CURRICULUM VITA

NAME: Hay-McCutcheon, Marcia J

EDUCATION

POSTDOCTORAL: Indiana University, Department of Psychological and Brain Sciences, 2004-2005

GRADUATE: University of Tennessee, Audiology, M.A., 1997 University of Iowa, Hearing Science, Ph.D., 2004

UNDERGRADUATE: Queen's University, Canada, Social Behaviour, B.A., 1986 Queen's University, Canada, Bachelor of Education, 1987 Sir James Whitney School for the Deaf, Dip. Deaf Ed., 1990

ACADEMIC APPOINTMENTS

The University of Alabama, Department of Communicative Disorders, Chair, 2012-

The University of Alabama, Department of Communicative Disorders, Interim Chair, 2011-2012

The University of Alabama, Department of Communicative Disorders, Associate Chair, 2010-2011

The University of Alabama, Department of Communicative Disorders, Associate Professor, 2008-

The University of Alabama, Center for Mental Health and Aging, Associate, 2008-

The University of Alabama-Birmingham, Department of Surgery, Division of Otolaryngology—Head and Neck Surgery, Adjunct Associate Professor, 2009-

Indiana University School of Medicine, Department of Otolaryngology, Assistant Professor and Psi Iota Xi Scholar, 2005-2008

Indiana University, Department of Speech and Hearing Sciences, Adjunct Assistant Professor, 2007-2008

PROFESSIONAL APPOINTMENTS

Indiana University School of Medicine, Audiologist, 1997-1999

York Region Board of Education, Ontario, Canada, Itinerant Teacher for Deaf and Hard of Hearing Students, 1990-1993

Durham Region Board of Education, Ontario, Canada, Primary Teacher, 1987-1989

LICENSURE AND CERTIFICATION

Certificate of Clinical Competence, Audiology Alabama Audiology License #1036a

PROFESSIONAL ORGANIZATIONS

American Speech-Language-Hearing Association American Auditory Society Association for Research in Otolaryngology

HONORS AND AWARDS

Faculty Advisor, Leadership Board, College of Arts and Sciences, The University of Alabama, 2011 – 2014.

Invited Conference Attendee, 5th Annual Research Conference on Communication Sciences and Disorders, Lessons for Success: Developing the Emerging Scientist, Rockville, MD, March 2007.

Psi Iota Xi Scholar, 2005 – 2008

Young Investigator Award – Poster Presentation, Conference on Implantable Auditory Prostheses, Pacific Grove, CA, 2005

University of Iowa Presidential Fellow, 2000-2004

University of Tennessee-Knoxville, Distinguished Academic Award, 1997

TEACHING ASSIGNMENTS

Courses

CD351 Hearing Science, The University of Alabama, Department of Communicative Disorders, Spring 2010 - present

CD501 Introduction to Research Methods, The University of Alabama, Department of Communicative Disorders, Team taught, Summer 2009

CD275 Anatomy and Physiology of the Speech and Hearing Mechanism, The University of Alabama, Department of Communicative Disorders, Spring 2009

CD443_543 Basic Audiology, The University of Alabama, Department of Communicative Disorders, Fall 2008 - present

S515 Implantable Auditory Prostheses, Indiana University, Department of Speech and Hearing Sciences, Spring 2007

Post Doctoral Fellows

NIH sponsored post-doctoral fellow (NIDCD T32 DC00012, Director: David B. Pisoni, Ph.D.), 2007-2008

Student Advising

The University of Alabama's Emerging Scholar Program, Caitlyn Hearn (Advisee), February 2011 – May 2012

Student Project: Vowel Formant Frequency Discrimination Skills in Aging Cochlear Implant Recipients

NIH Sponsored Graduate Research Assistant (NIDCD R03DC008383), July 2009 – June 2010

Student Project: Dialect Discrimination with Combined Electric Acoustic Hearing

NIH sponsored Summer Medical Student Traineeship Program (NIDCD T32 DC00012, Director: David B. Pisoni, Ph.D.), May- July 2007

Student Project: "Speech Perception and Phonological Memory with Combined Electric Acoustic Hearing."

NIH sponsored Summer Medical Student Traineeship Program (NIDCD T32 DC00012, Director: David B. Pisoni, Ph.D.), May-July 2005

Student Project: "The detection of auditory-visual asynchrony in normal hearing adults."

RESEARCH

Grants

<u>Awarded - Completed</u>

Principal Investigator: National Institutes of Health (R03 DC008383 \$222,883 Total Costs, \$150,000 Direct Costs), Project Title: Speech Perception and Phonological Memory with Combined Electric Acoustic Hearing, 2006-2010.

Co-Investigator: Signature Center Grant (The Center for Advanced Studies in Hearing, Perception, and Language), Indiana University School of Medicine, 2007-2008, \$150,000 Direct Costs.

Co-Investigator: National Institutes of Health (R01 DC000064 \$1,699,202 Total Costs, \$1,170,312 Direct Costs), Project Title: Speech Perception and Spoken Word Recognition by Children with Cochlear Implants, 2006-2008.

Principal Investigator: National Institutes of Health Pre Doctoral Ruth L. Kirschstein National Research Service Award (F31 DC006532, \$29,563 Direct and Total Costs), Project Title: Neural Adaptation and Temporal Integration, 2003-2004.

Not Awarded

Principal Investigator: American Hearing Research Foundation, Project Title: Perception and cognition in older adults with cochlear implants, Projected Project Period: 2012 – 2014.

Principal Investigator: National Organization for Hearing Research, Project Title: Vowel discrimination and the acoustic change complex (ACC) in adults with cochlear implants, Projected Project Period: 2012 – 2014.

Principal Investigator: National Institutes of Health (Mentored Patient-Oriented Research Career Development Award – K23), Project Title: Cognition, perception & neural processing in elderly cochlear implant users, Projected Project Period: 2010 – 2015.

Publications - Peer Reviewed

- 1. Holt, R. F., Kirk, K. I., & **Hay-McCutcheon, M. J**. (2011). Assessing multimodal spoken word-in-sentence recognition in children with normal hearing and children with cochlear implants. <u>Journal of Speech, Language, and Hearing Research,</u> 54 (2), 632-657.
- 2. Harris, M. S., & **Hay-McCutcheon, M. J.** (2010). An analysis of hearing aid fittings in adults using cochlear implants and contralateral hearing aids. <u>Laryngoscope</u>, 120 (12), 2484-2488.
- 3. **Hay-McCutcheon, M. J.**, Pisoni, D. B., & Hunt, K. K. (2009). Audiovisual asynchrony detection and speech perception in hearing-impaired listeners with cochlear implants: A preliminary analysis. <u>International Journal of Audiology</u>, 48 (6), 321-333.
- 4. **Hay-McCutcheon, M. J.**, Kirk, K. I, Henning, S. C., Gao, S., & Qi, R. (2008). Using early language outcomes to predict later language ability in children with cochlear implants. Audiology and Neurotology, 13, 370-378.
- 5. Miyamoto, R. T., **Hay-McCutcheon, M. J.**, Kirk, K. I., Houston, D. M., & Bergeson-Dana, T. (2008). Language skills of profoundly deaf children who received cochlear implants under 12-months of age: A preliminary study. <u>Acta Otolaryngologica</u>, 128 (4), 373-377.
- 6. Kirk, K. I., **Hay-McCutcheon, M. J.**, Holt, R. F., Gao, S., Qi, R., & Gehrlein, B. L. (2007). Audiovisual spoken word recognition by children with cochlear implants. <u>Audiological Medicine</u>, 5 (4), 250-261.
- 7. **Hay-McCutcheon, M. J.**, Brown, C. J., & Abbas, P. J. (2005). An analysis of the impact of auditory nerve adaptation on behavioral measures of temporal integration in cochlear implant recipients. <u>Journal of the Acoustical Society of America</u>, 118 (4), 2444-2457.
- 8. **Hay-McCutcheon, M. J.**, Pisoni, D. B., & Kirk, K. I. (2005). Audiovisual speech perception in elderly cochlear implant recipients. <u>Larvngoscope</u>, 115, 1887-1894.
- 9. Miller, C. A., Abbas, P. J., **Hay-McCutcheon, M. J.**, Robinson, B. K., Nourski, K.V., & Jeng, F-C. (2004). Comparison of intracochlear and extracochlear ECAPs indicates antidromic action potentials. <u>Hearing Research</u>, 198, 75-86.
- 10. **Hay-McCutcheon, M.**, Brown, C.J., Schmidt Clay, K., & Seyle, K. (2002). Comparison of electrically evoked whole-nerve action potential and electrically evoked auditory brainstem response thresholds in Nucleus CI24R cochlear implant recipients. <u>Journal of the American Academy of Audiology</u>, 13, 416-427.
- 11. Vitevitch, M.S., Pisoni, D.B., Kirk, K.I., **Hay-McCutcheon, M.**, & Yount, S. (2002). Effects of phonotactic probabilities in the processing of spoken words and nonwords by postlingually deafened adults with cochlear implants. <u>Volta Review, 102</u> (4), 283-302.

- 12. Chin, S.B., Meyer, T.A., **Hay-McCutcheon, M.**, Wright, G.A., & Pisoni, D.B. (2000). The structure of mental lexicons of children who use cochlear implants: Preliminary findings. Annals of Otology, Rhinology, & Laryngology, 185 (Suppl.), 114-116.
- 13. Kirk, K.I., **Hay-McCutcheon, M.**, Sehgal, S.T., & Miyamoto, R.T. (2000). Spoken word recognition by children with cochlear implants: Effects of lexical difficulty, talker variability and word length. <u>Annals of Otology, Rhinology, & Laryngology, 185</u> (Suppl.), 79-81.
- 14. Kirk, K.I., Sehgal, S.T., **Hay-McCutcheon, M.** (2000). A comparison of children's familiarity with tokens on the PB-K, LNT and MLNT. <u>Annals of Otology, Rhinology, & Laryngology, 185</u> (Suppl.), 63-64.
- 15. Kirk, K.I., Eisenberg, L.S., Martinez, A.S., & **Hay-McCutcheon**, **M.** (1999). The lexical neighborhood test: Test-retest reliability and inter-list equivalency. <u>Journal of the American Academy of Audiology</u>, 10 (3), 113-123.

Publications - Professional Service

- 1. Miyamoto, R. T., & **Hay-McCutcheon, M. J.** (2012). Approach to the patient with hearing loss, in J. Biller (Ed.), <u>Practical Neurology</u>, <u>Fourth Edition</u>. Lippincott Williams and Wilkins, Philadelphia, PA.
- 2. **Hay-McCutcheon, M.J.** (2010). Our emerging interest in the interaction of hearing, aging, and cognition for speech perception. <u>Perspectives on Hearing and Hearing Disorders:</u> <u>Research and Diagnosis, 14 (2), 39-45.</u>
- 3. Houston, D. M., **Hay-McCutcheon, M.**, Bergeson, T. R., & Miyamoto, R. T. (2010). Cochlear Implants: Technology in E. B. Goldstein (Ed.), <u>Encyclopedia of Perception</u>. SAGE Publications, Thousand Oaks, CA.
- 4. Miyamoto, R. T., & **Hay-McCutcheon, M. J.** (2009). Approach to the patient with hearing loss, in J. Biller (Ed.), <u>Practical Neurology, Third Edition</u>. Lippincott Williams and Wilkins, Philadelphia, PA.

PROFESSIONAL ACTIVITIES

Invited Guest Lectures

"Hearing Aid Considerations," presented at the University of Alabama-Birmingham Medical Resident Lecture Series, July 5, 2011

"Cochlear Implants: Patient Selection, Surgical Considerations, and Outcomes," presented at the University of Alabama-Birmingham Medical Resident Lecture Series, May 2, 2011

"Applying for an NIH Mentored Patient-Oriented Research Career Development Award (K23)," presented for the Junior Investigators Program, The University of Alabama, October 27, 2010

"Anatomy of the Ear and Hearing Screening," two lectures presented for CD 377, Department of Communicative Disorders, The University of Alabama, October and March of each year.

"Hearing and Aging," presented in PY491: Seminar in Aging and Health, Department of Psychology, The University of Alabama, September 1, 2010

"Audiology Basics: Pure Tone Audiometry, Speech Testing, Tympanometry and Reflexes," presented at the University of Alabama-Birmingham Medical Resident Lecture Series, March 2010, March 2012

"Objective Tests: Otoacoustic emissions, Electrocochleography, Auditory Brainstem Response, Auditory Steady State Response," presented at the University of Alabama-Birmingham Medical Resident Lecture Series, April 2010, April 2012

"Vowel Perception and Immediate Phonological Memory in Profoundly Deaf Adults who use Cochlear Implants," presented for the Center for Mental Health and Aging Seminar Series, The University of Alabama, March 9, 2009.

"The NIH R03 Application," presented for the Junior Investigators Program, The University of Alabama, October 30, 2008, October 21, 2009

"Introduction to Cochlear Implants," presented in the School of Extended Education, Ball State University Indianapolis Campus, Summer 2007

"How cochlear implants work," presented in the Department of Otolaryngology—Head and Neck Surgery to summer medical students, Indiana University School of Medicine, Summer 2007

"Clinical Considerations for cochlear implantation," presented in the Department of Otolaryngology—Head and Neck Surgery to summer medical students, Indiana University School of Medicine, Summer 2007

"Life as a Student," presented in the Department of Speech Pathology and Audiology, University of Iowa, Spring 2007

"Electrically Evoked Auditory Potentials: Clinical Issues," presented in the Department of Speech and Hearing Sciences, Indiana University, Spring 2006 and in the Department of Speech, Language, and Hearing Sciences, Purdue University, Fall 2006, 2007, 2008

"Electrically Evoked Auditory Potentials (ECAP and EABR)," presented in the Department of Speech, Language and Hearing Sciences, Purdue University and the Department of Speech and Hearing Sciences, Indiana University, Spring 2005

Conference Presentations

1. **Hay-McCutcheon, M. J.,** Peterson, N., Pisoni, D. B., Bateman, S. (2010, July). <u>A</u> Preliminary Analysis of American Dialect Discrimination in Younger and Older Cochlear

- <u>Implant Recipients</u>. Oral presentation at the 11th International Conference on Cochlear Implants and other Implantable Auditory Prostheses, Stockholm, Sweden.
- 2. **Hay-McCutcheon, M. J.** (2008, June). <u>Children who receive cochlear implants under 12 months of age: Benefits for language development</u>. Oral presentation at the 105th Psi Iota Xi National Convention, Evansville, Indiana.
- 3. Holt, R.F., Kirk, K.I., **Hay-McCutcheon, M.J.**, Howell, S. (2008, June). <u>Audiovisual integration of speech by children with cochlear implants</u>. Oral presentation at the Newborn Hearing Screening 2008 conference, Lake Como, Italy.
- 4. **Hay-McCutcheon, M. J.**, Kirk, K. I., Henning, S. C., Gehrlein, B. L. (2008, April). <u>The effects of competing noise on the speech understanding abilities of children implanted below 3 years of age</u>. Oral presentation at the 10th International Conference on Cochlear Implants and other Implantable Auditory Technologies, San Diego, CA.
- 5. Kirk, K. I., **Hay-McCutcheon, M. J.**, Henning, S. C., Gehrlein. (2008, April). <u>Audiovisual spoken word recognition by children with cochlear implants</u>. Oral presentation at the 10th International Conference on Cochlear Implants and other Implantable Auditory Technologies, San Diego, CA.
- 6. Peterson, N. R., **Hay-McCutcheon, M. J.**, Kirk, K. I., Rosado, C. A. (2008, April). <u>Contribution of hearing aids to speech understanding in cochlear implant users</u>. Poster presentation at the 10th International Conference on Cochlear Implants and other Implantable Auditory Technologies, San Diego, CA.
- 7. Gehrlein, B. L., Henning, S. C., **Hay-McCutcheon, M. J.**, Kirk, K. I. (2008, April). <u>The relationship between language and adaptive behaviors of children with prelingual deafness who are cochlear implant recipients</u>. Poster presentation at the 10th International Conference on Cochlear Implants and other Implantable Auditory Technologies, San Diego, CA.
- 8. **Hay-McCutcheon, M. J.**, Rosado, C. A. Peterson, N. R. (2008, March). <u>Acoustic and electric cues for speech understanding and phonological memory</u>. Oral presentation at the American Auditory Society Annual Meeting, Scottsdale, AZ.
- 9. Miyamoto, R. T., **Hay-McCutcheon, M. J.**, Kirk, K. I., Houston, D. M., Bergeson-Dana, T. R. (2007, August). Speech and language skills of profoundly deaf children implanted under 12 months of age: Preliminary results. Oral presentation at the Collegium Oto-Rhino-Laryngologicum Amicitiae Sacrum, Seoul, South Korea.
- 10. **Hay-McCutcheon, M. J.** (2007, June). <u>Pediatric cochlear implant recipients at the Indiana University School of Medicine: An update</u>. Oral presentation at the 104th Psi Iota Xi National Convention, Fort Wayne, Indiana.
- 11. **Hay-McCutcheon, M.J.**, Kirk, K.I., Henning, S.C., Gehrlein, B.L., & Miyamoto, R.T. (2007, April). <u>Cochlear implantation during the first, second, or third year of life: Implications for</u>

- spoken word recognition and language skills at six years of age. Oral presentation at the 11th International Conference on Cochlear Implants in Children, Charlotte, North Carolina.
- 12. Kirk, K.I., **Hay-McCutcheon, M.J.**, Henning, S.C., Gehrlein, B.L., & Miyamoto, R.T. (2007, April). <u>Cochlear implant outcomes in young children with multiple disabilities</u>. Oral presentation at the 11th International Conference on Cochlear Implants in Children, Charlotte, North Carolina.
- 13. **Hay-McCutcheon, M.J.**, Pisoni, D.B., Kirk, K.I., & Miyamoto, R.T. (2006, June). <u>Language skills of school-aged children with cochlear implants.</u> Oral presentation at the 9th International Conference on Cochlear Implants and Related Sciences, Vienna, Austria.
- 14. **Hay-McCutcheon, M. J.**, & Pisoni, D. B. (2005, August). <u>Audiovisual asynchrony</u> <u>perception in adult cochlear implant recipients: Some preliminary findings</u>. Poster session presented at the Conference on Implantable Auditory Prostheses, Pacific Grove, CA.
- 15. **Hay-McCutcheon, M. J.**, Pisoni, D. B., & Kirk, K. I. (2005, February). <u>Speech recognition skills in the elderly cochlear implant population: A preliminary examination</u>. Poster session presented at the Association for Research in Otolaryngology (ARO) MidWinter Meeting, New Orleans, LA.
- 16. Horn, D. L., **Hay-McCutcheon, M. J.**, & Pisoni, D. B. (2005, March). <u>A longitudinal study of spoken digit recall in deaf children with cochlear implants</u>. Poster session presented at the 10th Symposium on Cochlear Implants in Children, Dallas, TX.
- 17. **Hay-McCutcheon, M. J.**, Brown, C. J., & Abbas, P. J. (2004, May). <u>Peripheral neural adaptation and temporal integration in cochlear implant recipients.</u> Poster session presented at the VIII International Cochlear Implant Conference, Indianapolis, IN.
- 18. **Hay-McCutcheon, M. J.**, Brown, C. J., Schmidt-Clay, K., & Seyle, K. (2002, January). <u>A comparison of EAP and EABR thresholds in Nucleus CI24R cochlear implant recipients.</u> Poster session presented at the Association for Research in Otolaryngology (ARO) MidWinter Meeting, St. Petersburg, FL.
- 19. Kirk, K.I., Kaiser, A.R., **Hay-McCutcheon, M.**, & Yount, S. (1999, November). <u>Audiovisual speech recognition by adults with cochlear implants: Lexical and talker effects</u>. Presentation at the American Speech-Language-Hearing Association annual meeting, San Francisco, CA.
- 20. **Hay-McCutcheon, M.**, Kirk, K.I., Sehgal, S.T., & Miyamoto, R.T. (1998, June). <u>Spoken word recognition by children with cochlear implants: Effects of lexical difficulty, talker variability and word length</u>. Poster session presented at the Seventh Symposium on Cochlear Implants in Children, Iowa City, IA.
- 21. Chin, S.B., Meyer, T.A., **Hay-McCutcheon, M.**, Wright, G.A., & Pisoni, D.B. (1998, June). <u>Understanding the structure of mental lexicons of children who use cochlear implants</u>. Poster session presented at the Seventh Symposium on Cochlear Implants in Children, Iowa City, IA.

22. Sehgal, S.T., Kirk, K.I., **Hay-McCutcheon, M.**, & Miyamoto, R.T. (1998, June). <u>A comparison of children's familiarity with tokens on the PB-K, LNT and MLNT</u>. Poster session presented at the Seventh Symposium on Cochlear Implants in Children, Iowa City, IA.

PROFESSIONAL SERVICE

Manuscript Reviewer, Otology and Neurotology, 2012 - present

Manuscript Reviewer, PLoS One, 2012 - present

Scientific Review: Ad Hoc NIDCD study section grant review panel (F31 Training Grant), November 2011

Manuscript Reviewer, Journal of Speech Language Hearing Research, 2011-present

Manuscript Reviewer, Ear & Hearing Journal, 2006-present

 $\label{lem:manuscript} \textit{Manuscript Reviewer, International Journal of Pediatric Otorhinolaryngology, 2006-present}$

Manuscript Reviewer, American Journal of Audiology, 2007 – present

Manuscript Reviewer, Journal of the American Academy of Audiology, 2009 - present

Abstract Reviewer, ASHA Adult Aural Habilitation Program Committee, 2009

Abstract Reviewer, ASHA Pediatric Aural Rehabilitation and Central Auditory Processing Disorders Committee, 2009

UNIVERSITY SERVICE

Chair, Writing Committee, College of Arts and Sciences, The University of Alabama, Spring 2012

Invited Speaker, Osher Lifelong Learning: Living with Hearing Loss, February 3, 2010

Senior Investigator in the Junior Investigator's Program – January 2010

Invited Speaker, Office of e-tech, Tegrity workshop; August 17, 2009, December 17, 2009

External Reviewer, Thesis Committee, "Engineering Analysis of Head-Thrust," by R. David Wilson, The University of Alabama, Department of Engineering, March 23, 2009

Faculty Mentor, Parker-Adams and Harris Living-Learning Communities, The University of Alabama, Fall 2008 –

Consultant, Office of Disability Services, The University of Alabama, 2009 -

Coordinator, DeVault Otologic Research Laboratory, Indiana University School of Medicine, 2005-2008

Speaker, Psi Iota Xi chapter presentation of the DeVault Otologic Research Laboratory, September 28, 2005

Speaker, IUPUI MD/PhD Information Day for Purdue Summer Research Students, June 30, 2006

Speaker, Riley Hospital Visitation Day, October 14, 2006

DEPARTMENTAL SERVICE

Chair, Search Committee, Neurogenics position, 2010-2011

Assessment Coordinator, Department of Communicative Disorders, Fall 2010 -

Grant application writer, The University of Alabama, College of Arts and Sciences iPad initiative, November 2010, (two iPads funded for faculty)

Member, Tenure and Promotion Committee, Department of Communicative Disorders, The University of Alabama, 2010 -

Chair, Graduate Admissions Committee, Department of Communicative Disorders, The University of Alabama, 2010 -

Chair, Curriculum Committee, Department of Communicative Disorders, The University of Alabama. 2010 –

Member, Summer Symposium Committee, Department of Communicative Disorders, The University of Alabama, 2009

Student Advising, Department of Communicative Disorders, The University of Alabama, Fall 2009 –

Chair, Tenure and Promotion Document Committee, Department of Communicative Disorders, The University of Alabama, 2009

Member, Textbook Committee, Department of Communicative Disorders, The University of Alabama, Fall 2008 –

Guest Speaker, Adult Rehabilitation Group, Department of Communicative Disorders, The University of Alabama, Fall 2008, Spring 2011