

# Adrienne Pichon, MPH

## Curriculum Vitae

### May 2021

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#### **Personal Data**

Place of Birth: New Orleans, LA  
Citizenship: United States of America  
Previous Last Name: Ball

#### **Contact Information**

New York, NY 10031  
ab3886@cumc.columbia.edu

#### **Education**

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|---------------------------|---|
| September 2019–Present    | Doctor of Philosophy (PhD)<br>Columbia University Department of Biomedical Informatics: New York NY<br><i>Advisor:</i> Noémie Elhadad   |
| September 2013–May 2015   | Master of Public Health (MPH)<br>Columbia University Mailman School of Public Health: New York NY<br><i>Department:</i> Sociomedical Sciences (SMS)<br><i>Certificate:</i> Sexuality, Sexual, & Reproductive Health (SSRH)<br><i>Thesis Title:</i> Sexuality Formation and Sexual Practices in Vietnam: A Nationally Representative Study<br><i>Thesis Advisor:</i> Dr. Theo Sandfort |
| August 2009–May 2013      | Bachelor of Science in Education (BSEd), Exercise Physiology<br>University of Miami: Coral Gables FL<br><i>Minors:</i> Chemistry, International Studies   |
| August 2011–December 2011 | Semester at Sea, Institute for Shipboard Education (ISE)<br>University of Virginia (UVA): Charlottesville VA  |

#### **Methods & Technical Skills**

Statistical programming (R, STATA) | Statistical analysis | Data management & analysis (STATA, R, Python, SQL, Dedoose) | C++, JavaScript, D3, jQuery, Perl, HTML | Database design and management (MS Access) | Survey design (Qualtrics, REDCap, Lighthouse Studios-CAPI) | Qualitative research methods (interviews, focus groups, usability) | Quantitative research methods (surveys, texts, blood serum, self-tracking, fitness, smart technology, app logs, metadata) | Data visualization | Consumer/clinical informatics app development & evaluation | User-centered & participatory design | Citizen Science

### **Peer-Reviewed Publications**

1. Beauchemin M, Weng C, Sung L, **Pichon A**, Abbott M, Hershman DL, Schnall R. Data Quality of Chemotherapy-Induced Nausea and Vomiting Documentation. *Applied Clinical Informatics*. 2021;12(2): 320–328. <https://doi.org/10.1055/s-0041-1728698>
2. **Pichon A**, Schiffer K, Horan E, Massey B, Bakken S, Mamykina L, Elhadad N. Divided We Stand: The Collaborative Work of Patients and Providers in an Enigmatic Chronic Disease. *Proc. ACM HCI*. 2020;4(CSCW3): Article 261. <https://doi.org/10.1145/3434170>
3. Ensari I, **Pichon A**, Lipsky-Gorman S, Bakken S, Elhadad, N. Augmenting the Clinical Data Sources for Enigmatic Diseases: A Cross-Sectional Study of Self-Tracking Data and Clinical Documentation in Endometriosis. *Applied Clinical Informatics*. 2020;11(5), 769–784. <https://doi.org/10.1055/s-0040-1718755>
4. Cho H, Powell D, **Pichon A**, Kuhns L, Garofalo R, Schnall R. Eye-tracking retrospective think-aloud as a novel approach for a usability evaluation. *International Journal of Medical Informatics*. 2019;129: 366-373.
5. Cho H, Powell D, **Pichon A**, Thai J, Bruce J, Kuhns L, Garofalo R, Schnall R. A mobile health intervention for HIV prevention among racially and ethnically diverse young men: usability evaluation. *JMIR mHealth and uHealth*. 2018;6(9): e11450.
6. Schnall R, Cho H, Mangone A, **Pichon A**, Jia H. Mobile health technology for improving symptom management in low-income persons living with HIV. *AIDS and Behavior*. 2018;22(10): 3373-3383.

### **Manuscripts In Preparation and Under Review**

1. **Pichon A**\*, Idnay B\*, Marder K, Schnall R, Weng C. Cognitive Function Characterization Using Electronic Health Records Notes. [submitted to AMIA 2021 Annual Symposium]
2. **Pichon A**, Jackman K, Winkler I, Elhadad N. The Messiness of the Menstruator and their Needs: Characterizing the Personas and Functionalities of Menstrual Trackers. [submitted to JAMIA special issue Informatics for Sex- and Gender-Related Health: Understanding the problems, developing new methods, and designing new solutions]

### **Peer Reviewed Proceedings Papers**

1. Stonbraker S, Cho H, Hermosi G, **Pichon A**, Schnall R. Usability testing of a mHealth app to support self-management of HIV-associated non-AIDS related symptoms. *International Conference on Nursing Informatics*; 2018 Jun 6-8; Guadalajara, Mexico. *Studies in Health Technology and Informatics*; 2018;250:106-110.
2. Schnall R, Cho H, Mangone A, **Pichon A**. A mobile video information provider (VIP) for dissemination of evidence from patient-centered outcomes research for improving symptom management. *European Federation of Medical Informatics, Special Topic Conference*; 2017 Oct 22-23; Tel Aviv, Israel. *Studies in Health Technology and Informatics*; 2017;244:80.

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\* Contributed equally, co-first authors

### **Peer Reviewed Podium Presentations**

1. **Pichon A**, Houterloot M, Schiffer K, Horan E, Elhadad N. Get on the same page: negotiating and aligning knowledge and expectations between patients and providers through self-tracking artifacts. Presented at: AMIA Annual Symposium; 2019; Washington DC.

### **Peer Reviewed Poster Presentations**

1. Schnall R, **Pichon A**, Scherr T. In-depth interviews to understand the feasibility of using the mLab app for promotion of HIV-self testing in young men. Poster session presented at: Creating the healthiest nation: health equity now. APHA Annual Meeting; 2018 Nov 10-14; San Diego, CA.
2. Cho H, Powell D, **Pichon A**, Bruce J, Kuhns L, Schnall R. Usability evaluation of a mobile intervention (MyPEEPS mobile) for HIV prevention among young men. Poster session presented at: Data, technology, and innovation for better health. AMIA Annual Symposium; 2018 Nov 3-7; San Francisco, CA.
3. Schnall R, **Pichon A**, Scherr T. Mixed methods feasibility study of the use of the mLab app for promoting the uptake of HIV testing. Poster session presented at: Data, technology, and innovation for better health. AMIA Annual Symposium; 2018 Nov 3-7; San Francisco, CA.
4. Schnall R, **Pichon A**, Scherr T. Feasibility of using mobile phone imaging to interpret HIV rapid self-testing results among young high-risk men. Poster session presented at: Connecting systems and people to improve population health. Public Health Informatics Conference; 2018 Aug 20-23; Atlanta, GA.
5. Schnall R, Cho H, **Pichon A**, Jia H. Mobile health technology for improving symptom management in low-income persons living with HIV. Poster session presented at: AMIA Clinical Informatics Conference; 2018 May 8-10; Scottsdale, AZ.
6. Schnall, R, Cho, H, Mangone A, **Pichon A**, Jia H. Mobile health technology for improving symptom management in low income persons living with HIV. Poster session presented at: Academy Health Conference on the Science of Dissemination and Implementation in Health; 2017 Dec 4-6; Arlington, VA.

### **Non-Peer-Reviewed Publications**

1. Messeri P, **Ball A**. Medication adherence support services. New York, NY: Columbia University, New York Health and Human Services Planning Council; 2018. CHAIN Report #2016-1. Available from: [www.nyhiv.org/data\\_chain.html](http://www.nyhiv.org/data_chain.html)
2. Messeri P, Zabel T, **Ball A**. Predictors of long-term survival for persons living with HIV: a literature review and empirical study of the New York City CHAIN cohort. New York, NY: Columbia University, New York Health and Human Services Planning Council; 2018. CHAIN Report #2016-2. Available from: [www.nyhiv.org/data\\_chain.html](http://www.nyhiv.org/data_chain.html)
3. Messeri P, **Ball A**, Sharma N. Prevalence of non-HIV comorbid health conditions in the CHAIN cohort. New York, NY: Columbia University, New York Health and Human Services Planning Council; 2016. CHAIN Report #2013-6. Available from: [www.nyhiv.org/data\\_chain.html](http://www.nyhiv.org/data_chain.html)

4. Messeri P, **Ball A**. Hepatitis C lifetime prevalence and treatment. New York, NY: Columbia University, New York Health and Human Services Planning Council; 2016. CHAIN Briefing #2015-3. Available from: [www.nyhiv.org/data\\_chain.html](http://www.nyhiv.org/data_chain.html)
5. Messeri P, **Ball A**. Place of residence and location of services. New York, NY: Columbia University, New York Health and Human Services Planning Council; 2015. CHAIN Briefing #2015-1. Available from: [www.nyhiv.org/data\\_chain.html](http://www.nyhiv.org/data_chain.html)
6. Frazer S, Howe E, Lelutiu-Weinberger C, **Ball A**. Feasibility study for LGBT SAINT: serving lesbian, gay, bisexual, and transgender adolescents in need of treatment. New York, NY: Strength in Numbers Consulting Group; 2015.

### **Non-Peer-Reviewed Presentations**

1. **Pichon A**. Acknowledging Menstrual Challenges, Approaching Menstruation through FemTech. Flash talk presented at: Multifaceted Menstruation - an Interdisciplinary Workshop at Columbia University (Menstrual Health and Gender Justice Working Group and Center for Social Difference); 2019; New York, NY.
2. Massey B, **Pichon A**, Elhadad N. Characterizing, Comparing, and Contrasting Patients' and Providers' Approaches to Endometriosis Management. Presentation at: Annual Biomedical Research Conference for Minority Students (ABRCMS); 2019; Anaheim, CA.
3. Ensari I, McKillop MM, **Pichon A**, Lipsky-Gorman S, Bakken SB, Elhadad N. Augmenting the learning health system with citizen science to tackle health inequalities. Poster session presented at: Annual Data Science Day at Columbia University; 2019; New York, NY.

### **Lectures (Invited)**

1. Biomedical Informatics Approaches to Facilitate Endometriosis Research & Care. Talk presented at: Columbia University Mailman School of Public Health Period Posse Presents: Webinar Series, Menstrual Disorders: A Focus on Endometriosis; March 2021; virtual webinar via zoom (recorded).
2. FemTech to Advance Menstrual Health. Lecture presented at Columbia University: Menstruation, Gender and Rights: Interdisciplinary Approaches Course; February 2021; virtual class via zoom.
3. Citizen Endo: Supporting patients and providers in hacking endo together through data-powered tools. Talk presented at: Endometriosis Foundation of America Annual Medical Conference and Patient Day; March 2020; New York, NY. [cancelled due to COVID-19]
4. Categorizing the complex: context matters with sex and gender in research. Talk presented at: City-As-School Annual Showcase; June 2019; New York, NY. [talk also presented in 2020]

### **Non-Academic Writing and Dissemination**

1. **Pichon A**. Working Group gives plenary panel at 2019 Society for Menstrual Cycle Research Conference. Menstrual Health & Gender Justice Blog; June 2019. Available from: <https://periodsatcolumbia.com/2019/06/19/working-group-gives-plenary-panel-at-2019-society-for-menstrual-cycle-research-conference/>

2. **Pichon A.** Menstrual Spotlight: Meet faculty fellow Nancy Reame! Menstrual Health & Gender Justice Blog; February 2019. Available from: <https://periodsatcolumbia.com/2019/02/01/menstrual-spotlight-meet-faculty-fellow-nancy-reame/>

## **Media**

1. How endometriosis disrupts women's lives: "Please just let me make it through today." Noémie Elhadad was featured and I was included in supporting footage on: CBS This Morning News; June 2019. Available from: <https://www.cbsnews.com/news/endometriosis-disrupts-womens-lives-lena-dunham-susan-sarandon-padma-lakshmi/>
2. How endometriosis disrupts women's lives: "Please just let me make it through today." Noémie Elhadad was featured and I was included in supporting material on: BBC Digital Planet; March 2019. Available from: <https://www.bbc.co.uk/programmes/w3cswfr>

**Service: Peer-Reviewer, Volunteer** *Publons profile:* <https://publons.com/researcher/3606167/adrienne-pichon/>

- Computer Supportive Collaborative Work (CSCW)
- Special Issue of ACM Transactions on Human-Computer Interaction (ToCHI): HCI and the Body: Reimagining Women's Health
- Journal of the American Medical Informatics Association (JAMIA), and the Special Issue of JAMIA: Informatics for Sex- and Gender-Related Health: Understanding the problems, developing new methods, and designing new solutions
- American Medical Informatics Association (AMIA) Annual Symposium
- American Medical Informatics Association (AMIA) Clinical Informatics Conference
- Applied Clinical Informatics (ACI)
- Journal of Medical Internet Research (JMIR)
  - JMIR mHealth and uHealth
  - JMIR Research Protocols
  - JMIR Public Health and Surveillance

## **Institutional Organizations & Committees**

August 2020 – Present	Patient Empowerment Working Group, HL7 <i>Role:</i> Participant in broader HL7 working group, and active member of the person-contributed data subgroup, contributing to a white paper
April 2019 – Present	New York Academy of Sciences
September 2018 – Present	Menstrual Health & Gender Justice Working Group <i>Institution:</i> Center for the Study of Social Difference, Columbia University: New York NY <i>Role:</i> Research Fellow
October 2013 – May 2015	Sexual and Reproductive Health Action Group (SHAG) <i>Institution:</i> Mailman School of Public Health, Columbia University: New York NY <i>Role:</i> Student member

October 2013 – May 2015      Queer Health Task Force (QHTF)  
*Institution:* Mailman School of Public Health, Columbia University: New York NY  
*Role:* Student member

### **Mentorship**

2020 – 2022 (anticipated)      *Description:* Provided support and mentorship for (1) high school student for long-term research project, with the ultimate goal of the student submitting to the Regeneron competition.  
*Duration:* Every two weeks over approximately two years, more in summer  
*Institution:* Department of Biomedical Informatics, Columbia University: New York NY

2019      *Description:* Provided support, direction, and supervision for summer internship of (1) undergraduate student.  
*Duration:* Weekly or more frequent meetings over 2 months.  
*Final Project Title:* Characterizing, Comparing, and Contrasting Patients' and Providers' Approaches to Endometriosis Management  
*Program:* Summer Fellowship  
*Institution:* Department of Biomedical Informatics, Columbia University: New York NY

2019      *Description:* Provided supervision, direction, and feedback for 1-week summer internship of (5) high school students.  
*Duration:* 4 full-days of summer internship  
*Project:* Engagement of Adolescent Girls in Menstrual App Research  
*Program:* The Chapin School, Senior Internship  
*Institution:* Department of Biomedical Informatics, Columbia University: New York NY

2018 – 2019      *Description:* Led research activities for provider interviews for PhendoPHL project, collaborating with (1) student to develop themes, codebook, and analysis. Provide support for Barnard senior thesis, a result of work together.  
*Duration:* Full academic year, weekly meetings at minimum  
*Thesis Title:* Endometriosis Storytelling through Self-Track Data: An Integrative Analysis of Digital Experience, Illness Narratives, and Clinical Encounters  
*Institution:* Department of Biomedical Informatics, Columbia University: New York NY

2017 – 2018      *Description:* Provided direction for daily research tasks and guidance for long-term projects for (12) Masters of Public Health Research Assistants.  
*Duration:* students work approx. 20 hours per week, average of 1-3 semesters per student, generally 3-5 students on staff simultaneously  
*Program:* Masters of Public Health Student Research Assistant, from Columbia University Mailman School of Public Health  
*Institution:* School of Nursing, Columbia University: New York NY

- 2017 *Description:* Provided supervision to (1) undergraduate pre-med student seeking exposure to clinical informatics research.  
*Duration:* 4 days per week, 6 weeks  
*Program:* North East Regional Alliance (NERA) MedPrep HCOP Academy  
*Institution:* School of Nursing, Columbia University: New York NY
- 2015 – 2016 *Description:* Paired to mentor (1) student research assistant, mentorship activities included survey design and implementation, data management and quality assurance procedures, and writing support.  
*Duration:* 2 days per week, 3 semesters  
*Program:* Masters of Public Health Student Research Assistant, from Columbia University Mailman School of Public Health  
*Institution:* Mailman School of Public Health, Columbia University: New York NY
- 2014 *Description:* Paired to work with (1) undergraduate research student from Kansas interested in health disparities, mentorship activities included literature review support, research study design, and data analysis.  
*Duration:* 3 days per week, 8 weeks  
*Program:* Summer Public Health Scholars Program  
*Institution:* Mailman School of Public Health, Columbia University: New York NY

## **Professional Research Experience**

### **Columbia University: New York NY**

**Department of Biomedical Informatics:** PI: Noemie Elhadad, PhD

September 2018 – September 2019

**Research Coordinator**

*Project:* Citizen Endo & Even (PI: Elhadad)

*Objective:* Data-powered women's health, currently focusing on endometriosis. The Phendo app was developed with end-users to self-track symptoms and management of endo. I am applying visual analytics and time-series analysis to identify temporal patterns using patient generated data to facilitate individual insights and to support shared decision-making between patients and providers.

### **Columbia University: New York NY**

**School of Nursing:** PI: Rebecca Schnall, PhD, MPH, RN-BC

February 2018 – September 2018

**Project Manager**

February 2017 – February 2018

**Research Coordinator**

*Project:* **MyPEEPS**, Pragmatic Clinical Trial of MyPEEPS Mobile to Improve HIV Prevention Behaviors in Diverse Adolescent MSM (U01 MD011279, NIH/NIMHD) (PI: Schnall/Garofalo)

*Objective:* The MyPEEPS Mobile project is a sexual health education curriculum for HIV prevention and sexual health promotion, based in 4 cities. I was responsible for setting up research activities across phases and sites (traveling twice to Birmingham to train staff). I oversaw Qualtrics and REDCap survey creation and distribution. I recruited for and conducted interviews (n=10, each site) about cultural ideas of gender and sexuality, HIV and PrEP knowledge, and LGBT slang to update app curriculum. I substantively contributed to usability design, implementation (eye tracking and retrospective think-aloud protocol), and analysis (n=20, total) and worked with the research team, app developers, and other stakeholders to iteratively apply app updates from participatory research findings. Finally, I set up and implemented pilot procedures (2 time-points, n=10, each site) and modified to successfully manage the launch of the full RCT (5 time-points, 2 conditions, n=700 total).

*Project:* **mLab**, mLab App for Improving Uptake of Rapid HIV Self-testing and Linking Youth to Care (R01 MH118151-01, NIH/NIMH) (PI: Schnall/Garofalo)

*Objective:* The mLab app utilizes mobile phone imaging and cloud-based analysis via an image processing algorithm (originally validated to detect and report malaria) to provide real-time feedback on home-based OraQuick (lateral flow assay) HIV test results. I contributed to the initial feasibility study, where we recruited and elicited feedback from 20 YMSM about their potential use of the app. I presented results of the feasibility study at the 2018 Public Health Informatics Conference, and contributed to the successful proposal for the upcoming full RCT (n=300).

*Project:* **VIP-HANA**, Video Information Provider for HIV-Associated Non-AIDS (VIP-HANA) Symptoms (R01 NR015737, NIH/NINR) (PI: Schnall)

*Objective:* The VIP-HANA app utilizes symptom self-tracking to provide strategies for symptom self-management for people living with HIV (PLWH). I contributed to the usability evaluation (n=20), including an assessment of symptom data visualizations using a concurrent think-aloud protocol. I also managed the research team while this project was launched (2 time-points, 2 conditions, n=100).

*Project:* **VIP-HANA Gender Supplement**, Video Information Provider for HIV-Associated Non-AIDS (VIP-HANA) Symptoms (Supplement) (3R01 NR015373-02S1) (PI: Schnall)

*Objective:* Utilizing Ecological Momentary Assessments (EMAs) to enable patients to self-track symptom data using SMS text messaging in real-time, combined with hormone levels assessed at baseline with blood serum, this project aims to understand gender-differences in symptom experience for PLWH. Specifically, investigators sought to understand how women in different phases of menopause experience symptoms (blood draw at baseline, 20 EMAs, n=25 men, n=25 pre-menopausal women, n=25 peri-menopausal women, n=25 post-menopausal women). I was responsible for coordinating logistics of this project, implementing biological specimen data collection at the Irving Institute Clinical Research Resource, and assembled, cleaned, and analyzed data from various data sources.

*Project:* **mVIP**, Use of mHealth Technology for Supporting Symptom Management in Underserved Persons Living with HIV (R21 NR015737, DHHS/AHRQ) (PI: Schnall)

*Objective:* Symptom-self management strategies were translated from a paper-based manual into an informatics app for PLWH. Patients self-track symptoms and receive text and video strategies to mitigate symptoms (2 time-points, 2 conditions, n=80). Consistent with user-centered design, end-users were involved in the iterative, multi-level design and evaluation of the app. I conducted follow-up visits, coordinated and conducted focus groups (n=36, Dr. Bakken advised, I facilitated 1 of 4 sessions), and conducted in-depth interviews (n=10) about real-world usability factors. I also created a flexible tracking database using MS Access, initially for use with this project.

*Project:* **Wise App**, The Wise App Trial for Improving Health Outcomes in PLWH (R01 HS025071, AHRQ) (PI: Schnall)

*Objective:* The Wise App Trial utilizes a cellular/Bluetooth enabled pill bottle and FitBit activity tracker to support medication adherence and promote wellness among PLWH (3 time-points, 2 conditions, n=300). I managed the research team that implemented this project, and contributed to development meetings with software developers.

## **Columbia University: New York NY**

**Mailman School of Public Health:** PI: Peter Messeri, PhD & Angela Aidala, PhD

June 2015 – February 2017

December 2014 – June 2015

**Junior Programmer  
Research Assistant**

*Project:* **CHAIN** (Community Health Advisory and Information Network), Community Health Project (PI: Messeri/Aidala)

*Objective:* The CHAIN project is a prospective, representative longitudinal study of PLWH in NYC and the surrounding counties. The mission of CHAIN is to provide systematic data from the perspective of PLWH about their needs for health and human services, encounters with HIV services, and health-related quality of life. The CHAIN data are used to inform allocation of Ryan White funding to NYC agencies and city policies surrounding HIV through the HIV Planning Council (including 'HASA for All'). I designed and implemented a new Computer Assisted Personal Interview (CAPI) system with 1000+ fields including complex skip logic and looping patterns. I updated the data management procedures including writing code to preprocess data and generate useful relational datasets. I contributed to data analysis and dissemination of results (including Structural Equation Modeling).

*Project:* **WT Grant** Evidence-Based Policy of Obesity and Childhood Vaccinations (PI: Messeri/Nathanson)

*Objective:* This qualitative study focused on exploring the use of evidence in enacting policy at the state level, using case study states from across the political spectrum. I contributed logistical, technical, and general research support including qualitative coding with Dedoose software.



**Strength in Numbers Consulting Group: New York NY: PI: Somjen Frazer**

February 2014 – February 2017

**Research and Program Development Assistant**

*Project:* **LGBT SAINT** (Serving Adolescents in Need of Treatment) (PI: Frazer)

*Objective:* This feasibility study was conducted for the LGBT Center of NYC, to design a treatment program and referral network for young LGBT people facing challenges with alcohol and illicit drugs. This project fulfilled my MPH practicum requirements. I documented and developed an interactive intake flow map. I also organized literature reviews, notes from research meetings, qualitative transcripts from focus groups, and quantitative survey data.

*Project:* **New York State LGBT+ Health and Human Services Needs and Resources Assessment** (PI: Frazer)

*Objective:* This project was commissioned on behalf of the New York State LGBT Health & Human Services Network to inform programming and policy change and to communicate with broad audiences about LGBT disparities in health. I contributed detailed data checks, minimal writing, and flexible data visualizations via reusable code template.

**Tema General Hospital: Tema, Ghana**

May 2012 – July 2012

**Research Assistant**

*Project:* **Exploratory Research on Contraceptive Knowledge and Unsafe Abortion** (PI: Kessler)

*Objective:* To explore contraceptive knowledge and attitudes among women in Ghana. I developed and implemented a survey for prenatal patients to determine level of knowledge of female anatomy, physiology, and family planning methods including access to abortion and collected data from surveys. Using findings, I drafted an educational pamphlet integrating cultural standards for clinical use. I also observed the clinical workflow in the maternity ward.

**Professional Certifications**

December 2017 – Present

Sponsored Projects Certification

*Institution:* Office of the Executive Vice President for Research, Columbia University: New York NY

Training program for professional research staff at Columbia University covering key compliance and regulatory requirements and resources available to support research activities and proposal development.

Current RASCAL

HIPAA; Human Subjects & IT Security; Clinical Research Coordinator; Responsible Conduct of Research; FDA-Regulated Research (with minors); Dry Ice; Bloodborne Pathogens