



MEDICAL  
UNIVERSITY  
OF LODZ



PhD  
summer  
school

NAWA-STER Summer School

## “How to influence scientific outcomes with innovations”

room 01.11 · Clinical and Didactic Center at the Medical University of Lodz



**Speakers (Day 1 • 09.07.2024)**



### **Prof. Joanna Klubo-Gwiezdzinska, MD, PhD, MHSc**

Lasker Tenure Track Investigator is the Acting Section Chief of Thyroid Tumors and Functional Thyroid Disorders at the Metabolic Diseases Branch, National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health in Bethesda, MD. She obtained her MD and PhD degree from Nicolaus Copernicus University, Collegium Medicum in Bydgoszcz, Poland, and Master of Health Science degree from Duke University, Durham, NC, USA. She underwent residency training in Nicolaus Copernicus University, Poland as well as Georgetown University, Washington, DC and fellowship in endocrinology at the National Institutes of Health, Bethesda, MD, USA. She is board certified in internal medicine and endocrinology, diabetes and metabolic diseases.

Prof. Klubo-Gwiezdzinska's primary scientific focus involves translational and clinical studies focused on the optimization of thyroid cancer diagnosis, as well as appropriate risk stratification and therapy aimed at improving patients' morbidity and mortality outcomes utilizing personalized medicine. She is an author of 95 publications in high impact journals including *JAMA*, *Lancet Oncology*, *Clinical Cancer Research* and 12 book chapters. Prof. Klubo-Gwiezdzinska is a recipient of several awards for her work, including prestigious the American Society for Clinical Investigation 2021 Young Physician-Scientist Award and Women Advancing Thyroid Research Award from the American Thyroid Association.

## Summer School lectures:

- “Innovations – the Exciting Journey of Bench to Bedside Translation”
- “One Size Does Not Fit All – Precision Medicine Applied to Thyroid Disorders”
- “Introduction – International Programs for Early Career Investigators”



### **Prof. Andrzej Lewiński, MD, PhD**

Andrzej Lewinski is a professor of endocrinology and a specialist in endocrinology, paediatric endocrinology and diabetology, internal medicine, nuclear medicine and public health.

He is a member of numerous professional societies, including the European Society of Endocrinology, European Thyroid Association and others. He was a member of Council of the European Pineal Study Group - EPSG (1990-1993), officer of the Executive Committee of the European Federation of Endocrine Societies (1994-2001), President of the Polish Society of Endocrinology (1993-1999) and President of the Polish Thyroid Association (2007-2017).

Professor A. Lewinski is an active leader in the medical community, having held a number of important functions, including the Director of the Department of Science and Education at the Ministry of Health of Poland (1997-2000), National Consultant in Endocrinology in Poland (1994-2002, 2009 and still), Rector of the Medical University of Lodz (2002-2008) and Vice-Chairman of the Advisory Board of the Polish Agency for Health Technology Assessment (2008-2012). He was also a member of the Central Commission for Academic Title and Degrees in Poland (2011-2020), as well as one of the founders and the first President of the Polish Society of Oncological Endocrinology (2017- and still).

His editorial activity in Polish and international journals comprises, among others, functions of the Editor-in-Chief of “Polish Journal of Endocrinology” (2000-2002), Honorary Editor of „Neuroendocrinology Letters” (since 2006), as well as Editor-in-Chief of „Thyroid Research”, BMC Ltd., London (2008-2020).

In 2013, Prof. Lewinski was honoured with a title of Doctor Honoris Causa by the St. Elizabeth University of Health and Social Sciences (Bratislava, Slovakia).

Professor Lewinski is the Chairman of Coordination Team of the “National Program of Severe Growth Hormone Deficiency Treatment in Adults and Adolescents after Completion of Growth Promoting Therapy” (since 2020).

Professor Lewinski has been an author or co-author of 512 original papers published in peer-reviewed foreign and Polish journals.

Professor Lewinski was Head of the Department of Endocrinology and Metabolic Diseases, Medical University of Lodz (2005-2023) and Polish Mother`s Memorial Hospital Research Institute (2000-2023). Currently, he is a professor at the Department of Paediatric Endocrinology, Medical University of Lodz (since 2023).

**Summer School lecture:** “Negative Feedbacks in Regulation of the Hypothalamo-Pituitary-Thyroid Axis”



## **Prof. Małgorzata Karbownik-Lewińska, MD, PhD**

Specialist in Endocrinology (since 1998) and Internal Medicine (since 1995)

Head, Chair/Department of Endocrinology and Metabolic Diseases (since October 2023; before head, Chair/Department of Oncological Endocrinology) Medical University of Łódź;

Consultant in endocrinology, Polish Mother's Memorial Hospital – Research Institute, Łódź.

Scientific title of Professor of Medicine – 2004

Hirsch Index-34 (ISI Web of Science Core Collection)

Total times cited-over 6000

Impact Factor-over 300

Invited Lecturer and Meet-the-Expert at international conferences (e.g. *European Congress of Endocrinology*, *Congress of the European NeuroEndocrine Association*).

Member of several professional societies, including: the European Society of Endocrinology, European Thyroid Association, Polish Thyroid Association (Vice-President), Polish Society of Endocrinology, Polish Society of Oncological Endocrinology (Member of Executive Committee).

Others:

American Cancer Society International Fellowship for Beginning Investigators (founded by the International Union Against Cancer, UICC) – Department of Cellular and Structural Biology, the University of Texas Health Science Center at San Antonio, USA (1999-2000).

Fellow/Life Member of the Association of UICC Fellows & Reviewer for UICC.

National Coordinator of KIMS (Pfizer International Metabolic Database).

Main research areas: Thyroid dysfunction in women of childbearing age (pregnancy included); Hypopituitarism; Oxidative stress in experimental models and clinical studies; Melatonin as an antioxidant; Growth hormone deficiency in adults.

### **Summer School lecture:** “Selected Issues in Clinical Endocrinology in Everyday Practice”

The lecture will cover several issues, including the following:

- Exploring Thyroid Tests: The Central Role of TSH Measurement;
- Reference Ranges for Thyroid Tests and Their Dependence on Age;
- Hashimoto's Thyroiditis as the Most Common Endocrine Disease;
- Clinical Cases of Thyroid Dysfunction in Women of Childbearing Age;
- Multihormonal Hypopituitarism.

Suggested sources: <https://doi.org/10.5603/EP.a2021.0089>; <https://doi.org/10.1210/jc.2016-2118>



## Prof. Krzysztof Cezary Lewandowski, MD, PhD

Professor Krzysztof Cezary Lewandowski graduated with distinction from the Medical Academy of Lodz in 1992, prior to this having completed part of his undergraduate training at the University of Leeds School of Medicine (UK) – years 1991-1992. Subsequently he requalified as a physician in the UK having passed The Professional & Linguistic Board Test in London in July 1994. Between 1995 and 2023 he completed full training programme in Endocrinology, Diabetes and General (Internal) Medicine in the United Kingdom, finally obtaining the UK and the EU specialist degree in endocrinology, diabetes and internal medicine in March 2023 (The United Kingdom Certificate of Completion of Specialist Training).

During his work in the UK he also developed research interests particularly in the field of adipokines, appetite regulation, pituitary diseases, thyroid as well as various aspects of endocrine disorders during pregnancy and reproductive endocrinology. He obtained a PhD at the Medical Academy of Lodz in 1999 and the University of Warwick (UK) in 2001.

Having returned from the UK in 2003 he has been employed in the Department of Endocrinology & Metabolic Diseases of the Medical University of Lodz, where he continued and broadened his clinical and research interests originally developed in the UK.

In 2012 he obtained a full professorial degree awarded by Bronisław Komorowski, the president of Poland. He continued his collaborative work with the University of Warwick (UK) - Professor Harpal S Randeve as well as with the University of Lubeck (Germany) – Professor Georg Brabant.

He is a leading author of over seventy original papers in the field of endocrinology & diabetes with Hirsh index of 16 and around 2000 citations.

**Summer School lecture:** “Difficulties In the Management of Amiodarone-Induced Thyrotoxicosis”.

Amiodarone is an effective drug used in treatment of both supraventricular and ventricular cardiac arrhythmias. The lecture would cover both etiology and differential diagnosis of amiodarone-induced thyroid disorders as well as an outline on available modalities of treatment. Despite these options there are clinical situations associated with failure of medical treatment and relevant cases together with an outline of their subsequent management will be presented.

Suggested reading: Ylli D, Wartofsky L, Burman KD. Evaluation and Treatment of Amiodarone-Induced Thyroid Disorders. *The Journal of Clinical Endocrinology & Metabolism*, 2021; 1: 226–236, <https://doi.org/10.1210/clinem/dgaa686>



## **Katarzyna Wojciechowska-Durczyńska, MD, PhD**

graduated with distinction from the Medical University of Lodz in 2005. She obtained specialist degree in Internal Medicine (2012) and Endocrinology (2016). As part of her specialization, she deals with a wide spectrum of endocrine disorders affecting the thyroid, adrenal, pituitary and parathyroid glands. Additionally, she has many years of experience in performing thyroid ultrasound examination and fine-needle aspiration biopsy of the thyroid gland.

She is also a certified specialist in osteoporosis treatment and clinical densitometry. She is the Chairwoman of the Lodz Branch of the Polish Society of Endocrinology since 2021 up to now and she was the Secretary of the Lodz Branch of the Polish Society of Endocrinology since 2012 up to 2021.

During her work she also developed research interest particularly in the field of thyroid cancer and thyroid autoimmunity. She obtained a PhD diploma with honors from the Medical University of Lodz in 2010 for paper entitled “Assessment of phosphoinositide kinase gene expression level in chronic autoimmune thyroiditis, papillary thyroid carcinoma and nontoxic nodular goiter”

Dr Wojciechowska-Durczyńska has been working as an adjunct (before assistant) at the Department of Endocrinology and Metabolic Diseases of the Medical University of Lodz since 2006 up to now.

Dr Katarzyna Wojciechowska-Durczyńska is an author of over thirty original and review articles in the field of endocrinology with Impact Factor 39,468.

**Summer School lecture:** “Hyperthyroidism – Clinical Picture”

Suggested sources: <https://pubmed.ncbi.nlm.nih.gov/21455118/>



## **Adam Śmiałkowski, MD, PhD**

Specialist in Internal Medicine

Resident in Diabetology

PhD degree – 2012

Assistant in the Department of Endocrinology and Metabolic Diseases, Medical University of Łódź

Senior Assistant in the Department of Endocrinology and Metabolic Diseases, Polish Mothers Memorial Hospital – Research Institute, Łódź

Main research areas: congestive heart failure, hypertrophic cardiomyopathy, echocardiography, speckle tracking echocardiography, diabetology.

Principal Investigator, National Coordinator of numerous clinical trials in the field of cardiology, pulmonology, diabetology.

Dr Adam Śmiałowski is an author of six original and review papers.

## Summer School lecture: “Acute Congestive Heart Failure – Practical Issues”

Pulmonary edema most commonly presents as a consequence of congestive heart failure deterioration and is a risk factor for hospitalization and death. The aim of this presentation is to elaborate pathophysiology, diagnosis, prognostic factors, treatment, and outcome of this disease.

Suggested sources: <https://pubmed.ncbi.nlm.nih.gov/23319101/>

## Speakers (Day 2 • 10.07.2024)

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### **Aneta Salamon, PhD**

Director of the Clinical Trials Support Center constantly improving her qualifications (including M.Sc., PhD, postgraduate studies in clinical trials methodology, MBA). She gained her professional experience in private and academic centers as well as in a medical research agency.

She develops her competence in projects requiring the highest quality of execution and creativity. She skillfully leads a team of experts whose work changes the quality of clinical trials in Poland. Fully involved in all aspects and stages of the project with a distinction of the conceptual part of the start-up. Eagerly takes the initiative to carry out demanding tasks and projects with high substantive and practical values, treating them as a challenge and valuable experience.

### **Course description:**

The aim of this course is to acquire and develop knowledge in the field of clinical trials. Students will learn basic information about polish market of clinical trials and their role in healthcare. In addition, they will have the opportunity to identify differences between noncommercial and commercial Clinical Trials which are conducted at the Medical University in Lodz. Students will also gain the knowledge about current legislations applicable to clinical trials, both in Poland and European Union.



**Mec. Anna Szmigiel-Woźniacka** – legal advisor, graduate of the Faculty of Law and Administration of the Jagiellonian University in Krakow, specialist in clinical trials law and personal data protection.

She completed part of her studies as part of a scholarship at the University of Antwerp in Belgium, where she completed the International and European Legal Studies Program with "magna cum laude" distinction. A graduate of the School of American Law organized by the Jagiellonian University and the Columbus School of Law, Washington, she completed numerous foreign courses and internships, including a European Business and Economy course at the University of Utrecht, the Netherlands, and an internship at a law firm in Cadiz, Spain.

Presenter of numerous lectures on personal data and clinical trials.

She is fluent in English (CAE certificate) and Spanish (DELE certificate).



**Prof. Wojciech Fendler, MD, PhD** (born 1982) graduated from the Medical University of Lodz. After obtaining PhD in 2011 and habilitation in 2013 he launched a biomarker project on microRNA biomarkers in oncology and radiotherapy together with prof. Dipanjan Chowdhury from the Dana-Farber Cancer Institute and Harvard Medical School. He has authored numerous high-impact publications in top journals in diabetology (Diabetes Care, Diabetologia), radiotherapy and oncology (International Journal of Radiation Oncology, Biology, Physics, Cancer Research, Clinical Cancer Research), experimental medicine (Science Translational Medicine) and basic sciences (Cell Reports, Nature Communications, eLife). Prof. Fendler is the recipient of several prestigious awards for young researchers including the Award of the National Science Centre in Life Sciences in 2020, START scholarship of the FNP (twice), Stipend of the Polpharma Foundation, Scholarship of the Ministry of Science and Higher Education, award of the Ministry of Health for habilitation and several others. International recognition of his works was awarded with the ISPAD-Medtronic Young Investigator Award in 2015 granted to outstanding researchers aged <40 in paediatric diabetology. During his career he has lead or supervised 28 research projects funded from the National Science Centre, Foundation for Polish Science and EU funds. Currently, as a leader of the Department of Biostatistics and Translational Medicine he explores the potential for biomarker assessment of risk incurred by ionizing radiation and detection of early stages of ovarian, breast and pancreatic cancers.

## **Course description:**

The aim of the subject is to expand the doctoral student's knowledge regarding the **publishing process**. The course will focus on best standards of critical manuscript reading. The course program includes 3 hours of practical exercises including an introductory talk with a multimedia lecture and discussion.

The course covers basics of research writing and formatting text to improve chances of publication or obtaining grant funding. The introductory lecture will include examples of basic rules of the scientific writing style including common pitfalls and issues to avoid when writing in non-native English tailored for scientific journals. The practical part will cover formatting abstracts to improve flow of the text, modifying titles, shaping the proper narrative and using text-editing methods to improve style.

During the practical class, the PhD students will work either in groups or individually with appropriately prepared materials. The classes will be concluded with a discussion panel for elaboration on the issues identified by the participants doctoral students, allowing to focus on specific concerns and issues encountered during the students' careers.



### **Agnieszka Goszczyńska, MA**

Graduate of the Faculty of Philology at the University of Lodz. Pro-active ambassador for Open Science. Currently works as a senior librarian at the Information and Library Center of the Medical University of Lodz. She supports employees in publications and research data management.

### **Workshop description:**

#### **Think, check, submit – how to target right journal**

The workshop is focused on scientific publishing. Participants will learn how to find the best-suited journals for publishing articles and avoid predatory ones. The workshop will enable to build critical thinking skills.

Required: Abstract, Title, Keywords.

### **Speakers (Day 3 • 11.07.2024)**

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### **Prof. Arkadiusz Sitek**

is a Professor at Harvard Medical School and an Associate Investigator at Massachusetts General Hospital, Center for Advanced Medical Computing and Analysis, where he applies expertise in artificial intelligence (AI), data science, and medical physics to address healthcare challenges. With over 20 years of experience in this field, he is passionate about integrating technology and medicine to enhance patient outcomes, improve clinical workflows. Previously employed at IBM and Philips Research in

Cambridge. In 2006-2015, assistant professor at Harvard Medical School, and a medical physicist at the Brigham and Women's and Massachusetts General Hospitals. In years 2001-2006 scientist in Lawrence Berkeley Labs in Berkeley and Beth Israel Medical Center in Boston. His professional interests are focused on the use of computing in medicine. He specializes in the application of statistical methods in healthcare, medical data visualization, medical physics, and machine learning.

His research focuses on developing and implementing AI-driven solutions for various healthcare domains, such as clinical decision support systems, computer vision for diagnostic medical imaging, biomarker discovery, and telemedicine. He aims to advance healthcare innovation through AI and data science, collaborating with a multidisciplinary team of clinicians, researchers, and data scientists. His work has been recognized in numerous journals and awards, and involves partnerships with global industry and academic institutions. He also leads teams and research programs, effectively communicating complex ideas to diverse audiences. With a PhD in Medical Physics, he has a strong background in both the theoretical and practical aspects of AI and healthcare.



**Maciej Węgierski, PhD** – Doctor of Law; Assistant Professor at the Department of Economic and Commercial Law at the University of Łódź; lawyer; graduate of the International Legal Studies Program at the University of Antwerp; specializes in civil and commercial law, especially in the field of e-commerce and capital market; author of articles on electronic commerce, new technologies law, and capital market, and the monograph "Legal Characteristics of Contracts Concluded Electronically" (Warsaw 2020), co-author of Volume V of the Commercial Law System (Warsaw 2020).



**Michał Pytkowski, MA**

PhD student at the Doctoral School of Social Sciences at the University of Łódź preparing a dissertation in the field of legal sciences within the scope of commercial law; lawyer at the Domański Zakrzewski Palinka (DZP) law firm.

**Summer School lecture:** Legal aspects of the usage of artificial intelligence

The subject of the lecture will be legal aspects of the use of artificial intelligence in the light of applicable legal regulations and planned regulations in the European Union. A key issue is the liability of entities using artificial intelligence mechanisms in medical services.



## **Krzysztof Grzegorz Filipczak, PhD**

(degree – 2017)

Assistant Professor at Quality Control and Radiation Protection Department of Medical University of Lodz,

Medical Physicist & Radiation Protection Officer at Nuclear Medicine Department of Central Clinical Hospital of Medical University of Lodz.

Dr Krzysztof Grzegorz Filipczak main activity areas are image processing and quality control in Nuclear Medicine. He was involved in quantitative analysis of typical nuclear medicine protocols like myocardial perfusion imaging, dynamic renal scintigraphy and also liver elastography - where his programming and analytical skills were used. Dr Krzysztof Grzegorz Filipczak is an author and co-author of several publications.

He is responsible for quality management and radiation protection in Nuclear Medicine Department where he shares responsibilities of Radiation Protection Officer and Medical Physicist.

### **Summer School lectures:**

"Potential applications of artificial intelligence in medicine, with primary focus on nuclear medicine".

"Artificial intelligence in nuclear medicine today - current applications"



## **Paweł Cichocki, PhD**

Assistant Professor and Nuclear Medicine Physician  
Nuclear Medicine Department of the Medical University of Lodz

Dr Paweł Cichocki coordinates nuclear medicine classes with Polish-speaking and English-speaking students of the Medical University of Lodz and actively participates in seminars for International Doctoral School students.

He obtained a PhD diploma with honors from the Medical University of Lodz in 2021 for a dissertation entitled "Ocena przydatności dodatkowych parametrów dynamicznej scyntygrafii nerek w diagnostyce uro/nefropatii zaporowej".

His primary research interests are applications of nuclear medicine procedures in nephrology and cardiology. Dr Paweł Cichocki is an author and co-author of ten publications.

### Summer School lectures:

"Potential applications of artificial intelligence in medicine, with primary focus on nuclear medicine".

"Artificial intelligence in nuclear medicine today - current applications"



**Paweł Gadzicki, MD** is a nuclear medicine physician (Board exam 2023) with Postgraduate Diploma in Data Science (Lodz University of Technology 2022) and teaching assistant (since 2020, Nuclear Medicine Department at MUL). Paweł completed EIT Health course HelloAI RIS Programme (2021) designed in a collaboration of the Royal Institute of Technology Stockholm (KTH), LEITAT Technology Center and GE Healthcare. The aim of this course was to adequately use AI in clinical practice, including machine learning and data science. Paweł is interested in Data

Science, AI, and radiomics implementation in nuclear medicine, nuclear cardiology and oncology. Since 2021 up to now he is also a secretary of Regional Division of Polish Association of Nuclear Medicine.

### Summer School lectures:

"Potential applications of artificial intelligence in medicine, with primary focus on nuclear medicine".

"Artificial intelligence in nuclear medicine today - current applications"

## Speakers (Day 4 • 12.07.2024)

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**Janusz Janczukowicz, PhD** is the Head of the Centre for Medical Education and the Vice Dean for Education at Medical University of Lodz. He is the Chair of the WHO Academy Quality Committee, the consultant in education for the WHO Europe Region and the WHO Pan-European Leadership Academy Lead for Education. He is working with multiple educational organisations, including being the advisor for Association of Medical Schools in Europe (AMSE) and the AMEE Governing Committee member. He is the member of the Board of Directors of European Institute of

Women's Health, external expert for multiple accreditation committees and the Associate Editor of the Medical Teacher Journal.

### Workshop description:

#### Trauma informed care and trauma informed education

The workshop is focused on the development of communication competence related to clinical, research and educational practice guided by the concepts of Trauma Informed Care and Trauma Informed Education. Participants will reflect on the role of

social suffering and structural violence to include “patient and learner – in context” paradigms in adjusting own communication. The workshop will enable participants to build leaderships skills focused on communication through listening for understanding instead of listening for responding.



**Paulina Sobierańska, MSc** is a psychologist, teaching assistant at the Centre for Medical Education at the Medical University of Lodz (MUL) with a PGCert in Medical Education from the University of Dundee (Scotland). She has 10 years of teaching experience with a special focus on clinical communication and professionalism for students from various programmes in the biomedical sciences. As a trainer, she has facilitated multiple workshops in four EU projects and for the past 9 years facilitated sessions within the Faculty Development Programme (FaDevPro) at MUL. The sessions topics include: curriculum planning and development, teaching strategies and methods, medical simulation, student engagement, methods and tools for e-learning, interprofessional education, and assessment methods.



**Łukasz Strąkowski, MSc** is a psychologist, specialist at the Centre for Medical Education at the Medical University, and a doctoral student at the International Doctoral School of the Medical University. During his doctoral studies, he focuses on analyzing education standards in biomedical sciences, with particular emphasis on developing leadership competencies. He also conducts classes with students in the areas of professionalism and communication skills.