Addressing the PhD Shortage

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Disclosure Statements

• Janet Koehnke has no financial relationships to disclose. She has a non-financial relationship with ASHA’s Academic Affairs Board serving as a member since 2011 and AAB Chair in 2014.

• Malcolm McNeil has no financial relationships to disclose. He has a non-financial relationship with ASHA’s Academic Affairs Board serving as a member since 2011 and as AAB Chair 2011-2013.

• Kathy Chapman has no financial relationships to disclose. She has a non-financial relationship with ASHA’s Academic Affairs Board serving as a member since 2011.

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• Loretta Nunez has a financial relationship with the American Speech-Language-Hearing Association that pays her salary. She has a non-financial relationship with ASHA’s Academic Affairs Board serving as Ex officio to this committee.
Learner Outcomes

At the conclusion of this session, participants will

• Understand the work that ASHA and CAPCSD have undertaken to address the PhD shortage
• Realize the urgent need to increase the number of individuals obtaining PhDs in CSD
• Be able to discuss the PhD shortage with their colleagues and determine ways they may be able to help alleviate the shortage
Problem

• The shortage of PhDs in communication sciences and disorders

Trying to Solve it

• CAPCSD and ASHA — collaborating to address the issue
Agenda

• The Shortage
  – Facts & Figures
  – Aging of the Professoriate

• Early Efforts to Address the Problem

• Moving Forward
  – The New Strategic Plan
  – Where Do We Go from Here?
  – Growing the Professoriate
Raise Your Hand If...

- You are associated with PhD programs
- You have open faculty positions — SLP? AUD?
- You’ve had to search more than a year to fill a position. More than 2 years
- More than 50% of your FT tenured or TT faculty are over 55 – over 60
- More than 25% of your FT tenured or TT faculty are under 40 – under 35
- You are concerned about finding new faculty as your current faculty retire
- Your administration is aware of the shortage
Situation in Black & White

• Workforce pipeline data for PhD graduates in CSD
  *(Source: 2012 CSD Education Survey)*

• Current workforce data for PhD holders
  *(Source: ASHA Year-End counts for 2002, 2008, and 2012)*

• Research doctoral degrees trend data for speech-language pathology and audiology, health sciences, and all fields
  *(Source: National Science Foundation Survey of Earned Doctorates 2000-2012)*
Existing PhD Programs
AY 2011-2012

• 74 institutions offer research doctoral degrees in CSD
• 538 research doctoral applications (not unique applicants)
• 206 offers of admission extended (not unique admissions)
• 158 research doctoral students (1st year enrollment)
• 743 research doctoral students (total enrollment)
• 2 is the average # of new PhD students per year/institution (first year enrollment)
• 10 is the average # of PhD students per institution (total enrollment)

Source: 2012 CSD Education Survey
PhD Degrees Granted by Area of Specialty 2011-2012

Top 2 Clinical Areas

• Audiology
  – Hearing and balance disorders
  – Treatment (AR, Balance, Hearing Aides, Cochlear Implants)

• Speech-Language Pathology
  Child Language
  Adult Neurogenics
# Research Doctoral Degree Graduates’ First Employment by Employment Setting

<table>
<thead>
<tr>
<th>Employment Setting</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Faculty/academic position in CSD program</td>
<td>46</td>
<td>35.7</td>
</tr>
<tr>
<td>2. Faculty/academic position in other discipline</td>
<td>7</td>
<td>5.4</td>
</tr>
<tr>
<td>3. Clinical position in academic setting</td>
<td>9</td>
<td>7.0</td>
</tr>
<tr>
<td>4. Clinical position non-academic setting</td>
<td>9</td>
<td>7.0</td>
</tr>
<tr>
<td>5. Administration position in academic setting</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>6. Administration position in non-academic setting</td>
<td>4</td>
<td>3.1</td>
</tr>
<tr>
<td>7. Research position in academic setting</td>
<td>8</td>
<td>6.2</td>
</tr>
<tr>
<td>8. Research position in non-academic setting</td>
<td>5</td>
<td>3.9</td>
</tr>
<tr>
<td>9. Postdoctoral position</td>
<td>27</td>
<td>20.9</td>
</tr>
<tr>
<td>10. Postponed employment</td>
<td>4</td>
<td>3.1</td>
</tr>
<tr>
<td>11. Unknown</td>
<td>9</td>
<td>7.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>129</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: 2011 CSD Education Survey*
Faculty-Researcher Workforce Data

- 4,394 faculty employed (based on 84% programs reporting data)
  - 1,843 full-time and 788 part-time academic faculty
  - 921 full-time and 842 part-time clinical faculty
- 408 projected PhD full-time faculty openings 2012-2017
  - 279 projected number of PhD-level research doctoral graduates who will be available for, and likely to seek, an academic faculty position as their first employment in the same timeframe
  - Nearly a third (31.6%) of faculty openings in CSD between 2012 and 2017 will remain unfilled

Source: 2012 CSD Education Survey
Age Range of All ASHA-Member PhD-Holders in Colleges and Universities

Age Range
- 35 or younger
- 36-40
- 41-45
- 46-50
- 51-55
- 56-60
- 61-65
- 66 or older

Year End 2002
Year End 2008
Year End 2012
Age Range of ASHA-Member PhDs Certified in Audiology in Colleges and Universities

![Bar chart showing the age range distribution of ASHA-Member PhDs certified in audiology from Year End 2002 to Year End 2012.](chart)
Age Range of ASHA-Member PhDs Certified in Speech-Language Pathology in Colleges and Universities
Distribution of ASHA Constituents with PhD by Certification from 1996 to 2013
Regression Analysis Table — Number of CCC-As with PhDs from 1996 to 2013
Regression Analysis Table — Number of CCC-SLPs with PhDs from 1996 to 2013
Research Doctoral Degrees Trend Data for Speech-Language Pathology and Audiology, Health Sciences, and All Fields From the National Science Foundation Survey of Earned Doctorates (2000-2012)

Research Doctoral Degrees Trend Data for Speech-Language Pathology and Audiology, Health Sciences, and All Fields From the National Science Foundation Survey of Earned Doctorates (2000-2012)

Research Doctoral Degrees Trend Data for Speech-Language Pathology and Audiology, Health Sciences, and All Fields From the National Science Foundation Survey of Earned Doctorates (2000-2012)

Critical Issues

Associated with Sustaining a Sufficient PhD Personnel Pipeline
Five Critical Issues Identified

1. While we are graduating a consistent, if not increasing, number of PhD holders, the number of retiring faculty exceeds the number entering the field. Therefore, there continues to be a strong need to (a) increase awareness of the shortfall for PhD holders and (b) continue efforts to recruit and retain a sufficient number of PhD students and faculty.
2. Job opportunities, money, and location impact decisions to pursue a PhD and to pursue a faculty-researcher career. Therefore, a faculty-researcher career should be promoted as a rewarding choice that helps people, allows one to pursue a passion for research, and affords job satisfaction, flexibility, and work-life balance.
3. Advancing the knowledge base of the discipline in the context of a limited, if not declining, pool of scientists is a serious concern. Further, scientists in all disciplines are challenged to support their research in the current funding climate; arguably, this situation has potentially perilous effects on smaller disciplines, such as CSD. Therefore, advocacy for research funding, greater CSD representation on grant review panels, and guidance about how to survive in a weak research-funding climate are all essential to support the success of CSD researchers.
4. The undergraduate curriculum in CSD may not optimally prepare students for contemporary clinical practice or scientific careers in our field. Therefore, stronger training in the sciences may be needed to better prepare students for both PhD education and clinical practice.
5. How we communicate about our field impacts awareness of our discipline, recruitment to our field, and the value placed on our contributions in academic, research, and clinical arenas. Yet, awareness about CSD, the value of our research, and the impact we have on the conditions we treat is not high. Therefore, there is a need to enhance communication about who we are as a discipline, including the value of our research and the impact of our clinical services.
Steps Taken Over the Past 10 Years to Address the Shortage
Associated with Sustaining a Sufficient PhD Personnel Pipeline
Documentation of Prior Efforts

- Found in the reports of the 2002 and 2008 Joint Ad hoc committees on the PhD Shortage
  - Report of the 2008 Joint Ad Hoc Committee on PhD Shortages in Communication Sciences and Disorders [PDF]
  - Crisis in the Discipline Report 2002 [PDF]
- Reports highlight initiatives, outcomes and impact achieved between 2002-2013

All reports are available at http://www.asha.org/academic/reports
Key Accomplishments — 2002-2013

- Enhanced Visibility of the Need
- Data Collection and Dissemination - HES CSD Education Survey and EdFind and annual national and state aggregate data reports
- Advocacy for loan forgiveness for PhD students
- Advocacy for increased funding for programs preparing PhD students
- Publication of articles and presentations to disseminate ideas and information about addressing the PhD shortage
  - In ASHA Leader
  - At ASHA Convention
  - At ASHA Researcher-Academic Town Meeting
  - At CAPCSD Annual Conference
- Programs and Resources to Address the Issue
  - ASHA, CAPCSD and ASHFoundation
Examples of ASHA Programs and Resources

• Career Development Webpages
  – Academic/Research Career Profiles
  – Considering a PhD
  – PhD Preparation

• E-newsletter

• Unique recruitment and retention programs
  ✓ SPARC
  ✓ AARC
  ✓ MARC
  ✓ ARTA
  ✓ Lessons for Success
  ✓ Grant Review and Reviewer Training
  ✓ Clinical Practice Research Institute
  ✓ PROGENY
Examples of CAPCSD Programs and Resources

- REPORT: 2009 CAPCSD Survey of Research Doctoral Students
- CAPCSD Scholarships
  - Plural Research Scholarship
  - CAPCSD Leadership Scholarship
- PhD Forum at the CAPCSD Annual Conference
Addressing the Shortage Moving Forward

New Strategic Plan (2015-2018)
Plans to “Grow” the Professoriate
New Strategic Plan — 2015 to 2018

I. Communication
   a. About the discipline
   b. About the PhD personnel supply and demand

II. Curricular Models
   a. Undergraduate curriculum
   b. PhD curriculum

III. Recruitment and Retention

IV. Funding Advocacy
   a. PhD student funding
   b. Research funding
Performance Measures (PM) and Targets (T)

1. PM: # of earned research doctorates granted annually.
   T: 140 (baseline = 122 in 2011-2012 AY*) 14% increase from baseline

2. PM: % capacity filled with new PhD students enrolled in CSD programs annually.
   T: 60% overall (baseline = 50%) 10% increase
   T: 40% for audiology (baseline = 26%) 14% increase
   T: 70% for speech-language pathology (baseline = 50%) 20% increase
   T: 70% for speech and hearing sciences (baseline = 45%) 25% increase

3. PM: % of all PhD graduates in CSD who take research and academic appointments
   (includes faculty-researchers and postdoctoral scholar appointments combined)
   T: 70 % (baseline = 57%) 13% increase
   a. PM: % of PhD graduates in CSD who take positions as faculty-researchers in CSD
      academic programs in the US.
      T: 40% baseline = 36% in 2011–2012 AY*) 4% increase
   b. PM: % of PhD graduates in CSD who take postdoctoral scholar appointments.
      T: 30% (baseline = 21% in 2011–2012 AY*) 9% increase

*Baseline Data Source: 2012 CSD Education Survey*
Examples of Initiatives

• Communication
  – Raise awareness about CSD among other disciplines
  – Raise the profile of scientific accomplishments and contributions from the CSD discipline with appropriate audiences
  – Maintain high engagement and response rates for the CSD Education Survey, communicate about trends
  – Engage Department Chairs to communicate about innovative workforce solutions
• **Curricular Models**
  
  – Explore the need to develop guidance for UG curricula
  
  – Identify scientific underpinnings appropriate for UG curricula that support contemporary clinical practice and research careers
  
  – Showcase innovative models of UG education that enhance science and research education
  
  – Showcase PhD education models that prepare future scientists
• **Recruitment and Retention**
  
  – Annual forum to discuss recruitment and retention strategies
  
  – Develop a faculty toolkit for PhD recruitment and retention
  
  – Recruit high quality master’s SLP and AuD students to PhD programs
  
  – Enhance ASHA award, mentoring and research education programs
  
  – Recruit from other disciplines to enter CSD PhD programs
  
  – Retool the ASHA “Get a Ph.D. in Communication Sciences and Disorders” web clip to make more explicit the wide variety of research being done in CSD and its impact
  
  – Refresh recruitment webpages, brochures and career profiles
  
  – Enhance presence at scientific meetings to showcase research in CSD for the purpose of enhancing recruitment of PhD faculty-researchers
  
  – Recruit PhD students through organizations for high school guidance counselors and science and health professions advisors
• Funding Advocacy

  – Encourage the academic and research community to complete ASHA’s annual Public Policy Survey to inform advocacy efforts
  – Continue advocacy in support of funding for PhD students
  – Advocate for federal incentives for Pell Grants and Stafford loans, loan forgiveness provisions for audiologists and speech-language pathologists, amortization of tuition and reauthorization of the Higher Education Act
  – Continue research education and mentoring programs that prepare emerging researchers for grant writing and grant review opportunities
  – Advocate to funding agencies for research funding in CSD
  – Explore the feasibility of a new funding mechanism to provide research funding for highly scored proposals (to federal funding agencies) that did not get paid with the intention of improving the chances of getting funded upon reapplication
How Do We “Grow” the Professoriate?