

# Department of Communication Sciences and Disorders - STRATEGIC PLAN 2014 -2019

## Values and Vision Statement

All children and adults have the right to experience life with functional communication and to experience and participate to their fullest potential in achieving educational, vocational and social goals in a climate that fosters a spirit of respect, optimism and joyfulness. We are change agents who provide the knowledge, skills and tools to transform the lives of children and adults with disabilities, their families and communities through our research, teaching, and outreach services.

## Mission of the Department of Communication Sciences and Disorders

The mission of the Department of Communication Sciences and Disorders is to:

- enhance and sustain a high quality interdisciplinary research program to address communication development and disabilities across the life span;
- advance and sustain a culture that provides the highest quality of undergraduate and graduate student instruction in a student-centered environment;
- prepare graduate students to conduct and become consumers of research, as well as competent professionals; and
- provide outreach to individuals with speech, language, and hearing disabilities in the University and surrounding community, as well as assist relevant private and public agencies.
- promote and sustain a culture of acceptance, diversity, inclusion and global engagement among the students, faculty, staff and clients.

## Summary of Immediate Needs Driving Future Plans

Communication disabilities are social disabilities. Disability is a global public health and diversity concern. With more than 1 billion people (15 percent of the world's population) belonging to the largest minority in the world according to the first official global report on disability (World Report on Disability, 2011), the need for addressing communication disabilities is specifically warranted, as the lack of functional communication capacities crosses all levels of social, economic, racial/ethnic, academic, psychological and vocational spheres. Although policies have been adopted to protect and assist this vulnerable population (United Nations Standard Rules on the Equalization of Opportunities of Persons with Disabilities, 1993; United Nations Convention on the Rights of Persons with Disabilities, 2006), barriers and disparities continue for this major minority group including: human rights, stigma, communication, health care, housing, access, education, transportation, employment and full social participation in society.

1. There is a critical need for research, student-centered undergraduate and graduate education, training the next generation of service providers, distinctive student clinical experiences, and engagement in the local and global communities to examine the etiology, development, assessment and treatment of communication disabilities because:

- More than 40 million Americans have communication disorders, costing the U.S. approximately \$154-186 billion annually
- By the first grade, roughly 5 percent of children have noticeable speech disorders
- 3 million+ Americans stutter
- 6-8 million Americans have some form of language impairment
- Approximately 1 million Americans suffer from aphasia
- The U.S. Centers for Disease Control and Prevention estimates the lifetime costs for all people with hearing loss born in the year 2000 will total \$2.1 billion, as the majority of these costs come from lost wages due to inability or limited ability to work
- In 2012, it was reported that more than 177,000 returning American veterans from Iraq and Afghanistan reported some type of service-related permanent hearing loss and an additional 350,000 reported tinnitus — noise or ringing in the ears. Tinnitus was the most prevalent service-connected disability for returning personnel from Operations Enduring Freedom and Iraqi Freedom in 2010 (Department of Veterans Affairs, Annual Benefits Report, FY 2010).
- With life expectancy increasing over the past two decades and individuals living healthier lives, maintaining and sustaining functional communication skills well into the later decades is becoming a critical issue.
- An awareness and use of new identification tools for children with developmental disabilities (e.g. Autism) with co-occurring communication deficits has shown alarming increases in the prevalence rates.

2. Approximately 1 percent of the current 177,739 members of the American Speech-Language and Hearing Association (ASHA) list researcher as a primary occupation (Highlights and Trends: Member and Affiliate Counts, Year End 2012).

- There is a critical shortage of doctoral level researchers and faculty in this discipline.

3. An urgent need for outstanding instruction of undergraduate and graduate students to meet the great demand for high-quality services for persons with communication disabilities with job opportunities in speech-language pathology expected to grow by 23 percent from 2010 to 2020, faster than the average for all occupations according to the Bureau of Labor Statistics.

- There is a 19 percent vacancy rate for speech-language pathologists and audiologists in the United States and a 15 percent vacancy rate for speech-language pathologists in the Commonwealth of Pennsylvania.

4. The urgent and increasingly pressing problem in today's society of improving outcomes for individuals with disabilities, especially those with the most complex disabilities by meeting the needs of Augmentative and Alternative Communication (AAC) users and their families.

- More than 32 million individuals have complex disabilities that significantly restrict participation in education, employment, social relationships, and community involvement, and negatively impact overall quality of life.

- The incidence of individuals with disabilities is steadily increasing due to longer life expectancies, improved medical interventions, as well as a wide range of environmental factors.

- The need for AAC assistance is also heightened by the increased incidence of Autism spectrum disorders, ALS, and the prevalence of traumatic brain injuries and other hearing disabilities in returning veterans.

- To date, the CSD department at Penn State has become the number one research and training program in the world by conducting state of the art research, providing outstanding professional education, and establishing and sustaining high quality outreach service provision.

- AAC tackles the needs of those individuals with the most complex and significant disabilities, including children and adults with developmental disabilities (e.g., Autism, cerebral palsy, mental retardation), those with acquired disabilities (e.g., traumatic brain injury, spinal cord injury, stroke), and those with degenerative neurological disorders (e.g., ALS or Lou Gehrig's disease, muscular dystrophy, multiple sclerosis).

- By advancing knowledge and enhancing function of individuals with the most complex disabilities, researchers and clinicians can positively impact the performance of others with less significant disabilities and those without disabilities.

5. The population of 65 and over has increased from 35 million in 2000 to 41.4 million in 2011 (an 18 percent increase) and is projected to increase to 79.7 million in 2040 (A Profile of Older Americans: 2012). The U.S. Census Bureau projects that population age 85 and over could grow from 5.5 million in 2010 to 19 million by 2050 (Older Americans 2012, Key Indicators of Well-Being).

- As the population sees a longer lifespan, normal changes resulting from aging will affect speech, language, hearing, memory, and/or swallowing.

- Coupled with the increased likelihood of strokes, head and neck cancer, neurodegenerative diseases, heart attacks, etc., a critical need will exist for speech-language pathologists in the United States to diagnose and treat individuals with communication, cognitive, and/or swallowing disabilities.

6. Essential neurological knowledge will be a prerequisite for future researchers in our profession, as interdisciplinary neuroscience research clearly demonstrates innovative changes in assessing and treating many communication disorders.

- With the increase in neuroscience research (e.g. imaging research during a variety of speech and language tasks, Evoked Response Potential software and hardware, Eye Tracker and Electroencephalogram technology, Auditory Brainstem Response) the functions of the social brain are displaying significant plasticity. This suggests that multiple areas of the brain are involved in development of delays and disorders, functionality may be restored by training other areas of the brain.

- Increasing knowledge and experience as it relates to the larger neuroscience community is essential for communication disorders.

- Re-training areas of the brain for delayed, disordered or lost cognitive, social and communicative functions is a critical new area of research and clinical applications.

7. This need for fostering an inclusive and welcoming environment is not only urgent for one of the largest minority groups in the United States (i.e., persons with disabilities) but also a global issue to enhance the opportunities of the world's estimated 650 million individuals with disabilities.

- Eighty percent of persons with disabilities live in developing countries according to the UN Development Program (UNDP). Developing countries needs for the assessment and treatment of communication disabilities are severely neglected.
- Ninety percent of children with disabilities in developing countries do not attend school according to the United Nations Educational, Scientific and Cultural Organization (UNESCO).
- The increase in the use of the Internet, e-learning, reading libraries, telehealth and new technologies for persons with disabilities has changed the communication opportunities and capacities for all people in the many countries around the globe.

8. Recent government initiatives calling for ways to provide access for all individuals to communicate using all possible modalities and technology are a federal funding priority.

- The passage of the laws like the ADA and call for interdisciplinary proposals from USDE, NIDRR, NSF and NIH signal the need and support from the federal government.

### **Challenges for Attaining the Goals of Our Strategic Plan**

In order to achieve the goals of our Strategic Plan, the needs must be met:

- The need to continue to recruit additional academic faculty at two levels (assistant and associate/full) who combine strong research and scholarship programs with a commitment to teaching/learning excellence.
- The need to continue to recruit additional full-time clinical faculty who combine strong clinical teaching skills with a commitment to collaborative research activities.
- The need to provide all students with distinctive and outstanding learning experiences while sustaining appropriate student-faculty ratios in classroom instruction, increased involvement in the world campus and e-learning seminars, global experiences and expanding clinical opportunities, especially in the area of neurogenics and aging.
- The need to maintain, through renewal, national accreditation of the graduate program through the Council for Academic Accreditation of the American Speech-Language Hearing Association. All accreditation agencies are being more selective in their reviews and placing greater requirements (curricular reviews) on academic departments to meet the demand for training high quality professionals in both academic and clinical areas.
- The need to secure additional external funding necessary by faculty in all priority areas to secure funds for research activities at University Park and non-University Park locations (e.g., Hershey Medical School) and graduate student assistance in both priority areas.
- The need for additional technological resources, specifically funding for acquisition and maintenance of state-of-the-art assistive technologies and cutting edge equipment for answering critical questions and providing high-quality, evidence-based clinical and outreach services.
- The need to secure additional resources for clinical and outreach activities.

### **Strategic Planning Process**

The Strategic Plan was guided by the input from focus groups, retreats and developing goals based on enhancing the department's current strengths, while planning new initiatives based on our strengths and opportunities for new and innovative initiatives to allow us to become nationwide leaders in these new areas in research, teaching and outreach activities. The process included obtaining input from numerous focus groups including: undergraduate students, graduate students, Schreyer Honors students, faculty committees, staff committees, clinical teaching committees, specific focus area committees, externship placement committees, alum committees, and committees of former and current employers. Additionally, faculty had a Strategic Planning Retreat in August 2013 and Annual Diversity Retreats to provide information for the Plan. Faculty also reviewed the documents in numerous iterations. Finally, the Strategic Plan was guided by the principles and standards outlined in the 2014 Council for Clinical Certification in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association for the Certificate of Clinical Competence in Speech-Language Pathology. (Appendix A).

### **Specific Detailed Strategy Statement Development**

- For each outcome statement, one or more specific strategy statements will be developed.

- The strategy statement will indicate a specific activity that will be necessary to accomplish the outcome.
- Each strategy statement indicates the following:
  - When it will be done [specific date]
  - Who will do it [person responsible]
  - What will be done [specific activity]
  - To Whom it will be done [target group]
  - Criteria that will indicate success [a number or quantitative indicator]
  - Evaluation procedure/tool that will be used to indicate when/if criteria were met

## **The Department's Priority Focus Areas**

Priority Area 1: We are currently the number one program in the world in augmentative and alternative communication / assistive technology in research, teaching, and outreach activities.

Our Priority 1 Focus is to maintain that status with continued significant contributions advancing knowledge and improving outcomes for individuals with complex disabilities by enhancing the existing AAC /assistive technology program at Penn State through research, teaching, and outreach activities.

Priority Area 2: We are building on current department strengths and expertise in the area of applications of innovative technologies and neuroscience for communication learning and disabilities across the life span with a special emphasis in aging. Our Priority 2 Focus is to develop and enhance a secondary area of research, teaching and outreach eminence in the applications of neuroscience and innovative technologies for communication learning and disabilities across the lifespan, especially aging, in order to be recognized as one of the leading programs in the country in these activities for individuals with communication disabilities

## **Target Goals of the Department of Communication Sciences and Disorders**

Our goals are fundamental to the mission of the College of Health and Human Development to improve and transform the quality of life of children and adults across the life span. It complements the foci in the College on prevention, development, and transformation within the context of enhancing and improving the quality of life, especially for those with disabilities. The Department and College have a fundamental responsibility to address the needs of individuals with disabilities as well as those without disabilities.

All children and adults, including those with disabilities, have the right to participate fully in educational, vocational, family, and community environments. All children and adults, including those with disabilities, have the fundamental right to the opportunity to achieve their full potential.

To attain our vision, we have established six overarching goals. These include:

***Goal 1: To conduct research that significantly improves the quality of life for individuals with communication disabilities and contributes to the knowledge of communication in individuals with typical development and those with communication disorders.***

Objectives:

1.1 Enhance and integrate academic and clinical faculty and student research projects, especially in translational research areas.

1.2 Sustain and enhance primary research theme in Augmentative and Alternative Communication that is driven and supported by faculty expertise and lines of research and current number one world rating. <sup>1</sup>

1.3 Develop and expand secondary research theme in the application of innovative technologies to answer critical questions in communication development and disabilities across the life span. <sup>1</sup>

1.4 Promote undergraduate student participation in new and ongoing research projects.

1.5 To expand and enhance laboratory facilities, equipment and research support services to promote faculty and student research.

1.6 To develop new and sustain current interdisciplinary research activities in communication disabilities across the lifespan, especially in priority areas.

**Goal 2: To educate and mentor the next generation of pre-professional scholars by strengthening and expanding our undergraduate academic programs to enhance learning experiences, thereby attract the best qualified students, especially those from underrepresented and underserved groups.**

Objectives:

- 2.1 Critically evaluate curriculum and revise as needed to meet the needs of a pre-professional student, using certification requirements as a vehicle for curriculum revision, especially in the area of foundational courses.
- 2.2 During curricular reviews, opportunities to enhance undergraduate students' quantitative thinking and digital communication and literacy skills will be explored and implemented.
- 2.3 Include content related to cultural and linguistic diversity in all relevant courses. <sup>1</sup>
- 2.4 Develop and incorporate neuroscience foundational course in the curriculum.
- 2.5 Develop and incorporate undergraduate course in aphasia, dysphagia, dementia and dysarthria in the curriculum.
- 2.6 Develop and incorporate service learning opportunities. <sup>1, 2</sup>
- 2.7 Increase student involvement in faculty research projects, especially in translational research areas. (Please see Objective 1.1.) <sup>1</sup>
- 2.8 Increase the quality/quantity of students admitted to the undergraduate program, especially those from underrepresented groups. <sup>1</sup>
- 2.9 Continue and expand course offerings that meet the University diversity requirement and the general education requirements to provide service to all University students' general health and well-being, especially taking care of their voices and hearing across the lifespan. <sup>1, 2</sup>
- 2.10 Increase post-graduate options for undergraduate students.
- 2.11 Focus on the complexities of increasing enrollment in the department.
- 2.12 Develop and institute a systematic system of peer evaluation of teaching for enhanced undergraduate learning experiences.

**Goal 3: To educate and mentor the next generation of professional scholars, scientists and practitioners by strengthening and expanding our graduate academic programs to enhance learning experiences, thereby attract the best qualified students, especially those from underrepresented and underserved groups.**

Objectives:

- 3.1 Maintain the accreditation of our academic graduate program through the Council for Academic Accreditation, (CAA).
- 3.2 Critically evaluate curriculum and revise as needed to meet the needs of a pre-professional student, using certification requirements as a vehicle for curriculum revision.
- 3.3 Include content related to cultural and linguistic diversity in all relevant courses. <sup>1</sup>
- 3.4. Increase the quality of students admitted to the graduate program. <sup>1</sup>
- 3.5 Increase number and quality of doctoral students. <sup>1</sup>
- 3.6 Increase the number of assistantships for graduate students through internally and externally funded research grants. <sup>1</sup>
- 3.7 Develop and institute a systematic system of peer evaluation of teaching for enhanced graduate learning experiences. <sup>1</sup>

**Goal 4: To significantly enhance the quality of life for individuals with communication disabilities by expanding and improving outreach opportunities for students participating in the Speech, Language and Hearing Clinics and related clinical activities, especially in priority areas.**

Objectives:

- 4.1 Increase current number and type of outstanding services to individuals with communication disabilities in the Speech and Language Clinics. <sup>1</sup>
- 4.2 Increase current number and type of outstanding services to individuals with hearing disabilities in the Hearing Clinic. <sup>1</sup>
- 4.3 Evaluate current Early Language Group with focus on language development. <sup>1</sup>

- 4.4 Evaluate current Rural Schools Project with focus on children with communication disabilities from underserved communities. <sup>1</sup>
- 4.5 Enhance current outstanding clinical placement sites. <sup>1</sup>
- 4.6 Enhance the current model demonstration program at Penn State providing the highest quality AAC assessment and intervention to individuals with complex disabilities who require AAC /assistive technology, especially those who are the hardest to serve. <sup>1</sup>
- 4.7 Enhance current outreach clinical activities in various formats to build capacity in AAC/ assistive technology among researchers and educational, medical, and rehabilitation professionals (e.g., webcasts, e-learning, distance education, summer institute, and annual conferences). <sup>1</sup>
- 4.8 Enhance audiological services for individuals with hearing losses and their families and clinical and research opportunities for students. <sup>1</sup>
- 4.9 Advocate for individuals with communication disorders through partnerships with local and state community members and agencies. <sup>1</sup>
- 4.10 Integration of diversity goals and global initiatives in clinical service delivery. (Please see Goal 5 and Goal 6.) <sup>1</sup>

***Goal 5: To promote diversity, a culture of inclusion, and an awareness, knowledge and understanding of the best methods for improving the lives of individuals with disabilities.***

Objectives:

- 5.1 Recruit and retain diverse students in the Department's undergraduate and graduate programs, especially those from underrepresented and underserved groups, while emphasizing the critical importance of programs aimed at improving the lives of individuals with disabilities through research, education, community engagement, and outreach activities. <sup>1</sup>
- 5.2 Recruit and retain diverse faculty and staff, while emphasizing the critical importance of programs aimed at improving the lives of individuals with disabilities through research, education, community engagement, and outreach activities. <sup>1</sup>
- 5.3 Provide continued leadership to the University-wide initiative to establish a Commission for Individuals with Disabilities to ensure the successful access and participation of students, faculty and staff within the Penn State University community. <sup>1</sup>
- 5.4 Provide continued leadership to federal and state governmental agencies as well as professional organizations with respect to issues related to individuals with disabilities and assistive technology. <sup>1</sup>
- 5.5 Maintain annual departmental diversity retreat. <sup>1</sup>
- 5.6 Expand our clinical offerings to include a wider variety of clients, especially those from underrepresented and underserved groups. <sup>1</sup>
- 5.7 Enhance visibility and support student organizations for inclusion including NSSHLA, Sign Language Organization, Audiology Club and Multicultural Issues in CSD Organization. <sup>1</sup>
- 5.8 Global initiative activities for inclusion. (Please see Goal 6.)<sup>1</sup>

***Goal 6: To develop and incorporate global learning opportunities and research partnerships to prepare students to improve the lives of individuals with disabilities in the global community.***

Objectives:

- 6.1 Create and develop international activities for faculty research, teaching and outreach activities. <sup>1</sup>
- 6.2 Establish maximum of two primary international partners for research, teaching and service excellence to assist students with global perspective and recruitment efforts at the department level. <sup>1</sup>
- 6.3 Create and strengthen co-sharing of teaching and research activities with doctoral students and international programs via research collaborations internationally (e.g., University of Pretoria, South Africa; University of Sydney in Australia; Jönköping University in Sweden, Vestfold University College in Norway). (Please see Objective 3.5) <sup>1</sup>
- 6.4 Create and develop international activities for graduate student research, teaching and outreach activities. <sup>1</sup>
- 6.5 Increase global initiatives with undergraduate students. <sup>1</sup>

## **Section 1 (Detailed Plan) and Appendix A**

Our strategic plan is focusing on research, teaching and outreach activities in two major priority areas. All faculty in the Department will contribute to the success and achievement of the Goals over the next five-year period. The plan was developed with the input from multiple stakeholders as mentioned in the Process section. We decided specific faculty groups would self-identify as key players to provide leadership roles the development and implementation of strategies and specific detailed strategy statements. Section 1 (Detailed Plan) and Appendix A of the Strategic Plan is located in 308 Ford Building (Department of Communication Sciences and Disorders main office).

### **Goal Key**

<sup>1</sup> Diversity

<sup>2</sup> Sustainability

### **METRICS:**

We see the plans and actions described above as working in concert to move the department forward. Five years from now, if the collective efforts represented by this strategic plan have been successful, we will have:

- Increased the proportion of undergraduate and graduate students, faculty and staff from underrepresented groups. The goal is to attain at least 10% for all groups.
- Increased the visibility, recognition and excellence in the area of augmentative and alternative communication and established leadership in neurological/neurogenic disabilities through rankings, peer reviews, etc.
- Increased the number of scholarly activities (publications, presentations and grants) by 10%.
- Increased the dollar amount of research awards by at least 5% over the next five years.
- Increased the number of doctoral students 20% during this time.
- Maintained the overall size of the department's undergraduate student body consistent with increased resources.
- Maintained or modestly decreased the overall size of the department's master's graduate student body consistent with increased resources.
- Increased the number of foundational courses (especially at the 200 or 300 level) to support student engagement, increased knowledge and skills in neuroscience for successful graduate work.
- Increased the number of courses (especially at 300 and 400-level) with smaller sections sizes to at least 5 of these courses.
- Increased the number of courses on the World Campus and/or on-line to at least 3 online and/or hybrid offerings.
- Increased the cross pollination of clinical, academic and research activities among faculty and students by at least 10%
- Increased the number of clinical outreach activities, especially in the area of aging and neurological disorders.
- Increased the number and type of assessment and treatment services for individuals with communication disabilities by 10% for enhanced graduate students training and experiences.
- Increased global connections/experiences for students and faculty by 10% with at least one new contract with an international university.

- Continued to increase the number of full-time faculty members who are tenured/tenure-track faculty.
- Continued to increase the number of fixed-term clinical faculty members.