Georgia Tech Center for Advanced Communications Policy

Annual Report

July 2015 – June 2016

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; STEM (science, technology, engineering, and mathematics) education; communications modes such as social media; and the impact of technology shifts. CACP collaborates with government, industry and academia at the local, state, national and international levels. In addition, CACP has participated in Ivan Allen college activities through teaching, advising and contributing to the goals of the Georgia Tech Strategic Plan Initiative Six to "expand and enhance the current programs dealing with technology and policy." CACP has and continues to provide 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 51 publishing activities; 28 conference presentations; active participation on 12 academic committees; 6 student assistantships or advisory roles by faculty of CACP; 47 memberships on boards/committees or national recognition; and over 26,500 website hits. Sponsored research was funded at $1,867,857.00. CACP staff/faculty exceeded 536 meetings with external/internal organizations and/or their representatives.

INSTRUCTION & APPOINTMENTS

Helena Mitchell, Ph.D.:	Regents' Researcher, Ivan Allen College, CACP
	Principal Research Scientist, School of Public Policy, CACP
	Faculty, Center for the Development and Application of Internet of Things Technologies (CDAIT), Georgia Tech.
	Co-chair, CDAIT Thought Leadership Working Group
	Visiting Professor, Amity University, London, England
	Adjunct Faculty, Oklahoma State University, OK
Advising:	Dalton Nechanicky, undergraduate student, IE Jamaya Powell, undergrad student assistant Christina Touzet, graduate student August 2015 through December 2015 (accepted research faculty position as of January 2016 with CACP)
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.
	Faculty, C21U, 2012 – present.
Advising:	James Flowers, Doctoral Candidate, GSU/GT Dissertation Committee (Defense, Feb. 29, 2016) Jennifer Rutledge, graduate student

	Nydia Palacios, graduate student
Nathan W. Moon, Ph.D.:	Research Scientist II, School of Public Policy, CACP
Teaching:	Part-Time Lecturer, School of History and Sociology (HSOC) Summer 2015; HTS 2013: Modern America; 29

RESEARCH AND CREATIVE SCHOLARSHIP

Books and Books Chapters (3)

Todd, R.L., Pater, J., & Baker, P.M.A. (2016) (In) accessible learning in virtual worlds. In S. Gregory, M.J.W. Lee, B. Dalgarno, & B. Tynan (Eds.), "Learning in Virtual Worlds: Research and Applications." Edmonton, Canada: Athabasca University Press, pp. 87-115.

Bennett, D., Baker, P.M.A., & Mitchell, H. (2016). "New Media and Accessible Emergency Communications." Chapter 22 in *Disability and social media: Global perspectives.* New York: Routledge. Katie Ellis and Mike Kent (eds.). New York: Routledge (in press).

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 (United Kingdom): Routledge.

Journal Articles, Papers and Conference Proceedings **(refereed)** (11)

LaForce, S. (2016). "Optimizing Accessibility of Wireless Emergency Alerts: 2015 Survey Findings." Accepted to the *Journal of Technology and Persons with Disabilities* (publication forthcoming).

Bricout, J., Sharma, B., Baker, P.M.A., Behal, A., & Boloni, L. (2016). "Learning Futures with Mixed Sentience." *Futures* (revise and resubmit).

Harte, R., Quinlan, L., Glynn, L., Rodriguez-Molinero, A., Baker, P.M.A., Scharf, T., ÓLaighin, G. (2016, in press) "A Case Study examining the Application of a Human-Centered Design Methodology to the Development of a Connected Health Smartphone Application", accepted to *Journal of Medical Internet Research.*

Gregg, N., Galyardt, A., Wolfe, G., Moon, N., & Todd, R. (2016). Virtual Mentoring and Persistence in STEM for Students With Disabilities. *Career Development and Transition for Exceptional Individuals*. Forthcoming in Print. Published online. DOI: 10.1177/2165143416651717.

Gregg, N., Jones, S., Wolfe, G., Moon, N.W., & Langston, C.L. (2016). STEM E-Mentoring and Community College Students with Disabilities. *Journal of Postsecondary Education and Disabilities (JPED)*, 29(1), 47-63.

Todd, R.L., Moon, N.W., & Langston, C.L. (2016). E-Mentoring and Its Relevance for Competency-Based Education for Students with Disabilities: Research from the GSAA BreakThru Model. *Journal of Competency-Based Education, 1*(1), 17-30.

Moon, N.W., Todd, R.L., Gregg, N., Langston, C.L., & Wolfe, G. (2015). "Determining the efficacy of communications technologies and practices to broaden participation in education: Insights from a theory of change." In M. Antona and C. Stephanidis (Eds.) Universal Access in Human-Computer Interaction, 2015, Part III, *Lecture Notes in Computer Science, 9177*, 179–188.

Langston, C.L., Moon, N.W., Todd, R.L., Gregg, N., & Wolfe, G. (2015). Leveraging virtual worlds for electronic mentoring. In M. Antona and C. Stephanidis (Eds.): Universal Access in Human-Computer Interaction, 2015, Part III, Lecture Notes in Computer Science, 9177, 137–148.

Baker, P.M.A., Gandy, M., & Zeagler, C. (2015). "Innovation and Wearable Computing: A Proposed Framework for Collaborative Policy Design." IEEE Internet Computing, 19(5) pp 18-25.

Mitchell, H., & LaForce, S. (2015). "Futures of Disabilities: The Migration to a Digital World." *Journal on Technology & Persons with Disabilities.* (Accepted)

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

Mitchell, Helena invited June 2016, to serve as an editor for a special issue on Next Generation Emergency Communication, IEEE Communications Society Journal.

Publications-non refereed (4)

Wireless RERC Summit Proceedings: Envisioning Inclusive FUTURES
The *Envisioning Inclusive FUTURES Summit Proceedings* was published March 2016 by the Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC) on our website. The Summit 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) the consequential futures for

people with disabilities. The Proceedings concluded that a variety of technological solutions exist whether discussing the present or the future, and more are under development to facilitate the ability of people with disabilities to engage in life activities. Transformative ideas and common visionary themes addressed wireless technologies and systems that could stimulate inclusive solutions such as robotics, wearables, the Internet of Things, next-generation emergency communications and alerts, and assistive intelligence for auditory and visual navigation. Looking to an inclusive future, not only were research and policy agenda items identified, but also challenges and recommendations on how to reach a future of inclusiveness. Following are a few findings:

- Usability is critical – technology needs to be "out of the box" ready. The design process should be enhanced so that devices be intuitively usable, or conversely, be easily personalizable.
- Education, outreach and awareness efforts should be dynamic and integral to both ongoing and adaptive/changing environments.
- Products and services should be universally designed and also take into account cultural sensitivity.

The visionary theme from the opening to the concluding dialog emphasized: **A transformative future is an inclusive future**. Available at: **http://www.wirelessrerc.gatech.edu/sites/default/files/content/newroom/Wireless%20RERC%20SoT%20-%20Envisioning%20Inclusive%20Futures%20Summit%20Preceedings.pdf**

Moon, N.W. (2016) Center for Advanced Communications Policy (CACP), Georgia Institute of Technology, "University System of Georgia (USG) STEM II Initiative Formative Evaluation Report and Findings, FY2015," Prepared for Office of Educational Access and Success (OEAS), University System of Georgia (USG), May 2016.

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.

Mitchell, H., Presti, P., LaForce, S., Linden, M., Bennett, D., & Touzet, C. (2015). "Optimizing Ability of Message Receipt by People with Disabilities: Prototype Findings Report/Vibration Scale Final Report." Report for the Department of Homeland Security's Science and Technology Directorate from the Center for Advanced Communications Policy (CACP) Collaborative, October 2015.

Filings on Rule Makings to the Federal Communications Commission, Washington, D.C. and other federal agencies (5)

Wireless RERC on the Record: Role of Government in the Advancement of IoT

June 1, 2016 – The Wireless RERC, in collaboration with Georgia Tech's Center for Advanced Communications Policy (CACP), and the Center for the Development and Application of Internet of Things Technologies (CDAIT), Georgia Tech Research Institute, filed comments in response to The National Telecommunications and Information Administration's (NTIA) inquiry: "Notice, Request for Public Comment, The Benefits, Challenges, and Potential Roles for the Government in Fostering the Advancement of the Internet of Things [Docket No. 160331306–6306–01]. NTIA sought broad input from all interested stakeholders—including the private industry, researchers, academia, and civil society on the potential benefits and challenges of the Internet of Things (IoT) and what role, if any, the U.S. Government should play in this area. The comments submitted addressed, among other things, IoT's potential to advance the social inclusion and independent living of people with disabilities; and improve the dissemination of emergency information. The submission encouraged (a) the consultation of people with disabilities throughout the design and development phases of the IoT, and (b) the accessibility implications of future technologies to become a high-level consideration when planning Federal level technology development strategies and policy.

Wireless RERC on the Record: Advancing Access to Emergency Alerting

June 8, 2016 - Georgia Tech's Center for Advanced Communications Policy (CACP), in collaboration with the Wireless RERC, submitted comments to the Notice of Proposed Rulemaking (NPRM) In the Matter of Amendment of Part 11 of the Commission's Rules Regarding the Emergency Alert System [**15-94**]; Wireless Emergency Alerts [**PS Docket No. 15-91**]. The proposed changes in the NPRM are intended to strengthen the emergency alerting systems and to increase their effectiveness at prompting the public to take the appropriate protective actions. The major areas of change included improving alerting organization at the state level, bringing alerting tools up to date with advancements in technology, and developing community-based accessible public safety exercises. Wireless RERC comments contended that all communications received on digital devices should be accessible and concur that the proposed advancements for both WEA and EAS are a promising avenue for ensuring timely response and recognition of messages to safeguard all citizens. The recommendations were intended to facilitate the maturation and modernization of both systems, empowering all to make informed choices that result in maximizing message diffusion and ensuring the same timely and effective access to alerts and warnings for people with disabilities. Available at: **https://ecfsapi.fcc.gov/file/60002098871.pdf**

Wireless RERC on the Record: Volume Control Standards for Hearing Aid Compatibility

February 26, 2016 –The Wireless RERC, in collaboration with Georgia Tech's Center for Advanced Communications Policy (CACP) filed comments before the FCC in response to the Notice of Proposed Rulemaking (NPRM) *In the Matter of Access to Telecommunications Equipment and Services by Persons with Disabilities* **[CG Docket No. 12-32];** *Petition for Rulemaking Filed by the Telecommunication Industry Association Regarding Hearing Aid Compatibility Volume Control Requirements* **[CG Docket No. 13-46];** *Amendment of the Commission's Rules Governing Hearing Aid-Compatible Mobile Handsets* **[WT Docket No. 07-250];** *Comment Sought on 2010 Review of Hearing Aid Compatibility Regulations* **[WT Docket No. 10-254].** The comments, in large part, were informed by analyses of data collected via the Wireless RERC's hearing aid compatibility (HAC) survey research in 2014 which gathered data from people who use hearing aids and cochlear implants on how well their hearing technology works with their wireless handsets. Answers to the survey questions have provided insight into the effectiveness of hearing aid compatibility requirements in the United States, as well as the need for any amendments to the rules. The Wireless RERC's comments supported the incorporation of the proposed 2012 ANSI Wireline Volume Control Standard, and further recommended extending any technology requirements for wireline phones to Voice over Internet Protocol (VoIP) phones, as well. The filing of Apple extensively quoted and supported our findings and has led to discussions on how accessibility features can be better incorporated into product development. Available at: **http://apps.fcc.gov/ecfs/document/view?id=60001520486**

Wireless RERC on the Record: Wireless Emergency Alerts & Accessibility

January 13, 2016 - The Wireless RERC, in collaboration with Georgia Tech's Center for Advanced Communications Policy (CACP), added their expertise to support several of the proposed enhancements to the Wireless Emergency Alerts (WEA) system. In a Notice of Proposed Rulemaking released by the FCC *In the Matter of Improving Wireless Emergency Alerts and Community Initiated Alerting* [PS Docket 15-91], the FCC requested stakeholder input on several ways to enhance the effectiveness and content of WEA messages. Wireless RERC and CACP research on the accessibility of WEA messages for people with disabilities provided empirical data in support of their recommendations. From a regulatory review and literature review conducted under contract with the DHS Integrated Public Alert & Warning System (IPAWS) Project Management Office (PMO), a framework was developed that identified influencing factors that, if not optimal, could negatively impact the effectiveness of WEA messages. For example, current WEA regulations limit the potential of the system. Most notably the 90 character maximum length and the geotargeting boundaries being too large (i.e., county wide). Additionally, the rules currently prohibit the use of URLs and dialable numbers. The accessibility provisions only addressed alert notification signals (i.e., vibration cadence and alert tone) but not access to the content of the message. For people with disabilities, these features would be especially useful as it would enable them to receive more information about the event in a format that is accessible to them, or made accessible via the assistive

technology they have installed on their WEA capable device. Available at: **https://ecfsapi.fcc.gov/file/60001404241.pdf**

Wireless RERC Comments on Accessible Emergency Communications

November 19, 2015 – The Wireless RERC submitted ex parte comments to the Federal Communications Commission in open proceedings concerning the Emergency Alert System [Docket Nos. 15-94 and 04-296] and Wireless Emergency Alerts (WEA) [Docket Nos. 15-91 and 07-287]. The document presents the background and results of research activities which were conducted to examine the effectiveness of EAS and WEA to provide alerts to people with disabilities. Specifically, the Wireless RERC conducted comparative analyses of the awareness of EAS and WEA messages, the accessibility of the two systems, as well as the types of protective actions taken as a result of the emergency messages. The survey research occurred between 2011 and 2014 and the results, analyses and recommendations were completed in 2015 and were submitted for consideration in the above-referenced rulemakings. This research was provided to government entities including the FCC and DHS to supply unbiased data and evaluation to help ensure that individuals with disabilities have equal access to critical lifesaving information through digitally-based warning systems. Available at: **http://www.wirelessrerc.gatech.edu/sites/default/files/content/newroom/Ex%20Parte%20_WEA_EAS_ResearchBrief_FINAL.pdf**

ACADEMIC, COMMUNITY ACTIVITIES & PRESENTATIONS

Helena Mitchell (3)

Member, President's Committee on Disabilities and Access, National Best Practices Subcommittee Chair, 2013 – April 2016.

Executive Committee, Policy@Tech.

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

Paul Baker (3)

Reviewer: Ivan Allen College Graduate Student Paper Competition 2015, 2016

Georgia Institute of Technology FIRE Proposal Reviewer, 2012 -2016.

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

Nathan Moon (5)

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

Chair, Georgia Tech Faculty Honors Committee, Standing Committee of the Georgia Tech Faculty Senate, 2014-Present.

Peer Review, Ivan Allen College SGR grants program

Peer Reviewer, *Technology in Society* journal

External Advisory Board (EAB) Member, Columbus State University, Improving Undergraduate STEM Education (IUSE) program.

Conference Presentations (28)

Touzet, C. (2016). "Accessible Emergency Alerts for People with Disabilities." Presented at the *National Emergency Number Association NENA Conference*, June 13, 2016, Indianapolis, Indiana.

Moon, N. (2016). "The Georgia STEM Accessibility Alliance," Rapid Talk for SMTI NSEC 2016 National Conference, Association of Public and Land Grant Universities (APLU), San Antonio, TX, June 8, 2016.

Moon, N. (2016). "Considerations for the Evaluation of Large-Scale, State Level STEM Initiatives," SMTI NSEC 2016 National Conference, San Antonio, TX, June 8, 2016.

Moon, N. (2016). "Improving STEM Education in Georgia's Colleges and Universities: Findings and Insights from Five Years of Evaluation," presented at the 2016 *SST STEM Symposium*, hosted by Georgia Gwinnett College, May 3, 2016, Lawrenceville, Georgia.

LaForce, S., & Touzet, C. (2016). "Wireless Emergency Alerts (WEA) vs. Emergency Alert System (EAS) National Survey Research Findings: Does the New Alerting, Technology Improve Accessibility?" Poster presentation at the "Garage @ Tech Square" at the *Disaster Response and Mitigation Forum*, April 28, 2016, Atlanta, Georgia.

Nechanicky, D. (2016). "Redesigning a Commercial Products Warehouse for UPS Supply Chain Solutions," presented his senior project at the *Senior Design Expo*, April 26, 2016, Atlanta, Georgia.

Moon, N. (2016). "Virtual Worlds for Supporting STEM Education and Workforce Development," 31st Annual International Technology and Persons with Disabilities Conference (2016 CSUN Conference), San Diego, CA, March 25, 2016.

Touzet, C. (2016). "EA*S* & WEA: Does the new alerting technology improve accessibility?" Poster presented at the *RES/CON (formerly the International Disaster Conference and Expo (IDCE)*, March 1-3, 2016, New Orleans, LA.

LaForce, S. (2016). "Optimizing Accessibility of Wireless Emergency Alerts: 2015 Survey Findings." Paper presented at the *31st Annual Technology and Persons with Disabilities Conference*, San Diego, CA.

Mitchell, H. (2016). "Futures of Disabilities: The Migration to a Digital World." Paper presented at the *31st Annual Technology and Persons with Disabilities Conference*, San Diego, CA.

Baker, P.M.A., & Bricout, J. (2016). "Mixed Sentience Learning Communities: Design Considerations & Opportunities." Paper presented at the *31st Annual Technology and Persons with Disabilities Conference*, San Diego, CA.

Baker, P.M.A. (2016). "What Works: Dimensions of Accessibility and Participation." Invited moderator on panel at the *Symposium on the Science of Broadening Participation (SoBP)*, sponsored by the National Science Foundation (NSF), February 25-26, 2016, Arlington, Virginia.

Baker, P.M.A. (2015). "Universities, Public-Private Partnerships, and the Innovation Ecosystem." Invited panelist at the Opportunities of Techno-industrial Innovation In Different Socio-cultural and Policy Situations: Diversities of Innovation Workshop. December 13-15, Tsinghua University, Beijing, China.

Baker, P.M.A. (2015). "Seminar on Technology and Innovation." Invited discussant at the *Opportunities of Techno-industrial Innovation In Different Socio-cultural and Policy Situations: Diversities of Innovation Workshop*, held at the School of Economics and Management. December 14, 2015, Beihang University, Beijing, China.

Mitchell, H. (2015). "ITU Kaleidoscope 2015: Trust in the Information Society." Moderator of a session titled "Trust in the Cloud" including accessibility concerns. December 9-11, 2015, Barcelona, Spain.
LaForce, S. (2015). "Networked Accessibility. What are the opportunities and challenges for harnessing crowd plus cloud?" Panelist at the *Smith-Kettlewell Eye Research Institute State of the Science Conference*. December 4, 2015, San Francisco, CA.

Cozzens, S., & Moon, N. (2015). "Improving Accessibility and Inclusion in STEM Graduate Education," Invited Presentation for Council of Graduate Schools (CGS) Annual Meeting, Seattle, WA, December 4, 2015.

Moon, N., & Langston, C.L. (2015). "Connect, Learn, BreakThru: Summative Findings from 5 Years of Electronic Mentoring in STEM Education," Accessing Higher Ground Conference, Westminster, CO, November 18, 2015.

Moon, N. (2015). "Virtual Worlds and Electronic Mentoring for Students with Disabilities in STEM," IPaT Think Tank Presentation, Georgia Institute of Technology, Atlanta, GA, November 12, 2015.

Moon, N. (2015). "Disability and Accommodation," Guest Lecture for HTS6743/LMC6743/PUBP6743, Science, Technology, and Society: Core Seminar, November 3, 2015.

Baker, P.M.A. (2015). "Wearables: Connecting Fitness & Health for Consumers." Panelist at the *Mobility Live! 2015*. October 28, 2015, Atlanta, GA.

LaForce, S., Touzet, C. (2015). *Accessible Wireless Emergency Alerts for People with Sensory Disabilities.* Poster presented at the Wearable Computing Center Forum 2015. Atlanta, GA, October 21, 2015.

Mitchell, H., & LaForce, S. (2015). "FutureS of Disabilities." *AT&T Advisory Panel on Access and Aging.* October 13, 2015, Atlanta, GA.

Mitchell, H., LaForce, S., Presti, P. (2015). *Public Response to Alerts and Warnings: Optimizing Ability of Message Receipt by People with Disabilities.* Webinar and meeting presented by the Department of Homeland Security Science & Technology Directorate. Washington, DC, October 2, 2015.

Moon, N., Freeman, J., Guzdial, M., & Hoffman, M. (2015). "Technology to Broaden Education," ICLAST Interdisciplinary Research Discussion Series, Ivan Allen College, Georgia Institute of Technology, August 28, 2015.

Moon, N., Todd, R., & Langston, C. (2015). "Determining the Efficacy of Communications Technologies and Practices to Broaden Participation in Education: Insights from a Theory of Change," *Human-Computer Interaction (HCI) International conference*, Los Angeles, CA, August 5, 2015.

Langston, C., Moon, N., & Todd, R. (2015). "Leveraging Virtual Worlds for Electronic Mentoring," Human-Computer Interaction (HCI) International Conference, Los Angeles, CA, August 5, 2015.LaForce, S., & Bennett, D. (2015). "Accessible Wireless Emergency Alerts for People with Sensory Disabilities." Poster presented at the *2015 Annual Natural Hazards Research and applications Workshop*, July 18-21, 2015, Broomfield, Colorado.

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

Outreach

CACP was a sponsor of the Wearable Computing Forum on October 21, 2015. The Forum focused on the Optimized Self. The day consisted of expert panels and demonstrations of new technology at related Georgia Tech centers. CACP/Wireless

RERC had a poster presentation and demonstration (see above reporting) during the daylong event where our work on smartphone adaptation prototypes to enhance those with sensory disabilities by increasing light and vibrations sent to phones during emergencies were highlighted.

Baker, P., LaForce, S., Linden, M., Touzet, C. (2015). *Analysis of Research Policy and Practices, Comprehensive Year One Deliverable Report*, ODEP, October 2015. National Employer Policy, Research and Technical Assistance Center for Employers on the Employment of People with Disabilities.

Paul M.A. Baker and Nathan Moon were on the planning committee and served as session leaders for the University System of Georgia's New Learning Models 2030 Symposium held September 23, 2015 at the Academy of Medicine, Atlanta.

Helena Mitchell met in July 2015 with Dr. Luminita Vasiu, head of the Amity University (in) London, representatives from the London School of Business and other stakeholders from industry and education to plan an executive workshop tentatively titled "Business, Advanced Communications and Academia Collaborations: across mutual fields of interest." The 2016 workshop, will be held in London to share strategies for leveraging EU and U.S. funds for collaborative projects.

Helena Mitchell received by-invitation-only request from CTIA to speak at their Accessibility Outreach Initiative Forum on September 9, 2015 in Las Vegas, Nevada. Ten leaders from the wireless industry who serve on CTIA board or advisory working groups attended the Forum on how to educate their constituents on accessible "best practices." The panel for 2015 was, "Advancing Access to Emergency Communication Technologies for Persons with Disabilities." Helena spoke on the federal network of Wireless Emergency Alerts.

Helena Mitchell attended an invitation-only workshop, "Broadband 2021" held June 16th and 17th 2016 at the National Science Foundation (NSF) in Arlington, VA. The goal was to help shape the future research agenda for broadband and help ensure all members of the U.S. society benefit from new developments in broadband. Dr. Mitchell addressed current applications-related challenges in the opening "technology uses of broadband" session. Given the priority accorded to this activity by the BOC and NSF/ National Telecommunications and Information Administration, the report is likely to receive wide attention in Washington policy circles and the media.

Helena Mitchell by special invitation, participated in the **ITU- IEEE-Academia collaboration consultation** meeting that took place on December 8, 2015 (just prior to Kaleidoscope 2015). This meeting provided an opportunity to exchange views on what the International Telecommunications Union (ITU) and IEEE can do to best meet the needs and expectations of Academia. The event included some 50 participants representing institutions from all over the world. The ITU Deputy Secretary General spoke to the small gathering of country higher education representatives.

Social Media

CACP:
Accessible Technology Policy Group (ATPG), established in 2009 currently has 904 members. ATPG is focused on policy development and exchange of information related to e-accessibility and inclusive design.

The CACP Facebook page has 202 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 692 followers. The CACP Twitter feed's purpose is to share CACP news and events, as well as post relevant technology and policy news items.

Individual:
Paul M.A. Baker has an IAC website at http://paulmbaker.gatech.edu, maintains a LinkedIn profile with 2263 connections, and a Twitter feed (@paulmbaker) with 1750 followers.

Emergency Lifelines Tabletop and Workshop

CACP and the Wireless RERC hosted an Emergency Lifelines Workshop & Tabletop on April 14, 2016 in Atlanta, Georgia. Forty-four (44) individuals representing local, state, federal and academic leaders who play a role in emergency communications were in attendance. This one day workshop heightened awareness among stakeholders about the need for accessible emergency communications and feasible approaches to ensure timely lifesaving information from the public safety officials is sent to people with disabilities.

The first panel gave an **Update on Federal, State, and Local Emergency Communications,** with panelists from IPAWS - FEMA/DHS, the regional level emergency communications operations at FEMA and the DeKalb County Emergency Management Agency.

Panel #1: Charles McCobb, Mary Hudak, Helena Mitchell (moderator), and Sue Loeffler.

The second panel discussed **State and Local Initiatives,** panelists were Georgia Emergency Management Agency; Georgia Department of Public Health Emergency Communications; DeafLink; and the Georgia Emergency Preparedness Coalition for Older Adults and Individuals with Disabilities.

Panel #2: Wayne Smith, Betsy Kagey, Rick Wimberly (moderator), Jennifer Hogan, Kay Chiodo.

Following the two panels, was a poster and demo session for attendees to gather information on the state of emergency communications research, technology, and resources available in Georgia to help their agencies and constituencies. Demos included: Hamilton/Georgia Relay, FEMA IPAWS, FEMA Region IV, Georgia Emergency Preparedness Coalition, Accessible Weather App, Deaf Link Inc., Wireless RERC Research, and Accessible Wireless Emergency Alerts with ASL video feature, etc.

In the afternoon there was a **Winter Storm Tabletop Exercise – a Discovery & Exploration**. The tabletop exercise consisted of modules that reviewed different types of winter weather alerts, warnings and watches. Each table was able to discuss each of the modules as a table and troubleshoot different efforts made by agencies in relation to emergency communications. Each table discussed issues that could arise and how to communicate in an accessible manner throughout the alert and warning stages. This tabletop exercise featured actual NWS generated weather watches and weather warnings for a winter storm in the Atlanta metro area. After presentation of each input the moderator posed a series of questions and each table was given time to discuss and then report out on what their discussions had revealed. Attendees reported countless benefits from the day, including: greater awareness, networking, expanding horizons, gained knowledge in new areas, learned how to communicate with different agencies, excellent opportunity to learn from other experts and share mutual experiences and lessons learned, learned various challenges related to inclusion of people with disabilities or access and functional needs.

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

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, educational liaison officer and secretary.

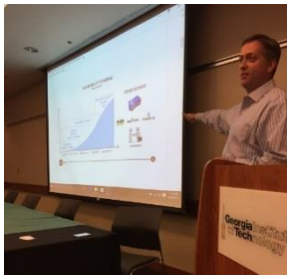
Salimah LaForce, Ken Bernard and Alisha Kennedy, officers of SERG, collaborated and held meetings with computer science and math faculty at Henry Grady High School and with the educational technology specialist and instructional coach faculty at South Atlanta High School throughout 2015 to encourage students to join 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. Goals included providing the opportunity for girls, minorities and socioeconomically disadvantaged youth the ability to discover and advance their computer science talents, engage students in a meaningful and fun computer science experience that incentivizes them to strive for all-around academic excellence; and encourage students to pursue degrees and eventual careers in a computer science field.

<u>Brunch n' Learn - Startups & Innovation: Taking Your Ideas to the Marketplace</u>

BCS-The Chartered Institute for IT, U.S.A. Southeast Regional Group (SERG) in partnership with CACP, hosted a Brunch & Learn titled, *Startups & Innovation: Taking Your Ideas to the Marketplace* on September 24, 2015 in the Student Center Commons, GT.

On the panel were three speakers: Blake Patton, Managing Partner, Tech Square Ventures; Dr. J. MacCalla, CEO, Zyrobotics; and Neil Kimbler, VP of Software Development, Videa, LLC. The panel discussed their experiences as a start-up and the lessons learned along the continuum of technology/product concept to market, and shared experiences with students and research faculty at Tech to help them gain insights on what it takes to successfully transition their ideas from concepts to realities.



Collaborations & Meeting Presentations

Helena Mitchell

Collaborations and meetings with **the Academy:** Georgia State University, Syracuse University, Oklahoma State University, University of Nebraska, Omaha; 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), Administration for Community Living, HHS.

Collaborations and meetings with **disability related organizations:** 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; Georgia Emergency Preparedness Coalition; RERC on Aging (TechSage); RERC on Blind and Low Vision, and RERC on Assistive Communications Technology.

Collaborations and/or meetings with **industry:** Blackberry, CTIA-the Wireless Association, Nokia, AT&T, Microsoft, NENA, Consumer Electronic Association, and National Public Radio.

165 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 Academy:** 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 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, Tsinghua University, Beijing, China, Beijing University.

Collaborations and meetings with **government agencies:** University System of Georgia, Federal Reserve Bank of Atlanta, 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), Research Foundation – Flanders (Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO).

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, Viscardi Center, Rehabilitation Engineering and Assistive Technology Society of North America, World Institute on Disability, USBLN.

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, CTA Foundation, Sprint, Samsung, AT&T, Microsoft, Jawbone, Friedrich Ebert Stiftung (International Trade Union Policy Foundation), Lumina Foundation, ITHAKA, Atlanta Braves organization, Booze Allen Hamilton, MailChimp, Sharecare, ThyssenKrupp, American Institutes for Research.

130 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.

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 Academy:** University of Nebraska - Omaha, Georgia State University, University of Texas – Arlington, Georgetown, George Washington University, University of California – Santa Barbara, Grady High School, South Atlanta High School, Atlanta Area School for the Deaf, Atlanta Public Schools District.

Meetings and/or collaborations with the **public and government entities:** FEMA – Integrated Public Alert & Warning System; Federal Communications Commission (Office of Disability Rights, Wireless Technology Bureau); Department of Homeland Security Science & Technology Directorate; US Department of Labor, Office of Disability Employment Policy; Georgia Emergency Management Agency, State of Georgia ADA Coordinator's Office; National Emergency Number Association (NENA); DeKalb Emergency Management Agency; Georgia Department of Public Health

Meetings and/or collaborations with **disability and non-governmental organizations:** Partnership for Employment and Technology (PEAT), Viscardi Center, BCS HQ, Smith-Kettlewell Eye Research Institute, US Business Leadership Network, Center for the Visually Impaired, Georgia Emergency Interpreting Services Network, CANnect.org, World Institute on Disability, American Institute for Research (via the Knowledge Translation RERC), GACHI – serving the deaf and hard of hearing, Harris Family Center for Disability and Health Policy

Meetings and/or collaborations with **Industry:** CTIA – The Wireless Association; HTC; AT&T; RareWorks, LLC; Deaf Link, Inc.; Yik Yak, Videa, Inc; Zyrobotics; Tech Square Ventures; Zero Tech; Infinite Futures; Be My Eyes; Galain Solutions; Inclusive Technologies; IT Americas, British Airways

Approximately **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; responses to inquiries via Facebook and Twitter accounts, response to the TDPH, respondent recruitment for the Survey of User Needs, and administration of the 2015 Wireless Emergency Alerts Survey via the telephone.

SPONSORED FUNDING

Active (7)

Paul M.A. Baker, Ph.D. **$ 146,191** for Fiscal Year 2016. Original award to James White, Ph.D., U.S. Department of Labor's Office of Disability Employment Policy (ODEP), The Viscardi Center in Albertson, New York, Cooperative work agreement award of **$1,848,350**, 09/30/2014 – 09/30/2019.

Paul M.A. Baker, Ph.D., Partnership for Learning Models, NLM Workshop, sponsored by USG, 4/22/2015 – 12/30/2015, **$25,671**.

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., 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 10/1/2014 – 9/30/15. **$950,000** for fiscal year 10/1/2015 – 9/30/2016.

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.

Nathan Moon, Ph.D., Principal Investigator, Phase III External Evaluation, USG STEM Initiative, Board of Regents of the University System of Georgia, 7/1/2015-6/30/2016, **$51,403** N.W. Moon (PI), Phase III External Evaluation of the University System of Georgia STEM II Initiative, Board of Regents of the University System of Georgia, 7/1/14 - 6/30/15, **$51,403**.

Nathan W. Moon (PI), Board of Regents of the University System of Georgia, Borrowed Services Agreement, 7/1/14-6/30/15, **$13,607**.

MEMBERSHIPS, BOARD MEMBERSHIPS AND NATIONAL RECOGNITION

Helena Mitchell (14)

Cuba Delegation Helena was selected to be part of a delegation to participate in meetings in Cuba early August 2015. The Delegation was sponsored by the New York Diversity Council who selected 24 members from across the U.S. Dr. Mitchell was part of the Education Interest Section and met with universities, broadcast executives, ministry of higher education and other organizations to discuss areas of mutual interest. A white paper was produced for the New York State council on diversity and the State Dept.

The Board of Regents appointed Dr. Helena Mitchell in 2014 as Regents' Researcher for three-years. 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.

Helena was one of fifty alumni of Syracuse University's S.I. Newhouse School of Public Communications—accomplished professionals from all areas of the media industry—who were honored at a 50Forward special event Oct. 29, 2015 in New York City. Honorees were selected because they represent the kind of forward thinking for which Syracuse University graduates have always been known.

Recipient of the 2015 Hall of Heritage Award in June 2015 from her undergraduate school, State University of New York, College at Brockport. The award honored those alumni who distinguished themselves by their contributions to the alumni association and through their community service.

Appointed to serve on a newly formed committee of the Federal Communications Commission in February 2015 for three-years. The Disability Advisory Committee provides 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.

IAC Million Dollar Club, 2015 and 2016.

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 – December 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.

Accessibility Advisory Council, CTIA-The Wireless Association, 2010 – Present.

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

Member, NENA Accessibility Committee, 2008 – Present.

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

Paul M.A. Baker (16)

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

External Reviewer, National Council on Disabilities, Section 503 Rehabilitation Act Amendments: Impact on Increasing Employment Opportunities for People with Disabilities.

External Reviewer, SBO (strategic basic research) Programme, Research Foundation - Flanders, Belgium, 2016.

External Reviewer, "New Learning Environments and Technologies." Academy of Finland, October, 2015.

External Proposal Reviewer, Netherlands Organisation for Scientific Research (NWO). December, 2015.

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.

Member, Disability and Rehabilitation Research Coalition (DRRC), 2009-present.

Member, Editorial Board, Assistive Technology Journal, 2006-present.

Member, Editorial Board, International Journal of Cases on Electronic Commerce (IJCEC), 2003-present.

Member, Editorial Board, Journal of Information Technology & Politics,

Member, Editorial Board, International Journal of Work Innovation

Member, Editorial Board, International Journal of E-Adoption (IJEA),

Member, Editorial Board, International Journal of E-Planning Research (IJEPR),

Member, Editorial Board, Journal of Disability Policy Studies.

International Journal of Cases on Electronic Commerce (IJCEC), 2003-present.

Nathan Moon (9)

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, Disability and Rehabilitation Research Coalition (DRRC)

Member, American Evaluation Association

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

Peer Reviewer, National Council on Disability (NCD), for Task Order NCD 01-16, "Notice of Funding Opportunity 2016 Progress Report" Competition

External Advisory Board (EAB) Member, Columbus State University, Improving Undergraduate STEM Education (IUSE) program.

Steering Committee Member, Georgia Conference on Scholarship of STEM Teaching and Learning, Georgia Southern University.

Peer Review, Ivan Allen College SGR grants program

Peer Reviewer, *Technology in Society*

Salimah LaForce (4)

Chair, Southeast Regional Group, USA Section, BCS – The Chartered Institute for IT, 2015 – Present (Secretary, March 2010 – 2015).

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.

Member, Consumer Technology Association - Working Group 19: Recommended Practice for Audio Accessibility of Audiovisual Device, August 2015 – Present.

Christina Touzet (3)

Member, National Emergency Number Association (NENA) – Committees: Accessibility, Emergency Communications, Communications Modalities, 2016.

Co-chair, Georgia Emergency Preparedness Coalition (GEPC) for Individuals with Disabilities and Older Adults, Training and Technical Guidance committee, 2014 – Present.

Member, International Association of Emergency Managers (IAEM) - Emerging Technology Caucus, Global Student Council Strategic Committee Student Liaison, 2012 – Present.

Jacqueline Herndon (1)

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

Kenneth Bernard (2)

Alternate, Government Technology Advisory Board, 2012 – Present.

Educational Liaison Officer, Southeast Regional Group, USA Section, BCS-The Chartered Institute for IT, 2015 – Present (Chairman, March 2010 – 2015).

Alisha Kennedy (2)

Secretary, Southeast Regional Group, USA Section, BCS-The Chartered Institute for IT, 2015 – Present.

Member, Georgia Tech Staff Council – Employee Engagement Committee, 2016 – 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
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

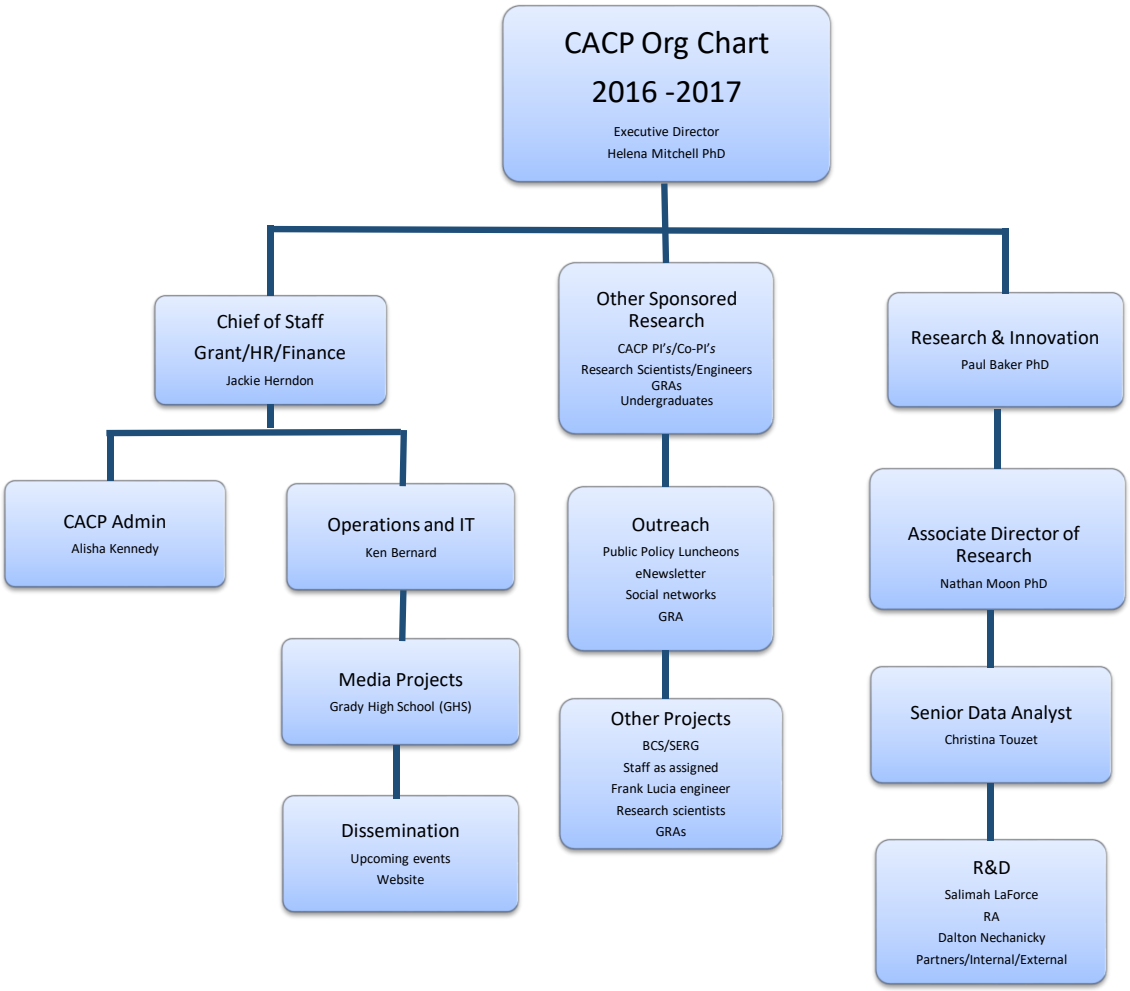
John Morris
Mark Sweatman
Peter Cassanova

PEOPLE INVOLVED IN CENTER ACTIVITIES

Jessica Pater – GTRI
Sara Endicott – COA
Jon Sanford – COA
Karen Milchus – COA
Joiava Phillpott, Cox Communications
Kennard Woods – Federal Communications Bar Association
Carolyn Roddy – Federal Communications Bar Association
Robert Todd – COA
Chris Langston – COA
Summer Lenuso -- COA
Technology Association of Georgia
The Findings Group
Burruss Institute, Kennesaw State University
DeafLink, Inc., San Antonio, TX

Goals for 2016 – 2017

Building upon a successful track record, CACP will grow internal GT collaborations to support new partnerships included in our proposed large "umbrella" funding of the Wireless RERC. If successful the new cycle will go into effect October 1, 2016 – September 30, 2021. CACP will hire more graduate and undergrad research assistants, faculty, and GT researchers and engineers. In addition, CACP plans to become more aggressive in its expansion of sponsored research into themes that leverage innovation; advanced R&D within the ICT and IoT arenas; educational innovative collaborations including STEM; developing of cutting edge Next-Generation technology; and external partnerships with industry; and collaborations with companies creating new tools that focus on service to vulnerable populations.



Google Analytics

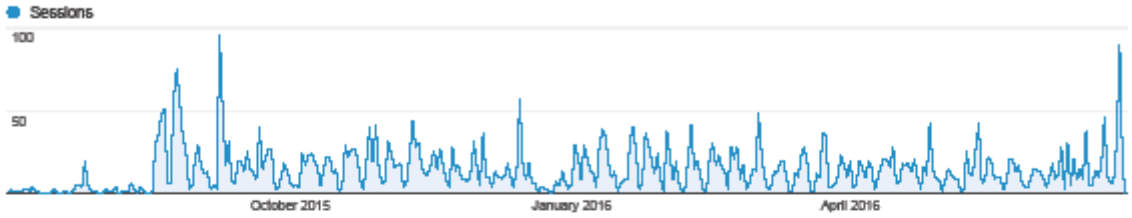
cacp website - http://www.cacp.gatech... Go to this report
cacp website

Audience Overview

Jul 1, 2015 - Jun 30, 2016

All Users
100.00% Sessions

Overview



Sessions	Users	Pageviews
5,269	2,426	26,783

Pages / Session	Avg. Session Duration	Bounce Rate
5.08	00:04:07	49.46%

% New Sessions
45.99%

	Language	Sessions	% Sessions
1.	en-us	4,353	82.62%
2.	(not set)	421	7.99%
3.	c	92	1.75%
4.	pt-br	86	1.63%
5.	en	82	1.56%
6.	en-gb	32	0.61%
7.	zh-cn	24	0.46%
8.	ko	23	0.44%
9.	fr	14	0.27%
10.	es	9	0.17%