Curriculum Vitae

Mona Anwar M. H. El-kady
106 Danny Drive
Carrollton, GA 30117

412-519-2080

monaelkady09@gmail.com

Education

- **Ph.D. in Communication Science and Disorders** 2010
  University of Pittsburgh, Pittsburgh, Pennsylvania, USA
  Dissertation: Interferon Alpha Signaling Pathway in the Sensory Auditory Neuroepithelial Cells (defended on July 30, 2009)
- **Doctoral Degree in Audiology** 2005
  South Valley University, Sohag, Egypt,
  Dissertation: Study of Auditory Function in Patients with Obstructive Pulmonary Diseases
- **Master Degree in Audiology** 1993
  Faculty of Medicine, Assiut University, Egypt
  Thesis: Ototoxicity of Commonly Used Cytotoxic Drugs
- **Bachelor of Medicine and Surgery (M.D.)** 1988
  Assiut Faculty of Medicine, Assiut University, Egypt,

CERTIFICATION & LICENSURE

- Certificate of Clinical Competence in Audiology (CCC-A), American Speech, Language, and Hearing Association (ASHA)
- Medical Practice License in Egypt
- Licensed Audiologist in Egypt

PROFESSIONAL EXPERIENCE

- **Assistant Professor of Speech Pathology and Audiology**
  The University of West Georgia (Current), Carrollton, Georgia
- **Assistant Professor of Speech Pathology and Audiology**
  Molloy College, Long Island, New York (2010-2012)
- **Research Assistant** (2007- 2010)
  Department of Communication Sciences and Disorders
  University of Pittsburgh, , Pittsburgh, Pennsylvania
- **Teacher Assistant** (2001-2006)
  Department of Communication Sciences and Disorders
  University of Pittsburgh, Pittsburgh, Pennsylvania
- **Research Assistant** (2001)

Department of Communication Sciences and Disorders
University of Pittsburgh, Pittsburgh, Pennsylvania

- **Visiting Scholar** (1997-1999)
  Department of Otolaryngology University of Pittsburgh Medical Center, Eye & Ear Institute, Pittsburgh, Pennsylvania
- **Teacher Assistant of Audiology & Otolaryngology** (1993-1997)
  Department of Otolaryngology, South Valley University, Egypt
- **Resident of Audiology and Otolaryngology** (1990-1993)
  Assiut University Hospitals, University of Assiut, Egypt
- **Intern in Medicine & Surgery** (1989-1990)
  Assiut University Hospitals, University of Assiut, Egypt

Courses Taught:

Under graduate Courses:

- Sound & Auditory Mechanisms
- Introduction to Speech Science
- Introduction to Audiology
- Communication Skills of Hearing-Impaired
- Research Seminar in Communication Science & Disorders
- Senior Research Seminar
- Anatomy and Physiology of Speech and Hearing

Graduate Courses:

- Advanced Anatomy and Physiology
- Audiology
- Research Seminar
- Auditory Disorders

Research Experiences

- **Dissertation**: To partially fulfill of the requirement for PhD degree in Audiology at the University of Pittsburgh.
  Title: Signaling pathway of interferon alpha in the cochlear cell line. Duties for this study include cell culture of cochlear cell line, cell collection and counting, RNA extraction, reverse transcription and PCR.
- **Pre-dissertation Project**: Does auditory training in noise bring better outcome than training in quiet?
- **Research Assistant** at the Department of Otolaryngology at The Children Hospital of Pittsburgh: study of speech recognition ability in children with unilateral sensorineural hearing loss.
- **Doctoral thesis**: Auditory Function of Patients with Chronic Obstructive Pulmonary Diseases.
- **Master thesis**: Ototoxicity of Some of Commonly Used Cytotoxic Drugs, a histopathological study of the cochlea of the rats receiving some of the commonly used cytotoxic drugs.

Training

- Training Course on multiple frequency tympanometery, otoacoustic emission, for 10 days in Italy, during February, 1997.
- Training courses on Nicolet Viking Evoked Potentials, Nicolet Spirit Three modality software systems, and Nicolet Viking EMG in Nicolet Biomedical Inc, Madison, WI for 22 days during August, 1995.
- Training as a resident in Audiology & Otolaryngology in the Dept of Otolaryngology at the Assiut University Hospitals (1990-1993).
- Clinical Training in Medicine, General Surgery, Obstetrics& Gynecology, Pediatrics, Otolaryngology, Anesthesia & Emergency (1989-1990)

Professional Membership

- American Speech- Language and Hearing Association (ASHA) (2006-current)
- Acoustic Society of America (2003-2008)
- American Academy of Audiology (2003-current)
- National Student Speech Language and Hearing Association (NSSLHA) (2004-2005)

Publications

Journal Papers

- **Mona A. El-Kady**, John D. Durant, Somia Tawfik, Abdel-Mateen Mousa, and Sarhan Abdel-Ghany. (2006). Study of Auditory Function in Patients Chronic Obstructive Pulmonary Diseases. Hearing Research. 212(109-116)
- **Mona M. El-Kady**, Ahmed A. Al-Hussini, Mohamed Saad, and Soad S. Ali. (1993). Ototoxicity of three commonly used cytotoxic drugs. Assiut Medical Journal, 17(2).
- **Mona El-Kady**, Mohamed Saad, Ahmed Al-Hussini, Soad Ali, and Madiha Mohammed. (1992). Ototoxic effects of cis-dichlorodiamine platinum on Albino rats. Egyptian Society of Histology and Cytology. Presented in the 16th Scientific Conference in December 31, 1992.

Manuscripts in preparation

Mona A., El-Kady, Ha-Sheng Li-Korotly, Diane, Sabo, John, D., Durrant, Catherine, V. Palmer. Upregulation of The Major Histocompatibility Complex (MHC-I) in Auditory Hair Cells Exposed to Interferon Alpha (submitted to Hearing Research)

Mona A., El-Kady, Ha-Sheng Li-Korotly, Diane, Sabo, John, D., Durrant, Catherine, V. Palmer. Can interferon alpha initiate an inflammatory reaction in the HEI-OC1 cochlear cell line?

Mona A., El-Kady, Ha-Sheng Li-Korotly, Diane, Sabo, John, D., Durrant, Catherine, V. Palmer. Apoptotic markers in HEI-OC1 cochlear cell line as a sequence for interferon alpha treatment

Presentations and Posters:

- Major Histocompatibility Complex in Cochlear Hair Cells Exposed to Interferon Alpha: Podium Presentation at The American Auditory Society, Scottsdale, AZ; March 2011
- Signaling Pathway of Interferon-alpha in the Cochlear Cell Line; poster presentation at Science 2010, University of Pittsburgh, March, 2010
- Auditory Functions in Patients with Chronic Obstructive Pulmonary Diseases; Poster presentation at the Association for Research in Otolaryngology, Tampa, FL, February, 2002

Research Statement:

I have been working on different research studies since 1991. My first research experience was through my master thesis. The study was about the ototoxicity of some commonly used cytotoxic drugs. Four cytotoxic drugs were chosen for the study included cic-platinum, methotraxate, vincristine, and indoxan. The four medications were applied (via intra-peritoneal administration) to four groups of albino rats, with an additional control group. The animal temporal bones were dissected and dissolved in a specific chemical solution to soften the bone. The specimens were treated and prepared for histological examination by light microscope. I gained skills in dealing with experimental animals, intra-peritoneal injection, temporal bone dissection & decalcification, specimen fixation, paraffin block preparation, and staining for light microscopic examination. Two articles were published from this work.

Mona M. El-Kady, Ahmed A. Al-Hussini, Madiha Mohammed, Mohamed Saad, and Soad S. Ali. (1993*).* Ototoxicity of three commonly used cytotoxic drugs. Assiut Medical Journal, 17(2).

Mona El-Kady, Mohamed Saad, Ahmed Al-Hussini, Soad Ali, and Madiha Mohammed. (1993). Ototoxic effects of cis-dichlorodiamine platinum on Albino rats. Egyptian Society of Histology and Cytology.

The second research was my doctoral thesis to obtain doctoral degree in Audiology from Egypt. It was a clinical study to look at some auditory functions in patients with chronic obstructive pulmonary diseases (COPDs), who usually suffer from

hypoxia. The study included 60 patients with COPDs and 30 control subjects. All subjects underwent basic audiological evaluation, combined ABR, and ECogh, Click-evoked Otoacoustic Emissions, respiratory function tests and blood gases estimation. One article was published in Hearing Research journal from this study:
Mona A. El-Kady, John D. Durantb, Somia Tawfik, Abdel-Mateen Mousa, and Sarhan Abdel-Ghany. (2006). Study of Auditory Function in Patients Chronic Obstructive Pulmonary Diseases.Hearing Research. 212(109-116).

I also participated in other two studies, one at the Department of Communication Science & Disorders, The auditory feedback in normal and cochlear-implant children. The second one was at the Department of Otolaryngology at The Children Hospital of Pittsburgh: Speech recognition abilities in noise for children with severe-to-profound unilateral hearing impairment (Melissa N. Ruscetta, , Ellis M. Arjmand & Sheila R. Pratt. 2005, International Journal of Pediatric Otorhinolaryngology, 69,6: 771-779).

My current research is aimed for partial fulfillment of the requirements for the PhD degree in Communication Science and Disorders. It involves study of the effect of Interferon alpha on cochlear cell line (HEI-OC1). The signaling pathway of interferon-alpha and its effect as an inflammatory modulator, immune modulator and an initiatory of apoptosis were investigated using real time polymerase chain reaction (RT- PCR). During this study, I developed experience in cell culture, cell count, microscopic examination, RNA extraction, gel electrophoresis, reverse transcription and some experience in PCR. One article was submitted to the Hearing Research: The Major Histocompatibility Complex (MHC-I) in Auditory Hair Cells Exposed to Interferon alpha

In addition, I have been developing a research proposal to study the effect of noise on auditory perceptual learning. The study will investigate the effect of low level of noise on the outcome of discrimination auditory training. The training will be done on some Arabic sounds that are difficult to discriminate by native speakers of English. Also, the study will investigate the strategy by which the performance will be improved by perceptual learning, if this is due to a reduction of the internal noise, an improvement of calculation efficiency (signal enhancement) or both. Two psychoacoustic techniques will be used to measure the internal noise and the calculation efficiency, namely, the external

noise masking procedure and measurement of response consistency. The idea of study is based on three motivating factors; the plasticity of the auditory system, the effect of perceptual learning on perceptual performance, and the stochastic resonance phenomenon that implies enhancement of signal detectability and information processing of the auditory system by presence of low level of noise.

For future research, further investigation to the effect of interferons as well as other cytokines on the cochlea will be my next research concern in the field of molecular biology of the auditory system. This line of research might open an avenue for therapeutic intervention of some inner ear disorders.

In addition, I will extend the current research ideas of the effect of noise on auditory perceptual learning to include electrophysiological evaluation and using of event-related potentials to measure the subject performance before and after training.

Statement of teaching philosophy:

My goal is to enhance student learning as a transformative experience. Ideally, I want students to feel personally changed by their participation in the class I am teaching. At the beginning of each class, I usually tell the students that "my mission here is to convey the material for you in such a way that makes you digest it easily, regardless my effort or my time". I always encourage them to ask questions at any time.

I work to be flexible, adapting my approaches according to the needs of students, materials and setting. I am passionate about finding the most effective ways of stimulating and sustaining the interest in knowledge among the students, as I usually tell them the purpose beyond knowing the topic I am teaching. I strive to optimize student engagement and success. In addition to the input from discussions with peers, my students' feedbacks are the best source for improving my teaching techniques which are growing on a continuous basis. I firmly believe that the best way to learn is to teach, and to let the students ask questions that sometimes open a new avenue in the way of my thinking.

I rely on providing real life examples to make the subject very easy. I also use web-based demonstrations models, software. If the topic looks difficult for the students, I use the board to explain the idea clearly or draw diagrams. In teaching anatomy course, I

used to take the students to the cadaver lab to show them the structure on a real model. My quiz for the class, are not only to test the student's knowledge to the material I am teaching, but also they include the most important points that the students should keep them in mind along their academic learning "a take-home message".

I also extend my relation to the students beyond being an instructor by talking to them about other issues in their life. I usually use the office hours or the few minutes before and after the class to talk to the students about their social life, their home towns, other classes, their plans for their academic life.. ..etc. Having a good sense of humor is an added advantage for my relation with the students. I believe that the best in a person comes out in a non stressful situation. I believe that students tend to learn more effectively from an approachable teacher who sets up a comfortable friendly atmosphere for learning.