

CURRICULUM VITAE

1. Personal data: Name: Imre Zoltán KUN

Data and location of birth: August, 15th, 1942, in Oradea city, Bihor County.

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2. Professional route - vocational training

Primary, secondary and higher level education

The primary and secondary schools I made in Zalau and Oradea. The school-leaving examination I had in 1960 in Oradea and in the same year passed the entrance exam for the *Medical Faculty of Medical and Pharmaceutical Institute of Targu-Mures*. I finished it in 1966 (as the *head of graduating students*, with *Diploma of Merit*), and worked as probationer in clinics until 1968.

Postgraduate training

In 1968 I attempted and succeeded – through competitive exam – an university assistant post at the Department of Pharmacology of the Institute of Medicine and Pharmacy Targu-Mures. Between 1968 -1972 I worked as probationer assistant, from 1972 to 1978 as titular one, while between 1978 -1988 as lecturer at the same Department.

I realized my *doctoral thesis* in Cluj at professor B.Cuparencu and finished it in 1977, when I achieved the *doctor's degree in medicine* (speciality pharmacology). My thesis treated some endocrino-pharmacological problems, concerning the theoretical and practical aspects of the catecholaminergic regulation of gonadotropin and prolactin secretion.

In 1999 I obtained *competence in clinical pharmacology* and conducted clinico-pharmacological studies of many pharmaceutical preparations in course of introduction for inland use, in collaboration with pharmaceutical factories Armedica and G. Richter. From 2006 I am *head physician in diabetology and nutrition*.

I was *integrated in clinical activities* in endocrinology: between 1978-1980 as probationer, between 1980-1990 as specialist, and from 1990 as head physician in endocrinology. From 1990 I was lecturer at the Endocrinological Chair of the University of Medicine and Pharmacy Targu-Mures, and from 1998 Associate Professor and Head of the Endocrinology Clinic. From February 2001 I conducted as University Professor the

same Chair and the same Clinic to my retirement in February 2011. Then I worked as head physician in the County Hospital Mures to September 01 2012, when I completed the age for retiring also here. Presently I *conduct as doctorate leader the research activity* of PhD students in the frame of *Doctoral School of the University of Medicine and Pharmacy Targu-Mures*, on the field of endocrinology and clinical pharmacology.

3. Scientific activity

The *results* of my doctoral thesis indicated the stimulatory role of noradrenaline-/adrenaline in the LH-RH secretion and the inhibitory action of dopamine on the same process (this problem was still controversial at that time). Similarly, my data plead for the dopaminergic inhibition of the prolactin secretion. The obtained results were publicated in international reviews (i.e. Pharmacology – Switzerland, Endokrinologie – Germany). At the same time I contributed to the recognition and elucidation of the neuroendocrine side effects (antioviulatory action, cycle disturbances due to hyperprolactinaemic states) of some medicines acting on CNS.

The conclusions obtained in studies performed in animals were used for *clinical purposes*, e.g. dopaminergic agonists such as l-dopa, lisuride, bromocriptine for the induction of menstrual cycles in amenorrhoeic women, and for the treatment of benign mastopathies and of some cases of polycystic ovaries, as well as for the treatment of impotence in man. I also studied the role of hypothyroid status in mastopathies and observed that the combination of dopaminergic agonists with thyroid hormone substitution gave better results, as did the thyroid hormones alone. Other investigations demonstrated that the opiate antagonists (naloxone, naltrexone) can abolish the estrous cycle disturbances in female rats through stimulation of LH secretion, a mechanism that can partly explain the favorable effects of these drugs on the disorders of the sexual dynamics in males. Later, I studied the interrelations of catecholaminergic and opioid mechanisms on the gonadotropin and prolactin secretion by means of antiadrenergic drugs, opioids (morphine, etylketocyclazocine) and opiate antagonists. Some years I was preoccupied with the screening, early diagnosis and treatment of hypothyroidism in the newborns and children. Similarly, we performed screening of high-risk pregnant women for thyroid dysfunctions in our moderately mild iodine-deficient geographical county.

On the field of *clinical pharmacology*, between 2001 - 2004 I was *principal clinical investigator in bioequivalence trials* of pharmaceutical preparations containing ciprofloxacin, piracetam, metformin, meloxicam, nateglinide. These investigations were made in collaboration with Faculty of Pharmacy of University of Medicine and Pharmacy

Tg.Mures, and pharmaceutical industry (Armedica S.A. and Gedeon Richter România S.A., Tg. Mureș), in the frame of 5 *investigational contracts*.

From 2004 and at present I am working also as principal clinical investigator in collaboration with Analytic Laboratory *Pharmaquest*, conducting about 30 bioequivalence studies. The investigated pharmaceutical preparations were different antidiabetics, neuroleptics, antidepressants, H₂-antagonists, antihypertensives, AINS, antiarrhythmics (e.g. amiodarone) etc.

Between 6-7. April 2000 I participated on a *course of pharmacovigilance*, organized by Nicare, the Northern Ireland Centre for Health Care Co-operation and Development, in the frame of a Phare Project, entitled „The Harmonisation of Legislation in the Pharmaceutical Sector”, held in Cluj-N. Similarly, between 8-10 November 2007, I attended The IIIrd Conference on Health Management organized by the Studium Foundation, held in Tg.Mures, entitled „Communication in health care”.

Between 2-3. Oktober 2009 I attended a *course of good clinical practice*, organized by ICH-GCP (Principles in Practice Course) in Sovata. I conducted the clinical investigation of Zomacton^R Ferring, Protocol: FE999905CS07), between 2009-2011. Recently, on 24 September 2014, I completed a GCP course organized by NIDA Clinical Trials Network (with expiration date on 24 September 2017).

I am coauthor of a Pharmacological practical guide (1988) and author of the Clinical Endocrinology, two lecture notes written in Hungarian and Romanian languages (in 1997, 315 pag. and in 2006, 279 pag., respectively).

In 2000 appeared my *book* in Hungarian language, entitled *Clinical Endocrinology – Klinikai Endocrinologia* (536 pag.). In 2012, an another handbook was appeared, *Neuroendocrinologia*, written by I.Z. Kun and Zs. Szántó (530 pag.). Recently, in 2015, a newer book, *Clinical Endocrinology – Klinikai Endocrinologia* (in Hungarian) appeared (authors: Szántó Zs., Kun I.Z, Pașcanu I., Kolcsár M., Réti Zs.), (193 pag.).

I am the *single or the first author* of 9 *chapters* in *endocrinologic books* (which appeared in 1985, 2001, 2003, 2006, 2008, 2010, 2012, 2013, and 2017, respectively):

1. Kun I., Feszt Gh.: *Dovezi pentru rolul diferențiat al mecanismelor monoaminergice în reglarea ciclului sexual*. In: Aspecte normale și patologice ale reglărilor neuroendocrine, Ed. I. Haulică, S. Lozneau, Iași, 1985, pag. 52-69, ; 2. I. Kun: *Definiția, epidemiologia, factorii de risc și patogeniza osteoporozei*. In: Managementul osteoporozei în practica medicală, ASPOR, Odorheiu-Secuiesc, 2001, pag. 5-19; 3. Kun I. Z., Szántó Zsuzsanna: *A pajzsmirigyelégletenség és szövődményeinek gyakorisága Maros megye területén (elsősorban a járóbetegek és a Marosvásárhelyi Endokrinológiai Klinikára*

beutalt betegek adatainak tükrében), in: Orvostudományi tanulmányok, Ed. Brassai A. Ed. Scientia Cluj-Napoca, 2003, pag. 131-206; 4. I.Kun: *Patologia iatrogenă în endocrinologie*, in: Patologie iatrogenă (red. J. Jung), Ed. University Press Târgu-Mureș, pag. 97-107, 2006; 5. I. Kun: *Aspectele clinice ale tumorilor pancreasului endocrin* (in Romanian). In: Cancerul de pancreas. Copotoiu Constantin, (editor), Bauer Ferdinand, Brânzaniuc Klára, Egyed-Zs. Emeric, Cristina Golea, Simona Gurzu, Jung Ioan, Kun Imre, Ionela Pașcanu, Marius Raica, Monica Sabău, Septimiu Voidăzan (autori): Ed. University Press Târgu-Mureș, 2008, ISBN 978-973-169-096-4. 6. Kun I. Z., Szántó Zsuzsanna: *Endokrin és metabolikus sürgősségek*. In: Sürgősségi betegellátás, 11. fejezet. (Ed. Kovács Judit), Ed. Edupoint Marosvásárhely és Erdélyi Múzeum-Egyesület Kolozsvár, pag. 454-503, 2010; 7. I. Kun, Zsuzsanna Szántó, Ildikó Kun and B. Szabó: *Screening of High-risk Pregnant Women for Thyroid Dysfunctions in a Moderately Mild Iodine-deficient Area*, in: „State of the Art of Therapeutic Endocrinology” (Ed. S.Magdeldin), Chapter 3, 2012, pag. 45-66, e-book, Publisher Intech, ISBN 978-953-51-0772-9, <http://dx.doi.org/10.5772/49971>. 8. Imre Zoltán Kun, Zsuzsanna Szántó, József Balázs, Anisie Năsălean, Camelia Gliga: *Detection of iodine deficiency disorders (goiter and hypothyroidism) in school-children living in endemic mountainous regions, after the implementation of universal alimentary salt-iodization*. In: Fedele Monica (ed.) Hot Topics in Endocrine and Endocrine-Related Diseases, Chapter 4, 2013, pag. 101-128, e-book, Publisher Intech, ISBN: 978-953-51-1080-4, <http://dx.doi.org/10.5772/54188>. 9. Imre Kun. *The Endocrinology and Iatrogenesis*. In: S. Gurzu & I. Jung (Eds.), Textbook of Iatrogenic Pathology, Chapter 15, p. 231-252. eISBN (Online): 978-1-68108-514-2, ISBN (Print): 978-1-2017, Bentham Science Publishers. 68108-515-9

My list of scientific works includes 552 titles, from these 96 were published *in extenso*, the others in abstract form, or were presented orally in our country or abroad (in Switzerland, Germany, Hungary, Poland, Italy, Portugal etc.).

I participated on numerous postgraduate courses (e.g. on those organized annually by the EFES and ESE), scientific sessions, symposiums and conferences. I am affiliated to many scientific associations, e.g. to Romanian Endocrinological Society, International Society of Endocrinology, European Society of Endocrinology, European Neuroendocrine Association, Romanian Psychoneuroendocrinological Society (I am one of the founders), International Society of Psychoneuroendocrinology, European Endocrine Association, European Society for Neurochemistry etc. I have numerous other scientific and social preoccupations, but these exceeds the frame of the present CV.

Tirgu-Mures, February, 06, 2018.

Prof. Imre Zoltán KUN, MD, PhD