

3rd Meeting of the Federation of European Biochemical Societies, Warsaw, April 4-7, 1966: Some Personal Recollections

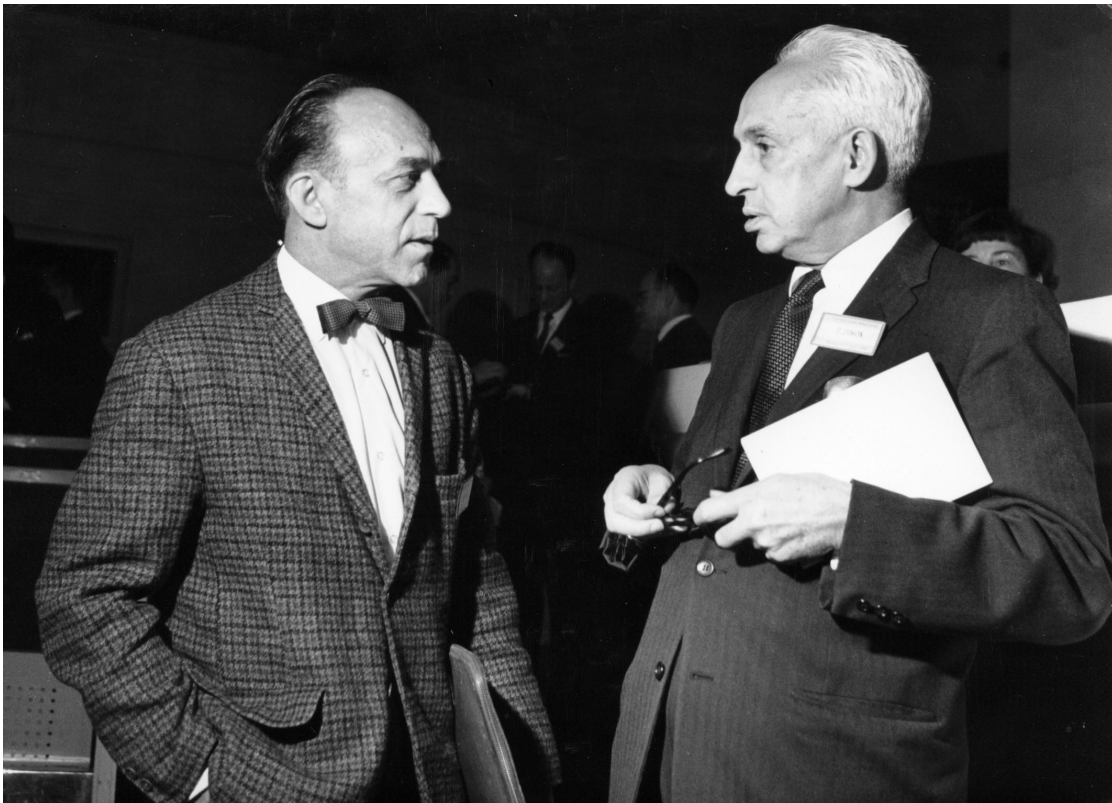
Almost forty years have elapsed since the 3rd Meeting of the Federation of European Biochemical Societies, which took place in Warsaw in April 1966, with the participation of more than 1,000 scientists from 30 countries, as well as 550 from various centers in Poland. The latter included many of the younger generation who, with their enthusiasm, contributed to making the 3rd FEBS a resounding success, both scientifically, as well as socially. The success of this meeting was also due, as several local participants have pointed out, to the exceptional organizing abilities of Kazimierz Zakrzewski, Chairman of the Organizing Committee.



David Shugar and Fred Sanger

As pointed out at that time, we were then “witnesses to an explosion in the field of molecular biology and its applications to the fundamental processes of cellular genetics”, a statement since more than amply supported by the continuing momentous progress in genomics, proteomics, genetic engineering.

Emerging out of this 3rd FEBS Meeting, in addition to the general program and poster sessions, were three special volumes presenting the Proceedings of Symposia on *Biochemistry of Mitochondria* (organized by E. C. Slater, Z. Kaniuga and L. Wojtczak), *Biochemistry of Blood Platelets* (organized by E. Kowalski and S. Niewiarowski), and *Genetic Elements: Properties and Function* (organized by D. Shugar). The latter was by far the center of interest, and it is worth recalling several points relating to its organization. Two of the participants (not originally invited)



David Shugar and Severo Ochoa

submitted Abstracts for Poster Presentation. One of these was by Piet Borst from Amsterdam, in collaboration with A.M. Kroon and G.J.M. Ruttenberg, entitled “Mitochondrial DNA and other forms of cytoplasmic DNA”. When Piet was asked by phone to present this as an invited lecture, he was somewhat hesitant, because he had “not done so before”, but eventually agreed, leading to what was at that time the most comprehensive account of the identification and properties of mitochondrial DNA and biochemical evidence for a genetic function of this DNA. The second was by Fred Sanger from the UK, already a Nobel recipient for the sequencing of insulin, who, in collaboration with G. G. Brownlee, submitted a Poster Abstract under the modest title “Fractionation of Radioactive Nucleotides”, which shortly thereafter led to the sequencing of 5S RNA, and the subsequent rare distinction of a 2nd Nobel prize, shared with W. Gilbert and Paul Berg. When Fred was contacted by phone, he first expressed astonishment that it was possible to phone from “behind the iron curtain” to the UK! And when I proposed that he present his poster as an invited lecture, he asked to be given several days to consider this. After three

days had elapsed, he agreed. It is interesting to recall that Severo Ochoa, who chaired the session on "Nucleotide Sequences in RNA", underlined in his Introductory Remarks that "it is encouraging (sic!)that Dr. Sanger.....is now engaged in the development of simpler methods for sequence analysis".

The highlight of the 3rd FEBS Meeting was undoubtedly the lecture of Gobind Khorana, at that time from the University of Wisconsin, under the unusually modest title "Polynucleotide Synthesis and the Genetic Code". The lecture was to be presented after a lunch break. When the morning session was over, Gobind sought me out to explain that he was "too nervous" to go to lunch, and asked instead that I accompany him to the lecture hall to see the layout and once again organize his slides. The lecture was presented in an auditorium with seating for 600, with an additional 200 crammed in! And, when the lecture was finished, we became witnesses to an unusual phenomenon at a scientific meeting, with 800 participants spontaneously rising to



B. Chance, Z. Kaniuga, E.C. Slater (from left to right)

their feet, and an applause that lasted for more than 10 minutes. And to me reminiscent of a similar standing ovation by a London audience, led by King George I, accorded the Hallelujah chorus in a performance of Handel's "Messiah". As pointed out by Fred Sanger, who chaired the session on The Genetic Code, "the most exciting and spectacular development in biochemistry during the last few years has been the elucidation of the genetic code". Two years later, Gobind was the recipient of a Nobel prize, shared with Robert Holley and M. Nirenberg "for their interpretation of the genetic code and its function in protein synthesis".

Another notable feature of the 3rd FEBS Meeting was the presence of Claude Liébecq, from the University of Liège in Belgium, actively engaged at that time in preparations for launching the *European Journal of Biochemistry*, under the auspices of FEBS. One of his objectives for attending was to profit from the presence of leading European scientists to line up the founding Board of Editors of the EJB. It is now hardly necessary to underline the important role since played by this journal on the international scene. I personally was highly flattered by the invitation to become a member of the Board.



P. Szfrański, W. Niemierko, F. Gros, D. Shugar, I. Mochnacka (from left to right)

Finally, it is worth emphasizing that the 3rd FEBS meeting, with its bevy of distinguished participants, profoundly stimulated and influenced the subsequent development of molecular biology and genetics in Poland, as well as the initiation of many international collaborative research projects.

David Shugar