

## Historical overview of the WFN-organised Congresses on Parkinson's Disease and Related Disorders

L. Battistin, A.D. Korczyn, E.Ch. Wolters

Nearly fifty years after the first International Parkinson's Disease Congress, the tradition of the WFN Research Group on Parkinsonism and Related Disorders to organise World Congresses on this theme is still alive and kicking. The first congress, organised by the Veteran's Administrations of Canada and the USA in 1959, took place in Montreal, attended by a small group of no more than 40 or 50 invited participants, mostly neurosurgeons, with the aim of assessing the state of the art in Parkinson's disease. In 2007, over 3,000 participants, mainly clinical neurologists, neurosurgeons, psychiatrists, neuroscientists and allied health professionals, are expected to attend the seventeenth edition of this, one of the world's earliest disease-oriented, meetings in Amsterdam.

In 1959, the surgical approaches of thalamotomy and pallidotomy represented the most important and successful strategies in the treatment of Parkinson's disease, and therefore the main topics addressed technical aspects of stereotactic surgery. Other issues were presented as well though, for instance the accuracy of contemporary diagnostic criteria, pathophysiological mechanisms underlying specific parkinsonian signs, and methods to measure the response to therapy. These themes would be explored in increasing detail in the following Parkinson's disease Congresses. The second Congress was held in Washington, DC (USA) in November 1963, whereas the third Congress was organized by the neurosurgeon F.J. Gillingham in Edinburgh, Scotland, in 1968. Every congress was expanded in respect to the previous one, in terms of both number of topics and participants. In fact, spurred by the biochemical and pharmacological discoveries pioneered by Arvid Carlsson from 1957 onwards, the potential of levodopa therapy [initially with the racemic DL-dopa] started to attract a wider audience. The epoch-making possibility to reverse the parkinsonian motor symptoms by the use of levodopa in advanced cases of Parkinson's disease, as well as the data presented from the animal models, had an enormous impact in the neurological community. Especially the 1968 congress increased the feeling that a new era was emerging in the treatment of neurodegenerative disorders, in particular Parkinson's disease. Among the attendants were André Barbeau (one of the hosts of the first Congress), George Cotzias and Rolf Hassler, founding members of

the Research Committee on Extrapyrimal Diseases of the World Federation of Neurology (WFN), which from 1972 was chaired by Melvin Yahr.

The fourth Congress was held in Zürich, Switzerland, in September 1972, again organized by a neurosurgeon, J. Siegfried, while the Ludwig-Boltzmann-Institute for Neurochemistry organized the V International Congress on Parkinson's disease, in Vienna, Austria, in September 1975. At that time the meeting had increasingly become a forum for interaction between basic scientists and clinicians. L-Dopa treatment had been discussed regarding its potential benefits and also side effects. In this respect, the ability to use MAO inhibitors combined with L-dopa was fully addressed by W. Birkmayer, organizer of this last meeting. In his concluding remarks, Melvin Yahr stated that "*So really that is what these meetings have become. They have become a forum for interaction between laboratory investigators in this field and clinicians. An opportunity to exchange information and ideas, hopefully to identify areas in which progress has been made and also areas in which there is no progress, to look for some of the signposts in research*".

The VI WFN Congress, held in Quebec, Canada, in September 1978, was organized by L.J. Poirier, and the VII Congress in June 1982, in Frankfurt, Germany, was organized by R.G. Hassler. Melvin D. Yahr (Figure 1), who chaired the Research Group of Extrapyrimal Disorders of the WFN from 1972 until 2001, was the President of the VIII International Congress, held in New York City in June 1985.

From the small group of about 50 participants of the first symposium in 1959, almost 25 year later the number of participants had increased to 500, coming from 28 countries. The topics encompassed a broad range of subjects from epidemiology to biochemistry and ultrastructural pathology, motor and non-motor aspects of Parkinson's disease, and future approach to therapy.

The IX Congress was held in Jerusalem, Israel, in June 1988, and was organized by Max B. Streiffler. This meeting was the first outside Europe and North America and succeeded in attracting over 850 participants. It saw the first mention of new agents (among them dopamine agonists, COMT inhibitors and amantadine), as well as the



Fig. 1. Professor Melvin D. Yahr (1917–2004) chaired the Research Group of Extrapyrimal Disorders of the WFN from 1972 until 2001 and chaired the VIII International Congress, held in New York City in June 1985.

expanding role of GABA and other neurotransmitters. Also, neurosurgical techniques which had been suppressed for twenty years by the success of levodopa re-emerged during this meeting. On the clinical side, non-motor symptoms in PD, such as autonomic, affective and cognitive symptoms, were mentioned for the first time and the further delineation of Parkinson-like syndromes attracted much attention.

In 1991 the WFN Research Group acknowledged the huge contribution of the Eastern scientific community in the field of neurodegenerative diseases, and especially the merits of the neurosurgeon Hirotaro Narabayashi, by awarding him the organisation of the X International Congress on Parkinson's disease, which was held in Tokyo, October 27–30, 1991. The number of attendants at that occasion came close to 1,000. In the preface of the book of proceedings, Narabayashi noticed that "... *knowledge of Parkinson's disease is rapidly advancing as a result of intense efforts in various fields of clinical and basic neurosciences ...: neuroanatomy, neurophysiology, neurochemistry and neuro-pharmacology ... and also in the fields of clinical neurology and neuropathology*".

Three years later, in March 1994, Rome hosted the XI World Congress, chaired by Leontino Battistin. In this meeting the putative interaction between gene and environment in the ethiopathogenesis of extrapirimal disorders was endorsed. In addition, the Organizing Committee recognized the importance of new developing hot topics and dedicated separate sessions to "Parkinson plus" syndromes, dementia in Parkinson's disease and neuroimaging. In the Preface the Organizer wrote: "*The widening of interest in possible etiologic factors and mechanisms of neuroprotection has been accompanied by new cultural and methodological approaches, and has involved disciplines such as molecular biology, immunology, endocrinology, genetics and epidemiology. Moreover, in recent years, an important and crucial step has been made with functional neuroimaging, through technologies such as SPECT, PET and MR, both imaging and spectroscopy.*

*Using such techniques, the chemistry and metabolism of the brain in vivo can be studied in normal subjects and in patients, leading to a better understanding of many physiopathological and clinical aspects of the disease*".

Melvin Yahr summarized the goals of the WFN's congresses on Parkinsonism and Related Disorders in the opening speech of this congress, attended by almost 1,500 participants. According to him, the most prominent were: (1) providing an international forum for those interested in parkinsonian research, not only to present their work but have an opportunity for personal interaction; (2) reviewing new developments in the field with "state-of-the-art" presentations by leading investigators; and (3) identifying new and promising avenues of research.

The XII Congress was held in London, UK, in June 1997, organised by Gerald Stern; the XIII Congress in Vancouver, Canada, July 1999, was organised by Donald Calne. The XIV Congress was held in Helsinki, Finland, in July 2001; the organiser was Heikki T. Teräväinen. During that congress, Melvin Yahr resigned as chair of the WFN Research Group of Parkinsonism and Related Disorders; his successor, Donald Calne, was unanimously elected. Donald Calne will step back in December 2007, during the XVII Congress.

The XV World Congress was programmed for 2003 in Beijing, China. Unfortunately, a fast-spreading, highly contagious influenza-like disease caused this congress to be cancelled a few months before the established date. Nevertheless, the XVI World Congress, held in Berlin, March 2005, and organized by Peter F. Riederer (Figure 2), was really very successful. Nearly 3,000 participants were registered.

The present XVII WFN World Congress on Parkinsonism and Related Disorders, organised by Erik Ch. Wolters, is taking place in Amsterdam. Hot items of this congress,



Fig. 2. During the Berlin XVI WFN World Congress on Parkinson's Disease and Related Disorders, Peter Riederer (center), the president of this congress, handed over the symbolic 'talking stick' to the president of the upcoming XVII<sup>th</sup> Congress in Amsterdam, Erik Wolters (left), in the presence of the chairman of the WFN Research Group, Donald Calne (right).

Table 1  
Proceedings of the consecutive Congresses

Congress, organizer(s)	Proceedings
I Congress (Montreal, Canada, October 1959)	No Proceedings.
II Congress (Washington, DC, November 1963)	No Proceedings.
III Congress (Edinburgh, Scotland, May 1968), F.J. Gillingham	Gillingham FJ, Donaldson IML, editors, Third Symposium on Parkinson's Disease. Edinburgh/London: E. & S. Livingstone; 1969, 302pp.
IV Congress (Zurich, Switzerland, September 1972), J. Siegfried	No Proceedings.
V Congress (Vienna, Austria, September 1975), W. Birkmayer	Birkmayer W, Hornykiewicz O, editors, Advances in Parkinsonism. Basle: Hoffmann-La Roche; 1976, 627pp.
VI Congress (Quebec, Canada, September 1978), L.J. Poirier	Poirier LJ, Sourkes TL, Bédard P, editors, The Extraparallel System and its Disorders, vol. 24 of Advances in Neurology; 1979, 529pp.
VII Congress (Frankfurt am Main, Germany, June 1982), R.G. Hassler	Hassler RG, Christ JF, editors, Parkinson-Specific Motor and Mental Disorders, Role of Pallidum: pathophysiological, biochemical and therapeutic aspects, vol. 40 of Advances in Neurology; 1984, 579pp.
VIII Congress (New York, NY, June 1985), M.D. Yahr	Yahr MD, Bergmann KJ, editors, Parkinson's Disease, vol. 45 of Advances in Neurology; 1986, 616pp.
IX Congress (Jerusalem, Israel, June 1988), M.B. Streiffler	Streiffler MB, Korczyn AD, Melamed E, Youdim MBH, editors, Parkinson's Disease: anatomy, pathology and therapy, vol. 53 of Advances in Neurology; 1990, 596pp.
X Congress (Tokyo, Japan, October 1991), H. Narabayashi	Narabayashi H, Nagatsu T, Yanagisawa N, Mizuno Y, editors, Parkinson's Disease: from basic research to treatment, vol. 60 of Advances in Neurology; 1993, 800pp.
XI Congress (Roma, Italy, March 1994), L. Battistin	Battistin L, Scarlato G, Caraceni T, Ruggieri S, editors, Parkinson's Disease, vol. 69 of Advances in Neurology; 1996, 612pp.
XII Congress (London, UK, July 1997), G. Stern	Stern GM, editor, Parkinson's Disease, vol. 80 of Advances in Neurology; 1999, 670pp.
XIII Congress (Vancouver, Canada, July 1999), D. Calne	Calne D, Calne S, editors, Parkinson's Disease, vol. 86 of Advances in Neurology; 2001, 479pp.
XIV Congress (Helsinki, Finland, July 2001), H. Teräväinen	Gordin A, Kaakkola S, Teräväinen H, editors, Parkinson's Disease, vol. 91 of Advances in Neurology; 2002, 426pp.
XV Congress (Beijing, China, 2003)	Cancelled
XVI Congress (Berlin, Germany, March 2005), P. Riederer	Riederer P, Reichmann H, Youdim MHB, Gerlach M, editors, Parkinson's Disease and Related Disorders. J Neural Transm 70(S), 2006; 506pp.
XVII Congress (Amsterdam, Netherlands, December 2007), E.Ch. Wolters	Wolters ECh, Berendse HW, de Koning-Tijssen MAJ, editors, Parkinson's Disease and Related Disorders. Parkinson Relat Disord 13(S3), 2007; 304pp.

organised in a vertical thematic way, comprise the recognition of the multitude of (premotor) non-motor symptoms enabling early diagnosis in Parkinson's disease; the visualisation of the working brain by new MRI, PET and SPET, MEG and ultrasonography techniques; and the 'continuous dopaminergic stimulation' by dopamine agonist patches and intestinal gel in the treatment of Parkinson's disease. The theme of this Congress, "Education by Integration: the gateway to improve the quality of life of patients suffering from Parkinsonism and/or related disorders" was brought into practice via critical, translational luncheon forum discussions and by the organisation of two symposia dedicated to allied health professions.

**Note:** The authors wish to express their hope that this reputable, world-wide appreciated activity of the WFN Research Group of Parkinsonism and Related Disorders may continue in the future, enabling all those interested in extrapyramidal disorders (all, indeed, with the traditional generous travel grants for younger colleagues all over the world) to regularly come together and discuss upcoming developments in this field, in the friendly, familiar atmosphere that is characteristic for these congresses, with particular opportunities for interaction between clinicians and basic scientists.