

**„VICTOR BABEŞ” UNIVERSITY OF MEDICINE AND
PHARMACY – TIMIŞOARA**



HABILITATION THESIS

**CHRONIC KIDNEY DISEASE
FROM CONCEPT TO PRACTICE**

Prof. Dr. ADALBERT SCHILLER

**TIMIŞOARA
2016**

Senior consultant in Internal medicine (1992), Senior consultant in Nephrology (1998), PhD Dissertation defended in 1998 at The University of Medicine and Pharmacy Timișoara (title Immune Assessment of the Diagnosis and Treatment of Urinary Tract Infections) I am Professor of Nephrology at The University of Medicine and Pharmacy Timișoara and The Past President of The Romanian Society of Nephrology and of the Balkan Society of Nephrology (BANTAO), actually Vice President of The Romanian Society of Nephrology and member in the Board of BANTAO.

I am author and coauthor of several published papers among which 118 indexed in international data bases having more than 400 citations and an h index of 10 and an i10 index of 10 (Google Scholar) and h index of 7 (Web of Science). 25 of these papers are published “in extenso” in ISI quoted international journals, 14 in non ISI quoted international journals but cited in international data bases, 26 papers published as abstracts in international ISI quoted journals, 39 papers published “in extenso” in Romanian CNCSIS B and B+ journals. I am also author/coauthor of 75 chapters in CNCSIS quoted textbooks and in 3 international textbooks Turner N, Lameire N, Goldsmith D, Winearls C, Himmelfarb J, Remuzzi G (eds). **Oxford Textbook of Clinical Nephrology, (4th Ed)** .Vol 1. author chap 86 **Chronic Tubulointerstitial Nephritis; overview pp 690-694 p.5** Oxford University Press, 2016 ISBN 978-019-870-858-2; Turner N, Lameire N, Goldsmith D, Winearls C, Himmelfarb J, Remuzzi G (eds). **Oxford Textbook of Clinical Nephrology, (4thEd)** Vol.1 coauthor chap 90 **Balkan Endemic Nephropathy** pp 714-718- p.5 Oxford University Press, 2016- ISBN 978-019-870858-2, Manisha Sahay (ed) **Diseases of Renal Parenchyma** coauthor capitol 14 **Diabetes and Renal Disease** pp 247 – 270 p. 23 Publisher: InTech ISBN 978-953-51-0245-8, I am author/coauthor of 146 papers orally presented in national and international congress and of 83 papers presented as posters. I have participated in 3 international research grants, in one national grant and I am Director of C2-PCFI- 2015/2016 a grant concerning MBD-CKD and inflammatory syndrome in CKD.

Between 1998 and 2002 essential concept changes took place in the field of Nephrology. The concept of Chronic Kidney Disease (CKD), CKD as major cardiovascular risk factor, early intervention measures for CKD prevention and measures for secondary prevention have been launched. These concept changes conditioned my teaching and research career.

Concerning the teaching concepts, the necessity to implement the CKD concept and its consequences in the general medical knowledge needed an important effort both in university teaching as well as in the post university training of the medical professionals in many specialties. Another aspect of the modern medical training, the interdisciplinary approach, was my secondary goal. Therefore I have organized an interdisciplinary national Conference with international participation, named Nephrology-Cardiology-Diabetes (**NefroCarDia**), having as main goal the interdisciplinary approach of CKD patients. This conference is at its 5th edition.

The main research directions followed by me, emerging from the changing concepts in Nephrology, generated papers published in international journals and this thesis is based on some of them:

Epidemiology of CKD in the general populations and in high cardiovascular risk patients Covic A, Schiller A, Constantinescu O, et al. **Stage 3-5 chronic kidney disease--what is the real prevalence in Romania?** *Rev Med Chir Soc Med Nat Iași*. 2008 Oct-Dec;112(4):922-31, (the first two authors had equal contribution); Schiller A, Petrica L, Petrica M, et al **High Prevalence of chronic kidney disease in stroke patients is associated with poor prognosis** *Nephrol. Dial. Transplant* 2006 21 (suppl 4) SP 317 iv 119; Schiller A, Ivan V. **Chronic kidney disease in cardiovascular disease. Is there a cardiorenal syndrome?** *Nephrol. Dial. Transplant* 2006 21 (suppl 4) SP 320 iv 120; Schiller A, Munteanu M, Taranu et al. **Chronic kidney disease in diabetes mellitus in a county from western Romania** *Nephrol. Dial. Transplant* 2006 21 (suppl 4) SP 226 iv 90.

Epidemiology of primary renal diseases in the kidney biopsy registries Covic A, Schiller A, Volovat C et al Gluhovschi G, Gusbeth-Tatomir P, Petrica L, Caruntu ID, Bozdog G, Velciov S, Trandafirescu V, Bob F, Gluhovschi C **Epidemiology of renal disease in Romania: a 10 year review of two regional renal biopsy databases”** *Nephrol Dial Transplant* (2006) 21: 419–424 (the first two authors had equal contribution);

Effects of Chronic kidney disease and Acute kidney injury on outcome of patients with Cerebrovascular disease: Covic A, Schiller A, Mardare et al **The impact of acute kidney injury on short-term survival in an Eastern European population with stroke** *Nephrol Dial Transplant* (2008) 23: 2228–2234) (the first two authors had equal contribution); Due to our contribution to the topic NDT invited us to write a review and it was also published in 2010: Schiller A, Covic **Kidney and brain—a renal perspective of ‘Les Liaisons Dangereuses’** *A Nephrol Dial Transplant* (2010) 25: 1370–1373). The paper was selected among the ten most significant papers published in 2010 in NDT and a free access of one month to our paper was offered on World Kidney Day.

Effects of Acute kidney injury on outcome of critically ill patients Schiller A, Mihaescu A, Timar R et al. M **Acute kidney injury in peripheral arterial surgery patients: a cohort study** *Ren Fail*, Early Online: 1–4; Schiller A, Valceanu D, Sararu AM, et al. **Acute kidney injury (AKI) is a marker of poor prognosis in patients undergoing abdominal surgery. Preop AKI and postop AKI are they different?;** World Congress of Nephrology, Milan 2009, Abstracts on CD-ROM, AN-AMG-2009, April 2009; Schiller A., Ionita H, Olariu N., et al **Acute kidney injury in patients with hematologic malignancies** *NDT plus*, vol 1 suppl. 2 June 2008 SP085

Cardiovascular risk in CKD and risk markers Oleniuc M, Schiller A, Secara I, Onofriescu M, Hogas S, Apetrii M, Siriopol D, Covic A **Evaluation of advanced glycation end products accumulation, using skin autofluorescence, in CKD and dialysis patients”** *Int Urol Nephrol* (2012) 44:1441–1449 (the first two authors had equal contribution);

Studies concerning the complications, survival of end stage CKD patients and quality of hemodialysis treatment Schiller A, Timar R, Siriopol D, et al., **Hepatitis B and C Virus Infection in the Hemodialysis Population from Three Romanian Regions** *Nephron* 2015;129:202–208 [25]; Schiller A, Apetrii M, I, Onofriescu M, et al **Prognostic significance of 25-hydroxivitamin D entirely explained by a higher comorbidity burden: Experience from a South-Eastern European Dialysis Cohort** *Hemodialysis International* 2014; Schiller A, Gadalean F, Schiller O, et al **Vitamin D Deficiency—Prognostic Marker or Mortality Risk Factor in End Stage Renal Disease Patients with Diabetes Mellitus Treated with**

Hemodialysis—A Prospective Multicenter Study PLoS ONE 10(5):e0126586. doi:10.1371/journal.pone.0126586

Progression mechanisms in CKD Bob F, Gluhovschi G, Schiller A et al **Immunohistochemical study of tubular epithelial cells and vascular endothelial cells in glomerulonephritis.** *Renal Failure*, DOI: 10.3109/0886022X.2014.929525

Noninvasive assessment of renal fibrosis Bob F, Bota S. et al Schiller A **Kidney Shear Wave Speed Values in Subjects with and without Renal Pathology and Inter-Operator Reproducibility of Acoustic Radiation Force Impulse Elastography (ARFI) – Preliminary Results** PLoS ONE 9(11): e113761. Doi:10.1371/ journal.pone.0113761 November 26, 2014 [46]

Most of these research directions are followed by our nephrology research group, for instance in 2016 we have published 2 papers concerning Roma population on hemodialysis (*PlosOne* May 19, 2016 [http://dx.doi.org/ 10.1371/ journal.pone.0155271](http://dx.doi.org/10.1371/journal.pone.0155271)) and the predictive value of Galectin 3 and Cardiotrophin 1 in hemodialysis (*Angiology*. 2016 Jan 18. pii: 0003319715623397.).