Ernst Fuchs
(1851-1930)
Dr. Padmaja Krishnan, Calicut

(In the same year that Helmholtz invented the ophthalmoscope was born a child destined to be one of our great ophthalmologists. This is his story…….)

Ernst Fuchs was born in Vienna on 14th November 1851. He was the eldest of three children.

His ancestors were poor farmers, but his grandfather was sent to Germany to study Theology initially; he gave it up to become instead a Professor of History in Vienna. Fuchs' father, Adalbert, had an even more varied career. He started as a medical student, did a PhD, taught Natural Science, Zoology and finally Agriculture in Vienna.

Ernst began his scholastic career at Scott's Gymnasium in Vienna in 1860, graduating in 1868. He had an insatiable thirst for knowledge and often related the story of how he had, as a college student, jumped into a whirlpool to find out for himself if it were true that the current was strong enough to pull down the strongest swimmer. He was lucky to survive this foolhardy experiment.

Fuchs' father wanted Ernst to be an engineer but the lad had other ideas. Although his interests included Physics and Astronomy, he opted to study Medicine. This he did in the heyday of the Vienna school, being taught by such luminaries as Joseph Hyrtl, Ernst Wilhelm von Brücke, Karl Rokitansky, Joseph Skoda, Christian Billroth, and Carl Ferdinand von Arlt.

While still a medical student, von Brücke recognised Fuchs' interest in Ophthalmology and got him a post as assistant to Otto Becker in Heidelberg, Germany. Fuchs however chose to go for a year to the Physiological Institute in Innsbruck. Here in the Austrian Alps, he developed his passion for mountaineering, which remained with him throughout his life. He returned to Vienna in the fall of 1873 and graduated with honours a year later.

He began his medical career as an unpaid intern with von Arlt for whom he had the greatest respect and admiration. A few months later von Arlt suggested that Fuchs start his formal training in surgery under Billroth, whose outstanding contributions as a surgeon were already recognised across Europe. Billroth was Fuchs' teacher and mentor for the next two years at the end of which time Fuchs was tempted to become a general surgeon himself.

Von Arlt now asked Fuchs to become his assistant and probably regretting his decision not to train under Becker the previous year, Fuchs accepted the offer and returned to Ophthalmology. Five years later and just 30 years of age, he became Professor of Ophthalmology.
at Liege, Belgium; at that time he was the youngest
Austrian-trained graduate to become a professor.
In 1885 he succeeded Eduard Jaeger Ritter von Jaxtthal
as Clinical Director of the Second Vienna Eye Hospital.
Fuchs had already published his prize winning book
on the causes and prevention of blindness. His
worldwide reputation as a lecturer and physician
started with this appointment.
In 1915, aged 64 years, Fuchs resigned as clinical
director of the Second Vienna Eye Hospital. The main
motive for his relatively early retirement was apparently
to escape from the time-consuming obligations of
 teaching and examining. Nevertheless, following
retirement he published a further 99 articles.
During the time he was at Vienna, ophthalmologists
from around the world came there to learn from the
man considered the master of their profession. Fuchs’
extensive clinical studies and histopathologic
observations provided the first descriptions and
definitions of many conditions and diseases of the eye,
including Fuchs endothelial dystrophy, Fuch’s
heterochronic cyclitis, Dalen –Fuch’s nodules and
Fuch’s coloboma to name a few. He changed the custom
of keeping patients in a dark room with both eyes
covered for a whole week before changing dressings
after a cataract operation. He also introduced early
ophthalmoscopic examinations in these patients and
thus found that choroidal detachment was far more
common than previously believed.
His Textbook of Ophthalmology, first published in 1889,
was regarded as the “bible of ophthalmology” for more
than 50 years. He developed this from his lectures to
ensure that his students listened to him rather than be
distracted making notes. It was a classic in its time and
published in all European languages as well as Japanese
and Chinese. Fuchs employed the then new technique
of using large print for material suitable for students
and small prints for that which he felt was important
for people who were continuing to study ophthalmology
as a postgraduate exercise. It ran into eighteen editions
in German within the next twenty-one years. Of these,
twelve were edited by Fuchs himself and the later ones
by his oldest pupil, Salzmann. And the rapid progress
made by ophthalmology in that period made Fuchs
write in his preface to the tenth edition, “Nothing shows
me the speed of scientific progress better than to leaf
through the first editions of my book. I come across
opinions that I shared with other experts and that now
seem to have aged half a century. I would prefer not to
admit to these opinions, would the proof not lie in front
of me.”
This text proved to be a very important work at that
time and was translated into various languages
including Japanese, Chinese and Russian. The last
German edition was published in 1945. Ten British
editions appeared between 1892 and 1933. In 1903,
Alexander Duane translated and published this in the
United States as Fuchs’ Textbook of Ophthalmology –
this popular text ran into eight editions.
Ernst Fuchs was famed for his teaching abilities
throughout his career but especially during the last 15
years of his life, which he spent traveling to teach and
visit his pupils around the world. Thanks to numerous
invitations by international colleagues, scientific
societies, and governments, Fuchs was able to escape
the Austrian winters (of which he had a growing dislike
with age) by speaking in countries as far away as
Indonesia and East Africa. Remarkably, besides some
knowledge of Latin and Greek, Fuchs was fluent in
English, French, and Italian. To present his work in
Spain and South America, he also began to learn
Spanish at age 70 years and subsequently produced
several publications in that language.
Fuchs was a tall man with a slight stoop. He embodied
Osler’s ideals of equanimitas by never being angry or
impatient and maintaining a calm and unruffled
exterior. He was fluent in English and German and this
helped him to communicate with and present papers
to scientists all over the world.
Apart from his interest in medicine, Fuchs was
interested in Botany, Geography, Literature, Art and
History. He enjoyed travelling till the very end and was
a member of the Vienna Geographical Society. He
regularly gave talks to a wide audience on his many
travels around the globe. In 1875 he returned from
Scandinavia with a pair of “snow shoes” and thus
introduced skiing to Vienna.
In recognition of Fuchs’ worldwide reputation a special
banquet was held in his honor by the American
delegation at the Amsterdam International
Ophthalmological Congress in 1929. It was at this
congress that the International Association for the Prevention of Blindness was established and Fuchs was elected its first honorary member. From the Netherlands, he traveled to Canada and then to Baltimore, where he was guest speaker for the opening of the Wilmer Ophthalmic Institute. Fuchs then journeyed through Mexico and Central America.

A few months after his return to Vienna and following an outstanding, dynamic career, Ernst Fuchs died of a heart attack on November 21, 1930, at age 79 years. He was buried in Kritzendorf, a small Austrian village on the Donau River.

During the funeral oration held by the Austrian Ophthalmological Society, of which he had been President of Honor, Fuchs was described as a serious teacher and physician who was never dogmatic and never taught anything he was not certain of. Great encomiums indeed!!