

Online Educational Opportunities for Practicing Audiologists: An International Perspective

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Online Educational Opportunities for Practicing Audiologists: An International Perspective



EDITORIAL

So Many Ears and So Few Audiologists

By James W. Hall III, PhD

I'm writing this editorial from India, where I'm lecturing at the 46th National Convention of the Indian Speech and Hearing Association. India is a good example of the global hearing healthcare challenge.

About 62 million people in India have serious bilateral hearing loss, and the number of people with any degree of hearing loss affecting communication is much higher. Each of the 1,500 registered audiologists/speech pathologists would need to see about 20,000 patients per day to even begin to provide hearing care services to those who need them the most.

In a rather long list of countries, many in Africa, no audiologists are available to identify, diagnose, and manage children and adults with hearing loss and related conditions.

What steps can we take to address this unacceptable situation? Four possible options come to mind immediately.

One long-term approach is the systematic development of an audiology presence in all developing countries. It would begin with the identification of a handful of bright young people who are highly motivated to enter a healthcare profession.

These individuals would be funded to complete formal audiology education where it exists before returning to their home country to become the "mothers and fathers of audiology" there. They

would also need to acquire knowledge and skills in social entrepreneurship to enhance the chance of success against rather difficult odds.

Three other options are in the early stages of implementation. One is tele-audiology. Research confirms that providing specific diagnostic tests or treatment strategies remotely through tele-audiology yields equivalent findings and outcomes as traditional face-to-face service (*Int J Audiol* 2010;49(3):197-202).

We now have the tools and resources to greatly expand quality hearing healthcare in all areas of the world.

Another option is the use of automated technology to identify hearing loss and facilitate its diagnosis in children and adults. Clinical devices now are available for automated objective test procedures, such as otoacoustic emissions and auditory brainstem response, as well as pure-tone audiometry.

Automation permits reliable hearing testing by non-audiologists with statistical analysis of findings outside the confines of a sound-treated room (*Int J Audiol* 2013;52(2):66-73).

A final option is growth of a global workforce of systematically educated and trained hearing care technicians who work with audiologists and physicians. Technicians will contribute importantly to efficient and cost-effective expansion of needed services in countries lacking adequate professional person-power.

Recently, I joined forces with my colleagues Drs. Jackie Clark, Richard Gans, James Saunders, and De Wet Swainsoo to develop a 20-course sequence for an entirely online educational program called the International Hearing Care Technician (IHCT) Certificate (www.aicnc.com/ihct).

Course materials include narrated lectures with video clips and other teaching aids. Technician students measure learning progress with posttests for each course.

Yes, the numbers are almost unbelievable, and the task is daunting, but we now have the tools and resources to greatly expand quality hearing healthcare in all areas of the world, and especially in developing countries where potential patients need it the most. ■

Dr. Hall is a member of *The Hearing Journal's* Editorial Advisory Board, as well as adjunct professor in the Department of Audiology at Nova Southeastern University in Fort Lauderdale, FL, and in the George S. Osborne College of Audiology at Salus University in Shaw Park, VA, and an honorary professor in the Department of Communication Pathology at the University of Pretoria in South Africa.

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ACAE CORNER

Thinking Globally About Audiology Education

By James W. Hall III

This article is the first of a two-part series on global education in audiology. A second article will review general strategies and specific steps for enhancing the quantity and quality of audiology education worldwide.

More than 90 percent of the world population has little or no access to hearing health care. In a rather long list of countries, many in Africa, no audiologists are available to identify, diagnose, and manage children and adults with hearing loss and related disorders. The creation of

individual politics to enhance the chance of success against possibly difficult odds. This approach has largely led to the establishment and development of the profession of audiology in countries as diverse and distant as India, South Africa, and, more recently, South Korea. Audiology educational models and

Audiology education and clinical credentialing are undergoing change in the United Kingdom with the implementation of a plan titled "Modernising Scientific Careers" (www.baaudiology.org). Audiologists now practicing, teaching, or conducting research in the United Kingdom hold various academic credentials,

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ACAE CORNER

Expanding and Enhancing Audiology Education Globally

By James W. Hall III

This article, the second of a two-part series about global education in audiology, addresses emerging strategies and efforts to expand the availability and enhance the quality of audiology education around the world.

An article in the preceding issue of *Audiology Today* titled "Thinking Globally About Audiology Education" reviewed existing academic models

has developed a five-year bachelor's degree audiology program. Dr. Kim M. Smith Abouchakra (ks05@aub.edu.lb) has taken a lead role in creation of an interdisciplinary medical audiology sciences bachelor's degree program at American



James W. Hall III, PhD, provides instruction in China to otolaryngologists specializing in audiology who attended a workshop organized by Giri Sundar, PhD, of Salus University and Qi Liang, AuD.

program at National University. In Billy's words,

Online Educational Opportunities for Practicing Audiologists: An International Perspective *90% of World Population is Without Access to Hearing Care*

WHO estimated in 2008:

- ❑ 288 million people have hearing loss > 40 dB HL
 - 4.3 % of global population
- ❑ 664 million people have hearing loss >25 dB HL
 - 9.9 % of global population
- ❑ “Half of all cases of hearing are avoidable through primary prevention.”
- ❑ “Current production of hearing aids meets less than 10% of global need.”
- ❑ “The majority of people with disabling hearing loss live in low- and middle-income countries.”



Online Educational Opportunities for Practicing Audiologists: An International Perspective: *Review of International Audiology Education (2008)*

informa
healthcare

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Profession
Education
World hearing health care resources

Original Article

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Audiology education and practice from an international perspective

Abstract

This paper describes the international education and practice of audiology with the broader aim of proposing possible cost-effective and sustainable education models to address the current situation. Major audiology organizations worldwide were surveyed from February 2005 to May 2007, and organizations from 62 countries (78% of the world population) returned a completed survey. Overall, the results suggested a wide range of professionals providing hearing health care, and 86% of

Sumario

Este artículo describe la educación internacional y la práctica de la audiología con un propósito más amplio de proponer modelos educativos posibles en costo/beneficio y sostenibles para analizar la situación actual. De febrero 2005 a mayo 2007 se encuestaron organizaciones audiológicas importantes y organizaciones de 62 países (78% de la población mundial), regresaron la encuesta respondida completamente. En general los resultados sugieren que existe un amplio rango de profesionales que ofrecen

Online Educational Opportunities for Practicing Audiologists: An International Perspective

Population of Colombia = 48.6 million
Estimated minimum number of audiologists required = ~ 2500



Salus University Osborne College of Audiology *Dedicated to Online International Audiology Education*

- ❑ Salus University (legacy since 1919) is based in Elkins Park, Pennsylvania (near Philadelphia, PA).
- ❑ Salus University is composed of four accredited colleges for health care professionals and educators:
 - Pennsylvania College of Optometry (PCO)
 - College of Education and Rehabilitation (CER)
 - **George S. Osborne College of Audiology (OCA)**
 - College of Health Sciences (CHS)
- ❑ Salus University offers the following earned degrees:
 - **AuD**, BSc, MEd, MMS, MS, **MSc**, MSOT, OD, OTD, PhD

Online Educational Opportunities for Practicing Audiologists: An International Perspective (Flyers Available Here)

Salus University Osborne College of Audiology
Where do you want to go?

WHERE ARE YOU TODAY?

- I have an AuD:** Salus PhD in Biomedicine is the next step for me.
- I have an MS plus 3 or more years clinical experience:** Salus AuD Bridge Program is a 2-year online course for US and international mid-career audiologists.
- I have an MS but less than 3 years clinical experience:** Salus 2-year online Bridge AuD is just what I need.
- I have a BSc in Audiology:** Salus 4-year on campus AuD is perfect for me.

Have you heard? Salus online courses run 24/7 for ease of study.

Have you heard? Most practicing audiologists earned their degrees from Salus online and residential AuD programs.

Have you heard? Salus 3-year Advanced Studies Certificate Programs are taught online by faculty career experts.

Have you heard? Salus AuD grads enter the profession with more than 2500 hours of clinical experience.

Have you heard? Salus 4-year on campus AuD students may integrate their training with other Salus programs.

Have you heard? Salus AuD grads enter the profession with more than 2500 hours of clinical experience.

Hands-on Workshops: Hands-on Workshops are conducted on-campus and worldwide.

Have you heard? Workshop topics have included:

- Auditory Processing and Disorders
- Case Approaches in Audiology
- Diagnostic and Management of External and Middle Ear Function
- Advanced Updates of Hearing Aid Technology and Clinical Best Practices
- Vestibular and Balance Assessment.

Salus University's Advanced Studies Certificate Programs

- Vestibular Sciences and Disorders
- Tinnitus and Hyperacusis
- Cochlear Implants

Salus University Osborne College of Audiology Online International Audiology Education

- **Advanced Studies Certificate Programs**
 - <http://www.salus.edu/audiology/index.html>
 - **Advanced Studies: Cochlear Implants**
 - **Advanced Studies: Tinnitus & Hyperacusis**
 - **Advanced Studies: Vestibular Sciences & Disorders**
- **Masters of Science (MSc) in Advanced Clinical Audiology**
 - Online degree with onsite workshops
 - For bachelors level audiologists
- **International AuD-Bridge Degree Program for Masters level audiologists who wish to earn a Doctor of Audiology degree**
 - http://www.salus.edu/audiology_bridge/ind



Salus University Osborne College of Audiology
Online International Audiology Education
World Class Faculty

Prudence Allen
Ali Danesh
James Hall III
Anne Hogan
Paul Kileny
Sherman Lord
Lisa Lucks Mendel
Bre Myers
Martin Pienkowski
Christopher Schweitzer
Jace Wolfe

Radhika Aravamudhan
Brian Fligor
Robert Harrison
Cheryl DeConde Johnson
George Lindley
Ryan McCreery
Thierry Morlet
Tracy Offerdahl
Donald Schum
Richard Tyler



Salus University
Osborne College of Audiology
Online International Audiology Education

ADVANCED STUDIES CERTIFICATE PROGRAMS

Doctor of Audiology On-Campus Program

Doctor of Audiology Online Bridge Program

Master of Science in Clinical Audiology

Advanced Studies Certificate Programs

Cochlear Implants Program

Tinnitus and Hyperacusis Program

Vestibular Sciences and Disorders

Application Process

Certificate Program Course Delivery

Summer Workshops

The Advanced Studies certificate programs are designed to expand the knowledge, improve the clinical skills, and promote general expertise in the delivery of audiology services.



The courses of study will bring the professional up to date on the state of the science in diagnosis and treatment of

Advanced Studies Certificate Programs

- ❑ **3 certificate programs**
 - Cochlear implants
 - Tinnitus/hyperacusis
 - Vestibular
- ❑ **6 to 8 online courses**
- ❑ **9 to 12 months of study**
- ❑ **10 to 12 semester credits**
- ❑ **Optional 4-day workshops**
- ❑ **Prerequisite: Degree in Audiology or a Related Field**

Formal Courework and Certification for Assessment & Audiologic Management of Tinnitus & Hyperacusis



8360 Old York Road
Elkins Park, PA 19027-1516
www.salus.edu

Advanced Studies in Tinnitus and Hyperacusis-

http://www.salus.edu/aud_TinnitusHyperacusis/index.html

The online Advanced Studies in Tinnitus and Hyperacusis Certificate Programs is for working audiologists or professionals in a related field, with degrees that is recognized by their country for the clinical practice of audiology (or the related field) and are interested in specializing in this specific area of study. The program of study is six courses, each course being six weeks duration, for a total of 10- academic (semester) credits over 40 weeks. The Courses are:

1. Neuroscience of Tinnitus and Hyperacusis
(1.5 Semester credits) Faculty: Martin Plenkowski, PhD
2. Assessment Techniques in Tinnitus and Hyperacusis
(1.5 Semester credits) Faculty: Rich Tyler, PhD
3. Tinnitus and Hyperacusis: Rehabilitation and Management
(2.0 Semester credits) Faculty: TBD
4. Professional Issues: Setting Up a Tinnitus and Hyperacusis Clinic
(2.0 Semester credits) Faculty: Jay Hall, PhD
5. Tinnitus and Hyperacusis: Controversies, Pitfalls and Prospects for Progress
(2.0 Semester credits) Faculty: Anthony Cacace, PhD & Martin Plenkowski, PhD
6. Public Health and Medical Issues in the Management of Tinnitus and Hyperacusis
(1.5 Semester credits) Faculty: Jay W Hall, PhD

Salus University Osborne College of Audiology Online International Audiology Education

DOCTOR OF AUDIOLOGY ONLINE BRIDGE PROGRAM

Doctor of Audiology On-Campus Program

Doctor of Audiology Online Bridge Program

Application Process
Frequently Asked Questions
Curriculum

Master of Science in Clinical Audiology

Advanced Studies Certificate Programs

Summer Workshops



The Doctor of Audiology Online Bridge Program offered from Salus University is a distance education, international degree program that offers online education for working audiologists with a master's degree or medical **degree in audiology**.

Doctor of Audiology (AuD) "Bridge" Program

- ❑ 28 didactic online courses
- ❑ 2-4 years of study
- ❑ 45 semester credits
- ❑ Two required 4-day workshops
- ❑ **Prerequisite: Masters degree from a recognized university + 3 Years clinical experience**

Online Educational Opportunities for Practicing Audiologists: An International Perspective *International AuD Bridge Program*

International AuD-Bridge Degree Program Courses and Faculty

Note: Courses and faculty are subject to change

- 1. Advanced Auditory Biology 1: Peripheral and Central Auditory Mechanisms**
(1.5 semester credits)
Faculty: Robert V. Harrison PhD, DSc
- 2. Computer Applications and Instrumentation in Audiology**
(1.5 semester credits)
Faculty: Sherman G. Lord, AuD/ Manikandan Rajappa M.S.
- 3. Sound Transmission into the Cochlea**
(1.5 semester credits)
Faculty: Robert V. Harrison PhD, DSc
- 4. Evidence-Based Audiology: Transitioning from Research to Clinic and Adoption of Best Practices in Audiology**
(1.5 semester credits)
Faculty: Radhika Aravamudhan, PhD

Online Educational Opportunities for Practicing Audiologists: An International Perspective *International AuD Bridge Program*

- 5. Pediatric Audiology: Current Trends in Behavioral Assessment**
(1.5 semester credits)
Faculty: Ryan McCreery, PhD
- 6. Early Hearing Detection in Infants**
(1.5 semester credits)
Faculty: James Hall, III, PhD
- 7. Genetics and Hearing Loss**
(1.5 semester credits)
Faculty: Ali Danesh, PhD
- 8. Topics in Pediatric Hearing Assistive Technology**
(1.5 semester credits)
Faculty: Ryan McCreery, PhD
- 9. Advanced Issues in Otoacoustic Emissions**
(1.5 semester credits)
Faculty: Thierry Morlet, PhD

10. Auditory Processing Disorders: Behavioral Issues

(1.5 semester credits)

Faculty: James Hall, PhD

11. Auditory Evoked Potentials in Pediatric and Adult ABR

(1.5 semester credits)

Faculty: Jace Wolfe, PhD

12. Auditory Processing Disorders: Electrophysiological Assessment

(1.5 semester credits)

Faculty: James Hall, PhD

13. Auditory Neuropathy Spectrum Disorder

(1.5 semester credits)

Faculty: Thierry Morlet PhD

14. Cochlear Implants and other Implantable Devices

(1.5 semester credits)

Faculty: Jace Wolfe, PhD

15. Advanced Auditory Biology 2: Vestibular and Balance System

(1.5 semester credits)

Faculty: Bre Myers, PhD

16. Assessment and Rehabilitation of Vestibular and Balance System

(1.5 semester credits)

Faculty: Anne Hogan, PhD

**Online Educational Opportunities for Practicing Audiologists: An International Perspective
New Online Master's Degree Program**



International MSc in Clinical Audiology
Salus University Osborne College of Audiology

Salus University Osborne College of Audiology (SU OCA) is offering an International MSc program in Clinical Audiology. The Master of Science degree in Clinical Audiology is a post-professional degree, intended for working audiologists who have completed a four-year, undergraduate degree in audiology (or its equivalent) and have been providing full-time clinical audiology services for no less than two years. The MSc program of study is both competency- and skills-based, intended to help practicing audiologists gain mastery over specialized areas of practice.

Students are required to complete all the mandatory courses, including three Clinical Skills training practicum, and choose two Fellowship Programs to complete all the requirements for the International MSc in Clinical Audiology Program. Each Fellowship Program is composed of didactic courses in the specialty area of study, two Hands-On Workshops and 150 clinical hours supervised by a preceptor approved by the international partner university and Salus University OCA

MSc in CLINICAL AUDIOLOGY COURSE ANALYSES

Required Courses	Semester Credits
Online Didactic Courses for Core Curriculum in Clinical Audiology (7 Course Modules, each module worth 3 credits)	21
Face-Face Clinical Skills Training at the Elkins Park Campus or in Partner Country	3
Required Studies Total Credits	24 Semester Credits
Required Fellowship for Cohort 1	
Fellowship in in Cochlear Implants	15
Fellowship in Vestibular Sciences and Disorders	15
Total Credits (2 Fellowships)	30
MSc in CLINICAL AUDIOLOGY TOTAL CREDITS	54 Credits

MSc in Clinical Audiology Program

- 14 Core Curriculum didactic online courses
- 2-Fellowships (6 didactic courses in each Fellowship, 2 Hands-On Workshops & 150 hours of Clinical Training)
- 2 to 4 years of study
- 54 semester credits
- Four required 4-day workshops
- Three days clinical training skills in audiological assessments
- Prerequisite: Bachelors degree from a recognized University + 2 Years clinical experience

INTERNATIONAL MSc in CLINICAL AUDIOLOGY: CORE CURRICULUM

1. *Module on Auditory Systems: 3.0 Semester Credits*
 - I. **Auditory Physiology & Psychoacoustics**
Robert V Harrison, PhD, DSc
 - II. **Auditory System Disorders and Diseases**
James W. Hall III, PhD
2. *Module on Basic Clinical Assessments : 3.0 Semester Credits*
 - I. **Diagnostic Clinical Procedures & Clinical Skills***
James W. Hall III, PhD
 - II. **Electro-acoustic Measurements in Audiology & Clinical Skills***
James W. Hall III, PhD
3. *Module on Advanced Clinical Assessments: 3.0 Semester Credits*
 - I. **Electro-physiologic Measurements in Audiology & Clinical Skills***
Jace Wolfe, PhD
 - II. **Introduction to Vestibular Function & Clinical skills training using computer simulation**
Bre Myers, AuD

4. *Module on Pediatrics: 3.0 Semester Credits*
 - I. **Pediatric Audiology**
Ryan McCreery, PhD
 - II. **Auditory Processing and Disorders**
James Hall, PhD/Wayne Wilson, PhD
5. *Module on Intervention Technologies: 3.0 Semester Credits*
 - I. **Hearing Technologies & Clinical Skills***
Jason Galster, PhD
 - II. **Implant Technologies and Sensory Aids & Clinical Skills***
Karen Gordon, PhD
6. *Module on Auditory Rehabilitation: 3.0 Semester Credits*
 - I. **Auditory Rehabilitation**
Harvey Abrams, PhD
 - I. **Counseling in Audiology**
Kris English, PhD
7. *Module on Best Practices: 3.0 Semester Credits*
 - I. **Clinical Decision Making in Audiology**
Dave Zapala, PhD
 - II. **Public Health & Humanitarian Audiology**
James W. Hall III, PhD

Online Educational Opportunities for Practicing Audiologists: An International Perspective
For More Information Contact: gsundar@salus.edu



Web links to the Program: <http://www.salus.edu/Colleges/Audiology/Master-of-Science-in-Clinical-Audiology.aspx>

Application Process: <http://www.salus.edu/Colleges/Audiology/Master-of-Science-in-Clinical-Audiology/Application-Process.aspx>

Curriculum: <http://www.salus.edu/Colleges/Audiology/Master-of-Science-in-Clinical-Audiology/Curriculum.aspx>

Tuition: <http://www.salus.edu/Admissions/Tuition-Financial-Aid/Cost-of-Attendance.aspx>

Facilitator Training:
International Hearing Care Technician Certificate
American Institute of Balance (www.aicme.com)



Jackie Clark, Ph.D.



James W. Hall, III, Ph.D.



James Saunders, M.D., F.A.C.S.



Alexandra Feliz, Au.D.

Spanish Language Instructors



Abraham Garcia, Au.D.

International Hearing Care Technician Certificate: Curriculum (www.aicme.com)

Core Curriculum:

Designed to provide general knowledge and skills required by a hearing care technician who will work under the supervision and direction of a physician, otolaryngologist or audiologist. Successful completion of the core curriculum leads to a Hearing Care Technician Certificate.

Each Course Features:

A 48 to 60 minutes of instruction through a narrated PowerPoint presentation on a focused topic. Presentations include text, figures, and video demonstrations to enhance the learning experience.

Selected readings and resources, including websites and other internet sources information, are recommended for each topic.

International Hearing Care Technician Certificate: Courses are Grouped Into One of Three Categories

Basic hearing courses cover general knowledge of sound, acoustics, auditory anatomy and physiology.

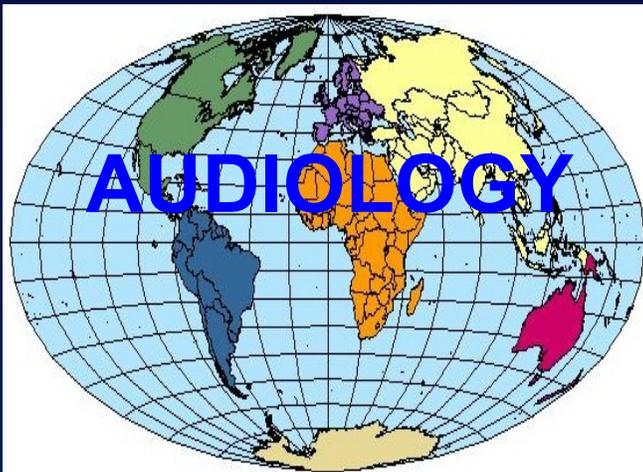
Auditory disorders courses provide a brief overview of disorders and diseases commonly encountered in patient population.

Assessment Techniques category provides information needed in preparation for conducting techniques commonly applied in hearing assessment, such as otoscopic inspection, pure tone hearing screening and threshold assessment, tympanometry, and measurement of otoacoustic emissions.

**International Hearing Care Technician Certificate:
Student Performance...Measuring Outcomes**
(www.aicme.com)

- ❑ Each course concludes with an assessment of learner outcome that includes questions within different domains of learning as defined by revised Bloom's Taxonomy, specifically:
 - ✓ Remembering (formerly knowledge)
 - ✓ Understanding (formerly comprehension)
 - ✓ Applying, analyzing, evaluating, and creating
- ❑ For each course, recommendations and guidelines are offered for acquisition of related clinical and technical skills by technicians enrolled in the core curriculum.

THANK YOU!
QUESTIONS?



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www.audiologyworld.net