Rebecca Sheiner
Research Scientist I
Center for Advanced Communications Policy

CURRENT FIELDS OF INTEREST:

- **User Centered Design**
- **Assistive Technology**
- **Usability Testing**

I.   MASTERY OF A COMPLEX FIELD

L.   Key Delivered Products

1. **Rapid Acceleration of Diagnostics (RADx)**
   Sponsor/ To Whom Delivered: National Institutes of Health
   Date range for work performed by the candidate: August 2021 – Present
   Describe Product: RADx is an initiative to help bring new and existing technologies to help bring COVID-19 testing to the public. The Atlanta center is a collaboration between Emory University, Children's Healthcare of Atlanta, and Georgia Tech to evaluate these devices. As a part of the Atlanta center, the Georgia Tech HomeLab group evaluated usability.
   Candidate's specific technical contributions: Sheiner has assisted in conducting over 30 usability evaluations for point of care and home test devices. These evaluations include internal evaluations, observations, user testing, and reporting.

2. **Name/Title for Key Delivered Product:** VPATs
   Sponsor/ To Whom Delivered: Ricoh
   Date range for work performed by the candidate: August 2022 – Present
   Describe Product: Voluntary Product Assessment Templates (VPATs) are standardized documents intended to indicate the conformance of information and communication technologies to the Revised 508 Standards for IT accessibility. VPATs are recommended for any ICT that will be marketed to the federal government and also provide an overview of the accessibility of a technology for other prospective buyers.
   Candidate's specific technical contributions: Sheiner conducted evaluations and contributed to the VPATs.

3. **Name/Title for Key Delivered Product:** Heuristic Evaluation of ISPs for Microsoft
   Sponsor/ To Whom Delivered: Microsoft
   Date range for work performed by the candidate: August 2022 – December 2022
   Describe Product: Sheiner contributed to a heuristic evaluation on six internet services providers (ISPs) in the United States. The heuristic evaluation is an evaluation method that helps identify usability problems against human factors heuristics. This evaluation helped the sponsor understand the high level and preliminary state of usability in the industry when customers sign up for internet service.
   Candidate's specific technical contributions: Sheiner conducted evaluations and contributed to the report.

4. **Name/Title for Key Delivered Product:** MCI Persona Development

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Sponsor/ To Whom Delivered: N/A
Date range for work performed by the candidate October 2021 – March 2022
Describe Product: Personas were developed to communicate the challenges, goals, unmet needs, and care environments of older adults with mild cognitive impairment in order contextualize research findings and pose design challenges for future interventions. Data was collected via interviews, observations and anecdotal data from fellow researchers.
Candidate's specific technical contributions: Sheiner led data collection and persona development.

II. TECHNICAL CONTRIBUTIONS AND INNOVATION

A. Research Reports
1. Farmer, S., Martinez, A., **Sheiner, R.,** and Peagler, A., "Accessibility Evaluation: MarcomCentral Digital Asset Management," Final, MarcomCentral, Inc., GR00017055, AGR DTD 7-11-22, September 2022, 27 pages.
2. Farmer, S., Peagler, A., **Sheiner, R.,** and Martinez, A., "Cox Communications Customer Discovery: Ensight App," Final, Cox Communications Inc., GR00012883, AGR DTD 10/18/2021, July 2022, 17 pages.
3. Farmer, S., Peagler, A., **Sheiner, R.,** and Martinez, A., "Cue Health Monitoring System: Preliminary Usability and Accessibility Evaluation," Final, National Institutes of Health., GR00005379, A416007, August 2022, 11 pages.
4. Farmer, S., Peagler, A., **Sheiner, R.,** and Martinez, A., "Uh-Oh Labs COVID-19 Test: ITAP Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, August 2022, 10 pages.
5. Farmer, S., Peagler, A., **Sheiner, R.,** and Martinez, A., "Mologic COVI-GO SARS-COV-2 Ag Self-Test: ITAP Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, August 2022, 11 pages.
6. Farmer, S., **Sheiner, R.,** and Martinez, A., "Clip Health Core Analyzer: Preliminary Usability and Accessibility Evaluation," Final, National Institutes of Health., GR00005379, A416007, July 2022, 12 pages.
7. Farmer, S., **Sheiner, R.,** and Martinez, A., "Roche Pilot COVID-19 At-Home Test: Preliminary Usability and Accessibility Evaluation," Final, National Institutes of Health., GR00005379, A416007, July 2022, 12 pages.
8. Farmer, S., **Sheiner, R.,** and Martinez, A., "Azure FaStep COVID-19 Antigen Pen Home Test: ITAP Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, July 2022, 8 pages.
9. Farmer, S., **Sheiner, R.,** and Martinez, A., "Mologic COVI-GO SARS-COV-2 Ag Self-Test: Preliminary Usability and Accessibility Evaluation," Final, National Institutes of Health., GR00005379, A416007, June 2022, 11 pages.
10. Farmer, S., **Sheiner, R.,** and Martinez, A., "Siemens Clinitest Rapid COVID-19 Antigen Self-Test: Preliminary Usability and Accessibility Evaluation," Final, National Institutes of Health., GR00005379, A416007, June 2022, 11 pages.
11. Farmer, S., **Sheiner, R.,** and Martinez, A., "MaximBio ClearDetect COVID-19 Antigen Home Test: Preliminary Usability and Accessibility Evaluation," Final, National Institutes of Health., GR00005379, A416007, June 2022, 9 pages.
12. Farmer, S., **Sheiner, R.,** and Martinez, A., "BD Veritor At-Home COVID-19 Test: Preliminary Usability and Accessibility Evaluation," Final, National Institutes of Health., GR00005379, A416007, June 2022, 12 pages.

13. Farmer, S., **Sheiner, R.,** and Martinez, A., "Ellume COVID-19 Home Test: Preliminary Usability and Accessibility Evaluation," Final, National Institutes of Health., GR00005379, A416007, June 2022, 14 pages.
14. Farmer, S., **Sheiner, R.,** and Martinez, A., "Twist uDetect COVID_19 Quick Test: ITAP Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, June 2022, 10 pages.
15. Farmer, S., **Sheiner, R.,** and Martinez, A., "Osang Healthcare COVID-19 Antigen Self-Test: Preliminary Usability and Accessibility Evaluation," Final, National Institutes of Health., GR00005379, A416007, May 2022, 12 pages.
16. Farmer, S., **Sheiner, R.,** and Martinez, A., "Quidel QuickVue At-Home OTC COVID-19 Test: Preliminary Usability and Accessibility Evaluation," Final, National Institutes of Health., GR00005379, A416007, May 2022, 10 pages.
17. Farmer, S., **Sheiner, R.,** and Martinez, A., "OraSure InteliSwab COVID-19 Rapid Test: Preliminary Usability and Accessibility Evaluation," Final, National Institutes of Health., GR00005379, A416007, May 2022, 10 pages.
18. Farmer, S., **Sheiner, R.,** and Martinez, A., "Azure FaStep COVID-19 Antigen Nasal Test: Preliminary Usability and Accessibility Evaluation," Final, National Institutes of Health., GR00005379, A416007, May 2022, 10 pages.
19. Farmer, S., Peagler, A., **Sheiner, R.,** and Martinez, A., "ANP .NIDS COVID-19 Antigen Home Test: Preliminary Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, April 2022, 11 pages.
20. Farmer, S., Peagler, A., **Sheiner, R.,** and Martinez, A., "AvantGen AccuRate COVID-19 SelfCheck: Preliminary Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, April 2022, 12 pages.
21. Farmer, S., Peagler, A., **Sheiner, R.,** and Martinez, A., "Azure FaStep COVID-19 Antigen Home Test: ITAP Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, March 2022, 10 pages.
22. Farmer, S., Peagler, A., **Sheiner, R.,** and Martinez, A., "Abbott PanBio COVID-19 Antigen Self-Test: ITAP Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, February 2022, 12 pages.
23. Farmer, S., Peagler, A., **Sheiner, R.,** and Martinez, A., "Boson Rapid SARS-CoV-2 Antigen Test Card: ITAP Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, February 2022, 10 pages.
24. Farmer, S., Peagler, A., **Sheiner, R.,** and Martinez, A., "Osang GeneFinder COVID-19 Ag Home Test: ITAP Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, January 2022, 11 pages.
25. Farmer, S., Peagler, A., **Sheiner, R.,** and Martinez, A., "Watmind USA SARS-Cov-2 Ag Self-Test Kit: ITAP Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, January 2022, 16 pages.
26. Farmer, S., Peagler, A., **Sheiner, R.,** and Martinez, A., "Roche COVID-19 At-Home Test: ITAP Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, December 2021, 11 pages.
27. Farmer, S., Peagler, A., and **Sheiner, R.** "Anavasi Diagnostics AscenioDx COVID-19 Test Kit: Preliminary Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, November 2021, 10 pages.
28. Farmer, S., Peagler, A., and **Sheiner, R**. "Glow Nanotech COVID-19 Ag Test: Preliminary Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, October 2021, 10 pages.
29. Farmer, S., Peagler, A., and **Sheiner, R**. "Conservation X NABIT SARS-CoV-2 Rapid Diagnostic Test: Preliminary Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, August 2021, 13 pages.

30. Farmer, S., Peagler, A., and **Sheiner, R.** "Palogen DX 64 COVID-19 Chip: Preliminary Usability Evaluation," Final, National Institutes of Health., GR00005379, A416007, August 2021, 10 pages.

III. PROJECT LEADERSHIP AND SUPERVISION

A. Leadership in Funded Research

1.	Title:	RADx Usability
	Sponsor:	NIH
	P.I.:	Farmer, Sarah
	Role:	Task Lead
	Amount Funded for Project:	$1,254,090
	Period of Performance (Project):	5/1/2020 – 9/29/2022
	Contributions:	Sheiner has assisted in conducting over 30 usability and accessibility evaluations for point of care and home test devices. These evaluations include internal evaluations, observations, user testing, and reporting.

2.	Title:	HomeLab/Cox Communications Customer Discovery
	Contract Number:	AGR DTD 10/18/2021
	Sponsor:	Cox Communications, Inc.
	P.I.:	Sarah Farmer
	Candidate's Role:	Task Lead
	Budgetary Authority?	No
	Amount Funded for Project:	94,763.00
	Period of Performance (Project):	18-Oct-2021 to 30-Sep-2022
	Period of Performance (Candidate):	15-Nov-2021 to 30-Sep-2022
	Contributions:	Sheiner led participant management for this study, including recruitment, onboarding, device installation, weekly surveys, monthly check-ins and offboarding. Sheiner analyzed participant data and feedback, developed personas, and contributed to the final report.