



BUILDing Diverse Teams for CSU-UC Transformation

SF BUILD Team





Diverse, Mission-Driven SF BUILD Team



Principle Investigators Leticia Márquez-Magaña, PhD Biochemistry Kirsten Bibbins-Domingo, PhD, MD, MAS Tung Nguyen, MD



Alegra Eroy-Reveles, PhD Chemistry SciEd Post-doc (now at UCSC)

SFSU Core TeamTeaster Baird Jr., PhD BiochemAudrey Parangan-Smith, PhD MicrobiologySciEd Post-docBlake Riggs, PhD Cell BiologyNichole Coleman, PhD Med PharmaKelechi Uwaezuoke, DrPHKenjus Watson, PhD Race,
Ethnic Studies in Education





UCSF Core Team

Esteban Burchard, MD, MPH; Yazmin Carrasco, PhD; Peter Chin-Hong, MD; Alicia Fernandez, MD, Maria Glymour, ScD Bob Hiatt, MD, PhD, Kala Mehta, Dsc MPH, Sonny Vernard, MPH, MPP



Convergent Interests Needs & Mutual Benefits

Project Overview

SF State

- Increase number of undergraduates earning advanced degrees for biomedical research careers
- Nearly 70% of science and math majors are students of color desiring opportunities in health-related fields
- Partner with UCSF to serve science and health related needs of San Francisco, especially communities of color, as the City's University

UCSF

University of California

San Francisco

- Become the most diverse, equitable, and inclusive academic medical system in the country
- Faculty and research labs want to train/hire diversity, but pool size and high cost of living are barriers
- Partner with SF State to better serve role as anchor institution tasked with improving long-term health and welfare of communities in its hometown

Activities

Goal 1: Affirm values and lived experiences of students for improved Biomedical Research

enabling full representation in science

- Systemically affirm "giving back" values & community cultural wealth as valuable assets for research that improves community health
 - Increase awareness of faculty
 - Provide classroom modules, community service learning, and health equity research experiences
- Provide critical research training to increase student persistence and enable resistance (agents of change)

Goal 2: Broaden student research experiences & faculty professional development

University of California

San Francisco

SAN FRANCISCO

STATE UNIVERSITY

- Deliver Diversity Supplement informational/matchmaking sessions, and resources for applying
- Implement "Research with Communities Course" at SF State, and follow-on training for Clinical Research Coordinators at UCSF
- Organize quarterly "in the Mix" networking event, and semi-annual mentored Writing Retreats that are cross-institutional

Goal 3: Disseminate to Sister Institutions

- Publications, presentations, workshops, Webcast
- Consultations, technical assistance, sharing of evidence-based tools
- MA² app
 - Microaggressions
 - Microaffirmations

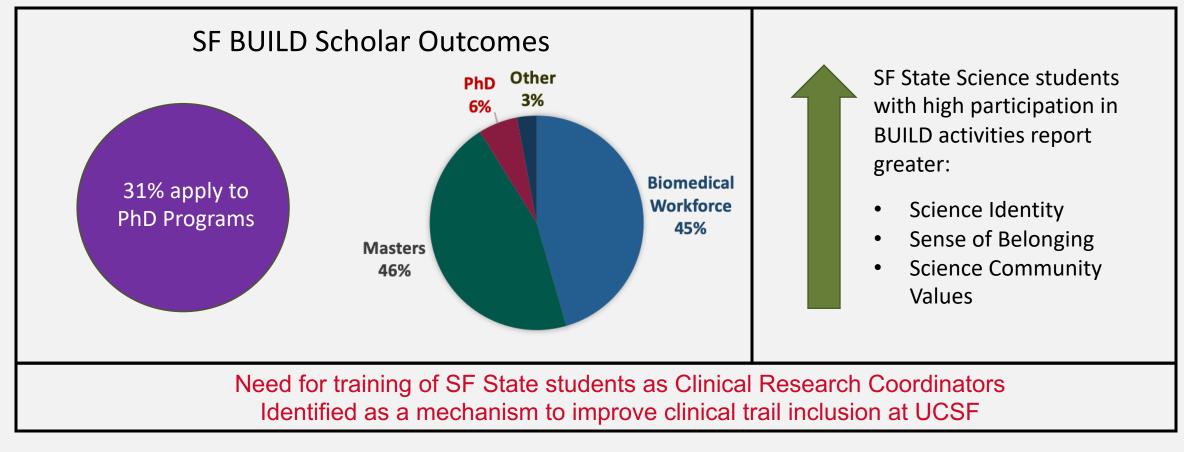


Student-Centered Results through Institutional Lens:

Towards Transformation



https://magazine.sfsu.edu/fall-2019/lab-partners





Faculty-Centered Results through Institutional Lens:

Towards Transformation



Pedagogy

SF State faculty created Social Justice Pedagogy (Kindle book) and Faculty Agents of Change Approach

Research Development Networking events and writing retreats for faculty from both campuses have been Institutionalized

Diversity Supplements

UCSF faculty made aware of diversity supplement mechanism and 396 eligible NIH grants

Diversity Supplements awarded to UCSF in 2018 & 2019



7/47 Awarded to SF State Graduates

Leticia Márquez-Magaña, PhD, Professor of Biology SF BUILD Partnership (SF State and UCSF), sfbuild.sfsu.edu

15%

>\$0.5M



UCSF University of California San Francisco

Results through Institutional Lens: Catalyzing Change

Towards Transformation

Tackle Negative Thinking Head-On To Boost Diversity In Biomedicine n p r

September 16, 2017 · 5:09 AM ET



SF BUILD team members engage in sitespecific & crossinstitutional leadership roles

Sharing Theories of Change

- 5 Papers
- 1 Book
- 68 Presentations

Workshops at National Conferences

- "Addressing the Threat in the Air
- Coping through Reflective Journaling

Broadcasting Successes through Media

• In the last 2 years, 17 local & 4 regional pieces in media outlets



Lessons Learned

- Working across institutions, disciplines, and organizations is challenging
 - Logistical barriers due to silos
 - Cultural divides and hidden rules require relational trust, flexibility, and compassion
- Focus on the *problem* to lift mission-driven, transdisciplinary teams over obstacles
 - Transdisciplinary research is transformational
 - Results are useful, meaningful, and impactful
- "One size does not fit all"
 - Institutional transformation efforts usually fail
 - Success anchored in institutional history/culture
 - SF State 1968-69 Student-led Strike
 - UCSF 2014 Protest White coats for Black Lives



https://ethnicstudies.sfsu.edu/home2

https://www.ucsf.edu/news/2015/08/131226 /ucsf-medical-students-win-human-rightsaward-white-coats-black-lives-movement

Institutional Transformation

Multi-pronged Approach



Next Steps

MA ²	CONNECTED		← New Report 🔋 ≻
	What did you experience?	Microaffirmation: Description	MICROAFFIRMATION REPORT
	MICROAGGRESSION	 <u>Example:</u> "In my STEM class the instructor made eye contact." 	May 1, 2018 8:00 PM Describe what happened
		Current Time	
	MICROAFFIRMATION	Related to "Race"	What was it related to?
	Did you forget what these are?		Race Culture
Home	7:3		Gender Sexual Orientation Other





Summary

- Leveraged existing SF State UCSF partnership to improve the transition from undergraduate to advance degrees to enhance diversity of the biomedical research workforce
- SF BUILD links all 3 public universities in San Francisco and is expected to improve health and welfare of local communities
- Partnership is based on relational trust and convergent interests for mutual benefit
- Activities are anchored in history/culture of institutions and grounded in theories of change that are based on scholarly and empirical evidence
- Our Ambassador Agents of Change are available for consultation, technical assistance, presentations, and workshops
- MA² app will be available in fall 2020



References and Funding

Publications and Book on Theories of Change

- Trujillo, G, Aguinaldo, PG, Anderson, C, Bustamante, J, Gelsinger, DR, Pastor, MJ, Wright, J, Márquez-Magaña, LM, and Riggs, B. (2016). Near-peer STEM Mentoring Offers Synergistic Benefits for Historically Underrepresented Minority Students. *Perspective on Undergraduate Research and Mentoring*, 4.1:1.
- Ben-Zeev, A., Paluy, Y., Milless, K.L., Goldstein, E.J., Wallace, L., Márquez-Magaña, L., Bibbins-Domingo, K., Estrada, M. (2017).
 'Speaking Truth' Protects Underrepresented Minorities' Intellectual Performance and Safety in STEM. *Education Sciences*, 7(65), 1-12.
- Estrada, M., Eroy-Reveles, A., Ben-Zeev, A., Baird, T., Domingo, C., Gomez, C.A., Bibbins-Domingo, K., Parangan-Smith, A., Márquez-Magaña, L. (2017). Enabling full representation in science: the San Francisco BUILD project's agents of change affirm science skills, belonging and community. *BMC Proceedings*. 11(Suppl 12)(25), 57-67.
- 4. Estrada, M, Eroy-Reveles, A., Matsui, J. (2018). The Influence of Affirming Kindness and Community on Broadening Participation in STEM Career Pathways. *Social Issues and Policy Review*, 12(1), 258-297.
- 5. Eliason, M.J. (2019). Social Justice Pedagogy Plus: Transforming undergraduate research methods courses. Amazon Kindle Direct
- 6. Estrada, M, Young, G, Nagy, J, Goldstein, EJ, Ben-Zeev, A, Márquez-Magaña, LM, Eroy-Reveles, A. (2019). The Influence of Microaffirmations on Undergraduate Persistence in Science Career Pathways, *CBE Life Sciences Education*, 18(3):ar30-mr3

The SF BUILD Project is funded by the NIH Common Fund Linked grants: UL1 GM118985; TL4 GM118986; RL5GM118984