



Dr. Virna-Maria Stavros Tsitou MD

**Assistant professor at the University Department of Medical Microbiology
Medical Faculty, Medical University - Sofia**

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Nationality: Greek

Secondary education: Greece, City of Ioannina, 2004

Higher education: Medical University, City of Sofia, 2011

Career:

1. Doctor in the Laboratory of Microbiology and Virology at the University Hospital "Queen Joanna - ISUL".
2. Department of Microbiology at the Medical Faculty at MU - Sofia.

Specializations:

1. MSc in Medical Microbiology 2018

Passed the state exam for medical specialty in microbiology - 2018

2. MSc in Health Care Management, Public Health and Health Management. 2020.

Passed the state exam for "Health Care Management", "Public Health and Health Management". 2020.

Scientific specialty: Clinical Microbiology

Dissertation: Defended herthesis "Microbiological and Genetic Studies on the Virulence, Resistance, and Molecular Epidemiology of Staphylococcus aureus Clinical Isolates." and acquired the scientific and educational degree "Doctor" in 2021.

Position: Assistant professor in the Department of Medical Microbiology. 2016.

ISO inspector:

- 1. ISO 9001:2015** –Quality management systems (QMS)
ISO 9001:2015 is a universal standard applicable to any organization in all fields of activity - production, services, trade, healthcare, local and government, etc.
The purpose of the standard is to assist organizations in their quest for quality management. Aristotle University of Thessaloniki 2021.
- 2. ISO 22000** - Food safety management systems. The international standard ISO 22000:2018 (БДC EN ISO 22000:2018) sets the requirements for a food safety management system. Aristotle University of Thessaloniki 2021.
- 3. FSSC 22000** - FSSC 22000 is a food safety standard, one of the standards of the Global Food Safety Initiative (GFSI). Aristotle University of Thessaloniki 2021.
- 4. ISO17025** - The International Harmonized StandardБДC EN ISO/IEC 17025:2018is the third edition ofISO/IEC 17025, which cancels and replaces ISO/IEC 17025:2005. This standard is applied worldwide as a criterion for assessing the competence of laboratories that perform testing and / or calibration, as well as sampling for subsequent testing / calibration. Aristotle University of Thessaloniki.

Memberships in professional organizations:

- 1. Bulgarian Medical Union (BMU)**
- 2. Member of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID)**
- 3. Member of the European Society of Chemotherapy (Infectious Diseases) (ESCID)**
- 4. Member of the Bulgarian Society of Medical Microbiology**

5. Member of the Greek Society of Medical Microbiology

Research interests:

1. Molecular epidemiology of antibiotic resistant *Staphylococcus aureus*.
2. Mechanisms of resistance to macrolides in *Staphylococcus aureus*.
3. Antimicrobial chemotherapy.
4. Antimicrobial resistance: Mechanisms, epidemiology, genetics and susceptibility testing.
5. Antimicrobial resistance, virulence factors.
6. Clinical microbiology.

Qualification courses:

1. Summer school in "medical parasitology" Palaios Panteleimonas Pierias Greece. June 25-28, 2015
2. Course - "Special Microbiology" at the Department of Medical Microbiology - MU Sofia 06/10/2014 - 24/10/2014.
3. Course - "Clinical Microbiology" at the Department of Medical Microbiology - MU Sofia 27/10/2014 - 31/10/2014.
4. Course - "Microbiological diagnosis of anaerobic infections" in the Department of Medical Microbiology - MU Sofia 03 / 11.2014 - 05/11/2014
5. Individual training for postgraduate qualification on the problem: "Epidemiology" in the Department of Epidemiology - MU Sofia 23/03/2015 - 14/04/2015.
6. Individual training for postgraduate qualification on the problem: "Infectious Diseases" - MU Sofia 04/06/2015 - 23/06/2015.
7. Course - General Microbiology and Immunology - "Antimicrobial Chemotherapy" in the Department of Medical Microbiology - MU Sofia 05/10/2015 - 24/10/2015.
8. Course - "Diagnosis and epidemiology of tick-borne infections of leptospirosis and lesteriosis" NCIPD 02/11/2015 - 06/11/2015.
9. Individual training in the module "Virology" in the Department of Virology at NCIPD 09/11/2015 - 28/11/2015
10. Course - "Microbiological diagnosis of tuberculosis" in NCIPD 26/09/2016 - 30/09/2016.

11. Course - "Microbiological diagnosis of particularly dangerous bacterial infections" in NCIPD 10/10/2016 - 14/10/2016.

Teaching activity:

1. Exercises in microbiology of students in medicine, dental medicine and pharmacists in Bulgarian and English languages.
2. Exercises in Postgraduate education in basic and thematic courses of the Department of Microbiology.
3. Introduction and preparation of students in the main areas of microbiology.
4. Participation and preparation of current courses for postgraduate education

Publications (2016-2022):

1. Gergova RT., **Tsitou VS**, Gergova II, Muhtarova AA, Mitov IG
Correlation of methicillin resistance and virulence genes of *Staphylococcus aureus* with infection types and mode of acquisition in Sofia, Bulgaria Afr. J. Clin. Exper. Microbiol. 2019; 20 (4): 280-288.
2. Gergova RT, **V-M. S. Tzitou**, I. G. Mitov. "Molecular-genetic method for fast direct detection of *Staphylococcus aureus* and methicillin resistance in blood cultures and punctures" Folia Medica, 2019; 61(4): 555-61.
3. **Циту В-М.**, Р. Гергова *Staphylococcus aureus* – фактори на вирулентност и ролята им в патогенезата на инфекцията Здраве и наука, година IX, 2019 брой 3, 46-51.
4. Георгиева Б, Гергова Р, **Циту В-М**, Переновска П, Митева Д, Парина С, Корсун Н, Сечанова Л, Петрова Г. Инфекциозни патогени, които могат да предизвикат кашлица при деца извън сезона на зимните епидемии. Наука Пулмология, 2019; 1(50);IX;12-20.

5. Георгиева Б, Гергова Р, Переновска П, **Циту В-М**, Митева Д, Парина, Петрова Г. Протрахиран бактериален бронхит в детска възраст, Практическа педиатрия, 2019;9, 20 -22.
6. **Virna-Maria Tsitou**, Ivan Mitov, Raina Gergova Relationship between MLSB resistance and the prevalent virulence genotypes among Bulgarian *Staphylococcus aureus* isolates. Acta Microbiologica et Immunologica Hungarica. 2021 DOI: <https://doi.org/10.1556/030.2020.01218>.
7. Raina Tzvetanova Gergova , Adile Muhtarova , **Virna Maria Tsitou** , Ivan Mitov Emergence of multidrug-resistant and -hypervirulent *Streptococcus agalactiae* in Bulgarian patients. Balkan Med J 2021;38:143-144.
8. Zornitsa Lazarova, Maya Rashkova, Raina Gergova, **Virna-Maria Stavros Tsitou**. ANTIMICROBIAL EFFECT OF A MEANS FOR ENZYME EXCAVATION (BRIX 3000) AND PHO-TODYNAMIC THERAPY IN CARIOUS LESIONS OF PRIMARY TEETH – IN VITRO EXPERIMENT. Journal of IMAB - Annual Proceeding (Scientific Papers). 2021 Oct-Dec;27(4) <https://doi.org/10.5272/jimab.2021274.4048>.
9. **Циту В-М.**, Р. Гергова Развитие на проблемна резистентност в български клинично значими изолати *Staphylococcus aureus* през периода 2016 - 2020г. Медицински преглед VoI. LVIII 58, 2022 No 1.

Reports and presentations at scientific forums:

1. **Virna - Maria Tsitou**, Rumiana Markovska, Temenuga Stoeva Lena Setchanova, Ivan Mitov. Urinary tract infections – etiology and antimicrobial susceptibility in three University hospitals in Sofia and Varna. "Microbiologia Balkanica 2015" 22-24 Oct. 2015, **Thessaloniki, Greece**. poster.
2. **Tsitou V-M**, R. Gergova, A. Muhtarova, I. Gergova, I. Mitov The toxic potential of Bulgarian clinical isolates *Staphylococcus aureus* determined

by multiplex PCR. 10th Balkan Congress of Microbiology November 16th – 18th, 2017, **Sofia, Bulgaria** – poster.

3. **Tsitou V-M**, R. Gergova, I. Gergova, I. Mitov. DiSTribution of virulence genes and *MEC A* in *Staphylococcus aureus* isolates from outpatients and hospitalized patients. 14th Congress of MicrobiologiSTs in Bulgaria with International Participation, October 10th – 13th, 2018, **Hisarya, Bulgaria** – poster.
4. **Tsitou V-M**, I Mitov, R Gergova. PCR detection of *Staphylococcus aureus* and *mecA* gene in patients with invasive infections. EuroSciCon Conference on Virology and Infectious Diseases April 22-23, 2019, **Athens, Greece** – poster.
5. **V.M.Tsitou**, R Gergova. Health care associated infections - an actual medical problem. International Congress of Medical Sciences, 9 - 12 May 2019, **Bulgaria – Sofia (AMSB-Sofia)** – poster.
6. **Virna-Maria Tsitou**. 11th Balkan Congress on Microbiology, Microbiologia Balkanica. November 21-23 2019, **TIRANA – ALBANIA**. poster.
7. **B.M. Цитю**. The genetic profile of virulence in *Staphylococcus aureus* and its relationship to the pathogenesis of infection. Symposiums "Acad. CHIDOMIR NACHEV" 10 November 2018, **Sofia, Bulgaria** – Oral Presentation.
8. **B.M. Цитю**. Microscopic preparations, growth media and some practical tests in microbiology. 5th International Biomedical Congress of **Sofia Bulgaria** (IBCS) 22-24 October 2021. Oral presentation.
9. **B.M. Цитю**. Disk diffusion test used to determine the antimicrobial sensitivity of bacteria. 5th International Biomedical Congress of **Sofia Bulgaria** (IBCS) IBCJunior 22-24 October 2021. Workshop.

Knowledge and use of foreign languages

1. Greek–Mother tongue
2. English - Excellent
3. Bulgarian–Excellent