T. Pomfret Kilner

1891–1964

Professor T. Pomfret Kilner, emeritus professor of plastic surgery at the University of Oxford, died on 2nd July, 1964, aged 73. By an unusual coincidence the Summer Meeting of the British Association of Plastic Surgeons, attended by many of his old friends and colleagues, was being held in Oxford at the time and the announcement of his death on the first morning of the meeting, overshadowed the remainder.

The name of Tommy Kilner, as he was universally known, was a household word to at least two generations of plastic surgeons. He qualified in 1912 and after military service in the first World War, joined Major (later Sir Harold) Gillies as plastic surgeon to Queen Mary's Hospital for Face and Jaw Injuries at Sidcup. Gillies and Kilner were the first pioneers of plastic surgery as a separate specialty and it was their tenacity of purpose in developing its principles and techniques during the 1920's and 1930's which was directly responsible for the enormous expansion and stability of plastic surgery in Britain today. His appointment to the chair of plastic surgery in Oxford in 1944 gave him great satisfaction although it meant leaving a busy private practice in London. It provided more time and greater facilities to devote to the training of the post-graduates who flocked to his department from all over the world.

For it is as a teacher that he will long be remembered. He disciplined himself and maintained the highest standards of efficiency, and exacted the same from those who were fortunate enough to work under him. The main criticism of his career was that he wrote so little although many of his friends and colleagues urged him to publish his methods before it was too late. But his teachings have been learned by many and his techniques are used all over the world today although some may no longer be aware of their originator.

His early and continued interest in the surgery of cleft lips and palates is well known and his techniques of classical interest to all of us; but his practice extended into all branches of the specialty and his opinion on any aspect of plastic surgery was always well-worth seeking and generously given. His name and his record are immortal in the history of plastic surgery and his many associates mourn his passing.

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BOOK REVIEWS

LENZ, WIDUKIND, *Medical Genetics*. Translated from German by Elizabeth F. Lanzl, Chicago, Illinois: University of Chicago Press, 1963. Pp. 218. $6.50.

The author of this book, Dr. Widukind Lenz, professor of genetics and director of the Institute for Human Genetics at the University of Hamburg, Germany, is well known not only to teratologists and geneticists but also to a wider public since he was the first to discover a causal relationship between thalidomide medication in early pregnancy and the severe malformations of the extremities of the fetus which had occurred recently in many thousands of infants in many countries.

The German edition of *Medical Genetics* published in 1961 was enthusiastically received. The *American Journal of Human Genetics* called it "by far the best introduction to medical genetics for physicians and medical students," while the *Annals of Human Genetics* (London) wrote that it "should provide an excellent basis for a university course in any medical faculty" and that it was worthy of translation into English.

The first translation of Dr. Lenz's book will make a welcome contribution to the literature of a relatively new but rapidly developing science. Admitting that it is impossible to present a complete compendium of evidence and concepts at this stage, the author, a clear and original thinker, aims chiefly to clarify the subject matter, methods, and thinking processes used in medical genetics and to arouse interest and understanding.

The book is divided into five major chapters. In the general introduction human genetics is defined as the study of individual variations based on differences of chromosomes and genes. The significance of human genetics for the understanding of the sciences of man and human pathology is presented. Chapters II to V deal with a short discussion of our knowledge of the nature of genes (up to 1961), single major gene effects, composite gene effects, and mutations. Genetic terms such as penetrance, expressivity, linkage, chromosome mapping, and others are critically evaluated. The different modes of single gene inheritance including complete, conditional, and intermediate dominance, codominance, complete and incomplete recessivity, dominant and recessive X-linkage are clearly defined. Examples—all taken from human pathology—for each mode of transmission are enumerated. In the discussion of mutation the controversial problems of the estimate of mutation rate in man and of the effect of ionizing radiation are treated with appropriate caution. Under the heading "Composite Gene Effects," the interaction of non-allelic genes, gene and environment, and polygenic inheritance as well as the importance of twin studies for the

latter are discussed. The newest branch of human genetics—cytogenetics—is treated under the heading "Chromosomal Mutation" and includes what was known when the German edition was written (1961).

Readers equally versed in German and English may prefer the original text, although both versions will be of great help for anyone teaching medical genetics to medical students, residents, and physicians. For the non-medical reader a glossary of medical terms is given while a glossary of genetic terms is given for those not familiar with the terminology of the geneticist. Over 400 references which date up to 1961, including some genetic texts, are given at the end of the English edition. In the German edition a selection of references is given after each chapter.

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MASON, STELLA E. (Ed.), *Signs, Signals and Symbols:* A Presentation of a British Approach to Speech Pathology and Therapy. Springfield, Illinois: Charles C Thomas, 1963. Pp. 208. $7.50.

According to the editor, *Signs, Signals & Symbols* is a book based upon papers read by members and their guests at a National Conference of the College of Speech Therapists held in Birmingham, England, in 1961. The theme of the Conference was "Communication Theory", and the papers presented were developed around the relationship between speech pathology and the broader field of human communication.

The book consists of twenty-three papers presented by British phoneticians, speech pathologists, and linguists. An attempt is made to lay down fundamental concepts of Communication Theory and to relate these to the "science" of speech pathology. These basic papers by such people as W. Haas, J. L. M. Trim, Alan S. C. Ross, G. Patrick Meredith, and D. B. Fry are followed by presentations by writers well known in the therapy field such as Joan H. van Thal, Peggy Carter, Joan Pollitt, Joyce Wilkins, Catherine E. Renfrew, and others. The papers are, for the most part, philosophical and observational in nature. Although there is reference to the presentation of data obtained through systemic research, none of the papers organize these materials in any sort of statistical framework.

Several points of particular interest to Americans are notable. L. Stein, in his paper entitled "The Place of Speech Therapy Among the Sciences", apparently like speech pathologists all over the world, deals with terminology and suggests that the term "speech therapy" be dropped in favor of "Science of Rhememes or Rhematology." This term comes from the Greek *ereo* meaning, "I say". John R. Brook's work entitled "Aids to Diagnosis and Therapy" set out to discuss instrumentation but, by way of introduction, told of having asked Dr. Stein why there was so much controversy among speech therapists over terminology. He reported that Dr. Stein

replied forthrightly, "It is because we do not know what we are talking about."

Peggy Carter's discussion of stuttering related the phenomenon to the suppression of a signal. She suggested that the tension involved in a "stammer" indicates the suppression of a signal which, coming from the unconscious, would betray, were it unsuppressed, a state of mind which would acutely embarrass the speaker. Several of the papers, including Joan Pollitt's "Children's Drawings—Their Value in Therapy," reveal that the British are becoming somewhat more psychoanalytically oriented than previous publications might have suggested.

A series of three papers dealing with the concept of dyslalia are of interest because of their attempt to describe articulation disorders linguistically and to show that they are in reality language disorders.

These papers are refreshingly presented primarily because the authors appear free to philosophize and to conclude on the basis of their own experiences. However, they do not, it appears to this reviewer, succeed in presenting the "British Approach to Speech Pathology and Therapy"—whatever that may be.

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STAPLE, PETER H., (Ed.), *Advances in Oral Biology*, (Vol. 1), New York: Academic Press, 1964. Pp. 353. $14.00.

Volume one of *Advances in Oral Biology*, edited by P. H. Staple, amply justifies its existence by fulfilling the expressed intent of this new contribution to the dental sciences as expressed by the editor in his preface remarks:

> "The primary objective of *Advances in Oral Biology* is to facilitate communication between dental scientists by providing critical surveys of the state of knowledge in selected areas of biology that bare upon growth, development and maintenance of normal function of oral tissues on the one hand and on the other, departures from this norm that eventually become recognized as disease".

This very welcome multidisciplined volume is clear, informative, and up to date. The book is attractively bound and adequately illustrated with numerous black and white photographs, tables, graphs, and diagrams. The book is logically and effectively organized into eleven sections.

Volume one consists of eleven essays each dealing with one or more facets of a contemporary dental problem. Each of these sections is thoroughly introduced, reviewed, and discussed by one or more eminently qualified dental scientists. The following sections are covered and in the order presented: Secretion of Saliva; Movement and Forces in Tooth Eruption; Recent Concepts of the Physiology of Mastication; Recent Studies of

Mucins and Blood-Group Substances; Cytochemical Aspects of Oxidative Enzyme Metabolism in Gingiva; Dynamics of Supragingival Calculus Formation; The Effect of Tetracycline on Mineralization and Growth; Citrate in Mineralized Tissues; Polarization Microscopy of Dental Enamel With Reference to Incipient Carious Lesions; The Relationships of Surface Active Agents, the Enamel Surface and Dental Caries; and lastly Modifications of the Properties and Composition of Dentin Matrix Caused by Dental Caries.

Each of the preceding sections (presented in chapters) is followed by a complete reference list (over 1,000 references in all), and although the form is acceptable, I personally favor the references including the full title of the article in reference. Moreover, Chapters Two, Four, Six, Ten, and Eleven could have been improved in both readability and consistency with the inclusion of a summary or conclusion section. An excellent author and subject index complements the book. It is well recommended as a valuable book and will have special appeal to dental scientists and dental educators who are research oriented.

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ABSTRACTS

Gropp, A., Jussen, A., and Odunjo, F., Near-triploid chromosome constitution in epithelial-cell cultures of palatal mucosa from a case of cleft palate. *Lancet, 1,* 1167, 1964.

Epithelial-cell cultures were processed from the palatal mucosa of a 3½ month old male with cleft lip and palate. Chromosome-counts and karyographing of 30 mitotic figures revealed a modal chromosome number of 72 with an exact threefold haploid set including one supernumerary small metacentric chromosome of the F group. Cultures of peripheral lymphocytes showed the chromosome number to be 46. The authors feel the finding is best explained by a local chromosomal anomaly in the tissues of the malformed region. (Noll)

Gilbert, P., They help rebuild lives. *Today's Health, 40,* 30–33, 62–63, 1962.

This article is intended for the layman as a description of the Northwestern University Cleft Lip and Palate Institute. The author describes briefly some of the main concepts of embryology and etiology of clefts. However, the primary emphasis is on the team approach to cleft lip and

palate rehabilitation. The factors of medical, dental, speech, and educational problems of the children are discussed. Several pictures are shown which would be of interest to parents and others. (Noll)

Porter, K., Unusual palatal cleft: report of a case. *J. oral Surg., 22,* 364–365, 1964.

A case report was presented describing a partial cleft of the palate approximately 4 cms. in length involving the junction of the hard and soft palates. The cleft extended through the soft tissues, but did not involve the underlying bone and did not extend into the nasal cavity. There was not a submucous cleft of the posterior soft palate. This deformity had been present since birth, and the author stated that a partial cleft of this type in this location had not previously been described in the literature. (Harding)

Kubacek, V., Modification of the vomer flap for closing the nasal floor in complete cleft. *Acta chir. Plasticae, 6,* 73–81, 1964.

In complete clefts of the lip, a triangular flap is raised on the vomer just behind the premaxilla and is rotated into the floor of the nose to help close and build up the nasal floor. This flap makes a Z-shaped suture possible, instead of a linear suture, and tends to prevent stenosis of the nostril. This method of closing the floor of the nose is a modification of the vomer mucous membrane flap. This method also creates a satisfactory condition for later suture of the anterior pole of the cleft palate. (Harding)

Burian, A. F., Klaskova, O., Farkas, L. G., and Cervenka, J., Questionnaire for research on the etiology of cleft-lip and cleft palate and other congenital malformations. *Acta chir. Plasticae, 6,* 88–113, 1964.

The workers of the Laboratory for Congenital Malformations of the Czechoslovak Academy of Sciences and of the Clinic for Plastic Surgery of Charles University, Prague, prepared a questionnaire based on many years of work and in consultation with a large number of specialists and are presenting it to the scientific world for assessment. This questionnaire is too lengthy for daily records and is developed primarily for research. The lengthy questionnaire occupies 16 pages in the *Acta Chirurgiae Plasticae* journal and those interested should refer to this publication. (Harding)

Maher, W. P., and Swindle, P. F., Variation in the network of submucosal arteries in the human fetal palate. *J. Amer. dent. Assoc., 69,* 106–111, 1964.

The authors studied the pattern of primary nutrient arteries in both closed and cleft human fetal palates, aged four months' gestation to full term. They found that the arteries, although variable, seem to be well developed in both the cleft and non-cleft palates. It is their feeling that cleft of the palate is not the result of poor development of blood vessels. (Harding)

Cooper, H. K., Recent trends in the management of the individual with oral-facial and speech handicaps. *Amer. J. Orthod., 49,* 683–700, 1963.

The importance of a closely integrated program in the successful treatment of cleft palate deformities is emphasized. Unfortunately, the importance of dentistry is not always recognized, and dental problems in many places are given low priority. Help for the indigent person with severe dental or orthodontic difficulties is far from satisfactory. The trend toward overspecialization in dentistry is a cause for serious concern. There is a need for better coordination of the treatment pro-

cedures of the orthodontist and the speech therapist in the correction of speech problems. Some of the research conducted at the Lancaster Clinic is described. (Luban)

Olin, W. H., Dental anomalies in cleft lip and palate patients. *Angle Orthod. 34,* 119–123, 1964.

The incidence of missing bicuspids is considerably higher in cleft lip and cleft palate patients than in the general population. All patients with cleft lip or cleft lip and palate have some deformity of the anterior teeth in the area of the cleft. (Luban)

Rosenstein, S. W., Early orthodontic procedures for cleft lip and palate individuals. *Angle Orthod., 33,* 127–137, 1963.

This is a preliminary report of the orthodontic management of several cases prior to, at the time of, and subsequent to lip and palate surgery. The purpose of this early treatment is to prevent or reduce the collapse of the arch segments in later life. Various types of appliances are utilized to obtain the desired arch form. Dr. B. L. Swoiskin of the Cleft Palate Center of the University of Illinois discusses this article, and presents arguments against early orthodontic intervention. (Luban)

Buresh, J. J., and Urban, T. J., Teratogenic effect of the steroid nucleus in the rat. *J. dent. Res., 43,* 548, 1964.

It has been shown that cleft palate can be produced in experimental animals by hormonally active steroids. The purpose of this investigation was to determine if cleft palate can be induced in rats by injection of a hormonally inactive steroid, Cholesterol. This material, injected daily into female white rats from the eighth through the fourteenth day of pregnancy, produced palatal abnormalities in a high percentage of animals treated. There was a corresponding increase in adrenal weight and a decrease in body weight. (Luban)

Ingalls, T. H., Taube, I. E., and Klingberg, M. A., Cleft lip and cleft palate: epidemiologic considerations. *Plastic reconstr. Surg., 34,* 1–10, 1964.

The authors present a retrospective study based on 99 pregnancies which led to the birth of 100 children with cleft lips and/or palates. The dates of delivery demonstrated no significant seasonal fluctuations. Other findings conformed to the accepted in demonstrating the greater frequency of cleft lip and/or palate in males; greater frequency of isolated cleft palate in females; and the left sided preponderance of cleft lip defects. While at least one-half of the cleft lips were associated with an alveolar ridge defect, there were several cases where the arch was apparently intact, an interesting finding in view of the widespread acceptance of the incisive foramen as the posterior terminus of the cleft lip defect. The frequency of cleft lip defects was found to be lower in non-whites. Associated anomalies were more frequent in isolated cleft palate cases than in cleft lips and/or palates. A tendency for clefts to occur in children fifth or later in birth rank was noted. No significant pattern of pregnancy disturbances was documented. In elucidating this last point the report suffers the deficiency of all retrospective analyses and accents the need for prospective studies. (Cosman)

Millard, D. R., Jr., The unilateral cleft lip nose. *Plastic reconstr. surg., 34,* 169–175, 1964.

The nasal deformity associated with the cleft lip defect remains a difficult surgical problem. The author's primary lip technique is said to have avoided the otherwise not infrequent severe nasal defect but abnormalities still occur in the course of growth. Rib graft alveolar arch

support beneath the depressed nasal ala, and auricular cartilage onlay grafts are procedures used early in the revision of these deformities. Later correction may involve excision of normal ala cartilage and its use as an onlay to the abnormal side as well as other well-accepted techniques. Some favorable results have been achieved by a septal cartilage strut graft inserted via the anterior columella with the spring of the transplanted cartilage serving to elevate the depressed cleft side ala. (Cosman)

Rogers, B. O., Harelip repair in colonial America. A review of 18th century and earlier surgical techniques. *Plastic reconstr. Surg., 34,* 142–162, 1964.

An interesting though disparate review is presented of the work of some little known American practitioners as well as material concerning others who have more significantly contributed to this field. (Cosman)

Woolf, C. M., Woolf, R. M. and Broadbent, T. R., Cleft lip and heredity. *Plastic reconstr. Surg., 34,* 11–14, 1964.

Of 418 cleft lip/palate patients studied, 55 had had 171 children of whom 8, or 4.7%, had cleft lips and/or palates. Hereditary transmission frequency as calculated for the female patients was 6.8% as compared to 3.9% for the males. Combining these figures with others in the literature serves to suggest that the risk of transmission is increased about 2-fold if the patient is female and that over 10% of such a woman's sons will be affected. These findings are interpreted as being compatible with a sex modified polygenic inheritance system. An affected female is thought of as possessing more defect determining genes than a comparably affected male and the risk that the threshold number of defect determining genes will be exceeded in her offspring is, therefore, increased. A subsidiary point of interest is that there was a slightly greater percentage of affected siblings of female patients in the group of 418 than that of the comparably affected males. This familial manifestation also supports the concept of a stronger genetic impetus toward the cleft defect in the affected female. (Cosman)

Ferm, Vergil H. and Kilham, Lawrence, Congenital anomalies induced in hamster embryos with H-1 virus. *Science, 145,* 510–511, 1964.

The report describes congenital malformations and fetal deaths induced by the intravenous inoculation of pregnant hamsters with H-1 virus. No signs of disease were noted among the maternal animals. Malformations and deaths were observed in the embryos, however. The malformations observed included dilation of the pericardial cavity, lateral herniation of the liver, facial clefts, facial asymmetry, microcephaly, ectopic hearts, and umbilical hernias. The occurrence of a wide spread viral infection indicated by the numbers of intranuclear inclusion bodies of all mesenchymal tissues of the fetus was also reported. The findings of this study indicate similarity to the teratogenic effects of rubella virus and cytomegalic-inclusion disease virus in man. (Lutz)

Kraus, B. S., Kitamura, H., and Ooe, T., Malformations associated with cleft lip and palate in human embryos and foetuses. *Amer. J. Obstet. Gynec., 86,* 321–328, 1963.

The purpose of the paper is to present data concerning associated malformations of aborted fetuses who have cleft lip and/or palate. A series of 3216 aborted human embryos and fetuses were collected from hospitals throughout the United States and Japan. Each was examined for presence of cleft lip and/or palate. The specimens ranged in age from

4 through 19 weeks. There were 60 specimens exhibiting a cleft. Review of the literature showed a total incidence of about 1.6 cleft lip and/or palate per 1000 live births. The authors observed about 19 such specimens per 1000 aborted fetuses, contrasting strongly with research on prevalence in fetuses born alive. A predominant number of isolated cleft palates were noted in the aborted fetuses and embryos and a relatively low incidence of isolated cleft lips. There were 61.7% of the fetuses with some type of morphologic associated malformations, as compared to 25% reported in the literature for live newborns with clefts. Brachydactyly, syndactyly, skeletal dysplasias, club hands or feet, and polydactyly were the most common malformations observed. (Noll)

Lee, Catherine S. M., Bowen, P., Rosenblum, H., and Linsao, Lydia, Familial chromosomes 2 and 3 translocation ascertained through an infant with multiple malformations. *New England J. Med., 271,* 12–16, 1964.

In following three generations of a family, a reciprocal translocation between Chromosomes 2 and 3 was noted. A duplication deficiency in the propositus was associated with a malformation syndrome comprising low-set and malformed ears, micronagthia, cleft palate, atrial septal defect, malrotation of the intestines, right hydronephrosis and double ureter, and finger flexion anomaly. (Harding)

Vrtička, K., Zasady leczenia foniatrycznego rozszczepów podniebienia a uwzględnieniem najkorzystniejszych okresów dla rehabilitacji wymowy. (Principles of phoniatric treatment of cleft palate speech in regard to most favorable periods for speech rehabilitation.) *Cesk. Stomatol., 17,* 199–202, 1964.

1) Preoperative period: From the phoniatric point of view, a surgical repair of the cleft palate at the age of two, i.e., at the beginning of speech development in these children, is strictly required. Muscular atrophy of the cleft velum as well as development of pathological speech habits can thus be prevented. When delay in surgery may be indicated as in some cases of marked clefts, the phoniatrician must treat the cleft palate child from the beginning of his speech development, introducing the speech therapy as soon as possible and continuing it till the surgery and after it. Principles of speech therapy (Seeman's method) are reported. 2) Postoperative period: Normal speech development following the surgery or after a short period of speech therapy was observed in most children who were operated on at the age of two. 3) Late period: In some cases, velopharyngeal insufficiency with fixed pathological speech habits persisted postoperatively, requiring secondary velopharyngoplasty by means of a wide pharyngeal flap. Consequently long-term speech therapy (performed by phoniatrician and speech therapist) and psychotherapy (performed by clinical psychologist) proved successful in most of these cases. Subjective evaluation in combination with objective "Visible Speech" analysis are used in evaluating the speech results obtained. (Karfik)

Giannì, E., Contributo allo studio del muro epiteliale nella morfogenesi delle fossette olfattorie e del palato primario. (Contribution to the study of epithelial wall in morphogenesis of olfactory pits and primary palate.) *Riv. Ital. Stomaltol.,* in press.

The author, after having briefly reviewed the most recent opinions on morphogenesis of olfactory pits and primary palate, analyzes and discusses his results based on serial histological studies of four human embryos of 13, 18, 42, and 55 mm lengths which may be so summarized: First the olfactory pits are formed medially by the medial nasal proc-

ess and laterally by the lateral nasal process and the maxillary process; the margins of the pits, growing toward each other, begin to fuse by their epithelial layer along the inferior end. The olfactory pits thus seem closed in their lower parts and formed only by the medial and the lateral nasal process without the direct contribution of the maxillary process. He states the epithelial wall is formed only by the fusion of the medial nasal process with the maxillary process. It seems to play an important morphogenetic role in the development of olfactory pits and of primary palate. This paper, dealing with the first step in embryological development of the face, is well illustrated by original material and offers a valuable contribution to the knowledge of epithelial wall formation and to the understanding of certain face malformations. We consider it a praiseworthy and accurate study which merits close attention. (Francesconi)

Sedláčková, E., and Vrtička, K., Vývoj řeči u dětí s vrozenými vadami patra. (Speech development in children with congenital defects of the palate.) *Cesk. Pediat., 19,* 239–242, 1964.

Congenital defects of the palate include cleft in the hard and soft palates, submucosal cleft of the hard palate, and congenital shortening of the soft palate. These congenital anomalies result in speech defects which limit contact with other children and interfere with the patient's growth and development. The basic demand of the phoniatrician is, therefore, the creation of a perfect velopharyngeal closure by plastic surgery about the age of two years, before bad speech habits have developed so that only a short period of phoniatric training will be required to assure good speech. With marked clefts, when the plastic surgeon feels he must delay the operation, one must try to eliminate the development of bad speech habits with preoperative phoniatric training. The paediatrician must recognize the various forms of the defects and cooperate with the plastic surgeon, stomatologist and phoniatrician in treatment and rehabilitation. (Karfik)

Lodovici, O., Evolution of congenital cleft lip and cleft palate repair. Basic principles of modern surgery. *Rev. Lat. Amer. Cir. plastic, 7,* 264, 1963.

Surgical treatment of the cleft lip and palate showed from the beginning tendencies based upon the philosophies on the growth and development of the upper jaw. Until 1949 two surgical techniques were executed, the osteouranoplasty or Brophy's operation and the staphylorraphy by the mucoperiostal flaps or von Langenbeck's operation. The principal purpose was to close the cleft as early as possible with as many operations as necessary. The secondary deformities that occurred from this management were analyzed by Graber, in view of the craniofacial growth. This author decided to condemn early surgery, postponing the operation until after the 4th year of age. Contrary to Graber, the Cleft Palate Center of the University of Illinois advocated surgery that would avoid the interfering of the upper jaw development. This surgery must be atraumatic; it must not damage the blood supply of soft tissues. There must be no undermining of mucoperiosteal flaps, no fractures, and it must be performed in stages and at a suitable time. It was emphasized the modelling role of muscular action on the affected structures restablished only surgery repair. This is recommended in the first months for the cleft lip, while the cleft palate should be operated on as soon as possible by simple reviving of its edges and suture, without undermining. Emphasis by some recent authors has been put on the alterations in shape of the alveolar arch in cleft lip and palate and orthopedic treatment before surgery. Many surgeons, such as the author (Discipline of Plastic Surgery and

Burns of the Surgery Department of the Hospital das Clinicas-University of S. Paulo) adopted a conservative, atraumatic surgical procedure, in stages and at suitable time, before 24 months of age, that uses the mucoperiosteal flaps, according to the von Langenbeck's operation. Summing up, it was verified that the evolution of the treatment of cleft lip and palate was such that surgery may be considered no more than one of its aspects, since its final aim is the patient's rehabilitation and social integration. On the other hand, the present values to estimate the efficiency of the treatment are satisfactory phonation, preservation of hearing and the nonengagement of the growth potential of the facial bones. (Spina)

Lodovici, O., Surgical treatment of congenital clefts of the lip and palate. *Rev. Lat. Amer. Cir. plastic, 7,* 203, 1963.

As of 1957 the Discipline of Plastic Surgery of the Hospital das Clinicas, of the University of S. Paulo, adopted a conservative surgical procedure for the treatment of cleft lip and palate, considering the essential requirements for the obtention of a satisfactory final result. The unilateral cleft lip is operated on at the age of one month. Cheiloplasty consists of marginal incisions, preservation of the Cupid's bow, suture of the anatomical planes and Z-plasty in the skin only. In the bilateral forms of cleft lip, when the fissure reaches the incisive foramen, at least in one side being therefore necessary to repair the nostril floor, the cheiloplasty is made in two stages with a two months interval, the first stage being performed at the age of one month. It consists of marginal incisions, with preservation of the prolabium and pre-maxilla. The palatorraphy is performed in only one stage, at the age of 18 months in partial cleft of the palate; in the complete forms the repair is made in two stages: uranoplasty employing the vomerian flap at the age of 12 months and staphylorraphy by the technique of von Langenbeck or by the Wardill's operation, at the age of 18 months. The surgery performed is the least traumatic possible and especial attention is given to the postoperative care. After the surgical assistance, the patients will go on with the treatment until each of their problems is met. As of the age of four years the patients receive phoniatric, orthopaedic, orthodontic, and odontologic assistance. Corrections of the cheiloplasty when required are made at the age of six years and the operations on the nose at the age of 15 years to correct the septum deviation, deformities of the alar cartilages, and of the nasal pyramid. The results obtained with this management characterized by atraumatic surgery, executed in adequate ages, and in stages, have proved excellent and show no surgical sequelae. (Spina)

Bergonzelli, V., and Hertel, A., Collaborazione fra chirurgo plastico e ortodontista nella riparazione delle schisi labio-palatine (Teamwork between plastic surgeon and orthodontist in cleft lip and palate repair.) *Minerva Stomatol., 12,* 549, 1963.

With the aim of improving the results of cleft lip and palate treatment, very often impaired by severe secondary deformities, the authors emphasize the importance of close teamwork between procedure and timely intervention of the orthodontist which can contribute to minimize the harmful effects of surgical trauma on the growing centers of the face. After having widely analyzed the causes provoking the most serious postoperative deformities of the upper jaw, and after having pointed out the detrimental influence on the side of the cleft of reduced blood supply on the growth centers as a direct consequence of disturbed nasal respiratory function, the authors state, in their opinion, the best operative proceeding. This consists in assuring cleft lip and palate patients

the remarkable advantages of an early surgical intervention performed with a less traumatic technique, by not exposing the hard palate to operative trauma and the fibromucous tissues to extensive undermining, and in maintaining these results with adequate lasting and continuous orthodontic treatment. On the strength of their vast experience gained from a large number of cleft lip and palate cases submitted to early operation and treated postoperatively by an orthodontist, the two-stage repair of cleft palate, after Schwechendick procedure, is concluded to be the choice treatment as it interferes less than other methods with the delicate biological growing balance of mastication and deglutition system. This very appreciable paper seems worthy of the attention of everyone interested in cleft lip and palate treatment, as, besides offering valuable suggestions of surgical procedures and the most appropriate age for patients to undergo operation, it emphasizes the already well-known but often forgotten or neglected necessity of an active proficuous teamwork among specialists, as only by this means may we obtain the best immediate, and above all, long-term results. (Francesconi)

Ruding, R., Cleft palate: anatomic and surgical considerations. *Plastic reconstr. Surg., 33,* 132–147, 1964.

A detailed and valuable description of normal and cleft palate anatomy is given. On this basis the desirability of detaching the misdirected fibers of the cleft palate levator palatini and suturing them so as to reconstruct a true levator loop is emphasized. To achieve this the greater palatin artery should be displaced backward by removal of the posterior wall of its canal. The author uses Veau's incisions for soft palate and incomplete palate clefts, but advises the Wardill incisions for larger clefts. Extensive dissection of the lamina medialis, the fossa, or the lateral pterygoid plate is to be condemned as producing excessive and unnecessary scarring. Monofilamentous or impermeable coated sutures are preferred by the author. To avoid fistulas in the anterior palatal repair in the Wardill method, support should be given by means of a previously prepared prosthodontic plate. No clinical material is presented illustrative of the special value of the author's techniques. (Cosman)

Schultz, R. C., Surgically produced cleft palates in rabbits: a study of resulting middle ear infections. *Plastic reconstr. Surg., 33,* 120–131, 1964.

The mechanism by which the high rates of hearing loss and of middle ear infections observed in cleft palate patients are produced has not been clearly elucidated. These problems were investigated by the surgical production of palate clefts in 30 rabbits and subsequent clinical, radiographic, gross and microscopic anatomic observations. 82% of the test group showed histologic evidence of inflammatory reaction in the middle ear as compared to 0% in a small control group. 75% of long term survivors showed chronic otitis media. Loss of function of levator and tensor veli palatini muscles following the clefting seemed to be the responsible factor permitting infection via the eustachian tubes. Bone production in the bullae was noted and the author suggests a causal relation between this type of process and the conduction deafness observed in humans. The anatomic similarities between the rabbit and human eustachian tube and middle ear complex gives some validity to such a comparison. (Cosman)

Warren, D. W., Velopharyngeal orifice size and upper pharyngeal pressure-flow patterns in normal speech. *Plastic reconstr. Surg., 33,* 148–162, 1964.

"Adequate" velopharyngeal closure should be quantified in terms of velo-

pharyngeal orifice area. Björk's roentgenographic and spectrographic method and the author's pressure-flow technique are the means available for measuring orifice size in connected speech. The latter method depends on the assumption that the area of the orifice can be determined from simultaneous measurement of differential pressure across it and air flow through it with values substituted in a hydrokinetic equation. Ten normal adults were studied. Consonant pressure varied depending on phonetic content and whether consonants were voiced or voiceless. Velopharyngeal orifice size was not related to these variations in pressure amplitudes, but oropharyngeal pressure was noted to decline rapidly where orifice size exceeded 10 mm^2. The relationship is, however, non-linear. It appears possible that insufficiency may begin at the 10–20 mm range but the data is not conclusive. (Cosman)

Millard, D. R., Refinements in rotation-advancement cleft lip technique. *Plastic reconstr. Surg., 33,* 26–38, 1964.

According to the authors, rotation advancement (R-A) achieves the following: the entire cupid's bow dimple component is not only preserved but rotated into normal position; advancement of the upper lateral lip element into the rotation gap not only maintains this rotation but also corrects the alar flare and the septal deviation. Over the past eight years a number of refinements have been added. Increased correction of the short columella is accomplished by a portion of the rotation incision which runs under the columella. A portion of the length is advanced by a modified one-sided fork flap. In wide clefts, vestibular extension of the lateral flap allows for increased potential of the lateral lip advancement flap. The use of a 1-mm transposed flap of 'white skin role' across the union of the mucocutaneous junction preserves the normal highlight across the scar. Thickness of the alar web across the height of the nasal arch is thinned by the Kilner crescent incision. In deficient alveolar arches, a rib bone graft is used which is a slight modification of Brauer, Cronin, and Reaves technique. Attenuated vermilion border is corrected by a V-Y roll down. Tailoring the normal side (noncleft side) is suggested for a more balanced effect. The principles for repair of incomplete clefts also apply. The author stresses flexibility rather than forcing a rigid method into the mouth of every cleft. (Ashley)

THESES AND DISSERTATIONS

Azaz, B., The incidence of congenital facial and jaw clefts among the Jewish population in Israel, D.M.D., Hebrew Univ., Jerusalem, Israel, 1960.

Campos-Giral, R., A method for assessing the mesial excursion of the pharyngeal musculature. M. S. thesis, Northwestern Univ., 1962.

Larson, K. S., Closure of the secondary palate and its relation to sulphomucopolysaccharides. D. Odont., Royal School of Dentistry, Stockholm, Sweden, 1962.

Newell, W. J., A radiographic cephalometric study of the soft and hard tissues of the nose in the midsagittal plane in cleft palate individuals. M. S. thesis, Northwestern Univ., 1962.

Nielson, R. A., Growth of the face in the presence of cleft lip and cleft palate —a review. M.S.D. thesis, Indiana Univ., 1962.

Osborne, H. A., A serial radiographic cephalometric analysis of facial growth in cleft palate subjects age 12 to 16 years. M.S. thesis, Northwestern Univ., 1962.

Pawlink, Z. M., A radiographic cephalometric analysis of certain craniofacial measurements in individuals with clefts of the secondary palate only. M.S. thesis, Northwestern Univ., 1962.

Poswillo, D. E., The embryology of cleft palate with the development of cleft palate induced by three teratogenic techniques, namely, X-radiation, hypervitaminoses A and cortisone, and amniotic puncture. D.D.S. thesis, Univ. New Zealand, 1962.

REGISTRY OF CURRENT RESEARCH PROGRAMS

The Registry will be maintained in subsequent issues of the *Journal.* Currently, the major source of information is the Bio-Sciences Information Exchange; however, other sources are invited to contribute. Descriptions of research programs to be listed with the Registry should be sent to the Editor.

Items are: Name of project; supporting agency; name of principal investigator with degrees; academic rank, institution, and address; and summary of project.

Kauai pregnancy study (NIH). *Jessie M. Bierman,* M.D., School of Public Health, University of California, Berkeley 4, California.

Summary: The purposes of this longitudinal study of pregnancy are to explore the physical, social, and psychological factors which may be associated with fetal loss, premature birth, neonatal death, and congenital defects, as well as the favorable outcomes of pregnancy, and to ascertain estimates of true rates of early as well as late fetal loss within a total community by life table methods. The study is unique in that it utilizes data collected on all pregnant women in a total community throughout the course of pregnancy and delivery, and on the offspring during the first two years of life. The data, consisting of household census, interview, medical, hospital and clinic records were collected during 1953–58 on the Island of Kauai, Hawaii, for approximately 4,000 pregnancies. Other investigations include the differences between retrospectively and prospectively collected information; the impact of severe and moderately severe congenital defects on community medical and educational regroups; effect on outcome of the amount and type of prenatal medical care; various health practices and experiences of the women during pregnancy; comparison of the prevalence of reported congenital anomalies at birth and those found at two years; consistency of mental ratings of infants at two years as judged by pediatricians and psychologists; and breast feeding practices of study mothers.

Velopharyngeal action in consonant articulation (NIH). *Kenneth R. Bzoch,* Ph.D., Speech and Hearing Services, College of Health Related Services, University of Florida, Gainesville, Florida.

Summary: This is a continuing roentgenographic study of functions of the stomatognathic structures in normal speech production with particular emphasis on velopharyngeal valving in connected speech. Tracing and measurements of high speed lateral x-rays of the head and neck and cinefluorographic films have

been obtained on groups of children and young adults with normal speech and submitted to biometric analysis. Variations in normal velopharyngeal valving for speech related to growth changes with age and phonetic differences in sounds being produced have been analyzed on these normal records. Similar biometric measures on cleft palate individuals are presently being compared to the normal records. Further study of abnormal function of the organs of speech is planned for selected cases presenting speech disorders related to deafness, stuttering, and neuromuscular disorders.

Longitudinal study of soft tissue profile in children with unilateral cleft lip and palate (NIH). *P. J. Coccaro,* D.D.S., Oral and Pharyngeal Development Section, National Institute of Dental Research, National Institutes of Health, Bethesda, Maryland.

Summary: Evaluation of distinctive development of form and dimension of skeleton and of soft tissue in facial area of cleft palate children. Principal observation method is that of adapted cephalometric tracings, which are compared by overlaid imposition and by particular measurements.

Nasal emission in cleft palate speech (NIH). *Donald T. Counihan,* Ph.D., Department of Communication Disorders, University of Oklahoma Medical Center, Oklahoma City, Oklahoma.

Summary: It is the general plan of this study to investigate the relationships between measured nasal air flow and perceived nasal emission in cleft palate speakers. Toward this end, measurements of nasal air flow during production of selected consonant syllables, single words, and sentences will be related to ratings of perceived nasal emission in tape-recorded, identical speech samples. A second phase of this investigation will explore possible relationships between the x-ray measures of velar patency during phonation and the measures of nasal air flow and ratings of perceived nasal emission. The effect of temporal separation of the oral and nasal air pulse on perceived nasality during consonant production will also be assessed. Since this information has consequence for all habilitative procedures involving restoration of velar competency, it can be expected to be of value in planning and evaluating the success of certain surgical procedures and speech appliances. It may also contribute to more effective planning of specific therapy procedures used by the speech pathologist.

Cytogenetic studies in congenital diseases (NIH). *Wayne H. Finley,* Ph.D., M.D., Pediatrics Department, University of Alabama Medical Center, Birmingham 3, Alabama.

Summary: This project is to organize and initiate a research program to correlate cytogenetic data, clinical findings, family history, and other genetical information from selected patients with congenital malformations. Cytogenetic data is to be obtained by instituting cell culture techniques for various tissues including peripheral white blood cells, bone marrow, skin, or other tissue biopsies for subsequent chromosome identification and analysis. Special attention to aborted fetuses is planned in an attempt to correlate the incidence of fetal wastage with chromosomal aberrations. Later the work is to be extended to study the relationship between tissue culture media and the growth rate of cells derived from selected patients. Future plans also include a search for biochemical differences in human cells derived from both normal and diseased individuals.

Mechanism of genetically controlled abnormal development (American Cancer Society). *Salome Glueck-*

sohn-Waelsch, Ph.D., Albert Einstein College of Medicine of Yeshiva University, Eastchester Rd. and Morris Park Avenue, New York 61, New York.

Summary: This project is concerned with studies of physiological genetics of mammals. In particular, these investigations attempt the causal analysis of mammalian development with particular emphasis on the genetic control of differentiation. Furthermore, analysis of genetically determined abnormalities of various mammalian organ systems and the mechanisms responsible for the abnormalities is carried out. In addition, the genetics of hemoglobin variations in mice is under investigation. All of these studies depend on the availability of known genetically controlled material. The present project is concerned with the maintenance of this system of genetically controlled breeding of mice.

A social psychological study of the self-image of adolescents with and without a physical impairment (Association for the Aid of Crippled Children). *Norman Goodman,* Ph.D., Department of Anthropology-Sociology, Queens College of the City University of New York, Flushing 67, New York.

Summary: This study, utilizing sociological and social psychological theory, attempts to assess and compare the self-image of adolescents with and without a visible physical impairment. Self-image is viewed as an important component of individual personality. We have delineated a variety of components of self-image such as the degree of differentiation, the degree of clarity, stability over time, self-evaluation (i.e., self-esteem), and a number of others. Not only are we interested in the differences between those with and without a physical impairment, but within the impaired group itself. For example, we are interested in the differential effects, if any, between those whose impairment is cosmetic only and those whose impairment is physically or physiologically dysfunctional. In all cases the impairment is congenital or acquired before the age of effective language development (3 years of age). The data are obtained by means of a battery of four forty-minute questionnaires. These questionnaires are designed to obtain information relevant to the conceptual dimensions of the self-image, some of which are stated above, using both a highly structured and also a relatively unstructured approach. This work has practical significance for rehabilitation workers and both theoretical and methodological significance for sociology and social psychology.

Physiological genetics of the short ear gene in mice (National Science Foundation). *Margaret C. Green,* Ph.D., Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine.

Summary: Short ear (*se*) is a gene which reduces the amount of mesenchymal condensation of precartilage in the mouse embryo, resulting in a skeleton which is slightly smaller than normal and in which many of the small bones, or bony processes, are absent or greatly reduced in size. It also affects the regeneration of adult skeleton, causing a slower rate of proliferation of callus cells in the hearing of bone fractures. The gene has a number of other effects, in addition to those on the skeleton, some of which are probably secondary to the skeletal effects, but some of which are probably not secondary. The purpose of this research is to try to discover the way in which the gene acts in bringing about these numerous effects. Specific questions to be investigated include: the effect of *se* on growth of fibroblasts in subcutaneously implanted sponge and in tissue culture; the effect of *se* on proliferation of macrophages; the origin of the foreign body granulomas

which occur regularly in the livers of *sese* mice; the origin of the hydroureter and hydronephrosis which occur in many *sese* mice; and the origin of the medially displaced left ovary and uterus which is a common occurrence in *sese* females.

Studies on the etiology and prevention of rubella (NIH). *Robert H. Green,* M.D., New York University School of Medicine, 550 First Avenue, New York 16, New York.

Summary: The purpose of this research is to acquire more knowledge concerning the etiologic agent of rubella, and to induce this agent to multiply in tissue cultures or experimental animals so that a vaccine, similar to the live measles vaccine, might be developed. A further aim is the evaluation of human gamma globulin in preventing both rubella and the congenital malformations resulting from maternal rubella. It is hoped that the accomplishment of these aims would result in providing a means of attaining the ultimate goal of preventing the congenital malformations which result from maternal rubella occurring during the first trimester of pregnancy.

Editor's Note: The following summary was submitted by the investigators:

Comparison of objective measurement of nasality by a nasality meter, nasal anemometer, cephalometric x-ray, and subjective measurement of nasality by three trained judges (Massachusetts Medical Foundation). *Lawrence F. Quigley, Jr.,* D.M.D. (senior investigator), Winchester, Massachusetts.

Summary: The study will suggest certain testing techniques for objective evaluation for normal and cleft palate patients and render in its opinion what will be the ideal or more suited testing phases or techniques. It will also compare the nasality meter with the nasal anemometer (flow or quantitative meter) and cephalometric x-rays used to measure palatal pharyngeal opening. Finally it will evaluate regional variations by compiling tests from other cleft palate centers using similar equipment in experimental design.

LETTER TO THE EDITOR

Dear Sir:

The following quotation (Guilford, J. P. *Psychometric Methods*, 2nd ed., McGraw Hill, New York, 1954, page 1) supplements the excellent letter by Moll (*Cleft Palate J.*, July, 1964) regarding the objectivity of speech measures.

> Measurement permits accurate, objective, and communicable descriptions that can be readily manipulated in thinking. The accuracy is as great as the care and the instruments of the observer will permit. Objectivity is one of the major goals of science. According to a convenient, operational definition, "objectivity" means interpersonal agreement. Where many persons reach agreement as to observations and conclusions, the descriptions of nature are more likely to be free from the biases of particular individuals. They form the body of knowledge that is taken to be true.

Articulation has been repeatedly demonstrated to be important to speech adequacy, and articulation tests have been repeatedly demonstrated to be reliable and valid. Therefore, these tests are very likely among the most objective tests used in clinical work with cleft palate persons. Conversely, the objectivity of measures made with some of the electronic devices recommended to the readers of this *Journal* remains to be demonstrated.

Comments in articles to the effect that speech judgments invariably lack objectivity and the grouping of subjects as normal, understandable with errors, and unintelligible in the absence of more specific speech data may be taken as indices to the inadequacy of those articles and of the poor practice of speech pathology on which they are founded. Persons doing research involving speech as a variable should give their attention to principles of psychometric measurement and stop repeating inane cliches about objectivity.

Incongruously, the same individuals who worry about the objectivity of speech measures sometimes refer to "speech therapy" as part of their study procedures as confidently as though an example of that therapy were housed in the Bureau of Standards. Where speech training is used as part of a study procedure, some attempt should be made to specify what was done and on what schedule.

Ralph L. Shelton, Jr., Ph.D.
University of Kansas Medical Center
Kansas City, Kansas

ANNOUNCEMENTS

The Nomenclature Committee announces that reprints of the article "A classification of cleft lip and cleft palate" (*Plastic reconstr. Surg., 29,* 31, 1962) are still available. Requests for no more than 10 copies are filled at no charge; a rate of 10 cents per copy is assessed for numbers of copies in excess of 10. Orders should be sent to:

William R. Harkins, D.D.S.
Fulton Building
Osceola Mills, Pennsylvania

The Abstracts Committee is having difficulty in providing comprehensive coverage of current literature. To assist the members in their efforts, authors are invited to either send reprints of recent publications for abstracting purposes in the *Cleft Palate Journal* or to send an abstract already prepared. Either should be sent to the Abstracts Editor:

Dr. Kenneth R. Lutz
School of Dentistry
Loma Linda University
Loma Linda, California

Back issues of the *Cleft Palate Bulletin,* Volumes I through XIII, are available for purchase. Copies of a bound volume (including Volume I through VIII) are available at $7.50 each. Unbound copies of Volumes IX through XIII are $4.00 per volume. Orders should be sent to the Secretary-Treasurer, Dr. Charlotte G. Wells, 106 Parker Hall, University of Missouri, Columbia, Missouri 65202.

The establishment of the National Referral Center for Science and Technology is announced. The Center does not answer technical problems directly, but rather refers the inquirer to those who may be able to assist. More specifically, the Center lists, in answer to an inquiry, information centers, special libraries, governmental agencies, professional societies, industrial laboratories, abstracting services, and individual specialists who may be able to supply the information. Requests for referral service should be made to the Center (by full name), Library of Congress, Washington, D. C. 20540.

The National Foundation-March of Dimes announces a new publication *Birth Defects: Abstracts of Selected Articles.* This is a monthly compilation of selected articles related to birth defects published in periodicals in this country and abroad. Over 2,600 journals are included

in the literature research. About 45–55 significant articles are abstracted every month for inclusion in the publication. The subject of birth defects is interpreted to include broadly morphological and functional defects of congenital origin. Both clinical and experimental studies are included. Articles in the basic sciences related to birth defects, such as epidemiology, embryology, teratology, biochemical genetics, cytogenetics, medical and population genetics are also covered. The emphasis is on the human and clinical. Calendar year subscription: $5.00. Vol. I, No. 1 was January, 1964; subscriptions entered now will begin with January issue while supplies of first issues last. Correspondence and subscription orders should be addressed to:

The National Foundation
Supply Division, Room 555
800 Second Avenue
New York, New York 10017

The *Journal of Implant Dentistry,* in an effort to fill a gap in the dental literature and to bring to a much larger segment of the profession a subject which up until now has had no formal outlet, has elected to change its name to *The Journal of Oral Implant and Transplant Surgery.* The *Journal,* which will be issued once yearly, will not only cover the field of implant dentistry in its every aspect—surgical, prosthetic, and research —but will also cover the new and ever-broadening subject of implantation in dental and oral surgery. This will include tooth transplantation, homo, hetero, and autogenous; the implantation of allopathic materials for alveolar ridge reconstruction; oral plastic surgery using hetero-implants such as acrylic and tantalum chins; a discussion of the use of metals for oro-antral fistula closure; many of the revolutionary European implant techniques such as the end-osseous or intraosseous pin and screw implants and Kirchner pin-broach implants. The newly appointed editor is Dr. A. Norman Cranin. Further information regarding the *Journal* may be obtained by writing to Marilyn S. Cranin, Managing Editor, 209 Cedar Avenue, Hewlett Bay Park, New York.

The American Fund for Dental Education and the American Association of Dental Schools announce the production of a new film entitled *Focus On Dental Education.* The film reviews several AFDE support programs such as dental student loans; dental teaching fellowships for graduate dentists; scholarships for hygienists, dental assistants, and laboratory technicians; student recruitment; dental education research; workshops on teaching methods; and direct grants to the nation's 50 dental schools. Booking: Free-loan. 28 minutes, black and white with sound. Normal loan period is three days; 10 days for television booking. Write AFDE, 410 North Michigan Avenue, Chicago, Illinois 60611.

Time and Place for Future ACPA Meetings

1965—May 20, 21, and 22.....New York City at the Americana
1966—April 14, 15, and 16....Mexico City at the Maria Isabel (convention headquarters) and at the Del Prado
1967—April 13, 14, and 15.....Chicago (no hotel chosen)

The Mayo Foundation, Rochester, Minnesota, announces that applications are now being accepted for twelve-month predoctoral and postdoctoral fellowships in speech pathology. These are made possible by a grant from the National Institute of Neurological Diseases and Blindness. The predoctoral program is designed to allow students in the final year of doctoral study at other institutions to carry out research studies for the dissertation, obtaining data pertaining to medically related speech, voice, and language problems from a large and varied patient population in the Mayo Clinic and two associated general hospitals. It also enables them to secure clinical experience in evaluation and therapy under supervision. The postdoctoral program will permit fellows to pursue individual research and clinical interest within wide areas of choice. Both the pre- and postdoctoral programs are designed to introduce fellows to clinical problems and research techniques in allied clinical fields (neurology, physical medicine, otology, plastic surgery, pediatrics, dentistry, radiology, neurological surgery, ophthalmology, and neuro-physiology) through lectures, seminars, and assignment for given periods of time to the sections concerned. Fellowships are available beginning July 1, 1964, but they may be initiated at any time to meet the needs and convenience of the individual applicant. Complete information can be secured from Frederic L. Darley, Ph.D., Mayo Clinic, Rochester, Minnesota.

The Dental Department of the Hospital for Sick Children, Toronto, Canada, invites applications for a Clinical Studies Fellowship in Orthodontics at the Maxillo-Facial Clinic. This is a one-year appointment for research studies in clinical orthodontic treatment for severe craniofacial deformities. Address applications to: Chief of Dentistry, The Hospital for Sick Children, 555 University Avenue, Toronto, Ontario.

Planning has begun for the 1966 ACPA meeting in Mexico City. The committee for local arrangements for that meeting has been appointed and many of the preliminary details have been worked out. The committee is as follows:

Robert F. Sloan, B.A., chairman
Fernando Monasteria, M.D., guest co-chairman
Norman R. A. Alley, D.D.S.
Raymond O. Brauer, M.D.
Kenneth R. Bzoch, Ph.D.

Sanford Glanz, M.D.
Elise Hahn, Ph.D.

A symposium entitled Environmental Variables in Oral Disease will be presented at the meeting of the American Association for the Advancement of Science, Section on Dentistry. The meeting will convene in Montreal on December 29 and 30, 1964. For further information, contact Dr. Seymour J. Kreshover, Secretary, AAAS, Section on Dentistry, NIDR, NIH, Bethesda 14, Maryland.

A surgical conference with international attendance is to be sponsored by the Czechoslovak Association of Plastic Surgery and the Czechoslovak Academy of Sciences in cooperation with the Czechoslovak Medical Society of J. E. Purkyne—Section of Surgery and the Slovak Academy of Sciences. The Conference will be held in Bratislava on June 28 to July 1, 1965, and will concern two major topics: surgery of congenital deformities and new trends in experimental plastic surgery. There will be sections for practitioners in plastic surgery, pediatric surgery, cardiosurgery, neurosurgery, and general surgery. Plastic surgeons from all countries are cordially invited to take part. Participants are urged to submit advance registration and lecture title no later than November 15, 1964. Address all inquiries to: Administration Office of Congress, To the Secretary/General Doc. Ladislav Kuzela, M.D., C.Sc., Partizanska 2, Bratislava, Czechoslovakia.

The Program Committee announces that the Program for the 1965 meeting is nearly complete. A limited amount of time is still available, however, for additional papers. For information, write

Kenneth R. Bzoch, Ph.D.
Department of Communicative Disorders
College of Health Related Services
University of Florida
Gainesville, Florida 32603

The Secretary-Treasurer of the Association announces that balloting for the amendments proposed to the ACPA Constitution closed on October 19, 1964; and the ballots have been counted. According to a verified count, the results of the voting are as follows:

a) On Article IV—The Officers: To change Article IV to read "The officers of the Association shall consist of a president, a president-elect, a vice-president, a vice-president-elect, a secretary-treasurer, an editor, and an historian. With the exception of the secretary-treasurer and the editor, who are to be elected every three years, one year in advance of taking office, and the historian, who is to be elected every five years, the officers are to be elected annually by ballot by members of the Associa-

tion convened at an annual meeting or by a special meeting convened upon the direction of the Executive Council."

In favor—430 Against—4

b) On Article XII—Committees: To change Article XII, Section 2, to read "The Membership Committee shall consist of six persons, appointed by the president and approved by the Executive Council, to represent medicine, dentistry, speech, and three members-at-large. . . ."

In favor—418 Against—15 Abstaining—1

The University of North Carolina School of Dentistry announces the activation and/or continuation of Graduate Studies leading to the M.S. Degree in Dentistry in the disciplines of orthodontics, pedodontics, periodontics, and prosthodontics. Information regarding the programs can be obtained on request to the various chairmen of the departments.

The Academy of Dentistry for the Handicapped has been invited to participate in the 100th Anniversary meeting of the Chicago Dental Society. On Monday, February 22, 1965, there will be a panel discussion on "Dentistry for the Handicapped for the General Practitioner." Topics for discussion will be etiology and research, hospital treatment, and office treatment. The Twelfth Annual meeting of the Academy of Dentistry for the Handicapped will be held at the Conrad Hilton (Chicago) on Sunday, February 21, 1965. This meeting is open to guests. Information on the program or regarding membership can be obtained by writing to: Academy of Dentistry for the Handicapped; Robert T. Kirk, Secretary-Treasurer, Box 213; Springfield, Ohio.

The publication of a new periodical, the *Journal of Oral Therapeutics and Pharmacology*, is announced. A bimonthly, the *Journal* publishes papers concerned with all aspects of investigation in the fields of oral therapeutics and pharmacology, both clinical and/or basic in nature. Subscriptions are $12.00 and may be obtained by order to the Subscription Department, The Williams and Wilkins Company, 428 East Preston Street, Baltimore, Maryland 21202.

The International Association of Logopedics and Phoniatrics announces the Thirteenth Congress in Vienna, August 23–29, 1965. The major topics to be considered in the scientific program are retarded language development, stuttering therapy, and spastic dysphonia. Make inquiries to Sekretariat: 4, Alserstrsse, Vienna IX.

The Children's Bureau announces the publication of Bulletin No. 17, *Research Relating to Children.* The issue covers research reported to the Children's Bureau Clearinghouse from February 1963 through February 1964. Bulletin No. 17 (or earlier issues) are available for purchase for seventy-five cents from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

Members of the American Cleft Palate Association who may wish to visit cleft palate centers or programs in or near New York City before or after the annual meeting may secure information regarding these activities from the 1965 local arrangements committee by writing to:

Dr. I. Kenneth Adisman
100 Central Park South
New York 19, New York

OFFICERS OF THE ASSOCIATION, 1964–1965

President.....Betty Jane McWilliams, Ph.D. Pittsburgh, Pennsylvania
President-Elect.....Peter Randall, M.D. Philadelphia, Pennsylvania
Past President.....J. Daniel Subtelny, D.D.S. Rochester, New York
Vice-President.....Kenneth R. Bzoch, Ph.D. Gainesville, Florida
Vice-President-Elect.....Elise Hahn, Ph.D. Los Angeles, California
Secretary-Treasurer.....Charlotte G. Wells, Ph.D. Columbia, Missouri
Editor.....Hughlett L. Morris, Ph.D. (1967) Iowa City, Iowa

COUNCIL MEMBERS OF THE ASSOCIATION 1964–1965

The above officers and
Norman R. A. Alley, D.D.S. (1966), Coral Gables, Florida
Lester M. Cramer, M.D. (1967), Rochester, New York
Michael L. Lewin, M.D. (1965), New York, New York
Mohammad Mazaheri, D.D.S. (1966), Lancaster, Pennsylvania
Ross H. Musgrave, M.D. (1967), Pittsburgh, Pennsylvania
Harry Z. Roch, D.D.S. (1965), Great Falls, Montana

Listed below are the Committees of the Association 1964–1965 which were omitted from page 2 of the Membership Directory.

COMMITTEES OF THE ASSOCIATION 1964–1965

Budget
Charlotte G. Wells, Ph.D. (Chairman)
William R. Laney, D.M.D.
Hughlett L. Morris, Ph.D.
Peter Randall, M.D.

By-Laws
Asa J. Berlin, Ph.D. (Chairman)
Ralph Blocksma, M.D.
Richard C. Webster, M.D.
Charlotte G. Wells, Ph.D.

Honors and Awards
Robert L. Harding, M.D. (Chairman)
Stephen P. Forest, D.D.S.
Clifford L. Kiehn, D.D.S., M.D.
Herbert Koepp-Baker, Ph.D.
Robert D. Splain, D.D.S.

Ethics and Professional Affairs
D. C. Spriestersbach, Ph.D. (Chairman)
Eugene T. McDonald, Ph.D.
Samuel Pruzansky, D.D.S.
Richard C. Webster, M.D.

International Relations
Michael L. Lewin, M.D. (Chairman)
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Irving G. Gault, D.D.S.
Charles E. Horton, M.D.
Robert W. Johnson, M.D.
William K. Lindsay, M.D.
Lawrence F. Quigley, D.M.D.
George H. Shames, Ph.D.
James C. Shanks, Ph.D.

Local Arrangements
Eugene Gottlieb, M.D. (Chairman)
I. Kenneth Adisman, D.D.S.
Kenneth R. Bzoch, Ph.D.
George F. Crickelair, M.D.
Sanford Glanz, M.D.
Ivan B. Prince, D.D.S.
Arthur G. Ship, D.M.D., M.D.
Robert F. Sloan, B.A.

Local Arrangements (Mexico City)
Robert F. Sloan, B.A. (Chairman)
Fernando Monasterio, M.D., (Guest Co-Chairman)
Norman R. A. Alley, D.D.S.
Raymond O. Brauer, M.D.
Kenneth R. Bzoch, Ph.D.
Sanford Glanz, M.D.
Elise Hahn, Ph.D.

Long Range Planning
President (Chairman)—Betty Jane McWilliams, Ph.D.
President-Elect—Peter Randall, M.D.
Vice-President—Kenneth R. Bzoch, Ph.D.
Past President—J. Dan Subtelny, D.D.S.
Secretary-Treasurer—Charlotte G. Wells, Ph.D.
Editor—Hughlett L. Morris, Ph.D.
Ross H. Musgrave, M.D.
Mohammad Mazaheri, D.D.S.

Membership
Robert W. Blakeley, Ph.D. (Chairman, 1965)
George F. Crikelair, M.D. (1965)
Edward F. Lis, M.D. (1966)
H. Cameron Metz, Jr., D.D.S. (1967)
Gene R. Powers, Ph.D. (1967)
Galen W. Quinn, D.D.S. (1966)

Nomenclature
William R. Harkins, D.D.S. (Chairman)
Asa J. Berlin, Ph.D.
Robert L. Harding, M.D.
Richard M. Snodgrasse, Ph.D.

Nominating
Harry Z. Roch, D.D.S. (Chairman)
John W. Curtin, M.D.
Herold Lillywhite, Ph.D.
Peter Randall, M.D.
J. Dan Subtelny, D.D.S.

Program and Short Course
Kenneth R. Bzoch, Ph.D. (Chairman)
Samuel Berkowitz, D.D.S.
Bertram E. Bromberg, M.D.
Eugene Gottlieb, M.D.
Elise Hahn, Ph.D.
Ross H. Musgrave, M.D. (ex-officio)
Morton S. Rosen, D.D.S.
Donald W. Warren, D.D.S.

Public Relations
Thomas D. Reese, M.D. (Co-Chairman)
Richard B. Stark, M.D. (Co-Chairman)
Mary Jane Koop, Ed.M.
Mohammad Mazaheri, D.D.S.

Time and Place
William H. Olin, D.D.S. (Chairman)
Thomas R. Broadbent, M.D.
Donald T. Counihan, Ph.D.
Samuel Glossman, D.D.S.
Francis W. Masters, M.D.
Kenneth L. Moll, Ph.D.

AMERICAN CLEFT PALATE ASSOCIATION

Information for Applying for Membership

The Association was organized in 1940 with the following objectives:

1. To encourage scientific research in the causes of cleft lip and palate.
2. To promote the science and art of rehabilitation of persons with cleft palate and associated deformities.
3. To encourage cooperation among, and stimulation of, those specialists interested in the rehabilitation of cleft palate persons.
4. To stimulate public interest in, and support of, the rehabilitation of cleft palate persons.

The Association publishes the *Cleft Palate Journal* quarterly. The Association's Annual Meeting includes sessions devoted to the presentation of papers in medicine, dentistry, speech, and related areas concerning the problems in individuals with cleft lips and palates.

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 orientation. He must be accredited in his professional field, and he must have displayed an interest in the rehabilitation of cleft palate persons. The above statement has been interpreted to mean that those applicants trained in Speech Pathology and Audiology must hold at least basic certification from the American Speech and Hearing Association at the time of the application.

The person shown as sponsor on the application must be a member of the Association and must write a letter attesting to the fact that the applicant is eligible for membership.

Send applications or requests for further information to:

CHARLOTTE G. WELLS, PH.D.
Secretary-Treasurer
American Cleft Palate Association
Parker Hall, University of Missouri
Columbia, Missouri 65202