

## From the scientific life

### Professor Piotr Kurnatowski as scientist, teacher, and organizer

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Professor Piotr Kurnatowski was born on the 26th of November, 1951 in Lodz. His parents were physicians. After passing his exam for secondary school certificate (maturity exam) in 1969 and after successfully passing the exams for the Medical Faculty of the Medical Academy of Lodz, on October 1, 1969, he became a student of this university; he was graduated with the Honors diploma ("Red diploma") as a physician in 1975. During study he was activist in an Association of Polish Students (ZSP); at first he was the deputy chairman, and later the chairman of the Student Scientific Society and after graduation, he was the Chairman of Young Scientists at the Medical Academy in Lodz (1975–1976).

From the 1st October, 1975 he was employed in

ENT Clinic of Medical Academy on the post of trainee assistant, then as assistant (1976–1978), senior assistant (1978–1981) and lecturer (1981–1997). First degree of specialization in ENT he obtained in 1978, and second degree-specialist – in 1980. While working as an ENT specialist, he cooperated with the Chair of Biology and Medical Parasitology where he was employed in 1994 and in 1997 (to 2002) he became the Head of the Diagnostics and Treatment of Parasitic Diseases and Mycoses Centrum, Chair of Biology and Medical Parasitology on the position of extraordinary professor. From October 1, 2002 he was employed as a Head of Chair of Biology and Medical Parasitology on the position of full professor. He retired at the Medical University of Lodz on 30 March, 2018.

Between 2007–2009 he was also employed as a Head of Chair of Medical Biology at University of Warmia and Mazury in Olsztyn. From 2016 till now he is employed in The Angelus Silesius University of Applied Sciences in Walbrzych, from October 1st, 2021 – Angelus Silesius State University. He still works as an otolaryngologist and consults patients.

In 1985 he fulfilled his 14 weeks internship and in 1988 – 2 weeks at/in University of Parma (Italy), in 1986 – 16 weeks at University of Helsinki (Finland) and in 1989 – 16 weeks at University of Antwerpen (Belgium).

He successfully defended his doctoral dissertation "Bacterial and fungal flora of the oral cavity, nasal cavity, paranasal sinuses and ear and its sensitivity to antihistamines" in 1980 (Medical Academy, 1980). The experimental part of the

dissertation was done in the Chair of Biology and Medical Parasitology, the clinical – in ENT Clinic.

In 1990 he completed the habilitation proceedings presenting his dissertation "Research on the efficiency of vestibular organs in people addicted to certain chemical substances (clinical study)" (Medical Academy, 1991).

The scientific activity of prof. Kurnatowski began during his studies at the Student Scientific Society at the Chair of Biology and Medical Parasitology, Medical Academy in Lodz; he did the work "The comparison of plant pollens with cysts and eggs of human parasites"; this work was awarded at the Conference of the Student Scientific Society Medical Academy in Lodz (1970) and a distinction at the XII National Conference Student Scientific Societies of Medics *Symposium Medicum* in Wroclaw (1970). Continuing his research in the Students' Scientific Society, he began working on the etiotropic properties of antihistamines.

It should be emphasized that the professor was the head of the Central Research and Development Plan (CPBR) grant No. 11.8, the main contractor in grant No. PO 4G 033 18 and the head in grant No. 2PO 4G 04927 financed by State Scientific Committee for Scientific Research; he was also the head in grant No. 0065/B/P01/2010/39 supported by Ministry of Sciences of Higher Education in Poland.

The main subjects of research interests of professor Kurnatowski has concerned:

a. characterization of the components of the ontocenoses of the oral cavity, pharynx, nasal cavities, paranasal sinuses and ear, with particular emphasis on fungi and protozoa, as well as multifocal fungal invasions;

b. evaluation of the sense of hearing and balance in healthy people and people addicted to chemical substances;

c. selected aspects (diagnostic, therapeutic: conservative, surgical, complications) in diseases of the upper respiratory tract;

d. host-parasite /fungus system; searching for the pathogenicity of fungi;

e. the occurrence of developmental forms of parasites and fungi potentially pathogenic for humans in particular parts of the biosphere.

Prof. Kurnatowski is author of 310 publications, including: original papers in the full version: 105, textbooks (chapters): 22 (79) and other publications: 136. He was the promoter of 11 doctoral dissertations, 5 master's theses and 10 bachelor's theses. He reviewed applications for the title of

Professor, habilitation dissertations, doctoral dissertations, master's and bachelor's theses, journal publications, handbooks and reports for the use of the Central Committee for Scientific Degrees and Titles (to 2019), the Council of Scientific Excellence (from 2019) and the State Committee for Scientific Research and the National Centrum of Science.

Major scientific achievements of professor Piotr Kurnatowski include:

– description of the hitherto unknown bacteriostatic, mycostatic and protozoicidal properties of antihistamin preparations frequently used in otolaryngology;

– determination of the prevalence of occurrence and the characteristics of fungi (differentiation of species, intraspecific) in individual organ ontocenoses, taking into account the multifocal nature of the invasion;

– demonstration of the relationship between the enzymatic activity of hydrolases in cells of *Candida* fungi and the clinical course (acute invasion, chronic invasion, asymptomatic infections); finding a decrease in T lymphocytes and the weakening of their activity *in vitro* in people infected by *Candida* with respiratory diseases; detection of differences between subpopulations of lymphocytes isolated from the tonsils of people infected and not infected with *Candida*;

– demonstration in drug addicts (during the period of abstinence) of changes in the central part of the vestibular organ that may undergo partial compensation; paying attention to the presence of symptoms of damage to the sense of balance and hearing more frequently in the physical examination than in anamnesis; the observation that there is a statistically significant relationship between the number of symptoms and addictions lasting over a year;

– proving that the degree of contaminations of soil with helminth developmental stages in selected rural areas of Lodz district, as well as in childrens recreations areas in Lodz, is significant, which constitutes a serious epidemiological problem, because is a potential source of antropozoonoses;

– demonstration of potentially pathogenic fungi in the waters of Lake Charzykowskie and in the Sulejow Reservoir, which are used for recreational purposes. The tested waters may be a suitable environment for the development of anamorphic fungi, potentially pathogenic, associated with ascomycetes (Ascomycota) or with basidiomycetes (Basidiomycota), also produced in the system of

humans and other mammals. The activity of hydrolytic enzymes of fungi species isolated from the waters of Lake Charzykowskie and watercourses differs compared to strains isolated from patients and isolated from the waters of the Sulejów Reservoir, which proves their wide adaptability to the environment.

He delivered about 180 papers and reports during numerous sessions of scientific societies, congresses and conferences, both Polish and international – held in Paris, Brussels, Izmir, Glasgow, Durban, Salzburg, Parma and Lisbon among others. He was invited to organizational committees of congresses, to participate in moderating discussions at the round table or presiding over the proceedings at the congresses as well as to deliver his lectures.

Professor Kurnatowski has started his teaching activity at 1970; as a student of the Student Research Society at the Chair of Biology and Medical Parasitology he conducted laboratory classes with students of the Academy of Physical Education; after graduation, he participated in the creation of curricula in various subjects, conducted lectures and exercises/laboratories from the following: • biology (students of sports trainer); • medical biology (students of medicine); • parasitology with mycology (students of medicine, dentistry, health sciences, nursing, obstetrics); • biology with ecology and genetics (students of medicine); • ecology with zoology (students of health sciences); • genetics (students of nursing); • biology with parasitology (students of health sciences); • environmental protection (students of health sciences); • environmental determinants of diseases (students of health sciences); • microbiology with parasitology (students of dental techniques, cosmetology, nursing); • parasitology (students of medicine); • mycology (students of cosmetology); • otolaryngology (students of medicine, dentistry). It should be emphasized that prof. Kurnatowski also took part in teaching the following subjects: • biology with ecology and • parasitology with mycology in English-language medical studies (students of medicine, dentistry) at the Medical University of Lodz.

For over 40 years he has been a lecturer at postgraduate studies in various issues of parasitology, mycology and otolaryngology not only at the Medical Center of Postgraduate Education in Warsaw, but also at the Medical

Academy/Medical University in Lodz.

Professor Piotr Kurnatowski was many times an examiner in biology and medical parasitology for PhD candidates.

In addition to working as an ENT specialist (in University Hospital and in various specialist policlinics) he has been consulting patients from the area of Poland at the Department of Diagnostics and Treatment of Parasitic Diseases and Mycoses, Chair of Biology and Parasitology of the Medical University of Lodz since 1990.

Professor Kurnatowski is a member of a number of scientific societies and has held positions of responsibility in many of them; member of European Confederation of Medical Mycologists, World Federation of Parasitologists, European Federation of Parasitologists. In Polish Parasitological Society – member (from 1994), President of the Main Board (2010–2013); formerly Vice-president (2008–2010), Chairman of the Medical Parasitology Section of the Main Board, a member of the Main Board Peers' Court. In Polish Society of Otolaryngologists – Head and Neck Surgeons – member (from 1975) – Chairman of the Lodz Division (2010–2014); previously the treasurer of the Lodz Division, a member of the Main Board Peers' Court. He is Correspondent Member of Warsaw Scientific Society.

As regards organizational activities, he was in organising and scientific committees of different international and national meetings and symposia; among others he was Vice-chairman of XIX Congress of the Polish Parasitological Society (2001), Treasurer of XXXII and XLIII Congresses of The Polish Otolaryngological Society (1983, 2008), Vice-chairman (several times), Chairmen (several times) Annual Clinical Days of Medical Parasitology. At the University, he acted in various committees, including the one developing the curriculum (Success operation); he was Vice-deputy Rector's Plenipotentiary for Medical Development, member of the Appeals disciplinary committee for students.

Professor Kurnatowski obtained a few times the award of the Minister of Health and Social Care; he was repeatedly awarded by His Magnificence Rectors of the Medical Academy/Medical University of Lodz, University of Warmia and Mazury in Olsztyn and The Angelus Silesius University of Applied Sciences in Walbrzych/Angelus Silesius State University for his scientific and teaching, as well as organization achievements.

For the work "The share of fungi in chronic sinusitis" he received the Award of prof. Miodonski (the highest scientific distinction awarded by the Society), granted by the Main Board of the Polish Society of Otolaryngologists (1977).

Professor Piotr Kurnatowski was among others honored with the Silver Cross of Merit (2010), Badge "For exemplary work in the health service" (1985), the Medal for the 50th Anniversary of the Medical Academy of Lodz (1995) and Silver Badge of the Association of Polish Students (1977). February 18, 2022 The Main Board of Polish Parasitology Society gave to Professor Kurnatowski dignity of Honorary Member of the Society.

Professor Kurnatowski was also active in Parasitological News (*Wiadomości parazytologiczne*) title changed (2012) currently – *Annals of Parasitology* – Deputy Editor-in-Chief (2001–2013); professor was one of the people who contributed to the change of the journal title and the publication of articles only in English. He was involved in Medical mycology – member of the Program Council (1994–2013) and in Otolaryngology-clinical review – member of the Editorial Board (2008–2013).

Particularly noteworthy is the activity of professor Kurnatowski in the field of the quality of education. He is one of the few people who have been dealing with this problem for 25 years. In 1997 he was appointed as a member of Accreditation Commission of Medical Universities (KAUM)/Accreditation Committee for University Medical Schools (KAUUM)/now: The University Commission for the Quality of Medical Education (UKJKKL); from 2021 he is the Vice-president of UKJKKL. Since State Accreditation Committee (PKA) inception in 2002/now: Polish Accreditation Committee, he has been its expert and for one term its member.

It is difficult to ignore the activity of professor Kurnatowski at the Polish Academy of Sciences, especially in Committee of Parasitology; he was the Committee Chairman (2007–2012), Vice-chairman of the Committee (1998–2007; 2012–2015), and Chairman of the Mycology Group (1993–2012). Professor Kurnatowski was also a member of Committee of Organismal Biology (2016–2019) and of Environmental Protection Committee, Department of the Lodz Academy of Sciences (1998–2006). Professor Kurnatowski has been an active member of the Scientific Council of Institute of Parasitology of the Polish Academy of Sciences for 15 years, initially as a member (2007–2011), then Vice-chairman (2011–2015), and recently as Chairman (2015 – until now) of the Council. For several years he was the Chairman of the Congress of Heads of Biology Departments of Medical Universities.

Professor Kurnatowski was appointed by the Minister of Health to the Team of Experts for issuing opinions on entities applying for conducting internships in the field of laboratory-medical parasitology – member (2008 – until now), as a Member of the State Examination Commission in the field of laboratory medical parasitology (2011 – until now).

Professor Piotr Kurnatowski is a capable physician and distinguished scientist. He enjoys the recognition and respect of his patients, colleagues and the academic community. He is well respected as a thoughtful, kind and empathic person who is always punctual, disciplined and well organized. He is known to stick to his principles and can be relied on to be consistent. He is widely regarded as a role model for his colleagues with his extensive experience and skills, including baking delicious cakes.