During the past year, the Center for Advanced Communications Policy (CACP) focused on key issues that influenced the development, implementation and adoption of cutting-edge, advanced communications technologies. CACP work included 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 included 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 collaborated with government, industry and academia at the local, state, national and international levels. In addition, CACP participated in the Ivan Allen College activities through mentoring students and, in past years, teaching and independent studies. CACP also continued collaborative educational efforts by working with institutions within the University System of Georgia and Emory University. CACP contributed to the goals of the Georgia Tech Strategic Plan, by fulfilling one of its key objectives, to “understand and influence connections between technology and policy.” CACP continued to provide funding to faculty and students at Georgia Tech.

Within this document, CACP summarized highlights of the past year’s efforts from our researchers and technical staff. The report is divided into eleven areas: Instruction and Appointments (pg. 2); Research and Creative Scholarship (pg. 3); Academic and Service Activities (pg. 10); Dissemination Activities (pg. 12); Summative Collaborations & Meetings (pg. 17); Memberships, Board Memberships and National Recognition (pg. 21); Sponsored Funding (pg. 25); Collaborative Efforts (pg. 26); CACP Goals for 2017-2022 (pg. 27); CACP Organizational Chart (pg. 29); and CACP Website Analytics (pg. 30).

The major achievement this past year, was submitting and receiving five-year funding from NiDILRR (National Institute on Disability, Independent Living, and Rehabilitation Research) for 2016-2021 to establish the Rehabilitation Engineering Research Center for Wireless Inclusive Technologies at $4.625 million. We received the highest score ever awarded to an RERC in the past 16 years!

This year there were more than 26 publishing activities; 25 major engagements and conference presentations; active participation on 27 academic and service activities; 5 student assistantships or advisory roles by faculty of CACP; and 50 memberships on boards/committees or national recognition. Sponsored research was funded at $2,241,431. CACP staff/faculty participated in more than 550 meetings with external/internal organizations and/or their representatives.
INSTRUCTION AND APPOINTMENTS

Helena Mitchell, Ph.D.:

Regents' Researcher, Ivan Allen College
Principal Research Scientist, School of Public Policy
Executive Director, CACP
Faculty, Center for the Development and Application of Internet of Things Technologies (CDAIT), Georgia Tech
Co-chair, CDAIT Thought Leadership Working Group, July 1 – December 31, 2016
Visiting Professor, Amity University, London, England

Advising:
Jamaya Powell, undergrad student assistant

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

Principal Research Scientist, School of Public Policy
Senior Director, Research and Strategic Innovation, 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
Faculty, Center for the Development and Application of Internet of Things Technologies (CDAIT), Georgia Tech
Co-chair, CDAIT Thought Leadership Working Group, January 2017 – present
Advising:

Yon Jung Choi, Doctoral Candidate, George Mason University. External Reader (Defense, May 1, 2017)

Kenneth Goughnour, Masters Student, Rollins School of Public Health, Emory Univ. Graduate Research Assistant, December 2016 – present

Andrew Hanus, MSPP Student, Georgia Tech. Research supervisor, June 2016 – present

Nathan W. Moon, Ph.D.:
Senior Research Scientist, School of Public Policy
Director for Research, CACP
Part-Time Lecturer, School of History and Sociology (HSOC)

Brad Fain, Ph.D.:
Principal Research Scientist, GTRI, CACP
Fellow, WellStar Health System, 2016 – present

Advising:
Richard Harte, Doctoral Candidate, NUI Galway, External Examiner (Defense, May 17, 2017)

RESEARCH AND CREATIVE SCHOLARSHIP

Books and Books Chapters (3)


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


Publications non-refereed (5)


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. Retrieved from TDPH website


Filings on Rulemakings to the Federal Communications Commission, Washington, D.C. and other federal agencies (7)

Wireless RERC on the Record: Transitioning to Real-Time Text Technology
While the reply comments supported transitioning from Teletypewriter (TTY) to Real-Time Text (RTT) technology, we concurred with other stakeholder recommendations that the manner and speed in which it is done take into account those most at risk of losing all text communications access if TTY becomes unavailable. While most people with hearing and speech disabilities have a preference for text or video-based communications, there are still some that rely on TTY to place both emergency and non-emergency calls. For no one to be left behind, it is imperative that the transition process includes collecting data on network support, RTT-capable devices on the market, their accessibility levels, and end-user ownership rates.

Additional Information: Wireless RERC Reply Comments - Transitioning to Real-Time Text Technology

**Wireless RERC on the Record: NIDILRR’s Research Agenda**

NIDILRR is within the Administration for Community Living (ACL), Department of Health and Human Services (HHS) that “sponsors grantees to generate new disability and rehabilitation knowledge and promote its use and adoption. To that end, Wireless RERC comments highlighted the considerable capabilities and functionality offered by smart devices and their ability to address important access and assistive technology needs of people with disabilities as a group. As new iterations of mobile wireless technology devices and networks are deployed, such as the Internet of Things (IoT), researchers, engineers, advocates, and the wireless industry must continue to push for parity of access to these essential technologies, especially through the adoption of inclusive design and development practices. Further, comments suggested that the combination of research, development, and policy activities can have an exponential impact on availability, accessibility, and usability of connected technologies. When working to improve access to technologies that are governed by federal agencies, the policy component is crucial to ensuring transfer of research knowledge into industry practice.

Additional Information: Wireless RERC Comments - NIDILRR Long Range Plan

**Wireless RERC on the Record: Advancing Access to an Inclusive Internet of Things**
March 13, 2017 - The Wireless RERC, in collaboration with CACP, submitted comments to the National Telecommunications and Information Administration’s Request for Comments on the Benefits, Challenges, and Potential Roles for the Government in Fostering the Advancement of the Internet of Things [IoT] [170105023-7023-01].

CACP and the Wireless RERC strongly recommended that NTIA specifically articulate policy recommendations that support early stage inclusion of people with disabilities to further accessibility and usability of IoT technology and services
before development and deployment of the same. Comments also suggested that the Federal government focus future policy initiatives as well as technological design on addressing the ability of IoT to provide “on demand” contextually aware information. This display of consumer-digestible information, coupled with the intelligence of devices and applications can meet and anticipate the needs of users with disabilities in ways which increase user independence, opening new opportunities in areas as broad as education, workforce participation, safety, e-health, and social engagement. Further, comments stated when implemented in the workplace, IoT technologies can profoundly change the experience of persons with disabilities, providing tools for independence and autonomy while at work. But implementation is to some extent dependent on availability and suitability of current (or in development) devices and services. We suggested that the NTIA could provide formidable leadership in driving the development of the IoT framework by supporting multi-stakeholder engagement by supporting the formation of public-private partnerships and other multi-stakeholder collaborations to envision innovative types and uses of IoT.

Additional Information: Wireless RERC/CACP Comments and Wireless RERC/CACP Comments [PDF]

**Wireless RERC on the Record – Advancing Access To Wireless Emergency Alerts**
December 8, 2016 - CACP, in collaboration with the Wireless RERC, submitted comments to the FCC’s Further Notice of Proposed Rulemaking In the Matter of Wireless Emergency Alerts (WEA) [PS Docket. No. 15-91]. Wireless RERC and CACP survey research (2013-2015) on WEA informed the comments. The following is a sample of the recommendations:

- We support extending WEA rules to include tablets and other mobile devices, including wearable and other nontraditional communications devices. However, for WEAs received on tablets and wearables to be effective, visual, haptic, and audio signaling capabilities will likely have to be incorporated into the technologies to support the WEA notification signal requirements.
- We agreed with the FCC’s proposal to amend the rules to require that WEA messages be saved until the message expires.
- Before deploying the universal use of symbology in the WEA message, we echoed CSRIC IV and V’s recommendation to conduct user-experience studies inclusive of people with a variety of disabilities, whose primary language is non-English (spoken or signed), and people with varying levels of literacy.
- We recommend that mobile phone manufacturers design WEA-capable handsets with the capability to adjust the strength of the vibration and sound and to include a light feature (Center for Advanced Communications Policy, 2015).

The recommendations made in our comments were intended to maximize message diffusion and ensure the same timely and effective access to alerts and warnings for people with disabilities.
Wireless RERC on the Record – Broadband Research Agenda
October 10, 2016 – CACP, submitted comments in response to the National Telecommunications and Information Administration (NTIA) and the National Science Foundation (NSF) request for public comments to inform the development of a National Broadband Research Agenda. Comments suggested several avenues of research to ensure that development and deployment of broadband connectivity and applications are accessible to and usable by people with disabilities. Some of the suggestions for the national research agenda included:
- Collecting evidence-based statistical user needs data and conducting summative research to understand not only technological but social, cultural and usage barriers to deployment and access for all citizens.
- Undertaking deep-dive research to examine the optimal speed of broadband transmission and deployment of broadband equipment, software, content, and front-end consultation and testing with consumers.
- Identifying technological barriers to using these technologies as well as develop device prototypes and processes for inclusive technologies.

The CACP and the Wireless RERC emphasized the importance of including accessibility for people with disabilities to the greatest extent possible as part of the conceptualization and articulation of the research agenda.

Wireless RERC on the Record: FCC’s Section 504 Compliance
October 3, 2016 - CACP, in collaboration with the Wireless RERC, submitted comments to the Public Notice, Request for Comment on the Commission’s Policies and Practices to Ensure Compliance with Sections 504 of the Rehabilitation Act of 1973 [CG Docket No. 10-162]. Section 504 requires that Federal agencies make their programs and activities accessible to people with disabilities. The FCC sought public input on their programmatic access. Wireless RERC comments asserted that baseline accessibility is consistently impacted by access to customer service and print and electronic materials furnished by industry and policy makers alike. We recommended addressing fundamental issues of awareness and accessible formats. One part of the FCC’s Section 504 Handbook stipulated that the Commission would not transcribe or translate comments submitted in alternative formats. The Wireless RERC urged the Commission to reconsider this position. As it stands, the requirement that comments be filed in written English excludes people who rely on ASL from participating in the rulemaking process. Other comments addressed:
1. Ensuring the Accessibility Clearinghouse is prominently displayed on the website and its contents are reflective of consumer expectations and the evolution of technologies.
2. Providing more detailed guidance on accessible print and electronic documents to improve FCC personnel’s awareness about and capability to deliver, accessible formats.
Wireless RERC Comments on the Record - Maturation and Modernization of National Emergency Communications Systems (EAS & WEA)

June 8, 2016 - 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 were 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 concurred 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 following is a sample of recommendations included in the comments:

- To ensure that all members of the population understand the messages, emergency managers and those writing the plans should also be very specific in their instructions concerning emergency actions to be taken, eliminating jargon and abbreviations.
- Crowdsourcing is proving to be a valuable tool for emergency managers in gathering and dispersing information. Continued review of agencies that utilize crowdsourcing technologies and social media during disaster response is recommended.
- User data regarding the most frequent methods by which people receive emergency alerts supports the addition of State/Local WEA Testing in state-level preparedness procedures.
- Comments supported the use of EAS and WEA public service announcements (PSAs). It was recommended that the PSAs present the information about the systems in several formats including audio, text, American Sign Language (ASL), and other languages with high usage in a particular area.
- Comments supported extending WEA rules to include tablets and other mobile devices, including wearable and other nontraditional communications devices.

Additional Information: Wireless RERC Comments
ACADEMIC AND SERVICE ACTIVITIES

ACADEMIC ACTIVITIES (11)

Helena Mitchell (2)


Meeting with potential graduate students for the School of Public Policy (SPP) to discuss planning, preparations, resources, programs of interest and opportunities for applying to SPP, October 28, 2016.

Paul Baker (2)


Nathan Moon (2)

Chair, Georgia Tech Faculty Honors Committee, Standing Committee of the Georgia Tech Faculty Senate, 2014 – present.

Peer Review, Ivan Allen College Small Grants for Research (SGR) grants program.

Brad Fain (1)

Peer Review, Role of Risk Communication IN Community Resilience Building book chapter.

Recha Reid (1)


Synge Tyson (3)

Instructional Designer, User Interface Design (CS 3750), 2016.


Technical advisor and consultant, Master’s Program in Human Computer Interaction (MS-HCI): assistive technology software design, Bluetooth cane project, and mandolin slicer project, 2014 – present.
SERVICE ACTIVITIES (16)

Helena Mitchell (2)

Invited Editor, Special Issue of NextGen Emergency Communications.

Member, Georgia Emergency Preparedness Coalition for Individuals with Disabilities and Older Adults, 2011 – present.

Paul Baker (3)

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

External Reviewer, NIH ASCEND Center for Biomedical Research, September, 2016.

Board of Trustees, of the Friends Publishing Corporation, Philadelphia, PA, 2010 – present.

Nathan Moon (6)

Peer Reviewer, Technology in Society journal.

Peer Reviewer, Disability and Rehabilitation journal.

Reviewer, USG (University System of Georgia) STEM (Science, Technology, Engineering, and Mathematics) Education Improvement Plan (EIP) grants program, 2016.

Steering Committee member, USG STEM Summit, August 2016.

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

Peer Review Panelist, National Science Foundation (NSF) EHR Core Competition, 2016.

Recha Reid (1)

Member, Event Coordinators’ Network, 2015 – present.

Salimah LaForce (3)

Member, Georgia Emergency Preparedness Coalition for Individuals with Disabilities and Older Adults, 2011-Present. Outreach Committee Member – August 2013 – present.
South Atlanta High School STEM Partnership - Assisting with their STEM certification process. Reviewed and commented on the South Atlanta High School STEM Strategic Plan. March 2016 – present.
Founding Member and Annual Donor, Soaring Owls Foundation, Inc. (SOFI): SOFI’s purpose is to acquire and distribute financial and other resources to reach long-term goals for the enrichment of academic and other programs so that all Bolton Academy students achieve high levels of excellence. May 2013 – present.

**Synge Tyson (1)**

Member, Georgia Emergency Preparedness Coalition for Individuals with Disabilities and Older Adults - Training and Technical Guidance Committee, 2016 – present.

**DISSEMINATION ACTIVITIES**

*Items in this section have not been counted in other categories.*

**CONFERENCE PRESENTATIONS** (9)


Moon, N. (2016, August). *Looking Back: STEM Progress in Georgia to Date*. Presented at the USG STEM Summit 2016, Macon, GA.


Impact of Public Policy on Innovation, Location, and Networks of Collaboration. Roundtable as Co-chair of RC-11 (Research Council on Science and Technology) for International Political Science Association (IPSA) 24th World Congress of Political Science in Poznan, Poland.


Major Public and Industry Engagement (16)

CACPers at RESNA 2017 Annual Conference
CACPers attended the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) 2017 Annual Conference in New Orleans, LA from June 26-30, 2017. During this event, researchers attended workshops on best practices in assistive technology, and scientific research platforms and poster sessions. In conjunction with the RESNA Conference, Helena and Paul presented on the Wireless RERC Technology Transfer Plan at the review meeting for newly funded RERCs, while Nathan and Maureen attended the Board of Directors annual meeting. Paul also attended the Assistive Technology Journal Editorial Board meeting.

STEM Initiative Grantees Meeting and USG STEM Summit
Nathan Moon attended the STEM Initiative Grantees meeting and USG STEM Summit on May 16-18, 2017 in Macon, Georgia.

The Center for the Development and Application of Internet of Things Technologies (CDAIT) Board meeting on April 25, 2017 in Atlanta, Georgia
Helena Mitchell (July – December 2016) and Paul Baker (January – June 2017) attended several CDAIT Board meetings and served as co-chairs of the working session of the IoT Thought Leadership working group.

Serving on the DAC for the Second Term
Helena Mitchell attended the first meeting of the second term of the Disability Advisory Committee (DAC) on Tuesday, March 21, 2017 at the FCC’s headquarters in Washington, D.C. The DAC members discussed (1) the roles and responsibilities of the Committee and its members; (2) issues that the Committee will address; and (3) issues to be assigned to each subcommittee (emergency communications, relay/equipment distribution, technology transitions and video programming).

GovTech Social Academy
Ken Bernard attended the GovTech Social Academy on March 14-15, 2017, where he joined fellow communicators in sharing stories and ideas from government social media and to gain insight from local leaders in the field. He also participated in a live recording of the latest episode of the podcast.
CSUN Assistive Technology Conference

South Atlanta High School (SAHS) STEM Partnership Breakfast and Tour
British Computer Science (BCS)-The Chartered Institute for IT U.S.A. Southeast regional Group (SERG) members, Salimah LaForce, Ken Bernard and Alisha Kennedy forged a partnership with SAHS in efforts to contribute towards assisting SAHS to become STEM certified. Ken Bernard and Alisha Kennedy attended the STEM Partnership Breakfast and Tour on January 25, 2017 at SAHS in the Courtroom. The purpose for the event was to give attendees [potential partners] something more tangible to explore and see exactly how they will be investing their time, where they fit in, and how they can contribute to SAHS.

CACPers at International Consumers Electronics Show (CES)
Nathan Moon and Ken Bernard attended the 2017 CES in Las Vegas, Nevada, January 5-8, 2017. Ken examined new product lines and educational technologies which can be relevant to the many sponsored activities of CACP; while Nathan attended conference sessions and exhibits. They met with industry partners and took part in private tours of products that have accessibility features.

Skills and Innovation Policy Workshop
Paul Baker attended the University of Ottawa Institute of Fiscal Studies and Democracy (IFSD) Skills and Innovation Policy Workshop as an invited discussant, in Ottawa, Canada, December 5-6, 2016.

Grace Hopper Conference
Synge Tyson received an award from the University of Washington’s DO-IT program of AccessComputing to attend the Grace Hopper Conference in Houston, TX, October 18-21, 2016. Synge attended sessions related to human computer interaction, human centered computing, assistive software design and technology, diversity, academic tenure, and leadership. She met with industry leaders and engaged in networking opportunities.

Diversities of Innovation Workshop and Graduate Symposium
Paul M.A. Baker was an invited participant to the Diversities of Innovation Workshop and Graduate Symposium in Berlin, October 17-23, 2016 at the IG Metall Bildungszentrum. He participated on a panel presentation, taught symposium sessions and co-chaired for the International Political Science Association (IPSA) Research Committee on Science and Politics of RC-11 (Research Council on Science and Technology) planning meeting.

International Association of Emergency Managers (IAEM) Conference
Georgia Digital Government Summit
Ken Bernard, a member of the Digital Government Advisory Board composed of public and private sector leaders, attended the annual Georgia Digital Government Summit on September 29-30, 2016 at the Westin Buckhead Atlanta. The Advisory Board members were tasked with creating an agenda that inspired state and local government organizations attending the summit, advance the goals of their organizations and recommending the discussion topics for the 2016 Georgia Digital Government Summit. The topics were 1) Cyber Trends - The Good, The Bad and The Ugly, 2) Information of Everything - Privacy, Protection, Policies and People, 3) Exponential Government: The Future of Public Service, Internet of Things and the Impact on Government, 4) Next Generation Workforce – How to Recruit, Retain and Survive, 5) Spatially Enabling Government, 6) Cognitive Technology, 7) Emerging Technologies, and 8) Smart ATL.

CTIA Accessibility Outreach Initiative Forum
Helena Mitchell was an invited speaker for the CTIA Accessibility Outreach Initiative Forum in Las Vegas, Nevada, September 7, 2016. Mitchell’s session, titled “5G and its Impact on the Accessibility Community” focused on 5G technologies and its expected capabilities including what this means for accessibility. The promise of next-generation benefits for the consumer as we move closer to a connected future was also explored.

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, 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 regarding Youth Code. Youth Code is an education and outreach activity piloted by BCS, the Chartered Institute for IT, USA Section, Southeast Regional Group (SERG). The goal of Youth Code is to engage local K-12 students in computer programming and stimulate an interest in pursuing computer science degrees and eventual careers. Program goals include 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. Youth Code will be a component of the South Atlanta High School computer programming pathway.
Brunch n’ Learn – Developers Delight: Wearables, Apps, IoT, oh my! – Do you have the Next Big Idea?

BCS-The Chartered Institute for IT, U.S.A. Southeast Regional Group (SERG) in partnership with CACP, hosted a Brunch & Learn titled, Developers Delight: Wearables, Apps, IoT, oh my! on September 29, 2016 in the Student Center Commons, GT. The panel featured three speakers: Maribeth Gandy-Coleman, Wearable Computing Center; Alain Louchez, Center for Development and Application of IoT Technologies; and Harold Soloman, Venture Lab. The panel discussed areas of exploration in emerging technology that could provide some inspiration and things to consider for aspiring technology developers.

Social Media

CACP:
- Accessible Technology Policy Group (ATPG), established in 2009 currently has 893 members. ATPG is focused on policy development and exchange of information related to e-accessibility and inclusive design.
- The CACP Facebook page has 195 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 1004 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 2450 connections, and a Twitter feed (@paulmbaker) with 1800 followers.
- Salimah LaForce maintains a LinkedIn profile with 577 connections and 44 group memberships, including the Mobile and Tablet Accessibility Forum, Mobile Future, Association of Public Policy Analysis and Management, Digital Georgia, Future Social Media, Science Technology & Innovation Policy, Center for Policy on Emerging Technology, Public Warning & Mass Notification Group, and many other topical groups relevant to the CACP mission.
SUMMATIVE COLLABORATIONS & MEETINGS

Helena Mitchell

Collaborations and meetings with the Academy: Georgia State University, Syracuse University, University of Nebraska, Omaha; Johnson C. Smith University, Amity University (London), and Gallaudet University.


Collaborations and meetings with disability related organizations: DeafLink; Shepherd Center; 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 Limited; CTIA-the Wireless Association; Nokia; Nominet and Nominet Trust Foundation (UK); AT&T; Microsoft; NENA (National Emergency Number Association; Consumer Electronic Association; and NPR (National Public Radio).

122 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 Texas at Arlington, George Washington University, George Mason University, University of Toronto, University of Ottawa, Complutense University of Madrid, National University of Ireland, Galway, Waterford Institute of Technology, Friedrich Schiller University Jena, Geneva Business School, Tsinghua University, Beijing, China, Beijing University.

Department of Health and Human Services, Finland Academy of Science, Ministerio de Obras Públicas y Transportes (Costa Rica), Research Foundation – Flanders (Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO), Province of Ontario, Canada.

Collaborations with disability and health organizations: RERC on Aging, Center for Leadership in Disability, Children’s Healthcare of Atlanta, Georgia Department of Economic Development, Viscardi Center, Rehabilitation Engineering and Assistive Technology Society of North America, USBLN.

Collaborations and/or meetings with industry: Assistive Technology Industry Association, Blackberry, CTIA-The Wireless Association, CTA Foundation, Sprint, Samsung, AT&T, Microsoft, Friedrich Ebert Stiftung (International Trade Union Policy Foundation), Booze Allen Hamilton, MailChimp, Sharecare, ThyssenKrupp, American Institutes for Research, SmartMatics.

115 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, Independent Living, and Rehabilitation Research (NIDILRR), 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).


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: Georgia Tech Research Institute, Wearable Computing Center, Venture Lab, School of Civil and Environmental Engineering, University of Nebraska - Omaha, Georgia State University, Georgetown, George Washington University, Grady High School, South Atlanta High School.


Meetings and/or collaborations with Industry: Consumer Technology Association (CTA), CTIA – The Wireless Association; RareWorks, LLC; Deaf Link, Inc.; Galain Solutions, ascAspicio, AC&C (Precision Global Alert System), MAX Smarthome.

Approximately 75 technical assistance/outreach meetings not reported already. Meetings included discussions on possible collaborations (presentations and publications); 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; recruitment efforts for research; responses to inquiries via Facebook and Twitter accounts, responses to the TDPH readers.

Maureen Linden

Collaborations and meetings with the Academy: University of Buffalo, University of Georgia, Georgia State University, Georgetown University, George Washington University, the University of Nebraska, and the University of Texas – Arlington.

Collaboration with public and government agencies: FEMA – Integrated Public Alert & Warning System; Federal Communications Commission (Office of Disability Rights, Wireless Technology Bureau); Georgia Vocational Rehabilitation Agency (GVRA); Department of Homeland Security Science & Technology Directorate; National Institute for Disability Independent Living and Rehabilitation
Research (NIDILRR), National Science Foundation (NSF), University System of Georgia (USG); and the US Department of Labor, Office of Disability Employment Policy.

Collaborations with disability and non-governmental organizations: Partnership for Employment and Technology (PEAT), Viscardi Center, RESNA, Shepherd Center, Center for the Visually Impaired, RERC on Technology Transfer (T2RERC), RERC on Aging (TechSAge).

Collaborations with industry: Flex, LTD.; Herman Miller; LateShift, LLC, Loeb Enterprises Venture; Society for Human Resource Management (SHRM); and Deaf Link, Inc.

Approximately 91 technical assistance / support / outreach activities, including: Advisement to government agencies on wireless emergency communications; Letters of recommendation / support to external faculty; External students advisement and research assistance; Professional Leadership Activities including provision of budgetary consultation, governance, bylaws development, and agency growth; Consultation on Grants Management issues; Discussions on research and development collaborations with academia and industry partners.

Syngye Tyson

Collaborations and meetings with the Academy: Georgia Institute of Technology College of Computing, College of Design, and School of Psychology, University of Texas – Arlington, University of Washington, DePaul University, University of Kansas; American University; Georgia Gwinnett College, Rice University, University of Maryland, Baltimore County.

Meetings and/or collaborations with the public and government entities: US Department of Labor, Office of Disability Employment Policy (ODEP); National Emergency Number Association (NENA); Department of Veterans Affairs: Atlanta VAMC Rehabilitation R&D Center for Visual and Neurocognitive Rehabilitation (CVNR); Department of Defense; Georgia Emergency Management Agency, State of Georgia ADA Coordinator’s Office; DeKalb Emergency Management Agency; Georgia Department of Public Health, Georgia Vocational Rehabilitation Agency.

Meetings and/or collaborations with disability and non-governmental organizations: Blinded Veterans of America; Georgia Regional Group; Blind Vet Tech; Dekalb Amateur Radio Emergency Service (ARES); Georgia Council on Developmental Disabilities; Georgia Libraries for Accessible Statewide Services; Georgia Radio Reading Services; Partnership for Employment and Technology (PEAT); Smith-Kettlewell Eye Research Institute; Student Veterans of America; Women in Computing; Southeast Women in Computing.

Meetings and/or collaborations with industry: Amazon; AT&T; Technology Association of Georgia.
Approximately **67** 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; recruitment efforts for focus group and usability studies; response to the TDPH; design of assistive technologies, computer interface design for people with disabilities; communication modalities; inclusive teaching methods for instructors with disabilities; diversity initiatives and recruitment for professors with “targeted” disabilities in STEM fields.

**MEMBERSHIPS, BOARD MEMBERSHIPS AND NATIONAL RECOGNITION**

Helena Mitchell (9)

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.

Re-appointed to serve a second term with the Federal Communications Commission in January 2017 for three years. The Disability Advisory Committee (DAC) provides advice and recommendations to the Commission on a wide array of disability matters. Member of the DAC Wireless Emergency Alerts subcommittee.

Presenter, National Academies of Sciences, Engineering and Medicine workshop on the Future of Emergency Alert and Warning Systems: Research Directions. Mitchell’s presentation, titled “Optimizing Receipt from PWD,” discussed findings from two DHS funded research and development grants to CACP and how these R&D results have contributed to improving emergency alerts that are accessible to people with disabilities. Her presentation also identified research gaps and suggestions for future research and development activities to create a platform that includes ASL, phone alerting features, and accessible solutions for timely and effective alerting. September 1, 2016.


Member, Georgia Emergency Preparedness Coalition for Individuals with Disabilities and Older Adults, 2011 – present.

Member, Broadcast Education Association, Judge, Law & Policy Division, odd years from 2009.

Member, NENA Accessibility Committee, 2010 – present.

Paul M.A. Baker (10)
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, American Political Science Association.

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

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


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

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

Member, Editorial Board, Journal of Disability Policy Studies.

Nathan W. Moon (5)
Invited participant to present to the Board on Science Education (BOSE) of the National Academies of Sciences, Engineering, and Medicine, on June 6, 2017. This presentation was a part of the Board’s 27th Annual Meeting in Washington, DC. Moon discussed accessible and inclusive STEM education for students with disabilities. His presentation was based on his book, published in 2012, Accommodating Students with Disabilities in Science, Technology, Engineering, and Mathematics (STEM): Findings from Research and Practice for Middle Grades through University Education, which was supported by the National Science Foundation (NSF).

Member, Board of Directors of RESNA, The Rehabilitation Engineering and Assistive Technology Society of North America (2016-present); Chair, Government Affairs Committee of RESNA (2012-present); Member, Governance Committee, 2015 – present.
Member, Disability and Rehabilitation Research Coalition (DRRC), 2013 – present.

Member, American Evaluation Association, 2010 – present.

Steering Committee Member, Georgia Conference on Scholarship of STEM Teaching and Learning, Georgia Southern University, 2013 – 2016.

**Brad Fain** (5)

Board Member, Mobility Worldwide 2016 – present.

Board Member, National Aging in Place Council, 2016 – present.

Full Member, MARTA Accessibility Committee, 2015 – present.


Member, Human Factors and Ergonomics Society, 1992 – present.

**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.

**Maureen Linden** (3)

The Board of Directors for RESNA recognized Maureen Linden with the 2016 RESNA Fellow award. This is RESNA’s highest honor and is conferred to members who have made long term and substantial contributions to the fields of rehabilitation or assistive technology as well as significant contributions to RESNA. She will be inducted into RESNA’s Hall of Fellows.

Treasurer, Executive Committee, RESNA Board of Directors, 2016-2018 (appointed).

Secretary, Executive Committee, RESNA Board of Directors, 2014-2016 (elected); RESNA Board of Directors, 2013 – 2018 (elected).
Synge Tyson (5)

Member, The Association for Computing Machinery (ACM) – Subgroup: Computer Human Interaction, 2014 – present.


Member, GA Emergency Preparedness Coalition for Individuals with Disabilities and Older Adults - Training and Technical Guidance Committee, 2016 – present.


Member, Technology Association of Georgia (TAG), 2014 – present.

Recha Reid (4)

Member, APSA (American Political Science Association), 2015 – present.


Member, SPSA (Southern Political Science Association), 2015 – present.

Member, PMI (Project Management Institute), 2013 – present.

Jacqueline Herndon (1)


Kenneth Bernard (2)


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

Alisha Kennedy (2)

Member, Georgia Institute of Technology Staff Council – Employee Engagement Committee, 2016 – present.

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

Active (8)

The National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) conducted a site visit to evaluate the facilities and review the activities of the proposed RERC on Wireless Inclusive Technologies grant on Wednesday, July 6, 2016. The site visit was conducted by external reviewers from NIDILRR (Steve Bauer) and SUNY Buffalo (Ann (Amy) Bisantz). Subsequently, CACP (Helena Mitchell, PI), was awarded the NIDILRR, Administration for Community Living (ACL), Department of Health and Human Services grant to establish a Rehabilitation Engineering Research Center on Wireless Inclusive Technologies. Competitive grant program $4,625,000. 09/30/2016 – 09/29/2021. $924,994 for fiscal year 10/01/2016 – 09/30/2017.


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 (NIDILRR), 60 months, 10/1/15 – 9/30/17, $40,346 for fiscal year 10/1/16 – 9/30/2017.

Nathan Moon, Ph.D., Co-PI, Collaborative Research: STEM Accessibility Alliance (GSAA), $110,235.13 for fiscal year 10/1/16 – 9/30/2017.

Nathan Moon, Ph.D., Principal Investigator, USG STEM Initiative Research (Service Level Agreement between Board of Regents of the University System of Georgia and Georgia Institute of Technology), 12 months, 7/1/2016 – 6/30/2017, $31,065.

Nathan Moon, Ph.D., Consultant (External Evaluator), Transformative Institutional Model for Undergraduate STEM Education: Building STEM Competencies through a Four-Year Research-Based Curriculum, $8,600.02 for 4/1/2017 – 9/30/2017.
Georgia Tech Collaborative Efforts

CACP AFFILIATES
Faculty/Research Staff (partially paid by CACP)
- Carrie Bruce, College of Design (COD)
- Young-Mi Choi, College of Design (COD)
- Brad Fain, Georgia Tech Research Institute (GTRI)
- Maribeth Gandy Coleman, Interactive Media Technology Center (IMTC)
- Scott Gilleland, Interactive Media Technology Center (IMTC)
- Harley Hamilton, College of Computing
- Brian Jones, Interactive Media Technology Center (IMTC)
- Amelia Lambeth, Interactive Media Technology Center (IMTC)
- Frank Lucia, Consultant
- Liz Persaud, Tools for Life
- Carolyn Phillips, Tools for Life
- Peter Presti, Interactive Media Technology Center (IMTC)
- Benjamin Thompson, Interactive Media Technology Center (IMTC)
- Bruce Walker, Psychology
- Clint Zeagler, Interactive Media Technology Center (IMTC)
- Jeffrey Wilson, Interactive Media Technology Center (IMTC)

PEOPLE INVOLVED IN CENTER ACTIVITIES
Faculty/Research Staff/Off-site Personnel
- Sara Endicott, College of Design (COD)
- Chris Langston, Facebook
- Summer Lenuso, College of Design (COD)
- Karen Milchus, College of Design (COD)
- Jessica Pater, Georgia Tech Research Institute (GTRI)
- Joiava Phillippott, Cox Communications
- Carolyn Roddy, Federal Communications Bar Association
- Jon Sanford, College of Design (COD)
- Robert Todd, University System of Georgia (USG)
- Kennard Woods, Federal Communications Bar Association

ORGANIZATIONS (partially paid by CACP)
- Andy Roach, Georgia State University
- John Bricout, University of Texas at Arlington
- Shepherd Center (25% - 100% paid by CACP):
  - Michael Jones
  - Jim Mueller
  - Ben Lippincott
  - John Morris
  - Mark Sweatman
  - Peter Cassanova
GOALS 2017 – 2022

CACP, in November 2016, undertook a major initiative with the specific purpose of discussing new projects and goals in order to develop a new five-year strategic plan. The initial retreat provided an opportunity for faculty and staff members to participate in the planning process and provide suggestions to accelerate CACP’s growth and future next steps. From late 2016 - mid 2017, CACP framed and began implementation of the five-year plan to provide a conceptual foundation to build a sustainable future. Building upon a successful track record, CACP began this expansion to enhance its efforts by inviting new collaborators to participate in our multiple grants, contracts, and service level agreements. Below is the summary of the strategic plan for 2017 – 2022:

STRATEGIC PLAN SUMMARY

Framing the Strategic Plan

CACP’s mission is to provide objective, evidence-based research to develop and advise social, economic and policy oriented perspectives on digital technologies at the intersection of society, inclusion and policy. These are the foundation of the assessment and analysis of issues that inform our commenting on federal rulemaking, and input into the policy-making process.

Key Focus: Developing collaborative partnerships, both internal to Georgia Tech and well as with external academic and industry associates, are a key strategy for expanding CACP’s breadth and depth of reach. Going forward, CACP will continue to develop expertise and a research agenda built on three areas of focus:

1) Basic and fundamental social research: informs areas related to digital communications and platforms and, more broadly, connectivity; higher education policy and evaluation; STEM (science, technology, engineering, and mathematics) education, including access for students with disabilities, inclusive technology driven workforce development and employment; digitally facilitated communications modes such as social media and online participatory platforms, and the cultural impact of technology shifts;

2) Applied and industry-centric research and assessment: initiatives include accessible and inclusive technology design and use for people with disabilities and the aging; enhanced, accessible, emergency communications affecting people with disabilities, the general public, first responders and other stakeholders;

3) Policy related initiatives: application of social science to generate assessments, analyses and other specialized products to provide insights to advise policy-makers, industry and other thought leaders; drawing on CACP’s unique perspective on information and communication technologies.

Implementation approaches:

1) Identify, and target growth opportunities in the three focal areas. This includes both as project leads, as well as serving as key partners with other entities.
2) Expand external awareness that CACP not only does “disability” but is actively engaged in understanding and working with designing inclusive solutions to technology related barriers, as well as identifying technological opportunities.

3) Leverage existing, but unpublished, CACP work and commit to dissemination of new research and products within 6 months of completion.

4) We are thought leaders in a number of areas – we need to continue to be innovative in increasing out thought leadership in key CACP areas.

* * *

CACP will continue to 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 and industry 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; external partnerships with industry; and collaborations with companies creating new tools that focus on service to vulnerable populations.
CACP Organizational Chart
2016 – 2017

Executive Director
Helena Mitchell Ph.D.

Admin Mgr. II
Grant/HR/Finance
Recha Reid

Special Projects
Jackie Hemdon, RBW

CACP Admin
Alisha Kennedy

Operations & IT
Ken Bernard

Dissemination
Upcoming events
Public Policy Luncheons
Website

Sponsored Research
CACP PIs/Co-Pis
Research Scientists/Engineers

Operations Manager
Maureen Linden

Research Analyst
Public Engagement
Salimah LaForce
eNewsletters
Social networks

Research Associate
Synge Tyson

Other R&D
Brad Fain, Principal Research Scientist
Ben Lippincott, RERC Task Leader
Frank Lucia, Engineer
Student Assistants
BCS/SERG

Senior Director
Research & Strategic Innovation
Paul Baker Ph.D.

Director of Research
Nathan Moon Ph.D.

Other Research Efforts
Kenneth Goughnour
Jamaya Powell
RA
GRAs
Federal Government
USG
Industry
Partners/Internal/External