



2021 REPORT

IMPACT: Results, Progress and Outcomes

The University of Arizona Zuckerman Family Center for Prevention & Health Promotion (ZFCPHP) at the Mel & Enid Zuckerman College of Public Health (MEZCOPH) continues to positively influence the health and wellbeing of the Tucson community. Our annual report provides an overview of our key initiatives and programs and how these initiatives impact our community, our college, and our students.

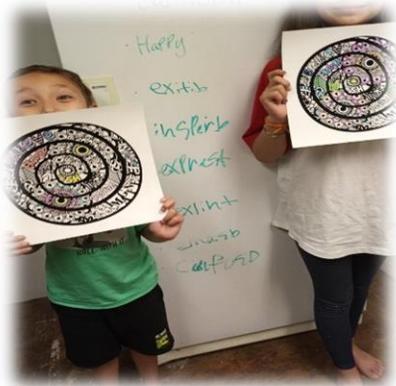
The Importance of the Zuckerman Family Center for Prevention & Health Promotion

The ZFCPHP efforts have had another significant year in terms of impact on the health of Tucson's most vulnerable. Our programs provide children, families and communities a unique opportunity to engage in wellness activities, advance their knowledge of healthy behaviors and experience first-hand the role of healthy behavior options to improve their physical, emotional, and social well-being. Additionally, the ZFCPHP mentors and trains over 100 MEZCOPH students annually with instruction and community engagement in wellness and health promotion. Our goal is to promote positive healthy behavior choices and to expand knowledge of resources available to those we work with. This year ZFCPHP faculty & staff continued to adapt outreach efforts and community engagement to address the on-going COVID-19 pandemic.

Supporting Youth and Families

Healthy 2B Me Camp for Underserved Youth (H2BM)

The Healthy 2B Me Summer Camp completed its 9th year in 2021 reaching 25 Tucson families (114 people) with the continuation of "Camp in a Box". For the second consecutive year we delivered resources to camp families as part of the adaption of H2BM during the Covid-19 pandemic. We continued our partnership with two local elementary schools (*Dietz K-8 in the Tucson Unified School District and Prince Elementary in the Amphitheater School District*) and families in the local metro area. The original H2BM camp curriculum was modified and slightly adjusted due to the pandemic and we were able to bring camp remotely to Tucson families. As outlined in 2020, we tailored camp for a more interactive family focused experience for participants to explore and learn new activities and about healthy food options. In each box, we had a binder of resources including suggested daily physical activities and groceries were provided for healthy daily snacks.





Future goals for camp include working with members of the local Indigenous American population to explore options to offer Healthy 2B Me to a location closer to potential participants or offer “Camp in a Box” if transportation or in person attendance continues to be a barrier. In addition, we plan to modify the current curriculum as culturally needed to expand our reach and to share our unique camp. We continue to explore expansion ideas for future camps and our continued goal of sharing public health knowledge.

Childhood Obesity Prevention Initiative

We are a collective and concerned group of professionals and citizens working to mitigate and eliminate childhood obesity and intervene on poverty and education as driving factors contributing to the early-age onset obesity crisis. We are addressing the social determinants of health through multi-sector partnerships to achieve gains in population-level health outcomes related to overweight, obesity and whole child and family wellness while also reducing related health inequities.

Engaged partners include:

- Jennifer Bea, PhD, Associate professor, Health Promotion Sciences, Mel & Enid Zuckerman College of Public Health, University of Arizona.
- Cynthia Thomson, PhD, RDN, Professor, Health Promotion Sciences and Director of the Zuckerman Family Center for Prevention & Health Promotion, Mel & Enid Zuckerman College of Public Health, University of Arizona.
- Sabrina Plattner, MEd, Health Educator Senior, University of Arizona MEZCOPH & Certified Health Coach, Co-Chair of Activate Tucson Coalition
- Annemarie Medina, University of Arizona Health Sciences, Director of Corporate & Community Relations, Co-Chair of Activate Tucson Coalition
- The Tucson Child Health Working Group Community partners:
Activate Tucson, Pima County Health Department’s Healthy Pima and WIC programs, Child Parent Centers Incorporated’s Head Start Health Services Advisory Committee, Arizona Department of Transportation, Grow 2B Fit, AZ Health Zone SNAP-ED, UArizona Cooperative Extension’s Garden Kitchen and Nutritional Sciences Department, The Boys and Girls Clubs of Southern Arizona, El Rio Community Health Center, The Community Food Bank of Southern Arizona, Tucson Unified School District, BEYOND Foundation
<https://www.activatedtucson.org/> <https://www.healthypima.com/>

Our Wellness Promotion Partnership with Tufts University

For the last 18 months, UA MEZCOPH’s Childhood Obesity Initiative has been involved in a seven-city grant study with Tufts University, Boston College and the Child Obesity 180 team to tackle the childhood obesity crisis. A Tucson, AZ community collaborative working group has been formed and named the Tucson Child Health Working Group (TCHWG). This group consists of twelve members from the University of Arizona, Activate Tucson Coalition, and community partners working in childhood obesity prevention, whole child health/wellness programming and research. The Catalyzing Communities Grant Study has graciously awarded the TCHWG and Activate Tucson, \$7,500 to help put these projects into action. This stakeholder group meets bimonthly and collectively identified the larger forces at play in the community that contribute to and result from identifying underlying beliefs driving childhood obesity and poverty in the

greater Tucson region. The TCHWG has spent the last ten months, convening virtually in an interactive thoughtful way by collecting data, research and applying group model building approaches to tackle the massive issue of childhood obesity. The team has identified complex factors such as funding for education, corporate values, and citizen advocacy, as well as social and emotional health, as crucial factors that shape health behavior and health outcomes.

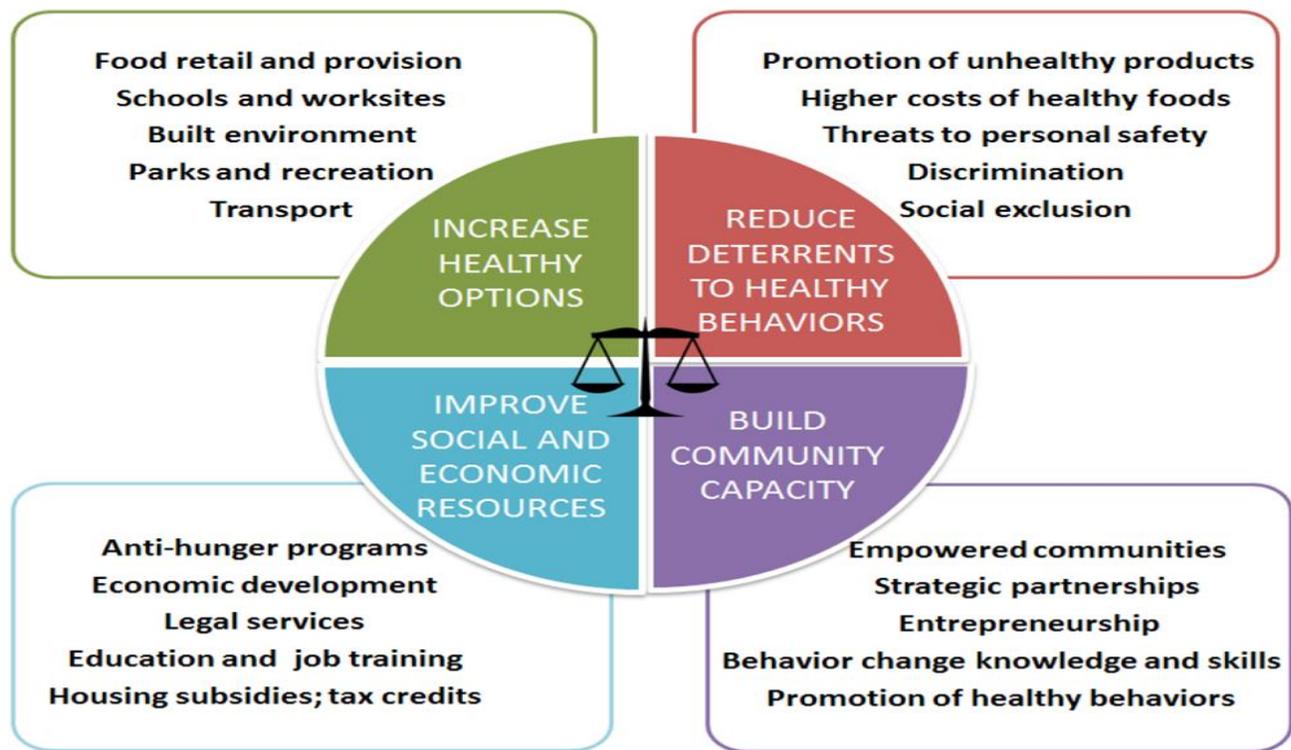


Figure 2 | Proposed equity-oriented obesity prevention action framework to assist in selecting or evaluating combinations of interventions that incorporate considerations related to social disadvantage and social determinants of health.

Espacio Seguro (Safe Space) with YWCA Southern Arizona

Espacio Seguro, a 10-week mental and emotional wellness program for Latinx families, emerged during summer and fall 2020 as a response to the COVID-19 pandemic and accompanying feelings of isolation. Although our partner program *Mujeres y Niñas* took a pause during the pandemic, we continued our collaboration with YWCA Southern Arizona to create a safe, supportive space for teens and their parents to share their struggles and successes as they navigated a “new normal”.

With foundations in resiliency, trauma-informed practice, and the Nurtured Heart Approach®, the Espacio Seguro curriculum included lessons and discussions about pandemic wellness, coping with challenging emotions (i.e., fear, grief, anxiety), letting go and staying positive, boundaries, healthy family communication, and technology safety. Parents and teens participated in separate groups, led by trained facilitators. Espacio Seguro was offered via Zoom during fall 2020 and spring 2021 on Saturday afternoons from 12-2 PM, although most parent sessions lasted for 3 or 4 hours!

Collectively, YWCA Southern Arizona enrolled 28 parents and 33 teens in Espacio Seguro during fall 2020 and spring 2021 semesters. Three UArizona student interns (Calli Townsend, Betsy Rodriguez, and Miguel Lopez) led the Espacio Seguro teen group while the parent group was facilitated by YWCA promotoras, Verónica Vázquez Carrasco and Ana Gonzalez. Families, especially parents, provided valuable feedback regarding their participation in Espacio Seguro, including gratitude for a “safe space” to share their challenges and acquiring new skills in preserving their mental and emotional energy to care for their minds, bodies, and hearts during the pandemic. As an extension of Espacio Seguro, UArizona student interns created two YouTube videos to highlight and demonstrate activities from the program. To access activity videos and for more information, please see <https://zfcphp.arizona.edu/safe-space-espacio-seguro>.

The Wildcat Marathoners

The Wildcat Marathoners (WM) is a running/walking club in Tucson, AZ created in part by members of the ZFCPHP. The WM program will continue in 2021- 2022 to achieve the long-term goal of instituting systems change at the school level by promoting structured physical activity movement of walking/running clubs at participating schools during recess and lunch time breaks by fostering lasting behavior change on the part of the participating youth, youth mentors, teachers, staff, and principals. We will continue to work collaboratively with the elementary, middle and after schools’ programs and partner with the Southern Arizona Road Runners Fit Kidz running program to provide race day opportunities for families to be active together throughout the year.

Growing Girls

Growing Girls is a psychosocial intervention for 5th and 6th grade girls targeted to promote social and emotional health and reduce bullying. The 2020-2021 school year was the 9th year of Growing Girls at Estes Elementary School in Marana, AZ, managed by Lindsay Bingham, MPH (Health Educator, Sr., Health Promotion Sciences). During the 2020-2021 school year, schools were navigating online schooling and shifting to hybrid learning, thus Growing Girls was offered only online through Zoom. Due to this format and the magnitude of the pandemic on adolescent mental health, we collaborated with a second Marana elementary school for the first time: Quail Run.

Growing Girls was offered for 1 hour after school for 25 weeks during the school year, which is the most program sessions we have ever offered. During 2020-2021, 32 girls participated and learned about staying well through the pandemic, friendship, positive thinking, making decisions, bullying, being assertive, problem solving, healthy risk-taking, technology safety, media messages, body acceptance, development and puberty, setting goals, and planning for the future. One graduate (Alyssa Rankin) and two undergraduate University of Arizona students (Cassandra Yee and Ariel Cruz) led growing Girls in three small groups of 10. Student Group Leaders received facilitation preparation and training in the Nurtured Heart Approach® to best support their participant groups.

Collaboration with stakeholders was essential in re-designing Growing Girls for an online format. The existing Growing Girls curriculum, designed for in-person delivery, was adapted for Zoom with thoughtful use of meeting functions and external media to cultivate a fun, safe after-school community. Lindsay communicated with parents, school principals, and after-school program coordinators frequently through the year to ensure the program was reaching participants and to provide additional resources to families. Having struggled with parent/guardian engagement in the past, the 202-2021 school year was a milestone year for parent communication with weekly emails, texts, and administering an end-of-year feedback survey.

Currently, Growing Girls is being offered weekly through a hybrid iteration (mostly online and some in-person opportunities) for up to thirty 5th and 6th grade girls during the 2021-2022 school year. Considering parent and school feedback, Growing Girls is now being offered during the evening as a social skill-building opportunity for participants. As the pandemic persists and school COVID-19 rates fluctuate, we will continue to offer Growing Girls with flexible adaptation and compassion for adolescent wellbeing!



Guys After-School Mentorship & Education (GAME!)

Adapted from its partner program, Growing Girls, GAME! is a psychosocial intervention for 5th and 6th grade boys intended to promote healthy social and emotional development and aid in the transition to middle school. The 2020-2021 school year was the 4th year of GAME! (Guys After-School Mentorship & Education) at Estes Elementary School in Marana, AZ, managed by Lindsay Bingham, MPH (Health Educator, Sr., Health Promotion Sciences). During the 2020-2021 school year, schools were navigating online schooling and shifting to hybrid learning, thus GAME! was offered only online through Zoom. Due to this format and the magnitude of the pandemic on adolescent mental health, we collaborated with a second Marana elementary school for the first time: Quail Run.

GAME! was offered for 1 hour after school for 25 weeks during the school year, which is the most program sessions we have ever offered. During 2020-2021, 21 boys participated and learned about staying well through the pandemic, personal identity and self-esteem, managing difficult emotions, staying positive, teamwork and communication, perseverance, resolving conflict, peer aggression and bullying, technology safety, healthy boyhood, development and puberty, self-care (food, movement, hygiene, and sleep), setting goals, and planning for the future. GAME! was led by one graduate (Miguel Lopez) and two undergraduate University of Arizona students (Frankie Romero and Javier Martinez) in two small groups of 10. Student Group Leaders received facilitation preparation and training in the Nurtured Heart Approach® to frame their GAME! mentoring and leadership roles.



We collaborated with program stakeholders – parents, school principals, and after-school program coordinators – to re-design GAME! for online delivery. The formal GAME! curriculum, created for in-person delivery, was adapted for Zoom with intentional utilization of meeting functions and external media to cultivate a safe, fun after-school learning space for boys. Lindsay communicated frequently with parents to ensure the program was reaching and engaging participants and to provide additional resources to families. Parent communication soared during the 2020-2021 school year with weekly emails, texts, and administering an end-of-year feedback survey.

Currently, GAME! is being offered weekly through a hybrid iteration (mostly online and some in-person opportunities) for up to twenty 5th and 6th grade boys during the 2021-2022 school year. Similar to its companion program Growing Girls, GAME! is now being offered during the evening. Although we have made pandemic-related program adaptations to reach and engage adolescent boys, mentorship from UArizona Group Leaders, skill-building activities, and fostering shared community remain priorities for the continued implementation of GAME!.

Educating the Next Generation of Public Health Professionals

Service-Based Learning

Preparing and educating the next generation of Public Health leaders through instruction and service is a core commitment of the ZFCPHP.

Public Health for Community Wellness

The ZFCPHP continues to serve South Tucson’s youth and families through the interactive and application-based public health course: *Public Health for Community Wellness (HPS 497E/597E)*. Through this course, undergraduate and graduate students learn how to plan, coordinate, and implement health education for young people ages 5-13. For the last 5 years, ZFCPHP has collaborated with the Primavera Foundation - an organization that provides pathways out of poverty through safe, affordable housing, workforce development, and neighborhood revitalization - with public health students providing service at their Las Abuelitas After-School Program. Unfortunately, due to COVID-19 pandemic restrictions, students were unable to offer in-person service during fall 2020 and spring 2021. During these semesters, Public Health for Community Wellness was offered in the Live Online format.

Offering Public Health for Community Wellness through Zoom did not limit or discourage us as 11 MEZCOPH students completed a community service project in partnership with Healthy 2B Me and Las Abuelitas After-School programs. Following the success of “Camp in a Box” – a new iteration of the Healthy 2B Me Summer Camp – students collaborated with community partners to compile and distribute educational activities, materials, and a COVID-19 resource guide in a “booster box” for families in the Tucson and South Tucson communities. Following the direction of course instructor (Lindsay Bingham) and community partners (Nicole Falbo, Alonzo Morado, and Victor Rodriguez), each student crafted a health and wellness activity for booster boxes, including a written outline and an activity demonstration video via YouTube. To view activities and demonstration videos, please see <https://zfcphp.arizona.edu/healthy-2b-me-booster-box-activities>.

During fall 2020 and spring 2021, we recruited 20 (15 returning from summer 2020, 5 from Las Abuelitas) and 23 families (9 returning, 13 from Las Abuelitas, and 1 new) to participate in the booster program, respectively. Students were paired with 3-5 families to coordinate and support booster box progress. Activities, including YouTube demonstration videos, and handouts were translated to Spanish for monolingual families. Students assisted with packing and distribution each semester to ensure all families received necessary supplies for each activity along with 1-2 bags of groceries. Despite implementation barriers presented from the pandemic, the booster box program successfully reached many families in the Tucson and South Tucson communities and the fun wellness activities offered respite from pandemic turmoil.

Primavera Foundation’s Las Abuelitas After-School Program re-opened during fall 2021 and HPS 497E/597E students are now providing weekly on-site service, led by new instructor Sabrina Plattner. This course moved back to in-person at Las Abuelitas where the focus was on nutrition and physical activity along with social and emotional learning lessons. The children at Las Abuelitas learned how to make healthy snacks using low-cost ingredients and participated in the Wildcat Marathoners running/walking program. The program also received 25 pairs of donated running shoes from the Kicks4Kids organization. Seventeen children participated in the Nov. 26, 2021, Thanksgiving Cross Country 1.5-mile race. Other outreach efforts included a coordination of a COVID-19 POP-UP vaccination site from the Pima County Health Department at Las Abuelitas.

Health Promotion Sciences & Public Health for School & Community Based Childhood Obesity Prevention Programming (HPS 497-L)

In the fall of 2020 and spring 2021, during the COVID-19 pandemic, MEZCOPH’s undergraduate student, Jedzia Rodriguez and Health Educator Senior, Sabrina Plattner, designed the **Healthy Schools Tucson (HST)** curriculum. HST, adapted from Project Healthy Schools, was created to address lifestyle behaviors and sociocultural factors that influence obesity risk among middle school students, with the goal of reducing childhood obesity prevalence.

For the past three years, Saints Peter and Paul Catholic Middle School (SSPP) has been the site of HST, a 10-week nutrition and physical activity curriculum to promote adolescent wellness and prevent childhood obesity. SSPP families self-identify as 22.7 % White, 57.8 % Latinx, 1.5 % African American, 1.2% Asian American, 1.7 % American Indian and 13.1 % Multi-Racial. Two new lessons in the curriculum include COVID-19 education and prevention as well as stress-reduction and coping strategies to support students through the traumatic and stressful COVID-19 pandemic. This lesson not only offered adolescents a better understanding the global pandemic, but also options for how to navigate wellness through the



uncertainty. In addition, MEZCOPH students enrolled during the spring 2021 semester created a new tobacco/vaping prevention lesson.

Due to pandemic restrictions, we used Zoom and online educational software tools such as Mural, Kaboom, and Poll Everywhere to engage middle school students in virtual lessons. Seven undergraduate MEZCOPH internship students delivered the lessons to over 200 middle school students, male and female, in 6th and 8th grades.

Outcomes from a self-reported *Student Wellness Questionnaire*

- The student participants have shown increased consumption of fruits and vegetables in their weekly food intake from the HST lesson *MyPlate for My Health*.
- The middle school students have participated in more than the recommended 60 minutes a day of physical activity time during the week from learning the importance of being more physically active from the lesson *Heart Strong with Physical Activity*.
- Students have also shown a decrease in sugar sweetened beverages and sweets from the lesson *Sugar Shockers*, and they have cut down on screen time during the day.
- Since fall of 2018, over 650 middle school students at SSPP have participated in the childhood obesity prevention and wellness lessons.

Enrolled students are given the opportunity to work within Saints Peter and Paul Middle School to deliver 10 evidence-based obesity and disease prevention lessons in the areas of nutrition, physical activity, and social and emotional learning. The students are required to complete the Collaborative Institutional Training Initiative (CITI) Human Subjects and other essential trainings in nutrition and physical activity (i.e., USDA’s MyPlate and the Dietary and Physical Activity Guidelines for Americans). Each semester, MEZCOPH students are required to research, build, and present a new HST lesson per the needs or suggestions presented by teachers, students, and school staff. In the fall of 2021, students created a lesson on self-esteem, body image, and social media.

Training

STEP-UP Summer Research Program

The Student Transformative Experiences to Progress Underrepresented Professionals (STEP-UP) Summer Research Program was delighted to bring 17 trainees back to campus during the summer of 2021! Under the leadership of Program Directors Jennifer Bea and Cynthia Thomson, 63 trainees have

completed an integrated, innovative, and multidisciplinary educational experience in cancer prevention and control.

This summer research experience is designed

to not only heighten awareness of cancer prevention and control, but to



support intrinsic motivational factors that result in a longer-term interest and commitment to engage in cancer prevention and control sciences. Trainees collaborated with University of Arizona (UArizona) Cancer Center researchers and UArizona faculty to build confidence and skills in cancer prevention research. Summer activities included systematic literature searches, analysis and presentation of cancer prevention findings, completing a community-based sun safety outreach project, practicing personal cancer prevention behaviors, and more.

The overall goal of the STEP-UP program is to increase the number of under-represented undergraduate and Master's students who pursue careers in cancer prevention and control sciences. This training program builds on our cancer center's reputation for quality, high-impact cancer prevention research and addresses the significant health disparities in Arizona and beyond. Congratulations, STEP-UP Class of 2021!

Behavioral Measurement and Interventions Shared Resource (BMISR)

BMISR has a unique model for staffing its shared resource with a student workforce that provides both an enriching training opportunity and a flexible, cost-effective staffing solution for research studies. From 2019 to the present, the BMISR trained 30 undergraduate students and 5 graduate students (3 Masters and 2 PhD Students) in behavioral interventions and behavioral assessment including diet and physical activity methods training. Mentoring is a priority task for BMISR co-directors Cynthia Thomson and Jennifer Bea and BMISR manager Angela Yung and as a result, 3 students were accepted in combined dietetic internship/Masters programs, 4 entered a PhD program, and 8 attended graduate or professional programs (PT, MEPN).

Community Outreach

During 2021, in person community outreach engagements were again limited due to the COVID-19 pandemic. Our team worked diligently to provide as many resources as possible in remote learning settings for the community including a reboot of the ZFCPHP website. As outlined above, our programs adapted to engage with those hit hardest by the pandemic. In addition, we adjusted our internship opportunities for rising public health professionals into complete online experiences following the guidelines outlined by the University of Arizona. The ZFCPHP Health Educators are committed to continue to work effectively & efficiently to bring high-quality outreach information to our community as we navigate through this pandemic and balancing a new normal in work conditions.



Supporting Novel Ideas for Health Promotion

The Cancer Prevention and Control Research Network (CPCRN)

The University of Arizona Cancer Center joined the Cancer Prevention and Control Research Network (CPCRN) and received an initial \$1.4 million to advance cancer prevention and control science, with particular focus on the health needs of Hispanic cancer survivors. Faculty and staff from the UArizona site attended the CPCRN Annual meeting in Chapel Hill, NC. Over 120 investigators engage across the US in cancer prevention and control research and programming.



The Arizona site (AzCPCRN) has 20 members; two of them completed the inaugural Dissemination & Implementation Science Scholars program in September 2021; three new scholars (of 20) were selected from the University of Arizona for the 2021-22 training class. Additionally, we have representation in five workgroups and two interest groups within the Network and lead the cancer survivorship working group nationally.



Notable Achievements of the Arizona Cancer Prevention and Control Network 2020-2021

- *Published two papers to guide cancer survivorship efforts during COVID*
- *Supported the authorship of the American Cancer Society Guideline for Diet, Nutrition, Physical Activity and Cancer Prevention (2020) and Survivorship (2022)*
 - *Completed qualitative interviews with cancer survivors and caregivers*
- *Complete Photovoice data collection with cancer survivors to inform on wellness program design*
- *Tested a FitFlu program for colorectal cancer screening in border community*

Our Public Health Students

Public Health students are an integral part of the ZFCPHP and we strive to create unique academic and training experiences for the next generation of public health professionals.



Adriana Hernandez- MPH and Doctoral student, Public Health
Gloria Cota Aguirre- Undergraduate Honors student, Public Health
Lauren Erdelyi – MPH and Doctoral Student
Lindsay Bingham- Doctoral student Public Health
Melissa Lopez-Pentecost- Doctoral student, Public Health
Riley Perlman- MPH student, Public Health
Samantha Werts- Doctoral student, Public Health
Tianna Tso- MPH student, Public Health

Center Website

Led by Lindsay Bingham, the ZFCPHP team continues to focus on the expansion of the Center website and marketing via Facebook, monitored by Sabrina Plattner. Website and social media content are consistently being updated to highlight new initiatives and partnerships. Following the creation of COVID-19 resource pages during 2020, families in the Southern Arizona community requested information and support for parents. A resource “hub” for parents is now in development. The website continues to be a priority for our staff and updates to content will be monitored and updated quarterly.

Website: <https://zfcphp.arizona.edu/>

Facebook Page: <https://www.facebook.com/zfcphp>

Awards / Recognitions

Jennifer Bea- Jennifer Bea- new faculty hire to MEZCOPH as an Associate Professor in Health Promotion Science. A physiological scientist, her research focuses on body composition and chronic disease across the lifespan, with an emphasis on cancer prevention. Importantly, the unabated childhood obesity epidemic is likely to contribute to an increase in several cancers, as well as cardiometabolic dysfunction in the future. Thus, Dr. Bea has developed an undergraduate childhood obesity course and has become actively engaged with ZFCPHP team to support wellness and obesity prevention efforts in the community.

Tracy Crane- Dr. Crane recently was hired at the University of Miami as an Associate Professor of Medical Oncology and the Co-lead of Cancer Control at the Sylvester Comprehensive Cancer Center, Miller School of Medicine. Dr. Crane completed her graduate degrees and training at the University of Arizona.

David Garcia- Dr. Garcia was awarded an NIH K award (career development) “*A Gender and Culturally Specific Approach to Reduce NAFLD in Mexican American Men*”. The training and proposed research will utilize a NAFLD-specific weight loss intervention to reduce the burden of this disease and improve health outcomes for this high-risk population.

Cynthia Thomson- The voting members of the Women’s Health Initiative Steering Committee selected Dr. Thomson as the next Steering Committee Chair. In addition, the NHLBI has officially approved her selection (a recent requirement of NHLBI).

Future Plans

In addition to supporting the high-impact programming, the ZFCPHP has selected the following initiatives for the

- **ZFCPHP 5-year Center Plan**

Our priority areas will include:

- Childhood Obesity Prevention
- Addressing Health Disparities in Diverse Communities / Populations
- Social and Emotional Well-Being in Adolescents
- Health Promotion for Older Adults

Growth areas will include:

- Aging and intergenerational programs
- Social Determinants of Health (SDOH)
- Health Risk Assessment

- **Step Up 2.0**

Building on our success from the past four years of the Student Transformative Experiences to Progress Underrepresented Professionals (STEP-UP) Summer Research Program, we are submitting an application for a new R25 Cancer Research Education Grant in January 2022 to continue to train undergraduate and early graduate students in cancer prevention research.

Updated 12/14/2021



2022+