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HELIOS Lab Informational

Summer 2023

Introductions

1. Name
2. Field of study / Program
3. Hometown
4. Something that may surprise us about you?

We will start recording after the introductions

Overview



- 1 Who We Are: HELIOS Mission & Team**
- 2 What We Do: Current Research Projects**
- 3 What We Expect: Lab Requirements**
- 4 What You Gain: Opportunities**
- 5 Next Steps: Application**

Who We Are

Established in 2017, the HELIOS Lab is a student led research lab with the purpose of:



The HELIOS Lab
2018-2019

- ✓ Providing Community-Based **Research & Clinical Experience** Opportunities
- ✓ Studying **Health Disparities** in Marginalized Communities
- ✓ Providing Students with **Leadership** Skill Development Opportunities

Our Mission



Health Services
Research



Help Create A More
Equitable
Healthcare System

Commitment To
Our Future
Healthcare
Leaders'
Career Goals





Summer Quarter
Leadership Development

SHARE-FM Build leadership skills in returning students and set the direction for the next HELIOS year



Fall Quarter
The Health Equity Lens

Clarify why health equity work needs to be done. And why **you** are the one to do it.



Winter Quarter
Real World Health Research

Learn foundations of research design and methods through an applied *Microproject*



Spring Quarter
Scientific Communication

Communicate the lessons and value of your work to professional and community audiences.

HELIOS offers a year-round curriculum in health equity, professional development and research.



The SHARE-FM summer experience offered by HELIOS, offers emerging leaders within the lab a summer stipend and a 200 hours of professional development with medical student mentors over 10 weeks



HELIOS activities and leadership opportunities build cohesive cohorts of equity-minded students



Collaboration and learning with community partners like CRECE Urban Farm, Latino Health Access and others.



Bilingual outreach at the UCI Family Health Center in Santa Ana

*Stepping Stone:
Reflect on values and passions*

What values motivate your behavior?

What is needed?

What are you good at?

What gets you excited and energized?

Who do you love?

Learning from dynamic leaders in
the health professions and
community spaces.

HELIOS lab 4⁺ Support the mission of community-based orgs



LHA offers promotor-led diabetes education classes
 Many strengths, but limited capacity to evaluate impacts
 HELIOS partners with LHA to show impacts of promoters

HELIOS lab 4⁺ Bring attention and resources



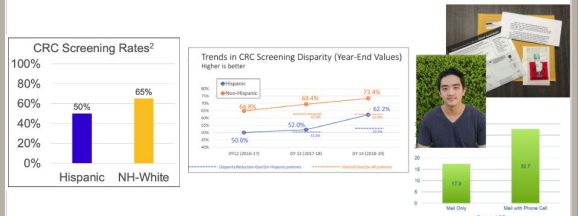
See disproportional impact of COVID-19
 Conduct and disseminate community interviews
 HEAL-OC Project funds 4 nonprofits and City HEQ office

Mentoring others



HELIALDs of Health Equity
 Health Equity Researchers Across Lots of Disciplines

HELIOS lab 4⁺ Introduce and evaluate interventions



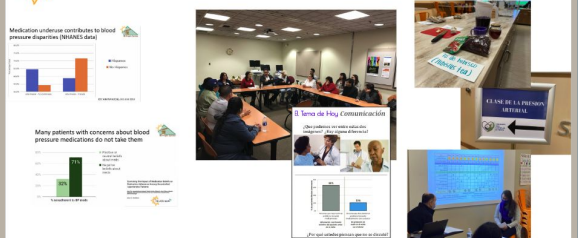
Disparity in colorectal cancer screening rates
 Clinic efforts start to close the gap
 Create and study a mail outreach program

Health Equity Research (and you) can drive systems change

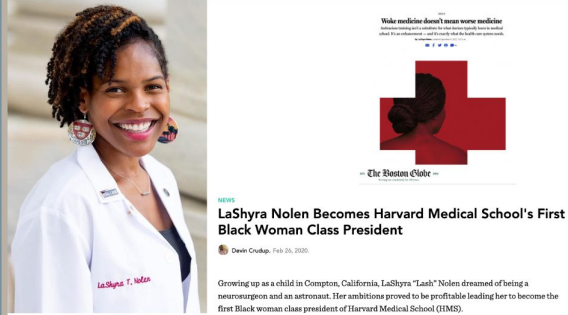
Health Equity Research prepares the next generation of professionals



HELIOS lab 4⁺ Elevate community voices



Research disparities in health outcomes
 Explore solutions with Community and Patient Advisory Groups
 Bring an idea to life and see how it works



HCAi
 Department of Health Care Access and Information

Health Professions Pathways Program

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 Jan 2023 - June 2027

Competitive proposals will demonstrate a commitment to the HPPP goals by implementing one or more of the following components:

- Pipeline programs that provide comprehensive academic enrichment, career development, mentorship, and advising in order to support students from underrepresented regions and backgrounds to pursue health careers.
- Paid summer internships for undergraduate students.
- One-year post-graduate fellowships.

Eligible Applicants, Available Funding, and Award Categories

1. Eligible Applicants

Proposals must promote eligible health professions:

- Primary Care
- Behavioral Health
- Geriatrics
- Nursing
- Oral Health
- Allied Health

Awardees must not use grant funds to supplant the salaries of existing full-time employees, or to provide training or continuing education for staff.

<https://hcai.ca.gov/wp-content/uploads/2022/06/HPPP-2022-23-Grant-Guide.pdf>



Assessing Pre-Post Changes to Intervention Sessions in Knowledge, Attitudes, Behaviors, and Blood Pressure within Hypertensive Latinx Patients from the UCI Family Health Center in Santa Ana
 Paola Duran, Andrea Serrano, William Hernandez, Daniela Garcia, Melissa Zaragoza, John Bilimek, PhD

Introduction

- Spanish-speaking, Latinx adults with hypertension are disproportionately affected by poor blood pressure control linked to lower uptake of recommended management strategies and less access to culturally and linguistically appropriate services.

Methods

- A total of 44 females and 16 males averaging 56 years of age participated. Surveys and blood pressure measurements were collected pre and post-intervention, with pre to post-changes examined with paired t-tests for continuous variables and McNemar's test for categorical variables.


Results

- There were no significant changes in knowledge scores pre post intervention, but attitudes towards blood pressure management improved.
- There were modest increases in health behaviors.
- Marginal blood pressure changes were observed for average systolic and diastolic readings.

Discussion

- These findings suggest that group health education classes for Spanish-speaking adults can promote positive health behavior change.

Health behaviors and attitudes improved after a 4-week hypertension class tailored for Spanish-speaking Latinx adults.



Scan to learn more about our study

Participant Characteristics

N	60
Age, mean ± SD, years	56 ± 8.6
Gender, no. %	
Female	44 73.3%
Male	16 26.7%

Beliefs on Medication

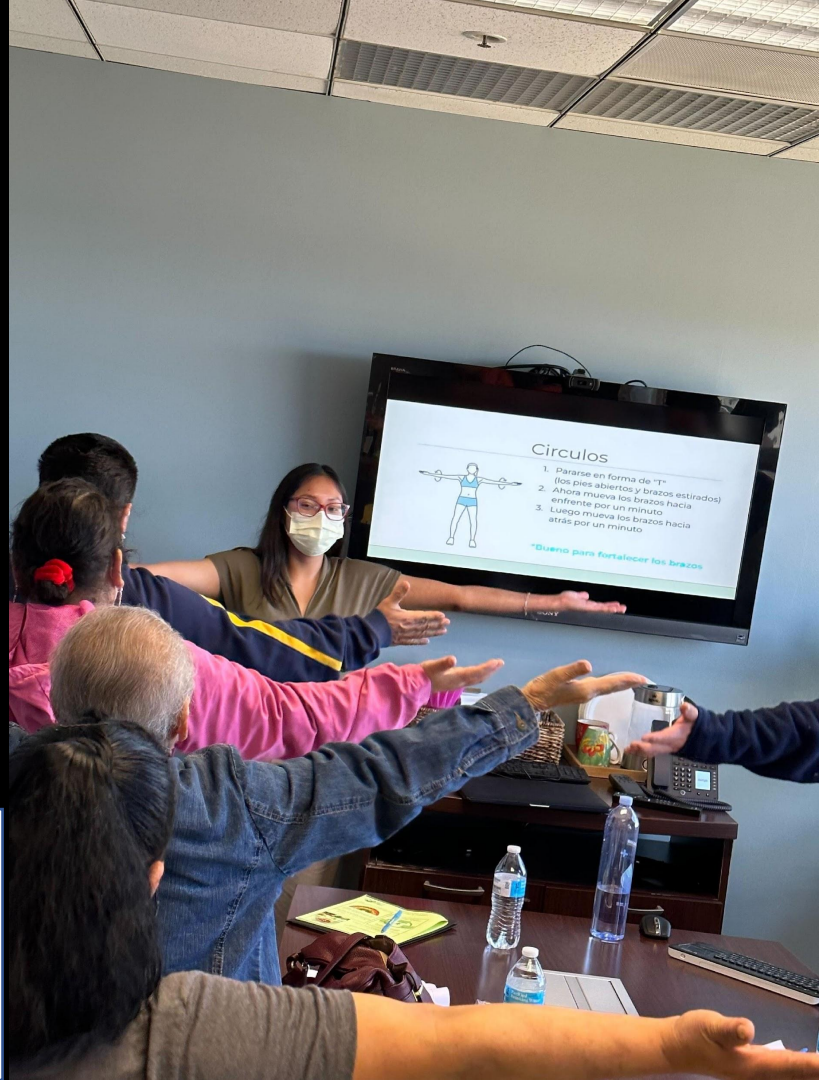


Stress Reduction Management



All HELIOS members lead and present collaborative research projects at local, regional or national conferences.

HELIOS students and staff lead Spanish-language blood pressure education classes with UCI Health Patients for the NIH funded *Mi Propio Camino* project





Collaborating with UCI Family Medicine residents to produce bilingua patient education videos



¿Cómo Voy a Llegar a la Clínica?: Hypertensive Latinx Patients' Journey to a Federally Qualified Health Center in Santa Ana, CA



Liliana Chau, Danielle Zaragoza, Brianna Flores, Devan Peterson, Shayda Abazari, John Billimek PhD, Adriana Orellana
University of California—Irvine, UCI Department of Family Medicine

Introduction

- Transportation can be a major barrier to accessing medical care
- When we see patients in clinic, the patient's journey to the clinic is often overlooked
- We aimed to describe the journeys of adult Latinx patients with hypertension at a federally qualified health center

Methods

- Driving distance from home address to the UCI Family Health Center Santa Ana was estimated using Google Maps for Latinx patient's hypertension participating in an NIH-funded hypertension study (n=235)
- A brief transit survey about modes of transportation and travel time to clinic was completed by a consecutively sampled subset of participants (n=87)
- Descriptive statistics on travel distance, method and time are presented
- Compared by gender and between patients with access to a car vs. those with no access to a car with t-tests and Fisher's Exact test

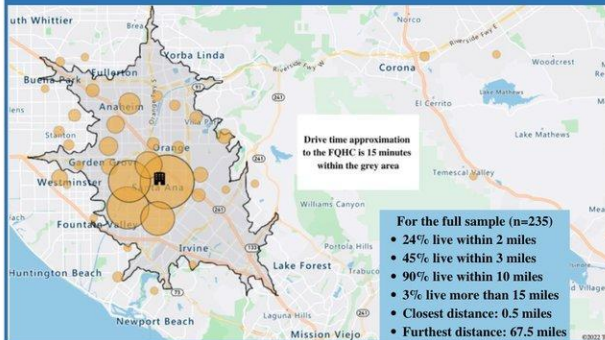
Results

- In the total sample (n=235), average distance to clinic was 5.5 miles
- Transit survey subset (n=87) had similar demographics and distance to clinic as total sample
- People without access to a car had much longer transit times but much shorter distance to clinic than those with access to a car (p<0.05)
- Minutes per mile of transit to clinic were 3x greater for those without access to a car (p<0.001)
- Women lived similar distances from clinic compared to men but were much less likely to have access to a car, especially a car they can use to drive themselves to clinic. (p<0.001)

Discussion

- Shorter commute distances for people without access to a car suggest that people without a car who live further away cannot as easily access this clinic
- Women who attend clinic visits do not live any closer on average than male patients, but have significantly less access to a car, suggesting considerable inequities in access to care despite similar geographic proximity
- Data limited to patients who actually made it to the clinic
- Future research should investigate transportation barriers among people who do not attend clinic visits

Among Latinx adult patients of a safety net clinic, lacking access to a car triples transit times per mile. Women are more than twice as likely to lack access to a car.



Learn more

about the

HELIOS lab!

Scan to access

our poster!

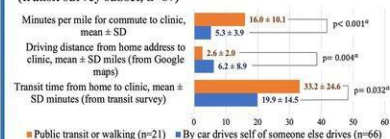
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our poster!

Table 1. Participant Characteristics, by sample group

	Full Sample (n=235)	Transit Survey Subset (n=87)
Age, mean ± SD years	58 ± 10	55 ± 9
Gender, no. (%) female	163 (70%)	56 (64%)
Education, no. (%) high school or beyond	32 (14%)	17 (20%)
Ethnicity, no. (%) Hispanic	235 (100%)	87 (100%)
Preferred language, no. (%) Spanish	235 (100%)	87 (100%)
Country of birth, no. (%) born outside U.S.	222 (94%)	84 (97%)
Household income, no. (%)		
<\$20,000 per year	127 (54%)	43 (49%)
\$20,000 or more per year	52 (22%)	29 (33%)
Not reported	56 (24%)	15 (17%)
Driving distance from home address to clinic, mean ± SD miles (from Google Maps)	5.5 ± 7.4	5.3 ± 8.0

Figure 1. Commute length by access to car (transit survey subset, n=87)



*Computed using independent samples t-test

Table 2. Different journeys for women vs. men (transit survey subset, n=87)

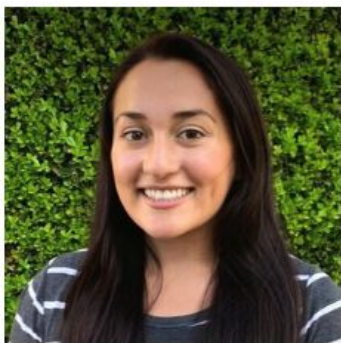
	Men (n=31)	Women (n=56)	p-value
Driving distance from home address to clinic, mean ± SD miles	5.7 ± 5.6	5.1 ± 9.1	0.94 ^b
Mode of transportation to clinic, no. (%)			<0.001 ^b
By car, drives self	24 (77%)	17 (30%)	
By car, someone else drives	7 (23%)	22 (39%)	
Public transit or walking	4 (13%)	17 (30%)	

*Computed using independent samples t-test; ^bComputed using Fisher's exact test

Research to know what it takes to ensure an equitable and trustworthy health care system.



Graduating seniors are honored at with a graduation stole at the annual HELIOS Banquet



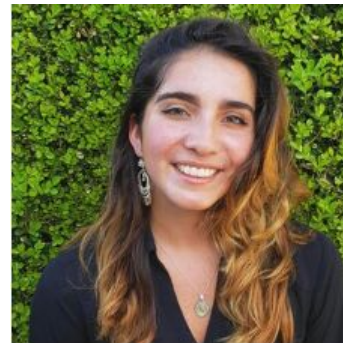
Danielle Chavez
Nursing



Brett Cervantes
Medicine



Carlos Garcia
Medicine



Cristabel Nunez
Physician Assistant



Rebeca Perez
Nursing



Jessica Arizmendi de la
Torre
Medicine



Anne Osuji
Medicine



Alexis Pellecer
Medicine

HELIOS alumni enroll in top-tier medical schools, nursing programs, PA school and pharmacy programs

HELIOS lab 4+ Support the mission of community-based orgs



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 Many strengths, but limited capacity to evaluate impacts
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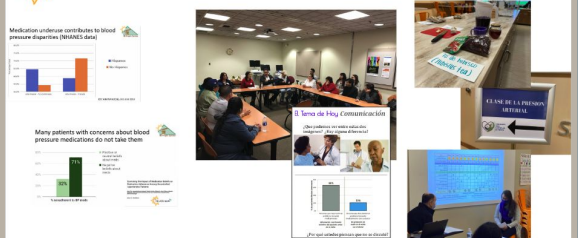
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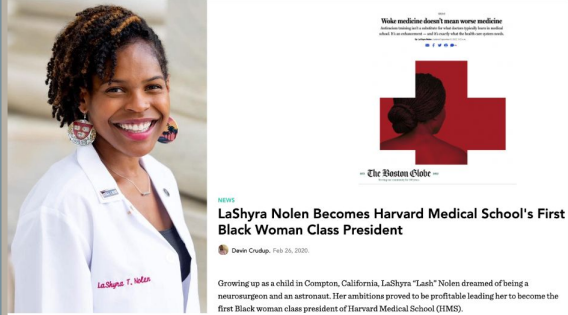


HELIOS '18 UCSD Medical School
 HELIOS '18 UC Davis Medical School
 HELIOS '18 UC Davis Research Assoc. Public Health Inst.
 HELIOS '19 UCSD Masters of Nursing Program
 HELIOS '19 UCI LEAD-ABC Medical School
 HELIOS '19 UCI PRIME-LC Medical School
 HELIOS '19 UCI PRIME-LC Medical School
 HELIOS '19 UCI LEAD-ABC Medical School
 HELIOS '19 UCI PRIME-LC Medical School
 HELIOS '21 UCI PRIME-LC Medical School
 HELIOS '21 UCI PRIME-LC Medical School
 HELIOS '21 UCI PRIME-LC Medical School
 HELIOS '21 UCSD Pharmacy School

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Meet Our Team



<https://thehelioslab.org/team>



Current Projects



Mi Propio Camino (My Own Way)

<https://thehelioslab.org/mpc>



Background:

Latinx adults with hypertension are **more likely to have uncontrolled blood pressure (bp)**, but are **much less likely** to be taking guideline medications

Purpose:

MPC examines an intervention that combines, group medical visits, home monitoring and physician oversight to empower patients to explore different combinations of medication and lifestyle to find **Mi Propio Camino (My Own Way)** to control BP.

Recruitment



Intervention





2023

MICROPROJECTS

UROP 2023 Posters

<https://thehelioslab.org/presentations>

Assessing Patients' Attitudes Toward the Use of Integrative Healthcare Services

Audrey Sjobeck, John Billimek, PhD, Alex Kipp, MD

BACKGROUND:

Due to the ongoing stigma and discrimination in the healthcare setting, understanding what factors are involved in a mood/stress related disorder patient seeking treatment is crucial to gaining better insight for what rhetoric to use with these patients in the field of integrative medicine (IM).

METHODS:

- 90 patients with mood/stress related disorders recruited from the UCI Family Medical Center in Santa Ana, California
- Qualtrics questionnaire developed to collect patient demographics and ten-point Likert scale to assess levels of importance in patient healthcare treatment preferences

RESULTS:

- Findings suggest that the factors, associating IM as a safe and effective practice and having prior experience using IM, have a relationship with a patient's intention to use IM

IMPLICATIONS:

- Patients' attitudes toward the use of IM can help shape future intervention studies with mood/stress related disorder patients that lead to an experience involving less stigma and discrimination



UCI Susan Samueli Integrative Health Institute




Associating integrative medicine (IM) as a safe and effective practice and having prior experience using IM suggest a relationship with intention to use integrative health services






Scan for full poster & additional information

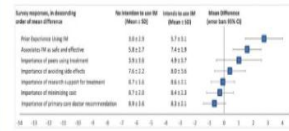
Participant Characteristics

Participant Characteristics				
Characteristic	Number	Percentage (%)	Mean (SD)	Range
Demographics				
Age (M)	38.8	100	11.5	18-75
Female (%)	78	86.7		
Male (%)	12	13.3		
White (%)	55	61.1		
Black (%)	10	11.1		
Hispanic (%)	10	11.1		
Other (%)	15	16.7		
Married (%)	35	38.9		
Single (%)	55	61.1		
Employed (%)	65	72.2		
Unemployed (%)	25	27.8		
Health Insurance (%)	85	94.4		
Medicaid (%)	10	11.1		
Medicare (%)	10	11.1		
Private (%)	65	72.2		
None (%)	5	5.6		
Healthcare Provider (%)	10	11.1		
Not a Healthcare Provider (%)	80	88.9		
Healthcare Provider Type (%)	10	11.1		
Physician (%)	5	5.6		
Nurse (%)	5	5.6		
Other (%)	0	0		

Independent Sample T-test Results

Survey Statement	Mean (SD)	Mean Difference	p-value
Integrative medicine is safe	4.83 (1.05)	0.83	0.0001
Integrative medicine is effective	4.70 (1.05)	0.70	0.0001
Integrative medicine is a safe and effective practice	4.77 (1.05)	0.77	0.0001
Integrative medicine is a safe and effective practice and having prior experience using integrative medicine	4.83 (1.05)	0.83	0.0001
Integrative medicine is a safe and effective practice and having prior experience using integrative medicine and having prior experience using integrative medicine	4.83 (1.05)	0.83	0.0001

Forest Plot; Mean Differences



To learn more about the HELIOS lab



Acknowledgements: A special thank you to Allison Kim for figure caption contribution.



Audrey Sjobeck (she/her/hers)
Psychology
Class of 2023


A Pilot Study of Diabetes Education Videos to Reduce Knowledge Gaps in Patients from an FQHC



A Pilot Study of Diabetes Education Videos to Reduce Knowledge Gaps in Patients from an FQHC

Naomi Jannae Ferrer, Angyelisa Hernandez, Gabriela Lopez Ruano, Jeffrey Garcia, William Hernandez, John Billimek, PhD, Cindy Yang, MD

Introduction

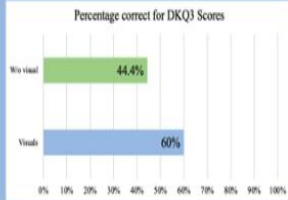
- Spanish speaking patients at the UCI family Health Center in Santa Ana have a low health literacy
- It is significant to provide a basic knowledge of diabetes, especially because most patients are not getting the proper education about their disease
- Reduce knowledge gaps in patients
- Educational video with visuals increases the percentage of patients to retrieve health knowledge



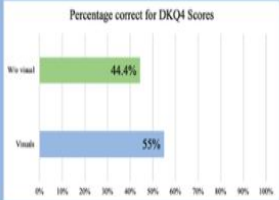
Using visuals in health education videos supports improved knowledge retention in patients at a primary healthcare setting.

Percentage correct for DKQ3 Scores



Visuals	Percentage
W/o visual	44.4%
Visuals	60%

Percentage correct for DKQ4 Scores



Visuals	Percentage
W/o visual	44.4%
Visuals	55%

“Regular exercise will increase the need for insulin or other diabetic medication.” (False)

Scan to learn more

“Medication is more important than diet and exercise to control my diabetes.” (False)

Scan to learn more

Results

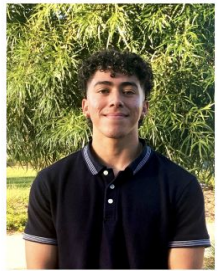
- Participants DKQ score:
 - With visuals: 79.2%
 - W/o visuals: 72.2%
- Well received and understandable regardless of video type



(Video without visuals)



Naomi Ferrer
Molecular Biology
Biological Sciences
Class of 2025



Jeffrey Garcia
Biochemistry
Biological Sciences
Class of 2025



Gabriela Lopez Ruano
Molecular Biology
Chemistry
Class of 2024



John Billimek
Biochemistry
Psychobiological Science, Social Ecology
Class of 2024



Angyelisa Hernandez
Molecular Biology
Cell Biology
Class of 2022

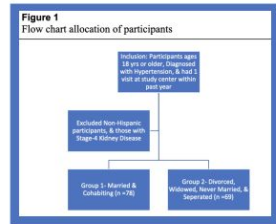
Title: Effects of Health-Related Social Control on Medication Adherence in Latinx Patients with Hypertension

PRESENTER: Sidra Ali
With: Jessica Arizmendi De La Torre and Dr. John Billimek

BACKGROUND: Social control's effect on medication adherence has been widely understudied. Previous studies have shown that hypertension control is lower in Latinx patients compared to White patients.

METHODS

1. 147 Latinx patients were recruited from Mi Propio Camino study. Participants were 18+, diagnosed with hypertension, and visited study center within the last year.
2. Measured social control (both pressure and persuasion) with 10 questions relating to influence by loved ones on medication adherence with 6-point Likert scale. Medication adherence measured by Morisky Medication Adherence Scale (MMAS).
3. Data calculated using multiple linear regressions via SPSS.



RESULTS

- 75% of participants with both high and low levels of pressure were non-adherent.
- 83% of individuals with high reports of persuasion were non-adherent, while 67% of those with reports of low persuasion were non-adherent.

83% of adults are non-adherent to medication when experiencing high levels of persuasion from loved ones.

Found in a study of 147 Latinx patients diagnosed with hypertension.



Scan for more info about the presentation

Scan more info about the HELIOS Lab



RESULTS (CONTINUED)

- Those who experienced higher levels of persuasion were more likely to be non-adherent than those who experienced lower levels of persuasion.
- Persuasion data was significant with $p=0.041$, while pressure data was not significant with $p=0.962$ (using confidence interval of $p \leq 0.05$)

Table 2
Participant's Response Summaries (n = 147)

Scale	Minimum Score	Maximum Score	Average Score
Persuasion	0 (43)	25 (14)	8.32 (8.66)
Pressure	0 (107)	20 (1)	1.57 (3.41)
Medication Adherence	0 (2)	8 (37)	5.84 (2.04)

Note: Response for minimum and maximum scores presented as value with the number of participants with that score in parenthesis. Values for average score presented as means with standard deviations in parenthesis. Higher pressure and persuasion equate to increased presence. Medication adherence ranges from 0 to 8, with 0 being no adherence and 8 being highly adherent.

Table 3
Covariate Coefficients- All Participants (n=147)

Model #	Expr(B)	95% Confidence Interval for Expr(B)		P
		Lower	Upper	
1. Pressure	0.997	0.834	1.112	0.362
2. Persuasion	1.853	1.062	1.107	0.041

Note: Shown are the coefficients for the log regression models of pressure and persuasion on medication non-adherence for all participants. Models with significant findings have been bolded.

CONCLUSION

- Positive relationship between both forms of social control and medication adherence could be because (1) cross-sectional data caused individuals to be more aware of social control with the experience being recent, (2) there may be unaccounted for confounding variables, or (3) persuasion may actually contribute to greater medication non-adherence.
- Team will be conducting focus groups with participants that are aligned with our baseline cohort to hear their direct experience.

Sidra Ali, Jessica Arizmendi De La Torre, Dr. John Billimek



Changing Minds or Following Interests? Predictors of behavior change in Latinx hypertension patients in the Mi Propio Camino Study

Daniela Garcia, Nydia Gomez, AngeliQue Nguyen, Allison Kim, John Billimek, PhD

INTRODUCTION

Managing a chronic health condition like hypertension requires adopting self management behaviors like taking medications and following a healthy lifestyle. Health education interventions focus on encouraging participants to adopt these behaviors with mixed success. The present study examines the degree to which the adoption of new self management behaviors observed in a health education intervention can be attributed to the interests that participants already held prior to the start of the intervention versus developing new interests during the intervention.

METHODS

We are analyzing data from the Mi Propio Camino hypertension education study, in which 194 Spanish-speaking Latinx patients completed a 4-session series of weekly group education classes. Prior to the classes, participants completed validated questionnaires assessing level of interest in and prior adoption of six different hypertension self management behaviors (medication taking, healthy eating, physical activity, nutritional supplements, stress management and sleep hygiene). Our team is currently analyzing (1) the percentage of patients that adopted each behavior, and (2) the correlation between baseline interest in a specific behavior and the likelihood of adopting that behavior.

Participant Demographics (n=194)

Average Age	Sex	Educational Attainment	Ethnicity	Birthplace	Income
57	Male: 39.7% Female: 60.3%	HS graduates: 52.2%	Hispanic: 96.4%	Born outside US: 96.3%	Below 20k annual income: 74.4%



SCAN TO LEARN MORE

When it comes to learning to take medications, patients follow their prior interests. For stress management, more patients tried it without prior interest.

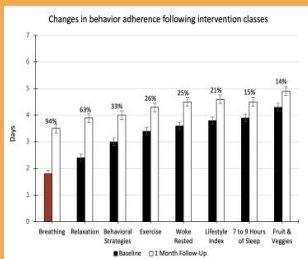


Figure 1. Changes in behavior adherence following intervention classes. The bar graph compares baseline measurements (black bar) with measurements taken one month after intervention classes were given (white bar). The data is an average number of days a behavior was followed over the course of seven days (N = 194). Left side of bar represents a different behavioral strategy tested. The numbers at the top of each bar is the percent change from the baseline to the one-month follow-up. The bar in red indicates the largest percent change. Error bars represent the standard error of the mean.

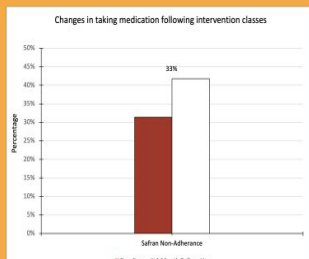


Figure 2. Changes in taking medication following intervention classes. The bar graph compares baseline measurements (red bar) with measurements taken one month after intervention classes were given (white bar). The data is the percentage of patients who took medication as prescribed (N = 194). The number at the top of the bars is the percent change from the baseline to the one-month follow-up.

RESULTS

This study found that 79% of participants in Pre-Contemplation for Natural Remedies at baseline developed interest in Breathing Exercises as a management behavior after intervention. Medication Adherence also improved, with 33% of participants in Contemplation or Planning having an increase after 1 month. Somewhat different to medication management, stress management was a behavior that participants increased regardless of prior interests. These findings highlight how pre-existing and developing interests during intervention can develop into adoption of self-management behaviors and improve health education interventions.



Figure 3. Readiness to change medication management and increased medication adherence. This research reports the number of patients who have indicated their level of readiness to change (RTC) their medication management, namely precontemplation, contemplation, or planning (N = 194). Multiple strategies to manage medication were taught in the intervention classes. Patients in the precontemplation category have not yet acknowledged the need for change. Patients in the contemplation and planning categories were aware of the need to change their medication management and may or may not have taken any concrete steps. The percentage of patients who increased medication adherence following the classes are displayed below for each category.

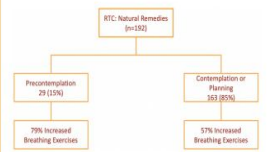


Figure 4. Readiness to change starting natural remedies and increased breathing exercises. This research reports the number of patients who have indicated their level of readiness to change (RTC) starting natural remedies, namely precontemplation, contemplation, or planning (N = 192). Multiple natural remedies were taught in the intervention classes. Patients in the precontemplation category have not yet acknowledged the need for change. Patients in the contemplation and planning categories were aware of the need to change starting natural remedies and may or may not have taken any concrete steps. The percentage of patients who increased breathing exercises, the most widely adopted strategy to manage stress following the classes, for each category are displayed below.



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Sleep Quality as a Protective Factor for Latinx Hypertensive Patients Facing Financial Stress

William Hernandez, Andrea Serrano, Claire Ali-Khan, Aracely Blanco, John Billimek Ph.D.



Sleep quality was found to be a protective factor for Latinx hypertensive patients facing high financial stress.

Participant Characteristics	
N	206
Age, mean, (SD), years	55.9 (9.5)
Female %	63.6%
Born outside U.S.	94.2%

RESULTS

- Financial stress was not associated with diastolic ($r = .03, p = .7$) or systolic blood pressure ($r = .11, p = .115$).
- Financial stress was significantly associated with sleep duration ($r = -.25, p < .001$) and sleep quality ($r = -.37, p < .001$).
- A 2-way ANOVA revealed a significant interaction between financial stress and sleep quality on DBP ($F = 4.54, p = .03$), wherein **patients with high financial stress and low sleep quality had worse DBP than those with high financial stress and high sleep quality**

DISCUSSION

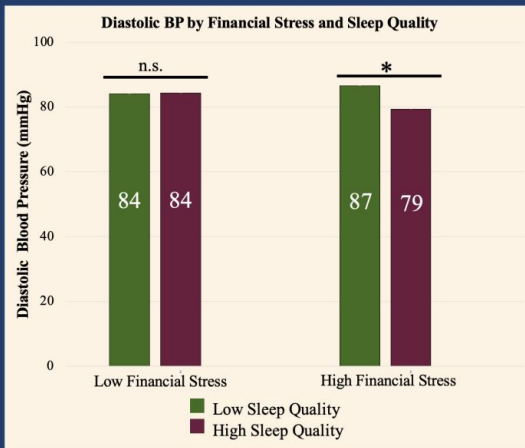
- Our findings show that sleep quality can help protect against higher levels of blood pressure among Latinos.
- Future research is needed to understand why sleep quality and not sleep duration was a protective factor.



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INTRODUCTION

- Previous research has shown that stress and sleep contribute to hypertension, a risk factor for Cardiovascular disease (CVD). However, the interplay between sleep quality/sleep duration and financial stress has not been investigated extensively among Latinos.
- Financial stress has been found to be associated with a higher risk for heart attack and worse self-rated health.

METHODS

- We analyzed data from n=206 Latinx patients from the UCI FQHC (Federally Qualified Health Center) who are part of larger NIH funded hypertensive study.
- Patients answered questions about their sleep duration and sleep quality in the last 7 days.
- Patients received the 8 item InCharge Financial Distress/Financial Well Being (IFDFW) Scale, and their blood pressure (Systolic and Diastolic) was taken.

Scan to learn more about our poster:



"Si, es responsabilidad de la mamá": Communication Narratives on Cervical Cancer Prevention Amongst Latina Mothers with Daughters

Esmeralda Garcia-Castellanos, Brianna Flores, Michelle Beltran Najera, John Billimek, PhD, Sora Park Tanjasiri, DrPH
University of California – Irvine | Department of Family Medicine, Department of Epidemiology

INTRODUCTION/BACKGROUND

- Latinas are 40% more likely to be diagnosed with cervical cancer and 30% more likely to die from it compared to non-Latina whites
- Cervical cancer rates can be offset by increased screening and HPV vaccination

PURPOSE

- To examine the perspective of Spanish-speaking Latina mothers, the relationship and communication with their daughters about cervical cancer, and its prevention

DEMOGRAPHICS

	Latina Mothers w/ Daughters 11+ years old	
	n=12	N (%)
Age (years)		
45 - 54	7	(58.33)
55 - 64	5	(41.67)
Education Level		
Primary (1-6th grade)	5	(41.99)
Secondary (7th-9th grade)	3	(24.99)
Less than High School graduate	1	(8.33)
High School Graduate	3	(25.25)
Foreign Born	12	(100%)
Health Insurance	9	(75%)
Last Doctor Visit		
Within Past Year	11	(91.67)
Within Past 2 Years	1	(8.33)
Occupied		
Economic	9	(83.33)
Other	3	(16.67)

METHODS

- 12 over the phone semi-structured interviews with Latina mothers recruited mostly from a larger NIH-funded project, Mi Propio Camino
- Questions included knowledge about cervical cancer prevention, to understanding the relationship with their daughters
- Data analysis was conducted through qualitative software program Dedoose, using both deductive and inductive coding

"It was a little bothersome the first time, but because they introduce something, an apparatus. But that was the first time, then when you go the next time, well then it is then you know a little more about how is the exam, and its like literally you go a little more mentally prepared. It doesn't feel to you as bad because you already know what you go for." - DG12

"Well, many times the truth scares me, it's scary to go in for checkups, it's scary to have a pap smear or mammogram done or sometimes because the person doesn't have insurance. Understand? That's why we can't go to the doctor because of that" - LC11

Despite Latina mothers' hardships, with more access to better health knowledge they are willing to learn and grow for the betterment of their families

"The truth is, I'm going to be honest, this is almost always my case. Nobody really said "look at this and this". And we have grown up with a family who does explain to us as well. It isn't until you have kids that you realize you have to go get yourself checked, to see that you're good" - ZM09

"Yes, it is the responsibility, of the mother if she has the correct information, and if she understand that information. I think so, because you have to be well informed. What is this, and what is this for? And like that provide that information to your daughter. A way that they understand it" - IR13

"I have a very nice relationship with her and we share everything. She shares with me her things and I share mine with her. We do have a nice relationship between us. Then she talks to me about things other people talk to her, "well, I have this, I have that other thing" I also share things with her" - BAO2

See the full poster



RESULTS

Code	Definition	Example (# of participants)
Pap smear experience + reason	Mothers describe what feelings they recall experiencing with Pap smears	<ul style="list-style-type: none"> • Felt discomfort (5) • Participants felt that it was good to know everything about her (4) • Felt some type of embarrassment when they had a Pap smear (3) • Expressed that after their first Pap smear experience, they would go mentally prepared (2) • Felt forced to have the pap smear by their doctor (1)
Barriers to accessing care	Participants express what they believe are barriers that Latina face when it comes to accessing medical care. It also includes reasons why women cannot go or decide not to see a doctor	<ul style="list-style-type: none"> • Expressed that there is an embarrassment to go to the doctor for medical care (5) • Expressed one of the barriers was a lack of insurance or no health insurance (3) • Barriers to accessing care is having a busy work schedule (2)
Health knowledge	Mother's knowledge of general health includes if they know what cervical cancer is, what cervical cancer is, how not to prevent it	<ul style="list-style-type: none"> • Know what cancer was, but could not specify what cervical cancer was (2) • Expressed not having the knowledge necessary but believed someone else should educate them (oncologist, or anyone else who has a lot of knowledge) (2)
Mothers' role in informing daughters about cervical cancer prevention	Mothers believe it is their responsibility to inform their daughters about cervical cancer and prevention methods. This reflects how the mothers engage in their daughters' health	<ul style="list-style-type: none"> • Believed that it is the mother's responsibility to inform daughters about cervical cancer (11) • Expressed that a mother needs to know the information she is sharing (1) • Expressed that it is the responsibility of both the mother and daughter (1)
Mother-daughter relationship & communication	This includes information on whether the mother-daughter relationship is positive or non-positive relationship with their daughter. More information on the relationship is obtained through the types of conversations that happen between them and if there are any topics that were avoided	<ul style="list-style-type: none"> • Participants expressed positive, healthy conversations with their daughters (11) • Mothers state that there are no topics avoided when communicating with their daughters (11) • Conversations entailed general health, just as checkups and general hygiene (7) • Conversations entailed women's health, discussion on sexual health, and exams (3)

DISCUSSION

- Uncommon topics that arose included: mother's interest in their daughters sharing health knowledge with their peers, and wariness of discussion of sexual relationships
- Participants showed empowerment to educate themselves further on what they previously lacked knowledge on

LIMITATIONS & FUTURE DIRECTIONS

- All participants have access to primary care. Due to this, their views and experiences cannot represent the larger scale Latine population
- It is suggested to explore the communication among Latina siblings or peers, as an avenue to spread information on cervical cancer & prevention & its potential motivation to early detection & health screenings.



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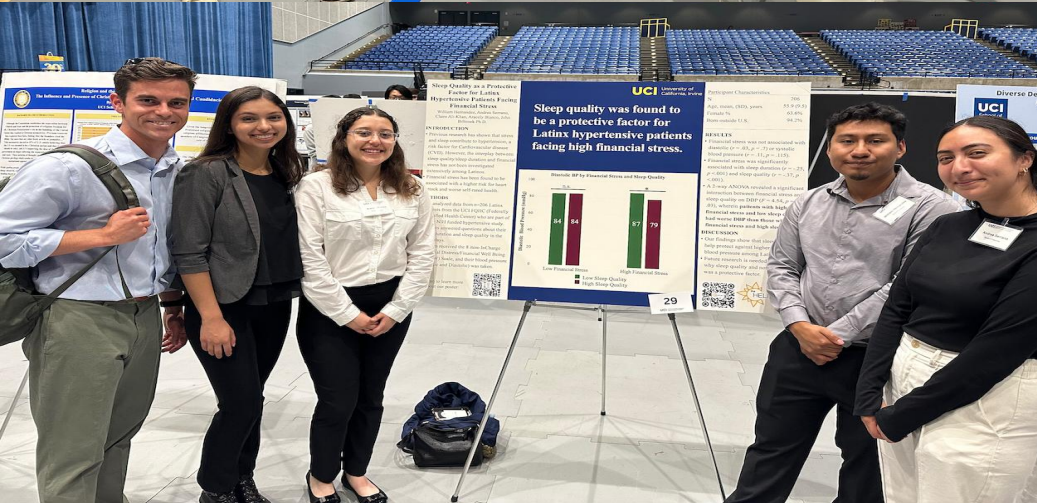
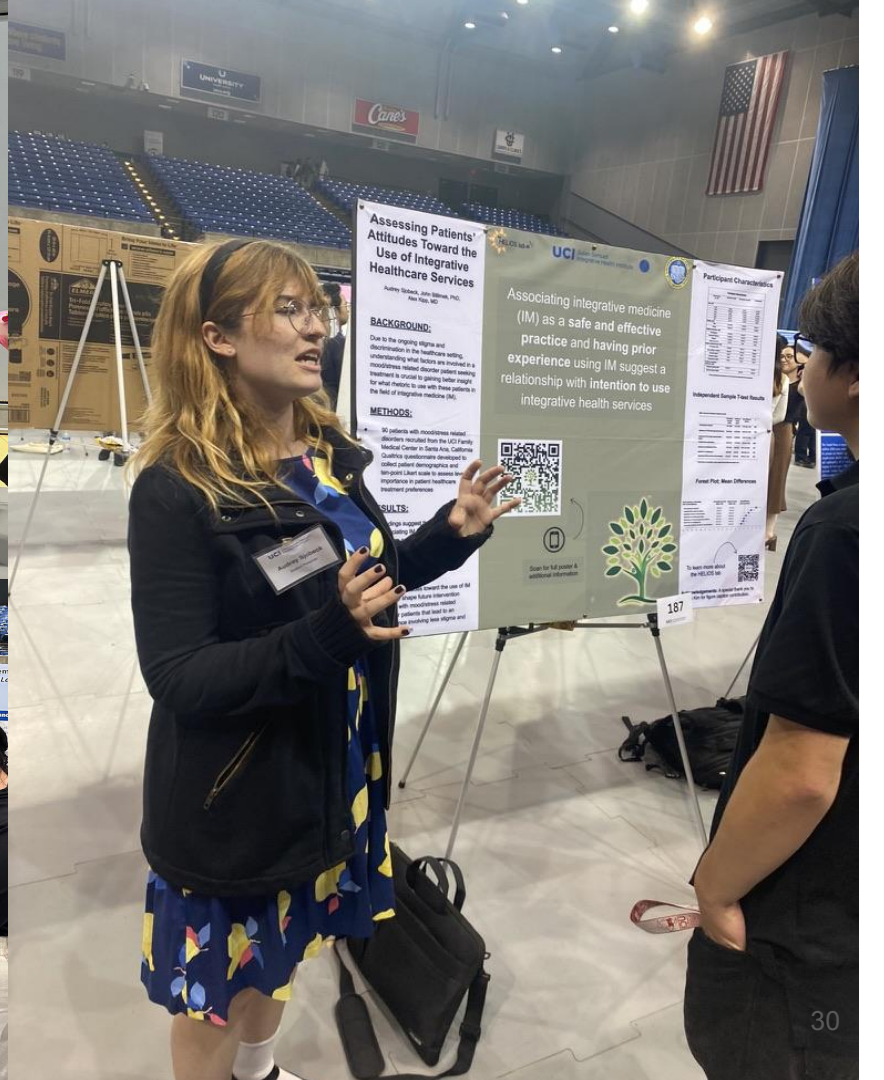
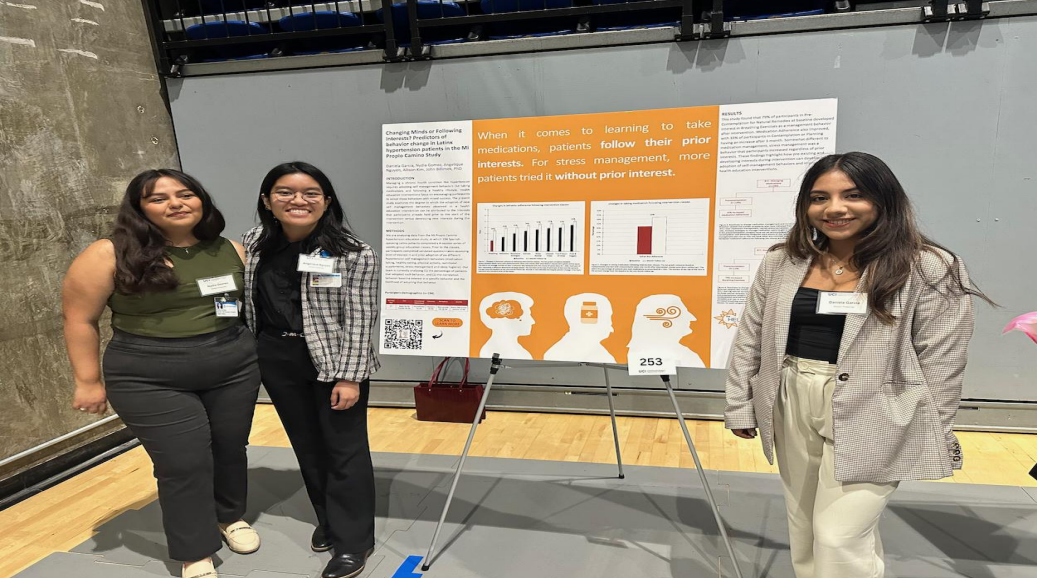


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UROP Symposium 2023

<https://thehelioslab.org/presentations>



What We Expect

- ✓ **Attend Mandatory Lab Meetings***
 - Fridays 3-5 PM
- ✓ **Create Community Within Our Lab**
- ✓ **Be Passionate About Serving in Medically Underserved Areas**
- ✓ **Units Breakdown (4 Minimum)**
 - **1st Unit**
 - Lab Meeting*
 - Community & Professional Development Activities
 - **+ 3 to 4 Units**
 - In-Clinic/Remote Research Activities



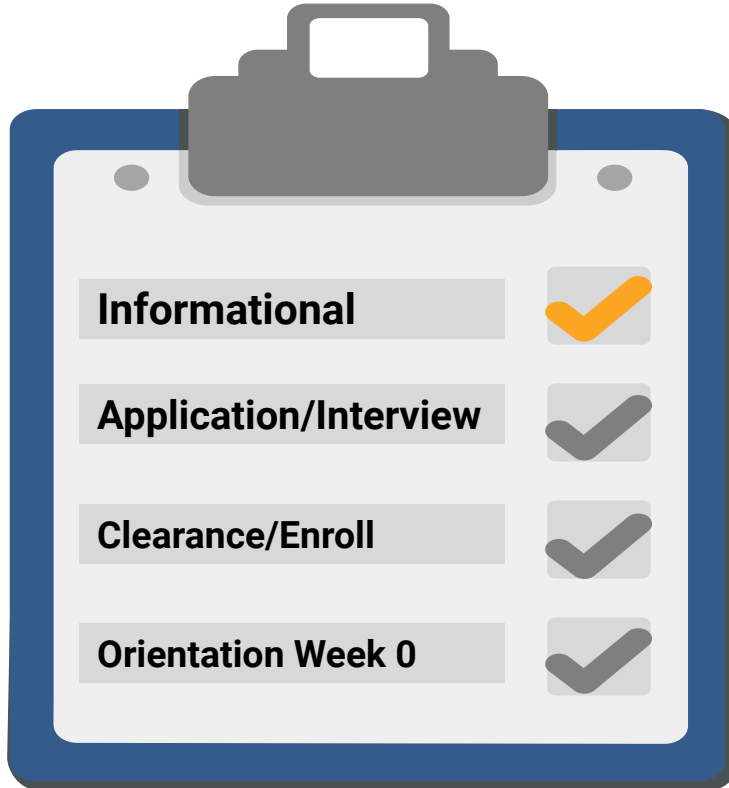
What You Gain



- ✓ Opportunities To Learn About Research & Participate In The Research Process
- ✓ Meaningful Experience in Clinic & Community Settings
- ✓ Support & Guidance In Your Pre-Health Journey
- ✓ Network With Health Professionals, Researchers, & Like-Minded Students

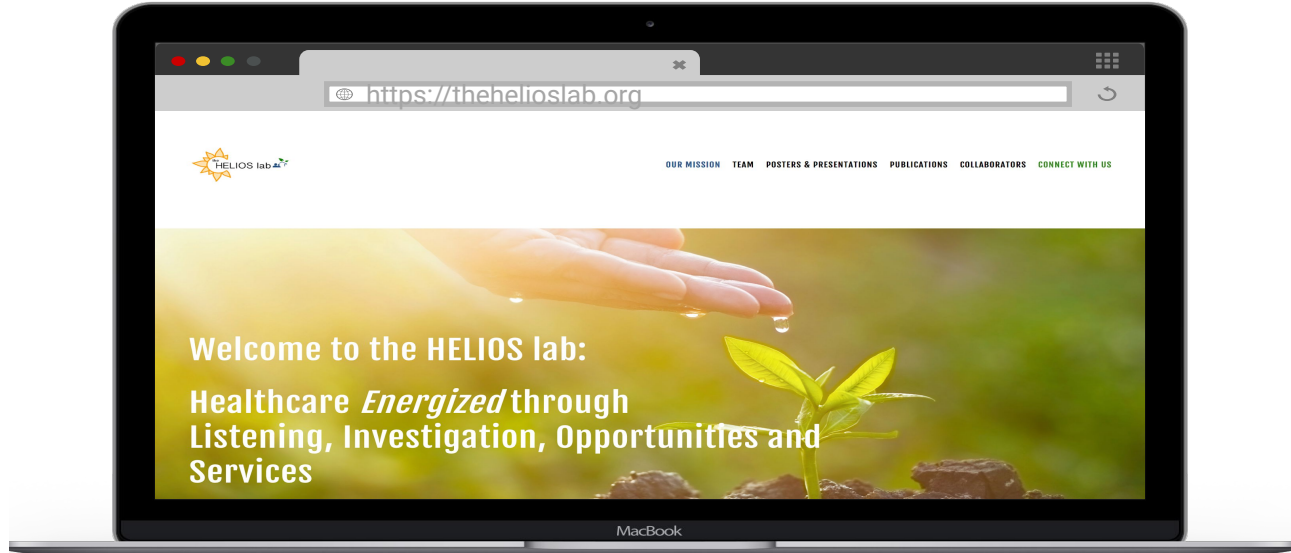


Next Steps



- Submit an application at theHELIOSlab.org/opportunities
- **Priority deadline is Tues Sept 5th at 11:59pm**
- We will invite applicants to interview for specific projects and roles on **Sept 10, 11 and 12.**
- Most positions will begin Fall Week 0
- Please take a look at health clearance requirements - these will take time to complete before Fall Week 0

Questions?



<https://thehelioslab.org>



E-mail thehelioslab@hs.uci.edu if you have specific questions