

From the Labs to the Clinics

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This issue of *Canadian Audiologist* has the theme of “terminology.” There are so many aspects of audiology where terminology is an issue. Sometimes important terms are misused, ambiguous or even lost!

We all know (or should know) that the auditory periphery is peppered with some very personalized terminology dating back to the time when it was common for a scientist’s name to be given to newly revealed structure or concept. Thus, we have the organ of Corti (Alphonso Corti), the supporting cells of Dieters (Otto Deiters) and Hensen (Christian Hensen), the tube of Eustachio (Bartolomeo Eustachi), Scarpa’s ganglion (Antonio Scarpa), and many more.

More recently in auditory science, we have “named” concepts such as Davis’ battery theory (Hallowell Davis) and the Bekesy audiogram (Georg von Bekesy; a test sadly missed by some). We almost ended up with the Kemp echo (David Kemp) but settled with otoacoustic emissions. We also nearly adopted the term Pickles links after Jim Pickles who first described the tip links between stereocilia.

The medical science areas most littered with eclectic names are the various syndromes or rare illnesses named after the first clinician to recognize them. It was said that if you found three patients with the same unusual disorder you could name it after yourself. In the audiology field, we have many of these names to remember, for example, Stickler syndrome (Gunnar B. Stickler); Waardenburg syndrome (Petrus Johannes Waardenburg); Usher syndrome (Charles Usher); Pendred syndrome (Vaughan Pendred) and Alport syndrome (Cecil A. Alport)

Perhaps the most debated terminology issue presently in my university department has

to do with demystifying “oto-rhino-laryngology” for the general public. In hospital clinics do we stay with the Latin derived original or simplify to “ear nose and throat” or even further to “ENT”? Even the audiology department can be a challenge for some; some say let’s call it a hearing clinic! I say let’s not pander to the masses and reduce all historically good terms down to one-syllable catchphrases. Let us keep the original nomenclature; let the public be educated.

But on a more serious note, there is one area pertinent to audiology where some terminology is often misused and about which we might be reminded. I speak of the distinction between objective and subjective terms. We all understand, the difference between subjective hearing tests (e.g. the audiogram; speech thresholds) and objective assessments (e.g., ABR; OAEs). But we also need to remember that “pitch” is the subjective equivalent of acoustic frequency, just as “loudness” is the subjective equivalent of acoustic signal intensity. Too often pitch and loudness are words used to define the physical aspects of acoustic signals; this is incorrect. A purist would even go further and maintain that a “sound” is a subjective percept. A sound is not “out there” in the environment, – that would be an acoustic stimulus. If we measure an acoustic signal with equipment then we are measuring intensity (or pressure) and frequency. If we listen to that signal it will have a corresponding loudness and pitch. I have to leave here now because I have just perceived a moderate intensity acoustic signal with high-frequency components modulated at a lower frequency. I sense the sound of my telephone.