

## BIOGRAPHY ΒΙΟΓΡΑΦΙΑ

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### Greek giants in Nephrology

Rufus of Ephesus and Aretaeus of Cappadocia (1st–2nd century CE) can be considered as the first Greek “giants” of Nephrology since they are the first exponents of Hippocratic medicine who recognised the specific function of the kidney and described renal diseases. In the modern era, several Greek doctors contributed to the establishment and advancement of Nephrology in Greece. This paper refers only to those who worked in Greece and are no longer alive. Hippocrates Yatzides (1923–2013), one of the founders of EDTA in 1964, is deemed a pioneer of haemodialysis as, in 1965, he used activated uncoated carbon haemoperfusion to treat barbiturate poisoning. Yatzidis’s early attempts to establish a national Society of Nephrology, in 1966, were fruitless. Three years later, Sotiris Papastamatis (1912–1979), associate professor of Medicine at the University of Athens and his close friend Dimitrios Valtis (1917–1973), professor of Medicine in the University of Thessaloniki, collaborated in the foundation of the Hellenic Society of Nephrology (HSN). Other departed colleagues noteworthy for their contribution to the advancement of the study of renal diseases and the introduction of chronic haemodialysis in our country are Panos Metaxas (1929–2007) (Valtis’s disciple, president of the 8th International Congress of Nephrology held in Athens in 1981), Antonis Billis (1932–2013) (Papastamatis’s disciple, president of the 2nd National Congress of Nephrology), and Gregory Vosnides (1943–1996) (Billis’s disciple, secretary of the 32nd EDTA-ERA Congress held in Athens in 1995, co-organiser with Spyros Marketos of the 1st International Congress of the History of Nephrology held in Kos in 1996). Further to breaking new ground in the development of Nephrology in our country, these colleagues have served and continue to serve as role models for younger Greek nephrologists.

#### IN ANCIENT TIMES

In Greek mythology, giants were beings of human appearance but of great size and strength, known for their battle with the Olympian gods. The word is used metaphorically for persons of great ability and influence who act as leaders. In that sense, two Greek doctors who lived in the time of the Roman emperor Trajan (53–117), Rufus from Ephesus – a centre of the medical profession in that time, and Aretaeus from Cappadocia, who practiced in Rome and Alexandria, can be considered as the first Greek “giants” of Nephrology, since they are the first exponents of Hippocratic medicine who recognised the specific function of the kidney and described renal diseases. In particular, in one of his surviving works, entitled *Περί των εν κύστει και νεφροίς παθών* (“On diseases of the bladder and kidneys”), Rufus describes the location of the kidneys, the ureters and the urethra, and strives to provide a rational explanation of the altered function of the kidneys in dis-

ease. For example, he proposes that haematuria is due to a widening of the renal tissue, making blood pass together with urine. He also describes medical signs reminiscent of chronic renal failure (chronic, silent symptoms, resulting in cachexia, lethargus, and generalized oedema) and of diabetes mellitus (heavy polyuria, thirst, emancipation, and death caused by oedema). On the other hand, Aretaeus, in his treatise *De causis et signis acutorum morborum* (“On the causes and symptoms of acute diseases”), was the first to recognise the role of the kidneys in excreting urine while extracting it from the blood. Moreover, in his work *De causis et signis diuturnorum morborum* (“On the causes and symptoms of chronic diseases”), he connects gout with renal disease and diabetes with nephrotic syndrome (diabetes induced dropsy), he repeats earlier descriptions of renal colics and renal infections, and provides a detailed classification of renal stones according to their size, shape, opacity, etc.<sup>1</sup> (fig. 1).

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Έλληνες γίγαντες στη Νεφρολογία

Περίληψη στο τέλος του άρθρου

#### Key words

Aretaeus  
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Metaxas  
Oreopoulos  
Papastamatis  
Rufus  
Valtis  
Vosnides  
Yatzidis



**Figure 1.** The first two Greek “giants” of Nephrology: Rufus from Ephesus (left) and Aretaeus from Cappadocia.

### IN THE MODERN ERA

In the modern era, several Greek doctors contributed to the establishment and advancement of Nephrology in Greece. I will refer only to a few of those who practiced as nephrologists in our country and are no longer alive. As underlined by Professor Garabed Eknayan “[although] the study of diseases of the kidney has a long history that can be traced to antiquity [...] it was in 1960 when the inaugural International Congress of Nephrology convened with the subsequent establishment of the International Society of Nephrology that “nephrology” entered the parlance of medicine.”<sup>2</sup> The Congress, held at Geneva and Evian in September 1960, was organised by five scientific societies (Société de Néphrologie, Scandinavian Society for Kidney Research, American Society for Clinical Investigation, Società Italiana di Nefrologia, and Renal Association). The International Society of Nephrology (ISN) was created following the Congress in the same year. It was founded thanks to the vision of Professor Jean Hamburger, who became its first president.<sup>3</sup> Three years later, in 1963, the late professor of Internal Medicine at the University of Athens Arkagathos Goutas (1895–1982) sent a letter to some of his colleagues informing them that “on the occasion of the 2nd International Congress of Nephrology to be held this year, ISN decided to publish a list of the members of the National Societies of Nephrology by country and of the researchers on specific Nephrology topics of countries that have not established a relevant scientific society yet”, and inviting them to a meeting to jointly decide on the appropriate way to respond to this initiative. The meeting concluded without any decision being made.<sup>4</sup>

In the meantime, during a symposium on acute renal failure held on 2 September 1963 at the lecture theatre of the Royal Free Hospital in London, William Drukker, Stanley Shaldon and David Kerr planned the creation of

the European Dialysis and Transplant Association (EDTA)<sup>5</sup> On Thursday, 24 September 1964, some 30 delegates from Belgium, Denmark, UK, France, Germany, Ireland, Italy, Netherlands, Sweden, USA and Greece were invited to a founding meeting at the Queen Wilhelmina Hospital of the University of Amsterdam.<sup>6</sup> Greece was represented by Hippocrates Yatzidis, adjunct professor at the Second Department of Internal Medicine of the Athens Medical School, headed by Professor Goutas. The next day, some 34 papers were presented at the first meeting of the new association. Yatzidis presented his work on the use of activated uncoated carbon haemoperfusion to treat barbiturate poisoning. His full paper was published in French in *Nephron* in the same year.<sup>7</sup> Due to this presentation, which William Drukker credits as “classical”,<sup>6</sup> Yatzidis is deemed as a pioneer of haemodialysis. It is interesting to note that in a paper published the following year, Willem Kolff, who is considered the “father of artificial organs”, wrote: “A safe and inexpensive method to treat patients with terminal uremia is urgently needed. We have been stimulated by a report from Doctor H. Yatzidis in Athens, Greece, to look into the possibility of absorbing nitrogenous substances from the blood of uremic patients by hemoperfusion over activated charcoal...”.<sup>7</sup> Yatzidis, therefore, can be acknowledged as the first Greek “giant” of Nephrology in the modern era. It is worth mentioning that Hippocrates Yatzidis (1923–2013) was a principal mentor to Dimitrios Oreopoulos (1936–2012), one of the “giants” of nephrology at an international level, before the latter left Greece to Belfast, at first, and then to Toronto, where he crucially contributed to the evolution and worldwide spread of the method of continuous ambulatory peritoneal dialysis (fig. 2).<sup>8</sup>



**Figure 2.** Dimitrios Oreopoulos (left) and Hippocrates Yatzidis in October 1990, in Athens.

Yatzidis's early attempts to establish a national Society of Nephrology, in 1966, were fruitless.

Three years later, on 12 September 1969, two more Greek "giants" of Nephrology, Sotiris Papastamatis, adjunct Professor of Medicine at the University of Athens and his close friend Dimitrios Valtis, Professor of Medicine at the University of Thessaloniki, collaborated in the foundation of the Hellenic Society of Nephrology. The founding members were 22, from both Athens and Thessaloniki. Papastamatis was elected as the first president, and Valtis as the first vice-president of the new society.<sup>4</sup> Further to the Hellenic Society of Nephrology, Sotiris Papastamatis (1912–1979) contributed to the foundation of two other major Greek medical societies, which played a key role in the continuing education of Greek doctors: the Society for Medical Studies and the new chapter of the Athens Medical Society, the oldest scientific institution in modern Greece (est. 1835). He was also the first to establish dialysis units in two of the largest hospitals in Athens: the Athens State General Hospital and "Evangelismos" Hospital. Dimitrios Valtis (1917–1973) was professor and chairman of the 1st Department of Internal Medicine at the "AHEPA" University Hospital in Thessaloniki and served as dean of the Medical School of the Aristotelian University of Thessaloniki. Valtis introduced renal replacement treatment in Northern Greece in 1967, and contributed to the first cadaver renal transplantation in Greece, performed by the professor of Surgery Constantine Tountas, at the "AHEPA" hospital, in 1968<sup>9</sup> (fig. 3).

Two other departed colleagues, disciples of the two founders of the Hellenic Society of Nephrology, also merit the designation of "giants" of Nephrology. Panos Metaxas, Valtis's disciple, was a member of the 1st Council of the



**Figure 3.** The founders of the Hellenic Society of Nephrology: Sotiris Papastamatis (left) and Dimitrios Valtis.

Hellenic Society of Nephrology and president of the 8th International Congress of Nephrology held in Athens on 7–12 June 1981, with 3,000 participants (fig. 4). He was one of the several Greek nephrologists, including Dimitrios Oreopoulos and Antonios Billis, who were trained at the Belfast City Hospital under Mollie McGeown (1923–2004).

Antonios Billis, Papastamatis's disciple, served as vice-president (1972–1974) of the 2nd Council of the Hellenic Society of Nephrology, presided by professor Valtis, and as president (1974–1976) of the 3rd Council of the Society, and of the 2nd National Congress of Nephrology, held in Athens on 3–5 November 1982. The Nephrology Department of "Evangelismos" hospital in Athens, where he worked as chief, was named after him. Gregory Vosnides, the youngest of the Greek "giants" of nephrology in the modern era, was a fellow of Antonios Billis (fig. 5). He served as presi-



**Figure 4.** George E. Schreiner, president of the International Society of Nephrology, addressing the opening ceremony of the 8th International Congress of Nephrology at the Herodus Atticus Theater. Panos Metaxas, Congress president, is looking at him.



**Figure 5.** Antonios Billis and Gregory Vosnides (first and last from left to right) at the opening ceremony of the 8th International Congress of Nephrology (Athens, 1981).



dent of the Hellenic Society of Nephrology (1994–1996), and as secretary of the 32nd EDTA-ERA Congress held in Athens on 11–14 June 1995. Furthermore, as president of the Hellenic Society of Nephrology, he contributed, along Spyros Marketos, to the organisation of the 1st International Congress of the History of Nephrology held in Kos on 14–16 October 1996, almost a month before his tragic demise.<sup>10</sup> The Nephrology Department at “Laikon” hospital in Athens was named after him.

## CONCLUSIONS

These are our late colleagues who symbolise Greek “giants” of nephrology. Further to breaking new ground in the development of nephrology in our country, these colleagues have served and continue to serve as role models to younger Greek nephrologists. And this attribute should be viewed as one of their most important accomplishments.

## ΠΕΡΙΛΗΨΗ

### Έλληνες γίγαντες στη Νεφρολογία

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Οι πρώτοι Έλληνες «γίγαντες» της Νεφρολογίας μπορούν να θεωρηθούν ο Ρούφος ο Εφέσιος και ο Αρεταίος ο Καππαδόκης (1ος–2ος αιώνας μ.Χ.), για τον λόγο ότι ήταν οι πρώτοι θιασώτες της Ιπποκρατικής Ιατρικής που αναγνώρισαν την ειδική λειτουργία του νεφρού και περιέγραψαν νεφρικές νόσους. Στη σύγχρονη εποχή, πολλοί Έλληνες γιατροί συνέβαλαν στην εδραίωση και εξέλιξη της Νεφρολογίας στη χώρα μας. Εδώ αναφέρονται μόνο ορισμένοι που εργάστηκαν στην Ελλάδα και δεν βρίσκονται πλέον στη ζωή. Ο Ιπποκράτης Γιατζίδης (1923–2013), ένας από τους ιδρυτές της EDTA το 1964, αναγνωρίζεται ως πρωτοπόρος της αιμοκάθαρσης δοθέντος ότι το 1964, χρησιμοποίησε στήλη ενεργού άνθρακα για την αντιμετώπιση μιας περίπτωσης δηλητηρίασης με βαρβιτουρικά. Οι πρώτες προσπάθειες του Γιατζίδη για την ίδρυση εθνικής Εταιρείας Νεφρολογίας απέβησαν άκαρπες. Τρία χρόνια αργότερα, ο Σωτήρης Παπασταμάτης (1912–1979), υφηγητής τότε του Πανεπιστημίου Αθηνών και ο στενός του φίλος Δημήτριος Βαλτής (1917–1973), καθηγητής Ιατρικής στο Πανεπιστήμιο της Θεσσαλονίκης, συνεργάστηκαν στην ίδρυση της Ελληνικής Νεφρολογικής Εταιρείας. Άλλοι εκλιπόντες συνάδελφοι των οποίων η συμβολή στην προώθηση της έρευνας επί των νεφρικών νόσων και την προαγωγή των μεθόδων αιμοκάθαρσης στη χώρα μας αξίζει να μνημονευθεί είναι ο Πάνος Μεταξάς (1929–2007) (μαθητής του Βαλτή, πρόεδρος του 8ου Διεθνούς Συνεδρίου Νεφρολογίας που διοργανώθηκε το 1981 στην Αθήνα), ο Αντώνης Μπίλλης (1932–2013) (μαθητής του Παπασταμάτη, πρόεδρος του 2ου Πανελληνίου Συνεδρίου Νεφρολογίας) και ο Γρηγόρης Βοσνίδης (1943–1996) (μαθητής του Μπίλλη, γραμματέας του 32ου Συνεδρίου της EDTA-ERA που έλαβε χώρα στην Αθήνα το 1995 και συνδιοργανωτής με τον Σπύρο Μαρκέτο του 1ου Συνεδρίου της Ιστορίας της Νεφρολογίας, το 1996 στην Κω. Πέραν της συμβολής τους στην καθιέρωση και την εξέλιξη της Νεφρολογίας στη χώρα μας, οι συνάδελφοι αυτοί χρησίμευσαν και εξακολουθούν να χρησιμεύουν ως πρότυπα για μίμηση από τους νεότερους Έλληνες νεφρολόγους.

**Λέξεις ευρητήριο:** Αρεταίος, Βαλτής, Βοσνίδης, Γιατζίδης, Ελληνική Νεφρολογική Εταιρεία, Μεταξάς, Μπίλλης, Παπασταμάτης, Ρούφος, Ωραιόπουλος

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