Daniel A. Epstein

Employment

2018-Present University of California, Irvine

Assistant Professor

Department of Informatics, Donald Bren School of Information & Computer Sciences

Courtesy appointment, Department of Computer Science

Areas: Human-Computer Interaction, Ubiquitous Computing, Social Computing, Health

Education

2012-2018 University of Washington

Ph.D., Computer Science & Engineering, 2018 Dissertation title: Everyday Personal Informatics

Advisors: James Fogarty, Sean Munson

Committee: James Fogarty, Sean Munson, David McDonald, Mira Dontcheva, Jessica Hullman

M.S., Computer Science & Engineering, 2014

2008-2012 University of Virginia

B.S., Computer Science with Highest Distinction, 2012

Advisors: Kevin Skadron, Aaron Bloomfield

Conference Publications

2020 C14 Supporting Caring among Intergenerational Family Members through Family Fitness Tracking

Qingyang Li, Clara Caldeira, <u>Daniel A. Epstein</u>, Yunan Chen

PervasiveHealth 2020 [Full Presentation; Acceptance rate 33%]

C13 Yarn: Adding Meaning to Shared Personal Data through Structured Storytelling

<u>Daniel A. Epstein</u>, Mira Dontcheva, James Fogarty, Sean A. Munson GI 2020 [Acceptance Rate 52%]

2018 C12 Examining Self-Tracking by People with Migraine: Goals, Needs, and Opportunities in a Chronic Health Condition

Jessica Schroeder, Chia-Fang Chung, <u>Daniel A. Epstein</u>, Ravi Karkar, Adele Parsons, Natalia Murinova, James Fogarty, Sean A. Munson

DIS 2018 [Acceptance Rate 23%] Best Paper Honorable Mention, Top 5% of Submissions

2017 C11 Examining Menstrual Tracking to Inform the Design of Personal Informatics Tools

<u>Daniel A. Epstein</u>, Nicole B. Lee, Jennifer H. Kang, Elena Agapie, Jessica Schroeder, Laura R. Pina, James Fogarty, Julie A. Kientz, Sean A. Munson CHI 2017 [Acceptance Rate 25%] Best Paper Award, Top 1% of Submissions

C10 TummyTrials: A Feasibility Study of Using Self-Experimentation to Detect Individualized Food Triggers

Ravi Karkar, Jessica Schroeder, <u>Daniel A. Epstein</u>, Laura R. Pina, Jeffrey Scofield, James Fogarty, Julie A. Kientz, Sean A. Munson, Roger Vilardaga, Jasmine Zia CHI 2017 [Acceptance Rate 25%] Best Paper Honorable Mention, Top 5% of Submissions

2016 C9 Reconsidering the Device in the Drawer: Lapses as a Design Opportunity in Personal Informatics

<u>Daniel A. Epstein</u>, Jennifer H. Kang, Laura R. Pina, James Fogarty, Sean A. Munson UbiComp 2016 [Acceptance Rate 24%]

C8 Taking 5: Work-Breaks, Productivity, and Opportunities for Personal Informatics for Knowledge Workers

<u>Daniel A. Epstein</u>, Daniel Avrahami, Jacob T. Biehl CHI 2016 [Acceptance Rate 23%]

C7 Crumbs: Lightweight Daily Food Challenges to Promote Engagement and Mindfulness

<u>Daniel A. Epstein</u>, Felicia Cordeiro, James Fogarty, Gary Hsieh, Sean A. Munson CHI 2016 [Acceptance Rate: 23%]

C6 Beyond Abandonment to Next Steps: Understanding and Designing for Life after Personal Informatics Tool Use

<u>Daniel A. Epstein</u>, Monica Caraway, Chuck Johnston, An Ping, James Fogarty, Sean A. Munson CHI 2016 [Acceptance Rate: 23%]

2015 C5 A Lived Informatics Model of Personal Informatics

<u>Daniel A. Epstein</u>, An Ping, James Fogarty, Sean A. Munson UbiComp 2015 [Acceptance Rate: 30%]

C4 Barriers and Negative Nudges: Exploring Challenges in Food Journaling

Felicia Cordeiro, <u>Daniel A. Epstein</u>, Edison Thomaz, Elizabeth Bales, Arvind K. Jagannathan, Gregory D. Abowd, James Fogarty CHI 2015 [Acceptance Rate: 23%] Best Paper Honorable Mention, Top 5% of Submissions

C3 From "nobody cares" to "way to go!": A Design Framework for Social Sharing in Personal Informatics

<u>Daniel A. Epstein</u>, Bradley H. Jacobson, Elizabeth Bales, David W. McDonald, Sean A. Munson CSCW 2015 [Acceptance Rate: 28%]

2014 C2 Taming Data Complexity in Lifelogs: Exploring Visual Cuts of Personal Informatics Data

<u>Daniel A. Epstein</u>, Felicia Cordeiro, Elizabeth Bales, James Fogarty, Sean A. Munson DIS 2014 [Acceptance Rate: 26%]

2013 C1 Fine-Grained Sharing of Sensed Physical Activity: A Value Sensitive Approach

<u>Daniel A. Epstein</u>, Alan Borning, James Fogarty UbiComp 2013 [Acceptance Rate: 23%]

Journal Publications

2020 J7 Mapping and Taking Stock of the Personal Informatics Literature

<u>Daniel A. Epstein</u>, Clara Caldeira, Mayara Costa Figueiredo, Lucas M. Silva, Xi Lu, Lucretia Williams, Jong Ho Lee, Qingyang Li, Simran Ahuja, Qiuer Chen, Craig Hilby, Sazeda Sultana, Payam Dowlatyari, Elizabeth V. Eikey, Yunan Chen Proceedings of the ACM: Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), Volume 4 Issue 4

J6 Exploring Design Principles for Sharing of Personal Informatics Data on Ephemeral Social Media

<u>Daniel A. Epstein</u>, Siyun Ji, Danny Beltran, Griffin D'Haenens, Zhaomin Li, Tan Zhou Proceedings of the ACM: Human-Computer Interaction, Volume 4 Issue CSCW2

J5 Raising the Responsible Child: Collaborative Work in the Use of Activity Trackers for Children

Isıl Oygur, Daniel A. Epstein, Yunan Chen

Proceedings of the ACM: Human-Computer Interaction, Volume 4 Issue CSCW2

J4 A Life of Data - Characteristics and Challenges of Very Long-Term Self-Tracking for Health and Wellness

Jochen Meyer, Judy Kay, <u>Daniel A. Epstein</u>, Parisa Eslambolchilar, Lie Ming Tang ACM Transactions on Computing for Healthcare (HEALTH), Volume 1 Issue 2

2018 J3 Defining Adherence: Making Sense of Physical Activity Tracker Data

Lie Ming Tang, Jochen Meyer, <u>Daniel A. Epstein</u>, Kevin Bragg, Lina Engelen, Adrian Bauman, Judy Kay Proceedings of the ACM: Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), Volume 2 Issue 1

2017 J2 Friends Don't Need Receipts: The Curious Case of Social Awareness Streams in the Mobile Payment App Venmo

Monica Caraway, Daniel A. Epstein, Sean A. Munson

Proceedings of the ACM: Human-Computer Interaction, Volume 1 Issue CSCW [Acceptance Rate 27%]

J1 Semi-automated tracking: A Balanced Approach for Self-Monitoring Applications

Eun Kyoung Choe, Saeed Abdullah, Mashfiqui Rabbi, Edison Thomaz, <u>Daniel A. Epstein</u>, Matthew Kay, Felicia Cordeiro, Gregory D. Abowd, Tanzeem Choudhury, James Fogarty, Bongshin Lee, Mark Matthews, Julie A. Kientz IEEE Pervasive Computing, Volume 16 Issue 1

Book Chapters

2020 B1 Monitoring Menses: Design Based Investigations of Menstrual Tracking Applications

Sarah Fox, Daniel A. Epstein

Chapter in The Handbook of Critical Menstruation Studies, Palgrave MacMillan

Workshops Organized

2018 O3 A Short Workshop on Next Steps Toward Long Term Tracking

Jochen Meyer, <u>Daniel A. Epstein</u>, Parisa Eslambolchilar, Judy Kay, Lie Ming Tang CHI 2018 Workshop

2017 O2 New Frontiers of Quantified Self 3: Exploring Understudied Categories of Users

Amon Rapp, Federica Cena, Judy Kay, Bob Kummerfeld, Frank Hopfgartner, Till Plumbaum, Jakob Eg Larsen, <u>Daniel A. Epstein</u>, Rúben Gouveia UbiComp 2017 Workshop

2016 O1 New Frontiers of Quantified Self 2: Going Beyond Numbers

Amon Rapp, Federica Cena, Judy Kay, Bob Kummerfeld, Frank Hopfgartner, Till Plumbaum, Jakob Eg Larsen, <u>Daniel A. Epstein</u>, Rúben Gouveia UbiComp 2016 Workshop

Panels

2019 P1 Women's Health, Wellbeing, & Empowerment

Neha Kumar, <u>Daniel A. Epstein</u>, Catherine D'Ignazio, Amanda Lazar, Andrea Parker, Muge Haseki, Anupriya Tuli CSCW 2019 Panel

Workshop Publications

2020 W13 Exploring Voice Input Opportunities in Multimodal Food Journaling

Lucas M. Silva, Yuqi Huai, <u>Daniel A. Epstein</u>
CHI 2020 Workshop (Conversational Agents for Health and Wellbeing)

2019 W12 Designing to Provide Social Support to Job Seekers After Prison Release

Daniel A. Epstein, Naomi F. Sugie

CSCW 2019 Workshop (Life Transitions and Social Technologies)

W11 Examining Self-Tracking by People with Migraine: Goals, Needs, and Opportunities in a Chronic Health Condition

Jessica Schroeder, Chia-Fang Chung, <u>Daniel A. Epstein</u>, Ravi Karkar, Adele Parsons, Natalia Murinova, James Fogarty, Sean A. Munson CHI 2019 Symposium (Workgroup on Interactive Systems in Healthcare)

2018 W10 Helping People Find Support through Data: Reflections from Four Projects

on Sharing Personal Informatics Data Online

Daniel A. Epstein

CSCW 2018 Workshop (Social Issues in Personal Informatics)

2017 W9 Exploring Opportunities for Storytelling with Everyday Personal Data

<u>Daniel A. Epstein</u>, James Fogarty, Sean A. Munson CHI 2017 Workshop (Quantified Data & Social Relationships)

W8 Exploring New Design Directions for Menstrual Tracking Technology

<u>Daniel A. Epstein</u>, Nicole B. Lee, Jennifer H. Kang, Elena Agapie, Jessica Schroeder, Laura R. Pina, James Fogarty, Julie A. Kientz, Sean A. Munson CHI 2017 Workshop (Hacking Women's Health)

2015 W7 Personal Informatics in Everyday Life

<u>Daniel A. Epstein</u>
UbiComp/ISWC 2015 Doctoral School

W6 Wearables of 2025: Designing Personal Informatics at a Broader Audience

<u>Daniel A. Epstein</u>, Nicole B. Lee, Elizabeth Bales, James Fogarty, Sean A. Munson CHI 2015 Workshop (Beyond Personal Informatics: Designing for Experiences with Data)

2014 W5 Failures in Sharing Personal Data on Social Networking Sites

<u>Daniel A. Epstein</u>, James Fogarty, Sean A. Munson UbiComp 2014 Workshop (Disasters in Personal Informatics: The Unpublished Stories of Failure and Lessons Learned)

W4 Design Considerations for Socially Sharing Quantified Self

Daniel A. Epstein, Elizabeth Bales and Sean A. Munson

CHI 2014 Workshop (Beyond Quantified Self: Data for Wellbeing)

2013 W3 Improving Personal Informatics Through Social Sharing

Daniel A. Epstein

UbiComp/ISWC 2013 Doctoral School (Junior Track)

W2 Examining Obstacles to Sharing Fine-Grained Personal Activity Data

Daniel A. Epstein and James Fogarty

CHI 2013 Workshop (Personal Informatics in the Wild: Hacking Habits for Health & Happiness)

2012 W1 Multi-Granularity Redundancy in Multi-Core SIMT

Daniel A. Epstein, Kevin Skadron, and Brett H. Meyer (2012).

DFM&Y 2012 (Workshop on Design for Manufacturability and Yield)

Mentorship and Advising

University of California, Irvine

2018-Present

Ph.D. Student Advising

Eunkyung Jo (Informatics, Fall 2020-Present)

Xi Lu (Informatics, Fall 2019-Present)

Coauthor on J7

Lucas de Melo Silva (Informatics, Fall 2019-Present)

Lead author on W13, coauthor on J7

Dennis Wang (Informatics, Fall 2020-Present)

M.S. Research Mentorship

Jong Ho Lee (Computer Science M.S., Winter 2020-Present)

Coauthor on J7

Tan Zhou (Informatics M.S., Spring & Summer 2019)

Coauthor on J6

Undergraduate Honors Thesis Mentorship

Yuqi Huai (Computer Science & Software Engineering B.S., Winter 2019-Winter 2020)

Winner of UCI ICS Undergraduate Award for Outstanding Contribution to Research

Coauthor on W13

Griffin D'Haenens (Computer Science B.S., Winter & Spring 2019)

Coauthor on J6

Zhaomin Li (Software Engineering B.S., Winter & Spring 2019)

Coauthor on J6

Undergraduate Research Mentorship

David Nguyen (Software Engineering B.S., Fall 2020-Present)

Sruthi Ramabadran (Psychology B.S., Fall 2020-Prsent)

Ryan Mohta (Computer Science B.S., Summer 2020-Present)

SURP Fellowship, Summer 2020

Marawin Chheang (Software Engineering B.S., Winter 2020-Present)

SURF-IOT Fellowship & SURP Fellowship (Honorary), Summer 2020

Siyun Ji (Informatics & Computer Science B.S., Spring 2019-Summer 2020)

Coauthor on J6

Ryan Kato (Computer Science B.S., Winter 2020-Spring 2020)

Payam Dowlat Yari (Software Engineering B.S., Winter 2020-Spring 2020)

Coauthor on J7

Sazeda Sultana (Informatics B.S., Winter 2020-Spring 2020)

Coauthor on J7

Simran Ahuja (Informatics B.S., Winter 2020-Spring 2020)

Coauthor on J7

Julie Tran (Informatics B.S., Fall 2019-Winter 2020)

Dakyung Go (I-SURF program, visiting from Kyung Hee University, Summer & Fall 2019)

Craig Hilby (visiting from University of Texas at Dallas, Summer 2019)

Coauthor on J7

Danny Beltran (Informatics B.S., Winter & Spring 2019)

Coauthor on J6

Kimberly Flores (Informatics B.S., Winter & Spring 2019)

Liangze Yu (Computer Science B.S., Winter 2019)

Ph.D. Topic Proposals

Je Seok Lee (Summer 2020)

Fatema Akbar (Fall 2019)

Ph.D. Advancement Committees

Fatema Akbar (Spring 2019)

Mayara Costa Figueiredo (Spring 2019)

Ted Grover (Spring 2019)

Mustafa Hussain (Spring 2019)

Ph.D. Comprehensive Exam Committees

Mayara Costa Figueiredo (Fall 2018)

Lu He (Fall 2019)

M.S. Thesis Defenses

Qingyang Li (Fall 2019)

University of Washington

2013-2018 Directed Research Groups (HCDE 496/596)

With Sean Munson from 2013 to 2015. Mentored 19 masters and undergraduate students over 5 quarters.

Work from group resulted in C3, C5, C6, C13, W4, with student coauthors on C3, C5, C6.

Individual Students mentored outside Directed Research Groups

Monica Caraway (HCDE M.S., Winter 2016-Spring 2017)

Lead author on J2, coauthor on C6

Sol Choi (HCDE B.S., Fall 2016)

Jennifer Kang (CSE & iSchool B.S., Winter 2016-Summer 2016)

Coauthor on C9, C11, W8

Tejas Bharadwaj (visiting from Bellevue High School, Summer 2015)

King Xia (CSE B.S. honors thesis, Fall 2014-Spring 2015)

Jennifer Kam (visiting from Wellsley College, Summer 2014)

Fundraising

External Fundraising

\$174,999 NSF CRII CHS #1850389

(2019-2021) Examining a Multimodal Approach to Lower the Burden of Food Journaling

Sole PI

Internal Fundraising

\$4,920 Academic Senate Council on Research, Computing, and Libraries (CORCL)

(2020) Children's Introduction to Wearable Technologies:

Use of Activity Trackers and Smartwatches in Families for Health Tracking

\$75,000 ICS Research Award, Exploration Category

(2020-2021) Self-Tracking, Prediction, and Technology Design in Fertility Care

Co-PI (with PI Yunan Chen, External Collaborator H. Irene Su)

\$2,885 Academic Senate Council on Research, Computing, and Libraries (CORCL)

(2019) Designing Data-Driven Stickers for Support and Advice on Social Media

Teaching Experience

University of California, Irvine

2018-Present Instructor

Seminar Informatics (IN4MATX 209S): Fall/Winter/Spring 2020-2021

User Interaction Software (IN4MATX 133): Fall 2018, Fall 2019, Winter 2021

Introduction to Ubiquitous Computing (IN4MATX 241/CS 248A): Winter 2019, Winter 2021 Moving Human Subjects Research Online (IN4MATX 299, with Stacy Branham): Spring 2020

Personal Informatics (IN4MATX 295): Winter 2020

User Interface Design & Evaluation (IN4MATX 231): Fall 2019

University of Washington

2014-2016 Teaching Assistant

Advanced Topics in HCI (CSE 510): Winter 2016, HCI Capstone (CSE 441): Spring 2015,

Introduction to HCI (CSE 440): Autumn 2014

2013-2016 Tutor

Data Structures and Algorithms (CSE 373), Data Abstractions (CSE 332),

Software Design & Implementation (CSE 331), Database Systems Internals (CSE 444)

University of Virginia

2009-2012 Teaching Assistant

Introduction to Programming (CS 1110), Operating Systems (CS 4414),

Game Design (CS 4501), Algorithms (CS 4102), Program and Data Representation (CS 2150)

Professional Experience

Summer Adobe, Research Intern, Creative Intelligence Lab

2017 Mentor: Mira Dontcheva

Designing for telling stories of accomplishment with personal data, published in C13.

Summer FXPAL, Research Intern

2015 Mentors: Daniel Avrahami, Jacob Biehl

Understanding and designing for breaks taken by knowledge workers, published in C8.

2012-2018 University of Washington, Research Assistant, DUB Group

Advisors: James Fogarty, Sean Munson

Exploring how personal informatics can align with people's everyday experiences.

2010-2012 University of Virginia, Undergraduate Research Assistant, LAVA Lab

Advisors: Kevin Skadron, Brett Meyer

Increasing manufacturing reliability in single-instruction, multiple-data (SIMD) processors.

Summer Microsoft, Software Development Engineer in Test Intern, Xbox
2011, 2012 Wrote web service test framework for issuing game console commands

Service, Awards, and Honors

Program Committees

2021 CHI (Subcommittee – Health)

CSCW

2020 PervasiveHealth

CSCW

CHI (Subcommittee - Health)

2019 PervasiveHealth (Senior Program Committee)

CHI (Subcommittee – Understanding People: Theory, Concepts, and Methods)

2018 CHI Workshop on Data Visualization on Mobile Devices

2017 PervasiveHealth

CHI Workshop on Quantified Data and Social Relationships

2016 CHI Late-Breaking Work

HealthWear

2015 UbiComp Workshop on New Frontiers on Quantified Self

Reviewing

2014-Present CHI (2014-2021)

UbiComp/IMWUT (2014-2021)

CSCW (2017-2021) DIS (2016-2020)

UIST (2017, 2019-2020)

MobileHCI (2014-2019)

Additional Journals including TiiS, IJHCI, IEEE Pervasive, JMIR, Nature Human Behavior, Human-Computer Interaction, and Foundations & Trends in Human Computer Interaction

 $16\ special\ recognitions$ for a review for DIS, UbiComp/IMWUT, CSCW, or CHI

University and Departmental Service

University of California, Irvine

2020 Faculty Hiring Committee, Health Informatics

2019 Faculty Hiring Committee, Human-Computer Interaction and Design

2018-Present Informatics Bachelor's Curriculum Committee

2019-Present HCIC representative

University of Washington

2016-2017 DUB Student Coordinator

2013-2017 UW ACM International Collegiate Programming Contest (ICPC) Coach

| 2013 | DUB Food Coordinator |
|------------------------------|--|
| 2017 2016 2014 2013 | Other Service Student Volunteering UbiComp/ISWC Student Volunteer Chair UbiComp/ISWC UIST Program Committee Meeting UbiComp/ISWC UbiComp/ISWC CHI |
| 2019 2018 2017 | Awards Schloss Dagstuhl Travel Grant (for Dagstuhl Seminar 19292, Mobile Data Visualization) Best Paper Honorable Mention, DIS (for C12, top 5%) Adobe Research Fellowship Finalist Best Paper Award, CHI (for C11, top 1%) Best Paper Honorable Mention, CHI (for C10, top 5%) |
| 2015 | Best Paper Honorable Mention, CHI (for C4, top 5%) |
| 2013 | UbiComp Travel Grant UbiComp Travel Grant |
| 2012 | Louis T. Rader UVA CS Departmental award for excellence in service |
| 2011 | Louis T. Rader UVA CS Departmental award for excellence in teaching |
| | Invited Talks |
| 2020 | Tracked Data and Women's Health With Mayara Costa Figueiredo and Yunan Chen SURF-IoT Program, University of California, Irvine, August 2020 |
| | Yarn: Adding Meaning to Shared Personal Data through Structured Storytelling DUB Seminar, University of Washington, May 2020 |
| 2019 | Overcoming Barriers to Everyday Personal Tracking HCI@KAIST Seminar, December 2019 |
| 2018 | Everyday Personal Informatics University of Illinois, Urbana-Champaign, April 2018 University of Minnesota, Twin Cities, March 2018 University of California, Irvine, March 2018 Indiana University, Bloomington, March 2018 University of Chicago, March 2018 University of Utah, February 2018 University of Rochester, February 2018 Pennsylvania State University, January 2018 FXPAL, January 2018 University of California, Santa Cruz, January 2018 |
| 2017 | Personal Tracking in Everyday Life |

Fitbit, July 2017

2016 Crumbs: Lightweight Daily Food Challenges to Promote Engagement and Mindfulness Computer Science & Engineering Industrial Affiliates, University of Washington, October 2016

Using Personal Data in Everyday Life: Actionable Insights, Self-Representation, and Eliciting Support International Society for Research on Internet interventions (ISRII) Scientific Meeting, April 2016

2015 A Lived Informatics Model of Personal Informatics

Barriers and Negative Nudges: Exploring Challenges in Food Journaling

Computer Science & Engineering Industrial Affiliates, University of Washington, October 2015

A Lived Informatics Model of Personal Informatics

FXPAL, September 2015

Personal Informatics in Everyday Life

HCI Seminar, Stanford University, September 2015

Receiving Value and Social Support from Personal Informatics Data

University of Maryland, January 2015

2013 Fine-Grained Sharing of Sensed Physical Activity: A Value Sensitive Approach

Computer Science & Engineering Industrial Affiliates, University of Washington, October 2013

Guest Lectures

University of California, Irvine

2018-Present

User's Experience with a Product Service System:

an Analysis of Activity-Oriented Wearables for Children

With Isıl Oygur

IN4MATX 295 (Connected Learning), February 2020

Aligning Personal Tracking with Everyday Life

ICS 90 (New Student Seminar), University of California, Irvine, December 2019 ICS H197 (Honors Seminar), University of California, Irvine, October 2019

Field Deployments

IN4MATX 295 (Digital Methods), University of California, Irvine November 2019

Everyday Personal Informatics

ICS H197 (Honors Seminar), University of California, Irvine, November 2018

University of Washington

2014-2017 Everyday Personal Informatics

HCDE 419 (Concepts in HCI), May 2017

Behavior Change and Personal Informatics

HCDE 419 (Concepts in HCI), April 2016

Experiment Design and Statistics

CSE 510 (Advanced Topics in HCI), January 2016

Task Analysis

CSE 440 (Introduction to HCI), October 2014

Other Universities

2014-Present Finding Support Through Personal Informatics Data

CS 124 (User Interfaces and User Experience), Pomona College, April 2019

More than Interaction Design: Exposing the Breadth of HCI

CS 3205 (HCI in Software Development), University of Virginia, October 2014

Selected Press

2020 What your Period Tracker App Knows About You

Consumer Reports (Donna Rosato, January 2020)

 $\underline{https://www.consumerreports.org/health-privacy/what-your-period-tracker-app-knows-about-you/health-privacy/what-your-period-health-privacy/health-privac$

2019 The Trouble with Period Trackers

Parentlology (Jenny Heitz, May 2019)

https://parentology.com/the-trouble-with-period-trackers/

2018 Period Tracking Apps Taught Me More About My Flow Than Sex Ed Ever Did

Mashable (Amanda Luz Herring Santiago, September 2018)

https://mashable.com/article/period-tracking-apps-sex-ed/

Drug Deals and Breakups: Venmo Social Feed Rankles Privacy Advocates

The Wall Street Journal (Peter Rudegeair, August 2018)

https://www.wsi.com/articles/drug-deals-and-breakups-venmo-social-feed-rankles-privacy-advocates-1533639600

The Race To Hack Your Period is On

Elle (Marina Khidekel, June 2018)

https://www.elle.com/beauty/health-fitness/a21272099/clue-period-app/

2017 Are You Making This Top Tracker Mistake? Here's How to Stop

Fitbit Blog (Danielle Kosecki, October 2017)

https://blog.fitbit.com/memory-techniques

Period Tracking Apps are Unreliable, But Here's Why We Should Still Use Them

Verily Magazine (Gabriella Patti, August 2017)

 $\underline{https://verilymag.com/2017/08/reliable-accurate-period-tracker-online-app}$

Chances Are Your Period App is B.S.

Cosmopolitan (Elizabeth Narins, May 2017)

http://www.cosmopolitan.com/health-fitness/a9598638/period-app-accuracy/

Do Period Tracking Apps Work? They Might Not be as Accurate as You Think

Bustle (Georgina Lawton, May 2017)

https://www.bustle.com/p/do-period-tracking-apps-work-they-might-not-be-as-accurate-as-you-think-55743

The Awful Pinkness of Period Apps

The Atlantic (Sarah Zhang, May 2017)

https://www.theatlantic.com/health/archive/2017/05/period-apps-pink/525207/

How to Choose a Period Tracking App that Actually Works for You

Health.com (Amanda MacMillan, May 2017)

http://www.health.com/sexual-health/period-tracker-app-complaints

Period tracking apps often 'disappoint'

Gynecology and Technology (May 2017)

http://www.figo.org/news/period-tracking-apps-often-'disappoint'-0015561

Period-Tracking Apps get Failing Grade: They're Not Accurate. And They're Way Too Pink.

STAT News (Usha Lee McFarling, May 2017)

https://www.statnews.com/2017/05/02/period-tracking-apps-flaws/

2016 From the Community: What Happens When You Take Off Your Fitness Tracker?

Chicago Tribune (Advocate Christ Medical Center, September 2016)

 $\frac{\text{http://www.chicagotribune.com/suburbs/daily-southtown/community/chi-ugc-article-what-happens-when-you-take-off-your-fitness-t-2016-09-16-story.html}$

This is What Happens When You Stop Using Your Fitness Tracker

Men's Fitness (Brittany Smith, September 2016)

http://www.mensfitness.com/life/gearandtech/what-happens-when-you-stop-using-your-fitness-tracker

From Guilt to Relief: The Emotional Impact of Giving Up Activity Tracking

Yahoo! News, Digital Trends (September 2016)

https://www.yahoo.com/news/guilt-relief-emotional-impact-giving-070948996.html

Why You Shouldn't Feel Guilty About Ditching Your Fitbit

Time.com (Amanda MacMillan, September 2016)

http://time.com/4500481/fitbit-fitness-tracker/

Feel Guilty About Ditching Your Fitbit? You're Not Alone

Health.com (Amanda MacMillan, September 2016)

http://www.health.com/fitness/fitbit-use-guilt

New Reasons Why You Should Keep a Food Journal

Wall Street Journal (Sumathi Reddy, May 2016)

 $\underline{http://www.wsj.com/articles/new-reasons-why-you-should-keep-a-food-journal-1463419285}$

2015 Food Journaling not as Easy or Effective as it Should Be: Study

Consumer Affairs (Christopher Maynard, April 2015)

https://www.consumeraffairs.com/news/food-journaling-not-as-easy-or-effective-as-it-should-be-study-041715.html

Why People Ditch Food Journal Apps

New York Magazine (Jesse Singal, April 2015)

http://nymag.com/scienceofus/2015/04/why-people-ditch-food-journal-apps.html

2014 UW Study Finds Pros and Cons of Fitness Gadgets

King 5 News (July 2014)