

diversity equity & inclusion

newsletter

creating greater fieldwork safety & community support for trans & gender non-conforming scientists:

an interview Dr. Ezra Kottler

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Field research and science provide important means of comprehending our universe and illuminating its remarkably diverse, intricately complex and ingeniously adaptative expressions of life. For those who pursue fieldwork in particular, studying the natural world can contain elements of not only purpose and appreciation, but also liberation and joy in witnessing realities encompassing interdependency and fluidity, existing beyond binary, rigid, and heteronormative ways of being.

Access to **nature** and **science** is not equitably available to all groups, however, as can be understood along axes of race, gender, disability, ethnicity, sexual orientation, economic status, and age. For LGBTQ+ people, the current U.S. socio-political landscape allows some to live with much greater

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openness than previously permissible in past generations, with little to no fear of workplace violence or job termination. Depending on geographic location, career stage, and work environment, however, numerous queer scientists still feel varying degrees of needing to **hide their identity, isolate, and self-police** their behavior in order to avoid discrimination. LGBTQ+ scientists are **17-21%** underrepresented in STEM fields and are more likely

Dr. Ezra Kottler



photo: Ezra Kottler

to be professionally devalued, harassed, and career-limited than their cisgender and heterosexual colleagues. Beyond the workplace, queer people are at an **increased risk** of being unhoused and have no protection at the U.S. federal level from housing and rent discrimination. At this moment, there are also **no federal protections** to prevent discrimination in insurance coverage and health-care, and there is a shortage of physicians who are sufficiently trained to provide care for transgender patients. In **2024** alone there have been 593 bills proposed to block trans people from receiving basic healthcare, legal recognition, education, and the right to publicly exist, with 42 passing and 332 active currently.

In order to 1) “build community for trans and gender-nonconforming (TGNC) field researchers who can often be isolated in workplaces that are majority cisgender”, as well as 2) “share resources for making labs and fieldwork undertaken safe for

TGNC scientists in both the natural and social sciences”, the **TGnC Fieldwork Alliance** was founded and launched by conservation scientist **Dr. Ezra Jay Kottler** at the 2022 Ecological Society of America (ESA) Annual Meeting in Montreal, Canada. In the interview that follows, Dr. Kottler shares in their journey towards greater self and community advocacy, outlines challenges faced by queer and trans scientists in conducting fieldwork and building a career in academia, relays the current and upcoming initiatives of the TGnC Fieldwork Alliance and opportunities for ally engagement, and describes a future of greater inclusivity and support they envision and are endeavoring towards.

Dr. Kottler is a Postdoctoral **David H. Smith Conservation Research Fellow** in the **Department of Ecology and Evolution at the University of Colorado, Boulder**. We met together while they were conducting fieldwork in California, where their **research** centers on trait ecology, genetics, and evolutionary responses of plants to climate change, and they are currently investigating the neutral and adaptive genomic variation among populations and across generations of two endangered vernal pool wetland annuals, *Lasthenia conjugens* and *Lasthenia burkei*.

What has gone into why you first started the TGnC Field Alliance?

2019 was my first time at ESA and it [coincided with being] my first time meeting and interacting with out, nonbinary grad students. A few months later, I started to unpack my own identity and come out to myself before deciding to come out in my [graduate] program. I think that there is a nonrandom element to that in that I had seen that people could exist as out and nonbinary in the workplace, that it was a possibility.

I learned a lot from joining the DEI committee at the field station I conducted research at, and worked



White Pelican take flight over the Chesapeake Bay where Dr. Kotter researches marsh grasslands.

to implement the DEI initiatives I learned about in my home institution. I started a DEI committee that has continued organizing DEI efforts for the two years following my departure from my graduate institution.

During the pandemic, I found the **International Society of Nonbinary Scientists**, or ISNBS for short. It was empowering to [realize that] things I was struggl[ing] with and thought were unique were not... [and] how being out in the workplace makes other people feel okay about being themselves. And I was inspired by ISNBS in many ways, seeing how they had gotten started just off of social media, [then] making a Slack channel and [further] organizing from there.

I modeled [TGnC Fieldwork Alliance] after ISNBS, creating a website, and in 2022, [giving] a talk about [it] as part of an ESA Inspire session on 'Advice from the Field' that was talking about different aspects of field safety, around social dynamics and things of that nature. Through organizing at ESA, [I have] had a lot of great support from the Inclusive Ecology section, [and at the conference,] the first members [joined].

TGnC Fieldwork Alliance seeks "to address the complex and unique challenges transgender, nonbinary and gender-nonconforming scientists face in undertaking fieldwork and consequently, pursuing resources and careers in science," where fieldwork can engender particularly vulnerable and potentially dangerous situations for TGNC scientists: "navigating gender-segregated dorms, incidents of queerphobia in remote areas, and geographic isolation from support networks." In addition, travel experiences and risks can include anti-LGBTQ+ laws, as well as airport body scanners that require security to press one of two buttons (male, female) that can then lead trans people facing invasive pat-downs and harassment when their bodies do not match the assigned scan.

How do we think about and address concerns that can arise with being TGNC in science and when performing fieldwork?

[I think] keeping in mind that we have to navigate systems at different levels, which will, depending on where you are, be more or less restrictive or supportive [is important].

Individuals face challenges in accessing gender-affirming medical care and legal support due to

varying state laws and personal circumstances. It depends on whether you need access to gender affirming medical care, whether you have made changes to your legal name and gender marker, [where] they are easier to change in some places than others. I have definitely spoken with people who have a supportive lab environment in a non-supportive state legal environment.

It is about what supports you have where you are because if there's somewhere where it's legally less safe that you have more personal supports, then that might still be the best place for you to [be if you] have a supportive interpersonal network.

[In addition to the] lack of acknowledgement for outreach and community engagement work, [another] challenge is that most out trans and nonbinary ecologists and field scientists are early career. So it's harder sometimes to access the resources and knowledge base that comes from more experience and a longer career. I envision that through the Alliance, it will build out that for us.

How have you experienced the impact of fostering community?

photos: @Mr.TinDC (l), Don Henise (r)

Often, if people aren't aware of how [the] issues [they face] are systemic, then they can often internalize that and think that it's their fault. And there are many situations where people aren't being respected in the workplace. Their pronouns aren't being used. And if they call attention to those issues, it's downplayed as, you know, they're being dramatic. They're making a big deal out of nothing.

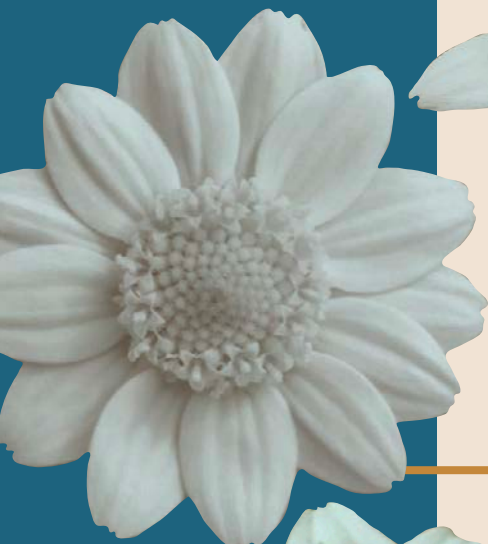
So part of experiencing community with an affinity group of people navigating the same challenges is knowing that these challenges aren't a 'you' thing. They're structural, and they are very much part of an issue that's part of the larger cultural landscape that we're all navigating. And that if you're in a very bad situation, it can be better, and you deserve to feel safe.

[In looking for broader community], there were times that it felt kind of frustrating that we didn't have more support from allies in the department, but it was an uphill battle to get that support because there were no structures for rewarding or acknowledging DEI organizing in terms of career development. At the time, the big thing for faculty is it's not part of the tenure requirements.



Loblolly pine forest at Blackwater National Wildlife Refuge on the Chesapeake Bay.





Lasthenia conjugens, goldfields, one of the species that Dr. Kottler studies in their investigation of vernal pools.



Even for graduate students, we were evaluated off an annual report that we would provide each year and there wasn't a spot to include outreach work, community engagement, or DEI organizing as part of the work we were doing as graduate students. One of the most hopeful things I've encountered has been the power of mutual support, with queer people supporting other queer people. I see a lot of queer scientists becoming mentors very early in their own career.

There's this big power of community and the importance of it [in] really being able to address challenges. [And there's] queer joy to be had in doing field work, and that's something that we try

to celebrate [and] connect with. All of us pursued field science because we love being outdoors and being covered in mud - it's great. [With] the development of the [Alliance's] organizing board and having it be very highly collaborative with [numerous] members, [its] beneficial to the long term [for the] sustainability of the organization.

As a resource and community available to scientists across the U.S. and beyond, the TGnC Fieldwork Alliance meets virtually on a monthly basis and coordinates various ways to provide support to TGNC scientists who do field work directly as well as balance creating resources for educating allies in positions of power using strategic parallel projects, including the creation of Community e-Zines that provide advice and resources for fieldwork safety, holding spotlight discussions with TGNC scientists, and drafting manuscripts to make processes like job searching safer and more equitable for queer and trans scientists

What are ways ally colleagues and supervisors can help make TGNC scientists more supported during fieldwork, and what partnership opportunities are there with the Alliance to address challenges and provide support for queer and trans scientists in fieldwork?

[Through the Alliance, we have created and provide] scenario-based **LGBTQ field safety trainings** for scientists at universities. It's exciting this year to have an entire session about trans and nonbinary experiences. [I'm hosting] an Inspire session at ESA this year... because sometimes it feels like we get a token talk. We really wanted a whole session to explore, [where] there's so much to talk about to really represent a whole variety of experiences and facets of how we navigate field work. ESA has been a really supportive place for talking about DEI equity in a fieldwork context.

We're working on an academic paper [now as well] about how institutions can have equitable hiring practices, and we are currently trying to

towards accountability in fieldwork

In the editorial **Allyship requires action** Kottler, Drs. Kyle Shanebeck, and Sharon Collinge further put forth that funds should be allocated in advance to address the barriers that LGBTQ+ ecologists face, including opportunities for grants and scholarships, as well as for relocation, housing, and travel. In addition, data collection on LGBTQ+ scientists from institutions is needed in order to better study and remedy underrepresentation, and the U.S. National Science Foundation just started to **pilot questions of gender and sexual diversity** in their workforce demographic surveys this year. Furthermore, normalizing but not requiring pronouns during introductions is a practice that can be adopted in workplaces, along with regular required participation in in-person harassment and sensitivity trainings.

Kottler et al. write "There should.. be systems in place for accountability and reporting of discriminatory incidents with external nonpartisan mediation as an option for complaints. At the interpersonal level, we advocate for support for your queer mentees and colleagues when they disclose an obstacle they've encountered, even and especially when their experience does not align with your own. You don't have to understand our experience to respect and believe us. Prioritize the safety of researchers over data and other research projects. This applies to all safety concerns in field ecology but is particularly critical regarding identity-related safety issues. If you are a principal investigator of a lab that works in regions where it is illegal or unsafe to be LGBTQ+, it is your job to provide your queer students with good alternatives for equivalent fieldwork experience."

organize a small grants program... to try and provide financial support for things in the fields that would make trans people feel safer.

I surveyed the Alliance [asking] what information would you want to have had when you're preparing for your first experience doing field work? What advice do you have? What tips do you have to support people? And it was really fun putting all of that really rich, lived experience together into a guide.

It's tough because I think everyone should have access to safe and enriching field work experiences. In [discussing] field safety and how PIs can support queer students when the research that they conduct is taking place ...[some]where it is not safe to be at, and how they can provide the field opportunities that are critical for development in a field-based research career to students who

might not be safe in those environments... what has come out from those [conversations] largely is that you need to provide a lot of information ahead of time and allow people to make their own safety decisions. And that's also true around accessibility in different field settings. Just allowing people to make their own choices and trust them, but giving them the information so they can make an informed decision.

And a lot of it really lies on the preparation side of things because if you're thoroughly prepared then you can respond as things come up. So there's a lot that I think individual PIs can do to make their workplace more explicitly supportive of LGBTQ folks.

[It's also] why it's so important for PIs to educate themselves on the legal status of LGBTQ people and the areas where they do field work because

it may be very different from where they live, depending on, you know, what those regions are.

One of my favorite resources that I try to get information about is the **Movement Advancement Project** (or MAP) website, which has a state by state breakdown of the protective and discriminatory laws for LGBTQ people in different facets of laws around medical access, bathroom use and other issues. And that's super helpful as a starting point for people to know what the landscape is in a state that they don't live in or spend a lot of time in.

It's a very rapidly changing landscape in a lot of places [and] not everyone has the privilege to relocate states.

[Time spent on outreach can also be] time that you're not getting grants. And if you really want this work to happen, it has to be incorporated into the system that's looking at those metrics so that the people that are doing this work, which are disproportionately people from marginalized communities, get the recognition that they deserve. I also think that we should have more allies doing the work, and I think there's an anxiety that people don't wanna overstep or speak from something that's not their experience. But you can listen and you can show up for people based on what they tell you they need.

And it can be so impactful and so positive to have that allyship relationship.

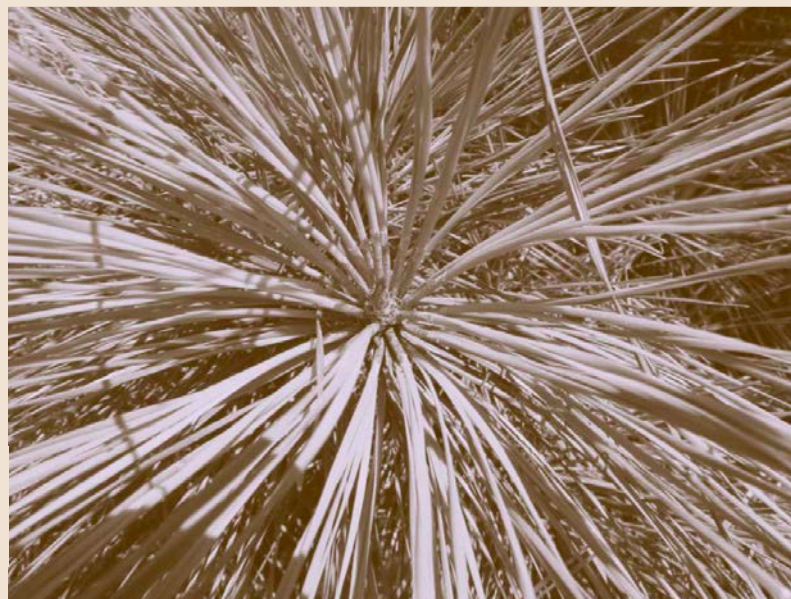
looking to the future

Dr. Kottler will be joining the University of the Pacific as faculty in January of 2025, and emphasizes the importance of collaboration and DEI in their job search and career development, in wanting to support marginalized students in STEM fields, address systemic inequalities, and advocate for inclusive policies.

I was very targeted in my job applications to try and find an institution that would value this type

"...part of experiencing community with an affinity group of people navigating the same challenges is knowing that these challenges aren't a 'you' thing. They're structural, and they are very much part of an issue that's part of the larger cultural landscape that we're all navigating."

—Dr. Ezra Kottler





Loblolly pine is a common overstory species on the Chesapeake's marshy shores.

of work, as well as my ecology field research and was lucky enough to get an offer at a teaching focused minority serving institution that does put a lot of value into DEI education research pedagogy. My organizing work with the Alliance was part of my cover letters and my job talk.

It was front and center in all of my application materials because I wanted to make sure that where I ended up was really walking the walk and not just paying lip service to these things, but would actually materially value it in terms of my career development as a faculty member there.

Academics are thrown into all types of work that they were never trained to do: teaching, mentorship, outreach, and grant budget management. And, it just sort of teaches some people just [to] take away from that, 'Well, if I can turn my hand at it, then how hard can it really be?' But, again, a lot of those people end up reinventing the wheel, and I feel like we should all be on the same page about using evidence-based methods because we're scientists. We think about data and want to use that data. But it's also just a product of not being aware of what is in the literature and what

research has been done in these other fields.

You have to focus so intensively on your subdiscipline. There's not really the training opportunities to get a foothold in a completely different academic discipline. [I feel that] starting my career as an interdisciplinary eco-evolutionary biologist [may have contributed to being] empowered to explore additional other disciplines

I have discovered a newfound enjoyment and enthusiasm for discipline based education research in support of our workplaces, [where] there's a lot of really rich information that can be gathered through social science methods. I feel like it's something that we in the natural sciences sometimes take for granted: how complex and robust social sciences are in and of themselves.

There's a lot of cool [and important] work being done right now in terms of, making biology pedagogy that is more scientifically accurate and inclusive in terms of talking about variation in sex determination and sexual behavior in the natural world, expanding beyond a limited binary lens of how nature works because many, many, many organisms in nature don't adhere to that type of binary naturally at all.

Then also, [we need to make] more explicit anti racist pedagogy, with the relationship between the development of evolution as a field and the eugenics movement in the US, because they were very intertwined and thinking about how we can move forward in developing evolutionary theory that is not based in white supremacy.

I also want a future where scholars who are people of color, queer, and disabled can focus all of their time on their research if that is what they want to do and not be expected to carry a burden of DEI organizing if that's not something they personally feel compelled to do. It's something that I have discovered I find fulfilling, and I want to be a part of my career, but I really respect and want for my colleagues who say 'I was trained as a marine

biologist. I want to be a marine biologist,' [to] be allowed to do that work without being tokenized.

Another thing that I think about a lot is, the demographics of students that are coming into our institutions are increasingly... out as queer and trans, as people feel safe enough to come out at younger ages. And so institutions that haven't really addressed these issues yet, maybe because they haven't happened to have a student with that identity, we need to start being proactive because students are going to be coming in with greater frequency with these identities, and they will need support. And it's a particularly fraught landscape currently in the US given how starkly different the legal barriers are for trans people depending on what state you live in. Currently, there are [10] states where trans people are not allowed to use the bathroom [as they would want and need to.] They're compelled legally to use the bathroom that aligns with their sex assigned at birth [and can be] criminalized and prosecuted for it. For example, if I were to use a men's restroom there, which is the safest option for me as a masculine presenting person, I'll be shouted down by a woman saying, 'There's a man in the bathroom' if I use the women's room.

I am hopeful [though] that things will turn around [as] one way that I have framed it for myself of a turning point for me was moving from a mindset of 'I'll just put my head down and deal with what's thrown on me. And then when I'm in a position of power, I will have the choice to make sure that those things don't happen to my students.'

But we don't have time for that.

It will take too long, and there will always be someone that is above you in the hierarchy that may make you feel nervous to rock the boat. And there are so many empowered and insightful undergraduates and graduate students that are making big changes in their departments. I know one of my goals is to just always continue to be learning from the people that I am mentoring. That relationship has to be two-way, and it can be, and

I learned so much [in this way]. I am constantly inspired by younger colleagues who aren't waiting to do this work. They aren't waiting a second. And I think, the more input that early career folks have in our systems, the more they will change for the better.

further readings links

1. Ramírez-Castañeda, Valeria, et al. 2022. A set of principles and practical suggestions for equitable fieldwork in biology. Proceedings of the National Academy of Science.

reflection questions:

1. What insight, discovery, or message from the interview surprised you and what would you like to learn more about?
2. If we are to create equal opportunity for underrepresented groups, including LGBTQ+ scientists, there is a need for all allyship to require action. What ways do you present and act as an ally to communities that are underrepresented in science? Are there ways you would like to take further action? What aspects you would like to learn more about?
3. Have there been times that you have felt unsafe while pursuing fieldwork, or otherwise conducting research? What was the impact of these incidents on your work and life? Are there ways to better ensure safety?



Dickson Court was the epicenter of student action at UCLA or the liberation of Palestine.

a loss for UAW in court, a loss for protestors' rights

by Maya Samuels-Fair
Graduate Student, IB

On June 7th, an Orange County Superior Court Judge ruled in favor of the University of California, ending the 2024 UAW 4811 strike and setting a new precedent for future strikes and campus protests.

The strike began when the UCPD and LAPD allowed a series of **escalating attacks** on UCLA's pro-Palestine encampment, and then **swept the encampment** and arrested more than two hundred. The next day, the statewide Executive Board of UAW 4811 (the newly amalgamated union previously known as UAW 2865 and UAW 5810, henceforth just "UAW") called a Strike Authorization Vote. UAW filed **Unfair Labor Practice** (ULP) charges with the CA Public Employment Relations Board (PERB), which permits a legally-protected

strike. Similar arrests soon took place at UC San Diego and UC Irvine, which were added to UAW's ULP charges against the UC. With amnesty for arrested University-affiliated protestors among the demands, UAW passed its Strike Authorization Vote (79% yes of 19,780 votes) on May 15th, and six campuses went on a staggered **Stand Up Strike**. On May 9th, UC President Michael Drake released a **statement** that anyone arrested or cited must go through a disciplinary review process, and the Regents **endorsed his statement**, adding that granting amnesty is incompatible with this policy. Negotiations to end the strike never began, because the UC did not acknowledge the legality of the strike.

Instead of bargaining, the UC filed its own **ULP** as well as **two injunctions** with the CA Public Employment Relations Board (PERB). In these injunctions,

the UC argued that 1) the strike violates the no strike clause in the current UC-UAW contract, 2) that UAW's demands were not workplace related, and 3) that the strike was harming undergraduate student education. After both injunctions were denied, the UC took the **case** to the Orange County Superior Court. Circumventing the authority of a state labor board and going to a favorable higher court is a tactic that **Starbucks** and **Amazon** have also used to thwart union activity. Judge Randall J. Sherman ruled in favor of the UC, **restraining UAW from further strike activity** until a hearing on June 27th. Since the strike was only authorized by membership through June 30th, the ruling effectively ended it. Though back to work, UAW membership have continued to organize protests to win amnesty.

The UC's win in court will make it harder for UAW to go on strike in the future during an active UC-UAW contract. The filing of a serious ULP with PERB is meant to invalidate the contract's no-strike clause, which is the main way unionized workers can legally strike during a contract. The judge's ruling gave primacy to the no-strike clause, which sets

a precedent that will make it harder for UAW to strike during a contract in the future. PERB may accept UAW's ULP, but there will always be the possibility that the UC will again seek an alternative ruling in court.

Furthermore, while the **published disciplinary guidelines** have not changed since February, the President's and Regents' recent **statements** signal a worsening attitude towards the protest activities on which UC Berkeley commends itself. University-affiliated protestors engaging in conventional direct action tactics such as sit-ins and road blocks, which often end in arrest or citation, will be required to go through a disciplinary review. Likely, this policy will be selectively enforced based on different campuses' attitudes towards various social movements and organizing campaigns. It's a free pass for administration to discipline students and employees for typical protest behavior at their discretion. There is no DEI without the right to peaceful protest.

photo: Zoraiz Irshad (l), Eric Chalifour (r)



Police response to Pro-Palestine protests as UCLA lead to the injury of UAW members, and was the impetus for the recent strike vote.





First monarch butterfly, *Danaus plexippus*, is spotted in the VLSB native pollinator garden, 16 June, 2024.

cross pollination

by Gregory Arena
IB Graduate Student

If you've spent any time on the south side of Valley Life Science Building recently, you've probably been confronted by the din of construction as cranes, pile drivers, and people in hard hats raise the New Undergraduate Academic Center. You may have also noticed, tucked up against the building, a patch of earth bursting with color and abuzz with many pollinating insects and birds.

The VLSB **Native Pollinator Garden** got its start in 2019, when Dr. Peter Oboyski, Executive Director at the Essig Museum received grant money to create an urban oasis to give sanctuary to some of the invertebrate diversity he and others study in the museum. At the time, the fallow plot was occupied only by two pollarded sycamore, and a few dandelions that had escaped the custodian's trowel. Joined by a team of volunteers, Oboyski

and others at the Essig Museum planted an assortment of native plantlife and watched as their garden took shape. "With our pollinator garden project," Dr. Oboyski shared over email, "I was looking for a way to make what students are learning in the classroom more tangible. To give them hands-on experience in conservation and feel the satisfaction of creating a healthy landscape."

But with the 2020 lockdown and in the long tail of the pandemic, there were few opportunities to bring people back to the garden—to plant, and water, and weed. Things quickly became overgrown in the years that followed. Now, the weeds have been pulled back to reveal these veritable grounds. "It all started with an undergrad in our lab," says Jenn Wagner, an Integrative Biology graduate student in the Looy Lab. "Tanmayi Patharkar wanted to get experience writing grants and wanted to start a project of her own. She found the TGIF [**The Green Initiative Fund**] and she toyed around with a few ideas." But when Dr.



©: Cindy Looy

top left: *Eschscholzia californica*—California poppy
bottom left: *Asclepias speciosa*—showy milkweed
right: Tanmayi Patharkar conducts a survey of the garden

Cindy Looy suggested updating the native pollinator garden outside VLSB, they knew they had a winner. Wagner already had some experience working in pollinator gardens and was happy to

help Patharkar get started. Patharkar also talked with Oboyski to get a lay of the land and learn about some of the native pollinator structures that had been installed in the plot. “In no time Tanmayi put together a successful grant proposal that secured funds to replant and maintain the garden,” says Dr. Looy: “her enthusiasm rubbed off on the rest of the lab and we all got involved.”

Wagner recalls that they “started with just weeding which has taken a lot of effort.” But beneath the bramble and invasive grass, a few hardy native plants persisted. And as they stripped back the blackberry the garden began to reemerge. Coyote brush, sage, toyon, and manzanita that were planted as small saplings had burgeoned in the few years of the pandemic into a Lilipute forest of native diversity. One of the challenges with maintaining the garden has always been how labor intensive this work can be. So Patharkar recruited other undergraduates. Ultimately, the Looy Lab took on ten students through the URAP program. The students weren’t just there to weed. “Some of them are working in landscape architecture for their majors,” says Wagner. Together, these students brought their unique skills to help the lab determine where natives should be planted

with consideration of the pollinators, existing trees, sprinklers, and other hard features in place. “Today the garden looks very different compared to a year ago. More than 100 native plants were added to the garden in March and April, and several others that were dormant during the winter made a surprise emergence in spring” says Dr. Looy. Against the clean angular backdrop of VLSB, the team has created something beautiful and full of life and tranquility.

new meaning for the garden

Just like gardens, communities take careful tending. From its inception, Oboyski notes that “[the pollinator garden] also became a community building experience. Many students joined the project after stopping by and asking what we were doing and became friends with others on the project.” These days, a few times each month Patharkar, Dr. Cindy Looy, or Dr. Ivo Duijnsteer will email fellow IB members about a garden work party. Walk by VLSB on a Saturday or Sunday morning and you’ll be greeted by the Looy Lab plus a dedicated cast of IB volunteers including graduate students and staff. In many ways, these work parties mirror another new tradition in the Looy Lab—Community Coffee, where most Fridays, during the fall and spring semesters, people from across the Valley Life Science Building congregate to talk and catch-up over a hot drink. “First we went to friends of the lab,” Wagner recalls, “and then graduate students and staff. It’s been pretty much open to everyone.” In a building where there are few spaces where IB can organically connect, the pollinator garden has brought together an unlikely mix of undergraduates, graduate students, staff, and faculty who may otherwise never see one another in their day to day. Monica Albe, Graduate Program Manager from Integrative Biology and the Endocrinology Graduate group is not just a frequent visitor at Community Coffee but has attended almost all of the weekend weeding parties in the pollinator. Part of why she keeps coming back is because of the opportunity to spend time with others in IB. “I have really appreciated that



photo: Roxy Cruz

Gabriel Trujillo
4 March, 1992—19 June, 2023

Ixchel González Ramírez (and [her dog] Patata!), Jenn Wagner, Cindy Looy, and Ivo Duijnsteer have been there each time I’ve gone, along with some awesome undergraduate students. I’ve loved that others have joined when they can—it’s been very nice to just hang out with folks outside the context of work and meetings, sharing fresh air and sunshine with everyone.” The garden reflects a cross-pollination of many disciplines and people within IB. And in that cross-pollination the garden has grown to find purpose beyond its original design.

On 19 June, 2023 **Gabriel Trujillo** was murdered in Sonora Mexico while completing his field work. Trujillo was a graduate student in Integrative Biology, studying the genetics and distribution of common buttonwillow, *Cephalanthus occidentalis*, a vivacious native wildflower at home in the wetlands, temperate woodlands, and arid high desert



Spring and Summer blooms in the Gabe's Garden.
(clockwise from top right): *Erigeron glaucus*—seaside daisy, *Diplacus aurantiacus*—sticky monkey flower, *Salvia leucophylla*—purple sage, *Sisyrrinchium californicum*—yellow eyed grass



of California and Northern Mexico. Trujillo's passion for botany went beyond the taxonomic, always curious about the things that could be grown and made from the plants around. In his garden were many heirloom and precious Mesoamerican vegetables and herbs he had carefully grown

from seeds. For Wagner, who is in Trujillo's PhD cohort, and others, the garden became a way to memorialize him.

After his death, Trujillo's labmates made a two hour drive to the Jepson Prairie on the



photo: Peter Oboyski



photo: CalFlora



left: Dr. Oboyski and others at a workparty in 2019

right (top to bottom): the flower of *Cephalanthus occidentalis*, Common Buttonwillow. Wagner holds some of the seeds collected in by the Fine Lab. Seeds are prepared for germination.



left: Dr. Duijnste (far left) and Dr. Looy (center left) gathering native plants at the nursery to plant at a work party in March, 2024.

right: Jenn Wagner holds up a garden snail on the first day the team weeded the site, last October.

Sacramento delta. It was one of Trujillo's field sites. There, they collect parched brown buttonwillow fruits. They gave the seeds of these buttonwillow and some starts to Wagner and Dr. Looy. Since then, Wagner has been working to grow the buttonwillow so that these plants collected in honor of her friend will forever have a home in the pollinator garden. What they have learned is that the species that Trujillo was working with, Common Buttonwillow, is uncommonly particular about its growing conditions. "We had some propagations brought in by the Fine Lab. We tried to keep them alive but they just weren't having it. One part would die-back or they were already brown and wilted." Besides the spiritual and **cultural significance** of the buttonwillow, this tropical descendant's ability to make a home in both very dry and very cold regions inspired Trujillo's research. But this unique

trait can also makes cultivation difficult, when the plant's preferred conditions jigsaw many environmental extremes.

Before he died, Trujillo established a small experiment in the six floor VLSB greenhouse. There, on his workbench, verdant shoots of buttonwillow exploded from cone-tainers with loops of irrigation tubing and nebulizers running on timers to water the young plants. So Wagner is persistent, and hopeful she will be able to coax these seeds to germinate and grow. "We tried cold treatment first, then water treatment because they are usually found near streams. Next we'll try a heat treatment to see if that may get them to germinate." Uncovering the secrets to growing buttonwillow follows in the footsteps of Trujillo's own work to establish a common garden to explore the diversity of traits and

characteristics associated with plants growing at the far reaches of their native range.

Prior to the pandemic, Oboyski installed an interpretive sign to describe the pollinator garden and offer context to bypassers. Wagner and others in IB would like to update that signage to include a QR code that would link to Trujillo's research and the new scholarships created by the graduate assembly in his honor. "I'd love for visitors to the garden to learn more about everything he did and worked for." Graduate students in IB have also called for this space to center community celebration and the memory of Trujillo's life and the things he loved. The department chairs have recently announced plans to hold a ceremony to formally dedicate the space in his honor.

"This is not the only thing we do, but one among many," says Albe. "It is one way of acknowledging the history, grace and beauty that is often ignored in such a special place in the world. I hope Gabriel Trujillo's memory lives here. He was a part of what makes Berkeley beautiful, and he was contributing and growing things while here—let's continue that legacy."

Now, when IB and a growing community in the bio-science comes together to tend and care for this space it will be a small but meaningful expression of both remembrance and community. A garden that began as a refuge for native flora and fauna has grown to become a constant reminder of a man who spent his time in reverence of nature and gave himself without reservation his warmth, his humor, and his spirit of curiosity to those fortunate to know him.

upcoming events + campus resources

- 1 July—free tickets become available for Port of Oakland **Harbor Tour**.
- 6-7 July—**Fillmore Jazz Festival**, 10.00am-6.00pm, the Fillmore District, SF (SF)
- 20 July—**UC Berkeley Architecture & History Walk**, 10.00am-3.00pm (free)
- 3-4 Aug—**50th Annual Nihonmachi Street Fair**, 11.00am-6.00pm, Japantown, SF, (free)



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an insect hotel outside VLSB

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