



GOCE DELCEV UNIVERSITY - STIP
FACULTY OF MEDICAL SCIENCES



International symposium at
Faculty of medical sciences

CURRENT ACHIEVEMENTS AND FUTURE PERSPECTIVES IN MEDICAL AND BIOMEDICAL RESEARCH



STIP, 24 NOVEMBER 2015
MULTIMEDIA CENTRE – UGD, STIP

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INTERNATIONAL SYMPOSIUM AT FACULTY OF MEDICAL SCIENCES
“Current achievements and future perspectives in medical and biomedical research”

SCIENTIFIC PROGRAM

November 24, 2015 - Stip

8:30 – 9:00

Registration

9:00 – 9:15

Rector / Vice rector/Dean

SESSION 1

Chair: Prof. Emilija Janevik Ivanovska

Co-chair: Ass. Prof. Elena Drakalska

9:15 – 9:35

Ass. Marija Darkovska Serafimovska
Macedonian agency of drug and medical
devices, Director
University Goce Delcev Stip
Republic of Macedonia

Step forward of Macedonian agency for medicines and medical devices, establishment and strategic plan for development

9:35 – 9:55

Assoc. Prof. Zorica Arsovska Sarafinovska
Institute of Public Health of the
Republic of Macedonia, Skopje,
University Goce Delcev Stip
Republic of Macedonia

Adherence to Therapy: A Modern Pharmacotherapeutic Approach

9:55 – 10:15

Prof. Biljana Gjorgjeska
University Goce Delcev Stip
Republic of Macedonia

Use of disinfectants and antiseptics in selected health institutions in Republic of Macedonia

10:15 – 10:35

Assoc. Prof. Bistra Angelovska
University Goce Delcev Stip
President of Pharmaceutical Chamber
of Macedonia. Republic of Macedonia

Code of Ethics for Pharmacists – Pharmaceutical Chamber of Macedonia

10:40 – 11:10

Coffee break

Poster presentation

Chair: Prof. Milka Zdravkovska
Co-chair: Ass. Prof. Darinka Gjorgieva Ackova

10:10 – 11:50

Prof. Neven Zarkovic
Rudjer Boskovic Institute, Croatia

4-Hydroxynonenal – major bioactive marker of lipid peroxidation

11:50 – 12:10

Assoc. Prof. Tatjana Ruskovska University
Goce Delcev Stip Republic of Macedonia

Nicotinamide adenine dinucleotide biosynthesis and consumption in dysfunctional white adipocytes

12:10 – 12:30

Prof. Rubin Gulaboski University
Goce Delcev Stip Republic of Macedonia

New insights into the chemistry and functions of Coenzyme Q

12:30 – 12:50

Assoc. Prof. Darko Bosnakovski
University Goce Delcev Stip
Republic of Macedonia

Genetically modified systems to study muscular dystrophies

12:50 – 14:00

Coffee break

Poster presentation

Chair: Assoc. Prof. Cena Dimova
Co-chair: Ass. Prof. Nevenka Velickova

14:00 – 14:40	Prof. Lia Rimondini Università del Piemonte Orientale, Novara, Italy	<i>Counteracting microbial biofilm formation onto dental materials</i>
14:40 – 15:00	Prof. Elizabeta Zisovska Agency for Quality and Accreditation of Healthcare Institutions, Skopje, Republic of Macedonia	<i>The endless potential of the umbilical cord blood for investigation, research and treatment</i>
15:00 – 15:20	Ass. Misko Milev University Goce Delcev Stip Republic of Macedonia	<i>The cytokinesis-blocked micronucleus assay: Good choice for detection and evaluation of genotoxicity in human cells</i>
15:20 – 15:40	Prof. Lence Miloseva University Goce Delcev Stip Republic of Macedonia	<i>Multiple predictive model for clinical and subclinical depression in adolescence</i>
15:40 – 16:00	Coffee break	Poster presentation

SESSION 4

Chair: Assoc. Prof. Darko Bosnakovski
Co-chair: Ass. Prof. Katarina Smilkov

16:00 – 16:40	Prof. Adriano Duatti University of Ferrara, Ferrara, Italy	<i>Molecular imaging and radionuclide therapy of prostate cancer</i>
16:40 – 17:00	Assoc. Prof. Vaso Taleski University Goce Delcev Stip Republic of Macedonia	<i>Where Nanotechnology and Nanomedicine meet – Applications and Potential Risks</i>
17:00 – 17:20	Dr. Aleksandar Cvetkovski University Goce Delcev Stip Republic of Macedonia	<i>The role of molecular cocrystals in drug development</i>
17:20 – 17:40	Prof. Emilija Janevik Ivanovska University Goce Delcev Stip Republic of Macedonia	<i>Drug development based on radiolabeled antibodies</i>
17:40 – 18:00	Closing remarks	

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INTERNATIONAL SYMPOSIUM AT FACULTY OF MEDICAL SCIENCES

“Current achievements and future perspectives in medical and biomedical research”

November 24, 2015 – Stip

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- 2. Adherence to Therapy: A Modern Pharmacotherapeutic Approach**
Author: Zorica Arsovska Sarafinovska
- 3. Use of disinfectants and antiseptics in selected health institutions in Republic of Macedonia**
Author: Biljana Gjorgjeska
- 4. Code of Ethics for Pharmacists – Pharmaceutical Chamber of Macedonia**
Author: Bistra Angelovska
- 5. 4-Hydroxynonenal – major bioactive marker of lipid peroxidation**
Authors: Neven Zarkovic, Kamelija Zarkovic
- 6. Nicotinamide adenine dinucleotide biosynthesis and consumption in dysfunctional white adipocytes**
Authors: Prof. Tatjana Ruskovska, David Bernlohr
- 7. New insights into the chemistry and functions of Coenzyme Q**
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- 8. Genetically modified systems to study muscular dystrophies**
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- 13. Molecular Imaging and therapy with radionuclides of prostate cancer**
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- 14. Where Nanotechnology and Nanomedicine meet – Applications and Potential Risks**
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- 15. The role of molecular cocrystals in drug development**
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- 16. Drug development based on radiolabeled antibodies**
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POSTER PRESENTATIONS

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- 2. Effect of kinesitherapy on physical activity in patient with Guillain-Barré syndrome**
Authors: Antoaneta Dimitrova, Kristin Petrova Grigorova, Daniela Lubenova, Danche Vasileva, Milena Nikolova;
- 3. Case Report :
Oligoasthenoteratozoospermia, treatment with acupuncture**
Authors: Jihe Zhu, Blagica Arsovska, Dance Vasileva, Andrijana Sterjovska-Aleksovska, Kristina Kozovska;
- 4. Treatment of cervical spondylosis with acupuncture**
Authors: Kristina Kozovska, Jihe Zhu, Blagica Arsovska, Andrijana Sterjovska-Aleksovska;
- 5. Effect of kinesitherapy on static and dynamic balance in patient after vertebral basilar system stroke**
Authors: Milena Nikolova, Antoaneta Dimitrova, Danche Vasileva, Daniela Lubenova, Kristin Petrova Grigorova;
- 6. Malignant pleural effusions in lung cancer: the condition during the disease**
Authors: Marija Karakolevska-Ilova, Elena Simeonovska Joveva, Aleksandar Serafimov, Lidija Petrovska;
- 7. Systemic fungal infections in hematological malignancies**
Authors: Petar Kuzmanovski, Velo Markoski;
- 8. Morbidity and mortality of malignant neoplasms in Macedonia**
Authors: Viktorija Vukovikj, Velo Markoski;
- 9. Cognitive behavioral program in treating insomnia among elderly patients**
Authors: Kneginja Richter, Lence Miloseva, Guenter Niklewski, Anja Piehl;
- 10. Regulations and legal aspects in management of medical waste**
Authors: Biljana Shikoska, Cena Dimova, Gjorgji Schumanov;
- 11. Control of the psychiatric disorders in the Republic of Macedonia**
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- 12. Monitoring of the renal function in Indometacin treated patients with rheumatoid arthritis**
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- 13. Incidence of breast cancer in Macedonia**
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- 14. HPV virus as a cause of cancer of the cervix in R.Macedonia**
Authors: Stefanija Joveva, Velo Markoski, Vaso Taleski;
- 15. Analysis of the Pap test results by age groups in the area of Kriva Palanka**
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- 16. Giant rhinophyma treated by excision and full thickness skin grafting**
Author: Emilija Lozanovska Doneva;
- 17. Incidence of patients with chronic renal failure in Skopje**
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- 18. Calculation of effective dose to family members of patients with thyroid diseases**
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- 19. Contemporary Microbiological Diagnostic Tests for Rapid Identification and Detection of Resistance of Mycobacterium tuberculosis**
Authors: Oliver Taleski, Vaso Taleski;
- 20. Analysis of clinical features and complications in patients with β -thalassemia in the region of Strumica**
Authors: Silvana Sinokapovska, Cena Dimova;
- 21. Lymphoepithelioma : A case report**
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- 22. F-ra Capitulum Radii L.Dex. – A Case report**
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- 24. Hereditary supracondylar spur of the humerus: Case report**
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- 25. Prosthetic rehabilitation in patient with advanced degree of functional disorders (case report)**
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- 26. Marginal Implants Bone Loss – a Case Report**
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- 28. Alveolar socket preservation and shaping using temporary prosthetic construction – cases presentation**
Authors: Nikola K. Gigovski, Vesna Korunoska- Stevkoska, Emilija Bajraktarova, Aneta Mijoska, Ana Radeska-Panovska, Ana Gigovska;
- 29. Porcelain veneers produced by refractory die method**
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- 30. Correlation of Two Different Local Hemostatic Modalities in Oral Surgery Patients with Oral Anticoagulants**
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- 31. Assessment of orthodontic treatment need among school children by using iotn (index of orthodontic treatment need)**
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- 35. Oral surgery treatment in the patients with combination syndrome**
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- 41. Determining normal tissue toxicity of non-radioactively Lu/Y-labeled rituximab-conjugates in rat animal model**
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- 50. Determination of active pharmaceutical ingredient – chloropyramine in dragées**
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- 51. Comparison of volatile aroma compounds between cultivated and spontaneous flowering stems of Sideritis scardica Griseb. from R. Macedonia**
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- 53. Development and validation of HPLC method for determination of flavonoids in herbal preparations**
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- 54. Atomic emission spectrometry with inductively coupled plasma (ICP-AES) analysis of trace elements in Camellia sinensis teas**
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- 55. Determination of trace elements analyzed by atomic emission spectrometry with inductively coupled plasma (ICP-AES) in Matricaria chamomilla L. teas present on macedonian market**
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- 56. Human health risks from heavy metals via consumption of contaminated food**
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- 66. Cancer specific conjugated monoclonal antibodies for anticancer therapy**
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- 67. Accreditation of the Laboratory of Radiopharmacy – requested requirements or need of challenge**
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- 68. Quality control of PET radiopharmaceuticals, with reference to its specifics vs quality control of conventional pharmaceuticals**
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- 69. Production of [11C] Choline in The University Institute for PET – new perspective in diagnostics of prostate malignancy in R. of Macedonia**
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- 70. PET radiopharmaceuticals in the diagnosis of neurological diseases**
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- 71. Achievements and perspectives in formulation of stable immunoconjugate of the HER2-targeting trastuzumab – potential for rapid labelling with Gallium-68**
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Faculty of Medical Sciences

University Goce Delcev – Stip, Macedonia

INTERNATIONAL SYMPOSIUM AT FACULTY OF MEDICAL SCIENCES

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Accreditation of the Laboratory of Radiopharmacy – requested requirements or need of challenge

Apostolova Paulina, *Delipetreva Katarina, Smilkov Katarina, Gjorgieva Ackova Darinka, Sterjova Marija, Janevik Ivanovska Emilija*

Faculty of medical sciences, University “Goce Delcev” Stip

Abstract

The Laboratory of Radiopharmacy is a part the Faculty of Medical Sciences, Department of Pharmacy at Goce Delcev University in Stip and was granted by the Government of Republic of Macedonia as a part of the project for improvement of the laboratories in the country. The main field in which the Laboratory of Radiopharmacy has focused after the establishment in 2011 is to introduce a new molecules as a potential radiofarmaceuticals, labeling with radioactive and not radioactive isotopes, defining their structure and especially chemical and radiochemical identification of potential impurities. At the same time, carefully implementing radiation safety program for controlling laboratory environment. The Laboratory is deeply involved in the educational program in all cycles of academic degrees following a few international and local research projects. The laboratory staff is educated and trained in the national and international programs in the field of Radiopharmacy and Radiochemistry, as well included in the training courses dedicated to the implementation the standards and quality assurance providing additional effectiveness in the work.

All that activities including the requested requirements from the Ministry of Education and Sciences were strong enough reasons to start the process of accreditation of the Laboratory of Radiopharmacy and to focus on that all our activities in the next period. The aim of our study is to introduce, to validate and to accreditate the procedures for quality control of radiopharmaceuticals for clinical and research purpose according to regulatory standards. At that stage, we have in progress the process of Accreditation with implementation of Standard MKC EN ISO/IEC 17025 - General requirements for the competence of testing and calibration laboratories. International Standard ISO/IEC 17025 specifies the general requirements for the competence of testing and calibration laboratories if they wish to demonstrate that they operate a quality system, are technically competent and are able to generate technically and scientifically valid results. The compliance these requirements enables the acceptance of testing and calibration results also between laboratories and countries.

Our Laboratory of Radiopharmacy currently is in the phase of implementation of the General requirements for the competence of testing and calibration laboratories of the Standard MKC EN ISO/IEC 17025. This standard holds five clauses, two annexes, and one bibliography section, out of which, the most important are Clause 4, that specifies the management requirements, and Clause 5, that specifies the requirements for technical competence for the type of tests the laboratory undertakes.

At the same time, we are preparing the first method that will be applied to as ISO recognized. The process of accreditation is a long process of implementation of the standards and require continuous engagement of all staff and people included in whole activities of the Laboratory.

After the establishment in the current location and having sufficient and competent staff that was necessary required, we started with the initiative of accreditation. We are expecting that the implementation of ISO/IEC 17025 as part of laboratory quality initiatives will provide both, recognized laboratory in a medical and clinical application including professional benefits, and have important rule in the research and educational field, gain an access to more agreements for testing and improve the national and global reputation. At the same time the aim is constantly to expand data quality and laboratory effectiveness. This will also permit to reach the agreement of the trends of implementation good laboratory under umbrella of international standards like ISO 17025 in radiopharmaceutical and radiochemical laboratories explained as a need of expanding of “good scientific practice”.

The accreditation process of the laboratories according Standard MKC EN ISO/IEC 17025 is also applied for Radiopharmacy and Radiochemistry. We are expecting that our Laboratory of Radiopharmacy will finish the first step of accreditation until June 2016 and be able to continue on the same road of good recognized work following already accepted standards and to have full access and confidentiality to the national and international research and clinical activities.

Keywords: accreditation, Laboratory of Radiopharmacy, MKC EN ISO/IEC 17025.