

Annual Report

July 1, 2017 - June 30, 2018

Submitted by Helena Mitchell, Ph.D. Executive Director

During the past year, the Center for Advanced Communications Policy (CACP) focused on key issues that influenced the development, implementation and adoption of cuttingedge, 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; STEM (science, technology, engineering, mathematics) education; and the impact of technology shifts, such as Internet of Things and Smart wearables. 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 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. 4); Academic and Service Activities (pg. 6); Dissemination Activities (pg. 8); Summative Collaborations & Meetings (pg. 13); Memberships, Board Memberships and National Recognition (pg.17); Sponsored Funding (pg. 19); Collaborative Efforts (pg. 21); CACP Goals for 2017-2022 (pg. 22); CACP Organizational Chart (pg. 24); and CACP Website Analytics (pg. 25).

This year there were more than 19 publishing activities; 26 major engagements and conferences; active participation on 18 academic and service activities; 7 student assistantships or advisory roles by faculty of CACP; and 38 memberships on boards/committees or national recognition. Sponsored research was funded at \$6,755,525.40. CACP staff/faculty participated in more than 518 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, 2016 - present.

Visiting Professor, Amity University, London,

England

<u>Advising:</u> Natasha Malmin, Doctorate Student

PUBP 8900, Directed Study.

Joint – Andrew Young School of Policy Studies, Georgia State University and School of Public

Policy, Georgia Institute of Technology,

January 2018 - May 2018

Paul M.A. Baker, Ph.D.: Senior Director, Research and Strategic

Innovation, and Principal Research Scientist, Center for Advanced Communications Policy

(CACP)

Adjunct Professor, Centre for Disability Law and Policy, National University of Ireland, Galway,

Ireland, January 2011 – present

Visiting Scholar, Workforce Innovation Policy, Beihang University, School of Economics and

Management, Oct 2017, Beijing City, China.

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

Co-chair, CDAIT Thought Leadership Working Group, January 2017 – present

Advising:

Kenneth Goughnour, Masters Student, Rollins School of Public Health, Emory Univ. Graduate Research Assistant, December 2016 – May 2018.

Elizabeth Hill, Masters Student, HCl, Georgia Institute of Technology, September 2018 - May 2018.

Nathan W. Moon, Ph.D.:

Senior Research Scientist, School of Public

Policy

Director of Research, CACP

Part-Time Lecturer, School of History and Sociology (HSOC)

Faculty, School of Science and Technology, Georgia Gwinnett College, 2016-present.

Guest lecturer SPP 6502. Nathan led a discussion on "Information & Communications Policy: Disability and Access."

Guest lecturer SPP 6001. Nathan and Professor Milton Mueller led a discussion on "Communications, Internet & Cybersecurity Policy."

Advising:

Carter Neely, Undergraduate, Scheller College of Business, Georgia Institute of Technology, September 2017 – present.



Brad Fain, Ph.D.: Principal Research Scientist, GTRI, CACP

Fellow, WellStar Health System, 2016 – present

Advising: Kaylin Broussard, Graduate Research Assistant,

Georgia Institute of Technology, College of

Design, 2017-2018

Maureen Linden: Research Engineer II, CACP

Senior Research Engineer II, CATEA, Georgia Institute of Technology

<u>Advising:</u> Collin Ahn, Undergraduate Research Assistant

College of Engineering,

Georgia Institute of Technology

2018

Salimah LaForce: Senior Policy Analyst, Center for Advanced

Communications Policy, Georgia Institute of

Technology - 2006 to present

Advising: Andrew Garcia, Masters Student, Rollins School

of Public Health, Emory University, Graduate

Research Assistant.

September 2017 – June 2018.

RESEARCH AND CREATIVE SCHOLARSHIP

Books and Books Chapters (1)

Baker, P.M.A., Drev, M., & Almeida, M. (2018, Forthcoming). "Postsecondary Education and the Development of Skilled Workforces: Comparative Policy Innovation in Brazil and the U.S. In U. Hilpert (Ed.), *Diversities of Innovation*. United Kingdom: Taylor & Francis Ltd: Routledge.

Journal Articles, Papers and Conference Proceedings (refereed) (10)

Zeagler, C.; Gandy, M.; Baker, P.M.A. (2018). The Assistive Wearable: Inclusive by Design. Assistive Technology Outcomes and Benefits, Volume 12. (Forthcoming).



Baker, P.M.A., Linden, M.A., LaForce, S., Rutledge, J., Goughnour, K.P. (2018). Barriers to Employment Participation of Individuals with Disabilities: Addressing the Impact of Employer (Mis)Perception and Policy. *American Behavioral Scientist*. https://doi.org/10.1177/0002764218768868.

Bennett, D., LaForce, S., Touzet, C., & Chiodo, K. (2018). American Sign Language & Emergency Alerts: The Relationship between Language, Disability, and Accessible Emergency Messaging. *International Journal of Mass Emergencies and Disasters*, 36(1), 71-87.

Feng Zhang, Huiyuan Xu. "A Study on the Triple Helix Relationship of Regional Government-Industry-University Based on Patent Datas - A Case Study of Beijing - Tianjin - Hebei Region", China Higher Education, 2018 (10): 59-61.

Feng Zhang. Three Key factors in the Technology Transfer and Commercialization of University. Science and Technology in China, 2018 (6): 58-59.

Feng Zhang, Zheqiang Wang, Miaomiao Liu. A Study on the Educational Faction of the Accommodation to the Students in the University [J], China Culture Monthly. 2018 (1):158-160.

Feng Zhang, Shuchun Liu, Miaomiao Liu. Study on the Logistical Service Index System of First-class University Based on Delphi Method, THE FOURTEENTH INTERNATIONAL CONFERENCE ON INDUSTRIAL MANAGEMENT (ICIM 2018), Accepted.

Gonzalez, E., Fausset, C., Fain W. (2017). <u>OVERCOMING CHALLENGES IN THE HOME: SOLUTIONS FROM OLDER ADULTS WITH LONGTERM MOBILITY IMPAIRMENT</u>, GERONTOLOGIST 56, 667-667.

Remillard, E., Fausset, C., Fain, W., Bowers B. (2017). <u>Aging With Long-Term Mobility Impairment: Maintaining Activities of Daily Living via Selection, Optimization, and Compensation</u>, The Gerontologist.

Pater J., Owens S., Farmer S., Mynatt, B., Fain, B. (2017). <u>Addressing medication adherence technology needs in an aging population</u>, Proceedings of the 11th EAI International Conference on Pervasive Computing.



Publications non-refereed (4)

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.

Fain, B., Farmer, S. (2017). Challenges in the Home for Adults Aging with Mobility Impairments, Georgia Institute of Technology.

Fain, B., Farmer, S. (2017). Medication Adherence for Older Adults with Disabilities, Georgia Institute of Technology.

Fain, B., Farmer, S. (2017). Development of Personas for Designing for Individuals with Mobility Impairments, Georgia Institute of Technology.

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

LaForce, S., Mitchell, H., & Linden, M. (2018, June 11). Reply comments submitted in response to the Public Notice, Parties Asked to Refresh the Record on Facilitating Multimedia Content in WEA Messages [GN Docket Nos. 15-91; 15-94]. Federal Communications Commission: Washington, D.C.

Mitchell, H., LaForce, S., Moon, N., Baker, P.M.A., Garcia, A., & Jacobs, B. (2018, May 3). Comments submitted in response to the *Public Notice* in the Matter of The Accessibility of Communications Technologies for the 2018 Biennial Report Required by the Twenty-First Century Communications and Video Accessibility Act [CG Docket No. 10-213, Consumer and Governmental Affairs Bureau]. Federal Communications Commission: Washington, D.C.

Garcia, A., Bennett, D., LaForce, S., Mitchell, H., Price, E. (2018, February 7). Ex Parte comments submitted in response to 2017 Hurricane Response Public Notice [Docket No. 17-344, Public Safety and Homeland Security Bureau]. Federal Communications Commission: Washington, D.C.

LaForce, S. & Mitchell, H. (2017, October 5). Reply comments submitted in response to the Notice of Inquiry in the Matter of Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion [17-199]. Federal Communications Commission: Washington, D.C.



ACADEMIC AND SERVICE ACTIVITIES

ACADEMIC ACTIVITIES (9)

Paul Baker (2)

Faculty Representative, Institute Research Faculty Promotions Committee, Georgia Institute of Technology, 2017- Present.

Faculty Representative, Provost's Advisory Committee on Academic Scheduling, Georgia Institute of Technology, 2017- Present.

Nathan Moon (2)

Chair and Elected Member, Georgia Tech Faculty Honors Committee (Standing Committee of Georgia Tech Faculty Senate), 2014-2020.

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

Brad Fain (3)

Peer Reviewer, Role of Risk Communication IN Community Resilience Building book chapter. September 2017

Promotion Committee Member, Georgia Tech Research Institute, 2017.

Track Chair, Southern Gerontology Society, 2017-Present. Technology and Aging Track.

Recha Reid (1)

Instructor, GT 2000 Transfer Student Seminar, 2015 – present.

Synge Tyson (1)

External Reviewer, ID 2022: ID Studio II: Sophomore Design Studio Presentations, Special Needs Design, 2017.

SERVICE ACTIVITIES (9)

Helena Mitchell (1)



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

Paul Baker (2)

External Peer Reviewer for Research Foundation - Flanders (Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO) 2017.

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

Nathan Moon (3)

Expert Panelist and Site Visitor, NSF Broadening Participation Evaluation project Windrose Vision, Fairfax, VA. November 2017.

Peer Reviewer, NSF Education and Human Resources (EHR) Faculty Early Career Development (CAREER) Program, September 2017.

Peer Reviewer, Disability and Rehabilitation journal.

Recha Reid (1)

Member, Event Coordinators' Network, 2015 – present.

Salimah LaForce (2)

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 – November 2017.

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.

DISSEMINATION ACTIVITIES

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

MAJOR PUBLIC AND INDUSTRY ENGAGEMENT (26)

M-Enabling Summit Conference



Nathan Moon attended the annual meeting of M-Enabling Summit held on June 11-13, 2018 in Washington, D.C. The theme of the conference was Accessible and Assistive Technologies Innovations: New Frontier for Independent Living. The all-inclusive conference and showcase featured innovative technology, mobile applications, connected devices, and services to support independent living in an interconnected world for seniors and persons with disabilities.

Syracuse University Regional Dinner

Helen Mitchell hosted the SU Regional Dinner held on May 23, 2018. Three students attended for the ATL Emerson Experience.

The Center for the Development and Application of Internet of Things Technologies Paul M.A. Baker (January 2017 – Present) serves as co-chair of CDAIT's lot Thought Leadership working group. He attended the August 2017, December 2017, and May 2018 CDAIT Board meetings and co-moderated the working group sessions. The Thought Leadership group has produced a final draft of the lot paper "Driving New Modes of lot-Facilitated Citizen/User Engagement" which is due to be released late summer 2018.

AT&T Advisory Board

Salimah LaForce, represented the Wireless RERC at the AT&T Advisory Panel on Access and Aging (AAPAA), May 15-16, 2018 in Dallas, Texas. A closed forum in which representatives from disability organizations and academia advise AT&T on various technologies, services and AT&T initiatives to ensure the company is well-informed on the needs, wants, experience and expectations of people with disabilities.

<u>Veterans STEM Innovation Network: Participatory Design Workshop</u>
Paul Baker held a workshop on April 27, 2018 pertaining to veterans and their engagement and opportunities for participation in STEM Innovation activities.

Serving on the DAC for the Second Term

Helena Mitchell attended all meetings held in October 2017, February 2018 and June 2018 by the Disability Advisory Committee (DAC) 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).

Leadership Workshop

CACP in collaboration with the Wireless RERC hosted 29 academics, practitioners, and service organizations at the first Leadership Workshop, "Using Technology R&D to Effect Policy Change" on April 24, 2018.



<u>Southern Gerontological Society</u>

Brad Fain (CACP), Paul M.A. Baker (CACP), and Brian Jones (Wireless RERC) were panelists on the "Aging and Technology" panel, part of the Southern Gerontological Society annual meeting held in Buford Georgia, April 13, 2017.

BEA/NAB Convention

Helena Mitchell attended the BEA/NAB Convention held April 7-11, 2018 in Las Vegas, Nevada. Mitchell was a Top Papers reviewer in the Law & Policy Division. Mitchell also attended Law & Policy committee meetings, attended Law and Policy panel, presentations and met with relevant contacts within the industry.

CSUN Assistive Technology Conference

Helena Mitchell and Salimah LaForce presented a paper and powerpoint, "Getting on the Record with the FCC: Public Input Process How To's" at the 33rd Annual CSUN Assistive Technology Conference in San Diego, CA, March 19-23, 2018.

Engaging Electors With Disabilities, Inspire Democracy Workshop

Paul M.A. Baker was an invited speaker at the Engaging Electors With Disabilities, Inspire Democracy Workshop, hosted by Elections Canada and the Institute of Fiscal Studies and Democracy (IFSD), on March 2, 2018, in Ottawa, Ontario. He spoke on the broader social factors affecting accessible voting and inclusive elections.

FCC Ex Parte Meeting

Ex Parte comments replying to the FCC's *Hurricane Response Public Notice* [PS Docket # 17-344] were presented to representatives from the Office of the Chairman, the Consumer and Governmental Affairs Bureau, the Public Safety and Homeland Security Bureau, among others on February 27, 2018.

FCC Emergency Communication (conference call)

Helena Mitchell presented findings to the FCC subcommittee on emergency communications regarding the Wireless RERC filing on the FM radio chip on February 22, 2018.

Presentation to Anthem Innovation Studio

Nathan W. Moon delivered a presentation titled *Next Generation Wireless Design for Disability* to the Anthem Innovation Studio in Atlanta on January 24, 2018. This presentation of Wireless RERC findings, along with a presentation by Elena Remillard from RERC TechSAge, led into a discussion with Anthem designers regarding the planned development of a HomeHub platform to serve the insurance provider's consumers, including people with disabilities.



Workshop on Government Decision-Making and Allocating Scientific Resources
Paul M.A. Baker and Kaye Husbands Fealing presented at the Workshop on
Government Decision-Making and Allocating Scientific Resources. They presented
on the Scientific Labor Force panel on their NSF-funded grant titled A Research
Agenda for Science of Broadening Participation (SoBP) 2.0: STEM Employment of
People with Disabilities. This event was held in Washington, D.C., January 8-9, 2018.

<u>Leadership Workshop on The Impact of Shifting Technologies</u>

Helena Mitchell was a speaker at the Amity University [in] London Leadership Workshop on The Impact of Shifting Technologies. She also served as referee for six Ph.D. student presentations at the University of London, Birkbeck College for students of Amity University. The student presentations covered the future of technology and finance in industries such as robotics, innovation, and peering resources; and opportunities to advance adoption of R&D. This event took place on November 10, 2017 in London, England.

Economic Development Conference

Paul M.A. Baker was a panelist on "How Fiber Broadband Drives Education, Skill and Workforce Requirements... And How It Helps Meet Those Needs" panel, at the "Fiber for a New Economy" 2017 Economic Development Conference, Atlanta, GA, November 8, 2017.

Georgia Digital Government Summit

Ken Bernard, a member of the Digital Government Advisory Board, attended the annual Georgia Digital Government Summit on October 30-31, 2017, in Atlanta. The Advisory Board members were tasked with creating an agenda that inspired state and local government organizations attending the summit and recommending the discussion topics for the 2017 Summit. The topics were 1) Digital Government Trends, 2) New Technologies, 3) Innovation, 4) Collaboration, and 5) IT Skills and Leadership.

Radio Interview – 97.1 Nassau

Helen Mitchell participated in a radio interview discussing broadcasting and student engagement in the age of social media on October 27, 2017 in Nassau, Bahamas.

DHS, FEMA, IPAWS subcommittee

Helena Mitchell made a guest presentation before the DHS, FEMA, IPAWS subcommittee. The subcommittee requested Mitchell to present a tutorial on Taking Appropriate Action during Emergencies. The title of the presentation was "Effective Emergency Alerts = Appropriate Action". This webinar was directed toward the full committee and subcommittee members. It addressed how research conducted by the Wireless RERC yielded findings regarding which technologies were the most effective during disasters. The presentation was held on October 18, 2017.



33rd Annual Pacific Rim International Conference on Disability and Diversity Robert Todd (University System of Georgia), Nathan W. Moon, and Maureen Linden delivered a presentation on Monday, October 9, 2017, at the 33rd Annual Pacific Rim International Conference on Disability and Diversity (Pac-Rim Conference), in Honolulu,

HI. The presentation, "Virtual Mentoring for STEM students: Accessibility, Promises and Pitfalls" discussed key findings from the National Science Foundation (NSF)-supported Georgia STEM Accessibility Alliance (GSAA) and its BreakThru project.

Todd, Moon, and Linden provided an overview of BreakThru's goals, theory of change, and impacts over the five-year duration of the project. They also discussed the development of the e-mentoring space in the virtual world of Second Life, as well as considerations for its accessibility and usability. Finally, they shared findings from a qualitative study to understand how users with disabilities utilized Second Life to support mentoring and other STEM education activities.

National Science Foundation (NSF)

Nathan W. Moon attended "STEM Education, Learning Disabilities, and the Science of Dyslexia," a conference sponsored by the National Science Foundation (NSF) on September 26-27, 2017, in Washington, D.C. The conference was a response to the Research Excellence and Advancements for Dyslexia (READ) Act of 2016. Presentations focused on the scientific and neuropsychological bases of dyslexia and how the disorder affects the performance of students in science, technology, engineering, and mathematics (STEM).

The Wharton School

Salimah LaForce was one of three panelists interviewed live on the "Knowledge@Wharton" Sirius XM radio show on September 20, 2017. Discussed how social media and technology are doing well or where they are not when it comes to natural disasters. Salimah commented on improving accessibility of emergency information.

(SAI) International Conference

Helena Mitchell was an invited participant at the Science and Information (SAI) International Conference in London, July 16-27, 2017. Helena moderated two panels in the "Technology Trends" and "Communications" tracks and chaired a demonstration session on "Personal Technology Devices".

Mitchell was interviewed by the SAI YouTube channel to discuss the importance of inclusion; how people with disabilities are helped/challenged during emergencies; and why multiple technology distribution platforms are critical for disseminating emergency information during emergencies and disasters. The 15 minute interview can be found on the SAI YouTube channel.



IBM thinkLeaders Blog (July 2018)

Wireless RERC principal investigator, Helena Mitchell, Ph.D., was interviewed for the IBM thinkLeaders Blog, Innovating for people with disabilities: Why companies should invest in universal design. The article discussed many pathways to inclusion, including the Internet of Things, incorporating universal design principles into all mainstream devices, and advancing assistive technologies. Mitchell pointed out the importance of including people with disabilities in the design and development phases. One of the problems Mitchell hears most often from companies is that they don't know how to reach enough people with disabilities to test a product. She urged companies to partner with universities to design, create and test new products, as they often have lists of potential focus-group participants who could serve as product testers.

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.

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 2685 connections, and a Twitter feed (@paulmbaker) with 1825 followers.
- Salimah LaForce maintains a LinkedIn profile with 603 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, University of Texas at Arlington, Syracuse University, University of Nebraska, Omaha; Amity University (London), and Gallaudet University.

Meetings with **government agencies:** U.S. Department of Commerce, National Telecommunications and Information Administration; Department of Homeland Security, Federal Emergency Management Agency (FEMA), IPAWS, Federal Communications Commission and various Bureaus; U.S. Access Board; National Institute for Disability, Independent Living, and Rehabilitation Research (NIDILRR), Administration for Community Living, HHS.

Collaborations and/or meetings with **disability related organizations:** DeafLink; Shepherd Center; 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; Nominet and Nominet Trust Foundation (UK); AT&T; Microsoft; NENA (National Emergency Number Association).

105 outreach meetings, collaborative discussions 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, 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, Auckland University of Technology.

Meetings with **government agencies:** University System of Georgia, Federal Reserve Bank of Atlanta, National Science Foundation, Veterans Administration, National Council on Disability, Office of Disability Employment Policy - US



Department of Labor, US Department of Education, United States Access Board, Administration for Community Living, CDC, US Department of Health and Human Services, Ministerio de Obras Públicas y Transportes (Costa Rica), Research Foundation – Flanders (Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO), Province of Ontario, Canada, Elections Canada.

Collaborations and/or meetings 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, CTA Foundation, Comcast, AIG, AT&T, Microsoft, Friedrich Ebert Stiftung (International Trade Union Policy Foundation), Booze Allen Hamilton, MailChimp, Sharecare, ThyssenKrupp, American Institutes for Research, SmartMatic, Facebook, Cox, LinkedIn, Corning.

110 outreach meetings, collaborative discussions 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, Stanford University.

Meetings 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).

Collaborations and/or meetings with **disability related organizations:** RESNA, Consortium for Citizens with Disabilities (CCD), Disability and Rehabilitation Research Coalition (DRRC), U.S. International Council on Disabilities (USICD), Association of Assistive Technology Act Programs (ATAP), Partnership for Employment and Accessible Technology (PEAT), and Easter Seals Crossroads, Indiana.



Collaborations and/or meetings with **industry:** U.S. Business Leadership Network (USBLN), Facebook and Amazon.

90 outreach meetings, collaborative discussions and technical assistance 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:** Rehabilitation Research and Training Center on Employment Policy and Measurement (EPM-RRTC), NRTC on Blindness & Low Vision, The Wharton School, School of Health and Medical Science, Örebro University, University of Nebraska - Omaha, Georgia State University, South Atlanta High School.

Meetings 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, Colorado Public Utilities Commission, Atlanta Regional Commission, City of Shawnee, OK Department of Emergency Management.

Collaborations and/or meetings with **disability and non-governmental organizations:** Partnership for Employment and Technology (PEAT), Viscardi Center, BCS HQ, US Business Leadership Network, Center for the Visually Impaired, Georgia Emergency Interpreting Services Network, GACHI – serving the deaf and hard of hearing, Jacob's Ladder, The Weather Channel.

Collaborations and/or meetings 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.

75 outreach meetings, collaborative discussions and technical assistance 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/or 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.

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

Collaborations and/or meetings with **disability and non-governmental organizations**: Association of University Centers on Disabilities, Partnership for Inclusive Disaster Strategies, Assistive Technology Act Technical Assistance and Training Center, EasterSeals CrossRoads – Indiana Assistive Technology Act (INDATA) Project, Assistive Technology Industry Association, 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 and/or meetings with **industry**: Amazon, Thrust Interactive, Inc.; Flex, LTD.; Herman Miller; LateShift, LLC, Loeb Enterprises Venture; Society for Human Resource Management (SHRM); NoBarriersCommunication (NoBaComm); and Deaf Link, Inc.

85 outreach meetings, collaborative discussions and technical assistance not reported already: 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.

Brad Fain

Collaborations and/or meetings with **the Academy**: Emory, University of Florida, University of Georgia, Georgia State University, and Morehouse.



Meetings with **public and government agencies**: National Institute of Standards and Technology (NIST); Department of Homeland Security Science & Technology Directorate; National Institute for Disability Independent Living and Rehabilitation Research (NIDILRR); New South Wales HeathShare

Collaborations and/or meetings with **disability and non-governmental organizations**: Arthritis Foundation, Arthritis Society of Canada, Arthritis Australia, RERC on Aging (TechSAge).

Collaborations and/or meetings with **industry**: Amazon, Yahoo, Flex, LTD. Pfizer, Dupont, Ricoh, Fiskars, NorthWestern Communities, Thrive, Comcast, Zimmer Biomet, Anthem, WellStar, Children's Healthcare of Atlanta, and Smartmatic.

53 outreach meetings, collaborative discussions and technical assistance not reported already: Advisement to government agencies and industry on human factors, accessibility and usability; Letters of recommendation / support to external faculty; External student advisement and research assistance; Faculty and student interviews; Discussions on research and development collaborations with government and industry partners.

MEMBERSHIPS, BOARD MEMBERSHIPS AND NATIONAL RECOGNITION

Helena Mitchell (4)

The Board of Regents re-appointed Dr. Helena Mitchell in 2017 as Regents' Researcher. A Regents' Researcher represents the highest status bestowed by the Board of Regents, which governs the University System of Georgia. It is in recognition of substantial, significant and an ongoing record of scholarly achievement that has earned high national esteem over a sustained period.

Member of the Federal Communications Commission, Disability Advisory Committee (DAC). Also member of the DAC Wireless Emergency Alerts subcommittee. Reappointed 2017 – 2019.

IAC Million Dollar Club, 2015, 2016, 2017, 2018.

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



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 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.

Nathan W. Moon (4)

Member, Board of Directors of RESNA, The Rehabilitation Engineering and Assistive Technology Society of North America (2016-2018); Chair, Government Affairs Committee of RESNA (2012-present); Member, Governance Committee, 2014 – present.

Member, Disability and Rehabilitation Research Coalition (DRRC), 2013 – present.

Member, American Evaluation Association, 2010 – present.

IAC Million Dollar Club, Level 1, 2018.

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, FirstNet User Interface Working Group, 2016 – 2017.



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

Salimah LaForce (4)

Member, National Emergency Number Association (NENA) Emergency Notifications Working Group – April 2018 – present Accessibility Committee – September 2017 – present.

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

Member, GA Emergency Preparedness Coalition for Individuals with Disabilities and Older Adults, 2011 – present. Outreach Committee – August 2013 – present.

Chair, Southeast Regional Group, USA Section, BCS – The Chartered Institute for IT, November 2015 – November 2017.

Maureen Linden (4)

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

RESNA Board of Directors, 2013 – 2018 (elected).

RESNA Membership Committee 2013 – 2014, 2016 – 2018.

RESNA Finance Committee 2016 – 2018.

Recha Reid (4)

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

Member, International Society of Research Administrators, 2017.

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

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

Jacqueline Herndon (1)

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



Kenneth Bernard (2)

Advisory Board, Government Technology, 2014 – present (Alternate, 2012 - 2014).

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

SPONSORED FUNDING

Active (17)

Helena Mitchell, Ph.D., Pl, Rehabilitation Engineering Research Center on Wireless Inclusive Technologies grant from The National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR), Administration for Community Living (ACL), Department of Health and Human Services. Competitive grant program \$4,625,000, 09/30/2016 – 09/29/2021. \$924,994 for fiscal year 10/01/2017 – 09/30/2018.

Paul M.A. Baker, Ph.D. and Kaye Husbands Fealing, Co-Pls, National Science Foundation. "Collaborative Research: Science Policy Research Report: A Research Agenda for Science of Broadening Participation (SoBP) 2.0: STEM Employment of People with Disabilities." \$30,000 for 06/01/2017–05/31/2018.

Paul M.A. Baker, Ph.D., Smartmatic International Corporation - Phase 1 of the Market Entry Study **\$29,000** for 2/1/2017 – 5/31/2018.

Nathan W. Moon, Ph.D., Pl, Field Initiated Project (Research) on Contingent Employment of Individuals with Disabilities (FIP-CE), National Institute on Disability and Rehabilitation Research (NIDILRR), **\$595,000**, 36 months, 9/30/2017 – 9/29/2020. **\$198,376** for fiscal year 10/1/17 – 9/30/2018.

Nathan W. Moon, Ph.D., Pl, Specialized Testing Services Agreement, Facebook, Inc., **\$30,142**, 3 months, 12/1/2017 to 2/28/2018.

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 - 9/30/18, \$30,442.54 for fiscal year 10/1/17 - 9/30/2018.

Nathan Moon, Ph.D., Consultant to Georgia Gwinnett College (External Evaluator), Transformative Institutional Model for Undergraduate STEM Education: Building STEM Competencies through a Four-Year Research-Based Curriculum, National Science Foundation, **\$17,800** for 10/1/2017 – 9/30/2018.



Nathan Moon, Ph.D., Co-PI, Collaborative Research: STEM Accessibility Alliance (GSAA), National Science Foundation, **\$99,145.53** for fiscal year 7/1/17 – 6/30/2018.

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.

Brad Fain, Ph.D., NIST - PSCR / Department of Commerce – ARTEMIS: FirstNet TestBed. CACP is a collaborator and funds will be leveraged for Wireless RERC emergency communication projects. **\$1,270,000** for 5/31/2018 to 5/30/2021.

Brad Fain, Ph.D., Smartmatic International Corporation – Voting Accessibility. **\$1,527,502** for 2/6/2016 to 3/2/2019.

Brad Fain, Ph.D., Ricoh USA – Ricoh Accessibility and Usability. **\$762,923.31** for 6/15/20110 to 4/31/2019.

Brad Fain, Ph.D., Fiskars – Fiskars Ergonomic Mapping. \$319,000 for 3/28/14 to 4/28/2019.

Brad Fain, Ph.D., Cox Communications – HomeLab Evaluations. **\$202,600** for 4/1/2017 to 3/31/2018.

Brad Fain, Ph.D., DoD F-16 SPO – F-16 Block 30 Human Factors Study. **\$650,000** for 5/31/2018 to 5/30/2019.

Brad Fain, Ph.D., Pfizer – Unrestricted gift to GTF received 5/31/2018. \$35,000

Brad Fain Ph.D., Facebook – Unrestricted gift to GTF received 3/31/2018. \$25,000

Georgia Tech Collaborative Efforts

GEORGIA TECH/CACP AFFILIATES

Faculty/Research Staff (on CACP sponsored grants)

- 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)
- 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

- Richard Catrambone, School of Psychology
- Sara Endicott, College of Design (COD)
- Chris Langston, Facebook
- Jessica Pater, Georgia Tech Research Institute (GTRI)
- Joiava Phillpott, Cox Communications
- Jon Sanford, College of Design (COD)
- Robert Todd, University System of Georgia (USG)
- Kennard Woods, Federal Communications Bar Association

INSTITUTIONS (on CACP sponsored grants)

- Andy Roach, Georgia State University
- John Bricout, University of Minnesota-Twin Cities
- Shepherd Center (75% paid by CACP):
 Ben Lippincott
 - John Morris
- University of Texas Arlington

GOALS 2017 - 2022

In 2017 CACP began a strategic expansion to enhance its current work portfolio by 1) building teams of new collaborators to extend CACP's reach into new markets by participating in our multiple grants, contracts, and service level agreements, and 2) exploring and developing new sponsors that leverage CACP policy and research strengths with an objective of increasing industry and other funding opportunities. Below is the summary of the strategic plan for 2017 – 2022:

STRATEGIC PLAN SUMMARY

Framing the Strategic Plan

CACP's mission is to influence the development, implementation and adoption of cutting-edge, next generation social impact technologies domestically and internationally by conducting objective, evidence-based research. We develop social, economic and policy-oriented perspectives on digital technologies at the intersection



of society, inclusion and policy that address client needs. Our research provides the foundation for the assessment and analysis of issues that inform our contribution to federal rulemaking, and input into public sector policy-making process.

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

- Basic and fundamental social impact 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 usability and human factors assessment, use of technology to facilitate independence for older adults, accessible and inclusive technology designed for people with functional limitations; enhanced, accessible, emergency communications that affect people with disabilities, the general public, as well as 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:

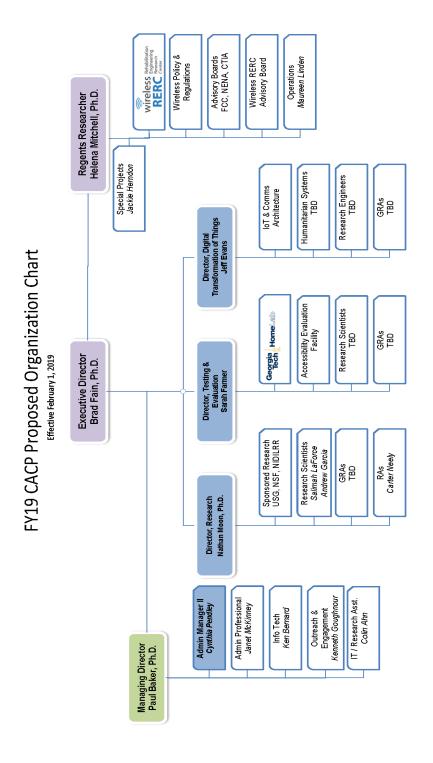
- 1) Identify, and target growth opportunities in the three focal areas. This includes both as project leads, as well as serving as key partners with other entities.
- 2) Reinforce awareness of potential partners of the value of CACP's research-based perspective that goes beyond a focus on "disability" to actively engage in understanding and designing inclusive solutions to technology related barriers, as well as identifying technological opportunities.
- 3) Leverage existing CACP work products to increase external awareness of the range of CACP activities. Commit to dissemination of new research and products within 6 months of completion. This includes traditional academic research outlets, social media platforms, and more general industry and business outreach efforts.
- 4) Extend the range of CACP thought leadership. This includes broader applications of emergency communications, and alerting, building support for addressing the needs of FirstNet first responder technological solutions, innovative application of technologies to enhance usability and accessibility; policy approaches to

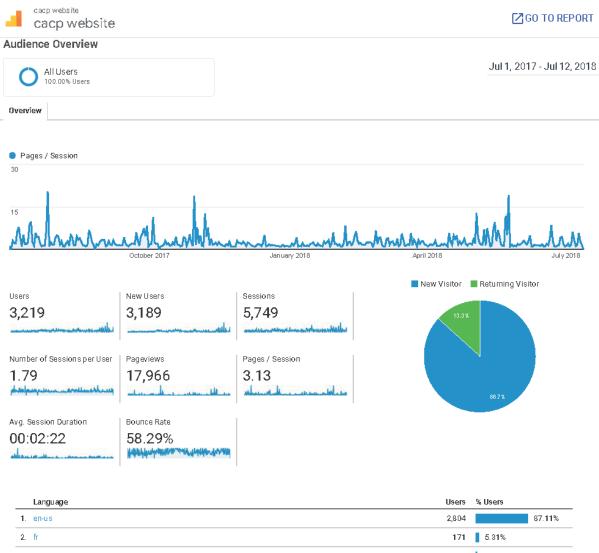


5) increase social engagement and participation, and exploration of the role of technology in supporting inclusive workforce development and the future of work.

* * *

CACP aims to continue hiring more graduate and undergrad research assistants, as well as faculty researchers and engineers. CACP will also expand by encouraging joint appointments with research faculty at GTRI interested in contributing to social impact research. In addition, CACP has 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.





Language	Users	% Users
1. en-us	2,804	87.11%
2. fr	171	5.31%
2. fr 3. c	63	1.96%
4. en-gb	51	1.58%
5. zh-cn	23	0.71%
6. en-ca	12	0.37%
7. pt-br	11	0.34%
8. ko-kr	9	0.28%
9. (not set)	6	0.19%
10. de-de	5	0.16%

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