# Andrzej Stanisław Urbanik

#### **Education**

- 1960 1968 Primary School No 15 in Rzeszów
- 1968 1972 High School No III in Rzeszów
- 1965 1970 Primary Music School in Rzeszów
- 1970 1971 Secondary Music School in Rzeszów
- 1972 1978 Faculty of Medicine, Medical University, Kraków
- 1991 Radiology specialist degree
- 1991 PhD degree
- 2003 Associate Professor
- 2009 Professor

#### Professional activity

1978 – 1988 Chair of Radiology, Medical University, Kraków (assistant)

- 1978 1988 Department of Radiology, The State Hospital of Medical University in Kraków (assistant)
- 1988 1992 Institute of Radiology, Medical University, Gdańsk (lecturer)
- 1988 1992 Department of Radiology, The State Hospital of Medical University,
- Gdańsk (senior assistant)
- Since 1992 Chair of Radiology, Collegium Medicum, Jagiellonian University, Kraków (Head 1998-2022, since 1.10.2022 profesor senior)
- 1992-2022 Department of Diagnostic Imaging, University Hospital, Kraków (Head 1998-2022)
- 2005 2015 Provincial Center for the Mammography Screening Program (Head) Since 2013 Chair of Electroradiology, Medical Faculty, University of Rzeszów (organizer, 2013-2017 – head, since 1.10.2022 profesor senior)

# Scientific activity

344 publications: articles (peer-reviewed Polish and international journals), chapters in books, video/CD films

716 presentation abstracts published at Polish (459) and international (257)

congresses

Grants of the Committee for Scientific Research (supervisor or main contractor) - 7

Statutory research project – 13 (supervisor), 57 (co-contractor) Supervisor of the 24 Ph.D. dissertations Supervisor of 5 habilitations theses, tutor of four profesor Supervisor of specialty training of 18 doctors

#### Organizing activity

1988 – 1992 Secretary of Polish Medical Society of Radiology (PLTR),

1993 – 2004 Secretary of Vascular and Interventional Radiology Group of PLTR,

1998 - 2018 Regional Consultant in Radiology and Diagnostic Imaging in the Małopolska Province

2004 – 2006 President of Vascular and Interventional Radiology Group of PLTR, 2004 – 2006 Member of the Committee of Didactics of European Association of Radiology

2004 - 2016 V-ce President of Polish Medical Society of Radiology (PLTR), Since 2007 Member of the Radiation Hygiene and Radiobiology Commission of Committee of Medical Physics, Radiobiology and Diagnostic Imaging, Polish Academy of Sciences

2007 – 2010 Member of the Diagnostic Imaging Commission of Committee of Medical Physics, Radiobiology and Diagnostic Imaging, Polish Academy of Sciences Since 2016 Member of Committee for the History of Science and Technology, Polish Academy of Sciences

2016 - 2019 President of Polish Medical Society of Radiology (PLTR),

Editorial Board Member: Polish Journal of Radiology, Medical Revue (Przegląd

Lekarski), Practical Medicine - Oncology, Engineer and Medical Physicist

Founder and president – PolradiologiaViva Foundation (2016)

Editor-in-chief (and founder) of the website www.polradiologia.org

(1998-2019) and www.inforadiologia.pl (since 2018)

Chairman of the organizing or scientific committees of 210 courses, symposia and congresses – including European Congress of Neuroradiology, Royal College of Radiologists Training Team, Halley Project Courses, European Seminar on Diagnostic and Interventional Radiology, European School of Radiology Courses, Symposium International Society for History of Radiology, Polish Congress of Ultrasound, Polish Congress of PLTR

Originator of the cyclical scientific events: Kraków Radiology Meeting (KSR),

Regional Radiology Meeting (RSR), Polish Forum of Interventional Radiology (OFRI), Radiology – A Common Cause' Symposium (RWS).

Organizer of internship programme for young radiologists from Ukraine (2008-2011) Initiator and organizer of the Polish Radiological Sailing Championships Initiator and organizer of the Polish Radiological Skiing Championships

Implementation and interesting research projects (with the team of the Chair of Radiology)

1. Examination of the Egyptian mummies (1995-2000)

 one of the world's first comprehensive studies of mummies using modern postprocessing techniques, including the first attempt of the facial reconstruction based on image data only, without unwrapping the mummy.

Continuation of the program – the 20s of 21st century.

2. X-ray and CT examinations for paleopathology (since 1998)

investigation of the remains from historical cemeteries

3. Development and application of MR cholangiopancreatography methods (1989-1990)

the first comprehensive evaluation of the usefulness of MRCP performed in Poland;
 a monograph was published

4. The introduction of the CT and MR virtual endoscopy into the diagnostic imaging (1998)

• the first in Poland examinations using CT and MR virtual endoscopy and the application of these method into the routine diagnostic imaging

5. Functional MR imaging (fMRI) of brain (since 1998)

 one of the first in Poland fMRI examinations (in 1998 they were started in Kraków and Łódź) performed on a large scale, especially the innovative study of memory, aspects of bilingualism, left-handedness, emotions, pain, and hypnosis

 Spectroscopy examinations of brain, especially concerning brain aging (since 1998)

• the first in Poland comprehensive HMRS examinations concerning brain aging (then they were completed with fMRI studies)

7. Phosphorous MR spectroscopy (since 1999)

the first in Poland CSN and muscles examinations using phosphorus MR spectroscopy

8. Methods of the MR dental diagnostics (since 1999)

 the first in Poland MR examinations of temporomandibular joint as well as the application of CT examination in the planning of implants especially so-called double scan technique

9. Cerebrospinal fluid - MR study (1999)

10. MR diffusion (dWI) (since 1999)

 continuation of experimental work from the 1990s on animals (cooperation between the Department of Radiology, Collegium Medicum of the Jagiellonian University and the Institute of Nuclear Physics); the research turned out to be pioneering in the world

- Grand Prize at the European Magnetic Resonate Congress in Brussels.

11. Information systems in radiology and teleradiology

• the first in Poland RIS (1998), PACS (1999) and teleradiology system (1998); it is noteworthy that these systems were developed "in-house"

12. Rapid Prototyping (since 2000)

• the first in Poland experiments with the medical modeling technique with practical application in maxillofacial surgery and neurotraumatology

13. Radiological examinations of flowers and shells using the digital technique (since 2001)

• first radiological examinations of flowers and shells were carried in the Chair of Radiology in the early 80. of the XX century; since 2001 they were continued using the digital radiography technique, additionally completed with CT and MRI

14. Radiological examinations of paintings and sculptures as well as musical instruments for the purposes of the conservation of cultural heritage (since 2001)

examinations using digital radiography and computed tomography

15. MR examinations of fetuses

• imaging examinations including (for the first time in Poland, 2000) HMRS study of fetal brains; publication of the atlas "MR of fetal defects" (2013)

16. Comprehensive MR examination of the prostate (since 2004)

 the first in Poland examinations using the transrectal coil (imaging, DWI, pMR, HMRS)

17. Ischemic stroke - radiological techniques (since 2002)

 a comprehensive program of advanced imaging diagnostics (CT, perfusion CT, later MRI and perfusion MR) and endovascular treatment of ischemic stroke - from targeted arterial thrombolysis to mechanical thrombectomy. The beginning of the program in 2002, in 2014 the establishment of CITO (Center for Interventional Therapies of Acute Stroke) at the University Hospital.

18. Comprehensive MR diagnosis of breast with MR biopsy

• the first in Poland (2005) application of MR breast biopsy

19. Comprehensive MR/ultrasound examinations with imaging fusion in rheumatic diseases

• the first such procedures used in Poland (since 2007); the establishing of a dedicated MR laboratory

20. X-ray and CT examination of General Władysław Sikorski's remains (2008)

21. Virtual CT autopsy

 application of the routine examinations using virtual CT autopsy (for the first time in Poland, 2009) for forensic purposes; also for the first time in Poland virtual MR autopsies were performed (2010)

22. Investigation of the effect of alcohol on the CNS (since 2005)

• the first in Poland and one of the few in the world comprehensive studies of the effect of alcohol on the CNS using HMRS and DWI

23. Studies of the CNS in children with Fetal Alcohol Spectrum Disorder (FASD) (since 2008)

• the first in Poland and one of the few in the world comprehensive studies of the CNS inchildren exposed to alcohol during foetal life, using MRI, HMRS and DWI

 the originator of the first hospital FASD Department in Poland (św. Ludwik Hospital, Kraków)

24. Systems for computer-aided diagnosis of the radiological musculoskeletal system in X-ray and CT(2016-2018)

 development of computer systems supporting imaging diagnostics of the musculoskeletal system, especially in lower limb pathologies and spondyloarthritis (radiological diagnosis, MR)

25. Sportsmedicine-MRdiagnostics(from2016)

• Central nervous system research, using MR techniques, athletes with head injuries.

26. Optimization of the shape of hernial meshes using CT (2017-2018)

 optimization of the shape of three-dimensional hernia grids, depending on the BMI and sex value, based on data obtained during the pelvic CT scan.

27. Comprehensive diagnostics of soldiers (from 2018)

• MR examination of the osteoarticular system, MR examination (also HMRS) of the

CNS

28. Assessment of the size of the corpus callosum in people with high IQ (members of the MENSA association) (2020-2021)

29. Searching for correlation between peripheral biomarkers and advanced neuroimaging techniques using magnetic resonance imaging in schizophrenia (2020-2021)

30. Study of the relationship between brain glutamatergic activity in magnetic resonance spectroscopy (MRS) and peripheral metabolic processes involving glutamic acid and kynurenic acid (KYNA) in the course of schizophrenia (since 2021)
31. Analysis of the usefulness of virtual reality technology for the assessment of

three-dimensional medical models created on the basis of data obtained during the CT examination (from 2021)

32. Assessment of the diagnostic effectiveness of computer-aided analysis of human body composition based on computed tomography of the abdominal cavity (from 2021)

# <u>Prizes</u>

1966

Prize winner of the National Competition "Poland is situated on the Baltic"

1971

Prize winner of the National Natural Science Competition

1972

Finalist of the Navigation Contest

1992

Polish Medical Society of Radiology Scientific Award (individually)

1999

Individual Scientific Award for the best experimental scientific work - Scientific

Congress of the Polish Society of Urology, Warszawa, Poland

2001

1st Award (collectively) - Cardiovascular and Interventional Radiological Society of

Europe Congress, Goteborg, Sweden

2002

Silver Grant (collectively) - European Respiratory Society Congress 2002, Stockholm, Sweden

2002

Certificate of Appreciation (collectively) - European Congress of Radiology, Wien, Austria

2004

Polish Medical Society of Radiology Scientific Award (individually)

2004

Medal of "Merit for the Polish Medical Society of Radiology" (individually)

2005

Main Award (collectively) - Polish Medical Society of Magnetic Resonance, Szczyrk, Poland

2005

3rd Award (collectively) - Cracow-Winnipeg Workshop on Magnetic Resonance and Molecular Imaging, Kraków

2005

1st Award (collectively) - Polish Psychogeriatric Society Congress and Alzheimer Wernicke Memorial Symposium, Wrocław, Poland

2005

Polish Society of Neuropsychology Award (individually) - Copernicus Prize 2006

2nd Award (collectively) - European Urology Meeting, Prague, Czech Republic 2006

The Professor Józef Bogusz Medal (individually) - Cracow Medical Society 2006

Colossus Special Award (individually) for creating the Polish globetrotter movement 2007

Distinction (given by media) - Radiological Society of North America Congress,

Chicago, USA, (collectively)

2009

Distinction (given by media) - Radiological Society of North America Congress,

Chicago, USA, (collectively)

2009

Diploma "Honorary Ambassador of Polish Congresses" (individually) - Polish Tourist Organization

2010

Honorary Member of American Urological Association (The New York Section); individually 2010 1st Award (collectively) - Central European Meeting of European Association of Urology, Bratislava, Slovakia 2010 Gold Medal for long service (individually) - Jagiellonian University 2011 Honorary Member of Polish Society of the Electroradiology (individually) 2012 Scientific Award of the Minister of Health (collectively) 2012 Certificate of Appreciation (collectively) - Radiological Society of North America Congress, Chicago, USA 2013 Commision of National Education Medal (individually) 2013 Brown Medal (individually) – International Salon of Artistic Photography for Physicians - PhotoArtMedica 2014 Main Prize (Summa cum Laude) at the American Society of Neuroradiology Congress (collectively), Montreal, Canada 2016 Honorary Member of Polish Medical Society of the Radiology (individually) 2017 The Doctor Kremer Medal (individually) - Cracow Medical Society 2020 Rector of the Collegium Medicum of the Jagiellonian University Award For Andrzej Urbanik and Chair of Radiology For: Teaching and organizational achievements 2021 The Polonia Minor Award (the most important award of the Lesser Poland Voivodeship) for the Chair/Department of Radiology of the Jagiellonian University Medical College "for merits in the development of national radiology and constant development of the unit constituting an important element of the regional health care system"

# Interests - hobbies

Poetry

History of civilization

# Sailing

skipper (Baltic, North Sea, Mediterranean Sea, Caribbean, Indian Ocean, Pacific),
 Sport

- athlete (athletics) of the Resovia sports club, Rzeszów (the 60.th and 70.th)
- initiator and organizer of the Polish Radiological Sailing Championships
- initiator and organizer of the Polish Radiological Skiing Championships
- Travelling

 one of the pioneers of Polish globetrotting, as well as one of the founders of the Polish globetrotters' communities,

- he has visited over 110 countries and all continents; two trips around the world,
- the author of the first Polish vademecum for travelers (1980)

• the author of the first Polish guide for globetrotters (1987 – South-East Asia) and the fist Polish globetrotter guide to China (1986),

• the originator and the editor 25 volumes of the book "Through the world"

("Przez świat") - stories from trips to the most interesting regions of the world,

 the originator and organizer of the first (since 1985) Polish annual travellers' meeting – OSOTT (Polish Globetrotters, Tramps and Tourists Meeting); www.travelbit.pl/osott

the founder and moderator of the oldest Polish website for travelers –

www.travelbit.pl (in 1986-96 a news mail service, since 1996 a website),

- co-founder of the Travel Festival Travenalia in Kraków,
- editor-in-chief of journals: Globtrotter and Travel (1988-1992),

production of and hosting the TV program "Through the world" ("Przez świat"), 1994-96),

• in 2006 he received a special "Award of Colossi" for creating the Polish globetrotter movement,

 for the travel passion and the activity for the globetrotter community he was nicknamed Tourbanik <u>Bibliography</u>

Teresa Bętkowska: Człowiek – Instytucja (Institution man), Alma Mater 2011, 132: 36-42