#### **CURRICULUM VITAE SYNOPSIS**

**Elias A. Lianos,** M.D (Medicine: National and Kapodistrian University of Athens, 1973), Ph.D (Nephrology/Experimental Pathology: Case Western Reserve University, Cleveland, OH, USA / State University of New York - Roswell Park Memorial Institute, Buffalo, NY, USA).

# **Academic Appointments:**

Assistant Professor of Medicine - Medical College of Wisconsin, USA: 1/7/83 Associate Professor of Medicine - Medical College of Wisconsin, USA: 1/7/89 Professor of Medicine & Pathology - Medical College of Wisconsin, USA: 1/7/97

Professor of Medicine & Director of Nephrology Division - University of Medicine and Dentistry of New Jersey, USA: 1/3/99

Associate Professor of Medicine - National and Kapodistrian University of Athens: 15/11/05 Professor of Medicine - National and Kapodistrian University of Athens: 13/3/2013

### **Honors and Awards:**

National Individual Research Service Award (National Institutes of Health, USA): 1980 American Heart Association Research Recognition Award: 1986 American Heart Association Established Investigator Award: 1989 American Federation of Clinical Research (AFCR) Research Excellence Award: 1990 American Society for Clinical Investigation. Elected Member: 1994

# **Research Support Record:**

Dr. Lianos' research has been funded by competitive research Grants from the following sources: 1) The National (US) Kidney Foundation in 1983 and 1984; 2) The US Public Health Service/National Institutes of Health (NIH): a National Individual Research Service Award in 1983, a Research Career Development Award in 1989, and several 3 to 5-year investigator-initiated type Grants (in 1984, 1987, 1996 and 1997); 3) The American Heart Association: a 3-year Grant-in-Aid in 1984, and a 5-year Established Investigatorship Award in 1989; 4) The US Department of Veteran Affairs: a 5-year Merit Review Grant in 1996; 6) EU Integrated Project (6<sup>th</sup> FP, NMP4-CT-2006-026556) in 2006 and 7) Hellenic National Strategic Reference Framework (ESPA-ARISTEIA) in 2013.

### SCIENTIFIC INTERESTS AND LEADERSHIP PROFILE

Dr. Lianos' career as an independent academic investigator began in 1983 in the United States, the focus of his research being the Pathobiology of renal inflammation. He received research recognition Awards from the American Heart Association (1986), the American Federation of Clinical Research (1990), and the American Society of Clinical Investigation (1994). In 1994, Dr. Lianos was elected member of the American Society of Clinical Investigation. Key prerequisites for election of membership in this Society since its foundation in 1908 have been originality of the candidate's research work, achievement of research independence, consistency and stature in the field of the member's research interest, and a major impact in this field before the member has reached the age of 45.

Dr. Lianos was among the first to demonstrate the importance of autacoid-type proinflammatory mediators in immune-mediated inflammation of the glomerular microvasculature. He published a systematic evaluation of the role of autacoids as mediators and modulators of glomerular inflammation. Further, his contributions include the experimental evaluation of treatment protocols in order to reduce the renal hemodynamic and inflammatory responses following onset of glomerular immune injury. The consistency and

impact of these contributions is reinforced by publications in widely circulated, high impact factor Journals such the *Journal of Clinical Investigation*, the *Journal of Biological Chemistry*, the *Journal of the American Society of Nephrology*, the *Proceedings of the Society of Experimental Biology and Medicine, Kidney international, e.t.c.* The observations made have stimulated larger scale trials in the treatment of human immune-mediated glomerular disease. Specifically, his observations have provided the impetus for clinical and experimental studies to be undertaken by other investigators in order to assess the effect of autacoid synthesis inhibition in patients with glomerulonephritis. Such studies have appeared in Journals including: J. Clin. Invest 76: 1011-1018, 1985; N. Engl. J. Med 320: 421-425, 1989; Lancet 1017-1018, 1984; Kidney Int 32: 7000, 1987, e.t.c.

As an academic Nephrologist, Dr. Lianos has had a recurring role in Annual meetings of the American Society of Nephrology in which he served as a reviewer or Scientific Session Chairman (1986, 1987, 1989, 1990, 1993), a role as a reviewer in peer-reviewed Journals (*Journal of Clinical Investigation, American Journal of Physiology, Journal of the American Society of Nephrology, Kidney International*, e.t.c) and in Editorial Boards (*Kidney International*), and a role in peer-review study sections of funding agencies (National Institutes of Health (NIH), USA: 1986, 1988, 1989, 2005, 2006; USA Veteran's Affairs Scientific Merit Review Service: 1987, 1990, 1993, 1994, 1996, 1997; National (USA) Kidney Foundation: 1986, 1988, 1989, 1990; The Kidney Foundation of Canada: 1989 and the Science Foundation of Israel: 1996).

Dr. Lianos has lectured in a number of prominent Academic Institutions including I.N.S.E.R.M-Hopital Tenon, St. John's College, (Cambrigde University, UK), and has mentored young scientists at the post-doctoral level. Scientists who have pursued successful academic careers are cited (Anthony Zanglis: Associate Director of Nuclear Medicine Department, St. Sabba Hospital, Athens, Greece; Joaquin Garcia-Estan: Professor of Physiology and Dean of the School of Medicine, Murcia, Spain; Barbara Bresnahan: Associate Professor of Medicine, Medical College of Wisconsin, USA; Cynthia Pan: Director of the Nephrology Division at Children's Hospital of the Medical College of Wisconsin, USA; ShengHua Wu: Professor of Pediatrics, Nanjing Medical University, P.R. China; Sevasti Koukouritaki: Research Scientist, Department of Pediatrics, Medical College of Wisconsin, USA; Prasun Datta: Assistant Professor, Department of Neuroscience, Temple University, Philadelphia, USA; Prasad Dhulipala: Senior Research Scientist, Amersham Corp. Piscataway, NJ, USA; Duann Pu: Assistant Professor, Department of Medicine, University of Medicine and Dentistry of New Jersey, USA).

In 1999, Dr. Lianos assumed Directorship of the Division of Nephrology at the University of Medicine and Dentistry of New Jersey, USA, where he continued his NIH and industry- funded research while increasing the research visibility of this Division by attracting competitive training and Scientist Development-type Grants from sources such as the National (USA) Kidney Foundation, the American Heart Association, and Industry (Dialysis Clinic Inc., Amgen Corp.) for trainees and young faculty of this Division.

In 2005, Dr. Lianos repatriated and joined the faculty of the University of Athens Medical School. In this University, he established a competitive research team hosted by the THORAX Foundation and has achieved research funding from various EU sources. He is currently a faculty member member of the 1<sup>st</sup> Intensive Care Clinic of the University of Athens School of Medicine located at "Evangelismos" Hospital.

# Representative peer-reviewed Publications (from a total of total 87)

**Lianos EA**, Andres G, Dunn MJ. Glomerular prostaglandin and thromboxane synthesis in rat nephrotoxic serum nephritis. Effects on renal hemodynamics. J. Clin. Invest. 74:1439-1448, 1983.

**Lianos EA**, Rahman MA, Dunn MJ. Glomerular arachidonate lipoxygenation in rat nephrotoxic serum nephritis. J. Clin. Invest. 76:1355-1359, 1985.

Goodwin JS, Atluru D, Sierakowski S and **Lianos EA**. Mechanisms of action of glucocorticosteroids: Inhibition of T cell proliferation and interleukin-2 production by hydrocortisone is reversed by leukotriene B4. J. Clin. Invest. 77:1244-1250, 1986.

**Lianos EA** and Zanglis A. Biosynthesis and metabolism of 1-0-alkyl-2-acetyl-sn-glycero-3-phosphocholine in rat glomerular mesangial cell. J. Biol. Chem. 262:8990-8993, 1987.

**Lianos EA.** Synthesis of hydroxyeicosatetraenoic acids and leukotrienes in rat nephrotoxic serum glomerulonephritis: Role of anti-glomerular basement membrane antibody dose, complement and neutrophils. J. Clin. Invest. 82:427-435, 1988.

Behrens TW, Lum LG, **Lianos EA** and Goodwin JS. Lipoxygenase inhibitors enhance proliferation of human B cells. J. Immunol. 143:2285-2294, 1989.

**Lianos EA**, Bresnahan BA, Pan C. Mesangial cell immune injury: Synthesis, origin and role of eicosanoids. J. Clin. Invest. 88(2): 623-631, 1991.

Bresnahan BA, Wu S-H, Fenoy FJ, Roman R, Lianos EA. Mesangial cell immune injury: Hemodynamic role of leukocyte and platelet-derived eicosanoids. J. Clin. Invest. 90:2304-2312, 1992.

Katoh T, **Lianos EA**, Fukunaga M, Takahashi K, Badr KF. Leukotriene D4 is a mediator of proteinuria and glomerular hemodynamic abnormalities in Passive Heymann Nephritis. J. Clin. Invest. 91:1507-1515, 1993.

Bresnahan BA, LeBreton GC, **Lianos EA**. Localization of authentic thromboxane A2/prostaglandin H2 receptor in the rat kidney. Kidney Int. 49:1207-1213, 1996.

Bokemeyer D, Gugleilmi KE, McGinty A, Sorokin A, **Lianos EA**, Dunn MJ: Activation of extracellular signal-regulated kinase in proliferative glomerulonephritis. J. Clin. Invest. 100 (3): 582-588, 1997.

**Lianos EA**, Guglielmi KE, Sharma M: Regulatory interactions between inducible nitric oxide synthase and eicosanoids in glomerular immune injury. Kidney Int. 53(3): 645-653, 1998.

Datta PK, Koukouritaki S., Hopp K A, **Lianos EA**. Heme Oxygenase –1 (HO –1) induction attenuates inducible nitric oxide synthase (iNOS) expression and proteinuria in glomerulonephritis. J. Am. Soc. Neprhol. 10:2540-2550, 1999.

Sharma M, McCarthy ET, Savin VJ, **Lianos EA**. Nitric oxide preserves glomerular protein permeability barrier by antagonizing superoxide. Kidney Int. 68(6):2735-2744, 2005.

Duann P, Datta PK, Pan C, Blumberg J, Sharma M, **Lianos EA.** Superoxide dismutase mimetic preserves the glomerular capillary permeability to protein. J. Pharm. Exp. Ther. 316: 1249-1254, 2006.

Sharma M, Zhou Z, Papapetropoulos A, McCarthy ET, Sharma R, Savin VJ, **Lianos EA**. ADMA Injures the Glomerular Filtration Barrier: Role of Nitric Oxide- and Superoxide. American Journal of Physiology-Renal Physiology, 296(6):F1386-95, 2009.

Duann P, **Lianos EA**. GEC-targeted HO-1 Expression Reduces Proteinuria in Glomerular Immune Injury. American Journal of Physiology-Renal Physiology, 297:629-638, 2009.