



## Annual Report

July 1, 2020 – June 30, 2021

Submitted by

Walter Bradley Fain, Ph.D.

### INTRODUCTION

The faculty and staff of CACP have much to be proud of despite the challenges of a year of disruptions and difficulties due to the global pandemic. As a team, we came together to celebrate accomplishments as well as to share the heartbreaks of an extended quarantine, missed opportunities, and the inevitable health scares associated with COVID-19. We continued to serve our customers well and proved to be good stewards of the resources and trust our customers invested in us by producing high quality research products and pivoting when conditions necessitated that we adjust our research approach. COVID-19 tested the faculty and staff and we all found that we are resilient beyond measure and steadfast in our mission. Presented below are a few highlights from the past year.

#### **EXCEL**

CACP partnered with the EXCEL program to hire a student during the 2021 spring semester. Janet McKinney worked with Heather Dicks, Career Development Coordinator to employ a third-year student from the EXCEL program. The student prepared a survey which was shared amongst a small group of peers within the program their encounters and interactions with first responders and law enforcement. This is an area of interest in CACP research to better prepare first responders with encounters with individuals with disabilities. This opens opportunities for both CACP researchers and students enrolled in the EXCEL program to learn from one another through engagement and employment. CACP is looking forward to continuing the relationship with EXCEL for future student employment and other areas of the program.

## **Wireless RERC**

The Wireless RERC convened the *Virtual State of Technology (SOT) Forum* ON March 23-24, 2021 highlighting 20 years of project research. The by-invitation event brought together more than 75 disability experts from government, industry, academia, and the public/private sector. The informed and diverse group of attendees representing the research community, people with disabilities, industry, developers, technologists, advocates, policymakers, and disability service providers explored the state of, and emerging trends in inclusive wireless technologies and applications. The Forum served as a mechanism for outlining the critical research, development, and stakeholder engagement accomplishments as well as activities needed to continue forward movement and propel positive change in the field of wireless technology access, usability, economic inclusion, and products that can be characterized as transformational.

Discussion-based sessions explored the capacity of evolving wireless and associated digital technologies to facilitate independent living and community inclusion of people with disabilities. Attendees and presenters discussed the role of research, development, and stakeholder engagement and the evolving nature and capacities of wireless technologies. The exchange among stakeholders also led to identifying opportunities that contributed to change-making practices in end-user research, design of inclusive technology, regulations, policy advancements, and creating a next generation of leaders via capacity building instruction.

The SOT Forum Proceedings publication will cover in detail the input from all stakeholders over the two days and will identify new research and innovation agendas in the field of wireless access and inclusion. The Forum Proceedings will further present the SOT videos and papers that highlight the projects of the Wireless RERC and show how our progress has contributed to wireless research, development, and stakeholder evolution over the past 20 years. The Wireless RERC project directors have submitted project specific papers that underwent a blind review process. These 16 papers and some anchor papers will be an important part of the Proceedings, which is expected to be available in early August. In addition to the Proceeding, The Wireless RERC has secured a Special RERC *Assistive Technology Journal* issue which consists of 8 articles, five of which are currently in Assistive Technology editorial process, and three of which have been published online <https://www.tandfonline.com/toc/uaty20/0/0>

## **CDAIT**

This year we completed the integration of the Center for the Development of the Application of Internet of Things Technologies (CDAIT) into CACP. CDAIT's mission is to foster the development of interdisciplinary Internet of Things (IoT) research, innovation, and policy that bridges industry partners with Georgia Tech researchers and other collaborators and fits closely with CACP's thematic focus. Recognizing this, on July 1, 2020, CDAIT moved to Ivan Allen College and became part of CACP. Along with the

change, the Executive Director, Alain Louchez, announced his retirement, and Paul M.A. Baker, took over as COO, joined by Jeff Evans as Chair of the Board.

While the pandemic presented logistical and organization challenges, CDAIT has accomplished a number of important objectives, supported by an engaged board of 9 industry partners, central to CDAIT Industry-Innovation efforts. Despite the COVID-19 hurdles, we added a new company (Kore) member during the year, and established ties to the Consumer Technology Association (CTA) and The AI Association. Jeff Evans continues his robust business development efforts with cross-sector industry outreach, and to explore collaborative activities with both GTRI (internally), as well as with other potential university and funding partners.

As part of the move to CACP, CDAIT has expanded from a large corporate-industry focus to include small and medium sized enterprises, start-ups and collaborations with other members of the IoT innovation network, such as trade groups. To support this, we are expanding our efforts at engaging in policy and regulatory activities, industry analysis; and supporting new innovative research and engagement activities. Of note this year CDAIT initiated its first annual Student IoT Innovation Capacity Building Challenge with providing a small research grant to support four IoT related projects. The projects were presented at a virtual Spring Challenge event attended by more than 30 industry and academic participants and covered in the GT communications feed. Another major CDAIT initiative was to provide additional funding to support the Bridges of the Beltline project, a mixed-methods study to understand how the Beltline can be used as an emergency management asset. Policy and research activities include regulatory filings to the NTIA, as well IoT papers that have been accepted for presentation at the International Political Science Association and for publication in policy related journals.

## **RADx**

CACP Researchers participated in The National Institutes of Health's (NIH) Rapid Acceleration of Diagnostics (RADx) Initiative from May 2020 to the present. RADx was launched by the NIH in order to get widespread, reliable COVID-19 diagnostic testing to Americans as quickly as possible. The initiative utilized a shark tank-like process to screen and select candidate tests from a pool of submissions, and then sent the selected tests for validation and risk review at various sites across the country. CACP's HomeLab joined Georgia Tech and Emory's Atlanta Center for Microsystems Engineered Point-of-Care Technologies as one of the validation centers for RADx. HomeLab researchers evaluated the usability of tests and reported results to the larger RADx team, the companies who created the tests, and to the NIH. HomeLab researchers evaluated over 30 COVID-19 diagnostic tests, often under limited access and time. This required a pivot from typical human factors evaluation methods to adapt to the constraints. Evaluation methods were adapted for each incoming project, with a focus on providing actionable feedback for the system and recommendations that could be rapidly incorporated into the design.

## CACP Website

The CACP website underwent a complete overhaul over the course of last year. This rebuild of the old site from the ground up has provided a refreshed user interface and the ability to employ a Georgia Tech theme and color scheme throughout. The refresh enabled the center to use several technologies to integrate further with Ivan Allen College by allowing the newsfeed to display items generated by CACP as well as for the college and Georgia Tech as a whole to share CACP news to their broad audiences. The redesigned site supports an on-page Twitter feed for more direct and quick communications as well as a robust news archive for searching and retaining information. The new website has given the center improved agility for content generation in support of its projects and events. New project pages, news articles and regulatory filings can be added quickly in line with research being conducted. Data analytics from this refresh will be captured and included the next annual report.

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. 4); Research and Creative Scholarship (pg. 8); Citations (pg. 14) Academic and Service Activities (pg. 15); Dissemination Activities (pg. 18); Summative Collaborations & Meetings (pg. 23); Board Memberships and National Recognition (pg. 30); Sponsored Funding (pg. 32); Collaborative Efforts (pg. 38); CACP Goals for 2017-2022 (pg. 39); CACP Organizational Chart (pg. 42).

This year there were more than 21 publishing activities; 18 major engagements and conferences; active participation on 44 academic and service activities; 4 student assistantships or advisory roles by faculty of CACP; and 32 memberships on boards/committees or national recognition. Sponsored research was funded at **\$3,317,300**. CACP staff/faculty participated in more than 750 meetings with external/internal organizations and/or their representatives.

## INSTRUCTION AND APPOINTMENTS

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

Senior Director, Research and Strategic Innovation, and Principal Research Scientist, Center for Advanced Communications Policy (CACP)

Chief Operating Officer, Center for the Development and Application of Internet of Things Technologies (CDAIT)

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

Faculty, GVVU, January 2010 – present

Faculty, Wearable Computing Center, January 2015 – present

Faculty, C21U, 2012 – present

**Megan Denham:**

Senior Research Associate, GTRI, Center for Advanced Communications Policy (CACP)

**Jeff Evans:**

Director, Digital Transformation of Things, GTRI, Center for Advanced Communications Policy (CACP)

**Brad Fain, Ph.D.:**

Principal Research Scientist, GTRI, CACP  
Executive Director, Center for Advanced Communications Policy (CACP)  
February 2019 – present

Affiliated Researcher, Institute for People and Technology (IPaT)

Affiliated Researcher, Center for the Development and Application of IoT (CDAIT)

Fellow, WellStar Health System, 2016 – present

Advising:

Nicole Kosoris, Doctoral Student  
Georgia Institute of Technology,  
College of Computing, 2018 - present

**Sarah Farmer:**

Research Scientist I, GTRI, Center for Advanced

Communications Policy (CACP) 2019 - present

**Amanda Foster:**

Research Scientist II, GTRI-ICL, Center for Advanced Communications Policy (CACP)

**Salimah LaForce:**

Research Scientist II/Senior Policy Analyst, Center for Advanced Communications Policy, Georgia Institute of Technology - 2006 to present

Advising:

Anushri Kumar, Graduate Research Assistant Master's Student, College of Computing Georgia Institute of Technology September 2020 – Present

Kameron Barrow, Undergraduate Research Assistant, School of Literature, Media, and Communication, Ivan Allen College of Liberal Arts, Georgia Institute of Technology June 2019 – Present

**Maureen Linden:**

Senior Research Engineer, Center for Advanced Communications Policy (CACP) September 2017 – Present

Associate Director of Research, Center for Inclusive Design and Innovation (CIDI) January 2021 – Present

Senior Research Engineer, CIDI July 2016 - Present Georgia Institute of Technology

Senior Research Engineer, College of Engineering and Engineering Technology, Kennesaw State University December 2020 - Present

**Helena Mitchell, Ph.D.:**

Regents' Researcher Emeritus, Ivan Allen College 2019 – Present

Visiting Professor, Amity University, London,  
England 2018 – Present

Board of Trustees, American College of Greece  
2018 – Present

Advising:

Natasha Malmin, Doctorate Student  
Dissertation Committee July 2018 - Present  
Joint – Andrew Young School of Policy Studies,  
Georgia State University and School of Public  
Policy, Georgia Institute of Technology,  
Dissertation defense March 11, 2021,  
hooded May 2021

**Nathan W. Moon, Ph.D.:**

Senior Research Scientist, School of Public  
Policy 2017 – Present

Director of Research, Center for Advanced  
Communications Policy (CACP) 2017 – Present

Part-Time Lecturer, School of History and  
Sociology (HSOC) 2011 – Present

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

Affiliated Researcher, Institute for People and  
Technology (IPaT) 2016 – Present  
Lecture, “‘From Accessible to Usable to  
Inclusive’: Why Policy Matters, But Really, Really  
Shouldn’t...,” Inclusive Technology  
Entrepreneurs Project (ITEP) Fellows Seminar,  
May 19, 2021

**Victoria Razin**

Research Engineer II, GTRI-ELSYS, Center for  
Advanced Communications Policy (CACP)  
July 2020 – June 2021

**Lorrin Robinson**

Research Scientist I, Center for Advanced  
Communications Policy (CACP)  
November 2019 – June 2021

**Russell D. Mitchell**

Senior Research Engineer, GTRI-ICL, Center for Advanced Communications Policy (CACP) 2020 - Present

**Jason Zutty**

Senior Research Engineer, GTRI-Electro-Optical Sys Labs, Center for Advanced Communications Policy (CACP) 2020 - Present

## RESEARCH AND CREATIVE SCHOLARSHIP

### **Books and Books Chapters (1)**

Bennett, D., LaForce, S., Linden, M. "Quasi-experimental research in the wild: Walking the line between quantitative and qualitative," in Research Methods of Disaster and Emergency Management: Approaches in Application (Rivera, J.D., Ed.), (in print).

### **Journal Articles, Papers and Conference Proceedings (refereed) (12)**

Farmer, S., Baker, P.M.A, & Solomon, J. (2021). Inclusivity, Usability, and the Application of Personas for Technology Policy Design. (revise and resubmit) *Journal of Assistive Technology*.

Baker, P.M.A, & Solomon, J. (2021). IoT and Covid19: Opportunities for Inclusive Technology Adoption, submitted to the *Wireless RERC State of Technologies Proceedings*.

Bricout, J., Baker, P. M., Moon, N. W., & Sharma, B. (2021). Exploring the Smart Future of Participation: Community, Inclusivity, and People with Disabilities. *International Journal of E-Planning Research (IJEPR)*, 10(2), 94-108. doi:10.4018/IJEPR.20210401.oa8.

Nehl, E. J., Heilman, S. S., Ku, D., Gottfried, D. S., Farmer, S., Mannino, R., Brand, O. (2021). The RADx Tech Test Verification Core and the ACME POCT in the Evaluation of COVID-19 Testing Devices: A Model for Progress and Change. *IEEE Open Journal of Engineering in Medicine and Biology*, 2, 145-151.

Baker, P.M.A., Gaspard, H. and Zhu, J. (2021). Industry 4.0/Digitalization and Networks of Innovation in the North American Regional Context. To be published in a special Industry 4.0/Digitization issue of *European Planning Studies* (in press).



Dubois, E., Bright, D., & Laforce, S. (2021). Educating minoritized students in the United States during COVID-19: How technology can be both the problem and the solution. *IT Professional*, 23(2), 12-18.

LaForce, S. & Bright, D. (2021) Are we there yet? The evolving state of mobile access equity. *Assistive Technology* (accepted)

Moon, N., Harris, F. Linden, M., LaForce, S. (2021) Participation of Individuals with disabilities in contingent employment and the "Gig Economy": Findings from interview and survey research. *Assistive Technology* (accepted)

Lam, W., Roback, J., Alter, D., Asakrah, S., Chahroudi, A., Farmer, S., Levy, J. (Submitted). Novel COVID-19 diagnostics: Innovation in technology should be paralleled by new test verification and regulatory approaches. *Nature Biotechnology*.

Frediana, J. K., Levy, J. M., Rao, A., Bassit, L., Figueroa, J., ... Lam, W. A. (Submitted). Multidisciplinary Assessment of the Abbott BinaxNOW SARS-CoV-2 Point-of-Care Antigen Test in the Context of Emerging Viral Variants and Self-Administration. *Scientific Reports*.

Milchus, K, Phillips, C, Bunn, D, Endicott, S, Harris, F, Holder, V, Linden, M, Persaud, L, Satterfield, R, Wilson, R, "Work ACCESS: The development of workplace accommodation decision trees." Proceedings of the 41<sup>st</sup> RESNA Conference (Virtual), September 23 – 24, 2020.  
<https://www.resna.org/sites/default/files/conference/2020/AccessAndAccommodations/133Milchus.html>

Milchus, KL, Sanford, JA, Harris, FH, Linden, MA, Mahajan, H, Moon, NW, "The Impact of equitable design on workplace outcomes." Proceedings of the 41<sup>st</sup> RESNA Conference (Virtual), September 23 – 24, 2020.  
<https://www.resna.org/sites/default/files/conference/2020/AccessAndAccommodations/139Milchus.html>

### **Publications non-refereed (8)**

Moon, N.W. "University System of Georgia (USG) STEM IV Initiative: Year 2 Mid-Year Evaluation Report," Department of Academic Affairs, Board of Regents of the University System of Georgia, April 2021.

Moon, N.W. "University System of Georgia (USG) STEM IV Initiative: Year 1 Evaluation Report," Department of Academic Affairs, Board of Regents of the University System of Georgia, February 2021.

Baker, P.M.A. (2020). Innovating Broadband Policy: Toward Systems of Connectivity, Accessibility, and Inclusion. Paper prepared for the NSF Broadband Research Workshops 2020 (November). <https://edas.info/p27906>

LaForce, S., & Bright, D. "Biennial Analysis of Mobile Phone Accessibility: Comparative analyses reveals pain points and progress," Research Report, National Institute on Independent Living, Disability, and Rehabilitation Research, NIDILRR grant number 90RE5025-01-00, September 2020.

Bennett, D., Knight, T., Dubois, D., Khurana, P., Wild, D., Laforce, S., Yuan, X.-J. (2020). Technological Innovations in Response to COVID-19. CONVERGE COVID-19 Working Groups for Public Health and Social Sciences Research. Boulder, CO: Natural Hazards Center, University of Colorado Boulder.  
[https://converge.colorado.edu/v1/uploads/images/technological\\_innovations\\_covid\\_19-1595254567781.pdf](https://converge.colorado.edu/v1/uploads/images/technological_innovations_covid_19-1595254567781.pdf)

Farmer, S. & Foster, A. (2020-2021). *Usability Reports* (27 technical reports produced for the RADx program). Reports documented usability evaluations of various COVID-19 diagnostic tests conducted by HomeLab.

Farmer, S., Robinson, L., & Foster, A. (2020). *MarcomCentral Accessibility Report*. Reported documented accessibility evaluation conducted on Marcom software.

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 (3)**

### **On the Record: Wireless Emergency Alerts (WEA) and Emergency Alert System (EAS)**

LaForce, S., Bright, D., Mitchell, H. (2021, May 4). Reply Comments Filed in Response to *Notice of Proposed Rulemaking and Notice of Inquiry in The Matter of Amendment of Part II of the Commission's Rules Regarding the Emergency Alert System and Wireless Emergency Alerts* [PS Docket No. 15-94; 15-91]. Federal Communications Commission, Washington, D.C.

May 2021 — The Wireless RERC submitted reply comments to the FCC in response to their Notice of Proposed Rulemaking and Notice of Inquiry in The Matter of Amendment of Part II of the Commission's Rules Regarding the Emergency Alert System and Wireless

Emergency Alerts [PS Docket No. 15-94; 15-91]. In our reply comments, we indicated support for expanding the Presidential alert class to allow activation by FEMA. By expanding the alert class, agencies responsible for detecting the threat have the authority to issue the alert. We also concurred with CTIA and NYCEM's recommendations to relabel the alerts "Federal" instead of "Presidential" or "National" because of news response regarding public perceptions of this label. We also agree that the term presidential is unfortunately inflammatory and may elicit responses contrary to the intention of the emergency message specifically (e.g., protective action) and the system entirely (i.e., public trust) because a small qualitative study of Georgia Tech personnel in 2018 showed that mobile phone users mentioned a preference for receiving the WEA test without the title "Presidential Alert" and would like to have seen the notification titled along the lines of "National WEA Test." As asserted by CTIA, "the effectiveness of emergency alerting will be lost if people simply ignore or opt-out of receiving these critical messages." Finally, the Wireless RERC supported previous recommendations to alert the public about new alert labels based on our survey data on WEA response based on user knowledge.

### **On the Record: Comments on the NTIA Survey Questionnaire**

Baker, P.M.A., Moon N.W., (2020, September 17). Comments filed in response to National Telecommunications and Information Administration (NTIA) *Notice, request for public comments. [Docket No. 200813-0218]. NTIA Internet Use Survey Questionnaire Development*. Washington D.C: NTIA.

September 2020 – The Wireless RERC, in collaboration with Georgia Tech's Center for the Development and Application of Internet of Things Technologies and Center for Advanced Communications Policy submitted comments to the Department of Commerce on September 17<sup>th</sup> in response to their Public Notice *NTIA Internet Use Survey Questionnaire Development [Docket No. 200813-0218]*. This survey is one of the NTIA's long-standing questionnaires and is distributed to approximately 50,000 homes across the United States. It supplements the periodically administered Current Population Survey (CPS) that gauges national labor force statistics and provides information on digital use. The Wireless RERC's comments noted concerns about the nature of some of the questions in survey that may cause respondents to provide less than accurate answers due to social standing. Other concerns related to the survey questions included wariness about the way in which questions are worded. They may not be clear to people with mild cognitive impairments, learning disabilities, or for whom English is a second language.

The RERC also recommended that NTIA should include additional questions to the NTIA Internet Use Survey. We argued that it would be useful to have questions related to Internet of Things (IoT) devices, services, and use cases. In our comments, we explicitly name one set of IoT-related devices that have not been assessed in the NTIA Survey: voice input devices (such as Amazon Echo or Apple Siri). These devices' deployment is prominent particularly in smart homes and for those with disabilities who use the technology to navigate their environment. We suggested that NTIA probe into accessibility, perceptions, and barriers to adoption of these devices. Two other areas

that we suggest the NTIA Survey expound on includes: characteristics of survey participants, accessibility and usability of technology, and accessibility of emergency and governmental services (such as IPAWS). Finally, the RERC suggests that questions about wearables, the complexity of their use, and the cost of devices are added to the survey. This invaluable information would allow neutral authorities to develop technological and policy interventions. Our comments to the Department of Commerce conclude by emphasizing how vital it is for surveys to be accessible to people with disabilities to ensure data collection is inclusive of these populations.

### **On the Record: Accessibility Gains and Gaps Found in the Biennial Analysis of Mobile Phone Accessibility**

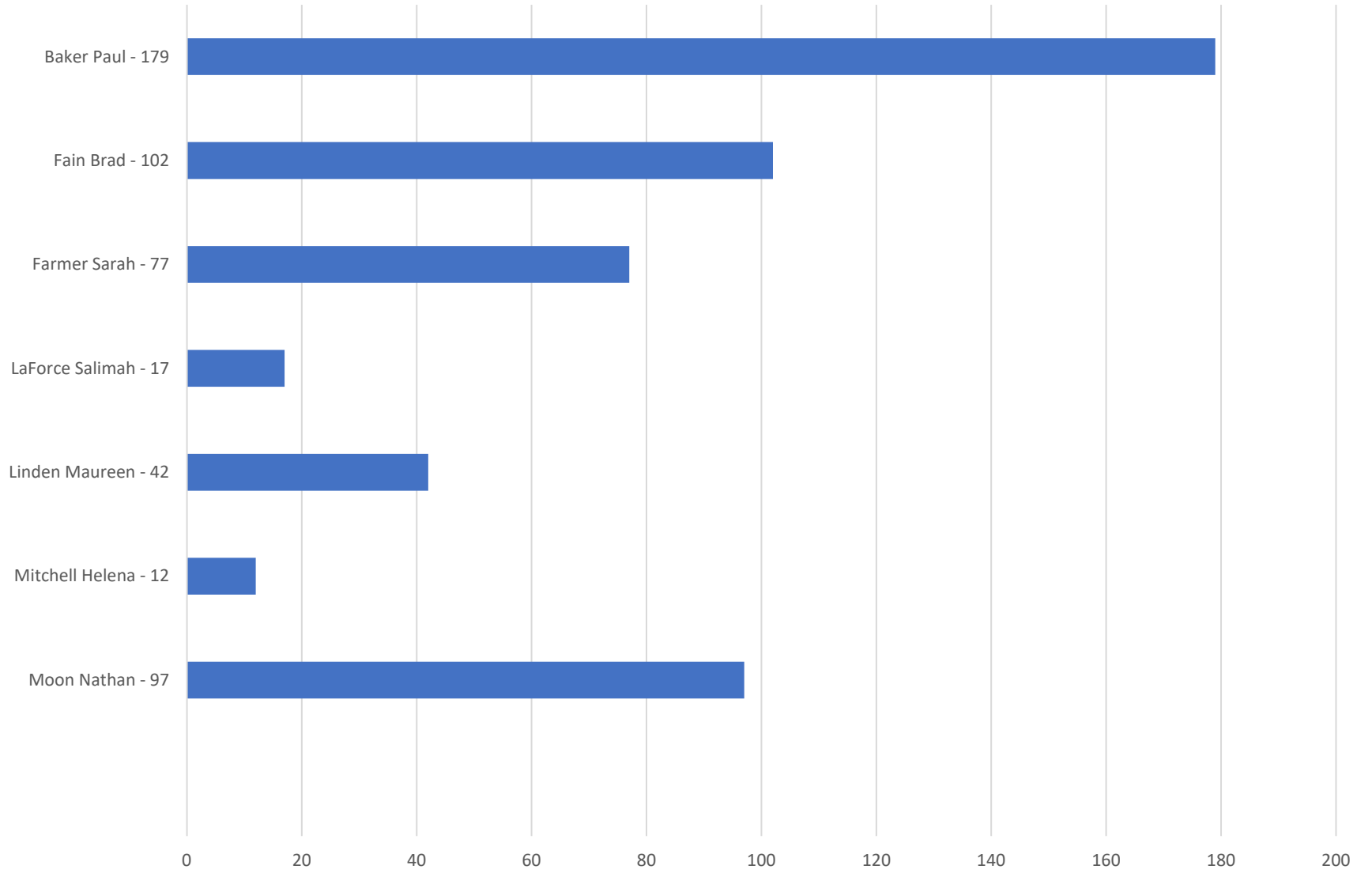
LaForce, S., Bright, D., Mitchell, H., Moon, N., Baker, P. M. A., Donehower, C., & Jimenez, E. (2020, August 4). Comments submitted in response to the *Public Notice Consumer and Governmental Affairs Bureau Seeks Comment On Tentative Findings for the 2020 Twenty-First Century Communications and Video Accessibility Act Biennial Report* [CG Docket No. 10-213]. Federal Communications Commission: Washington, D.C.

August 2020 - The Wireless RERC submitted comments to the FCC on August 4th in response to their Public Notice *Consumer and Governmental Affairs Bureau Seeks Comment on Tentative Findings for the 2020 Twenty-First Century Communications and Video Accessibility Act Biennial Report* [**CG Docket No. 10-213**]. The FCC's Tentative Findings Report cited the Wireless RERC nearly fifteen times based on our initial comments in April, which discussed the preliminary findings of the 2019/2020 Mobile Phone Accessibility review. In our latest comments, we provided the FCC with a complete analysis of mobile phone models available up to February 2020 from the top four wireless carriers, one prepaid carrier, and five Lifeline Carriers. Our review highlighted several interesting findings, which include the non-smartphone manufacturers integrating smartphone features into their core models and a significant increase in the presence of full access screen readers for all mobile phones.

Additionally, the comments were informed by the results of our cornerstone survey on wireless technology use by people with disabilities, the Survey of User Needs (SUN). Overall, the comments indicated the industry's growth in the accessibility and affordability of advanced communications technologies, as evidenced by the increasing presence and richness of new accessibility features on mobile devices, which can also result in greater usability of these devices. The data indicate that consumers with disabilities seeking to purchase smartphones have more device options with a greater variety of accessibility features. Particularly, accessibility for people who use the voice output features and the alternative login as there was a significant increase in the presence of TTS, full access screen readers, and biometric login. Furthermore, SUN analysis found that a majority of respondents with disabilities indicated that both basic cell phones and smartphones were easy to use. However, some access gaps remain, particularly regarding new communications technologies. Based on the data presented in the comments, the Wireless RERC offered the following recommendations:

- As new features are developed, mobile phone manufacturers are encouraged to continue to incorporate users with disabilities into all stages of the design process so that accessibility, and consequential usability, is intentional within digital designs instead of a fortuitous byproduct of innovative technology.
- Increasing the percentage of phones with excellent M and T ratings (M4/T4) would better ensure a quality experience with voice calls for people who use hearing aids and cochlear implants.
- Given the rate of people with disabilities reporting more than one disability, and the disparity between the availability of accessibility features based on disability type, increasing the percentage of more universally accessible devices would be good for manufacturers and end-users alike.
- Increasing the percentage of non-smartphones that are WEA-capable would better ensure access to emergency alerts for users with disabilities that prefer non-smartphones.
- For continuity of the accessibility experience through app and OS updates, more development efforts that would allow a way to ensure that systems updates are more transparent for the end-user by not resetting to the default status. If this could be overcome, it would not only impact accessibility, but also (1) the security of the device for people with disabilities, and (b) the optimal operation of the device or app, as it would have the latest fixes and features.
- Voice input devices such as digital assistants and smart speakers may be more capable than users believe is the case, suggesting the need for more informed or more expanded help/guidance functions. This speaks to the need for the design process to expand beyond minimal accessibility features to incorporate outcome-based design, such as increased usability.
- To address barriers experienced by customers with disabilities during point of sale transactions, we recommend (1) disability awareness/etiquette and information about accessibility features should be a standard part of sales associate training, and (2) providing a stable method for customers with disabilities to obtain in-store support (e.g., video remote interpreting services).

## CITATIONS



## ACADEMIC AND SERVICE ACTIVITIES

### ACADEMIC ACTIVITIES (21)

#### Paul Baker (4)

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

Member, Research Faculty Promotion Review Task Force Updates 2020-2021

Ivan Allen College Faculty Advisory Board (FAB) 2019 – Present.

Produced the first annual Student IoT Innovation Capacity Building Challenge  
2021 [https://cdait.gatech.edu/projects/Student\\_IoT\\_Innovation\\_Challenge\\_2021](https://cdait.gatech.edu/projects/Student_IoT_Innovation_Challenge_2021)

Editor, Wireless RERC State of Technology Special Issue of *Assistive Technology Journal* (2021).

#### Brad Fain (4)

Member, SPP Chair Search Committee, 2020-2021

Member, STSD Strategic Planning Committee, 2020-2021

Track Chair, Southern Gerontology Society, 2017-2020. Technology and Aging  
Track.

Invited Special Guest Speaker, HFES Student Chapter, February 2020

#### Salimah LaForce (5)

Cognitive Empowerment Program Diversity, Equity, and Inclusion Champion,  
2021- present.

Reviewer. *Assistive Technology* journal, Wireless RERC Special Issue, 2020 – present

Ivan Allen College Diversity and Inclusion Council, December 2019 – present.

Reviewer, NIDILRR, Field Initiated Projects (Research & Development) Grant  
Competition, May 2021.

Working Group - *CONVERGE Technological Innovations in Response to COVID19*, supported by the National Science Foundation-funded Social Science Extreme Events Research (SSEER) network and the CONVERGE facility at the Natural Hazards Center at the University of Colorado Boulder (NSF Award #1841338).

**Maureen Linden (2)**

Member, Georgia Tech Research Faculty Promotion Process Review, 2020

Member, Georgia Institute of Technology Research Faculty Promotions Committee, 2020

**Helena Mitchell (2)**

Coordinated visits of three graduate students and four undergraduate students interested in attending Ivan Allen College, including School of Public Policy, Pre-Law, and Literature, Media, and Communication.

Prepared more than a dozen letters of support for Georgia Tech graduates applying for advanced degree programs, doctorates at other universities, or external job positions.

**Nathan Moon (4)**

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

Chair, CACP Research Faculty Promotions Committee (Center-level), 2020-Present.

Member, IAC Strategic Planning Committee (College Level, Appointed) 2020-Present.

Member, Georgia Tech Research Next Phase II Commission (Institute-level, Appointed), 2021-Present.

**SERVICE ACTIVITIES (23)**

**Paul Baker (5)**



Reviewer, 2021 Ivan Allen College Graduate Essay Competition

Advisory Board, Georgia Digital Summit, 2019 – Present (Alternate for Helena Mitchell).

NSF Panel Reviewer, Smart and Connected Communities, May 2021

Invited Participant, Disability Inclusion in Workplaces through Tech. - NSF Convergence Accelerator, May 20<sup>th</sup> and May 28<sup>th</sup>, 2021.

Invited Participant, NSF Broadband Research Workshop 2020 Technology, Economics and Digital Inclusion, November 17-18, 2020.

**Brad Fain (3)**

MARTA Accessibility Committee – Design Subcommittee Member, 2017 – Present.

HFES National Office Task Force on Product Evaluations, Member, 2019 – Present.

Member, Human Engineering Working Group for F-16 Block 30 Fighter Aircraft, Participated in quarterly meetings at Hill AFB, Utah

**Maureen Linden (8)**

Board of Directors, Douglas County Animal Services Advisory Board, June 2015 – May 2023

Reviewer, International Journal of Audiology, October 2020

Reviewer, Archives of Physical Medicine and Rehabilitation, November 2020

President, Rehabilitation and Assistive Technology Society of North America (RESNA) Executive Committee, Board of Directors, August 2020 – July 2022

President-Elect, RESNA Executive Committee, Board of Directors, August 2018 – July 2020

Co-Chair, RESNA Governance Committee, August 2018 – July 2020

Member, RESNA Finance Committee, August 2016 – July 2024

Chair, RESNA Membership Committee, August 2018 – July 2020

### **Helena Mitchell (3)**

Advisory Board, Georgia Digital Summit, 2012 – Present.

Regional Council Member, Syracuse University (SU) 2019 – Present.

Advisory Committee member, COVID-19 Rapid Response grant, Salimah LaForce, PI.

### **Nathan Moon (4)**

Associate Editor and Reviewer, *Assistive Technology*, 2019-2021.

Peer Review Panelist, NIDILRR DRRP Program: Technology for Expressive Communication, July 2020

Peer Reviewer, National Science Foundation (NSF) ITEST Program, September 2020

Member (former Chair), RESNA Government Affairs Committee (GAC), 2012-Present

## **DISSEMINATION ACTIVITIES**

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

### **MAJOR PUBLIC AND INDUSTRY ENGAGEMENT (18)**

#### **The 7<sup>th</sup> Annual Health Services Research Day Symposium**

Sponsored by Georgia CTSA and Emory Health Services Research Center, Researcher Lorrin Robinson attended this free symposium and networking opportunity where researchers across Georgia learned about ongoing quality, effectiveness, and value-based research activities. May 5, 2021.

#### **Mental Health and Body Composition: The Effects of Race, Racial Discrimination and Social Relationships**

Nicole Fields is a fourth-year doctoral candidate in the Department of Biostatistics and Epidemiology at the University of Massachusetts Amherst. She presented her work focused on social determinants of health in marginalized populations to understand how these determinants affect both mental health and cardiometabolic risk factors. Researcher Salimah LaForce attended this event on May 3, 2021.

### **Georgia Center for Diabetes Translation Research (GCDTR) Pilot & Feasibility Symposium**

April 29, 2021- selected GCDTR pilot PIs showcased their projects and all PIs learned about ways to take their research to the next level. Dr. Pamela Thornton from the National Institute for Diabetes and Digestive and Kidney Diseases (NIDDK) and Dr. Karen Siegel from the Centers for Disease Control and Prevention (CDC) discussed funding opportunities at their respective institutions, as well as tips for successful applications. This event was held on April 29, 2021 and Research Scientist II Salimah LaForce attended.

### **HFES 2021 International Virtual Symposium on Human Factors & Ergonomics in Health Care**

Brad Fain attended and provided a presentation titled "Lessons Learned from Developing an MCI Virtual Empowerment Program" on April 14. April 12-16, 2021.

### **Health Experience Design Conference**

April 6-7, 2021. Researcher Sarah Farmer attended this annual conference hosted by Mad\*Pow's Center for Health Experience Design, the Health Experience Design Conference provides a unique crossroads for a diverse community of executives and practitioners in design, innovation, research, strategy, and technology to help accelerate the transformation of our health system. Attracting over 400 visionaries across the health ecosystem, this two-day mix of inspiring presentations, workshops, and discussion will help drive real-world change.

### **Wireless RERC State of Technology Forum**

The Wireless RERC convened its State of Technology Forum on Tuesday, March 23 and Wednesday, March 24. The Forum examined the evolving nature and capacities of wireless technologies and identified opportunities to meet a range of community needs for access, equity, and inclusion. Attendees helped chart the next generation of wireless/connected technology opportunities to enhance the lives of people with disabilities. The program comprised a series of discussion-based sessions focused on the role of research, development, and stakeholder engagement in the design of inclusive technology, policy, and regulations that advance the full social inclusion of people with disabilities. The discussions were punctuated by Rapid Fire Research Demos, Lightning Development Demos, and selected paper presentations. The Forum was chaired by Helena Mitchell and Salimah LaForce, Brad Fain, Paul Baker, Maureen Linden, Nathan Moon, and Sarah Farmer presented. Kameron Barrow designed the branding, conference program, and produced the InsightOut video presentation. Janet McKinney and Matt Soffel were instrumental in planning and logistics for the virtual format. Dara Bright, Anushri Kumar, and Kameron Barrow served as official note-takers.

<http://www.wirelessrerc.gatech.edu/state-technology-forum-2021-0>

### **IPPA - International Positive Psychology Association "Evidence in Action" Practitioner Conference**

Celebrating the application of positive psychology, the event featured discussions, presentations and panels focused on evidence-based applications of positive psychology. The event was held March 18-19, 2021, Brad Fain attended.

### **COVID FORCE Seminar**

Researcher Sarah Farmer with CACP along with Researcher, Amanda Foster from GTRI hosted a virtual seminar on March 5, 2021, titled Don't Forget About Human Factors- Lessons from COVID-19 Point-of-Care Diagnostic Testing, for the ongoing seminar series COVID FORCE. COVID FORCE (stands for Feasibility and Optimization of Research at Children's Healthcare of Atlanta) has been assembled to help track and facilitate all the important SARS-CoV-2 research happening in pediatrics these past 11 months.

### **USG STEM Initiative Webinar Series**

Nathan Moon served as the lead organizer and moderator for the University System of Georgia (USG) STEM Initiative's Friday Webinar Series. The series was launched in March 2020 to support the transition to online STEM instruction and academic support during the COVID-19 pandemic. Early webinars focused on online tutoring, supplemental instruction, and peer support. During the most recent academic year, sessions have focused on other activities such as adapting undergraduate research and learning communities for online learning. More recently, the series has focused on support for external grants. Notable sessions have included:

May 21, 2021: "Putting It All Together: Pursuing STEM Grants" – Dabney Dixon, Ed Coyle, Mary Lynn Realff, Judy Awong-Taylor, Monica Frazier, Kimberly Shaw, Timothy Howard, and Nathan Moon.

March 12, 2021: "In Pursuit of STEM Grants: Sustaining Effective Efforts" - John Leyba, Kimberly Shaw, Timothy Howard, Shainaz Landge, Joe Falcone, Anu Bourgeois, Kelly Stout, and Nathan Moon.

February 12, 2021: "Forming Effective Communities of Practice" - Nathan Moon, Laura Carruth, Aakanksa Angra, and Roz Barnes Fowler

October 9, 2020: "Learning Communities in STEM" - Jennifer Louten, Kimberly Shaw, Timothy Shaw, Delana Gajdosik-Nivens, Emma Blandford, Cameron Tyson, Rosalind Barnes Fowler, and Nathan W. Moon.

### **WSB-TV Interview – RADx Initiative**

Research Scientist Sarah Farmer was interviewed by WSB-TV on February 2, 2021 for remarks related to the first COVID-19 tests for home use from the RADx research evaluations performed by the research team she led within CACP.

<https://www.wsbtv.com/news/local/atlanta/at-home-covid-19-tests-near-fda-approval-could-be-game-changer-fight-against-virus/R3BPYCT4TVGOLBISPKVLQ5JGQ4/>

### **CACP Researchers Attend CES 2021**

CACP Executive Director Brad Fain and Research Scientist Sarah Farmer attended the 2021 Consumer Electronics Show (CES) January 11-14, 2021 held in a virtual format due to Covid-19 restrictions.

### **IoT for Manufacturing Symposium**

Industrial Internet of Things in 2020 was presented by Alain Louchez at the IoT for Manufacturing Symposium organized by the Factory Information Systems Center at the Georgia Tech Manufacturing Institute on November 11, 2020.

### **Center on KTDRR's 2020 Online KT Conference: Social Media Strategies for Knowledge Translation**

The theme of the conference being Social Media Strategies for Knowledge Translation. Paul M.A. Baker served as a panelist during the conference. Discussions included using social media to recruit research participants and ensuring ongoing stakeholder engagement. October 28, 2020.

### **Smith-Kettlewell Rehabilitation Engineering Rehabilitation Center State of the Science Meeting**

Sarah Farmer participated as a panelist for the topic of Household Accessibility, within the Community Living session at the virtual event held on October 23, 2020.

### **Georgia Virtual Digital Government Summit**

Executive Director of CACP, Brad Fain and researchers Paul Baker, Sarah Farmer, Salimah LaForce, Helena Mitchell and Lorrin Robinson attended this virtual event held on October 8-9, 2020. The Summit promotes best practices and spurs innovation in the public sector by offering an opportunity to explore a variety of technology topics and possibilities.

### **911 Task Force Equal Access Subcommittee Meeting**

September 23, 2020, Salimah LaForce invited presentation "Clear & Effective Emergency Communications Over Wireless Devices" to committee members in the state of Colorado.

### **M-Enabling Virtual Leadership Briefing**

The 9<sup>th</sup> annual M-Enabling event took place in a virtual format on September 15, 2020. The theme of the M-Enabling Virtual Leadership Briefing was "A New Reality for Digital Accessibility." The event aimed to address the issues surrounding pandemic challenges and trends in digital accessibility and featured an exclusive address by Vint Cerf, Vice President and Chief Internet Evangelist at Google, and Caroline Casey, Founder and Creator at Valuable 500. Director of Research, Nathan Moon attended this event.

## **RESNA – Rehabilitation Engineering and Assistive Technology Society of North America**

RESNA, the Rehabilitation Engineering & Assistive Technology Society of North America, is the only professional membership society that encompasses every aspect of assistive technology. The RESNA Annual Conference is an international gathering of multi-disciplinary professionals who create, adapt, and develop technology solutions for people with disabilities. Conference attendees form an active international network that quickly spreads the word about products, services, and new technologies. RESNA was held in a virtual environment on September 23-24, 2020. Maureen Linden, President Elect in attendance.

### Social Media

#### **CACP:**

- Accessible Technology Policy Group (ATPG), established in 2009 currently has **895** members. ATPG is focused on policy development and exchange of information related to e-accessibility and inclusive design.
- The CACP Facebook page has **198** page likes and **219** page-followers. 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 **1570** followers. The CACP Twitter feed's purpose is to share CACP news and events, as well as post relevant technology and policy news items.
- The Wireless RERC Twitter feed (@CACPGT\_wRERC) has **1265** page-followers. The Wireless RERC's Twitter feed shares news about Center research and associated academic, industry, government, and advocacy news concerning technologies and services that advance social inclusion of people with disabilities.
- The Wireless RERC Facebook page has **387** page likes and **441** followers. The page was designed to share Wireless RERC news and events, as well as post relevant inclusive wireless technologies and services news items with a human-interest appeal.
- The Wireless RERC YouTube Channel has 420 subscribers and 233,801 views. The channel shares videos (produced by the Wireless RERC) that provides tutorials on how to enable accessibility features on wireless devices and videos that showcase the research and development work of the Center.
- Salimah LaForce maintains the Facebook page for the Georgia Emergency Preparedness Coalition for People with Disabilities and Older Adults (GEPC). The page has **511** page likes and **563** page-followers. GEPC is a key component in statewide preparedness efforts and consists of stake-holder agencies throughout Georgia. The page was designed to share relevant local, state, and national news, initiatives, and actionable information.
- Paul M.A. Baker (assisted by Matt Soffel and Janet McKinney) designed and set up a new website for Center for the Development and Application of Internet of Things Technologies (CDAIT) <https://cdait.gatech.edu/> to represent CDAIT's revamping post move to CACP.

- Paul M.A. Baker set up a twitter feed for CDAIT (@cdaitgt) which has 294 followers and posts 3-5 times a day. CDAIT also has a company page on LinkedIn at: <https://www.linkedin.com/company/cdait> with 113 followers.
- CDAIT published a biweekly newsletter (edited by Alain Louchez) which is posted to the CDAIT and CACP websites as well as disseminated via Twitter and LinkedIn channels.

### Individual:

- Paul M.A. Baker has an IAC website at <http://paulmbaker.gatech.edu>, maintains a LinkedIn profile with **3253** connections, and a Twitter feed (@paulmbaker) with **2360** followers. He helps maintain **6** additional social media accounts for several organizations, including the Emory Alumni Group with nearly 24,400 members.
- Salimah LaForce maintains a LinkedIn profile with **665** connections, **718** followers, and **47** group memberships, including the Association for Public Policy Analysis and Management, Behavioralizing Policy; CDC Center for Preparedness and Response (CPR); Center for Policy on Emerging Technologies; Science, Technology & Innovation Policy; Mobile and Tablet Accessibility Forum; Mobile Future; Association of Public Policy Analysis and Management; Digital Georgia, Future Social Media; Public Warning & Mass Notification Group, and many other topical groups relevant to the CACP mission.

## SUMMATIVE COLLABORATIONS & MEETINGS

### 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 Minnesota.

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, University of Sydney, Auckland University of Technology.

Meetings with **government agencies**: Georgia Department of Public Safety, University System of Georgia, Georgia Department of Community Health, National Science Foundation, Veterans Administration, National Council on Disability, US Department of Education, United States Access Board, Administration for Community Living, CDC, US Department of Health and Human Services, Province of Ontario, Canada, Elections Canada, Technical College System of Georgia. German Federal Ministry of Labor and Social Affairs, U.S. State Council of Governments.

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, Rehabilitation Engineering and Assistive Technology Society of North America, USBLN, RERC on Aging (TechSAge), Smith Kettlewell Institute.

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), ThyssenKrupp, American Institutes for Research, SmartMatic, Facebook, Cox, LinkedIn, Corning, industriAll Europe, International Trade Union House (ITUH) (Brussels), Industriegewerkschaft Bergbau, Chemie, Energie (Germany), Global Federation of Competitiveness Councils, AFL-CIO, GSMA.

**100** outreach meetings (virtual and in-person), 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.

## **Brad Fain**

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

Meetings with **public and government agencies:** F-16 Program Office, Air National Guard, National Institute of Standards and Technology (NIST); Department of Homeland Security Science & Technology Directorate; National Institute for Disability Independent Living and Rehabilitation Research (NIDILRR).

Collaborations and/or meetings with **disability and non-governmental organizations:** Dementia Action Alliance, Eden Alternative, Arthritis Australia.

Collaborations and/or meetings with **industry:** Amazon, Delta, Pfizer, Battelle, Ongey, Cox Communications, LVHS, Ricoh, Fiskars, NorthWestern Communities, Thrive, Comcast, Zimmer Biomet, Anthem, WellStar, Children's Healthcare of Atlanta, and Smartmatic.

**74** outreach meetings, collaborative discussions and technical assistance not reported already: Assisted in the design of a surgical gown to protect healthcare workers from COVID-19, 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.

### **Sarah Farmer**

Collaborations and meetings with **the Academy**: Georgia Tech, Emory.

Meetings with **government agencies**: National Institute of Standards and Technology (NIST), Coroner Offices in California, Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), U.S. Food and Drug Administration (FDA), Georgia Department of Public Safety Support (GDPSS).

Collaborations and/or meetings with **industry**: Smartmatic, Children's Healthcare of Atlanta, Marcom Central, Ricoh, Cox Communications, ADT Health, Tamm Net, Smith-Kettlewell Eye Research Institute, various COVID-19 diagnostic testing companies through RADx.

**178** outreach meetings, collaborative discussions, and technical assistance sessions.

### **Salimah LaForce**

Collaborations and meetings with **the Academy**: Emory University, Georgia State University, The State University of New York (SUNY), Indiana University, University of Colorado-Boulder, University of Minnesota, University of Texas-Arlington, GT Interdepartmental: Center for Inclusive Design and Innovation (CIDI), Institute for People and Technology (IPaT), Wearable Computing Center (WCC), Interactive Media Technology Center (IMTC), Center for the Development of Applications for the Internet of Things (CDAIT), Georgia Tech Research Institute (GTRI), School of Psychology.

Meetings with the **public and government entities**: Atlanta BeltLine Inc., Colorado 911 Task Force, City of Los Angeles, Federal Communications Commission (Office of Disability Rights, Wireless Technology Bureau), FEMA – Integrated Public Alert & Warning System, Georgia Department of Behavioral Health & Developmental Disabilities, Georgia Department of Public Health, Georgia Emergency Management Agency (GEMA), National Emergency Number Association (NENA), North Carolina Department of Health and Human Services, State of Georgia ADA Coordinator's Office.

Collaborations and/or meetings with **disability and non-governmental organizations**: Center for the Visually Impaired, Coalition on Inclusive Emergency Planning (CIEP), Georgia Radio Reading Service (GaRRS), Georgia Center for the

Deaf and Hard of Hearing, Georgia Center for Diabetes Translation Research, Georgia Emergency Interpreting Services Network, Smith-Kettlewell Eye Research Institute.

Collaborations and/or meetings with **Industry:** KOE Wireless, Hawk Networks, Stantec, KPS Collaborative Solutions, Together Lives Matter. AT&T, BlackBerry, Deaf Link, Inc., CTIA – The Wireless Association, Microsoft, Momentum Dynamics Corporation, Rand Corporation, T-Mobile, TracFone, Vital Signs.

**155** 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, Colorado University, Emory University, Gallaudet University, University of Georgia, Georgia State University, Georgetown University, George Washington University, University of Guam, Kennesaw State University (KSU), University of Minnesota, University of Texas – Arlington, University of Texas – Austin, U.S. Virgin Island's University and the University of Washington.

Meetings with **public and government agencies:** Alaska Department of Labor, 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 Division of Aging Services, 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), North Carolina Department of Health and Human Services, US Department of Labor, Office of Disability Employment Policy; and the Washington State Department of Social and Health Services.

Collaborations and/or meetings with **disability and non-governmental organizations:** : American Association on Health and Disability (AAHD), Assistive Technology of Alaska (ATLA), Assistive Technology Industry Association (ATIA), Association of Assistive Technology Act Program (ATAP), Association of Programs

for Rural Independent Living (APRIL), Association of University Centers on Disabilities, Center for Visually Impaired (CVI), Council for State Administrators of Vocational Rehabilitation (CSAVR), European Federation of Hard of Hearing People (EFHOH), Partnership for Inclusive Disaster Strategies, Assistive Technology Act Technical Assistance and Training Center, Idaho Assistive Technology Act Program (IATP), Georgia Council on Developmental Disabilities, Georgia Radio Reading Service (GaRRS), Global Alliance of Assistive Technology Organization (GAATO), Guam System for Assistive Technology (GSAT), Hearing Loss Association of America (HLAA), Illinois Assistive Technology Program (IATP), EasterSeals CrossRoads – Indiana Assistive Technology Act (INDATA) Project, International Federation of Hard of Hearing People (IFHOH), Assistive Technology for Kansans (ATK), Montana Assistive Technology Program (MonTECH), National Council on Independent Living (NCIL), National Association of Deafened People (NADP), North Carolina Assistive Technology Program (NCATP), Oklahoma Able Tech, Partnership for Employment and Technology (PEAT), Rehabilitation and Assistive Technology Society of North America (RESNA), Smith-Kettlewell Eye Research Institute, Shepherd Center, RERC on Technology Transfer (T2RERC), RERC on Aging (T2RERC), RERC on Aging (TechSAGE), Texas Technology Access Program (ITAP), and Washington Assistive Technology Act Program (WATAP).

Collaborations and/or meetings with **industry**: Amazon, Comcast, Thrust Interactive, Inc., Society for Human Resource Management (SHRM); People Power Corporation, SmithBucklin, NoBarriersCommunication (NoBaComm), and Deaf Link, Inc., Professional Resource Group, LLC, KORE.

**40** 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.

## **Helena Mitchell**

Collaborations and meetings with **the Academy**: Georgia State University, University of Texas at Arlington, Johnson C. Smith University; Kennesaw State University; Carolinas Alliance for Success in Education (coalition of HBCUs & MSIs); Syracuse University, Amity University (London), State University of New York-Albany, American College of Greece, Gallaudet University, Atlanta University Center.

Meetings with **public and government agencies:** U.S. Department of Commerce, National Telecommunications & Information Administration, Office of Minority Broadband Initiatives; Department of Homeland Security, Science & Technology Directorate; 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).

Collaborations and/or meetings with **disability related organizations:** DeafLink; RERC on Aging (TechSage); RERC on Blind and Low Vision, and RERC on Assistive Communications Technology; Smith Kettlewell Institute; Georgia Radio Reading Service (GaRRS).

Collaborations and/or meetings with **industry:** T-Mobile, Blackberry Limited; CTIA-the Wireless Association; Georgia Public Broadcasting; AgComm, Rand Corporation.

**23** outreach meetings, collaborative discussions not reported already. Meetings included external and internal discussions on possible collaborations; grant opportunities; and public safety issues for people with disabilities. The SOT was held in 2021, which also lead to many interactions with industry, government, disability and NGO organizations.

## **Nathan Moon**

Collaborations and meetings with **the Academy:** University of Georgia, Georgia State University, Kennesaw State University, Columbus State University, University of West Georgia, Georgia College & State University, Georgia Southern University, Georgia Gwinnett College, Middle Georgia State College, University of Texas at Arlington, University of Minnesota, University of Washington, University of New Hampshire, Gallaudet University, Boston University, Emory University, Smith-Kettlewell Eye Research Institute, University of Maryland.

Meetings with **public and government agencies:** the National Institute for Disability, Independent Living, and Rehabilitation Research (NIDILRR), National Science Foundation (NSF), Federal Emergency Management Agency (FEMA), Federal Communications Commission (FCC) Disability Rights Office (DRO), National Information and Telecommunications Administration (NTIA), 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), Georgia Vocational Rehabilitation Agency (GCRA).

Collaborations and/or meetings with **disability related organizations:** Rehabilitation and Assistive Technology Society of North America (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), Assistive Technology Act (AT Act) Programs for the States of: Alaska and Texas, Assistive Technology Industry Association (ATIA), Partnership for Employment and Accessible Technology (PEAT), Center for the Visually Impaired (CVI), Georgia Center for the Deaf and Hard of Hearing (GCHDD), National Association of Deafened People (NADP), International Federation of Hard of Hearing People, European Federation of Hard of Hearing People.

Collaborations and/or meetings with **industry:** Microsoft Accessibility, Blackberry, TracFone, Facebook, Bluetooth Special Interest Group (Bluetooth SIG), KORE, Comcast, CTIA: The Wireless Association, KPS Collaborative Solutions, Deaf Link.

**150** 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.

### **Lorin Robinson**

Meetings with **government agencies:** ADA National Network; U.S. Access Board; The General Services Administration (GSA)

Collaborations and/or meetings with **disability and non-governmental organizations:** National Business & Disability Council (Viscardi Center; Great Lakes ADA Center.

Collaborations and/or meetings with **industry:** Freedom Scientific, TPG Interactive; Deque; WebAim; Knowability; Accessibility Track; AbilityNet; Accessibility Online; AccessIncludes; Level Access; M-Enabling; Microassist; Black Girls Code; Ricoh.

**30** outreach meetings, collaborative discussions and technical assistance not reported already: Outreach meetings included various discussions around digital accessibility, Section 508 standards and WCAG conformance; current and future

software testing activities contributed to several interactions across government agencies, disability and NGO and industry organizations.

## **MEMBERSHIPS, BOARD MEMBERSHIPS AND NATIONAL RECOGNITION**

### **Paul M.A. Baker (11)**

Chair, Research Council 11 (Politics and Science), International Political Science Association (IPSA), July 2018 – present.

Associate Editor, Assistive Technology Journal, 2006 – present.

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

Member, Editorial Board, Journal of Information Technology & Politics, 2005 – present.

Member, Editorial Board, International Journal of Work Innovation, 2012– present.

Member, Editorial Board, International Journal of E-Adoption (IJE), 2009 – present.

Member, Editorial Board, International Journal of E-Planning Research (IJEPR), 2012– present.

Member, Editorial Board, Journal of Disability Policy Studies, 2010– present.

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

Member, American Political Science Association, 1997 - Present.

Member, Association of Public Policy Analysis and Management, 2004 – present.

### **Brad Fain (2)**

Full Member, MARTA Accessibility Committee, 2015 – present.

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

**Sarah Farmer (1)**

Member, American Society on Aging 2020 – present.

**Salimah LaForce (5)**

Member, American Psychological Association, 2019 – present.

Member, Emergency Notifications Working Group, National Emergency Number Association (NENA), 2018-present.

Member, Communications Modalities Working Group, National Emergency Number Association (NENA), 2018-present.

Member, Accessibility Committee, NENA, 2017-present.

Member, Georgia Emergency Preparedness Coalition for People with Disabilities & Older Adults, 2013-present.

**Maureen Linden (2)**

Board of Directors, Douglas County Animal Services Advisory Board, 2015-2021 (appointed).

RESNA President-Elect, August 2018 – Present.

**Janet McKinney (1)**

Georgia Tech Event Coordinators Network, 2018-Present.

**Helena Mitchell (4)**

Regional Council Member, Syracuse University, 2018 – Present.

IAC Million Dollar Club, 2015, 2016, 2017, 2018, 2019, 2020.

Member, Broadcast Education Association, Judge, Law & Policy Division, odd years from 2009 – 2019, 2020 served as a Judge also, although conference cancelled due to COVID – 19.

Board of Trustees, American College of Greece. Served on the Higher Education and Advancement committees. Lead on Faculty Incentives task force. Virtual meetings in 2020 and 2021 2018 – Present.

#### **Nathan W. Moon (4)**

Member, RESNA, The Rehabilitation Engineering and Assistive Technology Society of North America, 2012 – Present.

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

Member, American Evaluation Association, 2010 – Present.

IAC Million Dollar Club, Level 2, 2019-2021.

#### **Lorin Robinson (1)**

International Association of Accessibility Professionals, April 2020 – present.

## **SPONSORED FUNDING**

#### **Active (36)**

Helena Mitchell, Ph.D., PI, 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 10/01/2020 – 09/30/2021.

Nathan W. Moon, Ph.D., PI, 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 – 9/29/2021. \$198,376 was awarded in FY21.

Nathan Moon, Ph.D, PI. Service Level Agreement Between Board of Regents of the University System. 9/1/18 – 6/30/21. **\$74,416** for 33 months. **\*\*\*no new money. A one-year no cost extension was granted.**



Nathan Moon, Ph.D, PI. Service Level Agreement Between Board of Regents of the University System. 7/1/20 - 6/30/22. **\$40,000** for 12 months. **A one-year no cost extension was granted.**

Nathan Moon, Ph.D, PI. Service Level Agreement Between Board of Regents of the University System. 6/1/21 - 6/30/22. **\$23,000** for 13 months. \*\*\*\*pending

Nathan Moon, Ph.D, PI (Maureen Linden, Co-PI) Accessibility and Usability of Online Platforms for Instruction and Academic Support. EVPR (GT) 5/1/20 – 6/30/21. **\$9,992.** \*\*\*no new money awarded in FY21.

Nathan Moon, Ph.D, PI (Paul Baker – Co-PI), ARRT: Inclusive Technology and Policy Design Research Fellowships, Department of Health and Human Services Administration for Community Living. 6/1/20 – 5/31/25. \$997,386 for 60 months. **\$199,857** for FY 20/21. \*\*\*new funds should arrive in September 2021. Annual increments.

Nathan Moon, Ph.D, Inclusive Tech Entrepreneurship Program. New Venture Fund. 1/1/21 - 12/31/21. (Ondin – Prime PI). Total award \$89,989. CACP receives **\$17,077.80**

Maureen Linden, PI. (Nathan Moon, Ph.D. Co-PI), The Assistivetech Network, A Community of Practice on Assistive Technology., Department of Health and Human Services Administration for Community Living. 9/1/20 – 8/31/23. \$1,499,954 for 36 months. \$499,999 for FY21/22. Nathan received \$56,759.69 Annual increments.

Maureen Linden, Co-PI (Carolyn Phillips PI). Accommodation Expert Support System for Aging Well (Access for Aging Well). Department of Health and Human Services Administration for Community Living. 9/1/20 – 8/31/25. \$2,499,862 for 60 months. **\$499,962 for FY 20/21.** Nathan Moon received **\$25,131.40.** Annual increments.

Megan Denham, Sr. Research Data Manager, Developing an Infrastructure for a Novel Personal Mobile Application in Nephrotic Syndrome to Enhance its Applicability and Scalability, Emory University. 10/1/19 – 9/30/24, **\$100,000** for 60 months. **\$100,000** for FY20. \*\*\*No additional funds expected.

Megan Denham, Sr. Research Data Manager, CAREER: Wearable Joint Sounds Sensing for Children with Juvenile Idiopathic Arthritis, NSF. 4/1/18 – 3/31/23, \$500,000 for 60 months. **\$100,000** for FY20. **(Megan gets \$5000.) \*\*No additional funds expected.**

Megan Denham, Sr. Research Data Manager. Development of a 3D Graphic Representation Scale for Assessing Hip Function, Shriners Hospitals for Children. 3/15/21- 3/15/22. \$49,473. **\$44,973 has been funded.**

Megan Denham, Sr. Research Data Manager. Evaluating the Effects of Temporal Discounting, Emory University. 7/1/20 – 6/30/21. **\$20,223 for 12 months.**

Megan Denham, Sr. Research Data Manager. Evaluating the Effects of Temporal Discounting. Internal funds from the Pediatric Technology Center. (7/1/20 – 6/30/21). **\$5,000 for 12 months.**

Salimah LaForce, Research Scientist II, Bridges of the Beltline, EVPR/Provost (GT), 7/1/20 – 6/30/22 for **\$74,949**. Extension through 6/30/22.

Salimah LaForce, Research Scientist II, American Sign Language Accessible Diabetes Education, Emory University, 2/1/20 – 7/31/21 **\$31,532** for FY20. \*\*\*No additional funds expected. A no cost extension was granted through 5/31/21.

Salimah LaForce, Research Scientist II, American Sign Language Accessible Diabetes Education, **Internal funds transferred from IPaT**, 2/1/20 – 7/31/21 **\$10,000** for FY20. \*\*\*No additional funds expected. A no cost extension was granted through 5/31/21.

Salimah LaForce, Research Scientist II, COVID-19 Information Access & Vulnerable Populations, EVPR (GT), 6/1/20 – 3/31/21 for **\$9,979**. \*\*\*No additional funds expected.

Brad Fain, Ph.D. Ricoh Accessibility and Usability Research Support Program Fauna IM C530FB, Ricoh USA. 1/12/21 – 6/30/21. \$9000 for FY 21.

Brad Fain, Ph.D. Ricoh Accessibility and SWIC 2021 Ricoh USA. 3/17/21 – 3/17/22. \$21,000 for FY 21.

Brad Fain, Ph.D. Ricoh Accessibility and Usability Research Support C7210S 2021, Ricoh USA. 3/17/21 – 3/17/22. \$9,000 for FY 21.

Brad Fain, Ph.D. Ricoh Accessibility and Usability Research Support Program MN Hardware 2020, Ricoh USA. 1/12/21 – 6/30/21. \$27,000 for FY 21.

Brad Fain, Ph.D., Mild Cognitive Impairment Empowerment Program, 5/1/19 – 9/30/22, **\$372,333** for FY20. \*\*\*No additional funds expected.

Brad Fain, Ph.D., Ricoh FY20 Accessibility and Usability Support A3A4 Hardware, Ricoh USA, 8/1/19 – 3/31/21. **\$56,800** for FY20. \*\*\*No additional funds expected.

Brad Fain, Ph.D., Ricoh Accessibility and Usability Support Program – State of MN Software, Ricoh USA, 11/1/19 -3/28/22, **\$83,760** for 27 months. \*\*\*No additional funds expected. No cost extension was granted.

Brad Fain, Ph.D., Ricoh Accessibility and Usability Research Support Program, Ricoh USA, 6/15/10 – 3/31/22, **\$1,045,769.87**.

Brad Fain, Ph.D., Ricoh Accessibility and Usability Support Program - Production Print Hardware 2. 8/1/19 – 3/31/21. \$49,800.

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 5/30/2022.

Brad Fain, Ph.D., Design Support and Evaluation of the Therapy Smart System, La Valeriane. 3/7/12 – 12/7/21, **\$38,500**.

Brad Fain, Ph.D., DHHS - Enhancing Older Adults' Everyday Memory Function. 6/1/20 – 8/31/21. **\$16,651.06**.

Sarah Farmer, Research Scientist I, PIT/Marcom, 6/18/20 – 8/18/21. \$20,000

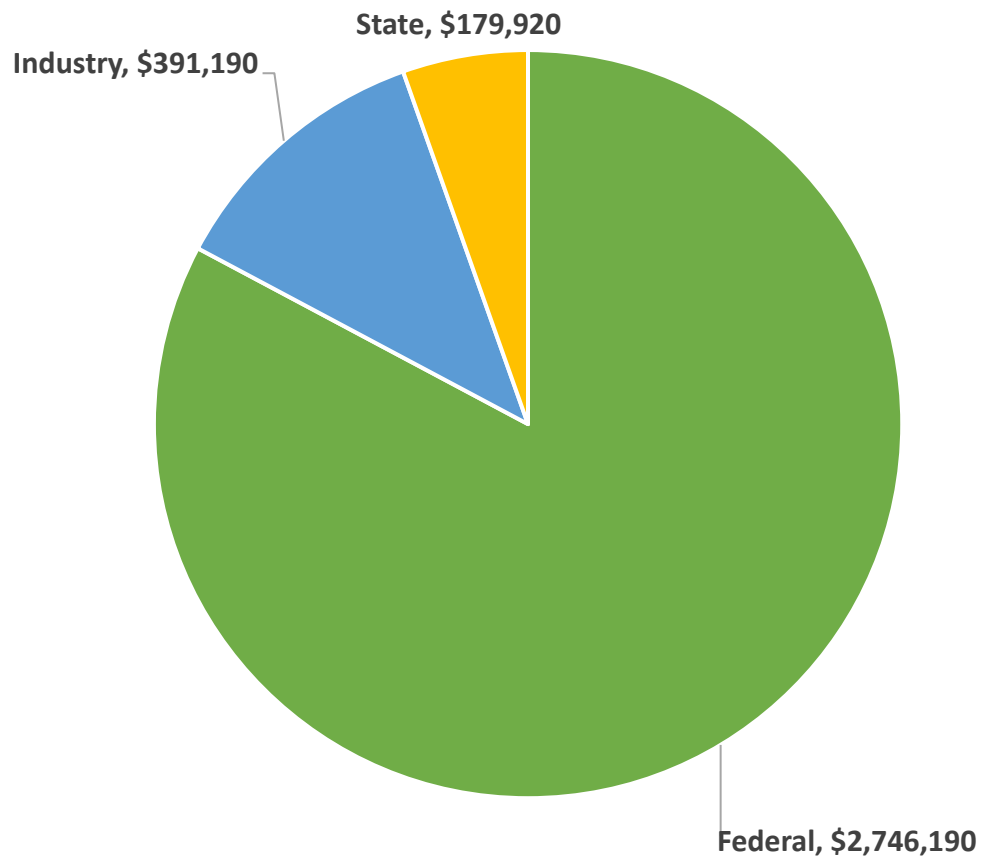
Sarah Farmer, Research Scientist I, CLINICAL STUDIES CORE/RAPID ACCELERATION OF DIAGNOSTICS (RADx), Emory University (NIH), 7/1/20 – 6/30/21 **\$13,795**.

Sarah Farmer, Research Scientist I, ACME POCT Rapid Acceleration of Diagnostics (RADx), Emory University (NIH), 5/1/20 – 5/31/22 **\$1,242,868**. No cost extension through 5/31/22. No additional funds.

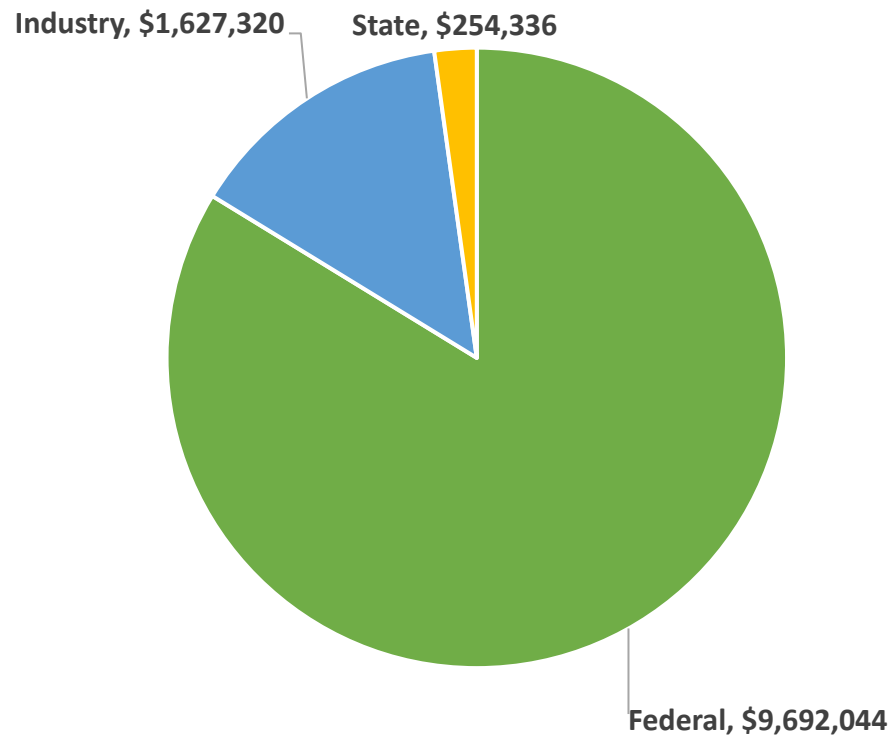
Paul Baker, Senior Research Scientist, Ph.D. CDAIT Membership. (multiple sponsors) July 1, 2020 – June 30, 2022. \$204,639.27. \*\* This will be extended annually, with membership funding throughout the year.

Paul Baker, Senior Research Scientist, Ph.D., GT 2021 Small Grant for White Papers at the Intersection of Science, Technology, and Public Policy, to produce, "Innovation Networks, Inclusion, and Connectivity: Intermediaries and Workforce Development in Disrupted Times. \$7000.

CACP  
FY21 Annual Sponsored Funding  
**Total = \$3,317,300**



CACP  
FY21 Active Cumulative Sponsored Funding  
**Total = \$11,573,700**



# Georgia Tech Collaborative Efforts

## GEORGIA TECH/CACP AFFILIATES

### Faculty/Research Staff (on CACP sponsored grants)

- Matthew Blake, College of Design (COD)
- Carrie Bruce, College of Computing
- Young-Mi Choi, College of Design (COD)
- Maribeth Gandy Coleman, Interactive Media Technology Center (IMTC)
- Scott Gilliland, Interactive Media Technology Center (IMTC)
- Patricia Griffiths, College of Design (CoD)
- Harley Hamilton, College of Computing
- Fran Harris, College of Design (CoD)
- Brian Jones, Interactive Media Technology Center (IMTC)
- Frank Lucia, Consultant
- Liz Persaud, Tools for Life, College of Design (COD)
- Carolyn Phillips, Tools for Life, College of Design (COD)
- Noah Posner, College of Design (COD)
- Peter Presti, Interactive Media Technology Center (IMTC)
- Ken Thompson, College of Design (COD)
- Benjamin Thompson, Interactive Media Technology Center (IMTC)
- Bruce Walker, Psychology
- Jeffrey Wilson, Interactive Media Technology Center (IMTC)
- Clint Zeagler, Interactive Media Technology Center (IMTC)

## PEOPLE INVOLVED IN CENTER ACTIVITIES

### Faculty/Research Staff/Off-site Personnel

- Donica Allen, FEMA, Integrated Public Alert Warning Systems Project Management Office
- DeeDee Bennett, State University of New York – Albany
- Shellie Blakeney, T-Mobile
- Richard Catrambone, School of Psychology
- Kay Choido, Deaf Link
- David Dougall, Blackberry Limited
- David J. Dzumba, Microsoft
- Sara Endicott, College of Design (COD)
- Dan Heller, Deaf Link
- Avalyn Jackson, AT&T
- Kevin Jones, Kore Wireless
- Chris Langston, Facebook
- Jessica Pater, Georgia Tech Research Institute (GTRI)
- Joel Odom, GTRI
- Joiava Phillipott, Cox Communications

- Jon Sanford, College of Design (COD)
- Glenn Shell, Deaf Link
- Deborah Simpier, Hawk Networks
- William Simitzes, Kore Wireless
- Karen Peltz Strauss, KPS Collaborative Solutions (Former FCC Deputy Bureau Chief), Consumer and Government Affairs Bureau – Ret. 2018)
- Robert Todd, University System of Georgia (USG)
- Will Tucker, Atlanta BeltLine, Inc.
- Elizabeth Vega, Tracfone Wireless

### **INSTITUTIONS (on CACP sponsored grants)**

- John Bricout, University of Minnesota-Twin Cities
- John Brabyn, Smith-Kettlewell Eye Research Institute
- Claire Donehower, Georgia State University
- Julienne Greer, 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:

- 1) 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 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.

### **CACP Organizational Chart 2020-2021**

CACP is organized around five functional departments: Operations, Research, Training and Evaluation, Development, and Special Projects. Operations includes all financial and administrative activities associated with the execution of CACP business activities. Research, Testing and Evaluation, and Development departments focus on the development and management of research portfolios in their respective areas. Special Projects includes the management of the Wireless RERC and the development of large, cross-disciplinary research programs. The organizational chart does not imply a hierarchical performance review structure. Performance reviews will be the responsibility of the executive director with the possible exception of the delegation of performance reviews in the Operations department. Paul Baker will serve as the alternative CACP representative to campus and the delegate approver for the research department when the executive director is unavailable.

## CACP Organizational Chart 2020-2021

