Stanislaus State | Geography & Environmental Resources | AY 2021 - 2022

Geographical focus

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22 - 23 Led by José Díaz-Garayúa, Project Desk Editors: Geography Program Editor: Dr. José Díaz-Garayúa This issue's front cover, was part of a scouting travel by Drs. McNally and Díaz-Garayúa in Fall of 2019, right just before the pandemic. This field was a beautiful sight, a great surprise hidden along the route in preparation of GEOG 3940, Geography of the Delta.

This course is an individually-paced, field trip which involves following a trip guide to sites in and around the communities across Sacramento-San Joaquin Delta. At each site, you are directed to play recorded lectures on topics ranging from early gold mines, mining methods, mining towns, local history, geography, and geology. This is a self-guided, one-unit, and asynchronous online course in which students go to the field on their own as a partial requirement to receive credit for this course.

The Geography Program has designed three one-unit self-guided tours. Students from any major benefit from these courses: GEOG 3930 the Delta Region, GEOG 3940 the Yosemite Region, and GEOG 3950 the Mother Lode Region.

Recently, a new 3900s course, GEOG 3910 Geography in Film, was added to the curriculum.

Geography in Film

Geography in Film is a one-unit asynchronous online new course developed by Dr. Díaz-Garayúa. As a PhD student, he co-taught a similar course at Kent State University being able to appreciate the use of films as pedagogical tool.

Although this course was thought long before, the pandemic was the catalytic that make it happen. As many one-unit self-guided courses were taken virtual due to the pandemic, Geography in Film was an excellent option as a virtual course. This course examines the multiple geographies as well as geographical representations in films. This course introduces concepts of geography through the use of films and is designed to provide critical lenses to interpret a variety of stories related to geography in film. Students will watch selected films (commercial, international, or independent), read scholarly work about those films, and write short essays about them.

This course introduces students to several concepts in the discipline of Geography [i.e. space, place, landscape, culture, nationalism, identity territory and other concepts] by exploring how geographies are crafted in films and examine them as data source that can be used to deploy a variety of critical techniques used in the subfield of human geography.



This course focus on the **geography** <u>in</u> films (cinematic representations or production of spatial meaning) and not on the geography <u>of</u> film (movie business).

Letter from the Chair

Dear Geographers and Friends,

I'm very proud to report on the Stanislaus State Geography & Environmental Resources' recent accomplishments.

I thank the faculty and staff for all of their dedication to the program over the past few years. I welcome, *Dr. Helzer* back to our department, after serving as the Associate Dean for International Education. *Dr. Avwunudiogba* co-edited a new book, *Human Trafficking: Global History and Perspectives* (2021). *Dr. McNally* served as the vice-president of the California Geographical Society. *Dr. Díaz-Garayúa* and partners at UC Merced were awarded a \$1.4 million grant from the Tobacco-Related Disease Research Program (TRDRP). As a group, we are pleased to announce our new undergraduate major in *Geography & Environmental Resources, BS.* Students select from a concentration in Applied Geography or Environmental Resources.

I especially want to recognize the important work of our lecturers over the past three years: Chuck Bowen, Cece Hudelson, Cameron Pallotta, Dr. Catherine Garoupa-White, Tanya Gemperle-Goncalves, and Gene Barrera. They were so very dedicated to providing high quality classes during the uncertain circumstances of the COVID emergency. I appreciate all the work Cameron Pallotta has done to maintain our GIS Lab, especially while we taught our GIS courses online. Some of the Stanislaus State COVID-relief funds were used to purchase a class-set of GIS laptops that students could check-out. Of course, none of this could happen without the support of our Administrative Coordinator, Christing Aflleje-Meyer. I commend Dr. Díaz-Garayúa and Dr. McNally for their work as co-Directors developing the new Center of Applied Spatial Analysis (CASA). I would also like to welcome two new affiliated Geographers to Stanislaus State. Dr. Haley Ye, joined the Stanislaus State community in 2021 as our new Dean of Graduate Studies and Research. Prior to Stanislaus State, Dean Ye was a professor, chair, and associate dean at CSU Los Angeles. Dr. Matthew Derrick, joins the Stanislaus State community in fall 2022 as the new director of the Social Science Program. Prior to Stanislaus State, Dr. Derrick was a professor and chair of Geography at Cal Poly Humboldt.

In the past two years we have virtually celebrated Geography Awareness Week and GIS Day. Thank you to our presenters and participates. In 2020, *David and Sharon Froba* (community leaders) hosted a virtual conversation on Racially Restrictive Covenants in Modesto. In 2021, *Dr. Carr* (UC Berkeley) presented on Language & the Right to Public Space; *Gene Barrera* (Merced County), *Aron Harris* (Stanislaus County), *Kristi Kelechenyi*, and *Kaley Lopez* participated on the GIS Professionals Experiences Panel; and *Dr. Sánchez-Rivera* (US Census Bureau) presented on Thinking Geographically: Making "Known" Research Problems Unique. Thank you, *Dr. Díaz-Garayúa*, for your tireless work hosting these two events.

Congratulations to our 2022 and 2021 Graduates and Student Achievers. Our Outstanding Students include *Elissa La Comb* (BA - 2022), *Emma Denison* (BA - 2021), and *Stephanie Lopez* (MS – 2021). Despite the global upheaval, our students have also continued to participate in International Education. *Vanessa Padilla* has been studying in Ghana in 2021-2022. Thank you to the Office of International Education for providing these opportunities to our students. We appreciate the support of our community in providing internships for many of our students including: Stanislaus State Facilities, CASA, Merced County, Stanislaus County, Turlock Irrigation District, Tuolumne River Trust, US Army Corps of Engineers, E&J Gallo, and Strong Emergency Fire & Construction Inc. Thank you to the Office of Service Learning for supporting and facilitating our community connections.

We have many exciting opportunities to look forward to next year. We invite you to attend our **November 2022 GIS Day Celebration** (More Information to Follow). I thank everyone for their contributions to our program. Have a wonderful and safe summer.

Sincerely,

Peggy Hauselt

Geography & Environmental Resources Chair

Faculty & Staff



Dr. Austin Avwunudiogba, Ph.D. is a Professor of Geography & Environmental Resources.

Dr. Avwunudiogba's primary research focuses on investigating how coupled human-fluvial systems respond to and recover from natural and human-induced changes at multiple temporal and spatial scales. He has ongoing research projects in the Tuolumne Watershed, CA, and the Lower Niger River Floodplain in Nigeria where he is working with his students to study the impacts of land use/ land cover change on hillslope erosion, stream channel response, and floodplain sediment flux.

Dr. Avwunudiogba's secondary interest focuses on current development challenges in Africa. In the past couple of years, he has examined the role played by globalization in the changing dynamics of the interrelated issues of refugees, internally displaced persons, and human trafficking in Africa. His recently published a co-edited book <u>Human</u> <u>Trafficking: Global History and Perspectives</u> with Dr. Elisha Dung (Alabama State University).



Dr. José R. Díaz-Garayúa, Ph.D. is an Associate Professor of Geography & Environmental Resources as well as co-Director of CASA.

Dr. Díaz-Garayúa's most recent publications are: 1) **Teaching Geography** in Times of Covid19: Experiential-Based Learning with Everyday Digital Tools in *The Geography Teacher* (forthcoming) and 2) COVID-19 deaths in México: A spatiotemporal analysis (with Oscar G. Hernández-Lara and Kevin Butler) in *COVID-19 and an Emerging World of Ad Hoc Geographies* (Eds. S. Brunn and D. Gilbreath) (2022).

At <u>CASA</u>, he is leading a series of projects. He is working with <u>Dr. Anna</u> <u>Song</u> (UC Merced's <u>NCPC</u>) to create a tobacco control pipeline. The <u>TRDRP</u> awarded **1.4 million dollars** for this project, being our institution recipient of over 1 million dollars of these funds.

As part of his work in CASA, He has led work for Stanislaus County as well as internships from *GeoHumanities* to human-environmental relations.



Dr. Peggy Hauselt, Ph.D. is a Professor of Geography & Environmental Resources and Chair of the Department of Anthropology and Geography & Environmental Resources.

Dr. Hauselt has been leading the Department of Anthropology, Geography, and Ethnic Studies during these difficult times of drastic changes. During this academic year, she helped to establish Ethnic Studies as a standing-alone department and established the new BS in Geography & Environmental Resources.

Dr. Hauselt also lead the following units: 1) the Program Director of the Interdisciplinary Studies Master Program, 2) Chair-Elect of the Academic Technology and Learning Committee (ATLC), and 3) Chair of the College of the Arts, Humanities, and Social Sciences' Chairs Council.

This year Dr. Hauselt taught Intro to Geospatial Apps, GIS, Wine Geography, & Restorative Human Ecology (along with Dr. McNally!).

Faculty & Staff



Dr. Jennifer Helzer, Ph.D. is a Professor of Geography & Environmental Resources.

Her research and teaching interests include immigration, ethnicity, and the transnational linkages associated with human migration and settlement in California.

Her published work explores the various dimensions of migration to northern and central California by refugees, euro-migrants, and recent newcomers. She incorporates experiential learning, including field trips and community-based servicelearning projects, in her courses. Her recent teaching includes California Cultures and Environments, Ethnic Geography, Urban Geography, Wine Geography, and the Geography of Europe. She is currently collaborating with Modesto's Downtown Improvement District to facilitate new internships and service learning opportunities for students.



Dr. Alison McNally, Ph.D. is an Associate Professor of Physical Geography & Environmental Resources and co-Director of CASA.

Dr. McNally is interim Vice-President of the <u>California</u> <u>Geographical Society</u>. She is interested in water accessibility and sustainability issues. Her research is influenced by biogeography, geomorphology, landscape ecology, and geospatial science.

Dr. McNally's most recent research focuses on the Tuolumne River watershed, where she examines impacts to water quality in the Tuolumne River, and at the Antioch Dunes National Wildlife Refuge, where she investigated particulate deposition on a relict dune ecosystem.

Program Administrator

Mrs. Christina Aflleje-Meyer

Adjunct Faculty

Gene Barrera, MCRP Geographic Information Systems Planning Issues

Chuck Bowen, M.S. Introduction to Physical Geography California Cultures & Environments

Dr. Catherine Garoupa-White, Ph.D. California Cultures & Environments

Environmental Tanya Gemperle-Goncalves, MSc ctor of CASA. Sustainable Agriculture

Cece Hudelson, MSc Cultural Geography

Cameron Pallotta, M.S. Introduction to Physical Geography, Lab.

2022 Graduates

- Alissa- Monique Bravo
- Isabella Sophia Cárdenas
- Zachary Falcon
- René García
- Elissa Genevieve LaComb
- Patrick James Nicolini
- Vanessa Padilla

CASA: 3 Years and Counting

By Dr. José Díaz-Garayúa

CASA, the Center for Applied Spatial Analysis of California State University, Stanislaus opened its door in Fall 2019 during the GIS Day. During that day, CASA launched a series of activities including a GIS workshop led by colleagues from ESRI. Dr. Díaz-Garayúa (co-Director of CASA) secured an external grant from California Humanities making possible to bring the 2019 Geography meets Humanities: A Focus in Social Justice.

COVID-19 hit soon after the opening of CASA. However, the pandemic could not bring CASA to a complete halt. During the pandemic, CASA was able to continue its work on several grants and also secured a small yet important work commissioned by David and Sharon Froba, community members from the city of Modesto. This work was about Racially Restrictive Covenants in Modesto. In addition. David and Sharon Froba presented in 2020 about the historical geography of Racially Restrictive Covenants in Modesto during the GIS Day.

CASA was able to serve hundreds of community members, students, staff, and faculty through a series of activities. You can access and read <u>CASA's 2019 – 2021 Annual Report</u> for more details.

During the academic year 2021 – 2022, the Center for Applied Spatial Analysis continued working and serving the general community.

CASA secured a contract with Stanislaus County Health Services Agency. This contract consisted of a project about park use to help determine how to better serve the communities. This project, led by Dr. Díaz-Garayúa and Dr. Ryan Logan (anthropology), provided funds for paid research assistants (for 10 students). The Program of Health Sciences assigned a student as an Intern to work on this project as well. The students had the opportunity to work in "real world" problems while developing skills used in applied human geography and applied anthropology.

In addition, CASA worked on a grant for the Tobacco-Related Disease Research Program. This project has been funded with over \$1,400,000 to develop a Tobacco Control Pipeline. Dr. Díaz-Garayúa, Dr. Song (NCPC of UC Merced), and Dr. Meggan Jordan (Sociology) are leading this work where students will apply geographic principles, GIS, and other techniques to tobacco control research and advocacy. Students will join research teams at the NCPC at UC Merced. Also, CASA delivered a workshop. The first post-pandemic workshop – organized by Dr. Díaz-Garayúa and Carolina Alfaro from the WCCC – brought a mapping workshop to provide tools to examine the campus language landscape. This workshop, led and supported by a Latinx team for our Hispanic Serving Institution, served to introduce basic concepts of mapping using ArcGIS Online to students, faculty, and staff.



Participants at the workshop. Photo Credit: Carolina Alfaro, 2022

CASA and the Geography Program brought the **Geography Awareness Week and the GIS Day**. These activities were organized and led by Dr. José R. Díaz-Garayúa and attracted 170 viewers. One of the sessions was coorganized and co-hosted by Dr. Brenda Ortiz-Loyola, from the Program of Modern Languages.

Grant Writing

Research Experience for Students

By Dr. José Díaz-Garayúa

The Stanislaus State Office of Research and Sponsored Projects (ORSP) launched a program. The Faculty Grant Writing Community was created to facilitate grant writing for external funding. This is a one-year commitment where participants must submit grant applications.

This award will provide time and compensation to a selected group of professors working on grant proposals. ORSP selected 18 faculty members across campus and 3, or 16%, of the fellows are geographers. Drs. Avwunudiogba, McNally, and Díaz-Garayúa were awarded. In fact, they represent 60% of the Geography Program.

Our <u>faculty members</u> have been successfully attracting external funding as primary investigators (PI) or co-investigators (co-I). Bringing external funds provide opportunity not just for faculty development but also helps students and community while allowing the growth of the discipline inside and outside our campus.

This well-earned award will facilitate the mission of the <u>Geography Program</u> and the <u>Center for Applied Spatial</u> <u>Analysis</u>. By Dr. José Díaz-Garayúa

One of the most beneficial opportunities for students during their undergraduate studies is to join a research project or work on their own research project. Engaging on research is useful because students learn new skills while doing their work. Students gain applied skills that are transferrable to jobs or graduate school.

In fact, CASA offers an alternative space for undergraduate and graduate students. CASA has brought students from different departments across campus and one intern from Health Sciences to work on a Park Use project. These ten paid research assistants and one intern (Fall 2021) that permitted students to gain new skills.

Students got to know and work with surveys, semi-structured interviews, coding, ArcGIS Pro, and the smartphone application Survey 123 under the supervision of Dr. Díaz-Garayúa (Geography) and Dr. Logan (Anthropology). In addition, students worked as a team and, in some instances, organized themselves to tackle problems. Working as a team is great not just for any job position but also, and more important, to our society. In doing so, CASA has created spaces of extracurricular learning for students across campus beyond grants or contracts. For example, biology major Laura Plascencia reached Dr. Díaz-Garayúa to engage on a research project. Laura is working on an applied human-environment project focused on the intersection of urbanization and front yards. During this project, Dr. Avwunudiogba and Dr. Gardner (Biology) joined the team.



Laura Plascencia working on the project Photo Credit: Laura Plascencia, 2022

Laura took advantage of CASA's student research opportunities presenting her work at the California Geographical Society. Also, Laura Plascencia, Dr. Díaz-Garayúa, and Dr. Gardner co-authored and submitted an article for the <u>California</u> <u>Geographer</u> the official journal of the <u>California Geographical Society</u>.

Research & Teaching at CASA

By Dr. José Díaz-Garayúa

Most people think about professors as persons reciting the same lecture for ages. Nothing further from the truth. You can find faculty members, scholars, engaged in constant research even in universities designated as teaching institutions like Stanislaus State. However, what better way to teach classes than incorporating research into our courses? Similarly, including students as Research Assistants to work in "real-world" experiences is an excellent way to provide them with a great opportunity of professional growth.

Moreover, faculty that regularly publish, work on projects proposals to attract external funds, participate in workshops, travel overseas, and are generally engaged on research are great resources when teaching, specially, method classes or graduate courses.

Our Geography Program is an example since several of our faculty member are active on research and publication. Here, Dr. Díaz-Garayúa co-authored (with Oscar Hernández-Lara and Kevin Butler) the publication **COVID-19 deaths in México: A spatiotemporal analysis** in <u>COVID-19</u> and an Emerging World of Ad Hoc <u>Geographies</u>, edited by Stanley D. Brunn and Donna Gilbreath. They emphasize the importance of spatiotemporal data analysis when, literally, making life or death decisions in society. Spatiotemporal data analysis is key for Public Health.

They examined daily data for over a year by municipio. Despite the limited resources, Mexico was successful in making available COVID-19 data.

In other words, every municipio in Mexico follows a similar pattern of these four distinct cluster showed in the Figure below.

Sure, the spread of COVID-19 is a complex process. The point is that Spatiotemporal analysis is a valuable tool that geography can offer to our students and other disciplines.



Figure 1. Average Time Series Clusters of Cumulative Deaths per 100,000 persons

One of the results, Figure 1 shows all municipios in Mexico classified in one of four categories. Thus, Figure 1 shows the result of the average timeseries clustering. In addition, you visit CASA (<u>www.csustan.edu/casa/projects</u>) to examine a map by municipios categorized in any of these time-series clusters.

A Field Note from Nigeria By: Dr. Austin Avwunudiogba

I travelled to Nigeria at the end of fall 2021 semester and spent three weeks doing fieldwork on the Lower Niger River floodplain (LNRF) as part of my ongoing research on human impacts on large river systems. Large tropical river systems such as the Niger play a significant role in the global hydrological cycle because of their extensive floodplain and the large volume of water that drain from their basins. However, land use and land cover change combined with global climate change is affecting the natural hydrological regime of many tropical rivers including the Niger. During the fieldwork, I conducted some floodplain geomorphological mapping and collected data to verify an earlier land use/ land cover map that I generated from the classification of Landsat 8 multispectral imagery of the LNF.

The long-term goal of this project is to contribute to our understanding of the new hydrological regime and develop basin wide adaptation measure to mitigate its economic impact on population that depend on the productivity of the LNRF.



Location: On the Lower Niger floodplain. The Asaba-Onitsha Niger Bridge is visible at the background. The dry riverbank would normally be under flood. Photo Credit: Felix Avwunudiogba, 2021

Note: This trip was funded by the Office of the Provost. The project has also received previous funding from the Office of the Dean, College of the Arts, Humanities and Social Sciences (CAHSS).

Geography Alumna on TV

By: Marvlú Pulido



In August 2021, my athletic coach put me in touch with the ASICS team because they were looking for three athletes for a sustainability campaign. ASICS was going to release a new environmentally friendly athletic shoes commercial.

After going through the selection and interviewing process, they sent me an airplane ticket and the itinerary with information for the shoot. We were scheduled to film in Seattle. Washington for a week where we would be staying in Island Wood, a non-profit environmental learning center on Bainbridge Island.

Island Wood is used as a summer camp for kids to learn about everything and anything that has to do with the environment. They show us how nature already has the blueprint we need to lead sustainable and environmentally friendly lives. Not to mention that they have their own garden so all the meals that are served, from fruits to vegetables, were harvested by them. While ASICS is trying to be more environmentally conscious with their products, they also want everyone to understand what it means to be environmentally friends

They had all of us go through an immersive learning experience and that completely gave me a different take on what the interactions between the environment and humans could look like. After this experience, I not only walked away feeling proud that I was able to be a part of such an amazing campaign but excited to and optimistic in the futures of sustainable living and what it could bring to everyone.

Marylú Pulido earned a B.A. in Geography in 2018. You can access the commercial here: https://youtu.be/HPRAvLgUbrg

A Field Note from Iceland

By Dr. Alison McNally

Last summer I was fortunate to take part in a professional development opportunity hosted by the National Council of Geographic Education and GeoCamp Iceland, where I spent 11 days exploring the southern part of Iceland with a group of K-12 and higher education teachers from across the U.S. Needless to say, I was thrilled and couldn't wait to get out after spending so much time at home due to the pandemic. After meeting COVID requirements (negative test), our group explored the rugged physical environment of the island (due in part to its location on the mid-Atlantic ridge where the North American and Eurasian tectonic plates are pulling apart), and learned about the human history of settlement dating back to 874 by Celtic and Viking settlers. A few highlights of the trip included:

Visiting the volcanic landscapes of lceland – yes, we went to the most recent eruption at Fagradalsfjall and got to explore the lava! We also visited several geothermal sites in southern Iceland, and heard the powerful jet engine sound of a geothermal steam vent being harnessed for energy (85% of homes are heated with geothermal energy in Iceland). Exploring glacial landscapes – our group visited a few of the over 260 glaciers in Iceland – with the most memorable experience consisting of a Zodiak ride through the Jökulsárlón glacial lagoon on the south edge of Vatnajökull glacier, one of the largest in all of Europe. It was amazing to see enormous chunks of ice that had recently broken off the glacier making their way toward the Atlantic Ocean.



Dr. McNally in front of Skógafoss waterfall. Photo Credit: Dr. McNally, 2021

Note: This trip was made possible by funding from the Office of the Provost and the Geography & Environmental Resources Program

Waterfalls were truly awesome – we visited several, including Skógafoss and on the Skóga river (foss=falls), Gullfoss (gull=gold), and Seljalandsfoss (selja=sells, lands=land), which we walked behind! These powerful landscape features produce 70% of Iceland's overall energy. As glaciers melt, there is a fear of what the future will hold for hydropower if rivers begin to wane.

Human landscapes were equally as interesting as the physical, with visits to Reykjavik (the largest city in Iceland) as well as many rural communities and landscapes made famous by Game of Thrones. We learned that most of Iceland's 366,000 inhabitants can trace back their ancestry to Celtic or Viking settlers in the late 800s, which means that many Icelanders are distantly related to one another. There is even an app folks use to check their ancestry before they begin dating!

The biggest highlight was being able to spend this time with so many friendly, giving hosts in Iceland, who literally opened up their homes and lives to us. It was a truly wonderful experience, and one I am eager to repeat in the near future. In the meantime, I will continue to practice pronouncing Eyjafjallajökull.

Smoke & Vape Free Scholars Initiative (2022 – 2025)

By Dr. Díaz-Garayúa

California Endgame's goal to end tobacco use in the state by 2035 strengthening reauires tobacco control capacity in all regions of the state. Although California's San Joaquin Valley (SJV) geographic land mass represents about 25% of the State and is the fastest growing region with over 4 million residents and counting, it is severely underresourced and lags in achieving state tobacco control objectives. According to 2019 data, despite the fact that more people have tried to quit smoking, counties of the SJV have higher smoking prevalence compared to the whole state. Moreover, the SJV is home to several immigrant communities (e.g., Hispanic, Hmong), many who reside in rural areas of the Valley and are vulnerable to tobacco use and are targets of the industry. In this regard, the SJV is not only home to priority populations, but as a whole is considered a priority population.

A major challenge to advancing tobacco control goals in the region has been cultivating local tobacco control advocates that understand the challenges in the region and are a part of the local community. Local lead agencies (LLAs) and nonprofit groups have taken the charge to organize youth tobacco control activity and increase interest, however to date, there has been a lack of structured efforts to provide continual training in tobacco control foundations, research, and practice. Historically, the lack of structured training for potential advocates is due, in part, to the lack of institutions of higher education in the region, including a research university that would produce new knowledge for the region.

To help address to this issue, faculty members from the CSU Stanislaus' Center for Applied Spatial Analysis (CASA) and the University of California, Merced's (UC Merced) Nicotine & Cannabis Policy Center have partnered up to recruit and train cohorts of undergraduate scholars at California State University, Stanislaus.

In addition to the scholars being integrated into a tobacco control research project conducted at the UC Merced's Nicotine and Cannabis Policy Center (directed by Dr. Anna Song), scholars will be assigned to one of six county local lead agencies to conduct tobacco control advocacy projects as a part of county-level tobacco control programs.

This partnership, between these two major institutions, will provide opportunity to the scholars accepted to this program to the following:

- Scholars accepted to this program will take course in HONORS being introduce to tobacco control in preparation for this program.
- Scholars will join a tobacco control research team at UC Merced.
- Scholars will be assigned to one of six county Local Lead Agencies (Public Health Departments), to conduct tobacco control advocacy work as a part of county-level tobacco control programs.

By engaging on these three activities, scholars will acquire a breadth control of tobacco experience. The training these students will receive will provide instrumental support for local activities control tobacco and sustainability to the tobacco control workforce in the region.

This program, Smoke & Vape Free Scholars Initiative, offers students an ample range of both academic and professional experiences on health and tobacco control in the Central Valley. These experiences will provide students with the necessary tools to be competitive and to continue graduate studies on health and/or tobacco control or to compete in the job market.

Smoke & Vape Free Scholars Initiative (2022 – 2025)

By Dr. Díaz-Garayúa

With a grant award of 1.4 million dollars for Stanislaus State and UC Merced from the Tobacco-Related Disease Research Program (TRDRP) in funds for the next three academic years (2022 – 2025), the Smoke & Vape Free Scholars Initiative program (SVFSI) is a one-year academic and professional experience that equip students to transition to jobs in the health area, including tobacco control, or to continue to graduate studies.

This program offers a one-year full scholarship allowing students to be a full-time student to dedicate their time to get immerse on this experience. This scholarship provides the following:

- It pays your tuition fees
- It pays you a generous stipend every month. The total annual amount is \$10,500.
- It will cover your costs to attend and participate at a program conference at UC Merced.

Scholars will enjoy of other advantages such as:

- Personalized Mentoring
- Working space at the Center for Applied Spatial Analysis (CASA)
- Other expenses covered

It is important to note that this program will benefits students by allowing them to enroll in HONORS courses (one every semester), being matched with a research team at UC Merced, and being matched with a health department in the Central Valley. These opportunities will expand the students' network that will likely increase professional and academic opportunities in the future.

Because the SVFSI program is schedule for:

- Academic Year 2022 2023
- Academic Year 2023 2024
- Academic Year 2024 2025

You can apply now for the Academic Year 2022 – 2023 or get ready to apply for the next two academic years.

To apply you want to be sure that you will enroll as a full-time student (12 units). You want to be committed to your studies, including working (internship) with the assigned UC Merced research team and with the assigned public health agency. You will need a minimum GPA of 3.0 and access to reliable transportation to work at your internships in UC Merced and the assigned health department agency. How to apply for the 2022 cohort:

- Submit your unofficial transcripts
- Section A Curriculum Vitae (CV)
- An 800-word (maximum) personal statement addressing the following:
- How you would use science to promote social justice in society?
- What sparked your interests in health and/or tobacco control and what have you accomplished toward this area?
- What are you looking to accomplish in this program?

Submit these materials via email as a single PDF to both

- Dr. José Díaz-Garayúa (jdiazgarayua@csustan.edu) and
- Dr. Meggan Jordan (mjordan1@csustan.edu)

by May 13, 2022 entitled "Lastname_Firstname_SVFSI". Please also use the SVFSI Internship as the subject line for the email.

Questions? Email Dr. José Díaz-Garayúa (jdiazgarayua@csustan.edu) or go to www.csustan.edu/casa/svfsi

Study Abroad: A Geographer in Ghana

By Vanessa Padilla

The university experience is so unique and special to each student because it opens in your life academic and personal doors. Through lectures, assignments, discussions, and group projects we adapt and grow to appreciate the learning experience.

Now, grab your passport and bags and head straight to the airport. Do not look back or think twice. Just do it. This was the plan I set in motion in January of 2022 with the destination set to Ghana. With little idea of what to expect I was excited to learn about the culture and customs. The study abroad experience at the University of Ghana in Accra has given me much exposure and insight to the history of the Gold Coast. Ghana has been a strong leader amongst the African countries, being the first to gain independence from colonial rule in 1957. This is even further shown through the colors of the flag red representing the fight for independence and the lives that were lost, gold to remind all of the precious gold reserves, green for the abundant natural resources, and the five-point black star as a symbol of freedom from slavery for all other African countries to strive towards. This has been the feeling during my time in Ghana, this sense of unity and strength.



Figure 1 – Black Star Square. Photo Credit: Vanessa Padilla, 2022

Along with the beautiful Ghanaian culture there is also much natural beauty to admire. In the northern region of Ghana, you will find Mole National Park in the heart of the savanna, which is home to a variety of native wildlife. The animals are free to roam as they please and have park rangers to ensure there is no illegal human trespassing nor poaching. When visiting we were fortunate to experience a variety of encounters, the first being a knock at our hotel room door, the unexpected visitor being a baboon. From there on we saw many birds, lizards, wart hogs, a variety of antelope, crocodiles and the most impressive in my opinion the *African elephant*. Though it pains to learn that some of these species are categorized as vulnerable, such as the elephants and lions, it is exciting to see the efforts that are being made to protect the wildlife and habitat.

Study Abroad: A Geographer in Ghana By Vanessa Padilla



Figure 2 – African Elephant at Mole National Park. Photo Credit: Vanessa Padilla, 2022

Just 10 hours south of Mole National Park you will begin to enter a region of lush green forested mountains and personally my favorite region, the Volta region.

Here we explored the *Wli* waterfall, known to be the tallest waterfall in west Africa. To reach the waterfall was a short 30-minute walk through the forest. As we began our walk we were met with rain which created the magical rainbow that met us at the base of the waterfall.

Ghana is now the keeper of my heart and stomach having had the time to sample many dishes, I have grown very fond of Ghana's cuisine. My typical lunch called **Red-Red**. The basics of the dish consist of black-eyed peas in palm oil, and fried plantain, to this you can add in gari, made from cassava root,



Figure 3 – Wli Waterfall. Photo Credit: Vanessa Padilla, 2022

Other common dishes are banku with a stew or meat with pepper, or fufu with some soup and another one of my favorite's groundnut soup with rice balls. These dishes all have such unique flavors and aromas that they will be one of the things I will be left missing the most. Traveling through Ghana has been a very unique experience, especially coming from a geography background I feel I can appreciate the landscape and the people so much more.

I truly believe exploration is at the center of all geographer's hearts and my study abroad experience has definitely proven this point. There is so much to learn and see all over the world and I truly wish and encourage all current and future students to take on this journey, to wander in the unknown, and to explore all that they can for as long as they can.



Figure 4 – Red-Red. Photo Credit: Vanessa Padilla, 2022

Vanessa Padilla is graduating in May 2022.

Alumna at PG&E By Jess Carey

As a transfer student from Clovis Community College, my time at CSU Stanislaus was short but also sweet. I originally entered California State University, Stanislaus as an Economics major but after taking my first geography class from Dr. McNally I knew a change in majors was the right decision for a career path that would be enjoyable, rewarding, challenging, and I jumped right in.



Jessica Carey earned a B.A. in Geography 2018

Growing up and residing in Mariposa County, my commute to campus was long, roughly 1.5 hours one way, I was taking 18 – 21 units most semesters, and the faculty did an amazing job at helping me get through my program and to reach my goals in a timely manner. As a part of my final semester, where an internship was required, I worked with the Mariposa County Planning Department, and was able to work on the County's Land Conservation Act (also known as the Williamson Act) supporting the GIS team uploading documents to a database that would then show in the County's GIS system.

Upon graduation in late 2018, I worked for the National Park Service in Yosemite seasonally and was then hired as an Assistant Planner for Mariposa County where I gained experience in municipal planning and community development, in County government, grant writing, land use, land rights research, project planning, and project management.

In 2020, I was hired with PG&E as a Land Planning Analyst supporting the Environmental Team, and most recently just accepted a new position within PG&E working as a Land Agent on the Land Team researching property rights.

In my spare time, I enjoy spending time at home with my family in the mountains of Mariposa, as well as weekend getaways to the city. Some of my hobbies include roller-skating, gardening, bikeriding, and watching murder-mysteries.

I would like to express my gratitude for my time spent as Stan State, my educational experience there was amazing, and it has done wonders for my career and self-confidence. The faculty and staff are top-notch, and I am glad to continue to stay in touch with many of my professors and former alumni.

GIS in Health & Human Services

By Christina Falk

I originally transferred to Stanislaus as a Liberal Studies major with the intention of becoming a teacher. I took one geography class and I was ready to change my major. After that first geography class I realized teaching wasn't what I wanted to do, and decided my life path would be better suited to collect data, analyze it, create maps, and most importantly EXPLORE!

I finally looked forward to going to school. I took every geography class available to me. During my second semester I enrolled in the Death Valley class, I had never been away from my family prior to this trip. We went to Death Valley for a week and it was well worth the risk. I was acquainted with a few of the other students, but I had not built a significant relationship with any of them. Upon returning from the Death Valley trip I felt like I was a part of the Geography Department family.

I graduated in 2018 with my B.A. in Geography with a concentration in global studies and physical geography, but I was not ready to quit my geographic aspirations. I wanted to pursue a M.S. in water resource management at Fresno State, but I was very hesitant because I was not sure if I was qualified for that level of education.

My advisors were so helpful in my decision-making process and encouraged me to pursue the program. In search of advice about the GRE examination Chuck Bowen told me "Well if you fail, you might not be ready for graduate school". Initially, I was stunned but he continued, "But that doesn't mean you can't get there ... If you want something I know you will do what it takes to get there". I know that seems insignificant, but it certainly made me realize failing doesn't actually matter. determination and hard-work will get me where I want to go.

I accepted a GIS internship at Turlock Irrigation District (TID) working in the Survey Department, which was a dream job for me. I worked on some very interesting and challenging projects, including TID's recent solar over the canal project, and the construction of the new Ceres Main Reservoir.

Currently, I am the GIS/IT coordinator for the San Joaquin County Mosquito and Vector Control. I am the first in this agency's history to hold the GIS/IT position, I essentially explore different ways that GIS can benefit the agency. I am using various GIS techniques for data collection, public information, and data analysis. Currently there are invasive species of mosquito (i.e., *Aedes Aegypti*) affecting our region. Mosquito surveillance and mediation are critical if we plan to prevent it. I have created a data collection layer that will allow technicians to document where these species are located, in addition to sites that have been inspected. With this data I will be able to help the district make data-driven decisions.

I grew academically and personally in my time at the Geography Program. I am a first-generation college student but I never felt alone. The instructors in the Geography Program are great. Stanislaus holds a special place in my heart.



Christina Falk earned a B.A. in Geography 2018

Kristi Kelechenyi's Geographic Path

By Kristi Kelechenyi

Acquiring new skills requires practice and more practice. After taking GIS related courses at Stanislaus State, I knew I would need continued access to the Esri software if I was going to hone the skills I had just learned or pick up any new ones.

Access to the ArcGIS was high on my list of priorities, but I wondered how difficult that would be to come by. What organizations in my area use GIS, and how is it being applied? After realizing that I would not be able to afford an ArcGIS license on my own, I became worried that I may not be able to find employment with a company who did. Would I forget what I had learned before I could find a job that allowed me to utilize it?

Planning Issues, a course often taught by Mr. Gene Barrera, showed me an avenue for acquiring that GIS access. The course project for Spring 2021 entailed assisting Merced County with updating their Hazard Mitigation Plan. As the GIS manager for Merced County and a University instructor, Mr. Barrera was able to provide a unique opportunity to the students: the chance to observe and participate in a local government process while gaining experience and confidence in our GIS abilities.



As a class, we created an online survey to classify current facilities that would be critical to Merced County in the event of an emergency or disaster, a web map displaying those facilities, and several story maps informing about various types of emergencies or disasters that residents of Merced County might face.

All of this data was included in a single application for ease of access for the Merced County Hazard Mitigation Team, and all of the various Merced County departments who may plan for emergencies. This project taught me to look at GIS from a different perspective; not to focus on the general public as the end user, but to focus the data toward those who would plan for a growing population. We had used several of Esri's programs to complete this project and I had more tools under my belt when I would go on my job search. Learning from Mr. Barrera in class was a good experience, but the chance be a part of the talent pipeline he was creating was even better. I was offered a place to continue sharpening my skill-set and observe how GIS was being implemented in a multitude of ways.

Mr. Barrera has arranged for several workstations in his office with access to the ArcGIS license for training students and colleagues while helping the county accomplish goals and projects. He has assigned me widely varied projects ranging from displaying prospective soccer fields to editing community zoning boundaries to displaying census data; there is always something different to work on.

I also learned the importance of developing a network of relationships, engaging those in the field you hope to work in can provide you with opportunities you may not have expected. Volunteering in the Merced County GIS department resulted in a part-time position, and has been an ideal situation for growing my GIS skill set.

Geographer Kristi Kelechenyi graduated in 2021

The Hallmark of Service Learning

Connecting academic instruction with real world experiences is the hallmark of service learning activities. Stan State has a long-standing commitment engaging students in the practical applications of coursework and civic participation. Nowhere can this be better exemplified than in the study of Geographic Information Systems or GIS and its use in local government.

Over the past several years, I've been providing instruction as a GIS the lecturer in Geography Department. I'm also the GIS Manager for the County of Merced. In both roles I've been relying on this service learning concept to develop a "Talent Pipeline" that provides students with a direct link to community engagement bv participating in academic coursework benefiting local government. In developing this talent pipeline, not only do students enrolled in the coursework benefit in applying the tools in GIS to a local government setting, but the County of Merced also benefits from the talent pool of university students to support projects of local importance.

To construct this talent pipeline, I have been able to work within Stanislaus State as a lecturer for the

By Eugene Barrera, MCRP

Department's Planning Issues course as well as my position as the GIS Manager for Merced County. Understanding the commitments in developing the course curriculum for the Planning Issue course and my direct involvement in administering GIS projects at the County of Merced has afforded me with a unique opportunity to develop the components necessary to provide a rewarding service learning experiences for students.



I've also coordinated with the Office of Service Learning to rely on their student placement program to ensure the community engagement experience meets the University's administrative requirements. Early engagement with the Office in developing the service learning and internship program provides the necessary resources to focus the course for experiential education. As the GIS Manager for Merced County, I have a good understanding of the GIS business needs of many County departments and have formed working relationships to assist in meeting their project goals. Several projects over the years have benefited from student involvement where GIS plays a role.

One example where student service learning was involved included a project supporting the Merced County Emergency Operation Center. This work involved identifying data that could be used to support populations with <u>Access and Functional Needs</u> <u>during an emergency event</u>. When a disaster strikes, knowing what you need and how to find them is the key factor to saves lives, resources, and critical infrastructure.

My vision is to maintain and ongoing talent pipeline between the University and the County that provides a mutually beneficial outcome for all parties involved. Such a collaboration not only serves in meeting a County need but fulfills a University mission of community service all while providing a unique service learning opportunity for students interested in geospatial technology.

Eugene Barrera, MCRP is Lecturer at the Geography Program in CSU, Stanislaus

Dr. Helzer's Sabbatical Project

Dr. Helzer's sabbatical project is the development of an etextbook entitled, California Dreamin': A Geography of the Golden State. She and her co-author, Dr. Robert Voeks, CSU Fullerton, will examine the principal natural, economic, political, and cultural processes and features that interact with one another to shape California's unique physical and human landscapes. The etext draws on each author's unique topical and regional expertise to provide a comprehensive and up-to-date examination of California's diverse human landscapes, cultural systems, and natural environments. The etext will explore such topics as social justice, indigenous and immigrant geographies, biogeography, popular culture, tourism, natural resource use, sustainability, and the state's evolving spatial relationships—local, regional, and global.

The ebook provides a relevant and upto-date teaching resource that can be utilized for online, hybrid, and face-toface instruction. Our overarching goal is to illustrate the geographical patterns and processes that have shaped California's past and present landscapes, and to explore the state's major human and environmental challenges from the perspective of justice, resilience, and sustainability.

By Dr. Jennifer Helzer

Each chapter will include maps and other visualizations to illustrate key topics and geographic processes. These visual aids will anchor course concepts to real locations and sites of historic and cultural significance throughout the state. Other unique features include Sites of Geographical



Chicano Park murals in Barrio Logan, San Diego. Barrio Logan is one of 14 California Cultural Districts. Photo credit: J. Helzer, March 2022.

Significance (SGS), which will utilize the custom mapping tools and sharing capabilities of GoogleMaps. Examples of SGS include San Diego's Barrio Logan and the town of Allensworth in Tulare County, also known as "the Tuskegee of the West," founded, financed, and governed by African American settlers. Similarly, the vernal pools of Butte County, and the Owens Lake (Inyo County), now dry due to its water source being diverted to supply the Los Angeles Aqueduct, are significant locales of environmental interest.

Each chapter will be showcased by specific and iconic geo-spotlights highlighting the exceptionalism of the Golden State. For example, the bristlecone pine, located in the White Mountains, is the oldest singlestemmed organism in the world. Likewise, the recovery of the California Condor and its resurgence as a unique species signifies the state's progressive environmental policies. Each chapter will include one or more "Five Minute Field Trip" YouTube video clips to illustrate a key geographic theme or process. The videos may also include testimonials from alumni, graduate students, faculty colleagues, and working geographers sharing their professional experiences.

Geography Awareness Week & GIS Day

By Dr. José Díaz-Garayúa

The Geography Awareness Week (#GeoWeek in Social Media) took place on November 15 to 19, 2021. As many of the activities during the pandemic, we decided to go virtual. Nevertheless, taking the talks virtual provided the opportunity to virtually bring people from other places to Turlock. We benefitted from scholars and professionals not just from as close as Stanislaus and Merced County but also from the Bay Area (Berkeley California) and as distant as the East Coast (Maryland).

These three talks, as we have been doing since 2019, have been edited and archived for the benefit of the general public. They will be in www.csustan.edu/geography/gis-day. The presentations will be available with subtitles in both English and Spanish. This is important because is a way to provide a *service* to students in this Hispanic Serving Institution, which make up over 50% of the student population (in the city of Turlock, over 40% speak Spanish). Providing subtitles in Spanish, permits more inclusion because many of our members students' family communicate better in Spanish. We cannot forget that more than 25% of California's population speaks Spanish while over 41 million (over 12%) of people in the US speak Spanish.

Our Geography Awareness Week opened on November 15, 2021 with the presentation of Dr. Jhonni Carr. Dr. Carr is a linguist at UC Berkeley. Her presentation examined how language can act as a barrier to social engagement, especially for marginal groups. Dr. Carr studied the linguistic landscape of Southwest Los Angeles's. Her presentation reached over 70 attendees from 31 cities, and 2 states.



The second activity, a panel with GIS Professionals, brought three practitioners: Ms. Lopez and Ms. Kelechenyi, two of our alumnae, and our colleague Mr. Barrera who is adjunct faculty and GIS Manager for Merced County. This talk brought over 40 viewers in 27 cities and 3 countries.

Our alumnae talked about how their experiences as intern and volunteer had contributed to their development and how the education and skills acquired in our program help them to move forward. Our colleague Mr. Barrera talked about the importance of a pipeline between universities and local governments. Mr. Barrera has taught GIS and Planning Issues and has a very dynamic service learning program in all of his courses providing opportunities to his students.



The last talk brought Dr. Ana Sánchez-Rivera. Her presentation reached 32 different zip codes in 18 different cities in California, Maryland, Washington, and Hawai'i. Dr. Ana Sánchez-Rivera is a human geographer with a social psychology background. Her undergraduate research, at the University of Puerto Rico, Río Piedras was about discriminatory attitudes against Dominicans living in Puerto Rico. She has an M.A. from SUNY Binghamton and a Ph.D. from University of Maryland, College Park. Dr. Sánchez-Rivera works as a Survey Statistician at the US Census Burau, Population Division in Washington DC.



Led by José Díaz-Garayúa, Project Will Leverage Each Campus's

Stanislaus State is partnering with UC Merced's Nicotine and Cannabis Policy Center (NCPC) on a significant project as part of California Endgame's goal to end tobacco use in the state by 2035. The two universities have been awarded a \$1.4 million Smoke and Vape Free Scholars Initiative Program Award collaborative grant from the Tobacco-Related Disease Research Program (TRDRP).

The project will train the next generation of tobacco control advocates in the San Joaquin Valley with a goal of producing scientific tobacco control advocates through classroom instruction, research labs and fieldwork.

Funding for the award began March 1 and is slated to last through 2025. The TRDRP has awarded similar grants in the past, but this is the first time a partnership between a public teaching institution and a research university has been required.

A unique aspect of the project is that each campus will provide its own strengths. Stan State students will have an opportunity to enroll in courses to learn about the basic tenants of tobacco control research. The project is a dynamic example of what is possible through multi-campus collaborations in the Central Valley.

"Stanislaus State is excited to partner with UC Merced on this collaborative grant," said Stan State President Ellen Junn. "This is a real opportunity for our campuses to band together and have a unified voice to advocate for better health in our region. By leveraging the strengths of our institutions, we will accomplish fantastic work within the Central Valley."

"UC Merced is proud to join with our Central Valley colleagues in advancing knowledge that will benefit the long-term health of people in the Valley and beyond," said UC Merced Chancellor Juan Sánchez Muñoz.



CASA's co - Director and PI, Dr. José R. Díaz-Garayúa, Ph.D.

Stanislaus State students will have an opportunity to participate in cutting-edge research projects at UC Merced, ranging from research on the metabolic process to scholarship on policies at the local and state level. Students will collaborate with multiple county Local Lead Agencies (LLAs) to conduct tobacco control advocacy projects, which will allow them to make significant contributions to their communities and gain vital hands-on experience.

Stanislaus State's José Díaz-Garayúa is the project's principal investigator. Díaz-Garayúa, an associate professor of human geography and geographic information systems (GIS), is co-director of the University's Center for Applied Spatial Analysis (CASA). He and his team will recruit students and provide workshops, instruction and mentoring.

Strengths to Train the Next Generation of Tobacco Control Advocates



"This is a real opportunity for our campuses to band together and have a unified voice to advocate for better health in our region. By leveraging the strengths of our institutions, we will accomplish fantastic work within the Central Valley."

President Ellen Junn

"This project will provide one more resource to continue reducing tobacco consumption," Díaz-Garayúa said. "I think this project will provide the tools in which we can funnel students into the right areas, including additional research opportunities and graduate school."

Joining Díaz-Garayúa's team is Stan State Associate Professor of Sociology Meggan Jordan. Jordan possesses a decade of experience in coordinating multi-disciplinary health interventions. She will act as the program's recruitment and educational coordinator. In collaboration with Drs. Song and Díaz-Garayúa, she will mentor students and provide guidance and advice as they progress through the program.

"I am thrilled to be working with such a vibrant team on a central goal to nurture the next generation of tobacco control scholars," Jordan said.

"Our goal has always been to build capacity in our communities," Song said. "Our efforts have traditionally been focused on building capacity through research and teaching, but what's exciting is now, we're going to build a bridge from the classroom to the lab and straight into our communities. This is a chance to empower communities by strengthening the pipeline into the community-health workforce. "The Central Valley is critical to California's overall health strategy. We are part of California, and so we can't reach a tobacco Endgame if our communities are still using tobacco."

The Endgame goal in 2035 does not mean the work will end then. Scholars from this pipeline will continue to be trained to think about the community.

"We are producing amazing scientist advocates," Song said. "They're not just going to think; they're going to do. They're going to go and change our world."

While students will reap many benefits from the project, instructors also have been immersed in the experience over the past year and will continue to do so in tandem with the future advocates.

"I think we are the right group of people for this undertaking," said Díaz-Garayúa. "We are here to create but also to learn. It is our job to get people on board for this next generation. It's important to establish how we can learn more from this process and how we can help our students to learn and be innovators — we are setting the example for our students."

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https://www.csustan.edu/news/stanislaus-state-uc-mercedawarded-14-million-project-help-snuff-out-tobacco-use







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