



**2nd International Conference in Translational
and Clinical Medicine**

**Digitalization and Artificial Intelligence
in Medical Education and Research**

Faculty of Medicine

Ivane Javakhishvili Tbilisi State University

23-25 May, 2024

Tbilisi, Georgia



Conference is financed by Shota Rustaveli National Foundation of Georgia



Dear Sir/Madam,

It is our pleasure to invite you to the 2nd International Conference in

Digitalization and Artificial Intelligence in Medical Education and Research

on 23rd -25th May, 2024. The conference is organized by the Faculty of Medicine, Ivane Javakhishvili Tbilisi State University in collaboration with Todua clinic.

The conference involves:

- ✦ 2 scientific sessions
- ✦ 4 satellite symposiums
- ✦ Public lectures

Location: TSU 1st Building, I. Chavchavadze Ave 1.



Invited Speakers



Otto Rienhoff
Germany



Ingo Runnebaum
Germany



Stein Kaasa
Norway



Nadey Hakim
United Kingdom



Wolfgang Brück
Germany



Christian Mawrin
Germany



Henning Dralle
Germany



Salvador Martinez
Spain



Max Petzold
Sweden



Ekaterine Berishvili
Berney, Georgia



Marom Sareli
Israel



Daniel Hanley
USA



Liana Gogiasvili
Georgia



Hans J. Schlitt
Germany



Zaal Kokaia
Sweden, Georgia



Javier Padillo
Spain



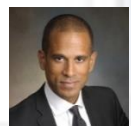
Merab Kiladze
Georgia



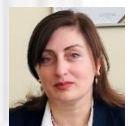
Thierry Berney
Switzerland,
Georgia



Tim Hamelink
Netherlands



Andrew Gumbs
France



Maia Bitskinashvili
Georgia



Gia Tomadze
Georgia



Saak Ovsepián
United Kingdom



Alexander Truskinovsky
USA

Scientific Committee: Dimitri Kordzaia, Javier Padillo, David Prangishvili, Ketí Tsomaia

Organizational Committee: Lika Svanadze, Mariam Mkervalishvili, Merab Vachnadze



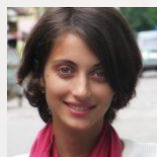
Dimitri Kordzaia



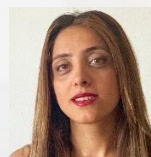
Javier Padillo



David Prangishvili



Ketí Tsomaia



Lika Svanadze



Mariam Mkervalishvili



Merab Vachnadze

Thursday, 23rd May, 2024

09:00 – 10:00	Registration of Participants (TSU 1 st building, large assembly hall)
10:00 – 10:20	<p>Opening Ceremony of the conference (TSU 1st building, large assembly hall)</p> <p>Welcome Speech:</p> <ul style="list-style-type: none"> – Jaba Samushia, Rector TSU – Nodar Papukashvili, Vice-Minister of Education and Science of Georgia – Teimuraz Dochviri, Director of the Shota Rustaveli National Science Foundation of Georgia – Maia Bitskinashvili, Dean of the Faculty of Medicine
10:20 – 10:40	<ul style="list-style-type: none"> – Awarding TSU Honorary Doctor to Ingo B. Runnebaum - Rector TSU, Jaba Samushia – Speech by Ingo B. Runnebaum – Dimitri Kordzaia, Coordinator of the International Advisory Board of the Faculty of Medicine, TSU
10:40 – 11:00	Coffee Break
<p>Session 1: Digitalization and Artificial Intelligence Trends in Translational Biomedicine</p> <p>Chairs: Otto Rienhoff, Ekaterine Berishvili Berney</p> <p>Location: Large assembly hall, TSU 1st Building</p>	
Invited lecture:	
11:00 – 11:40	<p>Otto Rienhoff (Germany)</p> <p>Digital transformation – challenges and chances</p>
Presentations:	
11:40 – 12:00	<p>Max Petzold (Sweden)</p> <p>Health registers – Nordic experience in multigenerational research</p>
12:00 – 12:20	<p>Stein Kaasa (Norway)</p> <p>MyPath – the digital solution to patient-centred cancer care</p>
12:20 – 12:40	<p>Ekaterine Berishvili Berney (Switzerland)</p> <p>Transforming diabetes treatment: The convergence of cell-based therapies and digital technologies</p>
12:40 – 13:00	Discussion
13:00 – 14:00	Lunch
<p>Session 2: Visualization and Computer Diagnostics</p> <p>Chairs: Salvador Martinez, Liana Gogiashvili</p> <p>Location: Large assembly hall, TSU 1st Building</p>	
Invited lecture:	
14:00 – 14:40	<p>Zaal Kokaia (Sweden, Georgia)</p> <p>Human reprogrammed oligodendrocytes for remyelination of damaged and brain-grafted neurons</p>
Presentations:	
14:40 – 15:00	<p>Christian Mawrin (Germany)</p> <p>Molecular profiling of human meningiomas</p>
15:00 – 15:20	<p>Salvador Martinez (Spain)</p> <p>Pathology of ALS: new molecular markers of spinal cord neurodegeneration</p>
15:20 – 15:40	<p>Liana Gogiashvili (Georgia)</p> <p>"Chemo - brain" - Doxorubicin-induced neurotoxicity in acute experiment (Histopathology, Immunohistochemistry)</p>


15:40 – 16:00	Alexander M Truskinovsky (USA) – via Zoom platform New research topics in breast pathology
16:00 – 16:20	Discussion
Thursday, 23rd May, 2024 19:00 – Gala Dinner - Invitation by Dean of the Faculty of Medicine	

Friday, 24th May, 2024 Satellite Symposiums	
09:00 – 09:30	Registration of Participants (TSU 1st building, TSU Museum)
Satellite symposium 1: Surgery and Transplantation - the Role of Digitalization and Artificial Intelligence Chairs: Nadey Hakim, Merab Kiladze Location: TSU Museum, TSU 1st Building	
Invited lecture:	
09:30 – 10:10	Nadey Hakim (United Kingdom) Ethical and legal problems of modern surgery using AI
Presentations:	
10:10 – 10:30	Hans J. Schlitt (Germany) Innovative aspects in liver surgery and transplantation
10:30 – 10:50	Gia Tomadze (Georgia) Current status of organ transplantation in Georgia: what do we expect from the new law
10:50 – 11:10	Andrew A. Gumbs (France) How artificial intelligence could eradicate mortality from colorectal cancer
11:10 – 11:30	Tim Hamelink (Netherlands) Models in kidney transplantation: from AI models to organ models
11:30 – 12:00	Coffee Break
Invited lecture:	
12:00 – 13:00	Ingo B. Runnebaum (Germany) AI-guided surgery – or – How not to die of ovarian cancer
Presentations:	
13:00 – 13:20	Henning Dralle (Germany) Syndromic hereditary medullary thyroid cancer: 30 years translational medicine from genetic diagnosis to cancer preventive surgery
13:20 – 13:40	Thierry Berney (Switzerland) Promises and expectations of artificial intelligence in pancreas transplantation
13:40 – 14:00	Javier Padillo (Via Zoom Platform) The role of vascular approach on R1 resection after pancreaticoduodenectomy in pancreatic cancer of the head of the pancreas
14:00 – 14:20	Discussion
14:20 – 15:00	Lunch

Satellite symposium 2: Innovations in Medical Education and Science using Digitalization and Artificial Intelligence Chairs: Wolfgang Brück, Otto Rienhoff, Maia Bitskinashvili Location: Auditorium N115, TSU 1st Building	
Invited lecture:	
09:30 – 10:00	Otto Rienhoff (Germany) German teaching hospitals and digital transformation – different strategies of how to address an overwhelming challenge
Presentations:	
10:00 – 10:20	Daniel Hanley (USA) Performing multicenter clinical trials with cloud-based systems
10:20 – 10:40	Saak Ovsepian (Great Britain) – via Zoom platform Biomolecules to biomarkers - A paradigm shift in translational biology
10:40 – 11:00	Lika Svanadze, Maia Bitskinashvili, Mikheil Jangavadze, Roman Shakarishvili, Dimitri Kordzaia Information about the first steps of implementation of digitalization and AI at the Faculty of Medicine, TSU
11:00 – 11:20	Discussion
11:20 – 12:00	Coffee Break

15:00	Satellite symposium 3: Meeting of the International Advisory Board of the Faculty of Medicine, TSU Location: Auditorium N115, TSU 1st building
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Satellite symposium 4: Public Lectures (in Georgian Language) – will be recorded by “Pulsi TV”	
Ekaterine Berishvili Berney	
Zaal Kokaia	
Marom Sareli	
Dimitri Kordzaia	



Friday, 24th May, 2024
18:00 – Dinner for International Guests

Saturday, 25th May, 2024
**9:00 – 20:00 - Social program for international guests (Museum for History of Georgian
Medicine, Guided Tour to the Jvari Monastery)**

7 Things About Georgia

Georgia is a home of the first Europeans. The oldest human skull discovered in Dmanisi located in southern Georgia, Kvemo Kartli region. You can visit museum to see the **1.8 million-year-old** fossilized remains of the first discovered human couple in Europe whose names sound truly Georgian: **Zezva and Mzia!**



Winemaking can be dated back to **8000 BC in Georgia**, where evidence of grape cultivation has been found. The qvevri - an earthenware vessel used to store and age wine for thousands of years - is becoming the unofficial symbol of the country. Qvevri is listed in the Representative List of the Intangible Cultural Heritage of Humanity by UNESCO.



Georgia claims to be the birthplace of honey. The honey samples discovered in the village of Sakire, Borjomi (Southern Georgia) are believed to be made by the bees that buzzed in Georgia **5,500 years ago**. The 5,500-year-old honey samples are 2000-year older than the samples of Egyptian honey that were considered to be the oldest.



The discovery of the oldest dyed flax fibers in a cave in Georgia dated to **thirty-six thousand** years ago suggests that ancient people used wild flax fibers to create linen-like fabrics from an early date.



Georgian history dates back for several millennia, having its roots in the **second half of the III mill. BC**. Ancient Georgian tribe Tubal (Tuval) is mentioned in the Bible as founder of the metallurgy and blacksmith art. Ancient Georgian metallic artifacts are found spread across the entire Middle East – Mesopotamia, Syria and the Anatolian Kingdoms.



Georgia (old Colchis) is the motherland of Medea – the **Kolkhetian Princess**, the famous herbal physician **holding the Golden Fleece** (well-known from the Greek mythology). The word “Medicine” is related to her name.



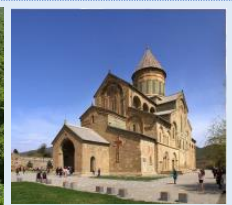
Georgia is country of Apostolic Autocephaly Orthodox Church (Christianity is state religion **since 4th Century**)



St. Nino's Church
IV Century



Nekresi Monastery
V Century



Svetitskhovli
XI Century