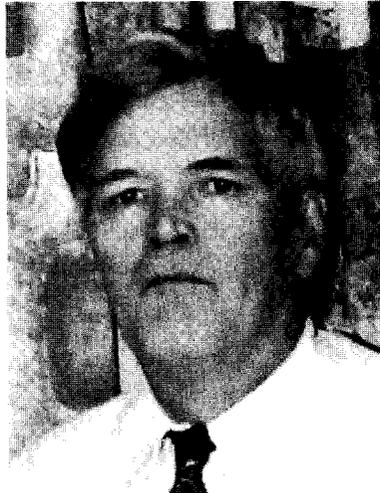


Special Issue on VA Sponsored Research



As noted in Allen Boysen's preface to this issue, three distinct research funding opportunities exist within the Department of Veterans Affairs (VA): Rehabilitation Research and Development, Medical Research, and Health Systems Research and Development. In this special issue of *JAAA*, research groups, supported by the VA merit-review process, from five VA Medical Centers are represented: Augusta (GA), Mountain Home (Johnson City, TN), Long Beach (CA), West Los Angeles, and Washington (DC).

All research within the VA, whether funded or nonfunded, is conducted under the auspices of a local Research and Development (R & D) office. Investigator-initiated proposals, often in collaboration with non-VA researchers, must be submitted to the R & D unit for scientific review and administrative approvals. Proposals that seek funding from one of the VA sponsors, or other non-VA agency, receive rigorous scientific review at the local level prior to review by the national review panels. Articles presented in this issue resulted from both local and national Research and Development support.

We are particularly pleased to include the contributions of two authors who recently joined the VA audiology community after distinguished careers in academia and who have served as mentors to many within and outside of the VA system: Professors Emeritus S. Joseph Barry and Donald D. Dirks. Both, with their coauthors, present a thorough analysis of an important clinical problem and draw inferences from their work that bear directly on clinical practice. Barry and Barry report that the response amplitude of the slow wave component of the auditory brainstem response increases with stimulus

duration and conclude that this effect, as well as others, may be combined in a single protocol to more closely approximate audiometric threshold. Dirks et al report their comparisons of several methods used to gauge the insertion depth of probes used in the measurement of ear canal sound levels. They conclude that, when accuracy of measurement (of ear canal length or absolute sound pressure level near the eardrum) is required, the "acoustic" method, based on the calculation of $\frac{1}{4}$ -wavelength resonance of the ear canal, is the method of choice.

Cynthia G. Fowler of the Long Beach VAMC, together with her VA and non-VA collaborators, contributed two papers to this special issue. Although she recently relocated to the University of Wisconsin, she continues her VA research program through an affiliation with the Madison VAMC. Blanks et al report their examination of the effects of horizontal optokinetic stimulation in fixed platform posturography in normal subjects aged up to 75 years. They observe that visual cues conflict with vestibular and proprioceptive cues, and the elderly may therefore experience postural instability. They suggest that the diagnostic value of fixed platform posturography may be enhanced by adding optokinetic stimulation to the test protocol. Fowler and Mikami report their results of continuing studies of the electrophysiologic correlate of the behaviorally established masking level difference (MLD). In this paper, they observe that middle latency responses, from either vertex or temporal electrode montages, did not show threshold differences resembling those characteristic of the MLD, but the late latency responses resembled closely the magnitude of the behavioral MLD. They conclude that cortical participation is necessary for

the production of the electrophysiologic and, analogously, the behavioral MLD.

Two papers, by the group at Mountain Home and at West Los Angeles, extend previous studies of performance of listeners on dichotic speech tests. Wilson and Leigh contribute additional normative data on the dichotic consonant-vowel (CV) materials as recorded on the VA compact disc. They conclude that the dichotic CV materials on the disc are sensitive to the "right-ear advantage" reported in the literature and that their use results in valid estimates of performance. Noffsinger et al extended their studies of performance on dichotic listening tasks to include an examination of the performance of elderly persons with hearing loss. Noting that their results support the body of literature that suggests that aging auditory systems process stimuli less well and that the right ear becomes more dominant in dichotic tasks as the system ages, they observe that the VA-CD materials present a useful continuum of difficulty for both the clinician and the investigator.

The seventh paper is representative of a growing number of studies within the VA of the performance of hearing-impaired listeners using nonlinear hearing aid circuitry. Schuchman et al studied 20 experienced hearing aid users over

a period of 19 weeks. After having evaluated their patient sample (using the SPIN test and the Profile of Hearing Aid Performance) with their own linear hearing aids (with peak clipping), they fit each person binaurally with a two-channel instrument having dynamic range compression in the low band and linear amplification in the high band. They observed superior performance using the two-channel device and, importantly, that performance measures were not different at 5 weeks and at the end of the trial (19 weeks). The latter observation would suggest, of course, that if persons "acclimatize" to a hearing aid's characteristics, such must have occurred within the first 5 weeks.

The papers contained herein represent a small portion of the papers generated annually by VA-sponsored investigators. We are honored to have the opportunity to serve as guest coeditors of this special issue highlighting the work of VA colleagues. We believe that you will recognize their studies as being both scientifically sound and clinically relevant.

*Vern Larson
Lucille Beck
Guest Coeditors*