative LV geometry.

Бодова 10x0,3=3

9. Nesković AN, Marinković J, Bojić M, Popović AD. Early predictors of mitral regurgitation after acute myocardial infarction. *Am J Cardiol.* 1999 Aug 1;84(3):329-32, A8.

It is well known that mitral regurgitation may lead to left ventricular dilation; however, the relationship between progressive left ventricular dilation after acute myocardial infarction (MI) and mitral regurgitation has not yet been clarified. This study tested the hypothesis that early mitral regurgitation contributes to left ventricular remodeling after acute MI. We prospectively evaluated 131 consecutive patients by serial two-dimensional and Doppler echocardiography on Days 1, 2, 3, and 7, after 3 and 6 weeks, 3 and 6 months, and 1 year following acute MI. Patients were divided into two groups: those with mitral regurgitation in the first week after acute MI (Group 1, n = 34) and those without mitral regurgitation (Group 2, n = 81). Over 1 year, a significant increase in end-diastolic volume index (from 62.1 +/- 12.9 to 70.5 +/- 23.6 ml/m², p = 0.001) with a strong linear trend (F = 15.1, p < 0.001) was noted. Initial end-diastolic volume index was higher in Group 1 (65.6 +/- 13.3 vs. 60.4 +/- 12.5 ml/m², p = 0.047),

but this difference remained constant throughout the study ($F = 1.76$, $p = \text{NS}$). Therefore, the pattern of end-diastolic volume changes was similar in both groups during the period of observation. These data indicate that early mitral regurgitation after acute MI does not contribute to subsequent left ventricular remodeling in the first year after myocardial infarction.

Бодова 10x0,75= 7,5

10. Nesković AN, Marinković J, Bojić M, Popović AD. Early predictors of mitral regurgitation after acute myocardial infarction. *Am J Cardiol*. 1999 Aug 1;84(3):329-32

We analyzed early predictors of mitral regurgitation after myocardial infarction in 131 consecutive patients with first acute myocardial infarction. We prospectively evaluated 131 consecutive patients with first AMI who met the following criteria: (1) age ≥ 70 years, (2) typical chest pain lasting ≥ 30 minutes, (3) ST-segment elevation ≥ 2 mm in ≥ 2 contiguous leads of standard 12-lead electrocardiogram, (4) transient elevation of creatine kinase and/or MB isoenzyme, (5) first echocardiogram performed within 24 hours of the onset of pain, and (6) no history of mitral valve disease or apical systolic murmur. Clinical assessment of patients' cardiovascular status was made according to the Killip classification. The chi-square test was used for comparison of nonparametric data and the t test was used to compare continuous variables. A multiple logistic regression model was used to identify predictors of MR on admission and 1 week after AMI. Variables examined included clinical (age, sex, Killip class, use of thrombolysis, peak serum creatine kinase level, infarct location), echocardiographic (left ventricular end-diastolic volume index, left ventricular endsystolic volume index, ejection fraction, wall motion score index, left atrial size and mitral annulus diameter, papillary muscle region asynergy, left ventricular sphericity index), and angiographic (extent of coronary artery disease, patency of the infarct-related artery) descriptors. Our data revealed that elderly patients with larger infarcts, multivessel coronary disease, and papillary muscle region asynergy are more likely to develop mitral regurgitation in the first year after infarction.

Бодова 10x0,75= 7,5

11. Popović ZB, Trajić S, Angelkov L, Mirić M, Nesković AN, Bojić M, Gradinac S. Spontaneous ventricular arrhythmias following partial left ventriculectomy for nonischemic dilated cardiomyopathy: relation to hemodynamics and survival. *J Card Surg*. 2001 Mar-Apr;16(2):104-12.

The study assessed the value of ambulatory electrocardiogram (AECG) monitoring for identification of patients who are at increased risk for cardiac death or arrhythmic event following partial left ventriculectomy (PLV). Furthermore, the impact of PLV and its hemodynamics on the occurrence of spontaneous ventricular arrhythmias was assessed in long-term survivors. In 32 idiopathic dilated cardiomyopathy patients who underwent PLV, ambulatory ECG (AECG) was performed preoperatively, early postoperatively, and 6 months and 12 months after surgery. In 17 of 19 patients who survived > 12 months after the procedure, left ventricular (LV) angiography was performed at the same time points and was used to calculate LV ejection fraction, and end-diastolic and end-systolic wall stress. During a mean follow-up of 478 ± 405 days, 11 cardiac events occurred. Cox univariate regression revealed frequency of premature ventricular contractions $> 30/\text{hour}$ at baseline ($p = 0.0213$) and duration

of heart failure symptoms ($p = 0.0226$) as predictors of cardiac death or arrhythmic event after PLV. In a multivariate analysis, only frequency of premature ventricular contractions $> 30/\text{hour}$ was a significant predictor. There was no change in the frequency or severity of ventricular arrhythmias after PLV. However, frequency of premature ventricular contractions correlated with LV end-diastolic stress ($r = 0.35$, $p = 0.013$), and ejection fraction ($r = -0.34$, $p = 0.016$). Preoperative AECG monitoring may help stratification of PLV patients. Serial AECG did not show that PLV influence the incidence or the complexity of spontaneous ventricular arrhythmias. In contrast, it appears that a hemodynamically "successful" procedure may decrease the incidence of ventricular arrhythmias

Бодова 10x0,3=3

12. Vukovic PM, Milojevic P, Stojanovic I, Micovic S, Zivkovic I, Peric M, Milicic M, Milacic P, Milojevic M, Bojic M. The role of ministernotomy in aortic valve surgery-A prospective randomized study. *J Card Surg.* 2019 Jun;34(6):435-439.

The purpose of this prospective randomized study was to compare the early and midterm outcomes of aortic valve replacement (AVR) through upper ministernotomy with conventional AVR through median sternotomy. One hundred patients undergoing elective AVR were randomized into two groups: the M group (upper ministernotomy group, $n = 50$) and the C group (conventional sternotomy group, $n = 50$). The operative data, major adverse outcomes, and postoperative variables were compared between the two groups of patients. A cross-sectional follow-up was performed 24.9 ± 5.8 months after surgery. The aortic cross-clamp time and cardiopulmonary bypass time were significantly longer in the M group. Similar incidences of major cardiac, neurologic and renal complications were recorded in both groups. Two patients (4%) in the C group developed wound infections. The length of ICU stay was similar in both groups. The patients in the M group had a shorter hospital stay compared with the patients in the C group (7.6 ± 2 days vs 9.3 ± 4.8 days; $P = 0.022$). Follow-up revealed that the time period needed to reach full recovery was significantly shorter in the ministernotomy group (1.7 ± 1.2 months vs 2.8 ± 1.6 months; $P = 0.001$). Morbidity and mortality data did not differ between the two groups. There was no difference in the major outcomes between the patients who underwent upper ministernotomy and those who underwent full sternotomy. The benefits of the minimally invasive approach were the shorter hospital stay and significantly faster recovery of patients after discharge from the hospital.

Бодова 10x0,3=3

13. Frazier OH, Gradinac S, Segura AM, Przybylowski P, Popovic Z, Vasiljevic J, Hernandez A, McAllister HA Jr, Bojic M, Radovancevic B. Partial left ventriculectomy: which patients can be expected to benefit? *Ann Thorac Surg.* 2000 Jun;69(6):1836-41.

Although some patients with end-stage heart disease will benefit from a partial left ventriculectomy, no criteria have been found for identifying this group preoperatively. Our experience with partial left ventriculectomy at two institutions-the Texas Heart Institute in Houston, TX, USA, and Dedinje Cardiovascular Institute in Belgrade, Yugoslavia-showed a higher survival rate and better postoperative myocardial function in the

Yugoslavian patients. We reviewed data from 42 patients (21 at each center) who had idiopathic cardiomyopathy, a left ventricular end-diastolic dimension of more than 70 mm, wall thickness of 1 cm or greater, and New York Heart Association class III or IV symptoms. The only significant difference in preoperative status between the two groups was duration of symptoms. Histologic specimens, blinded as to origin, were graded with regard to myocyte hypertrophy, cytoplasmic vacuolation, and fibrosis. Computer-assisted myocyte and nuclear morphometry was also performed. Immediately postoperatively, there were no significant intergroup differences in the reduction in cardiac dimension or in corrections of mitral regurgitation. During 6-month follow-up, however, the Texas Heart Institute patients had a lower cardiac index (1.8 versus 3.0 L x min⁻¹ x m⁻²; p = 0.001) and left ventricular ejection fraction (24% versus 34%; p = 0.006) than the Dedinje Cardiovascular Institute patients. The Texas Heart Institute patients differed from the Dedinje Cardiovascular Institute patients in the degree of severe or moderate changes in myocyte hypertrophy (90% versus 29%; p = 0.0003) and fibrosis (71% versus 29%; p = 0.006), as well as in the measurements of median myocyte diameter (35 +/- 7 microm versus 27 +/- 4 microm; p = 0.0002) and median nuclear size (15 +/- 4 microm versus 12 +/- 2 microm; p = 0.0029). In the Texas Heart Institute patients, the significant intergroup difference in clinical outcome may have been related to increased myocyte hypertrophy and fibrosis. Further studies should be performed to determine the usefulness of these criteria in selecting patients for partial left ventriculectomy.

Бодова 10x0,3=3

УКУПНО БОДОВА: 56,5

Научна монографија националног значаја

1. **Bojić M, Bojić D, Đorđević M.** Kardiovaskularna i maligna oboljenja u Srbiji na početku XXI veka, monografija, ZEXPO, Beograd, 2006. Knjiga je odobrena za objavljivanje odlukom Nastavno-naučnog veća Medicinske akademije – US Medical School br. 128/2006.

Бодова 10

2. **Đorđević M, Bojić M.** Vodič za rano otkrivanje raka dojke, monografija, ZEXPO, Beograd, 2007.

Бодова 10

УКУПНО БОДОВА: 20

УКУПАН БРОЈ БОДОВА: 98,1

г) Образовна дјелатност кандидата:

Образовна дјелатност прије последњег избора/реизбора
(Навести све активности (публикације, гостујућа настава и менторство) сврстаних по категоријама из члана 21.)

Кандидат је 24.05.1999.године изабран у звање редовног професора за ужу научну област Интерна медицина на Медицинском факултету Београд Универзитета у Београд .
Приложено је рјешење Сената о избору кандидата у звање као и Извјештај комисије о избору кандидата у звање редовни Професор из 1999. године.

Образовна дјелатност после последњег избора/реизбора
(Навести све активности (публикације, гостујућа настава и менторство) и број бодова сврстаних по категоријама из члана 21.)

Рецензирани универзитетски уџбеник који се користи у земљи

1. Недељковић С, Каљух В, Вукотић М и сарадници. Кардиологија том 1 и 2, Београд, Медицински факултет, Универзитет у Београд, 2000.

Одлуком научног вијећа Медицинског факултета Универзитета у Београду бр 1050/3 је прихваћена као уџбеник Медицинског факултета Универзитета у Београду

Бодова: 6x0,3=1,8

УКУПНО БОДОВА: 1,8 бодова

Менторство кандидата за степен трећег циклуса

1. Ментор доктората др Зорана Поповића под називом "Клиничка примјена показатеља контрактилности лијеве коморенезависних од и оптерећења", који је успјешно одрађен 16.09.1999 године.

Бодова: 7 бодова

2. Ментор доктората др Душка Њежића под називом "Механичка потпора циркулације код периперативне срчане слабости у операцијама на отвореном срцу", који је успјешно одрађен 24.11.1999 године.

Бодова: 7 бодова

УКУПНО БОДОВА: 14 бодова

УКУПАН БРОЈ БОДОВА: 15,8 бодова

д) Стручна дјелатност кандидата:

Кандидат је 24.05.1999.године изабран у звање редовног професора за ужу научну област Интерна медицина на Медицинском факултету Београд Универзитета у Београд . Приложено је рјешење Сената о избору кандидат у звање као и Извјештај комисије о избору кандидат у звање редовни Професор из 1999. године.
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Стручна дјелатност кандидата (послије последњег избора/реизбора)

<i>(Навести све активности и број бодова сврстаних по категоријама из члана 22.)</i>
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УКУПАН БРОЈ БОДОВА:0

УКУПНА НАУЧНА, ОБРАЗОВНА И СТРУЧНА ДЈЕЛАТНОСТ КАНДИДАТА

Дјелатност	Прије последњег избора	Послије последњег избора	Укупно
Научна дјелатност кандидата	/	98,1	98,1
Образовна дјелатност кандидата	/	15,8	15,8
Стручна дјелатност кандидата	/	0	0
Укупан број бодова	/	113,9	113,9

III. ЗАКЉУЧНО МИШЉЕЊЕ

Након увида у конкурсну документацију пријављеног кандидата, Комисија у напријед наведеном саставу је закључила да се **доктор медицинских наука, Милован Бојић, редовни професор**, међународно афирмисао са укупно 112 научних радова и 491 конгресним саопштењем.

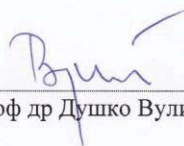
Комисија је такође, детаљно прегледала конкурсни материјал, анализирала богату научну, образовну и стручну дјелатност кандидата, анализирала услове за избор у звање прописане Законом о високом образовању, Статутом Универзитета у Бањој Луци и Правилником о поступку и условима избора наставника и сарадника на Универзитету у Бањој Луци.

Обзиром на напријед наведено, Комисија предлаже Наставно – научном вијећу Медицинског факултета и Сенату Универзитета у Бањој Луци, да се **др Милован Бојић** изабере у звање **редовног професора** за ужу научну област **Интерна медицина** на Медицинском факултету Универзитета у Бањој Луци.

У Бањој Луци, септембар, 2019. године

Потпис чланова комисије

1.



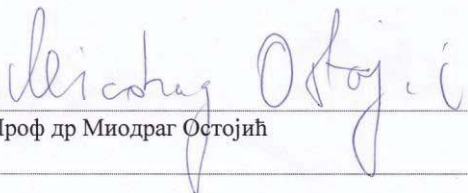
Проф др Душко Вулић

2.



Проф др Александар Лазаревић

3.



Проф др Миодраг Остојић