

Personal Data

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Birthplace: Taipei, Taiwan

Citizenship: United States

Education

Harvard University, Cambridge, MA

B.A. in Psychology, Cum Laude, June 1996. Transferred from the University of California, Berkeley, Fall 1994.

University of North Carolina, Chapel Hill, NC

M.S. in Information Science, August, 2010.

Master's Paper: *Food in Context: Food Choices, Eating Habits and Health Information Behaviors among Japanese University Students.*

Advisor: Barbara M. Wildemuth

University of North Carolina, Chapel Hill, NC

Ph.D. in Information Science, August 2015.

Dissertation: *Meaning, Information and Online Participation along the Illness Journey: The Story for Fibromyalgia Patients*

Advisor: Barbara M. Wildemuth

Postgraduate Training N/A

Faculty Positions Held

Assistant Professor, Department of Biomedical Informatics
University of Washington School of Medicine

2015 – June 2021
Seattle, WA

Adjunct Assistant Professor, Near Eastern Languages and Civilization
University of Washington

2020 – June 2021
Seattle, WA

Associate Professor, Department of Biomedical Informatics
University of Washington School of Medicine

July 2021 – present
Seattle, WA

Adjunct Associate Professor, Near Eastern Languages and Civilization **July 2021 – present**
University of Washington **Seattle, WA**

Hospital Position Held

Partner Employee – Research **January 2019-present**
Seattle Children’s Hospital **Seattle, WA**

Project Focus: The Preventing Emergency Aggression with Coping Enhancement (PEACE) study, a clinical trial of personalized Social Emotional Learning (SEL) tools with youth treated in an inpatient psychiatric setting, taking place Seattle Children’s Psychiatry and Behavioral Medicine Unit (PBMU)

Role: My roles, as Co-PI of this project, are to provide expertise in research design and data analysis, perform data analysis, and co-mentor trainees who work on this project.

Research/Informatics Positions Held

Research Assistant **September 2008-May 2009**
University of North Carolina **Chapel Hill, NC**

Project Focus: Information extraction from medical notes.

Role: Developed strategies for automatic identification of drugs and methods of delivery, and in the classification of adverse drug reactions.

Informatics Intern **May 2009 – August 2009**
AstraZeneca Pharmaceuticals **Wilmington, DE**

Project Focus: Explore and implement new text mining methods for clustering and identifying research literature of interest.

Role: Explored the viability of various clustering methodologies for clustering medical documents, and developed a process for selecting research of interest pertaining to biomarker literature.

Technical Research Assistant, “Main Street, Carolina” **September 2009 – May 2010**
University of North Carolina **Chapel Hill, NC**

Project Focus: Create a web-based toolkit for digital preservation: Main Street, Carolina.

Role: Supported the lead developer in application development within an MVC framework employing PHP and web mapping APIs.

Research Assistant **August 2009 – May 2011**
University of North Carolina **Chapel Hill, NC**

Project Focus: Conduct a focus group study of methods to promote enrollment in cardiac rehabilitation programs.

Role: I worked with Dr. Claudia Gollop to conduct a literature review, design and conduct a focus group study, and present the results of the study in a publication.

iDASH Natural Language Processing Intern **May 2011 – July 2011**
Division of Biomedical Informatics, UC San Diego **San Diego, CA**

Project Focus: Develop methods for employing natural language processing to extract meaningful information from clinical reports.

Role: My role on this team was applications development. I began with a Python-based version of a medical entity extraction algorithm, ConText, and developed a web-based version of it using the Django development framework.

Research Assistant, ResultsSpace

August 2011 – January 2013

University of North Carolina

Chapel Hill, NC

Project Focus: The objective of ResultsSpace (NSF IIS # 0812363) was to develop tools and interfaces to support multi-session, exploratory, collaborative search.

Role: My activities on this project included applications development, design and execution of studies of collaborative search behavior, data analysis, and results presentation. In particular, I led a team comprised of three developers to build a system to support collaborative search.

Technical Intern

September 2012 – January 2013

AstraZeneca Pharmaceuticals

Wilmington, DE

Project Focus: Feasibility study of health-related social media analytics.

Role: I was invited to conduct this work by project mentor Dr. Sherri Matis-Mitchell. The project was focused on researching candidate social media sources for text mining, developing a workflow for harvesting and information extraction of tweets, and validation of the extraction process.

Teaching Fellow

January 2013-May 2013

University of North Carolina

Chapel Hill, NC

Project Focus: Course design and instruction.

Role: Designed and served as Instructor of Record for INLS 491-002, Health Information Sharing in Social Media, a course that took a multidisciplinary approach to examine health-related social media use.

Research Scientist

June 2013-August 15, 2013

PatientsLikeMe

Cambridge, MA

Project Focus: Exploration of text mining potential of free text data.

Role: I developed new techniques for mining unstructured text data (e.g. discussion forum content and treatment evaluations) for patient insights.

Teaching Fellow

August 2013-December 2013

University of North Carolina

Chapel Hill, NC

Project Focus: Provide course instruction.

Role: Taught INLS 581-003, Research Methods, part of the core curriculum for the MSIS and MLS degrees at the School of Information and Library Science.

Staff Research Associate I

May 2014-August 2014

University of California, San Diego (UCSD)

Chapel Hill, NC

Project Focus: Employ text mining techniques to study e-cigarette and hookah use experiences in online discussion forums.

Role: I was invited to conduct this research by Dr. Mike Conway, and we collaboratively developed the project aims. I employed existing text mining techniques as well as developed novel approaches for automatically exploring social media data.

Research Associate, Digital Innovation Lab

May 2014-June 2015

University of North Carolina

Chapel Hill, NC

Project Focus: Employ text mining techniques to extract the names of persons and places from the University of North Carolina's DocSouth slave narrative collection.

Role: I developed a workflow that incorporated human annotators to validate and augment automatically extracted information, and I trained and supervised these annotators. Additionally, I adapted an interface that I had previously developed (VizText), to display the results of this project. Lastly, I conducted a survey of user needs in interfaces for exploring historical narratives.

Research Assistant

January 2014 –June 2015

University of North Carolina

Chapel Hill, NC

Project Foci: Predictive modeling and visual analytics.

Role: I have worked with Dr. David Gotz on two different projects. In the first project, we designed and I coded an interface for temporal visual analysis based on one of my existing social media datasets, and then we co-authored a paper that is under review. In the second project, we have focused on developing approaches to analyze electronic medical record data to predict hospital readmissions.

Research Associate

June 2015-July 2015

University of Utah School of Medicine

Salt Lake City, Utah

Project Focus: Employ text mining techniques to study e-cigarette and hookah use experiences in online discussion forums (continuation of research at UCSD).

Role: My primary role is to develop and validate a system to automatically extract symptom reports from social media data, and a secondary role is to provide consultation support for other projects being conducted in Dr. Mike Conway's lab.

Honors and Awards

- National Honor Society in Psychology, 1992-1994
- Chancellor's Scholar, 1992-1994
- Kalp Fellowship, 2009-2010
- Beta Phi Mu (International Library & Information Studies Honor Society), 2009-
- Lester Asheim Fellowship, 2010-2011 (\$3,000)
- SBP 2012 Travel Award (\$1,000)
- Computational Models of Narrative Workshop Travel Award (\$1,500)
- Future Faculty Fellowship Program, August 2012 (\$400)
- Louis Round Wilson Fellowship, January 2013 (\$500)
- SBP 2013 Travel Award (\$1,000)
- Association for Computational Linguistics Student Research Workshop Travel Award (\$2,100)
- SBP 2014 Travel Award (\$800)
- Association for Information Science and Technology (ASIS&T) 2014 Doctoral Symposium (invited) (\$200)
- 2015-16 Excellence in Teaching Award in Biomedical and Health Informatics, Department of Biomedical Informatics and Medical Education, University of Washington
- *2019 International Medical Informatics Association (IMIA) Yearbook of Medical Informatics:* Park, A., Conway, M., Chen, A.T. (2018). Examining thematic similarity, difference, and membership in three online mental health communities from Reddit: A text mining and visualization approach. *Computers in Human Behavior*, 78, 98-112. Selected as one of the best articles published in 2018 in the 'Consumer Health Informatics and Education' subfield of medical informatics.
- 2018-19 Excellence in Teaching Award in Biomedical and Health Informatics, Department of Biomedical Informatics and Medical Education, University of Washington

- 2020-21 Excellence in Teaching Award in Biomedical and Health Informatics, Department of Biomedical Informatics and Medical Education, University of Washington

Board Certifications N/A

Professional Organizations

American Society for Information Science and Technology (2012-2013, 2014-present)

American Medical Informatics Association (2015-2016, 2017-present)

Association for Computing Machinery (2017-present)

Teaching Responsibilities

University of North Carolina at Chapel Hill School of Information and Library Science

INLS 705-01W Health Sciences Information, Teaching Assistant, Spring 2011

Number of students: 15

Number of credits: 3

Role: This course was taught online. I updated the syllabus from the last time it was taught by finding current readings for the topics covered and revising some of the content covered, moderated the weekly discussions, and answered questions from the students over email.

INLS 613 Text Mining, Teaching Assistant, Fall 2012

Number of students: 25

Number of credits: 3

Role: This class was taught in person. I gave two guest lectures, designed and graded one of the homework assignments, and provided students assistance with course material.

INLS 512 Applications of Natural Language Processing, Teaching Assistant, Spring 2013

Number of students: 25

Number of credits: 3

Role: This class was taught in person. I gave two guest lectures and provided students help when asked.

INLS 490-202 Health Information Sharing in Social Media, Instructor of Record, Spring 2013

Number of students: 12

Number of credits: 3

Role: This class was taught in person. I designed and taught this course as the primary instructor of record. This course was accepted as an elective that could be taken to fulfill the requirements of the Certificate in Interdisciplinary Health Communication at UNC Chapel Hill, and it drew students from multiple departments on campus.

INLS 581 Research Methods, Instructor of Record, Fall 2013

Number of students: 7

Number of credits: 3

Role: This class was taught in person. I taught this course as the primary instructor of record. This is a required course in this department. The particular semester that I taught this course, enrollment was lower because this course was re-sequenced, and students were not yet aware that they should enroll in it. However, the students really enjoyed the course, and the average ratings on the course evaluations were well above the departmental means for that semester.

University of Washington School of Medicine

BIME 554 Biomedical Informatics Interactions and Design, Instructor of Record, Spring 2016-present

Number of students: 12-20

Number of credits: 4

Range of Adjusted Combined Median: 4.4-4.9 (out of 5)

Description: This is a required course in the Department of Biomedical Informatics and Medical Education (BIME). The course introduces students to the principles, methods and techniques of user-centered design, particularly within biomedical contexts. The course involves working on a quarter-long project with a client as we cover the different techniques.

BIME 598 (Winter 2016, Autumn 2016), 543 (Autumn 2017-present) Consumer Health and Informatics, Instructor of Record

Number of students: 12-28

Number of credits: 3

Range of Adjusted Combined Median: 3.9-4.8 (out of 5)

Description: This is a required course in the BIME department. I designed and taught this course as the primary instructor of record. The course is divided into three modules: overview and theories of health behavior, key issues, and application areas. In past years, this course has been taken by students from the School of Nursing and other departments, which leads to a mixed student composition. The increased diversity of the class composition led to opportunities for students to see differences in perspective.

NMETH 530, Instructor of Record, Summer 2021

Number of students: 19

Number of credits: 3

Adjusted Combined Median: 5.1 (out of 5)

Description: This course guides students in the writing of proposals for M.S.-level scholarly projects and theses in the Clinical Informatics & Patient-Centered Technologies program. This course is taught primarily asynchronously through instructional videos and a few interactive web conferences.

Mentoring

Since arriving at UW, I have served on the MS/PhD committee for, or serve as primary advisor to, 12 current/former students (3 as chair/primary advisor) and primary mentor for 2 postdoctoral fellows.

Graduate students and postdoctoral fellows mentored:

Primary Served as chair of MS/PhD committee or primary mentor, for postdoctoral trainee

GSR, Served as Graduate School Representative on the MS/PhD committee (for details, see:

<https://grad.uw.edu/policies-procedures/doctoral-degree-policies/doctoral-supervisory-committee-roles-and-responsibilities/>)

Member Served on MS/PhD committee

(A) Co-authored a peer-reviewed journal, conference or workshop paper together with the student as first author

(B) Co-authored a peer-reviewed journal, conference or workshop paper together

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(C) Co-authored a peer-reviewed conference abstract or other type of publication together

UW BHI: UW Biomedical and Health Informatics

UNC-CH SILS: University of North Carolina, Chapel Hill School of Information and Library Science

Name	Program	Period (end date omitted for current)	Mentorship	Current Position (-: indicates not yet graduated)
Jin Qu	MS (UW BHI)	2015-16	C	Senior Technical Staff, Salesforce AI
Jordan Eschler	PhD (UW Information School)	2015-17	Member	UX Researcher, Facebook Inc.
Albert Park	Postdoctoral Fellow (University of Utah Department of Biomedical Informatics)	2015-2017	AB	Assistant Professor, University of North Carolina-Charlotte College of Computing and Informatics
Wayne Liang	MS/Postdoc (UW BHI)	2016-17	Member, C	Assistant Professor of Pediatrics, University of Alabama at Birmingham
Lisa Taylor-Swanson	Postdoc (UW BHI)	2016-17	Primary, B	Assistant Professor, University of Utah College of Nursing
Samantha J. Kaplan	PhD (UNC-CH SILS)	2016-17	AB	Research and Education Liaison Librarian, Duke University School of Medicine
Shih-Yin Lin	Postdoc (UW BHI)	2017-18	Primary, BC	Senior Research Scientist, New York University Rory Meyers College of Nursing
Aarti Swaminathan	MS (UW BHI)	2016-18	Primary, AB	Biomedical Research Engineer, Toolbox Medical Innovations
Shuyang Wu	MS (UW BHI)	2016-18	B	Bioinformatics Scientist, Veracyte, Inc.
Yiqi Ni	MS (UW BHI)	2017-18	Primary	
William Kearns	PhD (UW BHI)	2015-19	BC	-
Ahmad Aljadaan	PhD (UW BHI)	2017-19	Member	Assistant Professor, KACST (King Abdulaziz City of Science and Technology)
Krystal Slattery	MS (UW BHI)	2018-19	B	Lead Data Manager, Bristol Meyers Squibb
Megan Threats	PhD (UNC-CH SILS)	2018-19	B	Assistant Professor, Rutgers University
Carmen Ng	MS (UW Institute of Public Health Genetics)	2018-19	Member, C	Health Services Consultant, Washington State Department of Health
Laura Roberts	MS (UW CIPCT)	2018-19	Member	Senior Manager, Research EHR Operations at City of Hope National Medical Center
Soojeong Han	PhD (UW School of Nursing)	2018-2020	BC	Nurse Practitioner, Washington Pac Services
Susie Cho	PhD (UW School of Nursing)	2019-2020	B	-
Jenna Bowen	Child and Adolescent Psychiatry Fellow, UW	2020	C	Child and Adolescent Psychiatrist, University of Wisconsin Hospitals

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	Dept of Psychiatry and Behavioral Medicine			
Aubrey Klaich	Child and Adolescent Psychiatry Fellow, UW Dept of Psychiatry and Behavioral Medicine	2020	C	Child and Adolescent Psychiatrist, Everett Clinic in Shoreline
Andrew Teng	PhD (UW BHI)	2017-2021	ABC	Healthcare Data Analyst, Swedish Health Services
Amandalynne Paullada	PhD (Linguistics)	2018-2021	GSR	-
Ronald Buie	PhD (UW BHI)	2016-	Primary, BC	-
Frances Chu	PhD (UW School of Nursing)	2019-	BC	-
Yung-Sheng Chang	PhD (University of Texas Austin School of Information)	2019-	Member	-
Ryzen Benson	PhD (University of Utah Department of Biomedical Informatics)	2019-	Member, ABC	-
Nandana Rao	PhD (UW Institute of Public Health Genetics)	2020-	GSR, C	-

Undergraduate students mentored:

(A) Co-authored a peer-reviewed journal, conference or workshop paper together with the student/trainee as first author

(B) Co-authored a peer-reviewed journal, conference or workshop paper together

(C) Co-authored a peer-reviewed conference abstract or other type of publication together

(D) Mentee on UW Undergraduate Research Symposium presentation/poster

Name	Major	Mentorship	Period
Darren Huang	Computer Science	BD	Jan.-June 2019
Justin Chang	Pre-major	B	Jan.-June 2019
Marium Raza	Biochemistry, Comparative History of Ideas	B	April-June 2019
Yogasai Gazula	International Studies	BCD	April-June 2019, Jan.-Mar. 2020
Marco Ornelas-Mendoza	Underserved Minority Summer Research Intern, Seattle Children's Hospital	C	July 2019-May 2020
Julianne Mendoza	Informatics	BD	Jan. 2019-present
Skyler Hallinan	Bioengineering, Math	BD	Jan.-June 2019, Apr. 2020 – Sept. 2021
Shubhangi Bansal	Business	CD	Apr. 2019-Aug. 2020
Renee Lin	Anthropology	D	Jan. 2020-Aug. 2020
Shelley Tsui	Communications and Design	CD	Apr. 2019-Sept. 2021
Adeline Perkins	International Studies	C	Sept. 2019-June 2021
Micah Slaughter	Near Eastern Languages and Civilization, International Studies	BD	Sept. 2019-June 2021
Jesse Du	History, Human Centered Design Engineering	AD	Sept. 2019-June 2021

Catherine Oei	Pre-Science	CD	Sept. 2020-June 2021
Chris Yuen	Computer Science	B	Sept. 2020-June 2021
Sam Fields	Mathematics	CD	Jan. 2020-present

Note: This list includes both undergraduate students who have worked with me on health-related projects as well as an incomplete list of those whom I have co-authored a peer-reviewed conference abstract with, and/or who presented at the UW Undergraduate Research Symposium, with me listed as mentor. Because the list of students is extensive, I have included only those students from that I have mentored extensively outside of the team meetings of the Svoboda Diaries Project, a digital humanities lab that I co-lead which engages 20-25 undergraduates per year.

Editorial Responsibilities

Review Editor, *Frontiers in Digital Health*, 2019 – present

Topic Editor, *Frontiers in Public Health*. Topic title: “Computational Methods in Substance Use and Addiction Research.” URL: <https://www.frontiersin.org/research-topics/21607/computational-methods-in-substance-use-and-addiction-research>

Ad-hoc reviewer for the following journals since 2015 (approx. 8 reviews per year, with those in bold at approx. 1-2 reviews per year):

- **Journal of Medical Internet Research**
- **Journal of Biomedical Informatics**
- **International Journal of Qualitative Studies on Health and Well-being**
- **Journal of the American Medical Informatics Association**
- Psychology and Health
- Chronic Illness
- Clinical Rheumatology
- International Journal of Qualitative Methods
- Journal of the Association for Information Science and Technology
- Computers in Human Behavior
- Geriatric Nursing
- Gerontology and Geriatric Medicine

Conference and symposia organization that involved significant editorial responsibilities for paper and poster selection:

- *Association for Information Science and Technology (ASIS&T) Special Interest Group Information Needs, Seeking, and Use (SIG-USE) Symposium*: Co-Organizer (2018)
- *Visual Analytics in Healthcare (VAHC) Workshop*: Co-Chair (2018), Papers Co-Chair (2020)
- Annual meeting of the *Association for Information Science and Technology (ASIS&T) Papers* Co-Chair (2021)

Other conference/workshop reviewing:

- *IEEE International Conference on Bioinformatics and Biomedicine (BIBM)* Program Committee Member (2019, 2020)
- *Visualization for the Digital Humanities (VIS4DH) Workshop* Program Committee (2020, 2021)
- Annual meeting of the *Association for Information Science and Technology (ASIS&T)*

- Annual meeting of the *American Medical Informatics Association (AMIA)*
- *AMIA Clinical Informatics Conference (CIC)*
- *Designing Interactive Systems (DIS)*

Special National Responsibilities

- *AMIA VIS Working Group Task Force on Evaluation Member, 2016-2018*
- *18th Annual ASIS&T SIG-USE Symposium Co-Chair (2018)*
- *AMIA Visual Analytics in Healthcare (VAHC) Workshop Co-Chair (2018, 2021)*
- *AMIA VAHC Workshop Publicity Chair (2019)*
- *AMIA VAHC Workshop Papers Co-Chair (2020)*
- *ASIS&T SIG-USE Communications Officer, 2019-2021*
- *IEEE International Conference on Bioinformatics and Biomedicine (BIBM) Program Committee, 2019-2021*
- *Annual meeting of the Association for Information Science and Technology (ASIS&T) 2021 Papers Co-Chair*
- *ASIS&T SIG-USE Chair-Elect, 2021-present*

Special Local Responsibilities

- *Doctoral Student Representative, UNC SILS Research & Development Committee, 2012-2013*
- *Doctoral Student Representative, UNC SILS Health Informatics Faculty Search Committee, 2012-2013*
- *Website Re-design Committee Member, UW BIME, 2015-2016*
- *Curriculum Committee Member, UW BIME, 2015-present*
- *Qualifying Exam Committee, UW BIME, 2016-present, Chair (2018, 2019)*

Research Funding

Ongoing Research Support

Brotman Baty Institute for Precision Medicine

8/1/19-6/31/22

(PI: B Shirts)

\$202,015 (2019-20)

Title: Full Spectrum Genetic Testing for Cancer Prevention

Identifying an optimal, unified screening approach can improve cancer prevention, but doing so requires an understanding of optimal population screening strategies and greater inclusion of minorities. This research plan pilots a population screening trial and implements innovative strategies to connect families with known pathogenic variants, paving the way for broad implementation of precision cancer prevention. Role: Co-Investigator (15% FTE) As Co-Investigator, I have led the design, pilot testing, and data collection of the multi-phase survey being deployed as part of the project, and mentored students and staff contributing to the project. I have also provided leadership on other aspects of this project, including communication, outreach and dissemination strategies.

NIH / NLM

07/01/2017-06/30/2022

PI: P. Tarczy-Hornoch

Total costs: \$5,034,513

Title: Biomedical and Health Informatics Training Program

The Biomedical and Health Informatics (BHI) research training program trains future research leaders in the field with translational skills and interdisciplinary expertise across the domains of bioinformatics, clinical informatics, and public health informatics.

Role: Mentor (0% FTE) My role in this grant involves serving as a mentor to predoctoral and postdoctoral trainees, which involves many different types of mentoring activities, including providing guidance in research; helping them to set and identify goals; and providing support as needed.

1R01 AG066957-01 (NIA)

06/01/2020 – 03/31/2025

(PI: A. Turner)

\$455,037 (2020-21 direct)

Title: Person-Centered Decision Making: Developing a Choice-Based Preference Tool for Transitions in Dementia Care

The research aims to advance our understanding of decision-making processes, and the factors that influence decision-making at different points in time, for older adults with Alzheimer's Disease and Related Dementias (ADRD) and their caregivers.

Role: Co-Investigator (20% FTE) My role in this project is to provide expertise on user-centered design, particularly with regard to incorporating stakeholder input into tool development; guidance on qualitative data analysis; and mentor students working on the project.

1R01AG074253-01(NIA)

08/15/2021-04/30/2026

(PI: R. Sharma)

Total costs: \$3,048,257

Title: Understanding and Improving Inequities in Palliative Care for Older Adults with Advanced Dementia and Limited-English Proficiency: A Mixed-Methods Evaluation

The long-term goal of this work is to identify barriers to palliative care for Latinx, Chinese, and Vietnamese older adults with dementia and limited-English proficiency and their families. This work will inform the development of culturally and linguistically appropriate interventions to facilitate high-quality equitable care for these populations.

Role: Investigator (15% FTE) My role in this project is to provide expertise in qualitative data analysis, culturally-sensitive needs assessment, and mentoring of graduate research assistants.

Completed Support

NSF IIS #0812363

8/15/2011-2/28/2013

(PI: G. Marchionini)

Title: Result Space Support for Personal and Group Information Seeking Over Time

The goal of this research was to develop techniques and systems that help people solve information problems that are complex, general, or ongoing and when information seeking takes place over multiple intervals or in collaboration with other people.

Role: Graduate Research Assistant (50% FTE) My role in this project, as the lead student developer, was to lead the development and evaluation of a system for collaborative search.

State and Community Tobacco Control Research

5/27/2014-8/15/2014

(PI: M. Conway)

Total costs: \$42,000

Title: Mining internet forums to understand consumer perceptions of hookah and electronic cigarettes

E-cigarettes have attracted a large base of consumers who use internet discussion forums to review e-cigarette products, guide new users, and discuss policy issues and legislation. Like e-cigarettes, hookah has become increasingly popular in recent years. This work utilized qualitative and computational text analytics techniques to analyze electronic cigarette and hookah forums, investigating consumer attitudes,

motivations for using e-cigarettes and hookah, and concerns.

Role: Staff Research Associate (100% FTE) My role in this project was to leverage text mining and visualization techniques to examine the discussion content in these forums.

4R00LM011393-02 (NLM)

6/1/2015-7/31/2015

(PI: M. Conway)

Total Costs: \$224,100

Title: Utilizing Social Media as a Tool for Social Media Surveillance

Major depressive disorder is one of the most common debilitating illnesses in the United States, Natural Language Processing (NLP) provides techniques and resources to "unlock" data from text. We propose using Twitter and NLP as a cost-effective and flexible approach to augmenting current telephone-based surveillance methods for population level depression monitoring.

Role: Research Associate (100% FTE) My role in this project was to leverage text mining and visualization techniques to examine discussion content.

1 UG3 OD 023271 (NIH/OD)

9/21/2016-03/08/2017

(PI: C. Karr)

Total Costs: \$48,788,159

Title: Prenatal And Early Childhood Pathways To Health: An Integrated Model of Chemical and Social Exposures, Biological Mechanisms, and Sex-specific Effects on Neurodevelopment and Respiratory Outcomes

The PATHWAYS Study is uniquely poised to respond to the charge of the ECHO initiative and address limitations in understanding how the environment influences neurodevelopment and asthma risk. We propose to unify three geographically and ethnically diverse extant birth cohorts, for a sample size of 3,000+ mother-child dyads, to investigate how non-chemical and common chemical exposures during two sensitive time periods, pregnancy and early childhood, influence childhood neurodevelopment and airway function.

Role: Co-Investigator (20% FTE) My role in this project was to serve as the lead on the informatics team in setting up the technological infrastructure for the project.

5 R21 HG-008513 (PI: B Shirts)

09/21/2015 - 06/30/2018

Title: Developing and Evaluating Patient-Centered Tools for Clinical Classification of Variants of Uncertain Significance

We interviewed patients who have received clinical reports of genetic variants of uncertain significance (VUS) to explore patient understanding of their VUS, motivation and interest in classification, and barriers and facilitators to talking with family members about VUS. We used input from study participants to evaluate and improve an online patient-driven VUS classification toolkit.

Role: Research Scientist (3.33% FTE) My role in this project was to provide expertise in qualitative research and usability testing.

Funding: UW Population Health Initiative

5/1/2018 – 10/31/2019

(Co-Is: C Rockhill, AT Chen, equiv. to Co-PI for the Population Health Initiative) Total Costs: \$50,000

Title: Using Digital Learning Tools to Enhance Emotional Regulation for Youth Hospitalized for Aggressive Crises

The costs of violence and aggressive behaviors, including injuries, death, reduced health and happiness, are unacceptable. This project utilizes a technology-based set of personalizable Social Emotional Learning (SEL) tools to teach disruptive youth skills to manage aggression. We proposed a three-part pilot study to evaluate feasibility and effectiveness for an inpatient psychiatry population. Due to difficulties in recruitment, this project is currently still underway.

Role: Co-Investigator (3% FTE) As Co-Principal Investigator and expert in informatics on this project, my role has included leading the conceptualization and development of informatics aspects of the study

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design, including the logistics of deploying SEL tools in an inpatient clinical setting, developing data collection and analysis pipelines, conducting statistical analyses, as well as co-mentoring students/trainees at Seattle Children's Hospital along with Co-PI Rockhill.

MRS-14-058-01-PCSM (PI: R Sharma) 04/01/2019 - 12/31/2019

Title: Racial/Ethnic Differences in Inpatient End-of-life Communication

Despite advances in cancer treatment and screening, African Americans continue to suffer disproportionately from cancer, presenting at later stages of disease, having higher mortality rates, and receiving worse end-of-life care. Physician-patient communication as one of the modifiable factors associated with disparities in end-of-life care. The goal of this study include to better understand racial/ethnic differences in end-of-life communication and to develop a patient-centered, culturally-sensitive intervention to help improve communication.

Role: Research Scientist (10-15% FTE) My role in this project was to lead the development of a patient education application using user-centered design methods, provide expertise in qualitative data analysis of interview data, and mentor students participating in the project.

Research and Intramural Funding Program (RIFP) 7/1/2019 – 6/30/2020

(PI: O Zaslavsky)

Total Costs: \$20,000

Title: Virtual Online Community for Aging Life Experience

This project aims to pilot test an online social networking intervention that empowers older adults with frailty and pre-frailty to improve their health management. The intervention is delivered in an online group format via an asynchronous discussion forum. Older adults receive instruction in problem solving skills and engage in sharing and problem solving with their peers.

Role: Co-Investigator (10% FTE) My role on this research is effectively Co-Principal Investigator; the requirement for this funding source is that the PI be a member of the UW School of Nursing. As Co-Principal Investigator of the VOCALE study, I lead the design and technical development of the study platform; co-lead the design of research studies, data collection, and data analysis; and mentor students.

1 R21 DA043775-01A1 (NIDA) 9/30/2018 – 8/31/2021

University of Utah (PI: M Conway)

\$18,852(2019-20 direct)

Title: Exploring the Evolving Relationship between Tobacco, Marijuana, and E-Cigarettes

The relationship between marijuana, tobacco, and e-cigarettes is both rapidly changing and poorly understood. To understand this changing landscape we need new, flexible, and responsive research methods capable of rapidly providing insights. We propose to use a combination of qualitative methods and automated natural language processing techniques to investigate online discussion forums devoted to tobacco, marijuana, and e-cigarettes in order to understand user trajectories through the three product categories.

Role: Co-Investigator (6% FTE) I served at the UW site PI. In this project, I served as the expert on qualitative analysis methods and mentor students in the writing of the papers that emerge from the study.

Garvey Institute for Brain Health Solutions

1/1/21-12/31/21

(PI: Zaslavsky, Chen)

\$100,000

Title: Empowering Caregivers of Persons with Lewy Body Dementias (LBD) to Discuss and Solve Their Day-To-Day Caregiving Challenges Using a Virtual Peer-to-Peer Problem Solving Intervention

In this project, we propose to develop and perform a pilot evaluation of an innovative digital intervention that empowers caregivers of persons with LBD by providing a support network, enabling them to develop and/or improve skills that they can use to address daily challenges that they face.

Role: Multiple PI (10% FTE) As Co-PI, I provide methodological expertise in a user-centered approach to the design and evaluation of the intervention. I also co-mentor the postdoctoral fellows and students that work on this project.

Bibliography

Manuscripts in Refereed Journals and Refereed Conference Proceedings

(**): Refereed conference proceedings and refereed workshop papers in biomedical informatics or information science are peer-reviewed published papers generally indexed in Pubmed or analogous for information science

Underlined: students/trainees that I mentored during publication development

1. **Chen, A.T.** (2012). Exploring online support spaces: Using cluster analysis to examine breast cancer, diabetes and fibromyalgia support groups. *Patient Education and Counseling*, 87(2), 250-257. DOI: 10.1016/j.pec.2011.08.017
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3. **Chen, A.T.** (2012). Information seeking over the course of illness: The experience of people with fibromyalgia. *Musculoskeletal Care*, 10(4): 212-20. DOI: 10.1002/msc.1022
4. Capra, R., **Chen, A. T.**, Hawthorne, K., Arguello, J., Shaw, L., & Marchionini, G. (2012). Design and evaluation of a system to support collaborative search. ***Proceedings of the ASIS&T 2012 Annual Meeting*. DOI: 10.1002/meet.14504901181
5. **Chen, A.** (2013). Patient experience in online support forums: Modeling interpersonal interactions and medication use. In the proceedings of *Association for Computational Linguistics Student Research Workshop* (pp. 1-7). Bulgaria.
6. Capra, R., **Chen, A. T.**, McArthur, E., & Davis, N. (2013). Searcher actions in an asynchronous collaborative search system. ***Proceedings of the ASIS&T 2013 Annual Meeting*, 50(1), 1-10. DOI: 10.1002/meet.14505001077
7. Sheble L., & **Chen A.T.** (2014). Contexts of diffusion: Adoption of research synthesis in social work and women's studies. ***In: Kennedy W.G., Agarwal N., Yang S.J. (eds) Social Computing, Behavioral-Cultural Modeling and Prediction. SBP 2014. Lecture Notes in Computer Science, 8393, p. 351-358. Springer. DOI: 10.1007/978-3-319-05579-4_43*
8. **Chen, A. T.**, Lach, P. (2014). Needs and expectations in a tool for exploring slave narratives: A survey of prospective users. ***Proceedings of ASIS&T 2014 Annual Meeting*, 51(1), pp. 1-4. DOI: 10.1002/meet.2014.14505101124
9. **Chen, A. T.**, Capra, R., & Wu, W. (2014). An investigation of the effects of awareness and task orientation on collaborative search. ***Proceedings of the ASIS&T 2014 Annual Meeting*, 51(1), 1-10. DOI: 10.1002/meet.2014.14505101061
10. **Chen, A. T.** (2014). What's in a virtual hug? – A transdisciplinary review of methods in online health discussion forum research. *Library and Information Science Research*, 36(2), 120-130. DOI: 10.1016/j.lisr.2013.10.007
11. **Chen, A. T.** (2015). Information use and illness representations: Understanding their connection in illness coping. *Journal of the Association for Information Science and Technology*, 66(2), 340-353. DOI: 10.1002/asi.23173

12. *Chen A. T., Zhu, S.-H., & Conway, M. (2015). What online communities can tell us about electronic cigarettes and hookah use: A study using text mining and visualization techniques. *Journal of Medical Internet Research*, 17(9), e220. DOI: 10.2196/jmir.4517
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14. Chen, A. T., Carriere, R., Kaplan, S. J., Colht, K., Morey, O. T., Flaherty, M. G., Moser, G. B., Slager, S. L., Price, C. (2016). Exploring collective tagging as a mechanism to elicit language about health management. *Proceedings of ASIS&T Annual Meeting*, 53(1), pp. 1-6. DOI: 10.1002/pr2.2016.14505301104
15. Chen, A. T., Martell, J., & Lach, P. (2016). Supporting discovery through contextual representation: Developing a tool for visually exploring slave narratives. *Proceedings of the 2016 Workshop on Visualization for the Digital Humanities*, co-located with *IEEE VIS 2016* (pp. 1-4). Baltimore, MD.
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21. Chen, A. T. (2018). Timelines and interactive visualizations: Complementary visual elicitation techniques for exploring illness journeys. *International Journal of Qualitative Methods*, 17(1). DOI: 10.1177/1609406917753207
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23. Chen, A. T., Taylor-Swanson, L., Buie, R. W., Park, A., Conway, M. (2018). Characterizing websites that provide information about complementary and integrative health: Systematic search and evaluation of five domains. *Interactive Journal of Medical Research*, 7(2), e14. DOI:10.2196/ijmr.9803
24. Chen, A. T., Swaminathan, A., Kearns, W. R., Alberts, N. M., Law, E. F., Palermo, T. M. (2019). Understanding user experience: Exploring participants' messages with an online behavioral health intervention for adolescents with chronic pain. *Journal of Medical Internet Research*, 21(4): e11756. DOI: 10.2196/11756
25. Gotz, D., Wang, W., Chen, A. T., & Borland, D. (2019). Visualization model validation via inline replication. *Information Visualization*, 18(4), 405-425. DOI: 10.1177/1473871618821747
26. *Wu, D. T. Y., Chen, A. T., Manning, J. D., Levy-Fix, G... Gotz, D. (2019). Evaluating visual analytics for health informatics applications: A systematic review from the AMIA VIS working

- group task force on evaluation. *Journal of the American Medical Informatics Association*, 26(4):314-323. DOI: 10.1093/jamia/ocy190
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 28. ***Chen, A. T.**, Wu, S., Tomasino, K. N., Lattie, E. G., & Mohr, D. C. (2019). A multi-faceted approach to characterizing user behavior and experience in a digital mental health intervention. *Journal of Biomedical Informatics*, 94, 103187. DOI: 10.1016/j.jbi.2019.103187
 29. **Chen, A. T.**, Carpenter, H., & Flaherty, M. G. (2019). Examining the experience of work in the case of fibromyalgia: Gaps and recommendations for future research. *International Journal of Information, Diversity, & Inclusion*, 3(3). Special Issue: Health Justice, Part 1. DOI: 10.33137/ijidi.v3i3.32964
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 36. **Chen, A. T.**, Slattery, K., Tomasino, K., Bardsley, L. R., Rubanovich, C., Mohr, D. (2020). Challenges and benefits of an Internet-based intervention with a peer support component for older adults with depression: A qualitative analysis of textual data. *Journal of Medical Internet Research*, 22(6). DOI: 10.2196/17586
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 39. **Chen, A. T.**, Ge, S., Cho, S., Teng, A. K., Chu, F., Demiris, G., Zaslavsky, O. (2021). Reactions to COVID-19, information and technology use, and social connectedness among older adults with pre-frailty and frailty. *Geriatric Nursing*, 42(1): 188–195. DOI: 10.1016/j.gerinurse.2020.08.001
 40. **Chen, A. T.**, Chu, F., Teng, A. K., Han, S., Lin, S.-Y., Demiris, G., Zaslavsky, O. (2021). Promoting problem solving about health management: A mixed-methods pilot evaluation of a digital health intervention for older adults with pre-frailty and frailty. *Gerontology and Geriatric Medicine*, 7. DOI: 10.1177/2333721420985684

41. Du, J., Yuen, C., Slaughter, M., Chen, A. T. (2021). The influence of familiarity with digital tools on user experience and perspective in the digital humanities. Annual meeting of the *Association for Information Science and Technology (ASIS&T) 2021*.
42. **Chen, A. T.,** Cole, C. L. (2021). Reflexivity in issues of scale and representation in a digital humanities project. Presented at *Visualization for the Digital Humanities* workshop, co-located with *IEEE VIS 2021*.
43. Hu, M., Benson, R., **Chen, A. T.,** Zhu, S.-H., & Conway, M. (2021). Determining the prevalence of cannabis, tobacco, and vaping device mentions in online communities using natural language processing. *Drug and Alcohol Dependence*, 228. DOI: 10.1016/j.drugalcdep.2021.109016.
44. **Chen, A. T.** (2022). Affect, cognition, and information behavior in the context of fibromyalgia. *Journal of the Association for Information Science and Technology*, 73(1), p. 31-44. DOI: 10.1002/asi.24538
45. Benson, R., Hu, M., **Chen, A. T.,** Zhu, S.-H., & Conway, M. (2022). Examining cannabis, tobacco, and vaping discourse on Reddit: An exploratory approach using natural language processing. *Frontiers in Public Health*. DOI: <https://doi.org/10.3389/fpubh.2021.738513>

Book Chapters

1. Gotz, D., Caban, J., & **Chen, A. T.** (2015). Visual analytics for healthcare. In C. Aggarwal and C. Reddy (eds.), *Healthcare Data Analytics*. CRC Press.
2. **Chen, A. T.,** Park, A., & Hartzler, A. L. (2021). Online communities and social networks: Considering human factors and patient ergonomics. In Rupa S. Valdez and Richard J. Holden (Eds.), *The Patient Factor: A Handbook on Patient Ergonomics*. CRC Press.

Manuscripts Submitted or Being Revised *Co-first authors

1. Buie, R. W., Rañola, J. M. O., Chen, A. T., & Shirts, B. H. (revise & re-submit). An algorithm for optimal testing in co-segregation analysis. *Human Mutation*.
2. Citrenbaum, C., **Chen, A. T.,** & Conway, M. (revise & re-submit). Substance use disorder-related stigma: A study of search behavior using Google Trends (2004-2020). *American Journal of Drug and Alcohol Abuse*.
3. **Chen, A. T., Tsui, S.,** & Sharma, R. (under review). Characterizing uncertainty in goals-of-care discussions among Black and White patients. *BMC Palliative Care*.
4. **Chen, A. T.,** Johnny, S., Conway, M. (under review). Examining stigma relating to substance use and contextual factors in social media discussions. *Drug and Alcohol Dependence Reports*.
5. Fields, S., Cole, C. L., Oei, C., Chen, A. T. (under review). Using named entity recognition and network analysis to distinguish personal networks from the social milieu in nineteenth century Ottoman-Iraqi personal diaries.
6. Backonja, U.*, **Chen, A. T.*,** Kenrick, C. (under review). Integrating health disparities content into health informatics courses: a cross-sectional survey study and recommendations. *JAMIA Open*.
7. **Chen, A. T.,** Huey, J., Coe, S., Kaganovsky, J., Malouf, E. A., Evans, H. D., Daker, J., Harper, E., Fordiani, O., Lowe, E. E., Oldroyd, C., Price, A., Roth, K., Stoddard, J., Crandell, J. N., Shirts, B. H. (under review). Extending cascade screening using genealogy, direct-to-consumer ancestry genetics, and social media – the ConnectMyVariant exploratory pilot study. *Familial Cancer*.

Refereed Abstracts and Posters

1. Lin, Y.-Y., **Chen, A. T.**, Diambra, J. F. (2011). Counselor preferences of White university students: Ethnicity and other characteristics. *American Counseling Association 2011*.
2. **Chen, A.T.**; Chapman, W. W.; Conway, M.; & Chapman, B. E. (2011). A web-based platform to support text mining of clinical reports for public health surveillance. In *Proceedings of International Society for Syndromic Surveillance '2011 (ISDS 2011)*.
3. Capra, R., Arguello, J., **Chen, A. T.**, Hawthorne, K., Marchionini, G., & Shaw, L. (2012). The ResultsSpace collaborative search environment. In *Proceedings of the 12th ACM/IEEE-CS Joint Conference on Digital Libraries (JCDL '12)*. DOI: 10.1145/2232817.2232929
4. **Chen, A. T.** (2012). Information and emotion in online health-related discussions: Visualizing connections and causal chains. *Medicine 2.0'12*.
5. South, B. R., Mowery, D. L., Escamez, O. F., Shen, S., Suo, Y., Zhang, M., Wang, L., **Chen, A. T.**, Meystre, S. M.; Chapman, W. (2012). On the road towards developing a publicly available corpus of de-identified clinical texts. *AMIA 2012 Annual Symposium*.
6. Capra, R., **Chen, A. T.**, Hawthorne, K., & Arguello, J. (2012). ResultsSpace: An experimental collaborative search environment. In *Proceedings of the ASIS&T 2012 Annual Meeting*. DOI: 10.1002/meet.14504901371
7. **Chen, A. T.**, Sheble, L., & Eichler, G. (2013). Using topic modeling and network visualization to explore patient experiences. In *Proceedings of the Visual Analytics in Healthcare Workshop 2013*, co-located with the annual meeting of the *American Medical Informatics Association (AMIA), 2013*. DOI: 10.13140/2.1.4268.4481
8. Gollop, C. J., **Chen, A. T.**, Wu, W. (2013). Cardiac rehabilitation referral: An information gap. *iConference 2013*.
9. **Chen, A. T.**, Zhu, S.-H., & Conway, M. (2014). Text mining and visualization to explore e-cigarette and hookah-related social media. In *Proceedings of the Workshop on Visual Analytics in Healthcare 2014*, co-located with the annual meeting of the *American Medical Informatics Association (AMIA), 2014*.
10. **Chen, A. T.**, Zhu, S.-H., & Conway, M. (2014). Combining text mining and data visualization techniques to understand consumer experiences of electronic cigarettes and hookah in online forums. In *Proceedings of International Society for Syndromic Surveillance '2014 (ISDS 2014)*.
11. **Chen, A. T.**, Zhu, S.-H., & Conway, M. (2016). Using interactive visual analytics to facilitate sense-making about health-related online discussions. *International Society for Research on Internet Interventions 2016*.
12. Qu, J., & **Chen, A. T.** (2016). Topic visualization of online cancer discussion forums. *AMIA Annual Symposium 2016*.
13. **Chen, A. T.**, Kearns, W. R., Law, E. F., Alberts, N. M., Palermo, T. M. (2016). CHAI: A Visual interface for examining subject matter similarities across intervention chat message histories. *Visual Analytics in Healthcare Workshop*, co-located with the *AMIA Annual Symposium 2016*.
14. Lach, P. & **Chen, A. T.** (2017). Tagging for justice: Challenging hegemonic object description through participatory metadata creation. *Humanities, Arts, Science, and Technology Alliance and Collaboratory (HASTAC) 2017 Conference*. Nov. 2-4, 2017. Orlando, Florida.
15. Liang, W. H., de Veer, B., Korngiebel, D. M., **Chen, A. T.**, Jarvik, G. P., Tarczy-Hornoch, P., Crosslin, D. R. (2017). User-centered design of a Delphi Method-based tool for collaborative genetic variant interpretation. Presented at the annual meeting of the *American Medical Informatics Association (AMIA)*, Nov. 4th-8th, 2017 (Washington, D.C.).
16. Zaslavsky, O., **Chen, A.**, Teng, A., Lin, S.-Y., Han, S., Demiris, G. (2019). Virtual Online Communities for Aging Life Experience (VOCALE). *The International Conference on Frailty & Sarcopenia Research (ICFSR 2019)*. February 20-22, 2019. Miami Beach, USA.

17. **Chen, A. T.**, Andrews, W., Gazula, Y., Liu, C., & Wang, J. (2019). Re-designing the Svoboda diaries: A user-centered approach. *Canadian Society for Digital Humanities / Société Canadienne des Humanités Numériques (CSDH / SCHN) Congress 2019*. Vancouver, BC, Canada.
18. Tsai, G. J., **Chen, A. T.**, Garrett, L. T., Burke, W., Bowen, D. J., & Shirts, B. H. (2019). Impact of familial communication on relatives in patient-driven studies for reclassification of variants of uncertain significance. *Annual Clinical Genetics Meeting*. Seattle, WA.
19. Zaslavsky, O., **Chen, A. T.**, Teng, A., Lin, S.-Y., Han, S., Chu, F., Demiris, G. (2019). Virtual online communities for aging life experience (VOCALE) approach: Pilot studies. *2019 GSA Annual Scientific Meeting*. Austin, Texas.
20. Han, S., Teng, A., Lin, S.-Y., Chu, F., Demiris, G., Zaslavsky, O., **Chen, A. T.** (2019). Usability of an online discussion platform: Development of a coding scheme. *2019 GSA Annual Scientific Meeting*. Austin, Texas.
21. Conway, M., Hu, M., Benson, R., Zhu, S.-H., **Chen, A. T.** (2020). Tracking the evolving relationship between tobacco, marijuana, and e-cigarettes using Reddit. *Society for Research on Nicotine and Tobacco*. New Orleans, Louisiana. Was accepted and scheduled to be presented but cancelled due to COVID-19.
22. Bowen, J., Klaich, A., **Chen, A. T.**, Rockhill, C. (2020). Satisfaction of patients and implementers utilizing technology-based Social Emotional Learning interventions in a youth inpatient psychiatric setting. *AMIA Clinical Informatics Conference 2020*. Seattle, WA.
23. **Chen, A. T.**, Ornelas-Mendoza, M., Rockhill, C. (2020). Examination of heart rate variability among psychiatric youth inpatients utilizing a technology-based Social Emotional Learning biofeedback intervention in an inpatient setting: data collection and analysis challenges, initial results and next steps. *AMIA Clinical Informatics Conference 2020*. Seattle, WA.
24. Sharma, R. S., Tsui, S., **Chen, A. T.** (2020). Involving stakeholders in the design of an interactive guide for patients with advanced cancer. *AMIA Clinical Informatics Conference 2020*. Seattle, WA.
25. Ng, C., Shirts, B. H., **Chen, A. T.** (2020). Facilitating family communication about genetic testing through ConnectMyVariant, an educational website: Development and preliminary usability assessment. *AMIA Clinical Informatics Conference 2020*. Seattle, WA.
26. Bowen, J., Klaich, A., Rockhill, C., **Chen, A. T.** (2020). Emotional dysregulation, depression, and functional impairment at baseline and 6-month follow up in youth admitted to an inpatient psychiatric unit for aggression or depression. *American Academy of Child and Adolescent Psychiatry (AACAP) 2020 Virtual Annual Meeting*.
27. Shirts, B. H., **Chen, A. T.**, Ng, C., Huey, J., Rao, N. D., Coffin, A., Bowen, D. J., Fullerton, S. M., Daker, J., Fordiani, O., Oldroyd, C. M., Stoddard, J. A., Crandell, J. N. (2020). Piloting the use of consumer genetic genealogy networks for cascade screening. *American Society of Human Genetics*. Virtual meeting October 27-30, 2020.
28. Shirts, H., Rao, N. D., Huey, J. Coe, S., Bowen, D.J., Fullerton, S. M. Stoddard, J. A. Crandell, J. N., **Chen, A. T.** (2020). Collaborative use of social media and consumer genetic genealogy networks to connect people with the same genetic variant and encourage enhanced cascade testing. *24th Annual Meeting of the Collaborative Group of the Americas on Inherited Gastrointestinal Cancer being held virtually November 14-15, 2020*.
29. Rao, N. D., Coe, S., Huey, J., Fullerton, S. M., **Chen, A. T.**, Shirts, B. H. (2021). Population genetic screening: What are the psychosocial impacts? *ASHG 2021*.
30. Shirts, B., Rao, N., Huey, J., Coe, S., Tsinajinnie, D., Kaganovsky, J., Jarvik, G. J., Fullerton, S. M., **Chen, A. T.** (2021). A step towards real-world population screening for hereditary cancer and hypercholesterolemia. *ASHG 2021*.
31. Chen, B., Ge, S., Zaslavsky, O., **Chen, A. T.** (2021). Investigating information and support interaction patterns in an online health community. *ASIS&T SIG-USE Symposium 2021*.

32. Online community intervention for older persons with frailty and pre-frailty: pilot studies. Zaslavsky, O., Chu, F., Ge, S., Teng, A., Lin, S.-Y., Demiris, G., **Chen, A. T.** (2021). *Gerontological Society of America*.

Invited Talks

National Invited Presentations

1. On Health and Wellness: Information Encounters, Knowledge Acquisition, and Interactions in Online and Offline Spaces. School of Informatics and Computing, Indiana University-Purdue University Indianapolis. March 25, 2015.
2. On Health and Wellness: Information Encounters, Knowledge Acquisition, and Interactions in Online and Offline Spaces. School for the Science of Health Care Delivery and the College of Health Solutions, Arizona State University. April 17, 2015.
3. On Health and Wellness: Information Encounters, Knowledge Acquisition, and Interactions in Online and Offline Spaces. Department of Biomedical Informatics and Medical Education, University of Washington School of Medicine. April 27, 2015.
4. On Health and Wellness: Information Encounters, Knowledge Acquisition, and Interactions in Online and Offline Spaces. Department of Biomedical Informatics at the University of Utah School of Medicine. June 2, 2015.
5. Oh, S., Costello, K. L., **Chen, A. T.**, & Wildemuth, B. M. (2016). Invited to give a panel presentation entitled, "Qualitative Methods for Studying Health Information Behaviors," at the Annual meeting of the *Association for Information Science & Technology (ASIS&T 2016)*, Oct. 14-18, 2016. Copenhagen, Denmark.
6. The relationship between health management and information behavior over time: A study of the illness journeys of people living with fibromyalgia. AMIA Consumer and Pervasive Health Informatics Working Group April Meeting. April 17, 2017.
7. Encouraging patient voice and participation in health- and information behaviors research. School of Information at the University of Texas at Austin. May 1, 2018.
8. Online Communities and Social Networks: Challenges, Opportunities, and Open Questions. University of Utah Department of Biomedical Informatics. Salt Lake City, Utah. September 5, 2019.
9. Online Communities as Vehicles to Share Health Information and Support: Challenges and Critical Questions. University of British Columbia iSchool. Canada. October 21, 2019.
10. Approaches to Understanding Users, Their Behavior, and Mental Models. Dr. Lu Xiao's lab group, Syracuse University School of Information Studies. July 28, 2020.
11. Studying the Language of Psychological and Social Processes in Social Media and Personal Communications: Examples from Biomedical Informatics and Digital Humanities Research. Computational Linguistics Seminar. University of North Carolina, Chapel Hill, March 2, 2021.
12. Valdez, R., **Chen, A. T.**, Hampton, A. J., Madathil, K. C., Papautsky, E. L., Rogers, C. C. (accepted). Leveraging Social Media for Human Factors Research in Health Care. Invited to give a panel presentation at *Human Factors and Ergonomics Society Annual Meeting (HFESAM) 2021*. October 4-7, 2021. Baltimore, MD.
13. Digital Humanities Research: Practice and Reflexivity. Invited guest lecture, INF391D.10, Survey of Information Studies, Fall 2021 at University of Texas at Austin iSchool. November 16, 2021.

Local Invited Presentations (University of North Carolina Chapel Hill, 2012-2015; University of Washington, 2015-present)

1. Online Support Groups. INLS 515 Consumer Health Information. October 2, 2012.
2. Sentiment Analysis I & II. INLS 613 Text Mining. November 5 & 7, 2012.
3. Considering Online Support Interactions. INLS 490-189 Social Media and Society. November 8, 2012.
4. Named Entity Recognition. INLS 512 Applications of Natural Language Processing. February 18, 2013.
5. Bio/Health NLP. INLS 512 Applications of Natural Language Processing. April 10, 2013.
6. Combining Text Mining and Network Analysis to Mine Online Communities. INLS 613 Text Mining. November 20, 2013.
7. Shedding Light on Patients' Medication Experiences. PHRS 899 Seminar in Pharmaceutical Sciences. January 29, 2014.
8. VizText. INLS 512 Applications of Natural Language Processing. February 18, 2014.
9. Integrating NLP Techniques into Visual Analysis Tools to Support Reading and Analysis. INLS 512 Applications of Natural Language Processing. March 17, 2014.
10. Online Support Groups. INLS 515 Consumer Health Information. September 30, 2014.
11. The Living Document. INLS 512 Applications of Natural Language Processing. February 23 & 25, 2015.
12. Applications of Visual Text Analysis to the Genre of Women's Fiction. INLS 842 Seminar in Popular Materials. April 22, 2015.
13. Meaning and Time in Health-Related Social Media Use. BIME 590. October 27, 2015.
14. Different Strokes for Different Folks – Eliciting User Feedback and Analyzing Data in Two Genetics-Related Contexts. BIME 590. Presented with Ginger Tsai, March 7, 2019.

Workshop, Panel, and Tutorial Organization

Chen, A. T., Xiao, L., Kaplan, S. J., & Lach, P. (2017). Organized and moderated a panel entitled, "Incorporating Values Sensitive Design into Crowdsourcing Methodologies for Knowledge Collaboration," at Annual meeting of the Association for Information Science & Technology (ASIS&T 2017).

Chen, A. T., Ocepek, M. G., Potnis, D., Wang, Y. (2018). Organized the "Moving Toward the Future of Information Behavior Research and Practice: 18th Annual SIG-USE Research Symposium" at the Annual meeting of the Association for Information Science & Technology (ASIS&T 2018) as Co-Chair.

Chen, A. T. Warner, J. L., Wu, D. T.Y. (2018). Organized the 9th Annual Workshop on Visual Analytics in Healthcare (VAHC) at the annual meeting of the *American Medical Informatics Association (AMIA)* as Co-Chair.

Chen, A. T., Cole, C., Fields, S., Perkins, A., Oei, C., Kuru, S. S. (2021). Introduction to network analysis for literary and historical research. Tutorial presented at *Canadian Society for Digital Humanities/société canadienne des humanités numériques (CSDH/SCHN) 2021*. May 30 – June 3, 2021.

Other

Language Proficiency and Certifications

I am fluent in English, Mandarin Chinese, and Japanese. I passed the **Japanese Language Proficiency Test**, 1-kyu, in the year 2000.