# The Trouble with Speech Pathology

It was of great interest to me to read Dr. McWilliams's perception of my field, particularly since I respect her and because I have also spent a good number of years in ACPA. I know her well enough to know that she has her point of view and therfore I shall debate a couple of issues which she presents.

The title of her paper indicates TROU-BLE; however, I should like to submit that the field of speech pathology is very much alive, kicking and doing well. The field is no longer newly born, but is at least in adolescence and making itself heard. In the area of cleft palate our future is bright and I think we have contributed significantly in many ways.

Not many years ago, it was an exception for a person with a cleft to have normal speech, hold a good job, and not feel that he or she was vastly different from the normal population. I would postulate that individuals like Morley, Koepp-Baker, Spriestersbach, Subtelny, McWilliams, and many others, have been very instrumental in upgrading the treatment standards for individuals with cleft by several methods: 1) they have taught students both clinical skills and research principles, 2) by using scientific methods these individuals have done research which has gained recognition and respect in cleft palate treatment, 3) colleagues from other fields have learned to understand a great deal more about speech and speech science and thus the quality of treatment and the research literature in all areas have improved tremendously.

Although granted, there are differences in emphasis and strength in the various educational programs, the field of speech pathology is constantly being updated. Most states now require a masters degree and many states require continuing education or state licensure. The competition for entry into graduate programs is strong and thus in the same manner strong faculty and competition for grant support help encourage each department to become stronger. Although the competitive-educational process may take some time to filter to the working professional, speech pa-

thologists in the public schools (where the majority are employed) have benefited from the increased body of information, by inservice training, conferences, and reduced case loads. It is quite obvious that speech service to children with cleft has improved dramatically over the last decade. With the development of preschool programs available in many local communities, many children with cleft palate are served directly and efficiently by the local school system. It must be remembered that cleft palate does not make up the major portion of the speech pathologist's academic preparation nor is the frequency of cleft palate high in the case load. Approximately 50% of our children with clefts do not need the services of a speech pathologist because they exhibit normal speech! There is and continues to be a need for cleft palate centers or cleft palate teams to serve as a referral source for problem cases.

McWilliams indicates that there is a lag between knowledge and practice and the availability of referral sources. I would contend that the speech pathologist today is far better trained than ten years ago and that the majority either use referral sources or know how to find referral sources when needed. We all know the quantity of these referral sources has increased, yet we as an Association have done very little to ensure that quality is maintained.

I am in total agreement with Dr. Mc-Williams that decentralization of care for individuals with cleft palate is a step in the wrong direction. Although it is obvious that parents would prefer to have their child treated in the local community, rather than a large medical center, some compromise must be reached. Unless research is continued, quality of care will not improve in a systematic way and treatment may in fact be more expensive because of the lack of skill of those individuals providing treatment. Although travel costs might be greater, in the long run we're talking about the most efficient and effective way to habilitate a child with cleft or other craniofacial anomalies. To do

this task several factors must be considered: 1) money is needed to continue cleft research so that our goal can be attained, 2) we should begin to consider that we as an Association should be instrumental in the establishment of standards of treatment, 3) we should initiate joint research among institutions and 4) we should continue to emphasize and make sure that quality treatment is available for *all* individuals with cleft.

Thus as a speech pathologist, I am optimistic about our involvement in cleft palate habilitation. Children with clefts are receiving better speech habilitation than ever before. Research, although not as much as needed, continues to help us work more effectively in centers as well as in local communities. Students in the field are better educated than us old timers and may be even brighter. And finally speech pathologists in the United States continue to improve their image as professionals and are usually well integrated into the decision making process of the cleft palate team. Speech pathologists are active locally and in medical centers both in the clinical and in the research process. It is nice to hear a surgeon ask, "do you think this child needs management?" Other professionals sometimes ask for our opinion too, and so it's nice to be recognized as an integral part of a multidisciplinary clinical and research team.

D. R. Van Demark, Ph.D.Professor,Dept. of Otolaryngology andSpeech PathologyUniversity of IowaIowa City, Iowa 52242

### The Problems Still Exist

I have absolutely no reason to disagree with any of the comments that Dr. Van Demark

has made in his letter in response to "The Trouble with Speech Pathology." In fact, I made many of the same points in that article.

On the other hand, the fact that speech pathology has shown tremendous growth and has contributed greatly to the understanding of speech problems associated with clefting does not for one minute rid us of the problems that still exist in our field. They are there, and they cannot be denied. In fact, they are not necessarily problems that can be solved by speech pathologists working by themselves. It is indeed nice to hear a surgeon say, "Do you think this child needs management?" This is a question that I hear routinely. It is, however, a question that is never addressed by many speech pathologists, and there remain a great many who would not know how to answer it if it were. I think we cannot afford to close our eyes to existing problems, particularly when there are steps that we can take alone and together with the help of other professional people to minimize their importance and to deliver better care to the patients whom we serve.

I believe that my own article contained most of the suggestions that Dr. Van Demark has made, and I am happy to learn that he is in agreement. I am not, however, willing to say that all is well and that we have nothing left to accomplish. I suspect that Dr. Van Demark does not believe that either. I really do not see that there are any major areas of disgreement between Dr. Van Demark's position and mine except, perhaps, that I may have articulated the places where we are not succeeding in a more specific manner.

Betty Jane McWilliams, Ph.D. Director, Cleft Palate Center Professor, Speech Pathology and Audiology University of Pittsburgh Pittsburgh, Pennsylvania 15261 Ortner, D. J., and Purschar, W. G. J. Identification of Pathological Conditions in Human Skeletal remains. Smithsonian Contributions to Anthropology, No. 28, Smithsonian Institution Press, Washington, D.C., 1981.

In this book the authors have discussed different human diseases and abnormalities as they exist today along with discussion and illustrations of these conditions as they existed in ancient human skeletons. Two sections of the book relate to inborn anomalies, Skeletal Dysplasias and Skeletal Malformations. In the latter section they present a brief resume of the literature of paleopathology as relates to congenital facial clefting and illustrate five skulls with palatal clefts. One of the skulls illustrated and attributed to cleft palate status, #556, has an "omega" shape which could as easily be a non-odontogenic median palatal cyst as it could be a palatal cleft. Although this book will be primarily of interest to those interested in paleopathology, it contains excellent data relating to osteopathology supplemented by well chosen, exemplary illustrations. (Gregg)

Zimmerman, M. R., and Kelley, M. A. Atlas of Human Paleopathology. Praeger Publishers, New York, 1982.

This book relating to paleopathology is basically two different studies, a review of osteopathology from known skeletal collections for which there is good clinical data, and a study of normal and abnormal human tissues which have been exposed to experimental mummification by desiccation. The information supplies a much needed review of pathology in known bones and tissues which can be utilized for comparison with ancient human remains. A brief resume of the literature pertaining to congenital is presented, followed by a discussion of known osteopathology utilizing exemplary skeletal specimens. There is no discussion of congenital anomalies in the section dealing with mummified tissues. Although palatal clefting is discussed briefly, there is no illustration of this anomaly. For those interested in paleopathology, this book should be a good reference source. (Gregg)

## MARY ANNE WITZEL, Ph.D., EDITOR

#### NATIONAL COMMITTEE

Oscar E. Beder, D.D.S. Samir E. Bishara, D.D.S. Ellen Rassas Cohn, Ph.D. Bard Cosman, M.D. Stephen Glaser, M.D.

Herbert Jay Gould, Ph.D. Jerry Alan Greene, D.V.M. John B. Gregg, M.D. Michael C. Kinnebrew, D.D.S., M.D. Steward Ronald Road, Ph.D.

Bernice Kotkin, Ph.D. Guillermo Millicovsky, Ph.D. Dennis Ranalli, D.D.S. Robert Staley, D.D.S.

#### INTERNATIONAL COMMITTEE

William S. Crysdale, M.D., Toronto, Canada David Davies, M.B., Ch.B., Cape Town, South Africa Cosmoferruccio De Stefano, M.D., Rome, Italy Mark Ferguson, D.D.S., Belfast, Northern Ireland Jose Guerrerosantos, M.D., Guadalajara, Mexico Christine Huskie, L.C.S.T., Glasgow, Scotland Otto B. Kriens, Prof.Dr.Dr, Bremen, Germany Claes Lauritzen, M.D., Toronto, Canada

ALLARD, R. H. B., DEVRIES, K., and VAN DER KIVAST, W. A. M., Persisting bilateral naso-palatine ducts: A developmental anomaly, J. Oral Surg., Oral Med., Oral Path., 53: 24-26, 1982.

The authors discuss a very rare developmental anomaly in a 28 year old man, whereby the usual presence of remnants of the nasopalatine ducts presenting as vestigial epithelial strands did not occur, but instead these ducts remained patent.

Another case is described by B. S. Moslow, J. Oral Surg., Oral Med., Oral Path., 53: 458-460, 1982 (Beder)

COHN, E. R., GARVER, FK. L., METZ, C., McWilliams, B. J., Skolnick, M. L., and Garrett, W. S., Velopharyngeal incompetence in a patient with Multifocal Granuloma (Hand-Eosinophilic Schuller-Christian Disease), J. Hear. Dis., 47: 320-323, 1982.

The authors present a detailed description of the speech and velopharyngeal function in a 15 year old patient with multifocal eosinophilic granuloma. Velopharyngeal incompetence was treated by a pharyngeal flap and this resulted in improved hypernasality, articulation and laryngeal voice quality. Although William K. Lindsay, M.D., Toronto, Canada Junji Machida, M.D., Shiojiri City, Japan Dennis Newman, M.Sc., Brisbane, Australia M. Samuel Noordhoff, M.D., Taipei, Taiwan Seiichi Ohmori, M.D., Tokyo, Japan David A. Plint, B.D.S., London, England Karl-Victor Sarnas, D.D.S., Malmo, Sweden Felicia Travis, M.A., Toronto, Canada

there is no definitive evidence that the speech dysfunction was a direct consequence of the disease the authors recommend that these patients be examined for this problem. (Witzel)

COLLINS, P. C., EPKER, B. N., The alar base cinch: A technique for prevention of alar base flaring secondary to maxillary surgery, J. Oral Surg., Oral Med., Oral Path., *53*: 549–553, 1982.

The authors address the fact that total maxillary surgery is accompanied by changes in external nasal morphology. These changes, related to both the direction and the magnitude of the maxillary repositioning with the greatest changes occurring with superior and/ or anterior repositioning of the total maxilla, may be favorable or unfavorable esthetically.

They recommend that when total maxillary surgery is performed, alar base width should be measured preoperatively and assessed with regard to the patient's face as being narrow, normal, or wide. If preoperatively normal or wide ala are present, it may be advisable to maintain or narrow the bases in conjunction with the planned maxillary surgery in order to avoid unesthetic changes in external normal morphology. The technique they present

enables the surgeon to use the existing incision for access to the alar bases and thus control alar base width. (Beder)

Dorf, D. S., and Curtin, J. W., Early cleft palate repair and speech outcome, *Plast. Reconstr. Surg.*, 70: 74-81, 1982.

The authors point to the standard schism between speech results and facial form results in that the former are improved by early surgery and the latter by later surgery. They indicate the simple truth that the timing of such surgery has never been truly elucidated. They examined 80 cleft palate children dividing them into early surgery cases where palate closure was accomplished as 12 months or before and later surgery where the palate closure was accomplished past the 12 month period. It appears from their data that early palate surgery is productive of better speech and more easily trained speech. They point out that those cases in which late surgery was associated with ultimate development of good speech were cases in which the "articulation age" of the child had been delayed and it may well have been that for those children the later date of surgery was acceptable in that they had not yet learned the inappropriate compensatory mechanisms which lead to late poor speech results. In view of the overriding importance of speech as the prime palatal function, it remains for those advocating late surgery to justify their tardiness. (Cosman)

Furnas, D. W., Defeo, D. R., and Kusske, J. A., Glabellar ostectomy and orbital craniotomies with microscopic control for correction of hypertelorism: a preliminary report of microcraniofacial surgery in two patients, *Plast. Reconstr. Surg.*, 70: 51–62, 1982.

Orbital translocation was carried out in two cases of hypertelorism by a semi-open skull technique in which microscopic control was added to a combination of glabellar and lateral wall ostectomies so that formal frontal craniotomy was obviated. The difficulty in moving and fixing the lateral walls appropriately, length of time of procedure, and bleeding from dural vessels complicated the procedure. In a comment by I. R. Munro, these factors are pointed to as evidence that this

modification has little merit and no justification. A further comment by M. T. Edgerton makes many of the same points but is more open to the possibility of individualization of techniques for specific cases. (Cosman)

GILBERT, S. T. J. and PIGOTT, R. W., The feasibility of nasal pharyngoscopy using the 70° Storz-Hopkins nasopharyngoscope, *Br. J. Plast. Surg.*, 35: 14–18, 1982.

This is the first of a series of articles to be produced by the Cleft Palate Team, Frenchay Hospital, Bristol, reporting on studies designed to define some aspects of the feasibility and reliability of the investigations leading to a series of operations for velopharyngeal incompetence carried out during the preceding 10 years. In a sample of 100 patients of all ages with velopharyngeal incompetence, the overall success rate in passing the Storz-Hopkins 70° nasopharyngoscope was 83%. The authors recommend that, with this endoscope, endoscopy should be reserved for children of over 5 years of age. They feel that flexible endoscopes are easier to pass, but have a number of serious drawbacks, to be discussed in a later article, including greater cost. (Lindsay)

GOULD, H. J., and CALDARELLI, D. D., Hearing and otopathology in Apert Syndrome, *Arch. Otolaryngol.*, *108*: 347–349, 1982.

The authors reviewed otologic and audiometric data for 19 patients with Apert Syndrome. The findings indicated that these patients often have serous otitis media which persists into adulthood. The majority of cases had mild to moderate conductive hearing loss. Stapedial footplate fixation was found in one patient and a dehiscent jugular bulb in two others. Examination of eustachian tube function in 5 patients indicated a failure of the tube to clear any positive or negative middle ear pressure. This article reinforces the importance of early otologic and audiologic examination of these patients as well as consistent follow-up. (Witzel)

Kobus, K., Remarks on the treatment of cranio-facial malformations, *Chir. Plastica*, 6: 281–295, 1982.

This is a general article for the Hospital for

Plastic Surgery, Warsaw, Poland. It contains specific examples of the treatment of craniofacial deformities. However, to a greater extent, it contains a series of general observations and opinions, all presented in a stimulating manner. One such observation is that highly specialized craniofacial centers are not always necessary. The author proposes that already existing properly organized departments can manage some craniofacial cases successfully. The author indicates that there is quite an important group of patients with moderate symmetrical craniofacial malformations, the treatment of which is relatively uncomplicated and can be done perfectly adequately by "occasional" surgeons familiar with craniofacial surgery techniques, and includes in this category, limited hypertelorism operations, faciostenosis patients, Treacher-Collins syndrome, and cases of orbital enlargement requiring intracranial approach. The author suggests that the more difficult cases must have their treatment in highly specialized craniofacial surgery centers, such as craniostenosis cases not decompressed during early infancy, asymmetrical malformations such as hemifacial and craniofacial microsomia, or hypertelorism with coexisting hydrocephalus, and complicated cranial contour correction. The article also contains philosophical observations on age of treatment. (Lindsay)

KOUTRAS, A. and FISHER, S., Niikawa-Kuroki syndrome: A new malformation syndrome of postnatal dwarfism, mental retardation, unusual face, and protruding ears, J. Pediatr., 101: 417-419, 1982.

The Niikawa-Kuroki syndrome, a newly recognized syndrome in Japan, is characterized by moderate to severe mental and growth retardation with specific craniofacial malformations, including a high-arched or cleft palate. The authors describe an example of this new syndrome in a South American girl. The face of the patient illustrated the "Kabuki actor make-up" appearance. Consistent findings include: arched eyebrows sparse in lateral half, long palpebral fissures with eversion of the lateral one third of the lower eyelids, long eyelashes, bulbous nose with broad and depressed nasal tip, low posterior hairline, and prominent ears. (Glaser)

LA PENNA, R. and FOLGER, G. M. Extreme upper airway obstruction with the Marshall Syndrome, *Clin. Pediat.*, 21: 507-510, 1982.

Children with the Marshall syndrome present with a somatic triad characterized by facial dysmorphism, failure to thrive, and acceleration of osseous maturation. Of the six cases previously reported all have presented with the additional feature of pulmonary complications including the finding of pulmonary hypertension.

The subject of this report is an infant with the characteristic features of the Marshall syndrome in whom the findings associated with extreme upper airway obstruction developed through the first year of life. The purpose of this communication is to emphasize the need for awareness of this complication and the importance of its prompt relief. (Glaser)

MILLARD, D. R., JR., Earlier correction of the unilateral cleft lip nose, *Plast. Reconstr. Surg.*, 70: 64-73, 1982.

Details in the use of mucosal and lip flaps performed at the time of initial lip adhesion followed by alar lip procedures at age 5 or thereabouts are presented by the author. It would be valuable to have this talented practitioner's results in some statistically valid form so that one could judge whether the lovely results presented were truly representative or exceptional. It is not clear how many patients have been treated at the ages suggested nor how many have been followed to maturity. (Cosman)

Parsons, R. W., and Smith, D. J. Rule of thumb criteria for tongue-lip adhesion in Pierre Robin anomalad, *Plast. Reconstr.* Surg., 70: 210-212, 1982.

The authors discuss their experience in 38 patients with the Pierre Robin anomalad characterized by all its findings including micrognathia, glossoptosis, and respiratory obstruction. While not statistically significant, they feel that it is possible to identify the patients who require tongue-lip adhesion and those who do not by differentiating between those who under conservative treatment show progressive gains in weight, strength, and abil-

ity to control the tongue and who can be discharged by the 14th day and those not ready for discharge by the 14th day who underwent intermittent setbacks and protracted hospital stays. Several of these required surgery and the others probably would have benefited from it. Using the criteria of progressive weight gain, no child who did well in the long run would have had surgery unnecessarily and only one patient who might have benefited from surgery would not have had the operation based on this rule of thumb. (Cosman)

PIGOTT, R. W. and MAKEPEACE, A. P., Some characteristics of endoscopic and radiological systems used in elaboration of the diagnosis of velopharyngeal incompetence, *Br. J. Plast. Surg.*, 35: 19–32, 1982.

This is one of a series of articles planned by the Cleft Palate Team at Frenchay Hospital, Bristol, and the University of Bristol to assess critically the examination and treatment of velopharyngeal incompetence in that centre during the preceding 10 years. The characteristics of flexible and rigid endoscopes were studied in great detail with reference to their suitability for nasopharyngoscopy in the assessment of velopharyngeal incompetence. It was concluded that the ability to achieve correct positioning of the rigid endoscope and the wide angle field of view of the 70° Storz-Hopkins nasopharyngoscope made it the best single instrument at present available for this work, despite the greater ease and introduction of the flexible endoscopes. The characteristics of the information obtained by radiological examination were studied and compared with endoscopic information. It was concluded that endoscopic information was more reliable for qualitative analysis and radiological information was more reliable for quantitative analysis. This article details the physics and the problems of interpreting from both of these methods of investigation, and does this in excellent detail. (Lindsay)

Puckett, C. L., Pickens, J., and Reinisch, J. F., Sleep apnea in mandibular hypoplasia, *Plast. Reconstr. Surg.*, 70: 213–216, 1982.

The authors report a case of a patient with 1st and 2nd branchial arch syndrome and concurrent micrognathia who developed obstructive sleep apnea at age 5½. Up to that point, growth and development had seemed to be progressing satisfactorily. The case was treated by passing a strip of fasciae latae in mattress suture fashion through the base of the tongue and securing it to the inferior aspect of the mandible. Fifteen months after surgery the patient continues to do well. The authors review the literature concerning mandibular hypoplasia and the late development of respiratory obstruction at night and conclude that most of the cases reported probably represent instances of sleep apnea developing at various times in childhood. Since, in these instances, mandibular growth fails to keep pace with the remainder of orofacial growth, symptoms appear late rather than early in childhood. A recognition of obstructive sleep apnea is important since it is potentially life threatening in these instances. (Cosman)

Saito, R., Takata, N., Matsumoto, N., Koide, I., Fujita, A., Ogura, Y., Murakami, M., Yanagida, K., and Komazawa, M., Anomalies of the auditory organ in Potter's Syndrome, *Arch. Otolaryngol.* 108: 484–488, 1982.

The authors have presented the gross and histopathological findings with special reference to the ears, in a case they have identified as Potter's syndrome. Gross findings included malformed low-set ears, micrognathia, bilateral renal genesis, and pulmonary hypoplasia, in a full term stillborn female. In addition, there was hypertelorism, epicanthal folds, and vaginal and anal atresia. In the temporal bones, anomalies found were extensive deformities of the external and middle ears including absence of the auditory ossicles, atresia of the oval window, abnormal course of the facial nerve, and Mondini-type deformity of the inner ears. The cochlear membranous labyrinth was nearly normal in the upper turn but there was severe hypoplasia in the basal turn. The authors believe that is the first time the histopathological findings in the ear in Potter's syndrome have been reported. (Gregg)

# ACPA 40th ANNUAL MEETING MAY 4-7, 1983 HYATT REGENCY—INDIANAPOLIS, INDIANA

The 40th annual meeting of the American Cleft Palate Association will be held May 4–7, 1983, at the Hyatt Regency in Indianapolis, Indiana. Program highlights will include a guest lecture on medicolegal aspects of birth defects by Dr. Robert Brent, editor of Teratology; a tutorial session on microbeam radiography by Dr. James Abbs of the University of Wisconsin; an information exchange forum for clinical investigators utilizing computerized storage and retrieval of patient information; a session on pharyngeal flap revision; and a tentative schedule of entrylevel short courses for students and new professionals. Full information on the program and registration materials are contained in the brochure accompanying this issue of the journal. (See inside Front Cover).

FIRST ANNUAL HAWAII-PACIFIC CLEFT SYMPOSIUM will be held on February 13–17, 1983, at the Prince Kuhio Hotel, Waikiki, Honolulu, Hawaii. Co-sponsored by the American Cleft Palate Educational Foundation, the Hawaii Speech-Language-Hearing Association, and The Honolulu Medical Group Research and Education Foundation. This will be a major international congress of multidisciplinary specialists dealing with diagnostic and treatment approached for the cleft, craniofacial and neurogenic patient. Fee is \$300 for M.D.'s and D.D.S.'s; \$100 for all others. 24 CME, DDS, and CEARP credits. For more information please contact: Yvonne Brewer, (808) 537–2211 or write to HPCS, Research and Education Foundation, 550 So. Beretania Street, Honolulu, Hawaii 96813.

BOYS TOWN SYMPOSIUM The Boys Town Institute for Communication Disorders in Children is planning a one-day symposium for the Spring of 1983 on the topic "Velopharyngeal Management for Individuals with Dysarthria." We wish to examine the effectiveness of various treatments for neurogenic, velopharyngeal incompetence; including surgical prosthetic, and behavioral procedures. We would like to identify via a questionnaire the persons with experience for a full coverage of the topic. If you or someone you know are interested in presenting, attending, or both, please write to: Ronald Netsell, Boys Town Institute, 555 N. 30th St., Omaha, NE 68131.

THE CRANIOFACIAL SOCIETY OF GREAT BRITAIN—INTERNATIONAL MEETING. An International Meeting on Cleft Lip and Palate will be held in Birmingham, England from 13–16 July, 1983. An international faculty of invited speakers will address all aspects of habilitation with emphasis on long term results and future prospects. Submissions for additional papers are requested before 31 January, 1983. Registration limited to 200. For further information contact Mr. A. G. Huddart, Dental Department, Corbett Hospital, Stourbridge, West Midlands DY8 4JB England.

CRANIOFACIAL ANOMALIES—ORTHOGNATHIC SURGERY CONFERENCE IN CHINA.—March 8 to 23, 1983. Faculty: Bruce Epker, Oral Surgeon and Robert Issacson,

Orthodontist. Sixteen day tour with visits to Hong Kong, Canton, Guilin, Peking, Xian, and Shanghai, sponsored by the University of Miami School of Medicine and the Miami Cranio-facial Anomalies Foundation. Conferences with Chinese Doctors are planned at the Peking and Shanghai Dental/Medical School. Tour Operator: Hemphill-Harris and Japan Air Lines. Category I—Continuing Medical Education. For further details write to: Dr. Samuel Berkowitz, 6601 SW 80 St., South Miami, FL 33143; telephone (305) 667-3126.

**COMPETITION**—The Communicative Disorders Program of Syracuse University and Memorial Foundation of Alpha Gamma Delta Fraternity announce the 1983–83 Manuscript Awards for original papers on the Communicative Disorders of Individuals with Orofacial Anomalies. Eligible are undergraduate and graduate students in Communicative Disorders (speech and language pathology, audiology, and education of the hearing impaired). The prizes are \$500, \$350 and \$150. Manuscripts must be postmarked no later than *June 30*, 1983. For further information contact Dr. Michael Marge, Communicative Disorders Program, Syracuse University, 805 South Crouse Avenue, Syracuse, New York 13210.

THE CANADIAN CRANIOFACIAL SOCIETY will hold its 5th Annual Meeting in Saskatoon, Saskatchewan on April 22–23, 1983. Special speakers will include Hughlett Morris, Roger West and Bruce Ross. For further information, write to Carolyn Dunsmore, Alberta Children's Hospital, 1820 Richmond Road, Calgary, Alberta, Canada.