

Annual Report

July 2014 – June 2015

Submitted by

Helena Mitchell, Ph.D.
Executive Director

The Center for Advanced Communications Policy (CACP) focuses on key issues that influence the development, implementation and adoption of cutting-edge, advanced communications technologies. CACP work includes assessment of policy issues and production of regulatory filings, identification of future options for innovation, and articulation of a clearer vision of the ever changing technology landscape. Research areas include wireless communications and platforms; technology use by vulnerable populations including people with disabilities; emergency alerts and communications; higher education policy and evaluation; new communications modes such as virtual worlds and social media; STEM (science, technology, engineering, and mathematics) education, and the impact of technology shifts. CACP collaborates with government, industry and academia at the national, as well as local, state, and international levels. In addition to a vigorous agenda of national level activities, CACP has participated in Ivan Allen college activities contributing to the goals of the Georgia Tech Strategic Plan Initiative Six to “expand and enhance the current programs dealing with technology and policy” and has provided funding to faculty and students at Georgia Tech.

Within this document CACP has encapsulated highlights of the past year's efforts from our researchers and technical staff. The report is divided into six areas: Instruction and Appointments (pg. 2); Research and Creative Scholarship (pg. 3); Academic, Community Activities & Presentations (pg. 8); Sponsored Funding (pg. 20); Memberships, Board Memberships & National Recognition (pg. 21); CACP Website Analytics (pg. 26).

This year there were more than 34 publishing activities; 13 conference presentations; active participation on 16 academic committees; 10 student assistantships or advisory roles by faculty of CACP; 36 memberships on boards/committees or national recognition; and over 6500 website hits. Sponsored research was funded at \$2,376,742.00. CACP staff/faculty exceeded 690 meetings with external/internal organizations and/or their representatives.

INSTRUCTION & APPOINTMENTS

Helena Mitchell, Ph.D.:

Regents' Researcher, School of Public Policy, CACP

Visiting Professor, Amity University, London, England

Adjunct Faculty, Oklahoma State University, OK

Faculty, Center for the Development and Application of Internet of Things Technologies, Georgia Tech.

Advising:

Dalton Nechanicky, undergraduate student, IE
Vett Vandiver, grad Spring/Summer 2014 – SPP
Robert Brown, CACP Intern, Grady High School
Jenn Steckl, CACP Intern, Grady High School
Jamaya Powell, undergrad student assistant

Paul M.A. Baker, Ph.D.:

Principal Research Scientist, School of Public Policy, CACP

Adjunct Professor, Centre for Disability Law and Policy, National University of Ireland, Galway, Ireland. January 2011 – present.

Faculty, Institute for People and Technology. January 2011 – present.

Faculty, GVU. January 2010 – present.

Faculty, Wearable Computing Center. January 2015 – present.

Advising:

James Flowers, Doctoral Candidate, GSU/GT
Dissertation Committee
Jennifer Rutledge, graduate student

James White, Ph.D.:

Sr. Research Scientist, School of Public Policy, CACP

Visiting Professor, Journalism and Media Studies Center, University of Hong Kong

Senior Research Fellow, Center for International Strategy, Technology and Policy, the Sam

	Nunn School of International Affairs, Georgia Tech.
	Faculty, Institute for People and Technology
Nathan W. Moon, Ph.D.:	Research Scientist II, School of Public Policy, CACP
<u>Advising:</u>	Matthew Palmer, graduate student
<u>Teaching:</u>	Part-Time Lecturer, School of History and Sociology (HSOC)
DeeDee Bennett, Ph.D.:	Research Scientist I, School of Public Policy, CACP
<u>Advising:</u>	Amelia Williams, undergraduate student Christina Touzet, graduate student
<u>Teaching:</u>	Guest Lecturer, Oklahoma State University, OK

RESEARCH AND CREATIVE SCHOLARSHIP

Books and Books Chapters (2)

Baker, P.M.A., Breznitz, S., Seavey, A., & Bujak, K.R. (2015). "21st century universities as drivers for innovation: the dimensions of learning, research, and collaboration. Chapter 16 in U. Hilpert (Ed.), *Handbook on Politics and Technology*. United Kingdom: Taylor & Francis Ltd: Routledge.

Bennett, DeeDee, Paul Baker, and Helena Mitchell. (2015). "New Media and Accessible Emergency Communications." Chapter 22 in *Social Media and Disability* by (Eds.) Mike Kent and Katie Ellis. Routledge.

Journal Articles and Conference Proceedings (refereed) (9)

Bennett, D. (2015). "Just Another Communications Tool". International Association of Emergency Managers (IAEM) Bulletin volume 32 (6).

Steckl, Jennifer. (2015). "No Longer a Pi in the Sky Dream, New Club takes Root". Grady High School's "The Southerner" on-line publication. March 2015. Atlanta, GA.

White, J., LaForce, S. and Benson, B. (2014). "Futures of Disabilities: Is Technology Failing Us?" *Journal on Technology and Persons with Disabilities* Santiago, J.

(Eds): Annual International Technology and Persons with Disabilities Conference ©, California State University, Northridge.

Bennett, D. (2014). "Moving Towards Accessible Wireless Emergency Alerts: Sending and Receiving". IAEM Bulletin. Vol. 31 No.10 October 2014. pp. 30-31. Annual Conference and EMEX, Emergency Management: Navigating the New Normal.

Harte, R.P., Glynn, L.G., Broderick, B.J., Rodriguez-Molinero, A., Baker, P.M.A., McGuinness, B., O'Sullivan, L., Diaz, M., Quinlan, L.R., & O'Laighin, G. (2014). "Human centered design considerations for connected health devices for the older adult". Journal of Personalized Medicine, 4(2), 245-281. doi:10.3390/jpm4020245.

Sandulli, F.D., Baker, P.M.A., & López Sánchez, J. (2014). "Jobs mismatch and productivity impact of information technology". The Service Industries Journal. Published online: 31 Jul 2014. DOI:10.1080/02642069.2014.939638.

Moon, N. W., Baker, P. M., Roy, R. G., & Bozzorg, A. (2014). "Disability Issues and Planning Education: Findings from a Longitudinal Survey of Planning Programs and Lessons for Urban e-Planning". International Journal of E-Planning Research (IJEPR), 3(3), 38-52. doi:10.4018/ijepr.2014070103.

Langston, C.L., & Moon, N.W., "Electronic Mentoring Recruitment, Retention, and Success in BreakThru", (2014). Proceedings of Accessing Higher Ground, November, 2014, Denver, CO.

Duarte, A.R., Baker, P.M.A., & Sandulli, F.D. (2014). "Un marco de análisis para la adopción de sistemas de gestión de aprendizaje en las universidades". Globalización, Competitividad y Gobernabilidad de Georgetown/Universia, 8(1), pp.124-140. doi: 10.3232/GCG.2014.V8.N1.07.

Papers-refereed and Publications-non refereed (19)

Bennett, DeeDee. (2015) "Gaps in Wireless Emergency Alert (WEA) Effectiveness Research Brief," Center for Advanced Communications Policy (CACP) on-line publications. March 2015. Atlanta, GA.

Bennett, D., Sharpe, D., & Williams, A. (2014). Mobile Apps Catalog. Atlanta, GA: Center for Advanced Communications Policy.

Bennett, D., Benson, B., & Sharpe, D. (2014). Dissemination of WEA: Survey of Alert Authorities. Atlanta, GA: Center for Advanced Communications Policy.

Mitchell, H., & Levy, L. (2014). Review of Industry Initiatives on Mobile Device Accessibility. Atlanta, GA: Center for Advanced Communications Policy.

LaForce, S. Senior Editor, *Technology & Disability Policy Highlights Newsletter (TDPH)* (12 issues) produced by the Center for Advanced Communications Policy (CACP), Georgia Institute of Technology. TDPH provides a monthly report on national and local public policy events and recent wireless technological advances and political activities at the intersection of disabilities.

Moon, N.W., (2014) Center for Advanced Communications Policy (CACP), Georgia Institute of Technology, "University System of Georgia (USG) Online Precalculus Emporium: Spring 2014 Formative Evaluation Report," Prepared for Office of Educational Access and Success (OEAS), University System of Georgia (USG), July 2014.

Moon, N.W., (2014) Center for Advanced Communications Policy (CACP), Georgia Institute of Technology, "University System of Georgia (USG) STEM Initiative: Recommendations for Improvement," Prepared for Office of Educational Access and Success (OEAS), University System of Georgia (USG), December 2014.

Moon, N.W., (2015) Center for Advanced Communications Policy (CACP), Georgia Institute of Technology, "University System of Georgia (USG) STEM II Initiative Formative Evaluation Report and Findings, FY2014," Prepared for Office of Educational Access and Success (OEAS), University System of Georgia (USG), April 2015.

Filings on Rule Makings to the Federal Communications Commission, Washington, D.C. and other federal agencies (4)

Wireless RERC on the Record - Hearing Aid Compatibility Regulations

The Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC), in collaboration with Georgia Tech's Center for Advanced Communications Policy (CACP), submitted comments in response to the FCC's Public Notice, *Request for Updated Information And Comment On Wireless Hearing Aid Compatibility (HAC) Regulations [WT Docket Nos. 07-250 and 10-254]*. Released on November 21, 2014, the Public Notice sought insight into the current consumer experience, technical or other barriers to the provision of hearing aid compatible mobile phones, and considerations to amend rules for Twenty-First Century Communications and Video Accessibility Act (CVAA) compliance. The Wireless RERC and CACP reaffirmed the belief that the accessibility of information and communications technology (ICT) and services are essential to enhancing inclusion and independence for people with disabilities. Comments were respectfully based on subject matter expertise developed over the past 14 years: findings from consumer surveys and focus

groups, policy research, and development efforts. The comments were also largely informed by analyses of data collected via the Wireless RERC's hearing aid compatibility (HAC) survey research.

The FCC sought to update the record on two principle issues: (1) Whether the FCC should revise the hearing aid compatibility requirement to apply in a technologically neutral manner to all mobile wireless devices; and (2) Whether the FCC should consider moving away from the fractional compliance benchmarks and implement a requirement that all mobile wireless devices must comply with the hearing aid compatibility rules. The Wireless RERC and CACP addressed both issues with the following assertions:

- Ease of finding a compatible phone would be greatly improved if HAC requirements applied to all wireless handsets and would simplify phone selection for people with varying capabilities. For people with hearing loss, when purchasing a handset there are other mainstream *and* accessibility features to consider in conjunction with HAC compliance. One should not have to sacrifice other phone features to ensure they are purchasing a HAC compliant phone.
- Phones are rapidly changing forms and technologies; the Commission should attempt to create a large tent to encompass as many technologies that might be used in devices with phone features. Most Wi-Fi phones and private internal phone networks interconnect with the public switched telephone network (PSTN) through a gateway so they can be used to make traditional phone calls. ...a technologically neutral manner should be adopted.
- Hearing aid users report little improvement in ease of finding a hearing aid compatible wireless handset over the course of implementation of the HAC Act requirements. Substantial proportions of hearing aid users still report their search as being difficult or very difficult. Furthermore, fractional deployment causes problems for consumers in today's market as more and more consumers are opting to have wireless devices only. These factors indicate it might be time to phase out the fractional deployment rules.

In closing, the comments acknowledged the difficulty of crafting regulations due to the sometimes competing priorities of industry and consumers and the complexity of interaction between increasingly sophisticated and powerful wireless handsets. Nevertheless, they also maintained that people with hearing loss deserve and are entitled to having parity of access to telecommunications services, wireless, or otherwise.

Wireless RERC Comments on Impact of Federal Accessibility Mandates

Georgia Tech's Center for Advanced Communications Policy (CACP), in collaboration with the Wireless RERC, submitted comments to an FCC Public Notice [CG Docket No. 10-213] asking for comments on the tentative findings about the accessibility of communication technologies. Released on August 28, 2014, the Public Notice requested comments assessing the extent to which

telecommunications and advanced communications services and technology have complied with CVAA accessibility mandates, related recordkeeping and enforcement obligations effects, and the existing accessibility barriers for new communications technologies.

Georgia Tech's CACP and the Wireless RERC submitted comments addressing various aspects of inclusive and accessible technologies, including:

- Research supporting tentative findings that show an increase in readily available and accessible technologies;
- Information concerning the staffing and training of people who are knowledgeable about assistive technologies and the people who use them;
- Discrepancies among retail staff and retailer knowledge about assistive technologies and;
- The lack of accessible alerting systems.

Wireless RERC Makes EAS Accessibility Standards Recommendations

August 2014 – The Wireless RERC and Georgia Tech's Center for Advanced Communications Policy (CACP) submitted comments to the FCC's *Notice of Proposed Rulemaking In the Matter of Review of the Emergency Alert System (EAS)* [EB Docket No. 04-296]. As a result of the nationwide EAS test revealing issues with text crawls, the FCC requested public comments about the accessibility of EAS' visual and audio presentation of text.

CACP and Wireless RERC comments highlighted the need for EAS nationwide testing to account for human ability factors, as well as technical considerations when setting a national standard for text crawls. Their comments advised that any standards should consider the needs of people with vision disabilities, as well as those that simultaneously experience vision and hearing loss; noting a correlation between visual acuity and caption reading ability.

Further comments and recommendations concerning non-English alerts, text crawl placement, audio accessibility, and text-to-speech were made as well.

Comments on Proposed Rulemaking for Speech Generating Devices

May 2015 – Nathan W. Moon submitted comments on behalf of RESNA to the Center for Medicare and Medicaid Services (CMS), Department of Health and Human Services (HHS), in response to its *Proposed Decision Memorandum, Proposed Scope of Benefit NCD: Speech Generating Devices* [CMS-1526-P]. The comments regarded CMS's proposal to expand the definition of speech generating devices (SGDs) and revise the current scope of benefit national coverage determination (NCD) for SGCs at § 50.1 of Chapter 1, Part 1 of the Medicare National Coverage Determinations Manual.

The comments supported CMS's for a more expansive definition of "speech" to include communication by texting, e-mail, and phone. This proposed definition considers more appropriately the nature of communication in the 21st century, particularly for individuals in the workplace who may utilize speech generating devices for text or phone-based communications. However, comments also noted that the revised NCD does not address ongoing matters of concern, such as capped rental coverage for SGDs, as well as eye-tracking control and reiterated that these matters still need to be addressed.

ACADEMIC, COMMUNITY ACTIVITIES & PRESENTATIONS

Helena Mitchell (5)

Member, President's Committee on Disabilities and Access, National Best Practices Subcommittee Chair, 2013 – Present.

Faculty Senate – Member, Academic Services Committee, August 2012 – August 2014.

Faculty Senate - Committee on Use of Institute Facilities.

Executive Committee, Policy@Tech.

Member, Georgia Emergency Preparedness Coalition for Individuals with Disabilities and Older Adults, 2011-Present.

Paul Baker (5)

Voting member, Teaching and Learning Advisory Committee Meeting, under Strategic Technology Investment Committee (STIC). 2014-Present.

External Reviewer, "First in the World Program" U.S. Department of Education, 2014.

Research Committee selection panel, International Political Science Association, 2012-Present.

Industrial Design Program Advisory Board, Iowa State University, 2013-Present.

Board of Trustees, of the Friends Publishing Corporation, Philadelphia, PA, 2010-Present.

Nathan Moon (2)

Co-chair, Policy@Tech (Consortium of Policy Research Centers at Georgia Tech).

Chair, Georgia Tech Faculty Honors Committee, 2014-Present.

James White (4)

Member, Georgia Tech Aging Task Force.

Subject Matter Representative, President's Committee on Disabilities and Access.

Senior Research Fellow, Center for International Strategy, Technology and Policy, the Sam Nunn School of International Affairs.

Advisory Council Member, Georgia Tech Center for International Business Education & Research (GT CIBER) (from 2010).

Jacqueline Herndon (1)

Subject Matter Representative, President's Committee on Disabilities and Access.

Salimah LaForce (2)

Volunteer, Henry Grady High School Writing Center, 2010 – Present.

Chair, Bolton Academy PTA Grant Committee, 2011 – Present.

Conference Presentations (13)

Bennett, DeeDee and Salimah LaForce. (2015). "Reaching People with Disabilities: Wireless Emergency Alerting & Accessibility." Webinar. Georgia Emergency Preparedness Coalition for Individuals with Disabilities and Older Adults. June 2015. Atlanta, GA.
<http://wirelessrerc.gatech.edu/content/newsroom/presentation-available-reaching-people-disabilities-wireless-emergency-alerting#sthash.ZNLO12OI.dpuf>

Bennett, DeeDee. (2015). "Science Fiction: The Future Wireless Technologies and People with Different Abilities" Envisioning Inclusive Futures: The Migration of Wireless Technology. May 2015, Atlanta, GA.

Bennett, DeeDee, Brenda Phillips, and Elizabeth Davis. (2015). "The Future of Accessibility in Disaster Conditions: How Wireless Technologies Will Transform The Life Cycle of Emergency Management." Envisioning Inclusive Futures: The Migration of Wireless Technology Summit Proceedings. May 2015. Atlanta, GA

Bennett, DeeDee. (2015). "Findings from People with Disabilities and Emergency Managers on the Use of Websites and Social Media to Deliver Accessible Emergency Alerts." National Hurricane Conference, March 2015, Austin, TX.

Baker, P.M.A and Roach, A.T. (2015). Universally Designed Faith Communities: The Intersection of Technology and Religion. Invited presentation to the Summer Institute on Theology and Disability, Georgia State University, May 26, 2015, Atlanta, Georgia.

Baker, P.M.A. (2015). On Policy & Wearable Computing. Invited speaker, Symposium on Design & Wearable Technology, Georgia Tech Wearable School of Industrial Design and the Interactive Product Design Lab, May 9, 2015 Atlanta, Georgia.

Moon, N.W. (2015). (Discussant), "Catalyzing STEM Education," STEM Institute on Teaching and Learning. Athens, Georgia, March 28, 2015.

White, J., LaForce, S. & Baker, P.M.A. (2015). Futures of Disabilities: The Migration to a Digital World. To be presented at 30th Annual International Technology & Disabilities Conference. March 3, 2015, San Diego, CA.

Mitchell, Helena. (2014). "Accessible Wireless Emergency Communications Forum." FCC Accessibility day. November 7, 2014. Washington, DC.

Langston, C. & Moon, N.W. (2014) "Electronic Mentoring Recruitment, Retention and Success in BreakThru." Accessing Higher Ground Conference. Westminster, Colorado, November 21, 2014.

Baker, P.M.A. (2014). "Reflections on Wearable Computing: (the) Play is the Thing" presented at the "Wearable Technology Panel" at the Georgia Tech Wearable Computing Center Forum November 11, 2014, Atlanta, Georgia.

Bennett, DeeDee. (2014). "Accessibility and WEA." WEA Outreach Working Group Meeting. DHS, FEMA, IPAWS. August 2014. Washington DC.

Moon, N.W., Biesinger, K., & Kotal, C. (2014) "USG MATH1113 Emporium: Insights from an Online Precalculus Course." Scholarship of STEM Teaching and Learning Conference. Statesboro, Georgia, March 6, 2014.

Dissemination Activities – Items in this section have not been counted in other categories.

Public Policy Luncheon series

Hosted by CACP and the Federal Communications Bar Association since 1996. It brings together regulators, legislators, telecom experts, attorneys and diverse constituencies to discuss "hot topics" in telecom policy that affect Georgia and the nation. Events held in FY'15:

March 27, 2015. "Next Generation 911: Location Accuracy, IP Transition and PSAPs, Accessibility for Persons with Disabilities and other 911 Related Issues."

Speakers: Brian Fontes, CEO NENA The 9-1-1 Association, Matthew Gerst, Director, External & State Affairs, CTIA – The Wireless Association and Jose Jimenez, Executive Director, External Affairs, Cox Communications, Inc. The panel was moderated by Kennard B. Woods, Senior Counsel, Friend, Hudak & Harris, LLP.

Social Media

Accessible Technology Policy Group (ATPG), established in 2009 currently has 864 members. ATPG is focused on policy development and exchange of information related to e-accessibility and inclusive design.

The CACP Facebook page has 196 members. The page was designed to share CACP news and events, as well as post relevant technology policy news items with a human interest appeal.

The CACP Twitter feed (@CACPGT) has 568 followers. The CACP Twitter feed's purpose is to share CACP news and events, as well as post relevant technology and policy news items.

7th Annual Healthy Environments & Active Lifestyles (HEAL) Open House

Georgia Tech hosted a successful 7th Annual Healthy Environments & Active Lifestyles (HEAL) Open House on Tuesday, April 14, 2015. The guest speaker, Amy Baxter, MD spoke about her path from concept to production of her Buzzy product that provides reduced fear of shots and improved pain reduction through cold and vibration technology. The showcase event also included: App Factory grantees, ID 4012 student projects, Grady High School participating in the CACP/BCS Easy as Pi Youth Code project, and select teams from the Advanced Design course of the Sophomore Industrial Design Studio. The website was updated with these and other related projects for 2015 at <http://healatGT.gatech.edu>.

Visitors from various interest domains attended the event. Almost 100 participated including, home healthcare providers, researchers, advocates, government representatives, industry reps, and more. The open house showcased demonstrations of student projects and research from several Georgia Tech organizations, including: The Aware Home Research Initiative (AHRI), Design and Technology for Healthy Aging, The Center for Assistive Technology and Environmental Access (CATEA), the Center for ACP's, the Wireless Rehabilitation Engineering Research Center (Wireless RERC) and others.

Envisioning Inclusive FUTURES State of Technology (SoT) Summit

The Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC) convened its State of Technology (SoT) Summit on May 14-15, 2015 in Atlanta, Georgia. The *Envisioning Inclusive FUTURES Summit* was held at the Georgia Tech Hotel and Conference Center and included 45 subject matter experts in futures, disability

advocacy, universal design, wireless technology, communications policy, emergency management, hearing access, aging and disability, wearable computing and more.

The Summit was grounded in research carried out in 2014 by the Wireless RERC, and focused on 1) key social, economic, political and technological forces at play in the migration from legacy, analog technologies to mobile, digital technologies, and 2) on explored the consequential futures for people with disabilities. Two rounds of Delphi polling collected and aggregated expert opinions on complex or ambiguous forecasting problems that often exceeded the capabilities of any one-area expert. This Summit was a dialogic meeting, and served as the final phase of the assessment and forecasting process.

The “dialogic meeting” approach was implemented for the Summit, as a dynamic process open to conversations, comments and clarifications. The philosophical basis of the futures studies approach is that many ideas about potential futures exist. The purpose of the futures process is to explore, analyze, compare, and critique competing concepts of “the future.” The Summit attendees engaged in dialog on the alternative possible inclusive future(s) of people with disabilities, in the context of technological migration, and explored innovative paths to a transformative future for people with disabilities.

Day One:

Highlights of each paper were presented and discussed. The papers and their associated responses were presented in three thematic clusters: technological, social, and change process factors.

Authors gave a nine minute summation of the key points of their paper. Each author had a poster of an icon or image that was illustrative of the main concept of his or her paper. Participants were given a pad of Post-it notes. During the author’s presentation, they jotted down ideas, questions, “ah-hahs” on the notes, and a runner stuck them to the presenting author’s image.

Respondents then shared their reaction to the papers. Within each cluster, respondents reacted to each paper, followed by open discussion. All the while, the attendees continued to jot down ideas, questions, and “ah-hahs.” At the close of the session, the authors stood by their icons/images and the attendees were able to ask questions and discuss their comments with the authors.

Day Two – A Three Horizons Workshop:

The focus was on overturning ‘business as usual’ thinking. During the first day, current assumptions or frames that are most challenged by emerging changes in technology and society were identified. As a group the attendees pinpointed several “vulnerable assumptions” to be further explored. Each assumption had a roundtable.

Small working groups (5-7 people) each tackled one of the “vulnerable assumptions” and collaboratively envisioned transformative, inclusive futures using their ‘challenging changes’ as opportunities. Exercise worksheets were provided. Each group shared their discussions and collaboratively developed a range of innovative inclusive futures.

The attendees determined the most novel and transformative ideas from each group and what common visionary themes emerged across the groups. We prioritized three of the Future visions and begin mapping the pathways to those inclusive futures; identifying needed knowledge, resources and allies.

The results of the Summit will be presented as online conference proceedings and an online and print publication in a special issue of the FUTURES Journal.

Lunch n' Learn

Ivan Allen College School of Public Policy (SPP) Chair, Dr. Kaye Husbands Fealing, visited the Center for Advanced Communications Policy (CACP) on Wednesday, August 6, 2014. The lunch and learn presented and discussed an overview of CACP department outputs and outcomes of exemplary accomplishments FY' 2013-2014. On Tuesday, August 12, 2014, CACP received praises and recognitions for producing the highest sponsored research funds amongst IAC research units and cited over 150 times in Federal rulemakings at the SPP Retreat conducted by Dr. Fealing. Some of the highlighted presentation slides follow:



- **Outcomes for 2013-2014:**
 - Cited over 150 times in Federal rulemakings.
 - Sponsored research was funded at **\$2,197,579.00**.
 - USG programs revised & retargeted as a results of CACP work.
 - Faculty hold adjunct appointments at 4 institutions.
 - Appointments to 5 national level committees and orgs.
 - Reviewers for federal and state grant competitions.
 - Editorial board members and reviewers for 12+ journals.



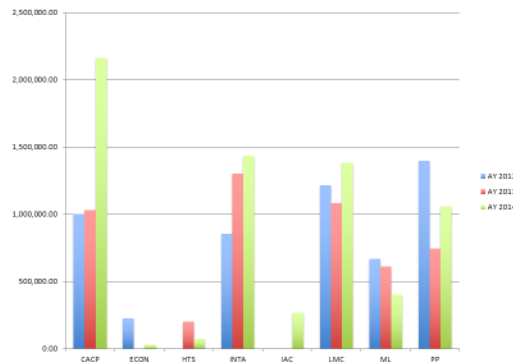
- **Outputs for 2013-2014:**
 - Legislative and regulatory studies, policy briefs, research studies
 - Regulatory filings (4 during 2013-2014)
 - Newsletter “Technology and Disability Policy Highlights” (12 issues/year)
 - Journal articles and Conference Presentations
 - 20+ publishing activities
 - 7 conference presentations
 - GT Service
 - active participation on 24 academic committees;
 - 9 student assistantships or advisory roles by CACP
 - Technology development



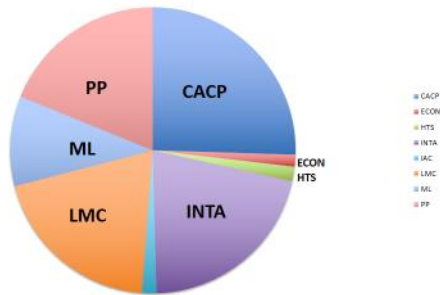
Source: <http://research.iac.gatech.edu/pasearch.php>

	AY 2012	AY 2013	AY 2014	3yr TOTAL
CACP	1,000,000.00	1,028,418.56	2,161,897.00	4,190,315.56
ECON	223,135.00	0.00	30,443.00	253,578.00
HTS	0.00	199,728.00	70,000.00	269,728.00
INTA	852,466.00	1,298,956.60	1,435,667.00	3,587,089.60
IAC	0.00	0.00	265,304.00	265,304.00
LMC	1,214,461.00	1,079,532.08	1,379,598.00	3,673,591.08
ML	665,751.00	608,862.00	399,666.00	1,674,279.00
PP	1,396,481.11	744,593.78	1,058,855.57	3,199,930.46
TOTAL	\$5,352,294.11	\$4,960,091.02	\$6,801,430.57	\$17,113,815.70

3 Year IAC Research by Unit



3 year Research by Unit



Yahoo Labs/Yahoo Accessibility visit to Georgia Tech

Seth Topper, Academic Relations, Yahoo Labs and Mike Shebanek, Senior Director, Accessibility Lab at Yahoo was invited to Georgia Tech on August 6 – August 8, 2014 by members from Wireless RERC and CACP. The goals for the visit was to 1) determine the potential for creating a pipeline of accessibility aware graduates from GA Tech to Yahoo (both interns and employees), 2) understand the current state of art in research and projects on mobile devices and wearables and 3) evaluate if there are any technologies or projects in which Yahoo and GA Tech should be collaborating.

National Council on Disability (NCD) Event

Georgia Tech hosted a Research showcase and reception for the National Council on Disability on October 6, 2014 from 6:30 pm to 8:00 pm. Twenty-eight R&D posters and demonstrations presented the wide ranging work of the Georgia Tech community including design and technology for people with motor impairments, hard-of-hearing and Deaf, people with vision impairments, social media for children and adolescents, and universal design for people aging into disability. CACP presented a poster representing our work on digital inclusion and emergency communications as well as demonstrated emergency communications accessible apps and devices for people with disabilities. CACP is also a sponsor for the event which was held at the Ferst Center for the Arts on the Georgia Tech campus.

CACP Participated in the FCC's Accessible Wireless Emergency Communications Forum & Exhibition

The FCC held a forum called, "FCC's Accessible Wireless Emergency Communications Forum & Exhibition," on Friday, November 7, 2014, to promote the latest advances in accessible wireless emergency communications, including text-to-911. The event was held at FCC Headquarters, 445 12th Street, SW, Washington, DC 20554. CACP/Wireless RERC, Helena Mitchell participated on a panel and team members provided several prototypes and app solutions for alerting people with disabilities.

International Association of Emergency Managers

DeeDee Bennett held demonstrations at the International Association of Emergency Managers (IAEM) Conference and Exhibition in San Antonio, TX, November 17 -19, 2014. She demonstrated development and prototype projects related to our work with the Wireless RERC and the Federal Emergency Management Agency (FEMA) Integrated Public Alerts and Warnings (IPAWS) division regarding accessible emergency alerts for people with disabilities. The demonstrations were featured in the FEMA IPAWS Booth (#327) at the IAEM Conference.

BCS-The Chartered Institute for IT, U.S.A. Southeast Regional Group (SERG)

CACP is the U.S.A. Southeast Regional Group headquarters for BCS, an international organization with more than 70,000 members worldwide, 16 international sections and over 45 specialist groups including BCS women, young professionals, education, and IT security. The SERG is comprised of members from GA, FL, AL, TN, AR, NC and SC. CACP held a number of officer positions in the SERG including chair and secretary.

Ken Bernard and Salimah LaForce, officers of SERG, collaborated and held meetings with computer science and math faculty at Henry Grady High School throughout 2014 to develop the *Easy as Pi Youth Programmers* pilot project. *Easy as Pi Youth Programmers* is an education and outreach activity piloted by BCS, the Chartered Institute for IT, USA Section, Southeast Regional Group (SERG). The goal of *Easy as Pi* is to engage local K-12 students in computer programming and stimulate an interest in pursuing computer science degrees and eventual careers. Raspberry Pi programmable computers, development supplies and peripherals were distributed to fifteen Grady High School students participating in their after school Coding Club. They worked in teams of 2-5 students to program and develop projects.

Program goals:

1. To enable girls, minorities and socioeconomically disadvantaged youth the opportunity to discover and advance their computer science talents.
2. To educate students on components of computer programming in a way that engrosses their imaginations and enables them to develop technical solutions to real-world problems.
3. To engage students in a meaningful and fun computer science experience that incentivizes them to strive for all-around academic excellence.
4. To encourage students to pursue degrees and eventual careers in a computer science field.
5. To serve the community by preparing graduates with the problem solving skills needed for 21st century success.

At the end of the 2014-2015 school year the students were given the opportunity to showcase their work at the 7th Annual Healthy Environments & Active Lifestyles (HEAL) Open House and the Envisioning Inclusive FUTURES State of Technology (SoT) Summit on Georgia Tech's campus. SERG members provided training, demonstrations and technical support to the faculty advisers and their teams

throughout the course of the program. A Grady High School student worked for CACP the summer of 2014 to help in designing and programming proposed activities for the upcoming school year.

Rex Mill Middle School

DeeDee Bennett gave a presentation on Emergency Communications at Rex Mill Middle School. The students at Rex Mill have partnered with Coca-Cola on a STEM Lab related to Emergency Preparedness. The sixth grade STEM Academy team is working on a natural disaster emergency preparedness and response unit for the entire school.

William Averette Anderson Fund

DeeDee Bennett is the chair of the Feeder council for the William Averett Anderson Fund (Bill Anderson Fund). The Fund is dedicated to the work done by and the legacy of William Anderson who passed away in 2013. The focus is on increasing the number of African-American and other minority representation in hazard and disaster mitigation.

Collaborations & Meeting Presentations

Helena Mitchell

Collaborations and meetings within **the Academy**: Georgia State University, Syracuse University, Oklahoma State University, University of Colorado-Boulder, Johnson C. Smith University, Amity University (London), and Gallaudet University.

Collaborations and meetings with **government agencies**: National Academies of Science- Computer Science and Telecommunications Board; U.S. Department of Commerce, National Telecommunications and Information Administration; Department of Homeland Security – Science and Technology Directorate, Federal Emergency Management Agency (FEMA), IPAWS, and Office of Disability Integration and Coordination; Federal Communications Commission; U.S. Department of Education; National Council on Disability; U.S. Access Board; National Institute for Disability and Rehabilitation Research (NIDRR), Georgia Emergency Preparedness Coalition.

Collaborations and meetings with **disability related organizations**: North Carolina Division of Services for the Deaf and Hard of Hearing; GACHI-serving the deaf and hard-of-hearing; DeafLink; National Association of County and City Health Officials; Georgia Council on the Blind; State ADA Coordinator Office; Wheeled RERC; Workplace Accommodations RERC; RERC on Aging (TechSage); RERC on Blind and Low Vision, and RERC on Assistive Communications Technology.

Collaborations and/or meetings with **industry**: Research In Motion (RIM) – Blackberry, CTIA-the Wireless Association, Nokia, Zenith Electronics, Sprint, AT&T, Microsoft, NENA, Consumer Electronic Association, and National Public Radio.

185 technical assistance/outreach meetings not reported already. Meetings included external and internal discussions on possible collaborations; grant opportunities; public safety issues for people with disabilities; vulnerable populations and wireless technology intersections; and topics regarding national public policy agendas in advanced technologies.

Paul M.A. Baker

Collaborations and meetings with the **educational sector**: Indiana University - Perdue University, Indianapolis (IUPUI), Emory University, Georgia State University, Kennesaw State University, University of Georgia, Technical College System of Georgia, University of Texas at Arlington, George Washington University, George Mason University, University of Washington, University of Central Florida, Temple University, Carnegie Mellon University, University of Colorado, Johnson County Community College, University of Toronto, Association of Public and Land-grant Universities, Complutense University of Madrid, National University of Ireland, Galway, Friedrich Schiller university Jena, University of Sydney, AUT University, University of Limerick, Kellogg College, Oxford University, Geneva Business School, Amsterdam University of Applied Sciences.

Collaborations and meetings with **government agencies**: University System of Georgia, National Council on Disability, Office of Disability Employment Policy - US Department of Labor, US Department of Education, ICDR (The Interagency Committee on Disability Research), United States Access Board, Administration for Community Living, US Department of Health and Human Services, Centers for Medicare and Medicaid Services (CMS), Centers for Disease Control; Science and Technology Directorate, British Consulate, Finland Academy of Science, CUDECA (Culturas y Desarrollo en Centroamérica) (Costa Rica), Ministerio de Obras Públicas y Transportes (Costa Rica).

Collaborations with **disability and health organizations**: RERC on Aging, Center for Leadership in Disability, Children's Healthcare of Atlanta, Georgia Department of Community Health, Georgia Department of Economic Development, Rehabilitation Engineering and Assistive Technology Society of North America, World Institute on Disability.

Collaborations and/or meetings with **industry**: Bill and Melinda Gates Foundation, Assistive Technology Industry Association, LoudCloud Systems, Degreed.com, Blackberry, CTIA-The Wireless Association, Steelcase, CEA Foundation, Sprint, Samsung, AT&T, Microsoft, Jawbone, Viscardi Center, Friedrich Ebert Stiftung (International Trade Union Policy Foundation), Lumina Foundation, ITHAKA, Atlanta Braves organization, Booze Allen Hamilton, MailChimp, BridgeEd Strategies, American Council on Exercise, Sharecare.

140 technical assistance/outreach meetings not reported already. Meetings generally involved discussions with potential or existing collaborators; grant opportunities; research on workforce development, policy on information and

communication technology, higher education and university based innovation, and healthcare and technology policy.

James White

Collaborations with **the Academy**: University of Hong Kong, Chinese University of Hong Kong, University of Shantou, Birkbeck, University of London, Toyo University, and University of Tokyo.

24 technical assistance/outreach meetings not reported already. Meetings included discussions on possible collaborations; grant opportunities; current research projects. Contacts occurred with both external and internal entities.

Nathan Moon

Collaborations and meetings with **the Academy**: University of Georgia, Georgia State University, Columbus State University, University of West Georgia, Georgia College & State University, Georgia Southern University, Valdosta State University, Georgia Gwinnett College, Middle Georgia State College, Georgia Perimeter College, University of Toronto, and California State University.

Collaboration with **public and government agencies**: the National Institute for Disability and Rehabilitation Research (NIDRR), National Science Foundation (NSF), U.S. Access Board, U.S. Department of Health and Human Services (Centers for Medicare Services), National Council on Disability (NCD), and Office of Disability Employment Policy (ODEP), University System of Georgia (USG).

Collaborations with **disability related organizations**: RESNA, Consortium for Citizens with Disabilities (CCD), Disability and Rehabilitation Research Coalition (DRRC), U.S. International Council on Disabilities (USICD).

Collaborations with **industry**: U.S. Business Leadership Network (USBLN).

80 technical assistance/support/outreach activities not reported already: Student letters of recommendation, faculty letters of recommendation/support; external student advisement and research assistance; discussions on possible collaborations and grant opportunities. Contacts occurred with both external and internal.

Salimah LaForce

Collaborations and meetings with the **educational sector**: Grady High School; Gallaudet University.

Collaboration with **public and government agencies**: the National Institute for Disability and Rehabilitation Research (NIDRR), National Council on Disability (NCD), Federal Communications Commission, Department of Homeland Security – Science and Technology Directorate, Federal Emergency Management

Agency (FEMA), IPAWS, and Office of Disability Integration and Coordination, Georgia Emergency Preparedness Coalition.

Collaborations and meetings with **disability related organizations:** State ADA Coordinator Office (Georgia); GACHI-serving the deaf and hard-of-hearing; Georgia Council on the Blind; State ADA Coordinator Office; Wheeled RERC; RERC on Aging (TechSage); and RERC on Assistive Communications Technology.

DeafLink on the accessibility of emergency alerts and information to people who are deaf and rely on ASL. The collaboration will result in a white paper, journal article, and workshop on the topic.

Collaboration with the Partnership on Employment and Accessible Technology on their project to review and synthesize NIDRR-sponsored research that focuses on the policy implications of accessible technologies in the workplace. This will result in a report to the Department of Labor's Office of Disability Employment Policy.

141 technical assistance/outreach meetings not reported already. Meetings included discussions on possible collaborations; grant opportunities; public safety issues for people with disabilities; vulnerable populations and wireless technology intersections; and topics regarding national public policy agendas in advanced technologies; topics regarding national public policy agendas in advanced technologies; recruitment efforts for focus group and usability studies; and administration of the 2015 Wireless Emergency Alerts Survey via the telephone.

DeeDee Bennett

Collaborations and meetings with **schools and universities:** Rex Mill Middle School, Georgia State University, Oklahoma State University, University of South Florida, University of Ohio-Chillicothe, Clemson University, George Washington University, University of Nebraska-Lincoln, University of Central Florida, North Dakota State University, Colorado State University, University of Southern Mississippi, Morgan State University, California State University at Long Beach and Curtin University in Australia.

Collaborations and meetings with **government and emergency management related agencies:** such as the Federal Emergency Management Agency, Federal Communications Commission, Georgia Emergency Management Agency, DeKalb County Emergency Management Agency, American Red Cross, National Fire Protection Association, Puerto Rico Emergency Management Agency, Georgia Department of Public Health, Georgia Emergency Preparedness Coalition, Bill Anderson Fund, and the International Association of Emergency Managers- Emerging Technology Caucus.

Collaborations and meetings with **disability related organizations:** DeafLink, GACHI-serving the deaf and hard-of-hearing, State ADA Coordinator Office (Georgia), Shepherd Center, Center for the Visually Impaired.

Collaborations and meetings with Technical Laboratories including Oak Ridge National Laboratory, Argonne National Laboratory.

Internal collaborations and meetings with Georgia Tech schools and departments including GTRI, ISYE, School of Public Policy.

120 technical assistance/outreach meetings not reported already. Meetings included discussions on possible collaborations; grant opportunities; disaster issues for people with disabilities; vulnerable populations and wireless technology intersections; topics regarding national public policy agendas in advanced technologies; EM initiatives for underrepresented minorities; as well as recruitment for survey and interviews of emergency management agencies. Topics occurred with both internal and external entities.

SPONSORED FUNDING

Active (10)

Paul M.A. Baker, Ph.D., Partnership for Learning Models, NLM Workshop, sponsored by USG, 4/22/2015. **\$23,163**.

Paul M.A. Baker, Ph.D., IEEE Internet Computing-wearable computing, 12/14 – 6/15, **\$10,000**.

James White, Ph.D., U.S. Department of Labor's Office of Disability Employment Policy (ODEP), The Viscardi Center in Albertson, New York, agreement award of **\$1,848,350**, 09/30/2014 – 09/30/2019. **\$146,000** for Fiscal Year 2015.

Nathan W. Moon, Ph.D., PI. Phase III External Evaluation of the University System of Georgia STEM II Initiative, Board of Regents of the University System of Georgia, 7/1/2014 - 6/30/2015, **\$51,403**.

Nathan W. Moon, Ph.D., PI. Phase III External Evaluation of the University System of Georgia STEM II Initiative, Board of Regents of the University System of Georgia, Borrowed Services Agreement, 7/1/2014 - 6/30/2015, **\$13,607**.

Helena Mitchell, Ph.D., Department of Homeland Security, FEMA, Division of the Science and Technology Directorate, IPAWS, "IPAWS - Inclusive Alerting", **\$629,362**, 5/1/14 – 10/31/15.

Helena Mitchell, Ph.D., Department of Homeland Security, FEMA, Division of the National Continuity Program Directorate, IPAWS, "IPAWS Alerts for People with Disabilities or Language Differences". **\$501,584**, 9/30/14 – 10/15/14.

Helena Mitchell, Ph.D., Co-PI, RERC on Wireless Technologies, U.S. Dept. of Education/NIDRR, Recompete Grant, **\$4,750,000**, 10/2011 – 9/2016, **\$950,000** for

fiscal year 10/1/13 – 9/30/14.

Nathan W. Moon, PhD, Co-PI. Collaborative Research: Georgia STEM Accessibility Alliance (GSAA), National Science Foundation, Research in Disabilities Education (RDE), 10/1/2010-9/30/2015, **\$22,239** for fiscal year 10/1/14 – 9/30/15).

Nathan Moon, Ph.D., Co-Investigator, Disability and Rehabilitation Research Project (DRRP) on Universal Design Practices to Enhance Work Outcomes, National Institute on Disability and Rehabilitation Research, 60 months, 10/1/12 – 9/30/17, **\$29,384** for fiscal year 10/1/14 – 9/30/2015.

MEMBERSHIPS, BOARD MEMBERSHIPS AND NATIONAL RECOGNITION

Helena Mitchell (11)

The Board of Regents appointed Dr. Helena Mitchell in 2014 as Regents' Researcher. A Regents' Researcher represents the highest status bestowed by the Board of Regents, which governs the University System of Georgia. It is in recognition of substantial, significant and an ongoing record of scholarly achievement that has earned high national esteem over a sustained period. The title is awarded upon the unanimous recommendation of the president, the chief academic officer, and other members named by the president, and upon the approval of the chancellor and the committee on academic affairs.

Appointed to serve on a newly formed committee of the Federal Communications Commission in February 2015. The Disability Advisory Committee provided advice and recommendations to the Commission on a wide array of disability matters within the jurisdiction of the Commission and facilitate the participation of people with disabilities in proceedings before the Commission.

Appointed to the Ad Hoc Committee, National Research Council, to Access Telecommunications Research and Engineering Programs of the U.S. Department of Commerce Boulder Labs. Dec. 2014- present.

Helena Mitchell is a recipient of the 2015 Hall of Heritage Award from her undergraduate school, State University of New York, College at Brockport. The award honors those alumni who have distinguished themselves by their contributions to the alumni association and through their community service. She received the honor during Reunion Weekend on Saturday, June 13, 2015.

IAC Million Dollar Club, 2015

Federal Emergency Management Agency, Integrated Public Alerts & Warning System, Symbology Working Group, 2013 – Present.

Member, Georgia Emergency Preparedness Coalition for Individuals with Disabilities and Older Adults, 2011- Present.

Member, Southeast Regional Group, USA Section, BCS-The Chartered Institute for IT, March 2010 – Present.

Member, NENA Accessibility Committee, 2010-Present.

Advisory Board, Government Technology Conference SE, 2002 – Present.

Member, Broadcast Education Association, Judge, Law & Policy Division, 2009-Present.

Paul M.A. Baker (3)

Product Advisory Council, LoudCloud Systems, June 2014 – present.

Co-Chair, Research Council 11 (Politics and Science), International Political Science Association (IPSA), December 2014 – present.

Program Committee Member: CSEDU, the International Conference on Computer Supported Education, 2014 - present.

James White (2)

Member, International Studies Association, International Communication Section, 2004 – Present.

Associate Member, Center for Global Media Studies, Edward R. Murrow School of Communications, Washington State University, 1998 – Present.

Nathan Moon (6)

Chair, Government Affairs Committee of RESNA, The Rehabilitation Engineering and Assistive Technology Society of North America (2012 – Present); Ex-Officio Member, RESNA Board of Directors

Member, American Evaluation Association

Ad-hoc Reviewer for NSF, Research on Education and Learning (REAL) and Research in Disabilities Education (RDE)

Site Visit Reviewer for Columbus State University (CSU), NSF IUSE grant proposal,

Peer Review, Ivan Allen College SGR grants program

Peer Reviewer, *Technology in Society*

DeeDee Bennett (11)

Reviewer (peer reviewed journals): *Western Journal of Emergency Medicine*.

Reviewer (peer reviewed Journals): *Natural Hazards Review*.

Georgia Emergency Preparedness Coalition for Individuals with Disabilities & Older Adults, co-chair on the committee on Technical Assistance and Training.

Chair, Feeder Council for the William Averette Anderson Fund for Hazard and Disaster Mitigation Education and Research.

Member, Georgia Emergency Preparedness Coalition for Individuals with Disabilities & Older Adults (EPC).

Member, Society of Broadcast Engineers, (SBE).

Member, Institute of Electrical and Electronics Engineers (IEEE).

Alternate Member, FEMA Emergency Alerts and Symbology Working Group.

Member, International Association of Emergency Managers (IAEM).

Member, Phi Kappa Phi Honor Society.

Member, International Association of Emergency Managers Emerging Technology Caucus.

Salimah LaForce (3)

Secretary, Southeast Regional Group, USA Section, BCS – The Chartered Institute for IT, March 2010 – Present.

BCS Women Coordinator, Southeast Regional Group, USA Section, BCS – The Chartered Institute for IT, 2011 – Present.

Member, GA Emergency Preparedness Coalition for Individuals with Disabilities and Older Adults, 2011- Present.

Jacqueline Herndon (1)

Member, International Society of Research Administrators, 1993 – Present.

Kenneth Bernard (2)

Alternate, Government Technology Advisory Board, 2012 – Present.

Chairman, Southeast Regional Group, USA Section, BCS-The Chartered Institute for IT, March 2010 – Present.

CACP AFFILIATES (Partially paid by CACP)

Frank Lucia, Consultant

Harley Hamilton, CoC

Ed Price, IPaT

Peter Presti – IMTC

Brian Jones, IMTC

Tiffany O'Quinn, IMTC

Zane Cochran, IMTC

Scott Gilleland, IMTC

Claudia Rebola, CoA

Carrie Bruce, CoA

Bruce Walker, Psychology

Young Mi Choi, CoA

Maureen Linden, CATEA

Shepherd Center (25% - 100% paid by CACP):

Michael Jones

Jim Mueller

Ben Lippincott

John Morris

Mark Sweatman

PEOPLE INVOLVED IN CENTER ACTIVITIES

Jessica Pater – GTRI

Sara Endicott – COA

Jon Sanford – COA

Karen Milchus – COA

Joiava Phillipott, Cox Communications

Kennard Woods – Federal Communications Bar Association

Carolyn Roddy – Federal Communications Bar Association

Robert Todd – COA

Chris Langston – COA

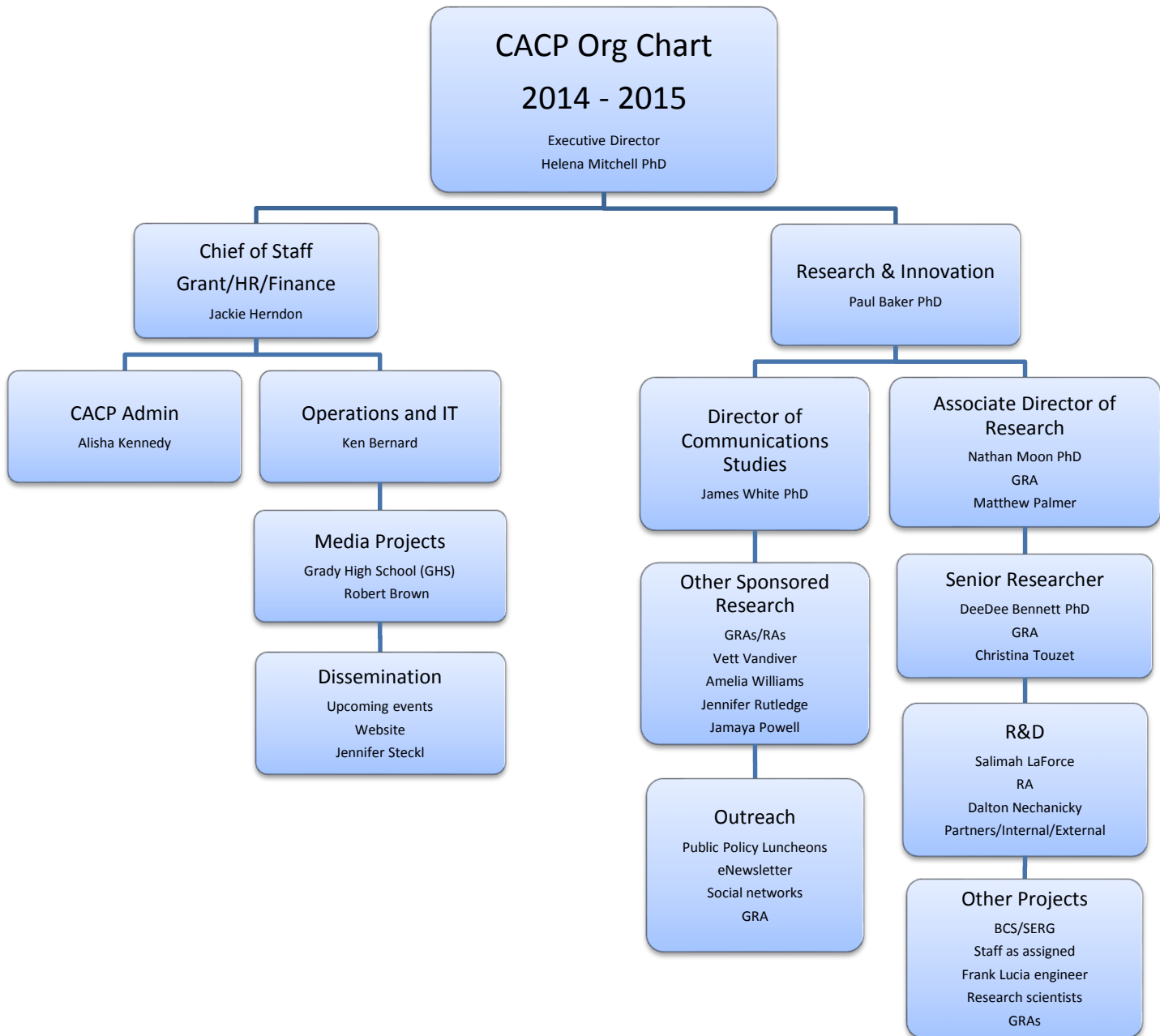
Summer Ienuso – COA

Technology Association of Georgia

The Findings Group

Burruss Institute, Kennesaw State University

DeafLink, Inc., San Antonio, TX



The goals for 2015 – 2016 will include hiring more graduate students, faculty, and GT researchers. Achieving these goals will require expansion of sponsored research beyond emergency communications and disabilities into more advanced R&D ICT, educational innovative collaborations, developing of cutting edge technology applications, expanding survey and focus group constituents, and external collaborations with entities involved in service to vulnerable populations.

My Dashboard

Jul 1, 2014 - Jun 30, 2015

All Sessions
100.0%

Pageviews

8,742

% of Total: 100.00% (8,742)



Visits

6,513

% of Total: 100.00% (6,513)



Unique Visitors

3,433

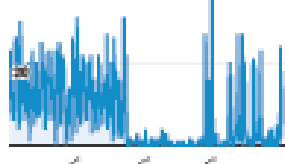
% of Total: 100.00% (3,433)



Daily Visits

Sessions

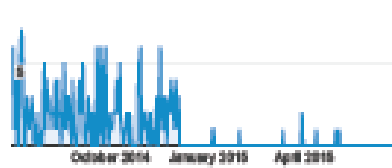
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Visits Mobile

Sessions

10



Total Goal Conversion Rate

Goal Conversion Rate

100.0%



Traffic Types

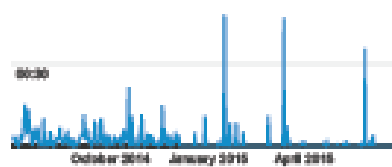
organic direct referral email



Avg. Time on Site

Avg. Session Duration

01:00



Conversion Rate by Source

Source Goal Completions Goal Conversion Rate

There is no data for this view.

Mobile Visits

Mobile (including Tablet)	Sessions	Pageviews
No	2,218	6,170
Yes	295	573

Time on Site by Country

Country	Sessions	Avg. Session Duration
United States	2,100	00:03:02
China	27	00:00:36
Russia	20	00:00:02
India	19	00:01:11
United Kingdom	16	00:00:16
Japan	16	00:01:01
South Korea	15	00:00:15
Canada	12	00:00:00
Germany	11	00:00:21
Hong Kong	11	00:00:30