

Notes and Announcements

8th International Congress of Neurological Surgery Toronto, July 7 - 13, 1985. The Canadian Neurosurgical Society will host the 1985 Meeting of the World Federation of Neurosurgical Societies. The officers for this congress are as follows: President — Dr. A. Hudson, Vice-President — Dr. C. Bertrand, Secretary — Dr. S. Schatz, Assistant Secretary — Dr. F. LeBlanc, Treasurer — Dr. D. Parkinson, Assistant Treasurer — Dr. H. Hoffman, Scientific Director — Dr. S. Peerless.

The most recent planning session was held in Washington at the time of the AANS meeting. Dr. Stan Schatz will be in control of the overall format for the meeting. Dr. Skip Peerless will have the opportunity of drawing on neurosurgical talent from around the world as he assembles the scientific program. A preliminary outline of the budget was presented by Dr. Harold Hoffman at the business meeting of the Canadian Neurosurgical Society in Newfoundland in June.

The organizing committee wishes to emphasize that while the Congress will be held in Toronto, that the selection of a meeting site in Canada is considered a tribute to Canadian Neurosurgery. It is anticipated that neurosurgeons from across the country will participate in the planning for this congress. Individuals who have not already done so are invited to write to Dr. Stan Schatz to volunteer their assistance.

Dr. Greg Brown Honoured by Peers. Dr. Gregory Brown, Professor and Chairman of Neurosciences and Professor of Psychiatry, is the recipient of the second annual Heinz Lehmann Award which is given to individuals who have conducted outstanding research on drugs which affect the brain. The award, which consists of a plaque and a gift of \$1,000, is sponsored by Hoffman LaRoche in honour of Dr. Heinz Lehmann, a distinguished Canadian investigator.

The award was presented to Dr. Brown at the annual meeting of the Canadian College of Neuropsychopharmacology held in Saskatoon, Saskatchewan at the end of May. The 1982 award winner was Dr. T.L. Sourkes of McGill University.

Dr. Brown joined McMaster's Faculty of Health Sciences in 1977. He is an active investigator in the interdisciplinary Brain/Behaviour Research Program, which has as its focus the biological basis of behaviour. He and his colleagues have made major contributions to the understanding of stress, and the regulations of pituitary hormones by brain transmitters in experimental animals and man. Another significant contribution is the study of the pineal gland and its role in the regulation of biological rhythms. Dr. Brown and his colleagues have devised new methods of measuring the pineal chemicals melatonin and N-acetylserotonin.

Medical Research Council of Canada — Allocation of Budget Supplement. The Medical Research Council decided June 22-23 in Calgary on the allocation of an additional \$50 million over two years recently provided by the federal government for the support of health research in Canada. Decisions were made to allocate \$16.2 of \$20 million available this year, in addition to the \$117 million already allocated.

Decisions on the remaining \$3.8 million will be made in later meetings to cover expected needs for other programs and in accordance with Council priorities.

The major decisions allow for an additional:

221 Research Grants	— \$4.8 million
362 Equipment Grants	— \$7.2 million
15 Scholarship and MRC Scientist Awards	— \$0.4 million
43 Fellowships	— \$0.7 million
61 Studentships	— \$0.5 million
5 Development Grants	— \$1.0 million
2 Biotechnology Training Grants	— \$0.1 million

Standards for Recording Auditory Brainstem Responses. In February of 1982 a group of clinicians and scientists representing a diversity of backgrounds (Neurology, Audiology, Otolaryngology, Pediatrics, Electroencephalography) met in Laguna Beach California, under the auspices of the Department of Neurology, University of California, Irvine, to consider recommendations for standards for auditory brainstem response testing. In some areas it was easy to reach an agreement that standards are or are not possible at the present time. There were other areas in which the consensus was that more information and then further consideration would be required. The proceedings of the conference will be published by Sensus, Amplaid Scientific Publications, Milano.

A summary of the conclusions follow:

I) SCOPE

It was agreed to try to define the *minimal* requirements for the equipment, and also conventions of communication including nomenclature. Only limited aspects of testing protocols were considered as these were felt to be very much in flux. Training requirements for technicians or interpretation of the test were not considered as these issues are the proper domain of the appropriate National Societies.

II) THE ABR AS A NEUROLOGICAL TEST FOR BRAINSTEM ASSESSMENT:

Stimulus: Clicks are to be used, produced by a 100 usec square wave pulse applied to an earphone with a relatively flat frequency spectrum such as a TDH 49 or equivalent. The equipment should allow presentation of either single polarity clicks (condensation or rarefaction) or alternating polarity clicks, and also broad band noise to the contralateral ear for masking.

Intensity: A range of intensities in 5 dB steps up to 130 dB peak equivalent SPL should be available. The intensity of the clicks should be acoustically calibrated twice a year using a standard coupler and sound level meter. Intensity should be stated as "dB peak equivalent SPL."

Rate: Stimulus rates should be available from 1 to 80 per second.

Electrodes: Electrodes of relatively equal and low impedance should be applied to the scalp in the midline somewhere between the vertex and forehead and on the earlobe or mastoid ipsilateral to the ear stimulated. The ground electrode may be placed anywhere on the subject. The manner of application should follow customary laboratory procedures of an electroencephalographic facility, but special precautions must be followed for preterm or new born infants. (See section III.)

Amplifiers and filters: The amplifiers should meet customary standards of safety for application to patients. Their overall gain should be sufficient to utilize fully the computer's digitizing capability to achieve adequate resolution of signals as small as 50 nanovolts. The pass-band of the filters for the ABR should be approximately 30 to 3000 Hz (3dB-down points) and they should have slopes of at least 6 dB/octave.

Averaging Computer: The maximal dwell time should be 50 usec (20kHz sampling rate) when using a sweep time of 10 to 20 msec. Artifact rejection of traces above a certain amplitude should be provided.

Plotting convention: There should be notation of the electrode used as G1 input to the amplifier, i.e. the "active" electrode, and of the direction of display of the polarity of this electrode in the ABR. There was no consensus as to a single convention for the polarity of such a display.

Protocol for Neurological Assessment: Stimulus intensity should be approximately 90 dB peak equivalent SPL. One slow rate of 25/sec or less and a faster rate of 50/sec or more should be used. All averages should be replicated until the latencies of principal peaks are within 0.2 msec of each other.

III) THE ABR AS SCREENING TEST FOR AUDIOLOGICAL EVALUATION:

The same minimal requirements as for neurological evaluation are recommended with the following additions and exceptions:

1. Sedation of infants may be necessary.
2. Capability to present bone-conducted signals should be available.
3. Collodion should not be used to affix electrodes to pre-mature or full-term newborn infants because of their fragile skin as compared to the skin of adults.
4. Earphone bands and standard earphone cushions customarily used in adults can cause collapse of the ear canal in neonates. Holding the earphone gently against the ear can avoid this problem.
5. Each ear should be tested separately, using contralateral noise masking if the thresholds differ significantly. Several intensity levels should be tested to cover both suprathreshold and threshold levels.

IV) THE ABR AS A FREQUENCY-SPECIFIC AUDIOLOGICAL TEST:

There are two general approaches to frequency selectivity, one by shaping the stimulus (tone bursts or filtered clicks), the other by masking undesired frequencies (notched noise, derived responses). There was no consensus on the method of choice but full agreement on the need for further experimental and clinical evidence to evaluate the compromises that are inherent in each method. There is the possibility that other

evoked potential components may be more suitable for audiological testing.

The following organizations and individuals were involved in the preparation of these recommendations: American Academy of Neurology (Keith Chiappa), American Academy of Otolaryngology (Derald Brackman), (William Melnick), American Auditory Society (Hiroshi Shimizu), American Electroencephalographic Society (Alfred Coats), American Speech-Language-Hearing Society (ASHA) (Charles Berlin), British Audiological Society (Roger Thornton, Alex Salt), Canadian Society of Clinical Neurophysiologists (Terence Picton), Israeli Societies of Audiology and Otorhinolaryngology (Chaim Sohmer), Japan Audiological Society The Otorhinolaryngology Society of Japan (Jun-ichi Suzuki), Scandinavian Audiological Society (Erik Borg), Other Participants Hallowell Davis, Manuel Don, Robert Galambos, Kurt Hecox, James Jerger, John Rowe III, Arnold Starr, James Stockard, Aaron Thornton.

Dr. R.S. McLachlan has joined the Epilepsy Unit in the Department of Clinical Neurological Sciences, University Hospital, London, Ontario. A graduate of the University of Western Ontario, Dr. McLachlan spent the last two years as a Medical Research Council (MRC) Fellow at the Montreal Neurological Institute. A Career Scientist Award from the Ontario Ministry of Health will allow him to continue his research into the neurophysiology of epilepsy.

Calendar of Events

November 13-17, 1983. Sixth Asian and Oceanic Congress of Neurology, Taipei, Taiwan. Contact: Secretariat, 6th AOCN, c/o Formosa Holiday, Box 68 - 439, Taipei, Taiwan, Republic of China.

November 20-25, 1983, Sixth Asian-Australian Congress of Neurological Surgery, Hong Kong. Contact: Dr. Stanley Cheung, Rm. 1007, Hang Seng Bank Bldg., Carnarvon Rd., Kowloon, Hong Kong.

24 au 27 novembre 1983. La réunion de la Société de Neurologie Infantile, (comprenant les neuropédiatres de langue français, Belges, Espagnols, Français, Italiens, Luxembourgs, Portugais, Suisses français) se tiendra à Madrid. Thème principal: neuroophthalmologie. Communications libres. Leux qui désirent participer à la réunion peuvent s'adresser au Président de la Société: Prof. G.B. Cavazzuti, Clinica Pediatrica, Università de Modena, h 1100, Modena, Italie.

January 22-28, 1984. 11th Annual Meeting, Southern Clinical Neurological Society. "Advances in Neurology", Sheraton Hotel, Mallards Beach, Ocho Rios, Jamaica. Contact: Millie F. Walden, Executive Secretary, Southern Clinical Neuro-

logical Society, 3425 S.W. 2nd Avenue, #153, Gainesville, Florida, 32607.

March 11-16, 1984. Fifteenth Annual Meeting of the American Society for Neurochemistry, Portland, Oregon. Deadline for receipt of abstracts is December 1, 1983. Contact: Lawrence F. Eng, Ph.D., Program Committee Chair, Pathology Research (151B), V.A. Medical Center, 3801 Miranda Avenue, Palo Alto, CA. 94304.

April 8-14, 1984. American Academy of Neurology, Boston, M.A. Contact: American Academy of Neurology, 2221 University Ave. S.E., Suite 335, Minneapolis, MN 55414.

June 26-30, 1983. XIX Canadian Congress of Neurological Sciences, Edmonton, Alberta. Contact: Dr. Ken Petruc, 11102 Clinical Sciences Building, University of Alberta, Edmonton, Alta. T6G 2N6.

September 27-30, 1984. Synapse-50. Montreal. Contact: Synapse-50, Montreal Neurological Institute and Hospital, 3801 University Street, Room 638, Montreal, Quebec H3A 2B4.

August 1985. 13th International Congress of Biochemistry. Amsterdam, The Netherlands.