BOOK REVIEWS

CRITCHLEY, EDMUND, Speech Origins and Development. Springfield: Charles C Thomas, 1967. 141 pp. \$6.50.

The origins of speech and developmental patterns of speech have been of interest to many disciplines for years. The stated purpose of this book is "to present a concept of the origin and development of speech in a form meaningful to those whose chosen specialities impinge on this fascinating subject".

The initial chapters discuss the beginnings of language as recorded in religious writings, Darwinian evolutionary theories, etymological hypotheses, and animal communication. Much emphasis is placed on the gestural theory of language development.

Chapter 6, "The Essential Requirements for Speech", refers to a wide range of topics such as anatomical structures, comparative anatomy of the ear and larynx, brain size in relation to speech development, time scale for human evolution, hemisphere dominance, and the relationship of toolmaking to speech.

Chapter 7, "The Lessons of Childhood Speech", indicates that the progression, from babbling to speech, is dependent on a variety of reflex mechanisms, which may be environmental, organic, and psychological. Various accounts of feral children are presented. Speech reception is related to aspects of hearing, kinesthetic and visual factors, and interference from various types of brain damage.

The discussions on "Gesture and Deaf" probably make its greatest contribution by describing language actions of deaf children that suggest numerous research projects. The last chapter, "Expression, Concept, and Speech", follows the same pattern of utilizing deductive reasoning to explain language phenomena. Many of these statements could be tested empirically.

Several references to specific work are made in the text but are not included in the bibliography. However, this does not detract from the stimulating style of the book and its tremendous variety of material. In my opinion, it is a book that will be of interest to most individuals who are concerned with speech and language development.

DORIS P. BRADLEY, PH.D.

Dental Research Center University of North Carolina Chapel Hill, North Carolina 27514

JENKINS, G. NEIL, The Physiology of the Mouth, 3rd Ed. Philadelphia, Pennsylvania: F. A. Davis Company, 1966. 495 pp. \$11.50. Dr. Jenkins is a professor of oral physiology at the Sutherland Dental School, University of Newcastle-upon-Tyne. In the preface to this book, the author states, "In the course of preparing this edition it has been clear that the results of dental research during the last few years show gratifying progress in clarifying much that was previously obscure and adding detail to what was previously known only in outline. The enormous bulk of recent work has, however, made the task of sifting and summarizing for this edition a very difficult one. The attempt has been made to incorporate as many as possible of the new concepts which have emerged and some of the detail is also included".

This book consists of 14 chapters discussing various subjects such as Calcium and Phosphorus Metabolism, Formation and Calcification of the Dental Tissues, Permeability and Age Changes in the Dental Tissues, The Effects of Hormones and Influence of Diet on the Oral Structures, Dental Caries, Saliva, Mastication and Deglutition. The concluding chapter is devoted to Speech. The Speech chapter is simple, since it is intended for readers who are not trained in the field of speech pathology. This book was not intended to cover the field of cleft lip and palate. Therefore, no mention was made of congenital oral anomalies.

This book would serve as a good reference for anyone interested in the topics covered.

MOHAMMAD MAZAHERI, D.D.S.

24 North Lime Street Lancaster, Pennsylvania

ROGERS, BLAIR O., M.D., ed., Facial Disfigurement: A Rehabilitation Program. New York, New York: U.S. Dept. of Health, Education and Welfare, 1963. Price not indicated.

The authors are to be complimented on assembling many diverse fields to participate in a conference on facial disfigurement. Not surprisingly at all, the topic develops to be of mutual and vital interest to all participating. Plastic surgeons have been interested for years in rehabilitating the facially disfigured. It is impressive to see that this interest extends to other important and related fields such as Workmen's Compensation, private insurance companies, Vocational Rehabilitation, and also to the task of finding a new job for the facially disfigured through employment consultation and assistance.

All subjects are presented informally in this book, apparently as they were given at the Conference. While turning the pages of this book the reader realizes how important each related service is to total rehabilitation. Without total service of plastic surgery, dentistry, eye prostheses, speech pathology, psychiatry, and employment counseling where needed, the patient is only partially helped. To deny any of

366 Book Reviews

these fields would be equally as undesirable as refusing surgery and physical care for the acutely injured facial problem.

The final session of the conference which was briefly covered in the book concerns the problem of community agencies assisting the facially disfigured patient. The economic problem of where to get financial assistance for the complete rehabilitation process, while not solved in the book, was at least faced squarely. That discussion should be stimulating to all concerned professional workers.

In general, this book can be recommended to all members of the American Cleft Palate Association, for it once again demonstrates the team work so necessary to help the abnormal patient as far as possible along the road to normalcy.

CHARLES E. HORTON, M.D.

603 Medical Tower Norfolk, Virginia

RUBIN, ALAN, M.D., Handbook of Congenital Malformations. London, Philadelphia: W. B. Saunders Company, 1967. 398 pp. \$14.00.

This volume is an excellent compilation of pertinent information about some 700 congenital anomalies. The 23 contributing authors have followed a short concise format that includes definition, problem, associated anomalies, hereditary factors, treatment and outlook, and selected reference citations. Each anomaly is listed alphabetically in the appropriate section of the major system to which it relates. Extensive cross referencing avoids any unnecessary reduplication. The material is accompanied by a table of contents and a complete index which further facilitates its usefulness.

The last portion of the book contains a chapter on "Etiological Agents" that briefly summarizes the present status of our understanding of the effects of infection as well as physical and chemical factors in causing anomalies. A separate glossary is included so that readers with limited background can enjoy the full benefit of the information available.

The handbook should be an invaluable reference source for anyone with an interest in congenital anomalies—be it casual or expert. It can be recommended to students, teachers and research workers with diverse backgrounds who will find that it provides a quick reference of identification and authoritative summary of significant information in a readily manageable form.

DAVID B. COURSIN, M.D.

Lancaster Cleft Palate Clinic 24 N. Lime Street Lancaster, Pa. 17602

ABSTRACTS

National Editor, J. Douglas Noll, Ph.D.

Richard M. Adams, D.M.D., M.S.D.
Franklin L. Ashley, M.D.
Albert L. Babcock, M.D.
William E. Barnes, M.D.
Samuel Berkowitz, D.D.S.
Robert E. Berner, M.D.
Bard Cosman, M.D.
W. Bailey Davis, D.D.S. James E. Fricke, Ph.D.
M. Elizabeth Gassert, M.S.
John R. Gill, M.D.
Alexander Goldenberg, D.D.S.
John B. Gregg, M.D.
Lawrence S. Harte, D.D.S.
Joseph Luban, D.D.S. Robert M. Mason, Ph.D.
Alan E. Romanella, Ph.D.
Charles C. Swoope, D.D.S., M.D.S.
Kenneth C. Troutman, D.D.S.
Sandra J. Walling, M.S.W.
Paul M. Weeks, M.D.

International Editor, Michael L. Lewin, M.D.

Khoo Boo Chai (Doctor), Junji Machida, D.D.S., Bengt O. Nylen, M.D., Singapore Osaka, Japan Stockholm, Sweden Paul Fogh-Andersen, M.D., Borel Maisonny (Madame). Josef Penkava (Doctor), Copenhagen, Denmark Paris, France Brno, Czechoslovakia Giuseppe Francesconi, R. J. Maneksha (Doctor), Pierre Petit, M.D., Paris, M.D., Milano, Italy Bombay, India France G. B. Hopkin (Doctor), Mirella Bertocchini Miller, Jean Psaume (Doctor), Edinburgh, Scotland M.D., Pisa, Italy Paris, France Muriel E. Morley, M.S.C., Vaclav Karfik (Professor W. H. Reid, Glasgow, Scot-Doctor), Prague, Czecho-F.C.S.C., Rothbury, land slovakia Northumberland, Eduard Schmid (Doctor), F. de Souza Lapa (Doctor). England Stuttgart, West Germany São Paulo, Brazil Karl Nordin (Doctor), Victor Spina (Doctor), São Stockholm, Sweden Paulo, Brazil

Aduss, H., and Pruzansky, S., Width of cleft at level of the tuberosities in complete unilateral cleft lip and palate. *Plastic reconstr. Surg.*, 4, 113–123, 1968.

106 patients were studied, each of whom had a complete lip cleft without Simonart's band, a complete unilateral palate cleft with the vomer fully attached to one maxillary shelf, and serial casts prior to lip repair and prior to and following palatal repair. Prior to lip repair there was a wide range of cleft width at the alveolar process with arch forms varying from apparent collapse of the cleft segments, to near symmetry, to wide lateral displacement of the segments. Width of the cleft at the tuberosities was well correlated with the alveolar process cleft width. The width of the palate segments at the tuberosities was greater than that in a normal group and was correlated to the cleft width which suggests that bilateral displacement of cleft segments occurs along the entire length of the cleft and is not limited to displacement at the alveolar borders. Following lip repair there was a rapid decrease in cleft width at the level of the alveolar process and at the tuberosities as well. In 42% of the cases there was early and continued narrowing of the cleft at the level of the tuberosities. In

27% of the cases there was early narrowing of the cleft with a subsequent increase in width. Following palatal repair there was further reduction of palatal segment width but the overall width of the repaired palates in this cleft group was greater than in a comparable sample of noncleft children. (Cosman)

Asrican, P., Prosthetic treatment of floating premaxilla: report of a case. JADA, 76, 99, 1968.

Treatment of a twenty year old patient with a "floating" premaxilla is described. Cast gold copings were constructed for the teeth in the premaxillary segment which could be retained. A chrome-cobalt alloy removable partial denture was constructed over the copings. The treatment described restored function, occlusion, and esthetics with an uncomplicated but carefully planned course of treatment. (Swoope)

Boo-Chai, K., and Tange, I., The isolated cleft lip nose: report of five cases in adults. *Plastic reconstr. Surg.*, 41, 28–34, 1968.

The authors add to the literature 5 more cases of cleft lip nasal deformity in the absence of cleft lip. Only one of the five had a suggestion of a bony submucous cleft of the hard palate. All had clinically intact alveolar arches. The authors subscribe to the concept that these cases are a clinical subgroup of the cleft lip deformity rather than an intrinsic defect of the alar cartileges. (Cosman)

Buresh, J. J., and Urban, T. J., Cholesterol Induced Palatal Clefts in the Rat. Arch. oral Biol., 12 (11), 1221– 1229, 1967.

The study was an attempt to investigate the effect of different dosages of cholesterol upon palate formation of 20 Holtzmann female white rats. Injections of 5 mg and 10 mg of cholesterol were administered from the eighth to the fourteenth day of pregnancy to two groups of rats. A control group was given daily doses of 2 ml of vegetable oil. The dosages of cholesterol were also suspended in 2 ml of vegetable oil in the experimental rats. A percentage of 51.7% of the rats receiving 10 mg of cholesterol and 27.0% of the rats receiving 5 mg of cholesterol resulted in palatal abnormalities. There were no clefts or other palatal abnormalities in the control group. Histologic sections showed poor tissue fusion and epithelial rest in the midlines of the abnormal palates. The experimental rats' serum cholesterol levels were twice as great as those of the control group. (Troutman)

Cannon, B., Current Concepts in Unilateral Cleft Lip. New England J. Med., 277, 583, 1967.

Important changes have come about in cleft lip surgery in recent years. Precise planning and careful mapping out of procedures has contributed to the improved results. Blair and Brown published their modifications of the Mirault technique to start this trend; however, the cupids bow was not reconstructed with this procedure. Following this the LeMesurier and Tennison techniques became popular and were enlarged on by other authors. This article alludes to the writings of many current authors with particular note to the work of Dr. Randall as an excellent example of technical advancement. There is a brief note to the use of orthodontic appliances to prevent collapse of the maxillary arches. Another interesting side note is that the incidence of a cleft problem is 1:750 in the white race and only 1:1750 in the Negro race. Anthropological studies reveal that African tribes have probably sacrificed many of those children at birth thereby altering the genetics of this trait in their population. (Gill)

Davydov, B. N., Izmenija licevogo skeleta u bolnych s vroždennymi raščelinami guby i neba po dannym telerentgenografii čerepa (Changes in the facial skeleton in patients with congenital cleft lip and palate according to data of teleroentgenography of the skull). Stomatologija (Moskva), 46, 44–50, 1967.

The author writes about the results of investigations of the facial skeleton in 51 patients with congenital cleft lip and palate performed with the aid of teleroentgenography. Teleroentgenograms were obtained by means of a device to the roentgen apparatus UPDd-110 k-4 Mla designed by the author. Deciphering of teleroentgenograms was done after Schwarz's method in Rehak and Korkhaus modification. (author's summary)

Eckert-Möbius, A., Genetische und funktionelle Gemeinsamkeiten und Besonderheiten der pneumatischen Organe des Menschen in klinischer Sicht (Genetic and functional aspects, both common and particular, of human pneumatic organs, clinically viewed). Deutschen Zahn-, Mund- und Kieferheilkunde, 49 (1/10), 41, 1967.

The author describes the development and anatomy of the pneumatic organs; the nose with its neighboring cavities, the tuba, the tympanic cavity, and the pharvnx, larvnx, and lungs. In the discussion of the normal function, he makes reference to the increase of cilia activity of the mucous membrane through direct exchange of O₂ and CO₂. The functional disturbances conditioned by constitution, infection, and location, are presented with their reciprocal effects on the entire pneumatic system. Breathing from the mouth as a result of the obstruction of the nasal passages, but also as a result of the LKG clefts or other tooth and jaw anomalies, should be eliminated as early as possible, so that disturb-

ances not only of sleep but perhaps even of emotional development may be avoided. (Schmid)

Eschler, J., Die Form des Unterkiefers beim Pierre - Robin - Syndrom als Ausdruck embryologisch-funktioneller Beziehungen (The form of the lower jaw by the Pierre-Robin Syndrome as an expression of embryological-functional relationship). Deutschen Zahn., Mund- und Kieferheilkunde, 49 (1/ 10), 130, 1967.

The following are symptoms for the diagnosis of the Pierre-Robin Syndrome: a) mandibular hypoplasia (retrognathia); b) glossoptosis; and c) cleft palate. The tongue, lying back in the pharynx, constricts the respiratory tract. It is considered fundamental that the proportion of underdevelopment with respect to the reserve of the lower jaw with this deformity as compared with the upper jaw amounts to more than 10 mm. It is confirmed by x-ray photography that, in the Pierre-Robin Syndrome, there exists a special form of the lower jaw: the lower jaw has the form of a half-transverse ellipse. The ascending branches and angle of the jaw project wide laterally, while the lower jaw curvature in the area of the symphasis is leveled off and broadened. (Schmid)

Ferm, V. H., and Carpenter, S. J., Teratogenic effect of cadmium and its inhibition by zinc. *Nature*, 216, 1123, 1967.

Malformations, affecting the upper jaw and resulting in varying degrees of facial clefts, were obtained in golden hamster embryos by intravenous injection of 2 mg/kg of cadmium sulphate into pregnant mothers on the eighth day of gestation. The simultaneous administration of 2 mg/ kg zinc sulphate almost completely inhibited the teratogenic effect of cadmium. Zinc alone produced a very mild teratogenic response. The authors are tempted to hypothesize a localized specific effect on some metalloenzyme which competes for both cadmium and zinc. (Noll)

Fröhlich, E., Die Knorpelbildung im Bereich der Ductus nasopalatini (The cartilage formation in the region of the ductus nasopalatini). Deutschen Zahn-, Mund- und Kieferheilkunde, 49 (1/10), 50–58, 1967.

In 1882 Merkel described a cartilage formation in the center line axis of the hard cleft in the region of the papilla palatine for the first time. This was designated as the Merkel papillan cartilage. Lateral to the papilla palatine in the area of the ductus nasopalatini another cartilage formation was observed. These two cartilage formations should be separated from each other, because of their different locations. The papillan cartilage is located in the soft part of the median-sagittal dispersed papilla. The ductus cartilage, on the other hand, is located deeper and laterally in the region of the ductus nasopalatini. On the basis of histological studies, the question of pathogenesis and pathological-anatomical importance of the above mentioned cartilage is posed. The origin of the cartilagines ductus nasopalatini and the failure of the tractus nasopalatini to develop have a common cause. With the aid of histological examinations (25 serially complete dissected upper jaws) the author was able to prove that the cause is a matter of persistant embryological tissue formations which are functionally correlated. Now the question must be answered, does the cartilage appear bilaterally? As yet, no morphological evidence has been brought out concerning cartilage formation in the ductus nasopalatini in humans. On the basis of exhaustive studies of dissections the author has traced a ductus cartilage. (Schmid)

Fujino, H., et al., Empirical genetic risk

among offspring of cleft lip and cleft palate patients. Jap. J. human Genet., 12, 62-68, 1967.

Questionnaires answered by 145 Japanese cleft lip and/or palate patients who had been admitted to the Oral Surgerv Clinic at Kyushu University from 1922 to 1952 revealed that all had married unaffected persons. The 326 resultant offspring included 9 (2.76%) who were affected with facial clefts. In eight cases, both parent and child had the same type of defect. Of the 157 offspring from the 73 cleft lip patients, five cases had cleft lips (3.18%). The 35 cleft palate patients had 94 children, of whom two (2.13%) were affected. In the group of 37 cleft lip with cleft palate patients, two (2.6%) of the 75 children had similar defects. The recurrent risk for simple cleft palate in the Japanese seems lower than for Caucasians, but the difference is not statistically significant. For cleft lip, the recurrent risk is about the same for Japanese as for Caucasians, though the incidence of cleft lip and palate is about twice as high among Japanese. (18 references) (This abstract is from Birth Defects: Abstracts of Selected Articles, The National Foundation-March of Dimes, 5(4), abstract number NF 68-308, 1968.)

Georgiade, N., Mladick, R. A., and Thorne, F. L., Positioning of premaxilla in bilateral cleft lips by oral pinning and traction. *Plastic reconstr.* Surg., 41, 240-244, 1968.

In 2 recently treated patients the authors describe the insertion of a Kirschner pin through the cheeks in the posterior maxillary area distal to the tooth follicles to serve as an attachment for rubber band traction on a K-wire similarly inserted into the premaxilla. Traction was instituted 4 to 5 days prior to a bilateral lip repair and was continued for approximately 2 weeks, then the pins were cut and removed. Rapid retropositioning of the premaxilla is documented in a series of dental molds. The small number of cases and lack of stated follow-up makes it difficult to assay the possible complications of this method. (Cosman)

Griffith, B. H., Monroe, C. W., Hill,
B. J., Waldrop, W. S., and White,
H., Motion of the lateral pharyngeal walls during velo-pharyngeal closure.
Plastic reconstr. Surg., 41, 338-342.
1968.

A technique for x-ray visualization of lateral pharyngeal wall dynamics is described. The pharynx and palate are coated with a contrast medium under fluoroscopic control, and anterior-posterior cinefluorography and videotape recordings are made. Considerable experience is needed to recognize the structures so recorded, but lateral pharyngeal nasopharyngeal air escape has been visualized. The method is being developed further in the hope of helping in the selection of patients for appropriate primary and secondary procedures to improve speech. (Cosman)

Grimm, G., Zum Nasenproblem bei Rehabilitation von Spaltträgern (Concerning Nasal Problems in the Rehabilitation of Cleft Palate Patients). Deutschen Zahn-, Mund- und Kieferheilkunde, 49 (1/10), 171–181, 1967.

Extensive operative measures in infancy are regarded by the author as a prime factor in the disrupted nasal development of the cleft palate. Growth zones would be distroyed through cartilage mobilization scaring promoted by excessive and amounts of incision. Secondary additional underdevelopment would increase the deformity. A primary molding of the nose in the childhood years should only be attempted through lobe formation. Good possibilities are given through the methods of Millard, Trauner, and Skoog. The author advocates, if necessary, an elevation of the sides of the nose by underlaying cartilage or bone in connection with the primary osteoplastic surgery. Here he

overlooks, however, that in addition the periosteum of the jawbones below the attachment at the sides of the nose must be removed, and that in doing so, under certain circumstances, growth disturbances may also be promoted. Forked lobe surgery makes possible an elevation of the bridge in infancy (first employed by Schmid and Millard with children). In addition perhaps secondary osteoplastic surgery could be undertaken at the same time. (Schmid)

Gruber, H., Maxillary orthopedics and orthodontics in cleft palate therapy. J. Amer. med. Women's Assoc., 21, 990-1001, 1966.

An orthodontic point of view in presurgical maxillary orthopedics in clefts of the lip and palate is presented. Prior to maxillary orthopedics, surgical repair of the cleft lip caused a moulding action to take place on the unfused arch segments. Frequently this moulding action changed the relationship of the maxillary arch segments present at birth to the point of causing a medial collapse of the smaller segments and a total narrowing or constriction in the width of the maxillary arch. According to the author, any infant with a cleft lip and palate whose lip is repaired without regard for the maxillary arch segment relationship and maxillomandibular relationship is predestined to have a malocclusion that includes not only maxillary incisor teeth in poor inclination, but collapsed and crowded buccal segments as well. He advocates uses of extraoral traction and intraoral acrylic appliances with expansion screws in the newborn. When teeth are present in older children, plates with springs are utilized to expand maxillary segments. Parents of cleft patients are brought together and briefed as a group. Goals of treatment are outlined. The intermingling of new parents and parents of earlier patients seems to bring about a better comprehension and instills courage and hope. (Goldenberg)

372 Abstracts

Ivy, R. H., Congenital deformities recorded on birth certificates in Pennsylvania, 1961–1965: with special reference to racial influence on incidence. *Plastic reconstr. Surg.*, 41, 50– 53, 1968.

This is a continuing report of a similar nature to those previously presented by Dr. Ivy in 1957 (Plast. reconstr. surg., 20, 400-411) and in 1963 (Plast. reconstr. surg., 32, 361-367). Beginning with 1961, records have been kept of the racial origins of children with birth deformities, and some changes in the relative frequency of certain deformities have been demonstrated in a section of the state where non-Caucasian births are on the increase. During the 5 year period under study 95.4% of the cleft lip-palate cases occurred in Caucasians and 4.6% in non-Caucasians. This gave an incidence of 1 cleft in 724 Caucasian births and 1 cleft in 2,013 non-Caucasian births. In Philadelphia County with a relatively high non-Caucasian birth rate, 75.3% of the cleft lip-cleft palate births were in Caucasian children and 24.7% were in non-Caucasian children, giving an incidence of 1 cleft in 844 white births and 1 cleft in 1,607 non-Caucasian births. (Cosman)

Kasirsky, G., Gautieri, R. F., and Mann, D. E., Jr., Inhibition of cortisone-induced cleft palate in mice by cobaltous chloride. J. Pharm. Sci., 56, 1330–1332, 1967.

The purpose of this study was to detect any cobalt-steroid interactions in terms of anomalies in the mouse fetus. Pregnant female mice were divided into five groups of 26 mice each. Treatment and results were as follows. Group A: Each mouse received an injection of cortisone acetate on days 11-14; 269 fetuses were examined with 75.6% incidence of cleft palate, and all litters had some clefts. Group B: Each mouse received an injection of cobaltous chloride on day 11 only, followed by cortisone acetate on days 11-14; 259 fetuses were examined with 12.6% incidence of cleft palate, and only six litters had clefts. Group C: Each mouse received an injection of saline solution on days 11-14; 288 fetuses were examined, and none of the fetuses had clefts. Group D: Untreated controls; no incidence of cleft palate. Group E: Each mouse received an injection of cobaltous chloride on day 11, followed by a saline injection on days 11-14; 293 fetuses were examined with 12.9% incidence of cleft palate, and thirteen of the litters had some fetuses with clefts. The authors propose that the cobalt-steroid interaction may occur at the same site through competitive inhibition, for each alone induces clefts while together inhibition occurs. Cortisone-induced cleft palate results in a more pronounced defect than that produced by cobaltous chloride. (Noll)

Meskin, L. H., and Pruzansky, S., Validity of the birth certificate in the epidemiologic assessment of facial clefts. J. dent. Res., 46, 1456-1459, 1967.

An examination of the birth certificates of 460 patients with facial clefts indicated that as the severity of the defect decreased there was a corresponding decrease in the completeness of reporting the defects on the birth certificate. It was noted that 29.4 percent of all types of facial clefts was not listed. This would indicate that the birth certificate should be used with caution in epidemiologic investigations of facial clefts. (Luban)

Monroe, C. W., Griffith, B. H., Rosenstein, S. W., and Jacobson, B. N., The correction and preservation of arch form in complete clefts of the palate and alveolar ridge. *Plastic re*constr. Surg., 41, 108–112, 1968.

In the last 2 years 24 patients have benefitted from a program of immediate

oost-lip-closure prosthetic management with subsequent bone graft and, finally, palate closure. Infants with complete clefts of the palate and alveolar ridge with even slight anterior rotation of the premaxilla were the ones chosen for this treatment. An acrilic prosthesis with short soft projection into the cleft and with extension over the alveolar ridge in the bicuspid and molar areas was constructed. The space between the ends of the alveolar ridges was not filled. The prosthesis was inserted by the surgeon at the end of the operation and not removed for 10 days. Rapid correction of the arch form was noted with almost all defects having been corrected within 2 to 4 months. At age 4 to 9 months a rib bone graft was used to stabilize the arch form and the prosthesis was reinserted. Twelve of the 24 patients have had successful bone grafts thus far. with 10 of these having had palate closure. Eight of these 10 have good alveolar ridge alignment. In 2 cases, however, simultaneous bone graft and palate closure were carried out with resultant alveolar ridge collapse. While it is too early to assess the results of this program, the authors feel that the alveolar ridge contour they are achieving in severe clefts is a marked improvement over what they previously obtained. (Cosman)

Morgan, P. R., and Harris, J. W. S., Observations on meclizine-induced cleft palate in rat embryos. J. dent. Res., 46, 1271-1272, 1967.

Meclizine hydrochloride given in large doses to pregnant rats results in a high incidence of cleft palate in their embryos. This study indicated that the volume of fluid surrounding treated embryos was consistently less than in normal embryos. The length and angulation of the cranial base in treated embryos was within normal range, but the subsequent extension of the prechordal portion of the base was retarded, and there was a reduction in the

length of Meckel's cartilage. It is postulated that this decrease in size of Meckel's cartilage is a major factor in the development of meclizine-induced cleft palate. (Luban)

Morris, A. L., and Greulich, R. C., Dental research: the past two decades. *Science*, 160, 1081–1088, 1968.

The authors discuss the interdisciplinary programs which have broadened the base of dental science. One short section of the article reviews in generalities "Studies in Growth and Development", and contains a brief resume of some of the investigations relating to the teratogenic effect of drugs in experimental animals, as well as metabolic disturbances and heredity. There is no bibliography accompanying the article. (Gregg)

Murray, J. E., and Swanson, L. T., Midface osteotomy and advancement for craniosynostosis. *Plastic reconstr.* Surg., 41, 299–306, 1968.

A total mid-facial osteotomy, i.e., a surgical Le Fort III fracture, was carried out to reverse the facial defect in a patient with successfully treated craniosynostosis. This is believed to be the first such procedure carried out in the United States. A single case of Sir Harold Gilles had previously had a somewhat similar treatment. The result presented is an impressive one. The applicability of this approach to cleft palate patients with similar maxillary hypoplasia is a subject for serious consideration. (Cosman)

Orticochea, M., Construction of a dynamic muscle sphincter in cleft palates. *Plastic reconstr. Surg.*, 41, 323– 327, 1968.

In most instances of velopharyngeal incompetence the author believes that an effort should be made to fashion a dynamic muscle sphincter. The operative procedure he has developed consists of a one- or twostage formation of lateral pharyngeal flaps containing the palatopharyngeal musculature based superiorly, detached inferiorly, and attached to an inferiorly based posterior pharyngeal flap. This produces a triple opening in the nasopharyngeal aperture. The lateral openings tend to close by scar contraction and the central one is said to show muscle sphincter action. The procedure is said not to shorten the anteriorposterior dimension of the palate and not to interfere with motility of the palate. The number of cases treated, the exact preoperative and postoperative speech status, and the complication rates are not mentioned. (Cosman)

Perczyńska-Partyka, Weislawa, Przedoperacyine leczenie rozxzczepów wargi, wyrostka zebodolowego i podniebienia przedsionkowopodniebienna plytka modvfikacji (Preoperative wlasnei treatment of the fissures of the lip, alveolar process and palate with the use of vestibular plate in my modification). Czasopismo stomatolo-(Varšava), 20, 1055 - 1062,giczne 1967.

The author's method for stimulating orthodontic treatment before lip surgery with the use of vestibularpalatal plate in complete clefts of the lip is discussed. Advantages of the applied plate are shown in growth stimulation and the displacement of parts of the fissure's jaw in a desirable direction. The advantageous action of the apparatus for a child with this developmental defect, through the nursing stage until the period of surgical treatment, is emphasized. (author's summary)

Prins, D., and Bloomer, H., Consonant intelligibility: a procedure for evaluating speech in oral cleft subjects. J. speech hearing Res., 11, 128–137, 1968.

As a follow-up to a previous study, the authors investigated the precision and

validity of a procedure utilizing consonant intelligibility to assess the speech of oral cleft subjects. 20 subjects with oral clefts and 10 subjects with normal speech recorded 50-item word lists from the Fairbanks Rhyme Test. A group of 20 untrained listeners responded to the recorded words by transcribing the initial consonant sounds on score sheets. Results indicated that the listeners were reliable as a group (r = 0.88). Distribution and type of listener error scores revealed that listener responses were primarily a function of the speaker and not the response task. Comparison of oral cleft and normal speakers revealed consonant intelligibility differences in terms of percentage of error scores (12.6 vs. 1.4) and percentage of nasal oral consonant confusions (31 vs. 6). A wide range of oral cleft speaker ability was identified, particularly among those speakers with poorer velopharyngeal valving mechanisms who showed more prevalent nasal and oral consonant confusions. (Mason)

Rees, T. D., Wood-Smith, D., Swinyard, C. A., and Converse, J. M., Electromyographic evaluation of submucous cleft palate: a possible aid to operative planning. *Plastic reconstr.* Surg., 40, 592–594, 1968.

Twelve patients with submucous clefts have been encountered in a series of 250 cleft palate patients, an incidence of 4.8%. The palates of these and other patients have been "mapped" electromyographically either under anesthesia in the younger children or under sedation and topical anesthesia in older children. The zone of electrically silent tissue was removed in the repair. Two of the patients had Veau-Wardill procedures combined with superiorly based pharyngeal flaps and the remaining 10 had palate closure and retroposition without pharyngeal flap. The authors' impression is that the patients with the combined procedures Rosenthal, W., and Flath, I., Wandlungen in der Versorgung der kongenitalen Lippen-Kiefer-Gaumenspalten (Changes in the care of congenital lip-jaw cleft palate). Deutschen Zahn-, Mund- und Kieferheilkunde, 49, (1/10), 199-205, 1967.

A short survey of the operative palate plastic surgery from Langenbeck to the present is given, and it is pointed out that, with reference to the dental care of patients, there was a development from the obturator to prosthesis to the present early orthodontic treatment. In addition, the factors which influence the development of the cleft jaw are presented schematically. (Schmid)

Shagdarsuren, T., and Pavlov, B. L., Opyt chejlophastiki pri vroždennych raščelinach verchnej guby (Experiences in cheiloplasty in congenital cleft lip). Stomatologija (Moskva), 46, 43–48, 1967.

The paper describes the results of operations in 44 children suffering from cleft lip, including Orlovsky's technique in 7 cases with unilateral cleft lip and the Mire-Limberg method in 2 patients. Obuknova's and other techniques were used in 26 cases. In 12 children the operations were performed during the first days after birth with good results in 10 cases. Obuknova's technique gives the best results in unilateral cleft lip. (authors' summary)

Smith, J. L., Cleft palate: auditory and otologic findings. *Texas Medicine*, 64: 69-71, 1968.

The criteria of successful rehabilitation of patients with cleft palates has been normal speech and correction of dental deformities. The hearing loss which occurs so often in these patients has been frequently neglected even though it was recognized. This hearing loss is usually caused by serous otitis media, chronic adhesive otitis and/or mastoiditis, which disorders develop because of poor eustacian tube function. The hearing loss may not be noted by the patient's family nor his physician under usual circumstances, but it should be the responsibility of any physician caring for a child with a cleft palate to see that proper otologic and audiologic surveys are made in order to diagnose early any disease developing in the middle ear. There is disagreement among professional groups as to proper treatment of recurrent serous otitis media in a cleft palate child. Selectively used and correctly performed tonsillectomy and adenoidectomy, wide myringotomy with thorough aspiration of middle ear fluid. and myringotomy with insertion of polyethylene tubes are methods of treatment used in certain patients. The author outlines the work of the cleft palate team in the Texas Medical Center, among whom are representatives in the fields of audiology and otolaryngology. The team has processed 111 patients, 87 of whom had cleft palates and the remainder of whom had some form of palatal disorder besides a cleft. One of three was found to have some degree of hearing loss, mostly of a correctable type. (Barnes)

Sood, N. N., Agarwal, T. P., and Ratnaraj, A., Ankyloblepharon filimore adnatum with cleft lip and palate. J. pediat. Ophthal., 5, 30-32, 1968.

A three-day-old Hindu boy suffered from ankyloblepharon filimore adnatum in association with complete cleft lip and palate. His two siblings and parents were normal, but a maternal aunt was said to have a cleft lip and palate. The single bands of adhesions of the lid margins on both sides of the eyes, which were medial in position and situated behind the lashes but anterior to the opening of the meibomian ducts, were excised with scissors. The eyeballs and eyelashes were normal. The histological examination revealed stratified squamous epithelium covering connective tissue and containing blood vessels. Sebaceous glands and a rudimentary hair follicle were also found. Both the cleft palate and lip and ankyloblepharon filimore adnatum could arise from a fetal insult at eight to nine weeks gestation. (11 references.) (This abstract is from Birth Defects: Abstracts of Selected Articles, The National Foundation-March of Dimes, 5(4), abstract number NF 68-353, 1968.)

Stellmach, R., and Schettler, D., Betrachtungen zum Robin-Syndrom und kephalometrische Untersuchungen bei 12 Behandlungsfällen (Observations on the Robin Syndrome and cephalometric examinations in 12 cases of treatment. Deutschen Zahn-, Mund-, und Kieferheilkunde, 49, (1/ 10), 137-147, 1967.

On the basis of measurements of the gonial angle of five cephalometric plains with the facial plane (X ray) of 12 cases of Robin Syndrome, as well as by measurements of the sagittal incisor development of these children between the ages of nine months to ten years, the previous representative opinion (Lleweyllyn, Biggs, Routledge, Longmire, Sandfort, Feltmann) was refuted; that is, the pattern of growth of the lower jaw is deviant during the first few months of life, eventually gaining normal size. Standard size (depending upon the system of reference) was achieved only by three to four children. and it is just these children who, after birth, exhibited such a mild form of microgenesis that an extension treatment was not necessary. (Schmid)

Szepanska, Irena, and Smolarska, Melania, Dośwaidczenia własne z zakresu przedoperacyjnego leczenia ortopedycznego dzieci z rozszczpami podniebienia pierwotnego i wtórnego (Experiments concerning the preoperative orthopedic treatment of children with primary and secondary palate clefts). Czasopismo stomatologiczne (Varšava), 20, 633-639, 1967.

The authors discuss their experiments concerning the preoperative orthopedic treatment in infants with clefts of primary and secondary palate. Aim of treatment performed in the outpatients' condition was to improve such functions as respiration, swallowing, also feeding, and to improve the mutual localization of the fissured parts of the jaws. In this treatment the authors primarily used dental plates of their own invention on a jaw, but also a dental plate according to the original method of McNeil. The infants wore the plates all 24 hours, even during feeding. The treatment lasted for several months: later, lip surgery was completed. To illustrate the obtained results, the authors presented two patients aged $4\frac{1}{2}$ years to whom that therapy was applied. Results of the treatment are positive. (authors' summary)

Tocci, P. M. and Beber, B., Abnormal phenylalanine and tyrosine tolerance tests in mothers of children with cleft palate. Southern Medical Journal, 60, 1352, 1968.

The urine of children with cleft palate and the urine of the members of their families was examined as part of a routine genetic screening program. Qualitative similarities in the excretion of phenolic acids, primarily metabolites of phenylalanine and tyrosine, were found in 60 per cent of the mothers of these children. These amino acids were given orally to several mothers under standardized loading conditions, following which tyrosine and phenylalanine levels were determined fluorometrically at one, two, and four hours, and the urine examined chromatographically. Four of seven women who had borne children with palatal problems showed abnormal tolerances to both these amino acids, as compared to only one of eleven controls. The levels of both acids in the plasma continued to rise from the first to the fourth hour or remained the same in the mothers in question, whereas in the controls the values decreased progressively after the first hour. (Barnes)

Tulenko, J. F., Cleft lip nasal deformity in the absence of cleft lip: case report. *Plastic reconstr. Surg.*, 41, 35– 37, 1968.

This is another case report of "minimal cleft lip" in which a nearly intact lip is associated with a significant cleft-lip nasal deformity and a minor dental anomaly in the line of the clefting process. X rays of the alveolar arch are not presented. An extensive procedure was employed in the repair. (Cosman)

Verrusio, E. C., Pollard, D. R., and Frasier, F. C., A cytoplasmically transmitted, diet-dependant difference in response to the teratogenic effects of 6-aminonicotinamide. *Science*, 160, 206-207, 1968.

The frequency of congenital cleft palate produced by maternal treatment with 6aminonicotinamide during pregnancy is lower in the C57BL-6J than in the A-J inbred mouse strain. In the C57BL-6J strain the frequency is lower when the mothers are maintained on Purina Lab Chow than when they are on Breeder Chow. A-J feed mills do not show this effect of diet. There is a matroclinous reciprocal cross difference in frequency of induced cleft palate which persists in the back-cross when the F-sub-1 mothers are maintained on Lab Chow but not on

Breeder Chow. (authors' summary: Gregg)

Williams, H. B., A method of assessing cleft lip repair: comparison of Le Mesurier and Millard techniques. *Plastic reconstr. Surg.* 41, 103–107, 1968.

The author graded 5 features of the nose (tip, ala, floor, columella, septum) and 5 features of the lip (length, scar, vermillion, pout, alveolus), giving 10 points or less to each for a possible total of 100 points. His study group included 65 cases of which 13 incomplete and 15 complete clefts of the lip had been repaired by the Millard method and 12 incomplete and 25 complete defects had been closed by the Le Mesurier technique. The average age of the Millard cases assessed was lower by 4 years than that of the Le Mesurier repairs. In general, the highest ratings were obtained with the incomplete cleft Millard repairs followed by the incomplete Le Mesurier group. This was a statistically significant difference. The overall results of the complete cleft lip repairs were slightly better by the Le Mesurier method, but the result was not statistically significant. While some of the Le Mesurier results were marred by a lip too long from nasal floor to cupid's bow, the distance from nasal floor to cleft side commissure tended to be normal. On the other hand some of the Millard results showed shortness of both of these dimensions. Ala cartilage undermining had been performed at the time of initial repair in 19 of the Le Mesurier patients; these patients had poorer ala results than the other Le Mesurier cases and in a few instances it was felt that a growth abnormality might have been produced by this additional procedure. (Cosman)

Yules, R. B., and Chase, R. A., Quantitative cine evaluation of palate and pharyngeal wall mobility in normal

378 Abstracts

palates, in cleft palates, and in velopharyngeal incompetency. *Plastic re*constr. Surg. 41, 124–128, 1968.

A voice cine at 24 frames per second was made for 119 patients and 36 controls. The film was projected onto paper and tracings made at rest and at maximum palate height while the patient said "quack". Rate of palate ascent as well as amount of excursion for both the tip and the "knee" of the soft palate were determined. The rate of ascent was smaller in the younger controls than in the adults. No posteriorpharyngeal wall movement and no failure of closure was observed in the control group. All closures were by "knee" palate formation. Of the 94 cleft patients, palate tip ascent was faster than that of the knee portion in 62 cases. Radiographic closure was achieved in only 49 cases (one-third by tip) and posteriorpharyngeal wall anterior displacement was present in 43 cases. Compensatory tongue movements were noted in 33 cases. 25 velopharvngeal incompetency patients presented a more mixed picture. As in the controls, tip ascent rate was less than knee ascent rate in 17 of the 25 patients. Ascent speed was slower than the controls but faster than the cleft palate patients. Pharyngeal wall motions were noted in 12, and compensatory tongue movement in 8. The concept of relative palate ascent rates may allow a more precise selection of patients for given operations, although clearly more information remains to be accumulated and to be correlated with actual speech evaluations. (Cosman)

Zolotko, V. S., Topographic distribution of blood vessels of the hard palate. Stomatologia (Moskva), 45, 64–68, 1966.

The palatine blood vessels of 85 cadavers (67 fetuses, 6 newborns, 2 infants, and 10 adults) were injected with radiopaque material for radiologic examination and subsequent fixation and photographing. The blood supply of the hard palate came mainly from 2 branches of the descending palatine artery in 165 of 170 preparations. The branching of the descending palatine artery formed the greater synonym: the anterior and posterior arteries. In some instances (6 of 170), the maxillary artery was the origin of the 2 palatine branches. Only in 5 of 170 preparations, there was a single arterial stem of the palatine artery which supplied the entire palate. The most densely vascularized regions of the hard palate were those located along the alveolar processes and supplied by the greater palatine artery. (Shoshan/Oral Research Abstracts)

LETTERS TO THE EDITOR

Dear Editor:

I have read with interest the article "Roll-Y pharyngoplasty and palate-lengthening procedure", *CPJ*, 4, 300–307. In that, Dr. Hamacher described this reconstruction as "a new concept". I believe that essentially the same operation was devised and described by Dr. Arthur J. Barsky. It is illustrated in the textbook *Principles and Practice of Plastic Surgery*, A. J. Barsky, S. Kahn, and B. E. Simon, McGraw-Hill, 1964, page 393.

Sidney Kahn, M.D. 102 E. 78th Street New York, New York 10021

ANNOUNCEMENTS

The Association continues to have problems in financing the publication of CPJ. Just recently, for example, manufacturing costs increased 5%. Several steps are being taken in an effort to solve the problems.

a) Beginning immediately, the subscription rate for CPJ will be \$15.00 the volume, \$4.00 the issue. Note that this increase does *not* affect members of ACPA.

b) Beginning with the January 1969 issue of CPJ, a per page cost will be assessed to the author for printed pages in excess of eight per manuscript. (For example, if, in printed form, an article is ten pages in length, en toto, page costs will be assessed for two pages.) Other kinds of manufacturing costs, such as for tabular material or for figures, will not be assessed. The exact amount of page costs has not yet been established.

c) Additional efforts will be made to solicit advertising in CPJ. An Advertising Board has been established: Charles R. Elliott, Ph.D.; Maxine Schurter, M.D.; and Haskell Gruber, D.D.S., Chairman. The Board will be responsible for developing policy and procedure for the placement of advertising in CPJ. Members interested in participating in this activity should contact any member of the Board.

Cleft Palate Team Listings... Material is now being collected for the listing of cleft palate teams to be published in the 1968–1969 ACPA *Directory*. Teams which meet the criteria presented below may be listed in the *Directory* upon formal request to the Secretary (Dr. Kenneth R. Bzoch). See page 95 of the 1967–1968 *Directory* for format of the listings.

Criteria:

- a) each team must have representation from at least the fields of dentistry, speech pathology, and plastic surgery
- b) each team must have at least one member on the staff who is a member of ACPA

Notice: Listing in the ACPA *Directory* does in no way imply endorsement of the team by the American Cleft Palate Association.

The Editorial staff of CPJ and the Executive Council of ACPA are currently evaluating the usefulness of the sections on abstracts published routinely in CPJ. We need help from the readers. Please comment, at your earliest convenience, to Dr. Douglas Noll, Dr. Michael Lewis, or to the Editor about your use of the abstracts. Some questions that we have are: Do you read the abstracts? Do you find them useful? How are they useful? Could they be shorter in length and still be useful? Other kinds of comments will be helpful to us, too.

The Book Review Editor needs someone who can translate Polish. If that ability is among your skills, write Dr. Betty J. McWilliams, Ph.D., Cleft Palate Research Center, 355 Salk Hall, University of Pittsburgh, Pittsburgh, Pennsylvania 15213.

The Board of Trustees of the University of Illinois has approved the recommendation of the Chancellor at the Medical Center that the name of the Cleft Palate Center and Training Program be changed to the Center for Craniofacial Anomalies, effective immediately. The reorganization of the Center was designed to enhance its contribution to the teaching, research, and patient care services of the Medical Center Campus. The Center for Craniofacial Anomalies now includes the Cleft Palate Clinic, Maxillofacial Prosthetic Clinic, The Laboratory for Developmental Pathology, and the Growth Laboratory at the Illinois State Pediatric Institute. Additional clinics and laboratories are being planned. The new Center will be administered primarily through the Office of the Dean of the College of Dentistry. However, the Center will continue to be responsible for the clinical portion of its activities to the Medical Director of the Research and Educational Hospitals. The Advisory Committee to the Center will be drawn from the several colleges of the University. Dr. Samuel Pruzansky, Professor of Dentistry and presently in charge of the Cleft Palate Unit, will serve as Director of the Center for Craniofacial Anomalies.

The Mayo Graduate School of Medicine and the Section of Dentistry and Oral Surgery of the Mayo Clinic offer a graduate-residency training program in prosthodontics leading to a Master of Science Degree in Dentistry or Certificate of Achievement. Appointments for the 36 month course of study in conventional and maxillofacial prosthodontics are made once a year beginning with the summer or fall quarter. Didactic courses, clinical and laboratory experience, and practice teaching satisfy requirements for certification by the American Board of Prosthodontics. A stipend is provided with annual increments. Address inquires to Director, Mayo Graduate School of Medicine, 200 First Street Southwest, Rochester, Minnesota 55902.

382 Announcements

The University of Illinois Center for Craniofacial Anomalies in cooperation with The Division of Services for Crippled Children and The Center for Handicapped Children will present a short course on April 9 through 11, 1969 to be held at the University of Illinois at the Medical Center in Chicago.

The material for the course will be drawn from the longitudinal studies on children with craniofacial birth defects in progress since 1949. The data on about 2500 different individuals, include various facial clefts, Pierre Robin syndrome, mandibulofacial dysostosis, premature craniofacial synostosis, microtia, and oral-facial-digital syndrome among other entities.

Participating Center staff will include representatives of dentistry, dermatology, genetics, ophthalmology, otolaryngology, pediatrics, plastic surgery, public health, psychology, sociology and speech and hearing science.

Because of limited accommodations, professional workers active in the field will be given preference.

For further information, please write to: Dr. S. Pruzansky, Director, Center for Craniofacial Anomalies, University of Illinois at the Medical Center, P. O. Box 6998, Chicago, Illinois 60680

TIME AND PLACE, ACPA

1969—International Congress, April 1	4, 15, 16, 17
	Houston at the Shamrock
1970—April 16, 17, 18	Portland at the Hilton
1971—April 22, 23, 24	Pittsburgh at Chatham Center
1972—May 18, 19, 20	Salt Lake City at the Utah
1973—date unspecified	Oklahoma City

This year's *Time and Place Committee* has been charged by President Musgrave with the responsibility of presenting to Council a five-year plan regarding sites for the future meetings of the American Cleft Palate Association. This plan would involve the years 1974, 1975, 1976, 1977, and 1978. The members of this committee would like to offer an opportunity for the membership to voice their desires regarding long range planning of the meetings. By means of this announcement, we invite your comments, your ideas, and a statement of the areas you prefer as locations for future meetings. All correspondence should be addressed to the Chairman of the Time and Place Committee so that it can be shared with the members of the committee and officers of the Association. Your committee is willing to do the work of collecting information from various convention facilities but we want to do it in a way that will be in keeping with your wishes. Let us hear from you.

Doris P. Bradley, Ph.D., Chairman Time and Place Committee Dental Research Center University of North Carolina Chapel Hill, North Carolina 27514

A cumulative index of all abstracts which have appeared in *CPJ*, Volumes 1 through 4, has been assembled by Dr. J. Douglas Noll, *CPJ* Abstract editor, National periodicals. The index is of considerable length and duplication will be costly and time-consuming. Copies may be made available on request, however, if there is sufficient interest. Write to Dr. Noll or to the Editor regarding your request.



The deadline for the submission of materials for the technical sessions, table clinics, films and scientific exhibits, is now passed. At the moment, the Program Committee is hard at work making the final selections and fitting all of the pieces together to make an interesting and stimulating four days. The Committee hopes to have its work completed by November 1. Notifications will go out shortly after that to all of you who have submitted material.

There is still time, however, to get space for commercial exhibits and to be listed in the Industrial Guide. As you, hopefully, remember, I sent each of you a memo on July 1, giving you information about the exhibits and the Guide and asking you to give some of your time for the cause. Did you? If not, it's not too late to look up the memo or to write to me for another copy, and give the Association the requested eight hours of your support.

There is also still time to contact Dr. Betty Jane McWilliams if you would like to invite one of our foreign guests to your campus or clinic as a visitor or consultant. As you know, Dr. McWilliams will supply you with a list of names and you make your own direct contacts. An invitation from you will assist our overseas friends in meeting their travel expenses and it will add a new dimension to your own professional activities. But you must act now if you intend to participate in this fringe benefit from the Congress.

On December 1 we will be sending out posters to relevant programs in universities and clinics. One of the primary purposes of the posters is to attract the attention of students. Naturally, we hope that if you receive one of the posters you will see that it is posted on your bulletin board!

The Association has always encouraged the attendance of students at our meetings. According to actions taken by the Executive Council, interns, residents, and fellows in full-time training are considered to be students. Student status is established by a letter from the chief of service or other verifying personnel to Dr. Charlotte G. Wells, 106 Parker Hall, University of Missouri, Columbia, Missouri 65202. Dr. Wells is handling the registration for the Congress and will be sending out preregistration material to all of you on January 1. However, students will not get this material unless they have already filled out a form asking to be added to the mailing list or unless they write to Dr. Wells for it. If students do not preregister, they should go to the Congress armed with the necessary letter attesting to their status. The point of all this is that students may attend the technical sessions without paying a fee. They, unlike members and nonmembers attending the technical session of the Congress, have the option not to purchase tickets for the social events. If they do wish to attend the social events, the fee will be \$25. In any event I hope that those of you involved in educational programs will begin now to plan for the attendance of your students at the Congress.

The Secretariat and its committees have developed a master schedule which indentifies those things that must be done month by month. Our purpose in developing it was to insure that we would not overlook something, minor as well as major. We have tried to translate the schedule into action through meetings, letters and telephone calls. From where you sit, have we overlooked anything? If we have, I'd be most grateful if you would write to me. Hopefully there is still time to correct our oversights.

> D. C. SPRIESTERSBACH, PH.D. Secretary-General Old Capitol Iowa City, Iowa 52240



CUMULATIVE INDEX TO VOLUMES 1 THROUGH 5 1964–1968

AUTHOR INDEX

- Adams, Richard M., and Laurel E. Brown, Labial supportive appliance, 2, 389-393, 1965.
- Adamson, Jerome E., see Horton, Charles E., 1.
- Aduss, Howard, see Pruzansky, Samuel, 1.
- Alexander, John T., see Cronin, Thomas D., 1.
- Alley, Norman R. A., The use of speech aid prosthesis as a diagnostic tool, 2, 291-292, 1965.
- Altemus, Leonard A., The incidence of cleft lip and palate among North American Negroes, 3, 357-361, 1966.
- Anderson, Ruth M., see Weatherly-White, R. C. A., 1.
- Angelici, Dino R., Reopening of fused palatal shelves, 5, 205-210, 1968.
- Arkebauer, Herbert J., see Hardy, James C., 3.
- Arndt, William B., Jr., Ralph L. Shelton, Jr., and Lawrence J. Bradford, Articulation, voice and obturation in persons with acquired and congenital palate defects, 2, 377-383, 1965.... see Shelton, Ralph L., Jr., 5.
- Ashley, Franklin L., see Bleicher, Norman, 2.
- Atherton, J. David, Morphology of facial

bones in skulls with unoperated unilateral cleft palate, 4, 18–30, 1967.... A descriptive anatomy of the face in the human fetuses with unilateral cleft lip and palate, 4, 104–114, 1967.

- Azaz, B., and Edith Koyoumdjisky-Kaye, Incidence of clefts in Israel, 4, 227-233, 1967.
- Baibak, George, and Bertram E. Bromberg, Congenital midline defects of the midface, 3, 392-401, 1966.
- Balber, George, see Millard, Ralph, 4.
- Barry, John R., Patient motivation for rehabilitation, 2, 62-68, 1965.
- Becker, Melvin H., see Converse, John Marquis, 5.
- Berkman, M. D., see Fischer, J. H., 4.
- Blakeley, Robert W., The complementary use of speech prosthesis and pharyngeal flaps in palatal insufficiency, 1, 194–198, 1964.
- Blazine, Carol, see Buncke, Harry J., Jr., 3.
- Bleicher, Norman, Robert F. Sloan, Irving G. Gault, and Franklin L. Ashley, Cleft palate in a dog, 2, 56-61, 1965.
- Blocksma, Ralph, Silicone implants for velopharyngeal incompetence: a progress report, 1, 72-81, 1964.
- Bloomer, H. Harlan, see Prins, David, 2.
- Bluestone, Charles D., Ross H. Musgrave, Betty Jane McWilliams, and Phyllis A. Crozier, Teflon injection pharyngoplasty, 5, 19-22, 1968.
- Bonomo, Donald J., see Grossman, A. Richard, 2.

Bosma, James F., see Takagi, Yasuaki, 3.

A cumulative index of all abstracts which have appeared in *CPJ*, Volumes 1 through 4, has been assembled by Dr. J. Douglas Noll, *CPJ* Abstract editor, National periodicals. The index is of considerable length and duplication will be costly and time-consuming. Copies may be made available on request, however, if there is sufficient interest. Write to Dr. Noll or to the Editor regarding your request.

- Bradford, Lawrence J., Alta R. Brooks, and Ralph L. Shelton, Jr., Clinical judgment of hypernasality in cleft palate children, 1, 329-335, 1964.... see Arndt, William B., Jr., 2.
- Bradley, Doris P., see Neeley, Betty Jane [McWilliams], 1; McWilliams, Betty Jane, 2.
- Brandt, Sara Dale, and Hughlett L. Morris, The linearity of the relationship between articulation errors and velopharyngeal incompetence, 2, 176-183, 1965.
- Brauer, Raymond O., and Thomas D. Cronin, Maxillary orthopedics and anterior palate repair with bone grafting, 1, 31-42, 1964... see Cronin, Thomas D., 1.
- Brogdon, Byron G., see Sparrow, Sara S., 1.
- Bromberg, Bertram E., see Baibak, George, 3.
- Brooks, Alta R., see Bradford, Lawrence J., 1; Shelton, Ralph L., Jr., 3.
- Brown, Laurel E., see Adams, Richard M., 2.
- Bryant, D. L., see Jurkiewicz, M. J., 5.
- Buncke, Harry J., Jr., Patricia Page, Barbara Price, Carol Blazine, and Freda Fraser, The evaluation and management of velopharyngeal insufficiency, 3, 171-180, 1966.
- Buxton, Samuel, see Horton, Charles E., 1.
- Bzoch, Kenneth R., Clinical studies of the efficacy of speech appliances compared to pharyngeal flap surgery, 1, 275-286, 1964.... Articulation proficiency and error patterns of preschool cleft palate and normal children, 2, 340-349, 1965.... Variations in velopharyngeal valving: the factor of vowel changes, 5, 211-218, 1968.... see Sparrow, Sara S., 1.
- Calostypis, Fanny, see Hoffman, Saul, 5. Carpenter, Mary A., and Hughlett L. Morris, A preliminary study of Passavant's pad, 5, 61-72, 1968.
- Cataldo, E. F., see Fisher, J. H., 4.
- Červenka, Jaroslav, see Šubrt, Ivan, 3.
- Chan, Byron C., see Konegni, John S., 2. Chenoweth, Alice D., Services for chil-

dren with cleft palate by state crippled children's agencies, 1, 299-303, 1964.

- Chierici, George, Some observations on the pharyngeal airspace, 4, 129–136, 1967. ... see Curtis, Thomas A., 1.
- Chisum, Linda, see Shelton, Ralph L., Jr., 5.
- Cleall, John F., see Offerman, Richard E., 1.
- Clifford, Edward, Connotative meaning of concepts related to cleft lip and palate, 4, 165-173, 1967.
- Cobb, Carolus M., see Quigley, Lawrence F., Jr., 1; ... 2.
- Coccara, Peter J., and Samuel Pruzansky, Longitudinal study of skeletal and soft tissue profile in children with unilateral cleft lip and cleft palate, 2, 1-12, 1965.... Samuel Pruzansky, and J. Daniel Subtelny, Nasopharyngeal growth, 4, 214-226, 1967.
- Converse, John Marquis, Sidney L. Horowitz, Cary L. Guy, and Donald Wood-Smith, Surgical-orthodontic correction in the bilateral cleft lip, 1, 153-163, 1964.... Sidney L. Horowitz, and Melvin H. Becker, The use of tomography in the diagnosis of unusual and occult clefts of the palate, 5, 311-316, 1968.
- Conway, Herbert, and Kurt J. Wagner, Incidence of clefts in New York City, 3, 284-290, 1966.
- Cooper, Rueben, see Horton, Charles E. 1.
- Cosman, Bard, and George F. Crikelair, The reconstruction of the unilateral cleft lip nasal deformity, 2, 95-111, 1965.
 ... George F. Crikelair, Release of the prolabium in the bilateral cleft lip, 3, 122-129, 1966.
- Coursin, David B., see McNall, Earl G., 4.
- Cramer, Lester M., see Subtelny, J. Daniel, 5.
- Crawford, Hugh H., see Horton, Charles E., 1.
- Crikelair, George F., see Cosman, Bard, 2; ... 3.
- Cronin, Thomas D., Raymond O. Brauer, John T. Alexander, and William G. Taylor, Push-back repair using nasal mucosal flaps: results, 1, 269–274, 1964. ... A modification of the Tennison-type

lip repair, 3, 376–382, 1966. . . . see Brauer, Raymond O., 1.

- Crozier, Phyllis A., see Bluestone, Charles D., 5. ... see McWilliams, Betty Jane, 5.
- Curtis, Thomas A., and George Chierici, Prosthetics as a diagnostic aid in pharyngeal surgery, 1, 95–98, 1964.
- DeHaan, Clayton R., see Stark, Richard B., 1; Weatherly-White, R. C. A., 3.
- Demb, Norman, and Aubrey L. Ruess, High school drop-out rate for cleft palate patients, 4, 327–333, 1967.
- Dersch, William C., see Weatherly-White, R. C. A., 1.
- Des Prez, John D., see Kiehn, Clifford L., 2.
- Devereux, James L., see Warren, Donald W., 3.
- Donahue, Richard F., Birth variables and the incidence of cleft palate: part I, 2, 282-290, 1965. . . Birth variables and the incidence of cleft palate: part II, 4, 234-239, 1967.
- Donaldson, James A., The role of artificial eustachian tube in cleft palate patients, 3, 61-66, 1966.
- Drexler, Allan B., Age of surgery for cleft palate patients and speech proficiency, 5, 327-333, 1968.
- DuBois, Arthur B., see Warren, Donald W., 1.
- Engman, Lawrence T., D. C. Spriestersbach, and Kenneth L. Moll, Cranial base angle and nasopharyngeal depth, 2, 32-39, 1965.
- Erickson, Duane M., see Mazaheri, Mohammed, 1.
- Falk, Mervyn L., and George A. Kopp, Tongue position and hypernasality in cleft palate speech, 5, 228-237, 1968.
- Falter, Jane Werth, and Ralph L. Shelton, Jr., Bulb fitting and placement in prosthetic treatment of cleft palate, 1, 441-447, 1964.
- Fenyes, Vera, see Loevy, Hannelore, 5.
- Fisher, J. H., F. R. Shiere, M. D. Berkman, E. F. Cataldo, and H. R. Fogels, Oral tissue changes in infants with cleft palate, 4, 316-326, 1967... see Shiere, F. R., 1.

Fogels, H. R., see Fisher, J. H., 4.

- Fraser, F. Clarke, Cleft lip and cleft palate, 5, 187-194, 1968.
- Fraser, Freda, see Buncke, Harry J., Jr., 3.
- Fujiki, Yoshishige, and Takuro Wada, Synchronization of cinefluorography and speech observations, 4, 291–299, 1967.
- Garner, L. D., An orthodontic approach to the Veau type IV cleft lip and palate problem in the preschool child, 1, 82–87, 1964.
- Garrett, William S., see Kraus, Bertram S., 5.
- Gault, Irving G., see Bleicher, Norman, 2.
- Georgiade, Nicholas C., Kenneth L. Pickrell, and Galen W. Quinn, Varying concepts in bone grafting of alveolar palatal defects, 1, 43-51, 1964.
- Gibson, R. D., see Konegni, John S., 2.
- Gilmore, Stuart I., and Susan M. Hofman, Clefts in Wisconsin: incidence and related factors, 3, 186–199, 1966.
- Girdany, Bertram, see McWilliams, Betty Jane, 1.
- Goda, Sidney, Speech therapy with selected patients with congenital velopharyngeal inadequacy, 3, 268-274, 1966.
- Gorlin, Robert J., see Meskin, Lawrence H., 1; ... 2.
- Greene, John C., Jack R. Vermillion, and Sylvia Hay, Utilization of birth certificates in epidemiologic studies of cleft lip and palate, 2, 141–156, 1965.
- Grossman, A. Richard, Joseph G. Kostrubala, and Donald J. Bronomo, A technique for photographing cleft palate patients, 2, 13-15, 1965.
- Grossmann, W., see Matthews, David, 1.
- Gullen, Warren H., see Meskin, Lawrence H., 5.
- Guy, Cary L., see Converse, John Marquis, 1.
- Hagerty, Robert F., Donald A. Hess, and Willis K. Mylin, Velar motility, velo pharyngeal closure, and speech proficiency from cartilage pharyngoplasty the effect of age at surgery, 5, 317-326

1968. ... see Hess, Donald A., 5; Mylin, Willis K., 5.

- Hamacher, Edward N., Roll-Y pharyngoplasty and palate-lengthening procedure, 4, 300-307, 1967.
- Hanson, Marvin L., A study of velopharyngeal competence in children with repaired cleft palates, 1, 217–231, 1964.
- Hardy, James C., and Herbert J. Arkebauer, Development of a test for velopharyngeal competence during speech, 3, 6-21, 1966.
- Haring, Frederick N., and Robert M. McCormack, A physiometric analysis of lip function in cleft and noncleft subjects, 1, 320–328, 1964.
- Hay, Sylvia, Incidence of clefts and parental age, 4, 205-213, 1967... see Greene, John C., 2.
- Hess, Donald A., Robert F. Hagerty, and
 Willis K. Mylin, Velar motility, velopharyngeal closure, and speech proficiency in cartilage pharyngoplasty: an eight year study, 5, 153-162, 1968... see Hagerty, Robert F., 5; Mylin,
 Willis K., 5.
- Hochberg, Irving, and Jack Kabcenell, Oral stereognosis in normal and cleft palate individuals, 4, 47-57, 1967.
- Hoffman, Saul, David R. Wesser, Fanny Calostypis, and Bernard E. Simon, The rotation-advancement technique (Millard) as a secondary procedure in cleft lip deformities, 5, 37-43, 1968.
- Hofman, Susan M., see Gilmore, Stuart I., 3.
- Hofmann, F. Allan, Cineradiographic system design, 1, 382-387, 1964.
- Holmes, Louis A., see Sukurai, Edwin H., 3.
- Honjow, Iwao, see Isshiki, Nobuhiko, 5.
- Horowitz, Sidney L., see Converse, John Marquis, 1; ... 5.
- Horton, Charles E., Hugh H. Crawford, Jerome E. Adamson, Samuel Buxton, Rueben Cooper, and Jack Kanter, The prevention of maxillary collapse in congenital lip and palate cases, 1, 25-30, 1964.
- Huffman, William C., see Kremenak, Charles R., Jr., 4.
- Isaacson, Robert J., see Meskin, Lawrence H., 1; ... 2.

- Isshiki, Nobuhiko, Iwao Honjow, and Masanori Morimoto, Effects of velopharyngeal incompetence upon speech, 5, 297-310, 1968.
- Iyer, V. S., Isolated cleft palate, 4, 124– 128, 1967.
- Jacobson, Bailey N., and Sheldon W. Rosenstein, Early maxillary orthopedics: a combination appliance, 2, 369-376, 1965. . . . see Rosenstein, Sheldon W., 4.
- Jahina, Soona, see Randall, Peter, 2.
- Johnston, Malcolm C., see Ross, Bruce R., 4.
- Jordan, Ronald E., Bertram S. Kraus, and C. Marshall Neptune, Dental abnormalities associated with cleft lip and/or palate, 3, 22-55, 1966.
- Jurkiewicz, M. J., and D. L. Bryant, Cleft lip and palate in dogs: a progress report, 5, 30-36, 1968.
- Kabcenell, Jack, see Hochberg, Irving, 4.
- Kanter, Jack, see Horton, Charles E., 1.
- Kiehn, Clifford L., John D. Des Prez, Arthur Tucker, and Margueritte Malone, Activation of the incompetent soft palate by means of muscle transplants: a preliminary report on sixteen cases, 2, 133-140, 1965.
- Kirkpatrick, John A., Roentgen evaluation of velopharyngeal closure, 1, 388-390, 1964.
- Kitamura, Hironori, and Bertram S. Kraus, Visceral variations and defects associated with cleft lip and palate in human fetuses: a macroscopic description, 1, 99–115, 1964. . . . Epithelial remnants and pearls in the secondary palate in the human abortus: a contribution to the study of the mechanism of cleft palate formation, 3, 240–257, 1966.
- Konegni, John S., Byron C. Chan, Thomas M. Moriarty, Sam Weinstein, and R. D. Gibson, A comparison of standard organ culture and standard transplant techniques in the fusion of the palatal processes of rat embryos, 2, 219– 228, 1965.
- Kopp, George A., see Falk, Mervyn L., 5.
- Kostrubala, Joseph G., see Grossman, A. Richard, 2.

- Koyoumdjisky-Kaye, Edith, see Azaz, B., 4.
- Kraus, Bertram S., and Seishi W. Oka, The dentitions of monozygotic human twin fetuses with cleft lip and palate: a case report, 5, 250-268, 1968.... William S. Garrett, Cleft palate in a marmoset: report of a case, 5, 340-345, 1968.... see Kitamura, Hironori, 1; Jordan, Ronald E., 3.
- Křeček, Miloš, see Šubrt, Ivan, 3.
- Kremenak, Charles R., William C. Huffman, and William H. Olin, Growth of maxillae in dogs after palatal surgery: part I, 4, 6-17, 1967.
- Kreshover, Seymour J., Support of research in cleft palate from the National Institute of Dental Research, 1, 287– 291, 1964.
- Krogman, Wilton M., see Randall, Peter, 2.
- Landa, Lloyd Sherwin, Gerald Shapiro, Sidney I. Silverman, and Charles B. Storch, Radiation dosimetry for cleft palate patients, 4, 308-315, 1967.
- Largent, Max D., see Menius, Jack A., 3.
- Lauterstein, Aubrey M., and Mark Mendelsohn, An analysis of the caries experience of 285 cleft palate children, 1, 314-319, 1964.
- Letterman, Gordon, Maxine Schurter, and Bahman Teimourian, Vilray Papin Blair's early concepts of the cleft palate problem, 1, 125-129, 1964.
- Levinson, Carole, see Massengill, Raymond, Jr., 5.
- Lindquist, Arthur F., see Shelton, Ralph L., Jr., 5.
- Lindsay, W. K., see Ross, R. B., 2.
- Lis, Edward F., see Ruess, Aubrey L., 2.
- Loevy, Hannelore, and Vera Fenyes, Spontaneous cleft palate in a family of Siamese cats, 5, 57-60, 1968.
- Lubker, James F., and Kenneth L. Moll, Simultaneous oral-nasal air flow measurements and cinefluorographic observations during speech production, 2, 257– 272, 1965. . . . An electromyographiccinefluorographic investigation of velar function during normal speech production, 5, 1–18, 1968.

McCabe, Peter A., A coding procedure for

classification of cleft lip and cleft palate, 3, 383–391, 1966.

- McCalla, June L., see Takagi, Yasuaki, 3. McCormack, Robert M., see Haring, Frederick N., 1. . . . see Subtelny, J.
- Daniel, 5. McGlone, Robert E., see Takagi, Yasuaki, 2.
- McNall, Earl G., David B. Coursin, and Robert F. Sloan, *Theoretical biochemical constructs related to normal and abnormal palatal embryogenesis*, 4, 187-196, 1967.
- McNeill, Kenneth A., see Millard, D. Ralph, Jr., 2.
- McWilliams, Betty Jane, and Bertram Girdany, The use of Televex in cleft palate research, 1, 398-401, 1964....
 Doris P. Bradley, Ratings of velopharyngeal closure during blowing and speech, 2, 46-55, 1965.... Ross H.
 Musgrave, and Phyllis A. Crozier, The influence of head position upon velopharyngeal closure, 5, 117-124, 1968.... see Neely, Betty Jane [Mc-Williams], 1; Wylie, Howard Lee, 2; Smith, Robert M., 3; ... 5; Bluestone, Charles D., 5.
- Machida, Junji, Air flow rate and articulatory movement during speech, 4, 240-248, 1967... see Palmer, Martin F., 1.
- Maisels, David O., Early orthopaedic treatment of clefts of the primary and secondary palates: a surgeon's view, 3, 76-86, 1966.
- Malone, Margueritte, see Kiehn, Clifford L., 2.
- Marks, Carol Rea, Tongue thrusting and interdentalization of speech sounds among cleft palate and noncleft palate subjects, 5, 48-56, 1968.
- Massengill, Raymond, Jr., Galen W. Quinn, Kenneth L. Pickrell, and Carole Levinson, *Therapeutic exercise* and velopharyngeal gap, 5, 44–47, 1968.
- Matthews, David, and W. Grossmann, Restoration of the collapsed maxillary arch by rapid expansion and bone grafting, 1, 430-440, 1964.
- Mazaheri, Mohammed, Robert T. Millard, and Duane M. Erickson, Cineradiographic comparison of normal to noncleft subjects with velopharyngeal inadequacy, 1, 199-209, 1964. ...

- Robert T. Millard, Changes in nasal resonance related to differences in location and dimension of speech bulbs, 2, 167–175, 1965.... Surender Nanda, and Viken Sassouni, Comparison of midfacial development of children with clefts with their siblings, 4, 334–341, 1967.
- Melrose, Jay, see Sweitzer, Richard S., 5.
- Mendelsohn, Mark, see Lauterstein, Aubrey M., 1.
- Menius, Jack A., Max D. Largent, and Charles J. Vincent, Skeletal development of cleft palate children as determined by hand-wrist roentgenographs: a preliminary study, 3, 67-75, 1966.
- Meredith, Howard V., see Pinkerton, Charles J., 3.
- Meskin, Lawrence H., Robert J. Gorlin, and Robert J. Isaacson, Abnormal morphology of the soft palate: I. The prevalence of cleft uvula, 1, 342-346, 1964....II. The genetics of cleft uvula, 2, 40-45, 1965.... Samuel Pruzansky, and Warren H. Gullen, An epidemiologic investigation of factors related to the extent of facial clefts. I. Sex of patient, 5, 23-29, 1968.
- Millard, D. Ralph, Jr., Rotation-advancement principle in cleft lip closure, 1, 246-252, 1964.... Kenneth A. McNeill, The incidence of cleft lip and palate in Jamaica, 2, 384-388, 1965.... George Balber, and Betty W. Philips, A data collection system for cleft lip and palate. I. Surgical evaluation, 4, 277-290, 1967.
- Millard, Robert T., see Mazaheri, Mohammed, 1; . . . 2; Takagi, Yasuaki, 2.
- Mitchell, David F., see Sakurai, Edwin H., 3.
- Moll, Kenneth L., Cineradiography in research and clinical studies of the velopharyngeal mechanism, 1, 391-397, 1964.... A cinefluorographic study of velopharyngeal function in normals during various activities, 2, 112-122, 1965.... Thomas H. Shriner, Preliminary investigation of a new concept of velar activity during speech, 4, 58-69, 1967.... see Spriestersbach, D. C., 1; Engman, Lawrence T., 2; Lubker, James F., 2.

- Moriarty, Thomas M., see Konegni, John S., 2.
- Morimoto, Masanori, see Isshiki, Nobuhiko, 5.
- Morris, Hughlett L., see Spriestersbach, D. C., 1; Brandt, Sara Dale, 2; Carpenter, Mary A., 5; Sweitzer, Richard S., 5.
- Musgrave Ross H., see Wilhelmsen, Hans R., 3; Bluestone, Charles D. 5; McWilliams, Betty Jane, 5.
- Mylin, Willis K., Robert F. Hagerty, and Donald A. Hess, The pin-retained prosthesis in cleft palate orthopedics, 5, 219-227, 1968... see Hagerty, Robert F., 5; Hess, Donald A., 5.
- Nanda, Surender, see Mazaheri, Mohammed, 4.
- Neely, Betty Jane [McWilliams], and Doris P. Bradley, A rating scale for evaluation of video tape recorded x-ray studies, 1, 88-91, 1964... see McWilliams, Betty Jane.
- Neptune, C. Marshall, see Jordan, Ronald E., 3.
- Nylén, Bengt, and Åke Wåhlin, Postoperative complications in pharyngeal flap surgery, 3, 347-356, 1966.
- Offerman, Richard E., John F. Cleall, and J. Daniel Subtelny, Symmetry of lip activity in repaired unilateral clefts of the lip, 1, 317-356, 1964.
- Oka, Seishi W., see Kraus, Bertram S., 5.
- Olin, William H., see Pinkerton, Charles J., 3; Kremenak, Charles R., 4.
- Page, Patricia, see Buncke, Harry J., Jr., 3.
- Palmer, Martin F., and Junji Machida, A roentgenographic cephalometric study of identical twin females with cleft lips and palates, 1, 336-341, 1964.
- Pannbacker, Mary, Congenital malformations and cleft lip and palate, 5, 334-339, 1968.
- Penkava, Josef, Treatment of patients with cleft in CSSR, 4, 115-119, 1967.
- Philips, Betty W., see Millard, D. Ralph, Jr., 4.
- Pickrell, Kenneth L., see Georgiade, Nicholas C., 1; Massengill, Raymond, Jr., 5.

- Pinkerton, Charles J., William H. Olin, and Howard V. Meredith, Cephalometric studies of the mandible in individuals with clefts: part 1. a review, 3 258-267, 1966.
- Pourtois, Michel, Influence of cleft lip upon palatal closure in A/Jax mice, 4, 120-123, 1967.
- Price, Barbara, see Buncke, Harry J., Jr., 3.
- Prins, David, and H. Harlan Bloomer, A word intelligibility approach to the study of speech change in oral cleft patients, 2, 357-368, 1965.
- Pruzansky, Samuel, Presurgical orthopedics and bone grafting for infants with cleft lip and palate: a dissent, 1, 164–187, 1964.
 1964.
 Howard Aduss, Arch form and the deciduous occlusion in complete unilateral clefts, 1, 411–418, 1964.
 see Coccaro, Peter J., 2; ... 4; Ruess, Aubrey L., 2; Meskin, Lawrence H., 5.
- Quigley, Lawrence F., Jr., F. R. Shiere, Richard C. Webster, and Carolus M. Cobb, Measuring palatopharyngeal competence with the nasal anemometer, 1, 304-313, 1964... Carolus M. Cobb, and Richard C. Webster, A technique for obtaining intra- and extraoral photographs, 2, 247-256, 1965.
- Quinn, Galen W., see Georgiade, Nicholas C., 1; Massengill, Raymond, Jr., 5.
- Randall, Peter, Wilton M. Krogman, and Soona Jahina, Pierre Robin and the syndrome that bears his name, 2, 237– 246, 1965... see Stool, Sylvan E., 4.
- Rosenblum, Robert M., see Subtelny, J. Daniel, 5.
- Rosenstein, Sheldon W., and Bailey N. Jacobson, Early maxillary orthopedics: a sequence of events, 4, 197–204, 1967. . . . see Jacobson, Bailey, N., 2.
- Ross, R. Bruce, Cranial base in children with lip and palate clefts, 2, 157-166, 1965.... W. K. Lindsay, The cervical vertebrae as a factor in the etiology of cleft palate, 2, 273-281, 1965.... Malcolm C. Johnston, The effect of early orthodontic treatment on facial growth in cleft lip and palate, 4, 157-164, 1967.
- Ruess, Aubrey L., Samuel Pruzansky, and Edward F. Lis, *Intellectual develop*-

- ment and the OFD syndrome: a review, 2, 350-356, 1965. . . . see Demb, Norman, 4.
- Runyon, James C., see Subtelny, J. Daniel, 5.
- Ryon, William E., see Warren, Donald W., 4.
- Sakuda, Mamoru, see Subtelny, Joanne D., 3.
- Sakurai, Edwin H., David F. Mitchell, and Louis A. Holmes, *Bilateral oblique* facial clefts and amniotic bands: a report of two cases, 3, 181-185, 1966.
- Sassouni, Viken, see Mazaheri, Mohammed, 4.
- Schultz, Richard C., A survey of European and Scandinavian bone grafting procedures for cleft palate deformities, 1, 188-190, 1964.
- Schurter, Maxine, see Letterman, Gordon, 1.
- Schwartz, Martin F., The acoustics of normal and nasal vowel production, 5, 125-140, 1968.
- Schweiger, James W., Cranial base angle amount of palatal tissue and nasopharyngeal depth in individuals with clefts, 3, 115-121, 1966.
- Shapiro, Gerald, see Landa, Lloyd Sherwin, 4.
- Shelton, Ralph L., Jr., Alta R. Brooks, and Karl A. Youngstrom, Patterns of swallow in cleft palate children, 3, 200-210, 1966... Arthur F. Lindquist, Linda Chisum, William B. Arndt, Karl A. Youngstrom, and Sheldon L. Stick, Effect of prosthetic speech bulb reduction on articulation, 5, 195-204, 1968... see Bradford, Lawrence, 1; Falter, Jane Werth, 1; Arndt, William B., Jr., 2.
- Shiere, F. R., and J. H. Fisher, Neonatal orthopedic correction for cleft lip and palate patients: a preliminary report, 1, 17-24, 1964... see Quigley, Lawrence F., Jr., 1; Fisher, J. H., 4.
- Shriner, Thomas H., see Moll, Kenneth L., 4.
- Silver, William E., Dermatoglyphies and cleft lip and palate, 3, 368-375, 1966.
- Silverman, Sidney I., see Landa, Lloyd Sherwin, 4.
- Simon, Bernard E., see Hoffman, Saul, 5.

- Skoog, Tørd, The use of periosteal flaps in the repair of clefts of the primary palate, 2, 332-339, 1965.
- Sloan, Robert F., see Bleicher, Norman, 2; McNall, Earl G., 4.
- Smith, Robert M., and Betty Jane Mc-Williams, Creative thinking abilities of cleft palate children, 3, 275-283, 1966.
 ... Betty Jane McWilliams, Psycholinguistic abilities of children with clefts, 5, 228-249, 1968.
- Sparrow, Sara S., Byron G. Brogdon, and Kenneth R. Bzoch, The effect of filming rate and frame selection in cinefluorographic velopharyngeal analysis, 1, 419-429, 1964.
- Spina, Victor, The advantages of two stages in repair of bilateral cleft lip, 3, 56-60, 1966. . . . Repair of unilateral cleft lip-nose, 5, 356-363, 1968.
- Spriestersbach, D. C., Kenneth L. Moll, and Hughlett L. Morris, *Heterogeneity* of the 'cleft palate population' and research designs, 1, 210-216, 1964.... see Engman, Lawrence T., 2.
- Stark, Richard B., Clayton R. DeHaan, and Hiroshi Washio, Forked flap columellar advance, 1, 116-119, 1964. ... see Weatherly-White, R. C. A., 3.
- Stick, Sheldon L., see Shelton, Ralph L., Jr., 5.
- Stool, Sylvan E., and Randall, Peter, Unexpected ear disease in infants with cleft palate, 4, 99-103, 1967.
- Storch, Charles B., see Landa, Lloyd Sherwin, 4.
- Šubrt, Ivan, Jaroslav Červenka, and Miloš Křeček, Cytogenetic study of cleft lip and palate, 3, 362–367, 1966.
- Subtelny, J. Daniel, Robert M. McCormack, Joanne D. Subtelny, Joseph H.
 Worth, Lester M. Cramer, James C.
 Runyon, and Robert M. Rosenblum, Synchronous recording of speech with associated physiological and pressure-flow dynamics: instrumentation and procedure, 5, 93-116, 1968. . . . see Offerman, Richard E., 1; Subtelny, Joanne D., 3; Coccaro, Peter J., 4.
- Subtelny, Joanne D., Physio-acoustic considerations in the radiographic study of speech, 1, 402–410, 1964... Mamoru Sakuda, and J. Daniel Subtelny, Prosthetic treatment for palatopha-

ryngeal incompetence: research and clinical implications, 3, 130–158, 1966. ... see Subtelny, J. Daniel, 5.

- Sweitzer, Richard S., Jay Melrose, and Hughlett L. Morris, The air-bone gap as a criterion for identifications of hearing losses, 5, 141–152, 1968.
- Switzer, Mary E., Reducing the employment handicap of cleft palate, 1, 292-298, 1964.
- Takagi, Yasuaki, Robert E. McGlone, and Robert T. Millard, A survey of the speech disorders of individuals with clefts, 2, 28-31, 1965.... June L. Mc-Calla, and James F. Bosma, Prone feeding of infants with the Pierre-Robin syndrome, 3, 232-239, 1966.
- Taub, Stanley, The Taub oral panendoscope: a new technique, 3, 328-346, 1966.
- Taylor, William G., see Cronin, Thomas D., 1.
- Tiemourian, Bahman, see Letterman, Gordon, 1.
- Tretsven, Venus E., Impressions concerning clefts in Montana Indians of the past, 2, 229-236, 1965.
- Tucker, Arthur, see Kiehn, Clifford L., 2.
- Van Demark, Ann Ahlstrand, see Van Demark, Duane R., 4.
- Van Demark, Duane R., Misarticulations and listener judgments of the speech of individuals with cleft palates, 1, 232-245, 1964.... A factor analysis of the speech of children with cleft palate, 3, 159-170, 1966.... Ann Ahlstrand Van Demark, Misarticulations of cleft palate children achieving velopharyngeal closure and children with functional speech problems, 4, 31-37, 1967.
- Van Hattum, Roland J., and Joseph H. Worth, Air flow rates in normal speakers, 4, 137–147, 1967.
- Vermillion, Jack R., see Greene, John C., 2.
- Vincent, Charles J., see Menius, Jack A., 3.

Wada, Takura, see Fujiki, Yoshishige, 4. Wagner, Kurt J., see Conway, Herbert, 3. Wåhlin, Åke, see Nylén, Bengt, 3.

Warren, Donald W., and Arthur B. Du-Bois, A pressure-flow technique for measuring velopharyngeal orifice area during continuous speech, 1, 52–71, 1964. . . . James L. Devereux, An analog study of cleft palate speech, 3, 103–114, 1966. . . . William E. Ryon, Oral port constriction, nasal resistance, and respiratory aspects of cleft palate speech: an analog study, 4, 38–46, 1967. . . . Nasal emission of air and velopharyngeal function, 4, 148–156, 1967.

- Washio, Hiroshi, see Stark, Richard B., 1.
- Watson, Charles G., Personality adjustment in boys with cleft lips and palates, 1, 130-138, 1964.
- Weatherly-White, R. C. A., William C. Dersch, and Ruth M. Anderson, Objective measurement of nasality in cleft palate patients: a preliminary report, 1, 120-124, 1964.... Richard B. Stark, and Clayton R. DeHaan, Acoustic analysis of speech: validation studies, 3, 291-300, 1966.

- Webster, Richard C., Advances in therapy of cleft palate—our first twenty years, 1, 5-15, 1964... see Quigley, Lawrence F., Jr., 2.
- Weinstein, Sam, see Konegni, John S., 2.
- Wesser, David R., see Hoffman, Saul, 5.
- Whitehouse, Frederick A., Teamwork as a dynamic system, 2, 16–27, 1965.
- Wilhelmsen, Hans R., and Ross H. Musgrave, Complications of cleft lip surgery, 3, 223-231, 1966.
- Wood-Smith, Donald, see Converse, John Marquis, 1.
- Worth, Joseph H., see Van Hattum, Roland J., 4; Subtelny, J. Daniel, 5.
- Wylie, Howard Lee, and Betty Jane McWilliams, Guidance materials for parents of children with clefts, 2, 123-132, 1965.
- Youngstrom, Karl A., see Shelton, Ralph L., Jr., 3; ... 5.

TITLE INDEX

- Abnormal morphology of the soft palate: I. The prevalence of cleft uvula, Lawrence H. Meskin, Robert J. Gorlin, and Robert J. Isaacson, 1, 342–346, 1964.
- Abnormal morphology of the soft palate: II. The genetics of cleft uvula, Lawrence H. Meskin, Robert J. Gorlin, and Robert J. Isaacson, 2, 40-45, 1965.
- Acoustic analysis of speech: validation studies, R. C. A. Weatherly-White, Richard B. Stark, and Clayton R. DeHaan, 3, 291-300, 1966.
- (The) Acoustics of normal and nasal vowel production, Martin F. Schwartz, 5, 125-140, 1968.
- Activation of the incompetent soft palate by means of muscle transplants: a preliminary report on sixteen cases, Clifford L. Kiehn, John D. Des Prez, Arthur Tucker, and Margueritte Malone, 2, 133-140, 1965.
- Advances in therapy of cleft palate—our first twenty years, Richard C. Webster, 1, 5-15, 1964.
- (The) Advantages of two stages in repair of the bilateral cleft lip, Victor Spina, 3, 56-60, 1966.

- Age of surgery for cleft palate patients and speech proficiency, Allan B. Drexler, 5, 327-333, 1968.
- (The) Air-bone gap as a criterion for identification of hearing losses, Richard S. Sweitzer, Jay Melrose, and Hughlett L. Morris, 5, 141-152, 1968.
- Air flow rate and articulatory movement during speech, Junji Machida, 4, 240– 248, 1967.
- Air flow rates in normal speakers, Roland
 J. Van Hattum and Joseph H. Worth,
 4, 137-147, 1967.
- (An) Analog study of cleft palate speech, Donald W. Warren and James L., Devereux, 3, 103-114, 1966.
- (An) Analysis of the caries experience of 285 cleft palate children, Aubrey M. Lauterstein and Mark Mendelsohn, 1, 314-319, 1964.
- Arch form and the deciduous occlusion in complete unilateral clefts, Samuel Pruzansky and Howard Aduss, 1, 411– 418, 1964.
- Articulation proficiency and error patterns of preschool cleft palate and normal

children, Kenneth R. Bzoch, 2, 340-349, 1965.

- Articulation, voice, and obturation in persons with acquired and congenital palate defects, William B. Arndt, Jr., Ralph L. Shelton, Jr., and Lawrence J. Bradford, 2, 377-383, 1965.
- Bilateral oblique facial clefts and amniotic bands: a report of two cases, Edwin H.
 Sakurai, David F. Mitchell, and Louis A. Holmes, 3, 181-185, 1966.
- Birth variables and the incidence of cleft palate: part I, Richard F. Donahue, 2, 282-290, 1965.
- Birth variables and the incidence of cleft palate: part II, Richard F. Donahue, 4, 234-239, 1967.
- Bulb fitting and placement in prosthetic treatment of cleft palate, Jane Werth Falter and Ralph L. Shelton, Jr., 1, 441-447, 1964.
- Cephalometric studies of the mandible in individuals with clefts: part I, a review, Charles J. Pinkerton, William H. Olin, and Howard V. Meredith, 3, 258-267, 1966.
- (The) Cervical vertebrae as a factor in the etiology of cleft palate, R. B. Ross and W. K. Lindsay, 2, 273–281, 1965.
- Changes in nasal resonance related to differences in location and dimension of speech bulbs, Mohammed Mazaheri and Robert T. Millard, 2, 167–175, 1965.
- (A) Cinefluorographic study of velopharyngeal function in normals during various activities, Kenneth L. Moll, 2, 112-122, 1965.
- Cineradiographic comparison of normal to noncleft subjects with velopharyngeal inadequacy, Mohammed Mazaheri, Robert T. Millard, and Duane M. Erickson, 1, 199-209, 1964.
- Cineradiographic system design, F. Allan Hofmann, 1, 382–387, 1964.
- Cineradiography in research and clinical studies of the velopharyngeal mechanism, Kenneth L. Moll, 1, 391-397, 1964.
- Cleft lip and cleft palate, F. Clarke Fraser, 5, 187-194, 1968.
- Cleft lip and palate in dogs: a progress

report, M. J. Jurkiewicz and D. L. Bryant, 5, 30-36, 1968.

- Cleft palate in a dog, Norman Bleicher, Robert F. Sloan, Irving G. Gault, and Franklin L. Ashley, 2, 56-61, 1965.
- Cleft palate in a marmoset: report of a case, Bertram S. Kraus and William S. Garrett, 5, 340-345, 1968.
- Clefts in Wisconsin: incidence and related factors, Stuart I. Gilmore and Susan M. Hofman, 3, 186-199, 1966.
- Clinical judgment of hypernasality in cleft palate children, Lawrence J. Bradford, Alta R. Brooks, and Ralph L. Shelton, Jr., 3, 329-335, 1966.
- Clinical studies of the efficacy of speech appliances compared to pharyngeal flap surgery, Kenneth R. Bzoch, 3, 275–286, 1966.
- (A) Coding procedure for classification of cleft lip and cleft palate, Peter A. McCabe, 3, 383-391, 1966.
- Comparison of midfacial development of children with clefts with their siblings, Mohammed Mazaheri, Surender Nanda, and Viken Sassouni, 4, 334-341, 1967.
- (A) Comparison of standard organ culture and standard transplant techniques in the fusion of the palatal processes of rat embryos, John S. Konegni, Byron C. Chan, Thomas M. Moriarty, Sam Weinstein, and R. D. Gibson, 2, 219– 228, 1965.
- (The) Complementary use of speech prostheses and pharyngeal flaps in palatal insufficiency, Robert W. Blakeley, 3, 194-198, 1966.
- Complications of cleft lip surgery, Hans R. Wilhelmsen and Ross H. Musgrave, 3, 223-231, 1966.
- Congenital malformations and cleft lip and palate, Mary Pannbacker, 5, 334– 339, 1968.
- Congenital midline defects of the midface, George Baibak and Bertram Bromberg, 3, 392-401, 1966.
- Connotative meaning of concepts related to cleft lip and palate, Edward Clifford, 4, 165–173, 1967.
- Cranial base angle, amount of palatal tissue, and nasopharyngeal depth in individuals with clefts, James W. Schweiger, 3, 115-121, 1966.

- Cranial base angle and nasopharyngeal depth, Lawrence T. Engman, D. C. Spriestersbach, and Kenneth L. Moll, 2, 32-39, 1965.
- Cranial base in children with lip and palate clefts, R. Bruce Ross, 2, 157–166, 1965.
- Creative thinking abilities of cleft palate children, Robert M. Smith and Betty Jane McWilliams, 3, 275-283, 1966.
- Cytogenetic study of cleft lip and palate, Ivan Šubrt, Jaroslav Červenka, and Miloš Křeček, 3, 382–367, 1966.
- (A) Data collection system for cleft lip and palate: I. Surgical evaluation, D. Ralph Millard, Jr., George Balber, and Betty W. Philips, 4, 277-290, 1967.
- Dental abnormalities associated with cleft lip and/or palate, Ronald E. Jordan, Bertram S. Kraus, and C. Marshall Neptune, 3, 22-55, 1966.
- (The) Dentitions of monozygotic human twin fetuses with cleft lip and palate: a case report, Bertram S. Kraus and Seishi W. Oka, 5, 250-268, 1968.
- Dermatoglyphies and cleft lip and palate, William E. Silver, 3, 368-375, 1966.
- (A) Descriptive anatomy of the face in human fetuses with unilateral cleft lip and palate, J. David Atherton, 4, 104– 114, 1967.
- Development of a test for velopharyngeal competence during speech, James C. Hardy and Herbert J. Arkebauer, 3, 6-21, 1966.
- Early maxillary orthopedics: a combination appliance, Bailey N. Jacobson and Sheldon W. Rosenstein, 2, 369-376, 1965.
- Early maxillary orthopedics: a sequence of events, Sheldon W. Rosenstein and Bailey N. Jacobson, 4, 197-204, 1967.
- Early orthopaedic treatment of clefts of the primary and secondary palates: a surgeon's view, David O. Maisels, 3, 76-86, 1966.
- (The) Effect of early orthodontic treatment on facial growth in cleft lip and palate, R. Bruce Ross and Malcolm C. Johnston, 2, 157-164, 1965.
- (The) Effect of filming rate and frame selection in cinefluorographic velopha-

ryngeal analysis, Sara S. Sparrow, Byron G. Brogdon, and Kenneth R. Bzoch, 1, 419-429, 1964.

- Effect of prosthetic speech bulb reduction on articulation, Ralph L. Shelton, Jr., Arthur F. Lindquist, Linda Chisum, William B. Arndt, Karl A. Youngstrom, and Sheldon L. Stick, 5, 195-204, 1968.
- Effects of velopharyngeal incompetence upon speech, Nobuhiko Isshiki, Iwao Honjow, and Masanori Morimoto, 5, 195-204, 1968.
- (An) Electromyographic-cinefluorographic investigation of velar function during normal speech production, James F. Lubker, 5, 1-18, 1968.
- (An) Epidemiologic investigation of factors related to the extent of facial clefts:
 I. Sex of patient, Lawrence H. Meskin, Samuel Pruzansky, and Warren H. Gullen, 5, 23-29, 1968.
- Epithelial remnants and pearls in the secondary palate in the human abortus: a contribution to the study of the mechanism of cleft palate formation, Hironori Kitamura, 3, 240–257, 1966.
- (The) Evaluation and management of velopharyngeal insufficiency, Harry J. Buncke, Jr., Patricia Page, Barbara Price, Carol Blazine, and Freda Fraser, 3, 171-180, 1966.
- (A) Factor analysis of the speech of children with cleft palate, Duane R. Van Demark, 3, 159-170, 1966.
- Forked flap columellar advance, Richard B. Stark, Clayton R. DeHaan, and Hiroshi Washio, 1, 116-119, 1964.
- Growth of maxillae in dogs after palatal surgery: I, Charles R. Kremenak, William C. Huffman, and William H. Olin, 2, 6-17, 1965.
- Guidance materials for parents of children with clefts, Howard Lee Wylie and Betty Jane McWilliams, 2, 123-132, 1965.
- Heterogeneity of the 'cleft palate population' and research designs, D. C. Spriestersbach, Kenneth L. Moll, and Hughlett L. Morris, 1, 210-216, 1964.
- High school drop-out rate for cleft palate

patients, Norman Demb and Aubrey L. Ruess, 4, 327-333, 1965.

- Impressions concerning clefts in Montana Indians of the past, Venus E. Tretsven, 2, 229-236, 1965.
- (The) Incidence of cleft lip and palate among North American Negroes, Leonard A. Altemus, 3, 357-361, 1966.
- (The) Incidence of cleft lip and palate in Jamaica, D. Ralph Millard, Jr., and Kenneth A. McNeill, 2, 384-388, 1965.
- Incidence of clefts and parental age, Sylvia Hay, 4, 205-213, 1965.
- Incidence of clefts in Israel, B. Azaz and Edith Koyoumdjisky-Kaye, 2, 227-233, 1965.
- Incidence of clefts in New York City, Herbert Conway and Kurt J. Wagner, 3, 284-290, 1966.
- Influence of cleft lip upon palatal closure in A/Jax mice, Michel Pourtois, 4, 120– 123, 1965.
- (The) Influence of head position upon velopharyngeal closure, Betty Jane Mc-Williams, Ross H. Musgrave, and Phyllis A. Crozier, 5, 117-124, 1968.
- Intellectual development and the OFD syndrome: a review, Aubrey L. Ruess, Samuel Pruzansky, and Edward F. Lis, 2, 350-356, 1965.
- Isolated cleft palate, V. S. Iyer, 4, 124– 128, 1965.
- Labial supportive appliance, Richard M. Adams and Laurel E. Brown, 2, 389-393, 1965.
- (The) Linearity of the relationship between articulation errors and velopharyngeal incompetence, Sara Dale Brandt and Hughlett L. Morris, 2, 176-183, 1965.
- Longitudinal study of skeletal and soft tissue profile in children with unilateral cleft lip and cleft palate, Peter J. Coccaro and Samuel Pruzansky, 2, 1-12, 1965.
- Maxillary orthopedics and anterior palate repair with bone grafting, Raymond O. Brauer, and Thomas D. Cronin, 1, 31-42, 1964.
- Measuring palatopharyngeal competence with the nasal anemometer, Lawrence F. Quigley, Jr., F. R. Shiere, Richard C.

Webster, and Carolus M. Cobb, 1, 304-313, 1964.

- Misarticulations and listener judgments of the speech of individuals with cleft palates, Duane R. Van Demark, 1, 232-245, 1964.
- Misarticulations of cleft palate children achieving velopharyngeal closure and children with functional speech problems, Duane R. Van Demark and Ann Ahlstrand Van Demark, 4, 31-37, 1965.
- (A) Modification of the Tennison-type lip repair, Thomas D. Cronin, 3, 376-382, 1966.
- Morphology of facial bones in skulls with unoperated unilateral cleft palate, J. David Atherton, 4, 18-30, 1965.
- Nasal emission of air and velopharyngeal function, Donald W. Warren, 4, 148-156, 1965.
- Nasopharyngeal growth, Peter J. Coccaro, Samuel Pruzansky, and J. Daniel Subtelny, 4, 214-226, 1965.
- Neonatal orthopedic correction for cleft lip and palate patients: a preliminary report, F. R. Shiere and J. H. Fisher, 1, 17-24, 1964.
- Objective measurement of nasality in cleft palate patients: a preliminary report,
 R. C. A. Weatherly-White, William C.
 Dersch, and Ruth M. Anderson, 1,
 120-124, 1964.
- Oral port constriction, nasal resistance, and respiratory aspects of cleft palate speech: an analog study, Donald W. Warren and William E. Ryon, 4, 38-46, 1965.
- Oral stereognosis in normal and cleft palate individuals, Irving Hochberg and Jack Kabcenell, 2, 47-57, 1965.
- Oral tissue changes in infants with cleft palate, J. H. Fisher, F. R. Shiere, M. D. Berkman, E. F. Cataldo, and H. R. Fogels, 4, 316-326, 1965.
- (An) Orthodontic approach to the Veau type IV cleft lip and palate problem in the preschool child, L. D. Garner, 1, 82-87, 1964.
- Patient motivation for rehabilitation, John R. Barry, 2, 62-68, 1965.
- Patterns of swallow in cleft palate children,

Ralph L. Shelton, Jr., Alta R. Brooks, and Karl A. Youngstrom, 3, 200-210, 1966.

- Personality adjustment in boys with cleft lips and palates, Charles G. Watson, 1, 130-138, 1964.
- Physioacoustic considerations in the radiographic study of speech, Joanne D. Subtelny, 1, 402–410, 1964.
- (A) Physiometric analysis of lip function in cleft and noncleft subjects, Frederick N. Haring and Robert M. McCormack, 1, 320-328, 1964.
- Pierre Robin and the syndrome that bears his name, Peter Randall, Wilton M. Krogman, and Soona Jahina, 2, 237-246, 1965.
- (The) Pin-retained prosthesis in cleft palate orthopedics, Willis K. Mylin, Robert F. Hagerty, and Donald A. Hess, 5, 219-227, 1968.
- Postoperative complications in pharyngeal flap surgery, Bengt Nylén and Åke Wåhlin, 3, 347-356, 1966.
- Preliminary investigation of a new concept of velar activity during speech, Kenneth L. Moll and Thomas N. Shriner, 4, 58-69, 1967.
- (A) Preliminary study of Passavant's pad, Mary A. Carpenter and Hughlett L. Morris, 5, 61-72, 1968.
- (A) Pressure-flow technique for measuring velopharyngeal orifice area during continuous speech, Donald W. Warren and Arthur B. DuBois, 1, 52–71, 1964.
- Presurgical orthopedics and bone grafting for infants with cleft lip and palate: a dissent, Samuel Pruzansky, 1, 164–187, 1964.
- (The) Prevention of maxillary collapse in congenital lip and palate cases, Charles E. Horton, Hugh H. Crawford, Jerome E. Adamson, Samuel Buxton, Rueben Cooper, and Jack Kanter, 1, 25-30, 1964.
- Prone feeding of infants with the Pierre-Robin syndrome, Yasuaki Takagi, June L. McCalla, and James F. Bosma, 3, 232-239, 1966.
- Prosthetics as a diagnostic aid in pharyngeal flap surgery, Thomas A. Curtis and George Chierici, 1, 95-98, 1964.
- Prosthetic treatment for palatopharyngeal incompetence: research and clinical

implications, Joanne D. Subtelny, Mamoru Sakuda, and J. Daniel Subtelny, 3, 130–158, 1966.

- Psycholinguistic abilities of children with clefts, Robert M. Smith and Betty Jane McWilliams, 5, 228-249, 1968.
- Push-back repair using nasal mucosal flaps: results, Thomas D. Cronin, Raymond O. Brauer, John T. Alexander, and William G. Taylor, 1, 269– 274, 1964.
- Radiation dosimetry for cleft palate patients, Lloyd Sherwin Landa, Gerald Shapiro, Sidney I. Silverman, and Charles B. Storch, 4, 308-315, 1965.
- (A) Rating scale for evaluation of video tape recorded x-ray studies, Betty Jane [McWilliams] Neely and Doris P. Bradley, 1, 88-94, 1964.
- Ratings of velopharyngeal closure during blowing and speech, Betty Jane Mc-Williams and Doris P. Bradley, 2, 46-55, 1965.
- (The) Reconstruction of the unilateral cleft lip nasal deformity, Bard, Cosman and George F. Crikelair, 2, 95-111, 1965.
- Reducing the employment handicap of a cleft palate, Mary E. Switzer, 1, 292-298, 1964.
- Release of the prolabium in the bilateral cleft lip, Bard Cosman and George F. Crikelair, 3, 122-129, 1966.
- Reopening of fused palatal shelves, Dino R. Angelici, 5, 205-210, 1968.
- Repair of unilateral cleft lip-nose, Victor Spina, 5, 356-363, 1968.
- Restoration of the collapsed maxillary arch by rapid expansion and bone grafting, David Matthews and W. Grossmann, 1, 430-440, 1964.
- Roentgen evaluation of velopharyngeal closure, John A. Kirkpatrick, 1, 388-390, 1964.
- (A) Roentgenographic cephalometric study of identical twin females with cleft lips and palates, Martin F. Palmer and Junii Machida, 1, 336-341, 1964.
- (The) Role of artificial Eustachian tube in cleft palate patients, James A. Donaldson, 3, 61-66, 1966.
- Roll-Y pharyngoplasty and palate-length-

ening procedure, Edward N. Hamacher, 2, 300-307, 1965.

- Rotation-advancement principle in cleft lip closure, D. Ralph Millard, Jr., 1, 246-252, 1964.
- (The) Rotation-advancement technique (Millard) as a secondary procedure in cleft lip deformities, Saul Hoffman, David R. Wesser, Fanny Calostypis, and Bernard E. Simon, 5, 37–43, 1968.
- Services for children with cleft palates by state crippled children's agencies, Alice D. Chenoweth, 1, 299–303, 1964.
- Silicone implants for velopharyngeal incompetence: a progress report, Ralph Blocksma, 1, 72-81, 1964.
- Simultaneous oral-nasal air flow measurements and cinefluorographic observations during speech production, James F. Lubker and Kenneth L. Moll, 2, 257-272, 1965.
- Skeletal development of cleft palate children as determined by hand-wrist roentgenographs: a preliminary study, Jack A. Menius, Max D. Largent, and Charles J. Vincent, 3, 67-75, 1966.
- Some observations on the pharyngeal airspace, George Chierici, 4, 129–136, 1965.
- Speech therapy with selected patients with congenital velopharyngeal inadequacy, Sidney Goda, 3, 268–274, 1966.
- Spontaneous cleft palate in a family of Siamese cats, Hannelore Loevy and Vera Fenyes, 5, 57-60, 1968.
- (A) Study of velopharyngeal competence in children with repaired cleft palates, Marvin L. Hanson, 1, 217-231, 1964.
- Support of research in cleft palate from the National Institute of Dental Research, Seymour J. Kreshover, 1, 287– 291, 1964.
- Surgical-orthodontic correction in the bilateral cleft lip, John Marquis Converse, Sidney L. Horowitz, Cary L. Guy, and Donald Wood-Smith, 1, 153-163, 1964.
- (A) Survey of European and Scandinavian bone grafting procedures for cleft palate deformities, Richard C. Schultz, 1, 188-190, 1964.
- (A) Survey of the speech disorders of individuals with clefts, Yasuaki Takagi,

Robert E. McGlone, and Robert T. Millard, 2, 28-31, 1965.

- Symmetry of lip activity in repaired unilateral clefts of the lip, Richard E. Offerman, John F. Cleall, and J. Daniel Subtelny, 1, 347-356, 1964.
- Synchronization of cinefluorography and speech observations, Yoshishige Fujiki and Takuro Wada, 4, 291–299, 1965.
- Synchronous recording of speech with associated physiological and pressureflow dynamics: instrumentation and procedure, J. Daniel Subtelny, Robert M. McCormack, Joanne D. Subtelny, Joseph H. Worth, Lester M. Cramer, James C. Runyon, and Robert M. Rosenblum, 5, 93-116, 1968.
- (The) Taub oral panendoscope: a new technique, Stanley Taub, 3, 328-346, 1966.
- Teamwork as a dynamic system, Frederick A. Whitehouse, 2, 16-27, 1965.
- (A) Technique for obtaining intra- and extraoral photographs, Lawrence F. Quigley, Jr., Carolus M. Cobb, and Richard C. Webster, 2, 247-256, 1965.
- (A) Technique for photographing cleft palate patients, A. Richard Grossman, Joseph G. Kostrubala, and Donald J. Bonomo, 2, 13-15, 1965.
- Teflon injection pharyngoplasty, Charles
 D. Bluestone, Ross H. Musgrave,.
 Betty Jane McWilliams, and Phyllis A.
 Crozier, 5, 19-22, 1968.
- Theoretical biochemical constructs related to normal and abnormal palatal embryogenesis, Earl G. McNall, David B. Coursin, and Robert F. Sloan, 4, 187-196, 1967.
- Therapeutic exercise and velopharyngeal gap, Raymond Massengill, Jr., Galen
 W. Quinn, Kenneth L. Pickrell, and Carole Levinson, 5, 44-47, 1968.
- Tongue position and hypernasality in cleft palate speech, Mervyn L. Falk and George A. Kopp, 5, 229–237, 1968.
- Tongue thrusting and interdentalization of speech sounds among cleft palate and noncleft palate subjects, Carol Rea Marks, 5, 48-56, 1968.
- Treatment of patients with cleft in CSSR, Josef Penkava, 4, 115-119, 1965.

- Unexpected ear disease in infants with cleft palate, Sylvan E. Stool and Peter Randall, 4, 99-103, 1967.
- (The) Use of periosteal flaps in the repair of clefts of the primary palate, Tørd Skoog, 2, 332-339, 1965.
- (The) Use of speech aid prosthesis as a diagnostic tool, Nosman R. A. Alley, 2, 291-292, 1965.
- (The) Use of Televex in cleft palate research, Betty Jane McWilliams and Bertram Girdany, 1, 308-401, 1964.
- (The) Use of tomography in the diagnosis of unusual and occult clefts of the palate, John Marquis Converse, Sidney L. Horowitz, Melvin H. Becker, 5, 311-316, 1968.
- Utilization of birth certificates in epidemiologic studies of cleft lip and palate, John C. Greene, Jack R. Vermillion, and Sylvia Hay, 2, 141-156, 1965.
- Variations in velopharyngeal valving: the factor of vowel changes, Kenneth R. Bzoch, 5, 211-218, 1968.
- Varying concepts in bone grafting of alveolar palatal defects, Nicholas C.

Georgiade, Kenneth L. Pickrell, and Galen W. Quinn, 1, 43-51, 1964.

- Velar motility, velopharyngeal closure, and speech proficiency from cartilage pharyngoplasty: the effect of age at surgery, Robert F. Hagerty, Donald A. Hess, and Willis K. Mylin, 5, 317– 326, 1968.
- Velar motility, velopharyngeal closure, and speech proficiency in cartilage pharyngoplasty: an eight year study, Donald A. Hess, Robert F. Hagerty, and Willis K. Mylin, 5, 153-162, 1968.
- Vilray Papin Blair's early concepts of the cleft palate problem, Gordon Letterman, Maxine Schurter, and Bahman Teimourian, 1, 125-129, 1964.
- Visceral variations and defects associated with cleft lip and palate in human fetuses: a macroscopic description, Hironori Kitamura and Bertram S. Kraus, 1, 99-115, 1964.
- (A) Word intelligibility approach to the study of speech change in oral cleft patients, David Prins and H. Harlan Bloomer, 2, 357-368, 1965.

SUBJECT INDEX

classification, data storage and retrieval clefts in animals

- dental problems, description
- diagnosis and treatment, dental
- diagnosis and treatment, general
- diagnosis and treatment, speech
- diagnosis and treatment, surgical
- embryology
- etiology
- general information, historical
- genetics
- incidence of clefts
- instrumentation and methodology, description
- middle ear disease, hearing problems
- miscellaneous aspects, description
- noncleft (palatal insufficiency)
- psychosocial aspects
- speech physiology
- speech problems, description
- surgical problems, description
- velopharyngeal port, function and problems

classification, data storage and retrieval

- (A) Coding procedure for classification of cleft lip and cleft palate, Peter A. Mc-Cabe, 3, 383-391, 1966.
- (A) Data collection system for cleft lip and palate: I. Surgical evaluation, D. Ralph Millard, Jr., George Balber, and Betty W. Philips, 4, 277-290, 1967.

clefts in animals

- Cleft lip and palate in dogs: a progress report, M. J. Jurkiewicz and D. L. Bryant, 5, 30-36, 1968.
- Cleft palate in a dog, Norman Bleicher, Robert F. Sloan, Irving G. Gault, and Franklin L. Ashley, 2, 56-61, 1965.
- Cleft palate in a marmoset: report of a case, Bertram S. Kraus and William S. Garrett, 5, 340-345, 1968.
- Spontaneous cleft palate in a family of Siamese cats, Hannelore Loevy and Vera Fenyes, 5, 57-60, 1968.

dental problems, description

- (An) Analysis of the caries experience of 285 cleft palate children, Aubrey M. Lauterstein and Mark Mendelsohn, 1, 314-319, 1964.
- Arch form and the deciduous occlusion in complete unilateral clefts, Samuel Pruzansky and Howard Aduss, 1, 411– 418, 1964.
- Cephalometric studies of the mandible in individuals with clefts: part I, a review, Charles J. Pinkerton, William H. Olin, and Howard V. Meredith, 3, 258-267, 1966.
- Comparison of midfacial development of children with clefts with their siblings, Mohammed Mazaheri, Surender Nanda, and Viken Sassouni, 4, 334-341, 1967.
- Cranial base angle and nasopharyngeal depth, Lawrence T. Engman, D. C. Spriestersbach, and Kenneth L. Moll, 2, 32-39, 1965.
- Cranial base angle, amount of palatal tissue, and nasopharyngeal depth in individuals with clefts, James W. Schweiger, 3, 115-121, 1966.
- Cranial base in children with lip and palate clefts, R. Bruce Ross, 2, 157-166, 1965.
- Dental abnormalities associated with cleft lip and/or palate, Ronald E. Jordan, Bertram S. Kraus, and C. Marshall Neptune, 3, 22-55, 1966.
- (The) Dentitions of monozygotic human twin fetuses with cleft lip and palate: a case report, Bertram S. Kraus and Seishi W. Oka, 5, 250-268, 1968.
- Intellectual development and the OFD syndrome: a review, Aubrey L. Ruess, Samuel Pruzansky, and Edward F. Lis, 2, 350-356, 1965.
- Longitudinal study of skeletal and soft tissue profile in children with unilateral cleft lip and cleft palate, Peter J. Coccaro and Samuel Pruzansky, 2, 1-12, 1965.
- Morphology of facial bones in skulls with unoperated unilateral cleft palate, J. David Atherton, 4, 18-30, 1965.
- Nasopharyngeal growth, Peter J. Coccaro, Samuel Pruzansky, and J. Daniel Subtelny, 4, 214-226, 1965.

Oral tissue changes in infants with cleft palate, J. H. Fisher, F. R. Shiere, M. D. Berkman, E. F. Cataldo, and H. R. Fogels, 4, 316-326, 1965.

diagnosis and treatment, dental

- Bulb fitting and placement in prosthetic treatment of cleft palate, Jane Werth Falter and Ralph L. Shelton, Jr., 1, 441-447, 1964.
- Changes in nasal resonance related to differences in location and dimension of speech bulbs, Mohammed Mazaheri and Robert T. Millard, 2, 167–175, 1965.
- Clinical studies of the efficacy of speech appliances compared to pharyngeal flap surgery, Kenneth R. Bzoch, 3, 275-286, 1966.
- (The) Complementary use of speech prostheses and pharyngeal flaps in palatal insufficiency, Robert W. Blakeley, 3, 194–198, 1966.
- Early maxillary orthopedics: a combination appliance, Bailey N. Jacobson and Sheldon W. Rosenstein, 2, 369– 376, 1965.
- Early maxillary orthopedics: a sequence of events, Sheldon W. Rosenstein and Bailey N. Jacobson, 4, 197–204, 1967.
- Early orthopaedic treatment of clefts of the primary and secondary palates: a surgeon's view, David O. Maisels, 3, 76-86, 1966.
- (The) Effect of early orthodontic treatment on facial growth in cleft lip and palate, R. Bruce Ross and Malcolm C. Johnston, 2, 157-164, 1965.
- Effect of prosthetic speech bulb reduction on articulation, Ralph L. Shelton, Jr., Arthur F. Lindquist, Linda Chisum, William B. Arndt, Karl A. Youngstrom, and Sheldon L. Stick, 5, 195-204, 1968.
- Labial supportive appliance, Richard M. Adams and Laurel E. Brown, 2, 389– 393, 1965.
- Maxillary orthopedics and anterior palate repair with bone grafting, Raymond O. Brauer and Thomas D. Cronin, 1, 31-42, 1964.
- Neonatal orthopedic correction for cleft lip and palate patients: a preliminary report, F. R. Shiere and J. H. Fisher, 1, 17-24, 1964.

- (An) Orthodontic approach to the Veau type IV cleft lip and palate problem in the preschool child, L. D. Garner, 1, 82-87, 1964.
- (The) Pin-retained prosthesis in cleft palate orthopedics, Willis K. Mylin, Robert F. Hagerty, and Donald A. Hess, 5, 219-227, 1968.
- Presurgical orthopedics and bone grafting for infants with cleft lip and palate: a dissent, Samuel Pruzansky, 1, 161–187, 1964.
- (The) Prevention of maxillary collapse in congenital lip and palate cases, Charles E. Horton, Hugh H. Crawford, Jerome E. Adamson, Samuel Buxton, Ruebea Cooper, and Jack Kanter, 1, 25-30, 1964.
- Prosthetics as a diagnostic aid in pharyngeal flap surgery, Thomas A. Curtis and George Chierici, 1, 95–98, 1964.
- Restoration of the collapsed maxillary arch by rapid expansion and bone grafting, David Matthews and W. Grossmann, 1, 430-440, 1964.
- Surgical-orthodontic correction in the bilateral cleft lip, John Marquis Converse, Sidney L. Horowitz, Cary L. Guy, and Donald Wood-Smith, 1, 153-163, 1964.
- (The) Use of speech aid prosthesis as a diagnostic tool, Norman R. A. Alley, 2, 291-292, 1965.
- Varying concepts in bone grafting of alveolar palatal defects, Nicholas C. Georgiade, Kenneth L. Pickrell, and Galen W. Quinn, 1, 43-51, 1964.

diagnosis and treatment, general

Advances in therapy of cleft palate—our first twenty years, Richard C. Webster, 1, 5-15, 1964.

diagnosis and treatment, speech

- Clinical judgment of hypernasality in cleft palate children, Lawrence J. Bradford, Alta R. Brooks, and Ralph L. Shelton, Jr., 3, 329-335, 1966.
- Effect of prosthetic speech bulb reduction on articulation, Ralph L. Shelton, Jr., Arthur F. Lindquist, Linda Chisum, William B. Arndt, Karl A. Young-

strom, and Sheldon L. Stick, 5, 195–204, 1968.

- (The) Evaluation and management of velopharyngeal insufficiency, Harry J. Buncke, Jr., Patricia Page, Barbara Price, Carol Blazine, and Freda Fraser, 3, 171–180, 1966.
- (A) Factor analysis of the speech of children with cleft palate, Duane R. Van Demark, 3, 159–170, 1966.
- Speech therapy with selected patients with congenital velopharyngeal inadequacy, Sidney Goda, 3, 268–274, 1966.
- Therapeutic exercise and velopharyngeal gap, Raymond Massengill, Jr., Galen
 W. Quinn, Kenneth L. Pickrell, and Carole Levinson, 5, 44-47, 1968.

diagnosis and treatment, surgical

- Activation of the incompetent soft palate by means of muscle transplants: a preliminary report on sixteen cases, Clifford L. Kiehn, John D. Des Prez, Arthur Tucker, and Margueritte Malone, 2, 133-140, 1965.
- (The) Advantages of two stages in repair of bilateral cleft lip, Victor Spina, 3, 56-60, 1966.
- Age of surgery for cleft palate patients and speech proficiency, Allan B. Drexler, 5, 327-333, 1968.
- Clinical studies of the efficacy of speech appliances compared to pharyngeal flap surgery, Kenneth R. Bzoch, 3, 275– 286, 1966.
- (The) Complementary use of speech prostheses and pharyngeal flaps in palatal insufficiency, Robert W. Blakeley, 3, 194-198, 1966.
- Complications of cleft lip surgery, Hans R. Wilhelmsen and Ross H. Musgrave, 3, 223-231, 1966.
- Forked flap columellar advance, Richard B. Stark, Clayton R. DeHaan, and Hiroshi Washio, 1, 116-119, 1964.
- Growth of maxillae in dogs after palatal surgery: part I, Charles R. Kremenak, William C. Huffman, and William H. Olin, 2, 6-17, 1965.
- Maxillary orthopedics and anterior palate repair with bone grafting, Raymond O. Brauer and Thomas D. Cronin, 1, 31-42, 1964.
- (A) Modification of the Tennison-type lip

repair, Thomas D. Cronin, 3, 376–382, 1966.

- Neonatal orthopedic correction for cleft lip and palate patients: a preliminary report, F. R. Shiere and J. H. Fisher, 1, 17-24, 1964.
- (An) Orthodontic approach to the Veau type IV cleft lip and palate problem in the preschool child, L. D. Garner, 1, 82-87, 1964.
- Postoperative complications in pharyngeal flap surgery, Bengt Nylén and Åke Wåhlin, 3, 347-356, 1966.
- Presurgical orthopedics and bone grafting for infants with cleft lip and palate: a dissent, Samuel Pruzansky, 1, 164–187, 1964.
- (The) Prevention of maxillary collapse in congenital lip and palate cases, Charles
 E. Horton, Hugh H. Crawford, Jerome
 E. Adamson, Samuel Buxton, Rueben Cooper, and Jack Kanter, 1, 25-30, 1964.
- Prosthetics as a diagnostic aid in pharyngeal flap surgery, Thomas A. Curtis and George Chierici, 1, 95–98, 1964.
- Prosthetic treatment for palatopharyngeal incompetence: research and clinical implications, Joanne D. Subtelny, Mamoru Sakuda, and J. Daniel Subtelny, 3, 130-158, 1966.
- Push-back repair using nasal mucosal flaps: results, Thomas D. Cronin, Raymond O. Brauer, John T. Alexander, and William G. Taylor, 1, 269-274, 1964.
- (The) Reconstruction of the unilateral cleft lip nasal deformity, Bard Cosman and George F. Crikelair, 2, 95-111, 1965.
- Release of the prolabium in the bilatral cleft lip, Bard Cosman and George F. Crikelair, 3, 122-129, 1966.
- Repair of unilateral cleft lip-nose, Victor Spina, 5, 356-363, 1968.
- Restoration of the collapsed maxillary arch by rapid expansion and bone grafting. David Matthews and W. Grossmann, 1, 430-440, 1964.
- Roll-Y pharyngoplasty and palate-lengthening procedure, Edward N. Hamacher, 2, 300-307, 1965.
- Rotation-advancement principle in cleft

lip closure, D. Ralph Millard, Jr., 1, 246-252, 1964.

- (The) Rotation-advancement technique (Millard) as a secondary procedure in cleft lip deformities, Saul Hoffman, David R. Wesser, Fanny Calostypis, and Bernard E. Simon, 5, 37-43, 1968.
- Silicone implants for velopharyngeal incompetence: a progress report, Ralph Blocksma, 1, 72-81, 1964.
- Surgical-orthodontic correction in the bilateral cleft lip, John Marquis Converse, Sidney L. Horowitz, Cary L. Guy, and Donald Wood-Smith, 1, 153-163, 1964.
- (A) Survey of European and Scandinavian bone grafting procedures for cleft palate deformities, Richard C. Schultz, 1, 188-190, 1964.
- Teflon injection pharyngoplasty, Charles
 D. Bluestone, Ross H. Musgrave, Betty J. McWilliams, and Phyllis A. Crozier, 5, 19-22, 1968.
- (The) Use of periosteal flaps in the repair of clefts of the primary palate, Tørd Skoog, 2, 332-339, 1965.
- Varying concepts in bone grafting of alveolar palatal defects, Nicholas C. Georgiade, Kenneth L. Pickrell, and Galen W. Quinn, 1, 43-51, 1964.
- Velar motility, velopharyngeal closure, and speech proficiency from cartilage pharyngoplasty: the effect of age at surgery, Robert F. Hagerty, Donald A. Hess, and Willis K. Mylin, 5, 317-326, 1968.
- Velar motility, velopharyngeal closure, and speech proficiency in cartilage pharyngoplasty: an eight year study, Donald A. Hess, Robert F. Hagerty, and Willis K. Mylin, 5, 153-162, 1968.

embryology

- (A) Comparison of standard organ culture and standard transplant techniques in the fusion of the palatal processes of rat embryos, John S. Konegni, Byron C. Chan, Thomas M. Moriarty, Sam Weinstein, and R. D. Gibson, 2, 219– 228, 1965.
- Influence of cleft lip upon palatal closure in A/Jax mice, Michel Pourtois, 4, 120-123, 1967.

- Theoretical biochemical constructs related to normal and abnormal palatal embryogenesis, Earl G. McNall, David B. Coursin, and Robert F. Sloan, 4, 187-196, 1967.
- Visceral variations and defects associated with cleft lip and palate in human fetuses: a macroscopic description, Hironori Kitamura and Bertram S. Kraus, 1, 99-115, 1964.

etiology

- (The) Cervical vertebrae as a factor in the etiology of cleft palate, R. B. Ross and W. K. Lindsay, 2, 273-281, 1965.
- Cleft lip and cleft palate, F. Clarke Fraser, 5, 187–194, 1968.
- Epithelial remnants and pearls in the secondary palate in the human abortus: a contribution to the study of the mechanism of cleft palate formation, Hironori Kitamura, 3, 240-257, 1966.
- (The) Evaluation and management of velopharyngeal insufficiency, Harry J. Buncke, Jr., Patricia Page, Barbara Price, Carol Blazine, and Freda Fraser, 3, 171-180, 1966.
- Reopening of fused palatal shelves, Dino R. Angelici, 5, 205-210, 1968.

general information, historical

- Support of research in cleft palate from the National Institute of Dental Research, Seymour J. Kreshover, 1, 287– 291, 1964.
- Treatment of patients with cleft in CSSR, Josef Penkava, 4, 115–119, 1967.
- Vilray Papin Blair's early concepts of the cleft palate problem, Gordon Letterman, Maxine Schurter, and Bahaman Teimourian, 1, 125-129, 1964.

genetics

- Abnormal morphology of the soft palate: Part II. The genetics of cleft uvula, Lawrence H. Meskin, Robert J. Gorlin, and Robert J. Isaacson, 2, 40–45, 1965.
- Cytogenetic study of cleft lip and palate, Ivan Šubrt, Jaroslav Červenka, and Miloš Křeček, 3, 362–367, 1966.

incidence of clefts

- Abnormal morphology of the soft palate: part I. The prevalence of cleft uvula, Lawrence H. Meskin, Robert J. Gorlin, and Robert J. Isaacson, 1, 342-346, 1964.
- Birth variables and the incidence of cleft palate: part I, Richard F. Donahue, 2, 282-290, 1965.
- Birth variables and the incidence of cleft palate: part II, Richard F. Donahue, 4, 234-239, 1967.
- Clefts in Wisconsin: incidence and related factors, Stuart I. Gilmore and Susan M. Hofman, 3, 186-199, 1966.
- (An) Epidemiologic investigation of factors related to the extent of facial clefts, part I. Sex of patient, Lawrence H. Meskin, Samuel Pruzansky, and Warren H. Gullen, 5, 23-29, 1968.
- Impressions concerning clefts in Montana Indians of the past, Venus E. Tretsven, 2, 229-236, 1965.
- (The) Incidence of cleft lip and palate in Jamaica, D. Ralph Millard, Jr., and Kenneth A. McNeill, 2, 384-388, 1965.
- Incidence of clefts and parental age, Sylvia Hay, 4, 205–213, 1967.
- (The) Incidence of cleft lip and palate among North American Negroes, Leonard A. Altemus, 3, 357-361, 1966.
- Incidence of clefts in Israel, B. Azaz and Edith Koyoumdjisky-Kaye, 2, 227-233, 1965.
- Incidence of clefts in New York City, Herbert Conway and Kurt J. Wagner, 3, 284-290, 1966.
- Utilization of birth certificates in epidemiologic studies of cleft lip and palate, John C. Greene, Jack R. Vermillion, and Sylvia Hay, 2, 141-156, 1965.
- instrumentation and methodology, description
- Acoustic analysis of speech: validation studies, R. C. A. Weatherly-White, Richard B. Stark, and Clayton R. DeHaan, 3, 291-300, 1966.
- Cineradiographic system design, F. Allan Hofmann, 1, 382-387, 1964.
- Cineradiography in research and clinical studies of the velopharyngeal mechanism, Kenneth L. Moll, 1, 391-397, 1964.

- Development of a test for velopharyngeal competence during speech, James C. Hardy and Herbert J. Arkebauer, 3, 6-21, 1966.
- (The) Effect of filming rate and frame selection in cinefluorographic velopharyngeal analysis, Sara S. Sparrow, Bryon G. Brogdon, and Kenneth R. Bzoch, 1, 419-429, 1964.
- (The) Influence of head position upon velopharyngeal closure, Betty Jane McWilliams, Ross H. Musgrave, and Phyllis A. Crozier, 5, 117-124, 1968.
- Measuring palatopharyngeal competence with the nasal anemometer, Lawrence
 F. Quigley, Jr., F. R. Shiere, Richard
 C. Webster, and Carolus M. Cobb, 1, 304-313, 1964.
- Nasal emission of air and velopharyngeal function, Donald W. Warren, 4, 148-156, 1967.
- Objective measurement of nasality in cleft palate patients: a preliminary report, R. C. A. Weatherly-White, William C. Dersch, and Ruth M. Anderson, 1. 120-124, 1964.
- (A) Pressure-flow technique for measuring velopharyngeal orifice area during continuous speech, Donald W. Warren and Arthur B. DuBois, 1, 52-71, 1964.
- (A) Rating scale for evaluation of video tape recorded x-ray studies, Betty Jane [McWilliams] Neely and Doris P. Bradley, 1, 88-94, 1964.
- Roentgen evaluation of velopharyngeal closure, John A. Kirkpatrick, 1, 388– 390, 1964.
- Synchronization of cinefluorography and speech observations, Yoshishige Fujiki and Takuro Wada, 4, 291-299, 1967.
- Synchronous recording of speech with associated physiological and pressure-flow dynamics: instrumentation and procedure, J. Daniel Subtelny, Robert M. McCormack, Joanne D. Subtelny, Joseph H. Worth, Lester M. Cramer, James C. Runyon, and Robert M. Rosenblum, 5, 93-116, 1968.
- (The) Taub oral panendoscope: a new technique, Stanley Taub, 3, 328-346, 1966.
- (A) Technique for obtaining intra- and extraoral photographs, Lawrence F.

Quigley, Jr., Carolus M. Cobb, and Richard C. Webster, 2, 247-256, 1965.

- (A) Technique for photographing cleft
- palate patients, A. Richard Grossman, Joseph G. Kostrubala, and Donald J. Bonomo, 2, 13-15, 1965.
- (The) Use of Televex in cleft palate research, Betty Jane McWilliams and Bertram Girdany, 1, 398-401, 1964.
- (The) Use of tomography in the diagnosis of unusual and occult clefts of the palate, John Marquis Converse, Sidney L. Horowitz, Melvin H. Becker, 5, 311-316, 1968.

middle ear disease, hearing problems

- (The) Air-bone gap as a criterion for identification of hearing losses, Richard S. Sweitzer, Jay Melrose, and Hughlett L. Morris, 5, 141-152, 1968.
- (The) Role of artificial Eustachian tube in cleft palate patients, James A. Donaldson, 3, 61-66, 1966.
- Unexpected ear disease in infants with cleft palate, Sylvan E. Stool and Peter Randall, 4, 99-103, 1967.

miscellaneous aspects, description

- Bilateral oblique facial clefts and amniotic bands: a report of two cases, Edwin H. Sakurai, David F. Mitchell, and Louis A. Holmes, 3, 181–185, 1966.
- Congenital malformations and cleft lip and palate, Mary Pannbacker, 5, 334– 339, 1968.
- Congenital midline defects of the midface, George Baiback and Bertram Bromberg, 3, 392-401, 1966.
- Dermatoglyphies and cleft lip and palate, William E. Silver, 3, 368-375, 1966.
- (A) Descriptive anatomy of the face in human fetuses with unilateral cleft lip and palate, J. David Atherton, 4, 104– 114, 1967.
- Epithelial remnants and pearls in the secondary palate in the human abortus: a contribution to the study of the mechanism of cleft palate formation, Hironori Kitamura, 3, 240-257, 1966.
- Impressions concerning clefts in Montana Indians of the past, Venus E. Tretsven, 2, 229-236, 1965.

- Oral stereognosis in normal and cleft palate individuals, Irving Hochberg and Jack Kabcenell, 2, 47-57, 1965.
- Patterns of swallow in cleft palate children, Ralph L. Shelton, Jr., Alta R. Brooks, and Karl A. Youngstrom, 3, 200-210, 1966.
- (A) Physiometric analysis of lip function in cleft and noncleft subjects, Frederick N. Haring and Robert M. McCormack, 1, 320-328, 1964.
- Pierre Robin and the syndrome that bears his name, Peter Randall, Wilton M. Krogman, and Soona Jahina, 2, 237-246, 1965.
- Prone feeding of infants with the Pierre-Robin syndrome, Yasuaki Takagi, June L. McCalla, and James F. Bosma, 3, 232-239, 1966.
- Radiation dosimetry for cleft palate patients, Lloyd Sherwin Landa, Gerald Shapiro, Sidney I. Silverman, and Charles B. Storch, 4, 308-315, 1967.
- (A) Roentgenographic cephalometric study of identical twin females with cleft lips and palates, Martin F. Palmer and Junji Machida, 1, 336-341, 1964.
- Skeletal development of cleft palate children as determined by hand-wrist roentgenographs: a preliminary study, Jack A. Menius, Max D. Largent, and Charles J. Vincent, 3, 67-75, 1966.
- (A) Technique for photographing cleft palate patients. A. Richard Grossman, Joseph G. Kostrubala, and Donald J. Bonomo, 2, 13-15, 1965.
- Theoretical biochemical constructs related to normal and abnormal palatal embruogenesis, Earl G. McNall, David B. Coursin, and Robert F. Sloan, 4, 187-196, 1967.
- Visceral variations and defects associated with cleft lip and palate in human fedescription, tuses: a macroscopic Hironori Kitamura and Bertram S. Kraus, 1, 99-115, 1964.

noncleft (palatal insufficiency)

Cineradiographic comparison of normal to noncleft subjects with velopharyngeal inadequacy, Mohammed Mazaheri, Robert T. Millard, and Duane M. Erickson, 1, 199-209, 1964.

psychosocial aspects

- Connotative meaning of concepts related to cleft lip and palate, Edward Clifford, 4, 165-173, 1967.
- Creative thinking abilities of cleft palate children, Robert M. Smith and Betty Jane McWilliams, 3, 275-283, 1966.
- Guidance materials for parents of children with clefts, Howard Lee Wylie and Betty Jane McWilliams, 2, 123-132, 1965.
- High school drop-out rate for cleft palate patients, Norman Demb and Aubrey L. Ruess, 4, 327-333, 1967.
- Intellectual development and the OFD syndrome: a review, Aubrey L. Ruess, Samuel Pruzansky, and Edward F. Lis, 2, 350-356, 1965.
- Patient motivation for rehabilitation, John R. Barry, 2, 62-68, 1965.
- Personality adjustment in boys with cleft lips and palates, Charles G. Watson, 1, 130-138, 1964.
- Psycholinguistic abilities of children with clefts, Robert M. Smith and Betty Jane McWilliams, 5, 228-249, 1968.
- Reducing the employment handicap of a cleft palate, Mary E. Switzer, 1, 292-298, 1964.
- Services for children with cleft palates by state crippled children's agencies, Alice D. Chenoweth, 1, 299-303, 1964.
- Teamwork as a dynamic system, Frederick A. Whitehouse, 2, 16-27, 1965.

speech physiology

- (An) Analog study of cleft palate speech, Donald W. Warren and James L. Devereux, 3, 103-114, 1966.
- Air flow rate and articulatory movement during speech, Junji Machida, 4, 240-248, 1967.
- Air flow rates in normal speakers, Roland J. Van Hattum and Joseph H. Worth, 4, 137-147, 1967.
- Effects of velopharyneal incompetence upon speech, Nobuhiko Isshiki, Iwao Honjow, and Masanori Morimoto, 5,
- 195-204, 1968. $(An) \, Electromy ographic-cine {\it fluorographic}$ investigation of velar function during
- normal speech production, James F. Lubker, 5, 1-18, 1968.

- Oral port constriction, nasal resistance, and respiratory aspects of cleft palate speech: an analog study, Donald W. Warren and William E. Ryon, 4, 38-46, 1967.
- Physio-acoustic considerations in the radiographic study of speech, Joanne D. Subtelny, 1, 402-410, 1964.
- (A) Preliminary study of Passavant's pad, Mary A. Carpenter and Hughlett L. Morris, 5, 61-72, 1968.
- Simultaneous oral-nasal air flow measurements and cinefluorographic observations during speech production, James F. Lubker and Kenneth L. Moll, 2, 257– 272, 1965.
- Symmetry of lip activity in repaired unilateral clefts of the lip, Richard E. Offerman, John F. Cleall and J. Daniel Subtelny, 1, 347-356, 1964.
- Tongue position and hypernasality in cleft palate speech, Mervyn L. Falk and George A. Kopp, 5, 229-237, 1968.
- Tongue thrusting and interdentalization of speech sounds among cleft palate and noncleft palate subjects, Carol Rea Marks, 5, 48-56, 1968.

speech problems, description

- (The) Acoustics of normal and nasal vowel production, Martin F. Schwartz, 5, 125-140, 1968.
- (An) Analog study of cleft palate speech, Donald W. Warren and James L. Devereux, 3, 103-114, 1966.
- Articulation proficiency and error patterns of preschool cleft palate and normal children, Kenneth R. Bzoch, 2, 340-349, 1965.
- Articulation, voice, and obturation in persons with acquired and congenital palate defects, William B. Arndt, Jr., Ralph L. Shelton, Jr., and Lawrence J. Bradford, 2, 377-383, 1965.
- Cineradiographic comparison of normal to noncleft subjects with velopharyngeal inadequacy, Mohammed Mazaheri, Robert T. Millard, and Duane M. Erickson, 1, 199-209, 1964.
- Effects of velopharyngeal incompetence upon speech, Nobuhiko Isshiki, Iwao Honjow, and Masanori Morimoto, 5, 297-310, 1968.
- (The) Evaluation and management of

velopharyngeal insufficiency, Harry J. Buncke, Jr., Patricia Page, Barbara Price, Carol Blazine, and Freda Fraser, 3, 171–180, 1966.

- Heterogeneity of the 'cleft palate population' and research designs, D. C. Spriestersbach, Kenneth L. Moll, and Hughlett L. Morris, 1, 210-216, 1964.
- (The) Influence of head position upon velopharyngeal closure, Betty Jane McWilliams, Ross H. Musgrave, and Phyllis A. Crozier, 5, 117-124, 1968.
- (The) Linearity of the relationship between articulation errors and velopharyngeal incompetence, Sara Dale Brandt and Hughlett L. Morris, 2, 176-183, 1965.
- Misarticulations and listener judgments of the speech of individuals with cleft palates, Duane R. Van Demark, 1, 232-245, 1964.
- Misarticulations of cleft palate children achieving velopharyngeal closure and children with functional speech problems, Duane R. Van Demark and Ann Ahlstrand Van Demark, 4, 31-37, 1967.
- Objective measurement of nasality in cleft palate patients: a preliminary report, R. C. A. Weatherly-White, William C. Dersch, and Ruth M. Anderson, 1, 120-124, 1964.
- Oral port constriction, nasal resistance, and respiratory aspects of cleft palate speech: an analog study, Donald W. Warren and William E. Ryon, 4, 38-46, 1967.
- Ratings of velopharyngeal closure during blowing and speech, Betty Jane McWilliams and Doris P. Bradley, 2, 46-55, 1965.
- (A) Study of velopharyngeal competence in children with repaired cleft palates, Marvin L. Hanson, 1, 217–231, 1964.
- (A) Survey of the speech disorders of individuals with clefts, Yasuaki Takagi, Robert E. McGlone, and Robert T. Millard, 2, 28-31, 1965.
- Tongue position and hypernasality in cleft palate speech, Mervyn L. Falk and George A. Kopp, 5, 229–237, 1968.
- Tongue thrusting and interdentalization of speech sounds among cleft palate and noncleft palate subjects, Carol Rea Marks, 5, 48-56, 1968.
- Velar motility, velopharyngeal closure

and speech proficiency from cartilage pharyngoplasty: the effect of age at surgery, Robert F. Hagerty, Donald A. Hess, and Willis K. Mylin 5, 317-326, 1968.

- Velar motility, velopharyngeal closure, and speech proficiency in cartilage pharyngoplasty: an eight year study, Donald A. Hess, Robert F. Hagerty, and Willis K. Mylin, 5, 153-162, 1968.
- (A) Word intelligibility approach to the study of speech change in oral cleft patients, David Prins and H. Harlan Bloomer, 2, 357-368, 1965.

surgical problems, description

- Isolated cleft palate, V. S. Iyer, 4, 124– 128, 1967.
- Morphology of facial bones in skulls with unoperated unilateral cleft palate, J. David Atherton, 4, 18–30, 1967.
- Some observations on the pharyngeal airspace, George Chierici, 4, 129–136, 1967.
- velopharyngeal port, function and problems
- Air flow rate and articulatory movement during speech, Junji Machida, 4, 240– 248, 1967.
- Air flow rates in normal speakers, Roland J. Van Hattum and Joseph H. Worth, 4, 137-147, 1967.
- (A) Cinefluorographic study of velopharyngeal function in normals during various activities, Kenneth L. Moll, 2, 112-122, 1965.
- Cineradiographic comparison of normal to noncleft subjects with velopharyngeal inadequacy, Mohammed Mazaheri, Robert T. Millard, and Duane M. Erickson, 1, 199-209, 1964.
- Cineradiography in research and clinical studies of the velopharyngeal mechanism, Kenneth L. Moll, 1, 391-397, 1964.
- Development of a test for velopharyngeal competence during speech, James C. Hardy and Herbert J. Arkebauer, 3, 6-21, 1966.
- (The) Effect of filming rate and frame selection in cinefluorographic velopharyngeal analysis, Sara S. Sparrow, Byron G. Brogdon, and Kenneth R. Bzoch, 1, 419-429, 1964.

- Effects of velopharyngeal incompetence upon speech, Nobuhiko Isshiki, Iwao Honjow, and Masanori Morimoto, 5, 195-204, 1968.
- (The) Linearity of the relationship between articulation errors and velopharyngeal incompetence, Sara Dale Brandt and Hughlett L. Morris, 2, 176-183, 1965.
- Measuring palatopharyngeal competence with the nasal anemometer, Lawrence F. Quigley, Jr., F. R. Shiere, Richard C. Webster, and Carolus M. Cobb, 1, 304-313, 1964.
- Misarticulations of cleft palate children achieving velopharyngeal closure and children with functional speech problems, Duane R. Van Demark and Ann Ahlstrand Van Demark, 4, 31-37, 1967.
- Nasal emission of air and velopharyngeal function, Donald W. Warren, 4, 148– 156, 1967.
- Oral port constriction, nasal resistance, and respiratory aspects of cleft palate speech: an analog study, Donald W. Warren and William E. Ryon, 4, 38-46, 1967.
- Preliminary investigation of a new concept of velar activity during speech, Kenneth L. Moll and Thomas N. Shriner, 4, 58-69, 1967.
- (A) Pressure-flow technique for measuring velopharyngeal orifice area during continuous speech, Donald W. Warren and Arthur B. DuBois, 1, 52–71, 1964.
- Ratings of velopharyngeal closure during blowing and speech, Betty Jane McWilliams and Doris P. Bradley, 2, 46-55, 1965.
- Roentgen evaluation of velopharyngeal closure, John A. Kirkpatrick, 1, 388-390, 1964.
- Silicone implants for velopharyngeal incompetence: a progress report, Ralph Blocksma, 1, 72-81, 1964.
- Simultaneous oral-nasal air flow measurements and cinefluorographic observations during speech production, James F. Lubker and Kenneth L. Moll, 2, 257-272, 1965.
- (A) Study of velopharyngeal competence in children with repaired cleft palates, Marvin L. Hanson, 1, 217-231, 1964.
- Synchronization of cinefluorography and

speech observations, Yoshishige Fujiki and Takuro Wada, 4, 291–299, 1967.

- Synchronous recording of speech with associated physiological and pressure-flow dynamics: instrumentation and procedure, J. Daniel Subtelny, Robert M. McCormack, Joanne D. Subtelny, Joseph H. Worth, Lester M. Cramer, James C. Runyon, and Robert M. Rosenblum, 5, 93-116, 1968.
- Therapeutic exercise and velopharyngeal gap, Raymond Massengill, Jr., Galen
 W. Quinn, Kenneth L. Pickrell, and Carole Levinson, 5, 44-47, 1968.
- Variations in velopharyngeal valving: the factor of vowel changes, Kenneth R. Bzoch, 5, 211-218, 1968.
- Velar motility, velopharyngeal closure, and speech proficiency from cartilage pharyngoplasty: the effect of age at surgery, Robert F. Hagerty, Donald A. Hess, and Willis K. Mylin, 5, 317-326, 1968.
- Velar motility, velopharyngeal closure, and speech proficiency in cartilage pharyngoplasty: an eight year study, Donald A. Hess, Robert F. Hagerty, and Willis K. Mylin, 5, 153-162, 1968.

- <u>*</u>

OFFICERS OF THE ASSOCIATION, 1968–1969

PresidentRoss H. Musgrave, M.D., Pittsburgh, Pennsylvania
President-Elect
Past-President
Vice-PresidentPeter Randall, M.D., Philadelphia, Pennsylvania
Vice-President-ElectRobert W. Blakeley, Ph.D., Portland, Oregon
SecretaryKenneth R. Bzoch, Ph.D. (1971), Gainesville, Florida
Treasurer
Editor

COUNCIL MEMBERS OF THE ASSOCIATION 1968–1969

The above officers and

Thomas D. Cronin, M.D. (1970), Houston, Texas John W. Curtin, M.D. (1970), Chicago, Illinois Nicholas G. Georgiade, D.D.S., M.D. (1971), Durham, North Carolina Donald W. Warren, D.D.S., Ph.D. (1971), Chapel Hill, North Carolina Sheldon W. Rosenstein, D.D.S. (1969), Chicago, Illinois Joanne D. Subtelny, Ph.D. (1969), Rochester, New York

> Historian for the Association Asa J. Berlin, Ph.D., State College, Pennsylvania

Correspondence pertaining to the Association should be addressed to the Secretary: Dr Kenneth R. Bzoch, Department of Communicative Disorders, College of Health Related Professions, University of Florida, Gainesville, Florida 32601.

Changes of address and subscriptions to the Cleft Palate Journal should be addressed to the Treasurer: Dr. Howard Aduss, 808 S. Wood Street, Chicago, Illinois 60612.

Manuscripts and related correspondence should be addressed to the Editor: Dr. Hughlett L. Morris, Department of Otolaryngology, University Hospitals, Iowa City, Iowa 52240.

COMMITTEES OF THE ASSOCIATION 1968–1969

Budget

Howard Aduss, D.D.S. (Chairman) William H. Olin, D.D.S. Hughlett L. Morris, Ph.D. Kenneth R. Bzoch, Ph.D.

By-Laws

Charlotte G. Wells, Ph.D. (Chairman) Jay W. Lerman, Ph.D. Hratch Abrahamian, D.D.S. R.C.A. Weatherly-White, M.D.

Honors and Awards

Jack Matthews, Ph.D. (Chairman) Jacob J. Longacre, M.D. Samuel Pruzansky, D.D.S. D. Ralph Millard, Jr., M.D. John V. Irwin, M.D.

Ethics and Professional Affairs

Robert L. Harding, M.D. (Chairman) Betty J. McWilliams, Ph.D. J. Daniel Subtelny, D.D.S. Stephen P. Forrest, D.D.S.

International Relations

Michael L. Lewin, M.D. (Chairman) David B. Coursin, M.D. Stuart I. Gilmore, Ph.D. Juan B. Gonzalez, D.D.S. Richard B. Stark, M.D. Walter J. Benavent, M.D. Malcolm C. Johnson, D.D.S. Ralph L. Shelton, Jr., Ph.D.

Membership

Gary R. Smiley, D.D.S. (Chairman) Herbert A. Ecker, M.D. Howard Aduss, D.D.S. Frank W. Masters, M.D. Rolland J. Van Hattum, Ph.D. Mary S. Farquhar, D.Ed.

Nomenclature

Nicholas G. Georgiade, M.D. (Chairman) Charles R. Elliott, Ph.D. Dieran Goulian, Jr., M.D. Blair Rogers, M.D. Sheldon Rosenstein, D.D.S.

Nominating

John W. Curtin, M.D. (Chairman) Elise Hahn, Ph.D. David R. Dickson, Ph.D. William H. Olin, D.D.S. Norman R. A. Alley, D.D.S.

Program

Peter Randall, M.D. (Chairman) Ralph L. Shelton, Jr., Ph.D. Samuel G. Fletcher, Ph.D. Sheldon W. Rosenstein, D.D.S. Juan B. Gonzalez, D.D.S. Richard B. Stark, M.D.

Public Relations

Robert L. Harding, M.D. (Chairman) Walter J. Benavent, M.D. Doraid A. Harrington, Ph.D. Norman O. Harris, D.D.S. Robert J. Harrison, Ph.D. Goro Kamiyama, D.D.S., M.D. Michael L. Lewin, M.D. Mohammad Mazaberi, D.D.S. Betty J. McWilliams, Ph.D. (ex-officio)

Local Arrangements

Jack L. Bangs, Ph.D. (Chairman) Norman R. A. Alley, D.D.S. R. Ray Battin, Ph.D. Raymond O. Brauer, M.D. Thomas D. Cronin, M.D. Simon Fredericks, M.D. Bromley Freeman, M.D. S. Baron Hardy, M.D. John R. Hill, M.D. Walter B. Magness, D.D.S.

Long-Range Planning

Ross H. Musgrave, M.D. (Chairman) Howard Aduss, D.D.S. Kenneth R. Bzoch, Ph.D. Jack Curtin, M.D. Hughlett L. Morris, Ph.D. Peter Randall, M.D. Herold S. Lillywhite, Ph.D. Donald W. Warren, D.D.S. Duane C. Spriestersbach, Ph.D. (ex-officio)

Time and Place

Doris P. Bradley, Ph.D. (Chairman) Eugene Gottlieb, M.D. Donald T. Counihan, Ph.D. Richard C. Webster, M.D. Mohammad Mazaheri, D.D.S.

Association Finances (ad hoc)

Gene R. Powers, Ph.D. (Chairman) Charles R. Elliott, Ph.D. Lester M. Cramer, M.D. Stuart I. Gilmore, Ph.D. Haskell Gruber, D.D.S. Robert F. Sloan, Ph.D.

AMERICAN CLEFT PALATE ASSOCIATION

ACPA MEMBERSHIP / PROCEDURES AND CATEGORIES

Procedures.

Applications are obtained from the Membership Chairman (see below). Completed applications are distributed by the Chairman to members of the Membership Committee (two from plastic surgery, two from dentistry, two from speech pathology). A Committee member casts a double vote when reviewing an applicant of his own discipline. Committee review and Executive Council review of applications are held semi-annually: June and November. Secretary of ACPA notifies the applicant of the action taken.

Categories.

Membership. To be qualified as a member of the Association, the applicant must be in good standing in the professional organization representing his major or clinical accreditation. He must be accredited in his professional field, and have displayed an interest in the rehabilitation of cleft palate persons. In the fields of plastic surgery and orthodontia, this requirement has been interpreted to mean board accreditation or board eligibility in the appropriate organization. In speech pathology it requires the Certificate of Clinical Competence from the American Speech and Hearing Association. If the applicant's primary work is research, he must hold the doctorate degree. Applicants from other specialities are evaluated with similar criteria. In addition, the applicant must be sponsored by a member in good standing of the Association, who must write a letter attesting to the fact that the applicant is eligible for membership.

Associate Membership. Associate membership may be granted to persons whose professional interests are consistent with the goals of the Association, who have displayed an interest in the study or treatment of cleft palate, and who are in good standing in their professional organization representing their major or clinical orientation, but who cannot qualify for full membership because of circumstances related to accreditation requirements. Associate members will pay full dues, receive all publications of the Association, and be eligible to serve on committees. They will not be allowed to vote, hold office or chair committees. When an Associate member meets requirements for full membership, he may petition to have his membership status changed.

Corresponding Membership. Corresponding Membership may be granted to professional persons whose professional interest is consistent with the goals of the ACPA and who are members in good standing in their professional societies, but cannot qualify for full memberhip because of circumstances related to their geographic location. Such members will pay full dues, receive all publications of the Association, and be eligible to serve on committees. They will not be allowed to vote or to hold office. Processing of applications is handled in the same way as applications for full membership.

Send applications or requests for further information to:

Dr. Gary R. Smiley Chairman for Membership American Cleft Palate Association School of Dentistry University of North Carolina Chapel Hill, North Carolina 27514