

University of Iowa
College of Medicine
Curriculum Vitae

MICHAEL P. KARNELL, Ph.D.
Associate Professor

Department of Otolaryngology-Head and Neck Surgery
Department of Speech Pathology & Audiology

Current as of August, 2007
2006 activities are highlighted in **YELLOW**

I. EDUCATIONAL AND PROFESSIONAL HISTORY**A. Institutions Attended**

| | | |
|--------------|--|---|
| 1978 | B.A. | Western Michigan University, Kalamazoo, MI. |
| 1979 | M.S. | Western Michigan University, Kalamazoo, MI. |
| 1983 | Ph.D. | The University of Iowa |
| 1983-84 | Post-Graduate Research Fellow (NIH Funded) | The University of Iowa |
| 1984 | | Certified in Speech-Language Pathology from the American Speech-Language-Hearing Association (CCC-SP) |
| 1993-present | | Licensed to practice Speech Pathology in the state of Iowa |

B. Professional and Academic Positions Held

| | | |
|---------------|---------------------|---|
| July 1984-85 | Instructor | Otolaryngology-Head and Neck Surgery, The Pritzker School of Medicine, The University of Chicago. |
| July, 1985-92 | Assistant Professor | Otolaryngology-Head and Neck Surgery, The Pritzker School of Medicine, The University of Chicago. |
| July, 1992-93 | Associate Professor | Otolaryngology-Head and Neck Surgery, The Pritzker School of Medicine, The University of Chicago. |
| July, 1993 | Assistant Professor | Department of Otolaryngology-Head and Neck Surgery, College of Medicine, The University of Iowa (67%). |
| July, 1993 | Assistant Professor | Department of Speech-Language Pathology and Audiology, The College of Liberal Arts, The University of Iowa (33%). |
| July, 1996 | Associate Professor | Department of Otolaryngology-Head and Neck Surgery, College of Medicine, The University of Iowa (67%). |
| July, 1996 | Associate Professor | Department of Speech-Language Pathology and Audiology, The College of Liberal Arts, The University of Iowa (33%). |
| July, 1996 | Director | University of Iowa Hospitals and Clinics Consolidated Speech and Swallowing Service. Administers |

hospital-wide speech and swallowing services.

C. Honors, Awards, Recognitions, Outstanding Achievements

| | |
|---------|---|
| 1976-77 | Russell Siebert Award: Western Michigan University |
| 1978 | B.A., Summa cum Laude: Western Michigan University |
| 1980-83 | Waldo-Sangren Award: Western Michigan University |
| 1983 | Sigma XI |
| 1983 | National Institute of Dental Research Training Award |
| 1985 | American Speech-Language-Hearing Foundation and Psi Iota Xi Sorority Research Award |
| 1996 | Fellow: The American Speech-Language-Hearing Association. |
| 1999 | Phi Beta Kappa, Western Michigan University Chapter |
| 2003 | President-elect, American Cleft Palate-Craniofacial Association |
| 2004 | President, American Cleft Palate-Craniofacial Association |
| 2005 | Past-President, American Cleft Palate-Craniofacial Association |
| 2003-07 | American Speech-Language-Hearing Association Award for Continuing Education |

II. TEACHING AT THE UNIVERSITY OF IOWA

A. Teaching Assignments on Semester by Semester Basis

For The Department of Otolaryngology-Head and Neck Surgery

Fall Semester

Third Year Clinical Clerkship, Speech Disorders in Adults. One hour lecture for approximately 15 third year medical students. Offered each semester during rotation in The Department of Otolaryngology-Head and Neck Surgery.

Winter Semester

084:C28 Maxillofacial Prosthetics Seminar - Lecturer

Summer semester:

068:199, Basic Otolaryngologic Science. Voice Disorders. Two hour lecture for approximately 25 residents of Otolaryngology-Head and Neck Surgery and Dentistry. Offered each summer.

068:199, Basic Otolaryngologic Science. Alaryngeal Voice. One hour lecture for approximately 25 residents of Otolaryngology-Head and Neck Surgery and Dentistry. Offered each summer.

068:199, Basic Otolaryngologic Science. Cleft Palate. One hour lecture for approximately 25 residents of Otolaryngology-Head and Neck Surgery and Dentistry. Offered each summer.

068:199, Basic Otolaryngologic Science. Videostroboscopy and Videoendoscopy. Two hour lecture for approximately 25 residents of Otolaryngology-Head and Neck Surgery and Dentistry. Offered each summer.

For The Department of Speech Pathology and Audiology

Fall Semester

3:236, Swallowing Disorders 2-hour course for graduate students in Speech-Language Pathology. Offered each fall semester.

003:302 Clinical Practicum Supervision- Voice and Cleft Palate Clinic. At O-HNS Speech Pathology Clinic. Approximately 16 weeks/semester, 12 hours/week. Instruct graduate students in Speech Pathology regarding laryngeal videostroboscopy or velopharyngeal videoendoscopy procedures and interpretation.

3:015, Introduction to Speech and Hearing Processes and Disorders, three 1 hour lectures regarding swallowing disorders (1 hr) and communication disorders associated with head and neck cancer (1 hr), cleft palate (1 hr). Team-taught 2 hour course for undergraduate students. The Department of Speech Pathology and Audiology, The University of Iowa.

3:097, Honors Seminar, Honors project supervision for students in The Department of Speech Pathology and Audiology, The University of Iowa.

Spring Semester

003:237, Cleft Palate 2 hour course for graduate students in Speech-Language Pathology. Offered each spring semester.

003:302 Clinical Practicum Supervision. Approximately 16 weeks/semester, 12 hours/week. Supervise graduate students in Speech Pathology regarding voice, speech, and resonance evaluation.

003:015, Introduction to Speech and Hearing Processes and Disorders, three 1 hour lectures regarding swallowing disorders (1 hr) and communication disorders associated with head and neck cancer (1 hr), cleft palate (1 hr). Team-taught 2 hour course for undergraduate students. The Department of Speech Pathology and Audiology, The University of Iowa.

003:097, Honors Seminar, Honors project supervision for students in The Department of Speech Pathology and Audiology, The University of Iowa.

Summer Semester

003:302 Clinical Practicum. Approximately 8 weeks/year, 16 hours/week. Supervise graduate students in Speech Pathology regarding voice, speech, and resonance evaluation.

003:097, Honors Seminar, Honors project supervision for students in The Department of Speech Pathology and Audiology, The University of Iowa.

003:501, Seminar in Speech-Language Pathology, Seminar offered for graduate students in Speech-Language Pathology. Offered summer sessions on an as needed basis.

3:186 Problems in Speech-Language Pathology. Offered upon request to masters and doctoral students in Speech-Language Pathology, The Department of Speech Pathology and Audiology, The University of Iowa.

B. Students Supervised

Theresa Brobeck, Ph.D., Supervised Dissertation, Completed 1994

Mary Rokus, Honors Thesis, 1994-95

Bernard Micelli, Ph.D., Academic Supervisor, 1997

Brenda Sitzman, MA Thesis, 1997-98

Beth Leutjen, Honors Thesis, 1997-98

Jill Clowes, Honors Thesis, 1998-99

Ann Chang, Ph.D., Academic Supervisor, Dissertation Advisor, Completed, 2000

Holly Cavendar, M.S., Academic supervisor, Completed, 2000

Janna Hanson, supervised Honors Thesis, 2000-01

Sarah Melton, supervised Honor Thesis, 2001-02

Nicole Rogus, supervised MA thesis, 2002-03

Abby Childs Hemmerich, supervised Ph.D. candidate, 2006-present

C. Other Contributions to Institutional Programs (teaching committees, grand rounds, journal clubs, institutional conferences, counseling, national education related presentations, formal study to improve teaching abilities, current research concerning teaching, local and regional CME talks)

Conferences, grand rounds, national education related presentations, local and regional CME talks.

Teaching Committees

1986-87 Directed Research. Sara Anastaplo "Synchronized videostroboscopic and electroglottographic examination of glottal opening." Pritzker School of Medicine, The University of Chicago. (see presentation/publication lists).

1988 Directed Research. Elizabeth Chung "Synchronized videostroboscopic and electroglottographic examination of patients with unilateral vocal fold paralysis." NIH Summer Research Award, Pritzker School of Medicine, The University of Chicago.

1989 Directed Research. Leonard Covello "Videoendoscopy/Photodetector Response Characteristics." Pritzker School of Medicine, The University of Chicago. Currently completing residency in Otolaryngology-Head and Neck Surgery, Washington University, St. Louis. (see presentation/publication lists).

1994 Masters Thesis Committee for Colleen Lavelle in The Department of Speech Pathology and Audiology, The University of Iowa. 10 hours/year.

1994 Ph.D. Advisor, Bernard Miceli. Mr. Miceli withdrew from the program in 1996. (80 hours/year)

1995 Co-Chair with Erich Luschei, Dissertation Committee for Theresa Brobeck in The Department of Speech Pathology and Audiology, The University of Iowa. Brobeck graduated in 1996. 80 hours/year.

1995 Undergraduate Honors Thesis Faculty Mentor for Mary Rokus, *Therapeutic Precautions in Patients with Swallowing Disorders*, Completed May, 1995, The University of Iowa. 50- hours/year.

1995 Dissertation Committee for Kenneth Tom in The Department of Speech Pathology and Audiology, The University of Iowa. 10 hours/year.

1995 Comprehensive Examination Committee for Eileen Finnegan, Department of Speech Pathology and Audiology. 3 hrs/year

1995 Comprehensive Examination Committee for Phyllis Palmer, Department of Speech Pathology and Audiology. 3 hrs/year

1995-98 Dissertation Committee for Roger Chan in The Department of Speech Pathology and Audiology, The University of Iowa.

1996 Masters Thesis Committee for Starr Cookman in The Department of Speech Pathology and Audiology, The University of Iowa. 10 hours/year.

1996-2000 Chair of Dissertation Committee for Ann Chang in The Department of Speech Pathology and Audiology, The University of Iowa. Graduated, May 2000.

1998 MA Comprehensive Examination Committees for Amy Decou, Kerry Callahan, Mellisa Taylor.

1998 MA Thesis, Brenda Sitzman, Cleft Palate Speech.

1998 Undergraduate Honors Thesis Faculty Mentor for Beth Leutjen, Cleft Palate Physiology, Completed May, 1998, The University of Iowa. 50- hours/year.

1999 Undergraduate Honors Thesis Faculty Mentor for Jill Clowes, Comparison of results of medialization thyroplasty in patients with unilateral vocal fold paralysis. Completed May, 1999, The University of Iowa. 50- hours/year.

1998 Masters Thesis Committee for Douglas Montequin in The Department of Speech Pathology and Audiology, The University of Iowa. 10 hours/year.

1998-00 Dissertation Committee for Helen Sharp in The Department of Speech Pathology and Audiology, The University of Iowa.

1999 Masters Thesis Committee for Daniel McCabe in The Department of Speech Pathology and Audiology, The University of Iowa. 10 hours/year.

1999 Masters comprehensive examination committee for Karla Socarras, Pamela Anderson, and Nicole Cain

1999-present Dissertation Committee for Dana Collins in The Department of Speech Pathology and Audiology, The University of Iowa.

1998-2000 Academic Advisor, Masters Degree Studies for Holly Cavendar in The Department of Speech Pathology and Audiology, The University of Iowa. 80 hours/year.

2000-2001 Undergraduate Honors Thesis Faculty Mentor for Janna Hansen, *Nasality Ratings and Nasalance Measurements as Outcome Indices For Palatal Lift Management*. Completed May, 2001, The University of Iowa. 50- hours/year.

2001 Faculty mentor for Rachel Dozark ILEND project for the Center for disabilities and Development, *Comparing clinicians and caregiver ratings of speech intelligibility in the cleft lip/palate population*. Completed, December 2001. 20 hours/year.

2001-02 Masters Thesis Committee for Cara Smith. *Resonant Voice Production: Spectral Analysis and Nasendoscopic Measures*, The University of Iowa. Advised regarding procedures and performed endoscopic procedures for 5 subjects. 10 hours/year.

2001-present Dissertation Committee for Deonne Malick in The Department of Speech Pathology and Audiology, The University of Iowa. 1 hour/year.

2001-02 Undergraduate Honors Thesis Faculty Mentor for Sarah Melton, The University of Iowa. 50 hours/year.

2002-03 Chair, Masters Thesis Committee for Nicole Rogus, *Subjective versus Objective Determinations of Swallow Response Time*, University of Iowa, 50 hours/year.

2001-03 Dissertation Committee for Douglas Montequin in The Department of Speech Pathology and Audiology, The University of Iowa. 6 hours/year.

2003-2006 Dissertation Committee for Deonne Malick in The Department of Speech Pathology and Audiology, The University of Iowa. 6 hours/year.

2002-present Dissertation Committee for Scott Dailey in The Department of Speech Pathology and Audiology, The University of Iowa. 6 hours/year.

2003-Present Dissertation Committee for for Sanyukta Jaiswal, Depart of Speech Pathology and Audiology. 6 hrs/year

2003-Present Dissertation Committee for Karen Kochis-Jennings, Depart of Speech Pathology and Audiology. 3 hrs/year.

Course Materials

1994 Videotape. Karnell, M.P. Techniques for Visualizing the Larynx and Velopharynx During Speech. InfoLink Video Bulletin, (P.O. Box 852, Layton, UT, 84041).

2000 Videotape. Karnell, M.P. Endoscopic assessment of voice, resonance, and swallowing disorders: Is seeing believing? Reliance Training Networks for The American Speech-Language-Hearing Association.

Web-based Teaching Activities

Listserve administrator for SID3VOICE, a listserv for voice professionals sponsored by the University of Iowa in cooperation with the American Speech-Language-Hearing Association. Web access at:

http://list.medicine.uiowa.edu/scripts/lyris.pl?enter=sid3voice&text_mode=0&lang=english

Listserve administrator for CLEFTSERVE, a listserve for professionals who manage patients with cleft palate and related disorders, sponsored by the University of Iowa in cooperation with the American Cleft Palate-Craniofacial Association. Web access at: http://list.medicine.uiowa.edu/scripts/lyris.pl?enter=cleftserve&text_mode=0&lang=english

Website administrator for The Videoendoscopy Website (<http://craniofacialcenter.uiowa.edu:8080/speechpath/home.jsp>), an outreach project for the University of Iowa Craniofacial Center Collaboratory, National Institutes of Health Comprehensive Oral Health Research Grant #DE-13076-01.

Classroom Teaching

ACE=Assessing the Classroom Environment (1=strongly disagree, 6 = strongly agree)

1. This course requires an appropriate amount of work for the credit earned.
2. This instructor increased my interest in the course material.
3. This instructor clearly communicated class material.
4. Exams in this course were fair.
5. The syllabus was an accurate guide to course requirements.
6. Overall, this is an excellent course.
7. This instructor is competent in the language of instructions.

| Course # | Year | Semester | N | 1 work | 2 Interest | 3 comm | 4 Exams | 5 Syllabus | 6 Course | 7 Instr |
|----------|------|----------|----|--------|------------|--------|---------|------------|----------|---------|
| 237 | 1998 | fall | 22 | 5.71 | 5.81 | 5.85 | 5.40 | 5.63 | 5.81 | 5.95 |
| 231 | 1999 | Spring | 19 | 5.77 | 5.87 | 5.77 | 5.44 | 5.71 | 5.77 | 5.91 |
| 525 | 1999 | Summer | 9 | 5.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 |
| 237 | 2000 | Fall | 22 | 5.95 | 5.81 | 5.65 | 5.50 | 5.71 | 5.65 | 5.75 |
| 146 | 2000 | Spring | 20 | 5.82 | 5.44 | 5.43 | 5.43 | 5.71 | 5.31 | 5.77 |
| 236 | 2001 | Fall | 23 | 5.86 | 5.89 | 5.78 | 5.68 | 5.86 | 5.82 | 5.89 |
| 231 | 2001 | Spring | 17 | 5.93 | 5.79 | 5.65 | 5.65 | 5.73 | 5.65 | 5.88 |
| 146 | 2001 | Spring | 14 | 5.50 | 4.93 | 5.21 | 5.21 | 5.63 | 5.00 | 5.80 |
| 236 | 2002 | Fall | 8 | 5.50 | 5.50 | 5.00 | 4.50 | 5.50 | 5.00 | 5.70 |
| 237 | 2002 | Fall | 11 | 5.38 | 5.38 | 5.00 | 4.67 | 5.00 | 4.40 | 4.67 |
| 146 | 2002 | Spring | 21 | 5.92 | 5.88 | 5.92 | 5.75 | 5.84 | 5.88 | 5.97 |
| 236 | 2005 | Fall | 14 | 5.79 | 5.57 | 5.43 | 5.21 | 4.93 | 5.72 | 5.96 |
| 186* | 2005 | Summer | 6 | 6.00 | 5.67 | 5.83 | 5.83 | 5.83 | 5.67 | 6.00 |
| 237 | 2006 | Spring | 5 | 5.67 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 |
| 236 | 2006 | Fall | 10 | 5.88 | 5.88 | 5.88 | 5.67 | 5.88 | 5.17 | 6.00 |
| | | MEAN | 15 | 5.71 | 5.69 | 5.63 | 5.46 | 5.66 | 5.52 | 5.82 |

003-236 : SWALLOWING DISORDERS
2 Hr Course Outline, Autumn

Instructor-M. Karnell
Melton
WJSHC Office 125-D
O-HNS office 21268 PFP
Office Hours by appointment
335-8731

Teaching Assistant-Sarah

WJSHC Office
Office Hours to be announced

Course Objective:

To provide the future speech-language pathologist with a strong foundation for assessment and management of individuals with swallowing disorders.

Required Text:

Logemann, J.A. Evaluation and Treatment of Swallowing Disorders, Second Edition, Pro-Ed, Austin, Tx, 1998.

Required Supplemental Reading:

Kahrilas, P.J. 1989 The anatomy and physiology of dysphagia. Chapter in "DYSPHAGIA: DIAGNOSIS AND TREATMENT", David W. Gelfand and Joel E Richter, eds., Igaku-Shoin Ltd, New York.

Other assigned readings (see below) will be made available.

Course web page: <http://www.uiowa.edu/~c003236/>

Additional Unrequired Resources:

Groher, ME, Dysphagia: Diagnosis and Management. Butterworth-Heinemann, Boston, 1992.
Arvedson, JC, Lefton-Greif, MA Pediatric videofluoroscopic swallow studies, A profession manual with caregiver guidelines. Communication Skill Builders, The Psychological Corporation, San Antonio, 1998.
Yorkston, KM, Miller, RM, Strand, EA Management of Speech and Swallowing in Degenerative Diseases. Communication Skill Builders, The Psychological Corporation, San Antonio, 1995.
Swigert, NB The Source for Dysphagia, LinqiSystems, Moline, IL, 2000.

Classes are scheduled 8:30-10:10 a.m., Wednesdays.

Course Outline:

I. Introduction, Normal Anatomy & Physiology

Readings: Logemann, Chapter 1 (p 1-12), Chapter 2 (p 13-52)
Kahrilas: Photocopy available in Suite 125

MEETING

- 1 Introduction, Signs/Symptoms
- 2 Anatomy & Phys. Biomechanics/Bolus Flow
- 3 Neural Control, Developmental Influences

II. Instrumental Studies and Pathophysiology

Readings: Logeman Chap 3 (p 53-70), Chap 4, (p 71-134)

MEETING

- 4 Normal Radiographic Anatomy

- 5 Pathophysiology
- 6 **EXAM 1 (Wednesday 9/22)**

III. Assessment and Intro to Management

Readings: Logeman Chap 5 (p135-190), Chap 6 (p191-204)

- 7 History, Non-Instrumental Examination (adult)
- 8. Non-Instrumental Examination (pediatric), Instrumental Examination (OPMS)
- 9. Instrumental Examination (OPMS) - Other Techniques
- 10 Therapy probes and Swallowing Therapy
- 11. **EXAM 2 (Wednesday, October 27)**

IV. Management of Swallowing Disorders

Readings: Logeman Chap 7 (p 251-280) Oral and Oropharyngeal Cancer
 Logeman Chap 8 (p 281-302) Laryngeal Cancer
 Logeman Chap 9 (p 303-344) Neurogenic Disorders
 Logeman Chap 11-13 (p 345-374) Clinical Practice Issues

- 12 Management of Neurologic Swallowing Disorders
- 13 Management of Structural Swallowing Disorders
- 14 Management of Pediatric Swallowing Disorders
- 15 Documentation, Medical Tx, Multidisciplinary Tx
- 16 Ethics, Efficacy, Models of Delivery
- 17. **Final Exam (Wednesday, December 15)**

Journal Review

Each week an assigned research article will be discussed in class. A brief quiz will be offered about each article prior to the discussion. In the quiz you'll be asked to identify the primary purpose of the assigned article, some pertinent details about methods, and the major findings. Be prepared.

Course Grade

Grades will be based on the mean score from the three paper tests, acceptable performance on assignments, and acceptable completion of practical examinations. The tests may involve a variety of question types including multiple choice, short answer, and brief essay. Tests will not be comprehensive, but some questions may require application of knowledge from previous sections of the course.

Course grades will be assigned based on performance on the tests as follows:

| | |
|--------------|------------------|
| A+ = 98-100% | C+ = 78-79% |
| A = 93-97% | C = 73-77% |
| A- = 90-92% | C- = 70-72% |
| B+ = 88-89% | D+ = 68-69% |
| B = 83-87% | D = 63-67% |
| B- = 80-82% | D- = 60-62% |
| | F = 59% or below |

003:237 Cleft Palate and Related Disorders 2 Hr Course Outline, Spring Semester

Instructor-M. Karnell
 WJSHC Office 125-D
 O-HNS office 21268 PFP

Teaching Assistant-TBA
 WJSHC Office (to be announced)
 Office Hours (to be announced)

Instructor's office Hours by appointment-call Sharon Thomason at 335-8731

Course Objective:

To provide the future speech-language pathologist with a strong foundation for assessment and management of individuals with speech disorders associated with cleft palate and related craniofacial anomalies.

Required Text: Peterson-Falzone, Hardin-Jones, Karnell, **Cleft Palate Speech**, Third Edition, Mosby, St. Louis, 2001. Should be available at the Health Sciences Bookstore across Hawkins Drive opposite WJSHC.

Articles (Available for copying at 125-D): Tomes, L., Kuehn, D., Peterson-Falzone, S. (1996) Behavioral therapy for speakers with velopharyngeal impairment NCVS Status and Progress Report, 9, 159-180.

Web Resources: OMIM, Online Mendelian Inheritance in Man, National Center for Biotechnology Information; <http://www3.ncbi.nlm.nih.gov/Omim/>
University of North Carolina Embryo Images; http://WWW.med.unc.edu/courseware/embryo_images/
Iowa Cleft Palate-Craniofacial Outreach Project:
<http://craniofacialcenter.uiowa.edu:88/speechpath/home.jsp>

Course Outline

- I. Overview, Nature of the Disorder (readings: Chapter 1, p 1-16)
- II. Classification, Embryology, Etiology (readings: Chapter 1, p 16-27)
- III. Multi-anomaly Cleft Disorders (readings: Chapter 2)
- IV. Anatomy & Physiology of the Velopharyngeal System (Chapter 3)

(EXAM #1, September 21)

- V. Physical Management of Cleft Palate (Chapters 4, 5)
- VI. Speech & Hearing Problems associated with Cleft Palate (Chapters 6, 7)
- VII. Non-Cleft Velopharyngeal Problems (Chapter 8)

(Exam #2, October 26)

- VII. Assessment of Speech-Language Problems (Chapters 9, 10)
- VIII. Implications of VP Function (Chapter 11)
- IX. Treatment of Speech, Language Problems (Chapters 12, 13)
- X. Psychosocial and Educational

(Exam #2, December 14)

Clinic Observations & Reports

At least two hours of on-site observation experiences will be required (you may arrange more if you wish). One experience must involve an observation of an assessment of a patient (speech/language evaluation,

videoendoscopy, nasometry, or videofluoroscopy) in the Cleft Palate Clinic at the Department of Otolaryngology-Head and Neck Surgery. The other experience must involve observation of a staffing following a Cleft Palate Clinic at the Department of Otolaryngology-Head and Neck Surgery. WE WILL TRY TO LIMIT THE NUMBER OF STUDENTS OBSERVING EACH CLINIC. THERE IS NO LIMIT TO THE NUMBER STUDENTS WHO MAY OBSERVE A GIVEN STAFFING. A signup sheet will be provided.

Following each observation experience, write a brief observation report (maximum 3 pages double spaced) describing the clinical assessment or the staffing you observed. Reports will be not be graded; but they will be considered either acceptable or unacceptable based on the information in the report. The assessment observation report must include the name and age of the patient observed, the date of the observation, the presenting problem including original disorder, and the nature of the assessment. Provide whatever information you can about past surgical and therapy history and the outcome of the assessment. Consult the chart and the evaluating clinician if possible. The report describing the staffing must include the name and age of the patient, date of the staffing, presenting problem, and the reason the patient was discussed at the staffing. Usually, patients are discussed at staffing to determine what treatment should be planned. If you can, also provide a description of any decisions or recommendations arrived at during the staffing. IT MAY NOT BE POSSIBLE TO OBSERVE AN ASSESSMENT AND STAFFING INVOLVING THE SAME PATIENT.

Cleft clinics begin at 8:00 and run until approximately 12:00 noon most Mondays. Staffings occur after Monday clinics and from 1:00-2:00 p.m. The cleft clinic schedule for Fall Semester, 2003 is as follows.

| | |
|---------|--------|
| Aug 30 | Oct 18 |
| Sept 13 | Oct 25 |
| Sept 20 | Nov 1 |
| Sept 27 | Nov 15 |
| Oct 4 | Nov 29 |

Nasometer Project

The nasometer is an acoustic analysis system designed to estimate the percentage of acoustic energy emitted from the nasal area relative to the total nasal + oral areas during speech production. You will be provided with detailed instructions for using a nasometer system at the Department of Otolaryngology Head and Neck Surgery to test your own speech while producing normal speech, hypernasal speech, and denasal speech. A two page report describing your findings, with graphs demonstrating your findings, will be due by the end of the semester. Reports will be not be graded; but they will be considered either acceptable or unacceptable based on the information in the report.

Research Assignment (5%)

Write a 10 page paper (references not included) about a research issue that exists within the area of speech or swallowing associated with patients with cleft palate/craniofacial disorders or velopharyngeal insufficiency (VPI). Find 5 research articles (minimum) dealing with your selected issue/question/topic. Briefly describe the relevance of the topic, provide a brief summary of the selected articles including purpose, methods, findings, and major findings. Devote at least 2-3 pages of your paper to a discussion of future research needs and how that research should be conducted in order to further what is known about your topic. Suggested topics include measurement of speech and resonance, feeding and swallowing issues, early speech production, language development, timing of palatoplasty, efficacy of secondary surgery, speech and language of syndromic populations, hearing impairment, speech therapy. Please submit your topic by class time on September 21. You are encouraged to discuss your ideas and early drafts of you paper with the TA or Dr. Karnell anytime during the sememster. Final papers will be due no later than class time on December 7.

Optional Extra Credit Project (+3%)

Cleft palates create stressful situations for families. It is important that we as professionals are able to take their perspective. Use Babyface: A Story of Heart and Bones by Jeanne McDermott (ISBN: 0-14-200033-7) to help you take on a client's perspective of what having cleft palate means. After reading the book write two paragraphs for each chapter in the book. The first paragraph should contain what you believe is the clearest point that the author makes; be specific. The second paragraph should contain how you would use the information presented in the first paragraph to be a better clinician; be specific.

Your paper should be 7-10 pages long, double-spaced. Make sure that you make your points clearly so that someone who has not read the book will understand your meaning. If you have taken Foundations of Clinical Practice I or Intro to Stuttering, you can use those papers as a guide for this one. If you have questions, your TA has a model that you may use as a guide.

This paper will be worth 3 extra points that will be added to your average point total computed from the three tests. It is due no later than December 7.

Course Grade

Grades will be based on the mean score from the three paper tests (95%) acceptable completion of the two observations and reports, and completion of the research assignment (5%). Completion of the optional project will result in additional credit which will serve to augment performance on the tests and/or research assignment. Each test will be worth 100 points. The paper tests may involve a variety of question types including multiple choice, short answer, and brief essay. Tests will not be comprehensive, but some questions may require application of knowledge from previous sections of the course. Course grades will be assigned based on performance on the tests as follows:

A+ = 98-100%
 A = 93-97%
 A- = 90-92%
 B+ = 88-89%
 B = 83-87%
 B- = 80-82%

C+ = 78-79%
 C = 73-77%
 C- = 70-72%
 D+ = 68-69%
 D = 63-67%
 D- = 60-62%
 F = 59% or below

III. SCHOLARSHIP

A. Publications (level of involvement: *= major contribution, **= secondary contribution, ***= contribution equal to primary author, **** = minor contribution)

Peer Reviewed Articles

1. *Karnell, M.P. and Willis, C.R.: The effect of vowel context on consonantal intraoral air pressure. *Folia Phoniatr.* 34:1-8, 1982.
2. *Karnell, M.P. and Willis C.R.: The reliability of the Kay Agnellograph Pressure Translator in the study of consonantal intraoral air pressure. *Folia Phoniatr.* 34:53-56, 1982.
3. **Ibuki, K., Morris, H.L., Miyazaki, T., Matsuya, T. and Karnell, M.P.: Reliability and validity of nasopharyngeal fiberoptic (NPF) examination: A simultaneous NPF and lateral cinefluoroscopic (Cine) study. *J. Japan Cleft Palate Assoc.*, 7:29-47, 1982.
4. **Ibuki, K., Karnell, M.P. and Morris, H.L.: The nasopharyngeal fiberscope for assessing velopharyngeal function: Reliability and validity of analysis by measurement. *Cleft Palate J.*, 20:97-104, 1983.
5. *Karnell, M.P., Ibuki, K., and Morris, .L.: The nasopharyngeal fiberscope for assessing velopharyngeal function: Reliability and validity of analysis by judgment. *Cleft Palate J.*, 20:199-208, 1983.
6. **Zimmermann, G.N., Karnell, M.P. and Rettaliata, P.: Articulatory coordination and the clinical profile of two cleft palate speakers. *Journal of Phonetics.*, 12:297-306, 1984.
7. *Karnell, M.P., Folkins, J.W., and Morris, H.L.: Relationships between perceived and kinematic aspects of speech production in cleft palate speakers. *Journal of Speech and Hearing Research*, 28, 63-72, 1985.
8. *Karnell, M.P. and Morris, H.L.: Multiview videoendoscopic evaluation of velopharyngeal physiology in fifteen normal speakers. *Annals of Otology, Rhinology, and Laryngology.* 94, 361-365, 1985.
9. *Karnell, M.P., Van Demark, D.R.: Longitudinal speech performance in patients with cleft palate: Comparisons based on secondary management. *Cleft Palate Journal*, 23, 278-288, 1986.
10. *Karnell, M.P., Rosenstein, H, Fine, L.: Nasal videoendoscopy in prosthetic management of velopharyngeal dysfunction. *Journal of Prosthetic Dentistry*, 4, 479-484, 1987.
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40. **Smith C., Finnegan E., Karnell M.P. Resonant Voice: Spectral and Nasendoscopic Analysis. *Journal of Voice*, 19, 607-22, 2005.
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Books

****Classification Manual for Voice Disorders-1**, Contributing authors: Andrews M, Bless D, Boone D, Casper J, Glaze L, Karnell M, Ludlow C, Stemple J, Barkmeier-Kraemer J, Duffy J, Leonard R, Shrivastav R, Theibault S. Editors: K. Verdolini, CA Rosen, RC Branski. Lawrence Erlbaum Associates, London, 2006.

***Textbook** *The Clinician's Guide to Treating Cleft Palate Speech*. Peterson-Falzone, S.J., Cardamone, J.E. Karnell, M.P., Hardin-Jones, M.A., Mosby-Elsevier, 2006.

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Chapters

1. **Panje, W.R., Karnell, M.P.: Postlaryngectomy aphonia. Chapter in Current Therapy in Otolaryngology-Head and Neck Surgery, George A. Gates, Editor, B.C. Decker, Inc., Philadelphia, 347-353, 1987.
2. *Karnell, M.P., Seaver, E.J.: Measurement Problems in Estimating Velopharyngeal Function. Chapter in Multidisciplinary Management of Cleft Lip and Palate. Janusz Bardach, M.D., Hughlett L. Morris, Ph.D. Editors, W.B. Saunders Co., Philadelphia, 776-786, 1990.
3. *Karnell, M.P. Fundamental frequency and perturbation measurement. Chapter in The Use of Instrumentation in the Evaluation and Treatment of Voice, Thomas Watterson, Guest Editor, Seminars in Speech and Language, 12, 88-97, 1991.
4. *Karnell, M.P. Adjunctive measures for optimal phonosurgical results : The role of voice therapy. Chapter in Phonosurgery, Charles.N. Ford and Dianne.M. Bless, Editors, Raven Press, New York, 213-224, 1991.
5. *Karnell, M.P., Langmore, S. Videoendoscopy in Speech and Swallowing for the Speech-Language Pathologist. Chapter in Medical Speech-Language Pathology: A Practitioner's Guide, Alex F. Johnson and Barbara H. Jacobson, Editors, Thieme, New York, 563-584, 1997
6. **Corey, J.P., Gungor, A., Karnell, M.P. Allergy for the Laryngologist. In **Allergy Management for the Otolaryngologist**, J. David Osguthorpe and M. Jennifer Derebery, Editors, Otol Clin North Am, 31, 189-205, February, 1998.
7. **Hoffman, H.T., Overholt, E, Karnell, M., McCulloch, T.M. Granuloma contact ulcers and other posterior lesions. Chapter in The Larynx, Robert Ossoff, Stanley Shapshay, Gayle Woodson, James L Netterville, Editors. 2003.
8. *Karnell, M.P. Videoendoscopy in Voice. Chapter in Medical Speech-Language Pathology: A Practitioner's Guide, 2nd Edition, Alex F. Johnson and Barbara H. Jacobson, Editors, Thieme, New York, In Press.

Abstracts (See Conference Presentations)

Invited Publications

1. Karnell, M.P.: The nasopharyngeal fiberscope. Letter to the editor, Cleft Palate J., 20:260-261, 1983.
2. Karnell, M.P. Objective assessment of hypernasal speech: A necessary prologue to treatment. Article in Clinical Comment (a publication of the University of Chicago Medical Center, 7:3-5, 1992.
3. Karnell, M.P. Adductor and Abductor spasmodic dysphonia: Related until proven otherwise. Invited commentary, American Journal of Speech-Language Pathology: A Journal of Clinical Practice, 1, 17-18, 1992.

4. Karnell, M.P., Finnegan, E.M. Tools for voice measurement. Invited article in *Current Opinion in Otolaryngology-Head and Neck Surgery*, 2, 240-246, 1994.
5. Hoffman, H.T., Karnell, M.P. Hoarseness and Laryngitis. Invited article in *Conn's Current Therapy*, W.B. Saunders Company, P 28-34, 1996.
6. Karnell, M.P., Chang, A., Smithe, A., Hoffman, H. Impact of Signal Type on Validity of Voice Perturbation Measures. *NCVS Status Progress Reports*, 11, 91-94, 1997.
7. Karnell, M.P. Videoendoscopic evaluation of swallowing. *Phonoscope*, 1, 209-216, 1998.

B. Areas of Research Interest and Current Projects

Research Interest: Assessment and Management of Anatomic-Physiologic Based Disorders of Speech and Swallowing

Current projects:

Voice & Swallowing Disorders after Cervical Spine Fusion

Brain Morphology and Speech in Children with Cleft Palate

Agreement between Perceptual Instrumental Methods of Voice Assessment

C. Published reviews of scholarship - None

D. Grants Received

Federal

Medialization vs Reinvention for Vocal Cord Paralysis. \$742,936. (PHS Funded – grant number R101DC4681, Randal C. Paniello, M.D., P.I., Michael Karnell, University of Iowa PI). 4/1/02-3/31/07. \$15,000 for speech and voice analysis equipment and \$2275 per patient enrolled at the University of Iowa.

Comprehensive Oral Health Research Center of Discovery. PHS p60 de13076-01, 7,962,905 (Jeff Murray, P.I., Karnell 15% effort as investigator) 8-1-99 to 7-31-03

Registry of Craniofacial Treatment Outcomes 1/1/98-12/31/02,366,518. PHS 1 R01-DE12514-01 (Betty Jane Philips P.I., Karnell volunteer member of Advisory Board.) \$5000/year for part-time student employee.

Cleft Palate and Speech: Imaging, Management, Behavior. Grant submitted to the National Institutes of Dental Research, Dave Kuehn P.I., Karnell 15% effort as Co-P.I. \$5,499,356 requested. Approved, not funded, 1998.

Velopharyngeal Form and Function, 9-1-95 to 8-30-00, \$4,438,637. PHS 1 R01DC03051-01 (Ingo Titze P.I., Karnell 5% effort as investigator)

CPAP Therapy for Hypernasality in Cleft Palate Patients. \$75,125. 7-1-90 to 6-30-93 PHS 1 R01DE10436-01 (David Kuehn P.I., Karnell 20% effort)

Cancer Control Science Program in Head and Neck Cancer Rehabilitation. PHS PO1 CA 40007. 7-1-86 to 6-30-89 at the University of Chicago for the following projects:

| | |
|--|-----------------|
| *The effects of surgical reconstruction on speech and swallowing, William R. Panje, Principle Investigator, 10% time for Karnell, | <u>\$13,310</u> |
| *Comparison of two methods of rehabilitation for swallowing disorders, Michael P. Karnell, Principle Investigator, 10% time for Karnell, | <u>\$24,720</u> |
| *Functional effects of treatment for T ₁ glottic carcinoma, Michael P. Karnell, Principle Investigator, 10% time for Karnell, | <u>\$2872</u> |

1990 Synchronized Stroboscopic and Electrolottographic Assessment of Laryngeal Pathology. PHS R29NS27202-01, R01 DC. 00606-01A2. Submitted, 1987 at the University of Chicago, Revised, 1988, 1989. Approved, not funded.

Private

Videoendoscopy in Children. Grant from The Children's Miracle Network, 1996-97, Awarded \$7,500 for endoscopic equipment.

Videoendoscopy in Children. Grant from The Children's Miracle Network, 2001, Awarded \$500 for video equipment.

Videoendoscopy in Children. Grant from The Children's Miracle Network, 2001, Awarded \$7,500, for pilot stimulability research project.

E. Invited Lectures, Conference Presentations, Visiting Professorships

Invited lectures

1. Velopharyngeal Assessment: Techniques and Instrumentation. Presentation for the State-of-the-Art Conference: Multidisciplinary Management of the Unilateral Cleft Lip and Palate. Co-sponsored by the University of Iowa and the National Institute of Dental Research, October 14-17, 1987.
2. Clinical and Scientific Applications of Videoendoscopy for Evaluation of Speech Physiology. Presentation for the Faculty Colloquium On Communicative Phenomena, March 9, 1988, The University of Chicago.
3. Physiology of the Velopharyngeal Mechanism. Presentation before the Pre-Conference Symposium, Velopharyngeal Incompetence: Prevention, Evaluation, Treatment. Sponsored by the American Cleft Palate Association, April 24-25, Williamsburg, Va, 1988.
4. The Panje Approach to Tracheoesophageal Voice Restoration. Presentation before the International Congress for Tracheoesophageal Voice Restoration. September 6-10, 1988, Groningen, The Netherlands.
5. Videoendoscopy. Presentation before the Annual Meeting of the Illinois Association of Craniofacial Teams, October 6, 1989, Chicago, Illinois.

6. Oropharyngeal motility study: Why, how, when. Presentation at the conference on Advances in Otolaryngology-Head and Neck Surgery, March 19-23, 1990, Vail, Colorado.
7. Videostroboscopy for the objective assessment of vocal fold vibration. Presentation at the North Chicago VA Hospital, September 11, 1990, North Chicago, IL.
8. Adjunctive measures/Role of voice therapy. Presentation at the symposium on Phonosurgery, September 21-22, 1990, Madison, WI.
9. Diagnosis and management of aspiration and other swallowing problems. Panel discussion at the conference on Advances in Otolaryngology-Head and Neck Surgery, March 10-16, 1991, Vail, Colorado.
10. Voice therapy as an adjunctive measure to phonosurgery. Presentation at the conference on Advances in Otolaryngology-Head and Neck Surgery, March 10-16, 1991, Vail, Colorado.
11. Videostroboscopic evaluation of vocal fold vibration as it pertains to phonosurgery. Presentation at the conference on Advances in Otolaryngology-Head and Neck Surgery, March 10-16, 1991, Vail, Colorado.
12. Vocal tract imaging. Presentation/Demonstration presented for the Chautauqua short course "The anatomy and physiology of human communication and its disorders." Course director, Howard D. Schwartz, Northern Illinois University, May 20-22, 1991.
13. Marginal Velopharyngeal Insufficiency. Presentation at the 4th Annual Cleft Lip and Palate Symposium, Scottish Rite Children's Medical Center, Atlanta, GA, September, 1991.
14. Indirect Assessment of Velopharyngeal Insufficiency. Presentation at the 4th Annual Cleft Lip and Palate Symposium, Scottish Rite Children's Medical Center, Atlanta, GA, September, 1991.
15. Videoendoscopic evaluation of velopharyngeal function. Mary Ann Witzel, co-presenter. Workshop presented at the 4th Annual Cleft Lip and Palate Symposium, Scottish Rite Children's Medical Center, Atlanta, GA, September, 1991.
16. Nasopharyngoscopy and videostroboscopy. Discussion forum presented at the Annual Meeting of the Illinois Speech-Language-Hearing Association, Feb. 27-Mar. 1, 1992.
17. Predicting voice recovery in true vocal fold paralysis from early physiologic measures. Platform presentation at the Fifth Annual Pacific Voice Conference, Neurogenic and Psychogenic Dysphonias, San Francisco, October 9-11, 1992.
18. Evaluation and management of voice disorders. Workshop presented at the DuPage County Special Education Institute, February 26, 1993.
19. Clinical update on voice/resonance management: Videoendoscopy. Workshop presented for the Delaware Speech-Language and Hearing Association, Wilmington, March 26, 1993.

20. Assessment and treatment of swallowing disorders. Presentation before The Special Populations Institute, The Illinois Department of Mental Health and Developmental Disabilities, Elgin, IL, April 14, 1993.
21. Speech and resonance problems of the cleft palate child: Diagnosis and remediation. Presentation at the annual meeting of the New York Speech and Hearing Association, Rochester, NY, May 2, 1993.
22. Clinical forum on voice disorders. Presentation at the annual meeting of the New York Speech and Hearing Association, Rochester, NY, May 2, 1993.
23. Laryngeal behavior in velopharyngeal incompetence. Presentation at the 7th International Congress on Cleft Palate and Related Cranio-Facial Anomalies, October 31-November 5, 1993.
24. Videoendoscopic evaluation of velopharyngeal function for speech and language production. Teleconference sponsored by the American Speech-Language Hearing Association entitled, Risk Management Issues Related to Expanding Scope of Practice, M.P. Karnell, P.C. Ohliger, and B. Sonies, B. Faculty, May 13, 1994.
25. Evaluation and management of functional resonance disorders. Presentation at "Voice Therapy in the Desert", conference sponsored by ASHA Special Interest Division for Voice and Voice Disorders, Tucson, January 27-28, 1995.
26. Videoendoscopy: From Velopharynx to Larynx. Presentation at the Annual Meeting of the Illinois Speech-Language-Hearing Association, Feb. 24-26, 1995.
27. Videoendoscopy: From Velopharynx to Larynx. Presentation at the Annual Meeting of the Pennsylvania Speech-Language-Hearing Association, March 30-April 1, 1995.
28. Videoendoscopy: From Velopharynx to Larynx. Guest Faculty. Presented one and one half day workshop presented at the Annual Symposium of the Chicago Institute of Neurosurgery and Neuroresearch, October 20-21, 1995.
29. Laryngeal Video Endostroboscopy Workshop. Invited Guest Faculty. Presented multiple presentations and demonstrations during this one and one half day workshop regarding the use of video endostroboscopy for assessment and treatment of voice disorders in adults and children. Vanderbilt University Voice Center, October 27-28, 1995.
30. Improved Glottal Closure After Fat Injection for Treatment of Glottal Incompetence, with Harry Hoffman, M.D. and Scott Graham, M.D. The Pacific Voice Conference. October 20, 1995.
31. Update on Clinical Utility of Voice assessment. Clinical Laryngology Update, January 12, 1996, Iowa City, IA.
32. Treatment of Muscle Tension Dysphonia. Chaired panel discussion with Peak Woo, M.D., Steven Gray, M.D., Marshall Smith, M.D., Nelson Roy, M.A. Clinical Laryngology Update, January 12, 1996, Iowa City, IA..

33. Laryngeal Function Studies in the Diagnosis of Voice Disorders. Invited presentation for Department of Speech Pathology and Audiology, University of Northern Iowa, March, 1997.
34. Voice therapy for unilateral laryngeal paralysis. Iowa Laryngology Conference, June, 1997.
35. Assessment and Management of Speech Disorders Associated with Cleft palate. With John Canady, M.D. Two hour presentations via the Iowa Communications Network to Area Education Associations in Iowa. March 10, 2000.
36. Assessment and Management of Speech Disorders Associated with Cleft palate. With John Canady, M.D. One hour presentations via the Iowa Communications Network to Area Education Associations in Iowa. April 3, 2000.
37. Cleft Palate Update: Surgery and Speech Pathology, John Canady co-presenter. Short course presented at the Annual Meeting of the Iowa Speech-Language Hearing Association, Des Moines, October, 1998.
38. Diagnosis and management of voice disorders. Presented at the Iowa Speech-Language Hearing Association, Des Moines, IA, October, 1999.
39. Endoscopic evaluation of voice, swallowing and velopharyngeal insufficiency. Presented at the Annual Meeting of the Illinois Speech-Language-Hearing Association, Chicago, IL, February, 2000.
40. Evaluation and Management of Velopharyngeal Insufficiency. Short course presented at the Quad Cities Speech and Hearing Association, Davenport, February, 1999.
41. Identification and management of speech disorders. Cleft Lip and Palate Update, Statewide telemedicine presentation via the Iowa Communications Network, Sponsored by the Cleft Lip and Palate Service, Department of Otolaryngology-Head and Neck Surgery, April, 1999.
42. Improving Clinic to Clinician Communication via the Internet. With John Canady, M.D. Presentation to speech pathology supervisors of the Iowa Area Education Associations, May 4, 2000, Spencer, IA.
43. Interdisciplinary Management of Voice and Resonance Disorders. Invited short course for the Iowa Speech-Language Hearing Association, Des Moines, October, 1997.
44. Organ function following conservation laryngeal surgery. Panel presentation at the Combined Otolaryngological Southwest Meeting (COSM), Palm Desert, April, 1999.
45. Videoendoscopic assessment of voice, swallowing, and resonance disorders: Is seeing believing? Live national video conference sponsored by the American Speech-Language-Hearing Association, Pittsburgh, PA, March 16, 2000.
46. Karnell, M.P. Nasometry. Panel presentation for the International Congress on Cleft Palate and Related Craniofacial Anomalies, June, 28, 2001, Gothenberg, Sweden.

47. Karnell, M.P. Common Physiologic Observations of Pharyngeal Dysphagia. Poster presentation at the Annual meeting of the Dysphagia Research Society, October 11-13, 2001, Albuquerque, NM.
48. Web Based Clinical Outreach Program To Improve Speech Therapy for Children with Cleft Palate: A Pilot Study. Proseminar presentation before the faculty and students of the Department of Speech Pathology and Audiology, University of Iowa, February 2, 2001
49. Speech, Swallowing, and the Velopharyngeal Mechanism. One hour lecture for College of Dentistry Residents., March 1, 2001
50. A Pressure-Sensitive Theory of Marginal Velopharyngeal Inadequacy. Invited keynote presentation for the 18th Annual South Carolina Symposium on cleft Palate and Other Craniofacial Anomalies, University of South Carolina, Columbia, SC, March 23, 2001
51. Web Based Clinical Outreach Program To Improve Speech Therapy for Children with Cleft Palate: A Pilot Study. Invited presentation for the 18th Annual South Carolina Symposium on cleft Palate and Other Craniofacial Anomalies, University of South Carolina, Columbia, SC, March 23, 2001
52. Better Speech & Hearing Month. Invited three-five minute radio interviews broadcast regionally in celebration of May as Better Speech and Hearing Month, 2001
53. A Web Based Approach to Management of Hypernasal Speech. Invited presentation at the Annual Meeting of the Iowa Speech-Language-Hearing Association, October 26, 2001.
54. Voice and Resonance Disorders in Children. Invited presentation for Mississippi Bend Area Education Association, Bettendorf, IA, April 5, 2002.
55. Advanced Stroboscopy Workshop. Invited guest lecturer, Kay Elemetrics Corporation, Lincoln Park, NJ, December 5-6, 2003.
56. Medical and Behavioral Based Voice Disorders. Co-presenters: Henry Hoffman, M.D., and Eileen Finnegan, Ph.D. Presentation for the Oklahoma Academy of Medical Speech-Language Pathology, April 17, 2004.
57. Velopharyngeal Inadequacy vs Voice Disorders? Presented for Grant Wood Area Education Association, January 20, 2006.
58. Speech Therapy for Speech Disorders related to Velopharyngeal Insufficiency. Presented for Grant Wood Area Education Association, June 8, 2006.
59. VPI: What It Is and What To Do About It. Keynote Presentation for the University of Wisconsin School of Medicine, Department of Surgery, Cleft and Craniofacial Clinic Cleft Speech Symposium, March 15, 2007.
60. Endoscopic Assessment of VPI in Children. Presented for the University of Wisconsin School of Medicine, Department of Surgery, Cleft and Craniofacial Clinic Cleft Speech Symposium, March 15, 2007.
61. Physical management of VPI. Presented at the Joint ACPA-ASHA Division 5 Post Conference Symposium, April 28, 2007

Peer Reviewed Conference Presentations

1. Willis, C.R., Blocksma, R., and Karnell, M.P.: Agnellographic measurement of intraoral air pressure in normals and hypernasal speakers. Paper presented at the Annual Meeting of the American Cleft Palate Association, San Francisco, 1976. Poster presentation at the Third International Congress on Cleft Palate, Toronto, 1977.
2. Karnell, M.P., and Willis, C.R.: The effect of vowel context on consonantal intraoral air pressure. Poster presentation at the Annual Meeting of the American Speech-Language and Hearing Association, Detroit, 1980.
3. Willis, C.R. and Karnell, M.P.: The reliability of the Kay Agnellograph Pressure Translator in the study of consonantal intraoral air pressure. Poster presentation at the Annual Meeting of the American Speech-Language and Hearing Association, Detroit, 1980.
4. Ibuki, K., Karnell, M.P., Morris, H.L.: A study for assessing the mode of velopharyngeal closure: A technique using nasopharyngeal fiberscope and lateral cinefluorography. Paper presented at the Annual Meeting of the American Speech-Language and Hearing Association, Detroit, 1980.
5. Karnell, M.P., Ibuki, K., Morris, H.L., and Van Demark, D.R.: The nasopharyngeal fiberscope (NPF) for assessing velopharyngeal function: Reliability and validity by judgment. Paper presented at the Annual Meeting of the American Cleft Palate Association, Indianapolis, 1983.
6. Karnell, M.P., Folkins, J.R., Morris, H.L.: Perceived and kinematic aspects of speech production in cleft palate. Paper presented at the Annual Meeting of the American Cleft Palate Association, Seattle, 1984.
7. Karnell, M.P., Linville, R.N., Edwards, B.A.: Variations in velar position over time: A nasal endoscopic study. Paper presented at the Annual Meeting of the American Speech-Language and Hearing Association, San Francisco, 1984.
8. Karnell, M.P., Linville, R.N., Edwards, B.A.: Temporal relationship between variations in velar displacement and intraoral pressure, jaw displacement, and lip displacement. Paper presented at the 5th International Congress on Cleft Palate and related Cranio facial Anomalies, Monte Carlo, 1985.
9. Folkins, J.W., Dalston, R.M., Horii, Y., Karnell, M.P., Moon, J.B.: Research for the practicing Clinician: Instruments for measuring velopharyngeal function. Miniseminar presented at the Annual Meeting of American Speech-Language and Hearing Association, Washington, D.C., 1985.
10. Karnell, M.P.: Videoendoscopy for the evaluation of velopharyngeal function for speech. Videotape presentation at the Annual Meeting of the American Speech-Language and Hearing Association, Washington, D.C., 1985.
11. Karnell, M.P., Van Demark, D.R.: Secondary management in Cleft palate: Speech performance through age 16. Paper presented at the Annual Meeting of the American Speech-Language and Hearing Association, Washington, D.C., 1985.

12. Rosenstein, H.E., Karnell, M.P.: Nasopharyngeal videoendoscopy to evaluate speech bulb prosthesis. Table clinic presentation at the Annual Meeting of the American Prosthodontic Society, Chicago, 1986.
13. Karnell, M.P.: Clinical applications of Speech Science in a Medical Setting. Miniseminar presentation at the Annual Meeting of the Illinois Speech-Language and Hearing Association, Chicago, April 3-5, 1986.
14. Karnell, M.P., Seaver, E.J., Dalston, R.: Simultaneous videoendoscopic and photodetector studies of velopharyngeal movement: Methodology and Preliminary findings. Paper presented at the North American Working Group on Cleft Palate and Craniofacial Anomalies, September 17-19, 1986, and at the Canadian Craniofacial Society Symposium, September 20-22, 1986, Toronto, Ontario.
15. Karnell, M.P., Seaver, E.J., Dalston, R.: A comparison of photodetector and endoscopic evaluations of velopharyngeal function. Paper presented at the Annual Meeting of the American Speech-Language and Hearing Association, Detroit, 1986.
16. Karnell, M.P., Seaver, E.K., Dalston, R.: Videoendoscopic and photodetector evaluation of velopharyngeal activity. Videotape presentation at the Annual Meeting of the American Speech-Language and Hearing Association, Detroit, 1986.
17. Anastaplo, S.A., Karnell, M.P. Synchronized videostroboscopic and electroglottographic analysis of glottal opening. Poster presented at the Annual Meeting of the American Academy of Otolaryngology-Head and Neck Surgery Foundation, Chicago, 1987.
18. Folkins, J.W., Jones, D.L., Karnell, M.P., Kuehn, D.P., Morris, H.L., Netsell, R., Scherer, R.C., Warren, D.W., Morris, H.L. Contemporary issues in velopharyngeal research. Miniseminar presented at the Annual Meeting of the American Speech-Language-Hearing Association, New Orleans, 1987.
19. Karnell, M.P., Scherer, R.C., Bless, D.M., Fischer, L. Variations in laryngeal perturbation measures due to hardware, software, and technique. Paper presented at the Annual Meeting of the American Speech-Language-Hearing Association, New Orleans, 1987.
20. Seaver, E.J., Karnell, M.P. Simultaneous videoendoscopy and photodetection for analysis of velopharyngeal insufficiency. Paper presented at the Annual Meeting of the American Speech-Language-Hearing Association, New Orleans, 1987.
21. Karnell, M.P. Clinical application of synchronized videostroboscopic and electroglottographic laryngeal evaluation. Videotape program presented at the Annual Meeting of the American Speech-Language-Hearing Association, New Orleans, 1987.
22. Karnell, M.P. Synchronized videostroboscopic and electroglottographic laryngeal evaluation. Poster presentation at the Annual Meeting of the American Speech-Language-Hearing Association, New Orleans, 1987.
23. Anastaplo, S., Karnell, M.P. Synchronized videostroboscopy-electroglottography for interpretation of electroglottographic discontinuity.

- Poster presentation at the Annual Meeting of the American Speech-Language-Hearing Association, New Orleans, 1987.
24. Seaver, E.J., Karnell, M.P. Consistency of photodetector/endoscopic assessment of velopharyngeal activity. Poster presentation at the Annual Meeting of the American Cleft Palate Association, Williamsburg, VA, April 26-29, 1988.
 25. Karnell, M.P., McWilliams, B.J., Vallino, L., Linville, R.N. Current perspectives in nasendoscopy: New view of old problems. Study session presented at the Annual Meeting of the American Cleft Palate Association, Williamsburg, VA, April 26-29, 1988.
 26. Karnell, M.P. Synchronized videostroboscopic and electroglottographic examination of glottal opening. The 17th Symposium: Care of the Professional Voice, The Voice Foundation, New York, June 5-10, 1988.
 27. MacCracken, E.L., Karnell, M.P. Globus sensation and cricopharyngeal achalasia. Poster presentation before the Annual Meeting of the American Speech-Language-Hearing Association, Boston, MA, November 18-21, 1988. Abstract appears in ASHA, 30 (October), p 110, 1988.
 28. Karnell, M.P., Sataloff, R.T., Colton, R.H., Bless, D. Advanced application of imaging techniques for clinical assessment of voice. Miniseminar presented at the American Speech-Language-Hearing Association, Boston, MA, November 18-21, 1988. Abstract appears in ASHA, 30 (October), p 162, 1988.
 29. Karnell, M.P. Laryngeal perturbation analysis: Minimum length of analysis window. Paper presented at the American Speech-Language-Hearing Association, Boston, MA, November 18-21, 1988. Abstract appears in ASHA, 30 (October), p 190, 1988.
 30. Seaver, E.J., Karnell, M.P., Dalston, R.M. New approaches to treatment of patients with marginal velopharyngeal inadequacy. Short Course presented at the Annual Meeting of the American Speech-Language-Hearing Association, Boston, 1988. Abstract appears in ASHA, 30, (October), p72, 1988.
 31. Landahl, K., Karnell, M.P. Acoustic invariants in glossectomee speech. Paper presented at the American Speech-Language-Hearing Association, St. Louis, MO, November 17-20, 1989. Abstract appears in ASHA, 31 (October), p 150, 1989.
 32. Karnell, M.P., Scherer, R.C., Fischer, L.B. Use of the Visi-Pitch for measuring pitch perturbation. Paper presented at the American Speech-Language-Hearing Association, St. Louis, MO, November 17-20, 1989. Abstract appears in ASHA, 31 (October), p 180, 1989.
 33. Karnell, M.P. Effects of vocal fold mass changes on glottal closure. Paper presented at the American Speech-Language-Hearing Association, St. Louis, MO, November 17-20, 1989. Abstract appears in ASHA, 31 (October), p 180, 1989.
 34. Golding-Kushner, K., Karnell, M.P., McGrath, C., Marsh, J. Standardization of reporting of nasopharyngoscopy and videofluorography for the evaluation of VPI. Panel presentation at the Annual Meeting of the American Cleft Palate-Craniofacial Association, St. Louis, MO, May 15-18, 1990.

35. Karnell, M.P., Seaver, E.J. A new videoendoscopy/photodetection system. Paper presented at the Annual Meeting of the American Cleft Palate-Craniofacial Association, St. Louis, MO, May 15-18, 1990.
36. Karnell, M.P., Dalston, R., Cutting, C., Pron, G. An orientation to current data base applications for cleft palate/craniofacial teams. Study session presented at the Annual Meeting of the American Cleft Palate-Craniofacial Association, St. Louis, MO, May 15-18, 1990.
37. Covello, L., Karnell, M.P. Videoendoscopy/photodetector response characteristics. Poster presentation at the Annual Meeting of the American Cleft Palate-Craniofacial Association, St. Louis, MO, May 15-18, 1990.
38. Karnell, M.P., Li, L., Panje, W.P. Glottal opening in patients with benign vocal fold tissue changes. Presented at the 19th Annual Symposium: Care of the Professional Voice. The Voice Foundation of America, June 3-8, 1990, Philadelphia.
39. Corey, J.P., Karnell, M.P., Pratt, D. Laryngopathia premenstrualis. Presented at the 19th Annual Symposium: Care of the Professional Voice. The Voice Foundation of America, June 3-8, 1990, Philadelphia.
40. Karnell, M.P., Witzel, M.A., Vallino, L.D. Videoendoscopy : From velopharynx to larynx. Short Course presented at the Annual Meeting of the American Speech-Language-Hearing Association, October 16-19, 1990, Seattle. Abstract appears in ASHA, 31 (October), p 50, 1990.
41. Trost-Cardamone, J.E., D'Antonio, L.L., Dalston, R., Karnell, M.P., Moller, K.T., Moon, J.B., Paynter, E.T., Peterson-Falzone, S.J., Shprintzen, R.J., Witzel, M.A. Difficult diagnoses in craniofacial speech disorders. Miniseminar presented at the Annual Meeting of the American Speech-Language-Hearing Association, October 16-19, 1990, Seattle. Abstract appears in ASHA, 31 (October), p 52, 1990.
42. Panje, W.R., Scher, N., Vokes, E., Karnell, M.P. Immediate reconstruction of the mediastinum and pharyngoesophagus. Paper presented at the Middle Section Meeting of the Triological Society, January 25-27, 1991, Milwaukee, WI.
43. MacCracken, E., Karnell, M.P. Swallowing Function following multispecialty organ preservation treatment. Paper presented at the Annual Meeting of the Illinois Speech-Language-Hearing Association, February 22-24, 1991, Chicago, IL.
44. Karnell, M.P., Pron, G. Standardized registry systems and data base management for cleft palate/craniofacial teams. Short course presented at the Annual Meeting of the American Cleft Palate-Craniofacial Association, March 16-21, Hilton Head, S.C., 1991.
45. Karnell, M.P. Image oriented assessment of velopharyngeal and laryngeal function. Short course presented at the Annual Meeting of the American Speech-Language-Hearing Association, November 21-25, 1991.
46. Brady, A., Karnell, M.P. Cervical auscultation for screening of infant dysphagia. Presented at the Annual Meeting of the American Speech-Language-Hearing Association, November 21-25, 1991.

46. MacCracken, E., Karnell, M.P., Panje, W.R. Swallowing function after multidisciplinary treatment of pharyngeal cancer. Presented at the Annual Meeting of the American Speech-Language-Hearing Association, November 21-25, 1991.
47. Karnell, M.P., Seaver, E.J. Physiologic characteristics of marginal VPI. Platform presentation at the Annual Meeting of the American Cleft Palate-Craniofacial Association, Portland, OR, May 11-16, 1992.
48. Karnell, M.P., Dailey Hall, K., Landahl, K. Comparison of fundamental frequency and perturbation measurements among three analysis systems. Platform presentation at the 21st Annual Symposium: Care of the Professional Voice, The Voice Foundation of America, Philadelphia, PA, June 15-20, 1992.
49. Karnell, M.P., Isdebski, K., Morris, H., Stone, R.E., Waterson, T., Witzell, M.A. Nasal Videoendoscopy: Issues in Training and Ethics. Miniseminar presented at the Annual Meeting of the American Speech-Language-Hearing Association, San Antonio, November 20-23, 1992.
50. Karnell, M.P. Data Base Storage, Retrieval, and Reporting of Videoendoscopic Velopharyngeal Evaluations. Poster presentation at the Annual Meeting of the American Speech-Language-Hearing Association, San Antonio, November 20-23, 1992.
51. Karnell, M.P. Videoendoscopy: From Velopharynx to Larynx. Short course presented at the Annual Meeting of the American Speech-Language-Hearing Association, San Antonio, November 20-23, 1992.
52. Karnell, M.P. MacCracken, E.L. Data Base Storage, Retrieval, and Reporting of Videofluorographic Swallowing Evaluations. Poster presentation at the Annual Meeting of the American Speech-Language-Hearing Association, San Antonio, November 20-23, 1992.
53. Karnell, M.P., Hall, K.D., Landahl, K. Comparison of voice quality ratings and laryngeal perturbations among three speech analysis systems. Poster presentation at the Annual Meeting of the American Speech-Language-Hearing Association, San Antonio, November 20-23, 1992.
54. Karnell, M.P. Data Base Storage, Retrieval, and Reporting of Videostroboscopic Voice Data. Poster presentation at the Annual Meeting of the American Speech-Language-Hearing Association, San Antonio, November 20-23, 1992.
55. MacCracken, E., Karnell, M.P. The swallowing performance status scale: A Dysphagia Severity Rating Tool. Poster presentation at the Annual Meeting of the American Speech-Language-Hearing Association, San Antonio, November 20-23, 1992.
56. Seaver, E.J., Karnell, M.P., Gasparaitis, A., Corey, J. Acoustic rhinometric measurement of velar movement. Platform presentation at the 50th Annual Meeting of the American Cleft Palate-Craniofacial Association, April 20-24, 1993, Pittsburgh.
57. Karnell, M.P. Velopharyngeal insufficiency: Relationships among assessment parameters. Platform presentation at the 50th Annual Meeting of

- the American Cleft Palate-Craniofacial Association, April 20-24, 1993, Pittsburgh.
58. Karnell, M.P. Digital construction of a panoramic view of the velopharynx. Platform presentation at the 50th Annual Meeting of the American Cleft Palate-Craniofacial Association, April 20-24, 1993, Pittsburgh.
 59. Karnell, M.P. Evaluation and treatment of marginal velopharyngeal insufficiency. Presentation at the 7th International Congress on Cleft Palate and Related Cranio-Facial Anomalies, Broadbeach, Australia, October 31-November 5, 1993.
 60. Karnell, M.P. Nasometric discrimination of hypernasality and turbulent nasal airflow. Presentation at the 7th International Congress on Cleft Palate and Related Cranio-Facial Anomalies, Broadbeach, Australia, October 31-November 5, 1993.
 61. Karnell, M.P. Electroglottographic open phase discontinuity: Associations with nodules and polyps. Poster presentation at the Annual Meeting of the American Speech-Language-Hearing Association, , Anaheim, November 19-22, 1993.
 62. Karnell, M.P. Velopharyngeal function measured via nasometry. Poster presentation at the Annual Meeting of the American Speech-Language-Hearing Association, , Anaheim, November 19-22, 1993.
 63. Karnell, M.P. Data base storage, retrieval, and reporting of videofluorographic swallowing data. Miniseminar at the Annual Meeting of the American Speech-Language-Hearing Association, , Anaheim, November 19-22, 1993.
 64. Hicks, D.M., Karnell, M.P., Ramig, L.O. Clinical grand rounds in voice disorders. Miniseminar at the Annual Meeting of the American Speech-Language-Hearing Association, , Anaheim, November 19-22, 1993.
 65. Karnell, M.P. Nasometric Discrimination of Hypernasality and Turbulent Nasal Airflow. Platform presentation at the Annual Meeting of the American Cleft Palate-Craniofacial Association, Toronto, 1994.
 66. Bayerl, M., Hoffman, H.T., Karnell, M.P., Sporkman-Link, A., Graham, S., Verdolini, K. Clinical utility of acoustic and aerodynamic measures in the initial assessment of voice disorders. Platform presentation at the Western Section of The American Laryngological, Rhonological, and Otological Society, September, 1994.
 67. Karnell, M.P. Videoendoscopy: From Velopharynx to Larynx. Short course presented at the Annual Meeting of the American Speech-Language-Hearing Association, New Orleans, November 17-21, 1994.
 68. Karnell, M.P. Nasometric and perceptual discrimination of hypernasality and turbulent nasal airflow. Platform presentation at the Annual Meeting of the American Cleft Palate-Craniofacial Association, Tampa, April 24-29, 1995.
 69. Karnell, M.P., Witzell, M.A., D'Antonio, L., Moon, J. The art and science of cleft palate speech intervention. Presentation before the Annual Meeting of the American Speech-Language-Hearing Association, Orlando, November 1995.

70. Karnell, M.P., Smith, A.E. Agreement between vocal efficiency measures and clinical vocal function ratings. Presentation before the Annual Meeting of the American Speech-Language-Hearing Association, Orlando, November 1995.
71. Karnell, M.P., Micili, B., Van Demark, D.R. Reliability of videofluorographic oropharyngeal motility evaluations. Presentation before the Annual Meeting of the American Speech-Language-Hearing Association, Orlando, November 1995.
72. Leonard, R.J., Karnell, M.P., Izdebski, K. Videoendoscopy and the SLP: Ethical/Legal, Practice, and Training Issues. Short Course presented at the Annual Meeting of the American Speech-Language-Hearing Association. Seattle, November, 1996.
73. Brobeck, T.C., Karnell, M.P., Luschei, E.L. Variations in epiglottic configuration: Relationships to age and swallowing. Poster session presented at the Fifth Annual Dysphagia Research Society Meeting, Aspen Colorado, October, 1996.
74. Karnell, M.P., Chang, A., Smith, A., Hoffman, H. Impact of signal type on validity of perturbation measures. Poster presentation at the Annual Meeting of the American Speech-Language-Hearing Association. Seattle, November, 1996.
75. Karnell, M.P., Hoffman, H., Titze, I.R. Longitudinal vocal performance after gortex thyroplasty: A detailed case study. Poster presented at the Annual Meeting of the American Speech-Language-Hearing Association. Boston, November, 1997.
76. Karnell, M.P., Hardy, J.C., LaVelle, W. Oral/nasal resonance balance in individuals using velopharyngeal prostheses. Poster presented at the Annual Meeting of the American Speech-Language-Hearing Association. Boston, November, 1997.
77. Karnell, M.P. Implementation of the ACPA Clinical Data Base. Annual meeting of the American Cleft Palate-Craniofacial Association, Scottsdale, April, 1999.
78. Karnell, M.P., Schultz, K, Canady, J. Nasometric prediction of mild hypernasal speech. Annual meeting of the American Cleft Palate-Craniofacial Association, Atlanta, April, 2000.
79. Dailey, S., Karnell, M.P., Canady, J. A comparison of pharyngeal flap and z-plasty for velopharyngeal management. Annual meeting of the American Cleft Palate-Craniofacial Association, Atlanta, April, 2000.
80. Karnell, M.P. Nasometry. Panel presentation for the International Congress on Cleft Palate and Related Craniofacial Anomalies, June, 28, 2001, Gothenberg, Sweden.
81. Karnell, M.P. Common physiologic observations of pharyngeal dysphagia. Poster presentation at the Annual Meeting of the Dysphagia Research Society, Albuquerque, October 11-14, 2001.

82. Karnell, M.P., Hanson, J., Hardy, J.C., Lavelle, W.L., Markt, J. Perceived and Nasometric Outcomes for Palatal Lift Management of VPI, Platform presentation at the Annual Meeting of the Society for Ear, Nose, and Throat Advances in Children, San Diego, November 29-December 2, 2001.
83. McCulloch TM, Andrews BT, Hoffman HT, Graham SM, Minnick C, Karnell MP. Long-term follow-up of fat injection for unilateral vocal cord paralysis. Presentation before the Triological Society, 2002.
84. Ruscello, D.M., Riski, J., Kummer, A.W. Assessment of Speech Disorders in Speakers with Velopharyngeal Inadequacy. Presentation before the Annual Meeting of the American Speech-Language-Hearing Association, November 23, 2002.
85. Scott, C., Apel, K., Busacco, D., Gillam, R., Hooper, C., Karnell, M.P., Konkle, D. Academic Town Meeting: Innovations in CSD Classrooms and Clinics. Described interactive web-based outreach project to educate and inform practicing clinicians about speech therapy for patients with hypernasal speech. Presentation before the Annual Meeting of the American Speech-Language-Hearing Association, November 23, 2002.
86. Clark CR, Glaser J, Clifford K, Karnell MP, Stewart J. Voice Analysis Following Anterior Cervical Discectomy and Fusion. The John McCulloch Memorial Denver Spine Institute Winter Conference. Breckenridge, Colorado, March 6-9, 2003.
87. Finnegan E, Smith CGT, Karnell MP Resonant Voice Production: Spectral Analysis and Nasendoscopic Measures. Presented at the Annual Meeting of the Voice Foundation of America, June 5, 2003, Philadelphia.
88. Kummer AW, Karnell MP, Ruscello DM, Grames, LM. Articulation and Resonance Disorders Related to Orofacial Anomalies. Short course presented at the Annual Meeting of the American Speech-Language-Hearing Association, Nov. 13-15, 2003.
89. Hewes AE, Weiss AL, Flamme MP, Karnell MP, Cilek TD SLPs' role in treatment of children with chronic illness. Poster presentation at the Annual Meeting of the American Speech-Language-Hearing Association, Nov. 13-15, 2003.
90. Hicks DM, Milstein CF, Karnell MP Clinical Grand Rounds in Voice Disorders. Presentation at the Annual Meeting of the American Speech-Language-Hearing Association, Nov. 13-15, 2003.
91. Clark CR, Clifford K, Glaser J, Karnell MP, Stewart J. Voice analysis after cervical spine surgery: A preliminary report. Association of Bone and Joint Surgeons, 56th Annual Meeting, Nashville, Tennessee, June 16-20, 2004.
92. Goudy S, Ingraham CR, Canady J, Karnell MP. Velopharyngeal insufficiency in patients with Pierre-Robin Sequence: Surgical intervention and speech outcomes. Presentation at the Annual Meeting of the American Cleft Palate-Craniofacial Association, April 4-9, 2005.
93. Kummer A, Jones D, Karnell MP, Marty-Grames L, Ruscello D. Considerations in the evaluation and treatment of velopharyngeal dysfunction: Case studies and panel discussion. Presentation at the Annual Meeting of the American Cleft Palate-Craniofacial Association, April 4-9, 2005.

94. Karnell MP, Melton S. Comparisons of clinician and patient based documentation of voice disorders. Presented at the Annual Meeting of the Voice Foundation of America, June 5, 2005, Philadelphia.
94. Simmons JR, Dornfeld K, Karnell L, Karnell M, Funk G, Yao M, Wacha J, Zimmerman B. Radiation doses to structures within and adjacent to the larynx are correlated with long-term diet and speech related quality of life. *International Journal of Radiation Oncology*, 63, 2, S132, 2005.
95. Andrews BT, Van Daele DJ, McCulloch TM, Karnell MP, Graham SM, Hoffman HT. Revision thyroplasty: Open vs injection medialization. Presented at the Annual Meeting of the American Academy of Otolaryngology-Head and Neck Surgery Foundation, September, 2006.
96. Karnell MP. Endoscopic assessment of VPI in children: 20 years of experience. Presented at the Annual Meeting of the American Speech-Language-Hearing Association, Miami, FL, November 17, 2006.
97. Karnell MP, Dailey S, Strike D. The ACPA Cleft Palate-Craniofacial Data Base: Ten Years of Experience at the University of Iowa. Seminar presented at the Annual meeting of the American Cleft Palate-Craniofacial Association, Denver, CO, April 22, 2007.
98. Karnell MP, Dailey S. Perceptual and Nasometric Characteristics of Phoneme Specific VPI. Platform presentation at the Annual meeting of the American Cleft Palate-Craniofacial Association, Denver, CO, April 25, 2007.

F. Pending Decisions - None

IV. Service

A. National Offices

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| 1996-1999 | Secretary, American Cleft Palate-Craniofacial Association. |
| 2000-2001 | Vice President Elect, American Cleft Palate-Craniofacial Association. |
| 2001-2002 | Vice President, American Cleft Palate-Craniofacial Association. |
| 2002-2003 | President-Elect, American Cleft Palate-Craniofacial Association. |
| 2004 | President, American Cleft Palate-Craniofacial Association. |
| 2005 | Past-President, American Cleft Palate-Craniofacial Association. |

Committees

Community

1988-93 Meridian Hospice, Chicago, IL.

Departmental

- 1984 Chair. Search Committee for Chief Audiologist. Otolaryngology-Head and Neck Surgery, The University of Chicago.
- 1987 Chair, Search Committee for Chief Audiologist. Otolaryngology-Head and Neck Surgery, The University of Chicago.
- 1989-90 Department of Surgery Space Committee, The University of Chicago
- 1988-89 Advisory Committee on Clinic Restructuring. Otolaryngology-Head and Neck Surgery, The University of Chicago.
- 1987-88 Research Committee. Otolaryngology-Head and Neck Surgery, The University of Chicago.
- 1993-96 Computer Committee, Department of Speech-Language Pathology and Audiology, The University of Iowa.
- 1993-96 Research Committee, Department of Otolaryngology-Head and Neck Surgery, University of Iowa.
- 2004-2006 MA Comprehensive Examination Committee. Department of Speech Pathology & Audiology
- 2003-present MA Curriculum committee. Department of Speech Pathology & Audiology
- University
- 1990-91 Student supervisor for Minority High School Student Research Apprentice Program, The University of Chicago Office of Research Services.
- 1993 Judge for the Lederer-Pierce Resident Research Competition, The Chicago Laryngological Society, 4/12/93.
- 1997-2000 Family Issues Charter Committee, University of Iowa, Jennifer Modestou, Chair.
- 2001-2002 Chair, Knight Commission Committee. Ad hoc committee reporting to the Board in Control of Athletics, The University of Iowa.
- 2001-2004 Board in Control of Athletics, The University of Iowa. Academic Achievement Advisory Subcommittee
- 2004 University Ad Hoc Committee to Study Alcohol Sales at Kinnick Stadium. Appointed by Philip P. Jones, Ph.D., Vice President for Student Services
- 2003-present UIHC Healthcare Professional Subpanel. Kerri Wolfe, M.D., Chair.

State

- 1985-86 Allied Health Education Committee, American Cancer Society.
- 1985-86 Scientific Review Committee, Speech Science Track. Annual Meeting of the Illinois Speech- Language and Hearing Association.

- 1985-87 Public Relations Committee. Illinois Speech, Language and Hearing Association.
- 1986-87 Chair. Scientific Review Committee, Speech Science Track. Annual Meeting of the Illinois Speech-Language and Hearing Association.
- 1987 Chair. Program Committee. Annual Meeting of the Illinois Speech-Language and Hearing Association.
- 2004-present Member, State Advocacy for Reimbursement (STAR) Committee. Committee of the Iowa Speech-Language-Hearing Association.

National

- 1985-87 Constitution and By-Laws Committee. American Cleft Palate Association.
- 1987 Professional Accreditation Committee. American Cleft Palate Association.
- 1988-89 Nominating Committee, American Cleft Palate-Craniofacial Association.
- 1989 Program Committee, American Cleft Palate-Craniofacial Association.
- 1990-93. Exhibits Committee, American Cleft Palate-Craniofacial Association.
- 1991-92 Program Committee, American Cleft Palate-Craniofacial Association.
- 1992-93 Nominating Committee, American Cleft Palate-Craniofacial Association.
- 1992-95 Steering Committee, Special Interest Division #3, Voice and Voice Disorders, American Speech-Language-Hearing Association.
- 1993-96 Management and Finance Committee, American Cleft Palate-Craniofacial Association.
- 1993-98 Chair, Publications Committee, Cleft Palate-Craniofacial Foundation.
- 1994 Grants Project Committee, Cleft Palate-Craniofacial Foundation.
- 1994-95 Chair, Subcommittee for Endoscopic Training Guidelines, American Speech-Language-Hearing Association Special Interest Division #3, Voice and Voice Disorders.
- 1997-2000 Electronic Communications Committee, Cleft Palate-Craniofacial Association.
- 1991-present Clinical Data Base Management Committee, American Cleft Palate-Craniofacial Association, Chair, 1991-1995, member 1995-present.
- 1998-present Advisory Board, Craniofacial Outcome Registry, NIH funded effort to establish outcome measures for management of individuals with cleft palate-craniofacial anomalies.

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| 2000-2001 | Program Committee, Cleft Palate-Craniofacial Association. |
| 2001-02 | Chair, Program Committee, Cleft Palate-Craniofacial Association. |
| 2001-02 | National Heart, Lung, and Blood Institute Clinical Trials Review Committee. National Institutes of Health, Bethesda, Maryland. |
| 2001-2003 | ASHA - Special Interest Division 3: Voice and Voice Disorders Working Group to Update Policy Documents |
| 2002-03 | Executive Board - Vice President - American Cleft Palate-Craniofacial Association. |
| 2003 | Executive Board - President-Elect - American Cleft Palate-Craniofacial Association. |
| 2004 | Executive Board - President - American Cleft Palate-Craniofacial Association. |
| 2004-05 | Reviewer - Fulbright Scholar Specialist Review Committee on Speech Pathology. Council for International Exchange of Scholars, Washington, D.C. |
| 2005 | Executive Board - Past-President - American Cleft Palate-Craniofacial Association. |
| 2000-2006 | Steering Committee, Special Interest Division #5, Speech Science and Orofacial Disorders, American Speech-Language-Hearing Association. |

V. Clinical Assignments Since Last Promotion

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| 1997-present | Director and Speech-Language Pathologist, Consolidated Speech and Swallowing Service, University of Iowa Hospitals and Clinics. In 2006, this service performed 8231 procedures, producing \$819,314 in gross (billed) revenue. |
| 2001-present | As a practicing clinical speech-language pathologist, Karnell provides direct clinical service for patients with speech, voice and swallowing disorders. In 2006, he evaluated or treated 367 patients and billed in excess of \$107,000. |
| 2001-present | Clinical data base manager, Department of Otolaryngology-Head and Neck Surgery Cleft Palate-Craniofacial Clinic. |

Physical Facilities

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| A. Office: | 21268 PFP | 100 ² ft |
| B. Clinical Therapy Rooms: | 21237, 21238, 21239 PFP | 80 ² ft |
| C. Clinical Diagnostic Rooms: | 21224, 21225 PFP | 120 ² ft |
| D. Laryngeal Image Analysis Lab | 21226 PFP | 100 ² ft |

Personnel Currently Supervised

Karen Bryant, Ph.D., Clinical Faculty, Staff Speech-Language Pathologist (Room 21011)
 Todd Coleman, M.A., Staff Speech-Language Pathologist (Room 21215)
 Scott Dailey, M.A., Staff Speech-Language Pathologist (Room 21219)

Carolyn Simons, M.A., Staff Speech-Language Pathologist (Room 21219)
Alice E. Smith, Ph.D. Hourly part-time Staff Speech-Language Pathologist
Ann Sporkman-Link, M.A., Staff Speech-Language Pathologist (Room 21215)
Rebecca Bartlett, M.A., Clinical Fellow, Speech-Language Pathologist
Part-Time Student Employee hired annually to assist with Cleft Clinic Data Entry