ONC 2023 ANNUAL MEETING

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#ONC2023

Office of the National Coordinator for Health Information Technology

PHIT for Duty: Expanding the Nation's Public Health Workforce – Case Studies in Training Future Leaders in Public Health Informatics and Technology

2023 ONC Annual Meeting

December 15, 2023

Panelists

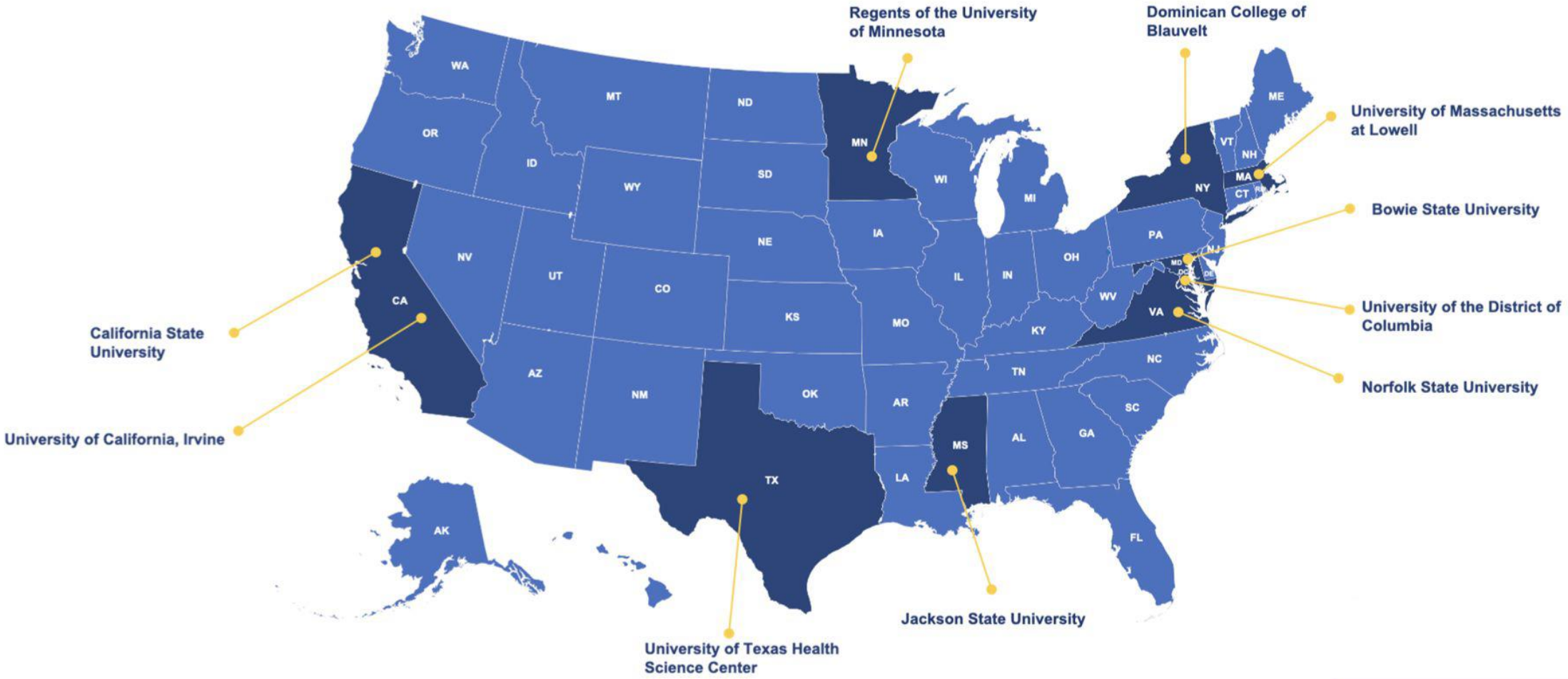
- **Sherilyn Pruitt** - ONC Moderator
- **Maggie Wanis** - ONC Moderator
- **Raja Sengupta, PhD** - UC Berkeley, CCPHIT
- **Robert Hammarberg, DrPH** - UTHealth Houston School of Public Health, GetPHIT
- **Anastasia Jones, MPH** - Texas Department of State Health Services, Public Health Region 8
- **Allene Stephen, MPH** - GNR Public Health
- **Kaylia Johnson, MPH** - Oakland County Health Division
- **Mary Anne Foo, MPH** - Orange County Asian and Pacific Islander Community Alliance (OCAPICA)
- **Erin Hitomi**, Orange County Asian and Pacific Islander Community Alliance (OCAPICA)

Overview of the PHIT Workforce Development Program

- In 2021, over $75 million awarded to 10 awardees to increase the number of public health professionals trained in public health informatics & technology.
- Focused on an interdisciplinary approach to data science and managing public health information.
- Over four years, the PHIT Program awardees will train at least 5,000 individuals.
- Awardees required to take a consortium approach and include at least one state/local public health department
- Programs range from training incumbent health care workers, undergraduate and graduate students as well as certificate programs.

https://www.healthit.gov/PHIT

Public Health Informatics & Technology Workforce Development Program Recipients



This map includes the 10 PHIT Workforce Development Program award recipients.

Curriculum, Course Development & Implementation

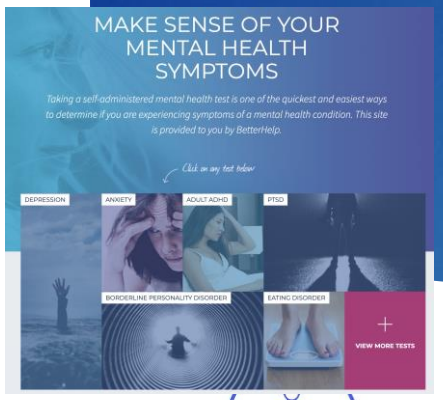
California Consortium for Public Health Informatics and Technology
Presented at the ONC Annual Meeting

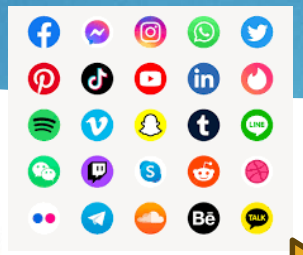
By Raja Sengupta, Professor. Engineering UC Berkeley
with Kamiar Alaei, Principal Investigator &
Professor, Health Science Cal State Long Beach

Sponsored by the ONC

CCPHIT program is supported by the Office of the National Coordinator for Health Information Technology (ONC) of the U.S. Department of Health and Human Services (HHS) under grant number 90PH0006/01-05 and title "The PHIT Workforce Development Program" for grant amount $10,232.066.00 and 0% financed with nongovernmental sources. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by ONC, HHS or the U.S. Government.

Objective: Technology Meets People
Technology → Public Health Outcomes





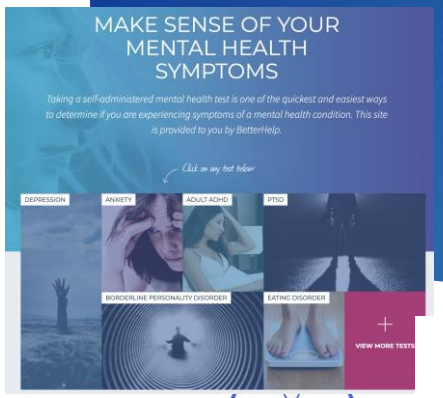
How do we translate?

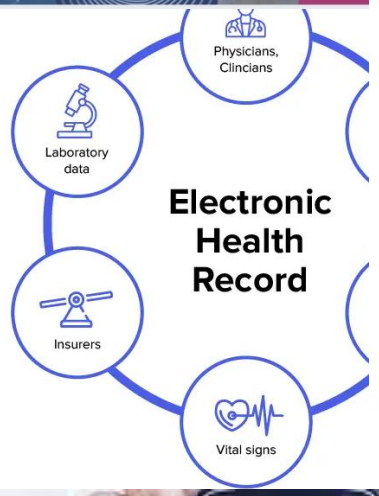
A society in which all people achieve their full potential for health and well-being across the lifespan.

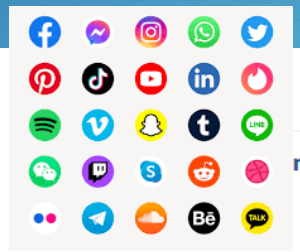
https://health.gov/healthypeople/about/healthy-people-2030-framework

Environmental health: Cleaner & Cooler
Preventable disease: Mental health, infectious disease, obesity, ……
Wellness Awareness & Retail health

The Answer as it often is → People
Workforce: Technology & Public Health fluency







HealthIT.gov

TOPICS BLOG NEWS DATA

ments > Public Health Informatics & Technology (PHIT)

Public Health Informatics & Technology (PHIT) Workforce Development Program CCPHIT 700

The Office of the National Coordinator for Health Information Technology (ONC) has awarded $75 million in cooperative agreements as part of its Public Health Informatics & Technology Workforce Development Program (PHIT Workforce Program). Funded through the American Rescue Plan, the program aims to strengthen U.S. public health information technology (IT) efforts, improve COVID-19

ease representation of underrepresented communities within the public

will support the overall administration of the program.

A society in which all people achieve their full potential for health and well-being across the lifespan.

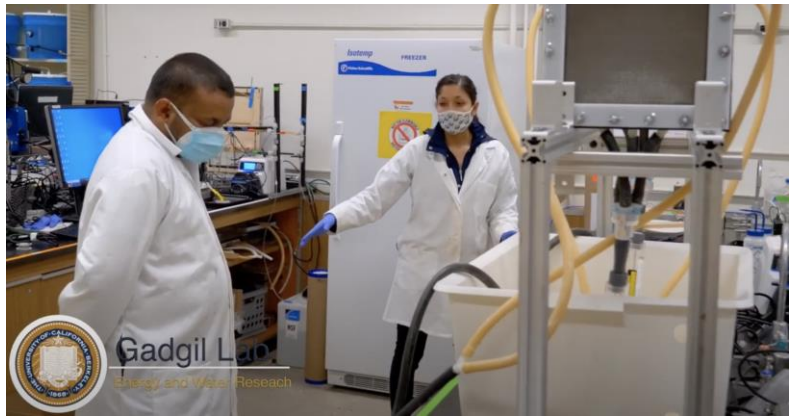
People, Education

https://health.gov/healthypeople/about/healthy-people-2030-framework

Environmental health: Cleaner & Cooler
Preventable disease: Mental health, infectious disease, obesity, ……
Wellness Awareness & Retail health

The Pedagogical Challenge

- This is where technology starts



- The Lab environment is pristine controlled

- Why can't they pay for it?
- Why don't they see the value?
- Why can't they maintain it?
- Why do they have so little infrastructure?

- This is where it must arrive

Reality is messy, complicated

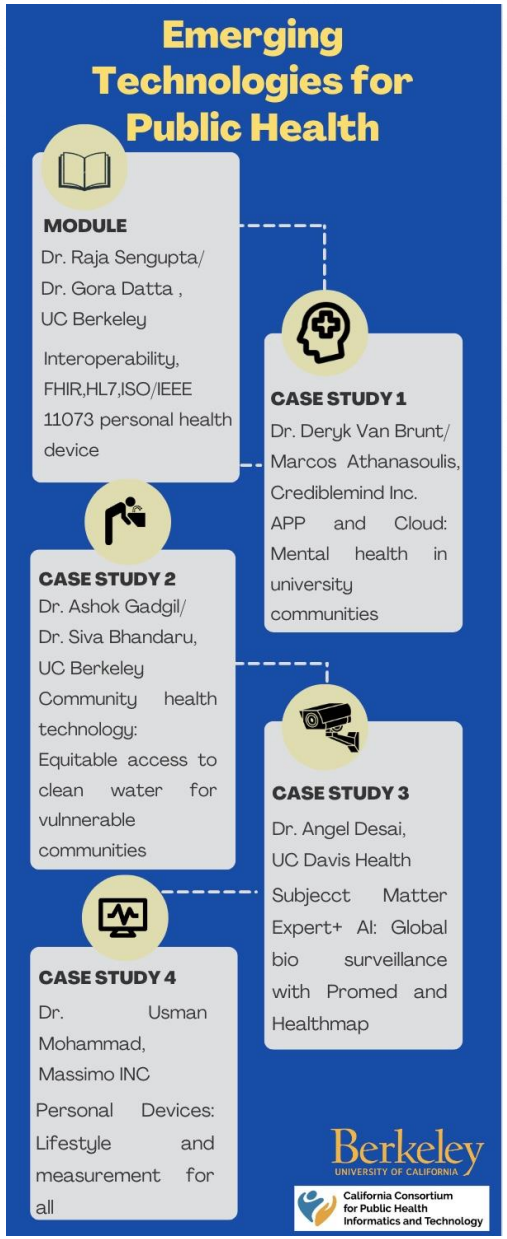
Approach: Case Study method

Case study 1 : Dr. Ashok Gadgil & Dr Siva Bhandaru
Professor UC Berkeley/Postdoc
Senior Faculty Scientist LBNL


Case study 2: Dr. Deryk Van Brunt & Marcos Athanasoulis
Associate Clinical Professor UC Berkeley
Co-Founders, CredibleMind

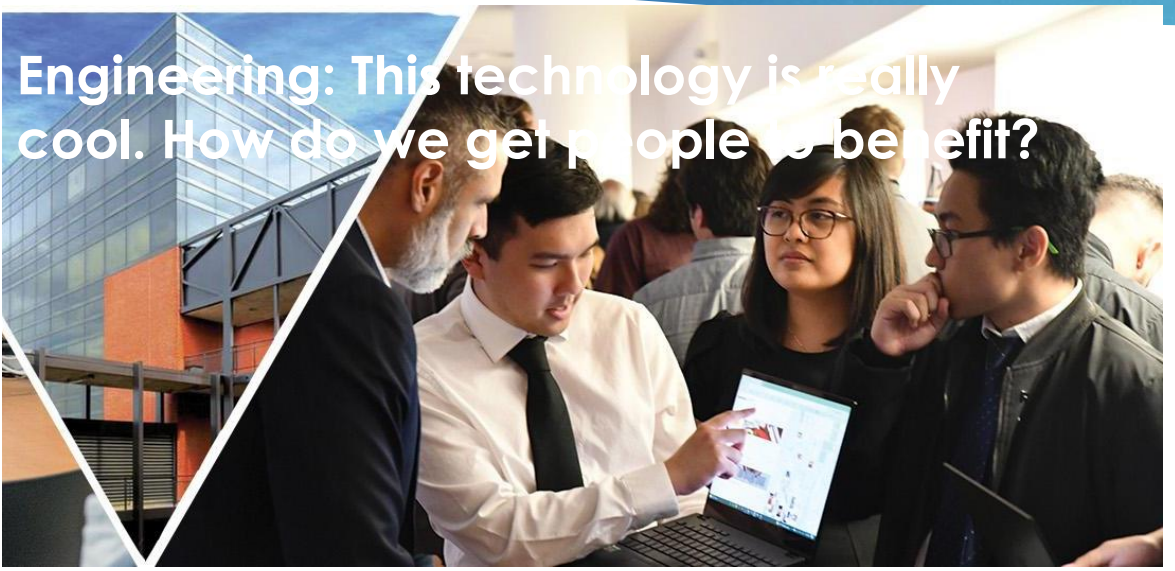

Case study 3: Dr. Angel Desai, Associate Editor JAMA
Assistant Clinical Professor UC Davis Health

Case study 4: Dr. Usman Mohammad
Executive Vice President of R&D Masimo, Inc.



Berkeley
UNIVERSITY OF CALIFORNIA

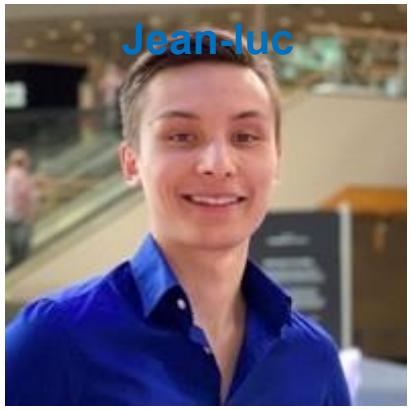
Case Studies: Convergence between Engineering and Public Health



And the Students give back in their Projects

Impact of campus transportation access on the mental health of community college students, CEE Phd

Global health and disease surveillance, CS bachelors, CSULB



Atrial Fibrillation, CEE Phd UCB

Maternal & Child Health Uganda POCUS Ultrasound, MPH UCB

The Role of Wearable Devices in Public Health MPH CSULB

Berkeley
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Open Issues: Taking Ownership, Scaling up

- A program-wide corpus of case studies?
- Instructor: Take ownership by using the corpus and adding a couple of your own
- Each course can be different and individually creative
- Student projects need resources

Robert Hammarberg, DrPH, The University of Texas Health Science Center at Houston (UTHealth Houston) School of Public Health

TEXAS
Health and Human Services

Texas Department of State Health Services

Spring 2023 GET PHIT Experience

Anastasia Jones, MPH

Epidemiologist 1

Texas Department of State Health Services

Public Health Region 8

anastasia.jones@dshs.texas.gov

Overview

- Introduction
- GET PHIT
- Expectations
- Project
  - Process & Atlas.ti
- Summary & Takeaways
- Next Steps
- Acknowledgements

Introduction

University of Texas at San Antonio

B.S. Public Health

B.A. Sociology

Minor in Biology

University of Texas Health Science Center, School of Public Health, San Antonio

MPH in Epidemiology

Texas Department of State Health Services

GET PHIT: Gaining Equity in Training for Public Health Informatics and Technology

Texas Department of State Health Services

Epidemiologist 1

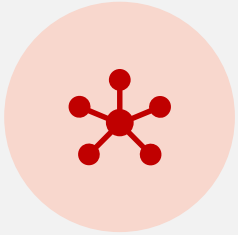
TEXAS Health and Human Services

Texas Department of State Health Services

GET PHIT

- Integrative learning experience (ILE), thesis, or capstone course per MPH requirements
- School's weekly newsletter had been advertising an internship program called GET PHIT
  - Matches students with health departments and non-profits with a focus on public health informatics and data science
  - Matched with the Texas Department of State Health Services at Public Health Region 8 on the Community Health Improvement team
- I was interested in learning more about public health informatics and how to turn raw data into digestible knowledge for the public

Expectations



NETWORKING

EXPERIENCE IN DATA ANALYSIS

APPLYING SCHOOL KNOWLEDGE

EXPERIENCE IN PUBLIC HEALTH INFORMATICS

TEXAS Health and Human Services

Texas Department of State Health Services

Project

- Health Disparities Project aims:
  - Identify communities disproportionately impacted by Covid-19 in Calhoun County
  - Address disparities in the community (lack of access, language barriers, lack of transportation)
- Direct tasks:
  - Assist in creating a Community Health Needs Assessment
    - Community and Quality of Life section
  - Use Atlas.ti to analyze stakeholder transcript notes

TEXAS Health and Human Services

Texas Department of State Health Services

Process for Data Collection

- Utilized a Community Needs Assessment for Comal & Guadalupe County from 2013 as a template
- Only given the source website (American Community Survey)
  - Thousands of tables available, needed to figure out what tables were being used
- Worked backwards by finding what tables were being used. Then changed the parameters to fit Calhoun County for the most recent year

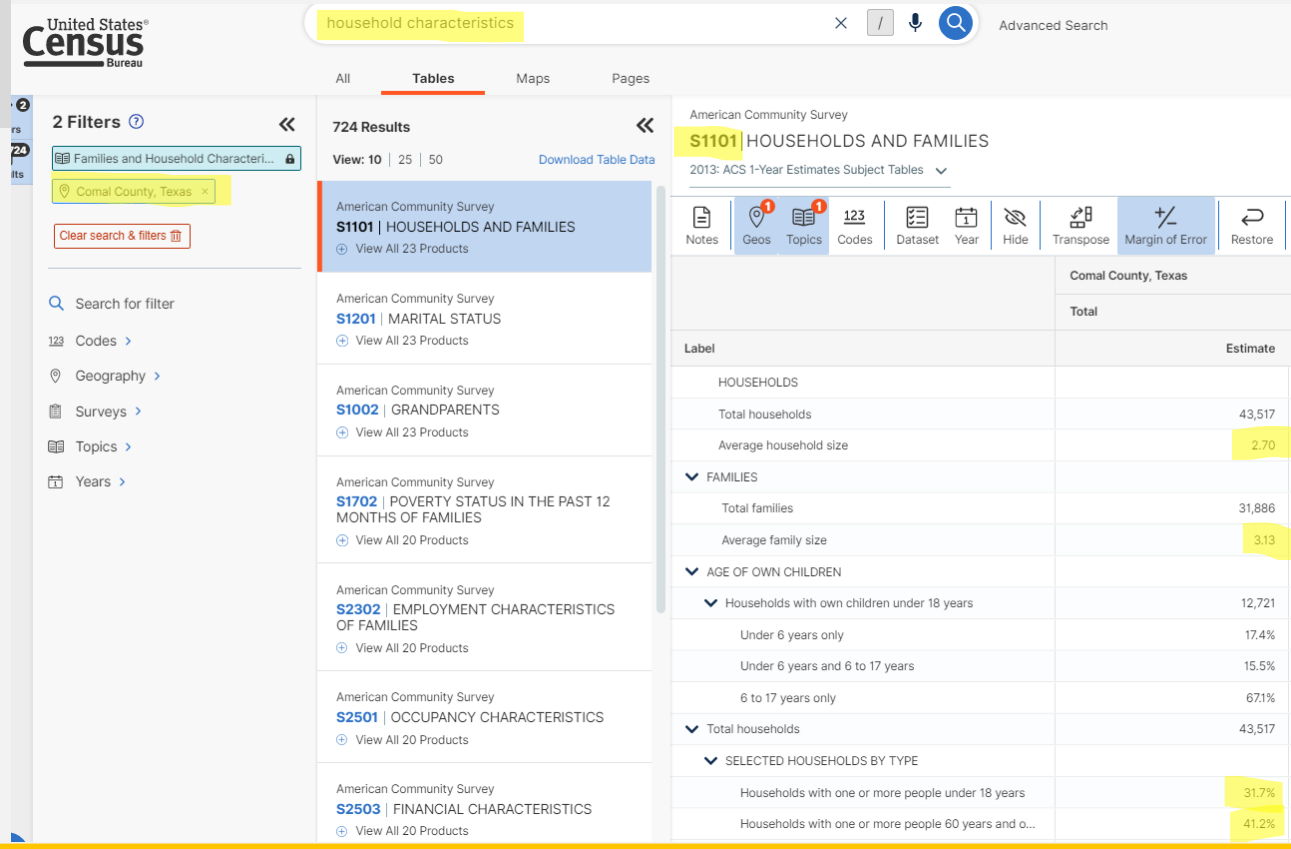
Household Characteristics (2013) & Types of Family Households (2013)

Characteristic	Comal County		Guadalupe County		Texas	
	Estimate (MOE)		Estimate (MOE)		Estimate (MOE)	
Average Household Size	2.70	(+/- 0.08)	2.89	(+/- 0.06)	2.84	(+/- 0.01
Average Family Size	3.13	(+/- 0.13)	3.39	(+/- 0.13)	3.44	(+/- 0.01
Households with Children < 18	31.7%	(+/- 3.3%)	38.7%	(+/- 3.5%)	37.60%	(+/- 0.20%
Households with Adults 60+	41.2%	(+/- 2.3%)	33.2%	(+/- 2.0%)	31.50%	(+/- 0.10%)

Consistent with earlier data on the older age of the county population, Comal County's average household size is smaller than in Texas, the percentage of households with children under 18 is lower, and percentage of households with seniors quite a bit higher. Guadalupe County more closely resembles Texas.

- Screenshot from Comal/Guadalupe County CNA in 2013
- Searched on data.census.gov using the title of the table (HOUSEHOLD CHARACTERISTCICS)
- Selected Comal County, 2013 1-year estimate

- Matched the data I found to the table in the CNA to see if it matched
- Now I know what dataset was used to obtain this information (S1101)
- Now I need to use this same table, but change the parameters for Calhoun County in the most recent year



American Community Survey

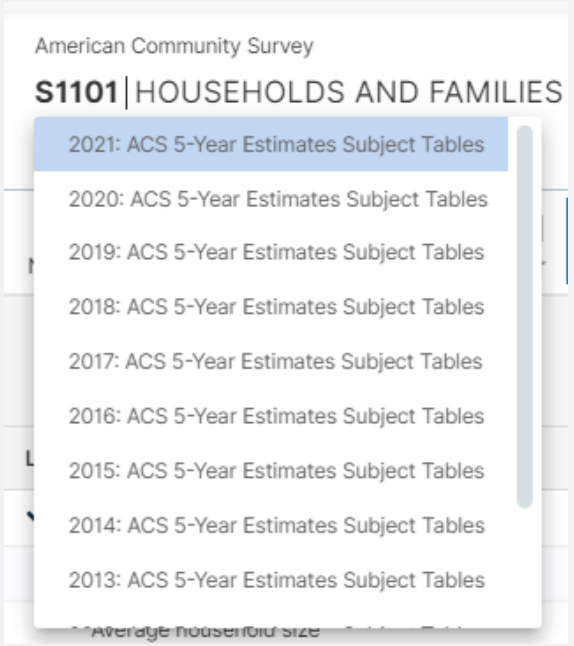
S1101 | HOUSEHOLDS AND FAMILIES

2021: ACS 5-Year Estimates Subject Tables

Notes | Geos (1) | Topics | Codes | Dataset | Year | Hide | Transpose | Margin of Error | Restore | Excel | CS

Label	Calhoun County, Texas Total Estimate
HOUSEHOLDS	
Total households	7,748
Average household size	2.59
FAMILIES	
Total families	5,562
Average family size	3.05
AGE OF OWN CHILDREN	
Households with own children of the householder under 18 years	2,368
Under 6 years only	18.8%
Under 6 years and 6 to 17 years	24.1%
6 to 17 years only	57.1%
Total households	7,748
SELECTED HOUSEHOLDS BY TYPE	
Households with one or more people under 18 years	35.8%
Households with one or more people 60 years and over	42.1%

1-year estimates	1-year supplemental estimates	3-year estimates*	5-year estimates
12 months of collected data *Example:* 2021 ACS 1-year estimates *Date collected between:* January 1, 2021 and December 31, 2021	12 months of collected data *Example:* 2021 ACS 1-year supplemental estimates *Date collected between:* January 1, 2021 and December 31, 2021	36 months of collected data *Example:* 2011-2013 ACS 3-year estimates *Date collected between:* January 1, 2011 and December 31, 2013	60 months of collected data *Example:* 2017-2021 ACS 5-year estimates *Date collected between:* January 1, 2017 and December 31, 2021
Data for areas with populations of 65,000+	Data for areas with populations of 20,000+	Data for areas with populations of 20,000+	Data for all areas



- Now that I know the dataset label (S1101), I can then change the county to Calhoun County
- However, only the 5-year estimate tables are available
- This is because 1-year estimates are only available for areas with populations of 65,000+

Atlas.ti

- Atlas.ti is a software program used for qualitative data analysis
- There were 56 files of stakeholder meeting notes
- Uploaded the files to Atlas.ti and created a codebook of major themes and frequently found codes
  - Health Issues: Mental illness / Mental health issues
  - Health and Social Services: Lack of access / Difficulty accessing mental health services
  - Health Disparities / SDOH: Elderly disproportionately affected

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ATLAS.ti QUALITATIVE DATA ANALYSIS

Social Issues	Social issues are complex and multifaceted problems that affect individuals, communities, and society as a whole. Social issues often result in social, economic, and health disparities, and they require systemic solutions to promote social justice, equity, and well-being.	**Language Barrier**	Refers to difficulties that individuals may experience in communicating due to differences in language or culture. This can limit access to important services and opportunities, such as healthcare, education, and social services.
		Increase in crime rate	Refers to a rise in criminal activity within a community or geographic area, which can impact safety and quality of life for residents.
		Difficulty finding childcare	Refers to challenges parents may face in finding affordable and high-quality childcare services for their children, which can impact parents' ability to work and contribute to the workforce, as well as impact children's development and well-being.
		Unemployed / difficulty maintaining or finding a job	Refers to challenges individuals may face in finding and keeping stable employment, which can impact financial stability, access to healthcare, and overall quality of life.

Summary & Takeaways

- Got more experience with Atlas.ti and code/theme development
- Got more experience with using Census tract data
- Learned how to piece together a Community Health Needs Assessment
- Networked with multiple public health professionals at Public Health Region 8
- Landed a position on the Epidemiologist team with Public Health Region 8

TEXAS Health and Human Services

Texas Department of State Health Services

Next Steps

- Continue to work as an epidemiologist and improve on my data analysis skills
- Specifically continue working with SAS and moving to the quantitative realm of data
- Also, begin data visualization to bridge the connection between data and the public

Acknowledgements

- Community Health Improvement Supervisor: Tina Castellanos, MPA, IBCLC
- Community Health Improvement Manager: Dr. Katherine Velasquez, PhD, RN
- Epidemiology Manager: Elise Rush, MPH, CIC
- DSHS Public Health Region 8
- University of Texas Health Science Center, School of Public Health
- GET PHIT UTH SPH Coordinator: Michele Stanton, MA
- Advisor: Dr. David Gimeno Ruiz de Porras, LPsy, MSc, PhD

Thank you!

Anastasia Jones, MPH

Epidemiologist 1

Texas Department of State Health Services

Public Health Region 8

anastasia.jones@dshs.texas.gov

GNR PUBLIC HEALTH

Local Health Department in GA Serving: Gwinnett, Newton, and Rockdale Counties

Allene Stephens, MPH, CPH
Epidemiologist II

GNR Public Health

Vision: Our vision is a healthy, protected, and prepared community.

Mission: To protect and improve the health of our community by monitoring and preventing disease; promoting health and well being; and preparing for disasters.

About Us

Local health district in GA

- 3 counties
  - outside Metro Atlanta
- 6 health clinics
  - TB clinic, and STI/HIV clinic
- 3 environmental health offices
- 1 district office

Opportunities

Everyone wins!

- ✓Bolster workforce
- ✓Affordable
- ✓Keep abreast with technology
- ✓Share within agency
- ✓Highlight gaps
- ✓Teach / Train

GNR Public Health

The Intern's Experience

- Apply classroom/training
- Work on reports and outbreaks
- Network
- Professional development skills
- Work with a diverse workforce AND serve a diverse community
- Valued and appreciated
- Work with an Epidemiologist

Next Steps

- Work in public health of course!
  - Tribal, Local, or State
- Work as a consultant
- Continuously use skills learned
- Remain up-to-date with software improvements and versions

Kaylia Johnson, MPH, Oakland County Health Division


RENÉE AN
ocapica
Orange County Asian and Pacific Islander Community Alliance

Erin Hitomi, Orange County Asian and Pacific Islander Community Alliance (OCAPICA)

Moderated Q & A

ONC 2023 ANNUAL MEETING

Check out the agenda, speaker bios, venue layout, and more!

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https://whova.com/portal/oncan_202312