



This is a peer-reviewed, final published version of the following document, © 2022 Auerbach, Muñoz, Walsh, Affiah, Barrera de la Torre, Börner, Cho, Cofield, DiEnno, Graddy-Lovelace, Klassen, Limeberry, Morse and Natarajan. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms. and is licensed under Creative Commons: Attribution 4.0 license:

**Auerbach, Jeremy, Muñoz, Solange, Walsh, Elizabeth, Affiah, Uduak, Barrera de la Torre, Gerónimo, Börner, Susanne, Cho, Hyunji, Cofield, Rachael, DiEnno, Cara Marie, Graddy-Lovelace, Garrett, Klassen, Susanna, Limeberry, Veronica, Morse, Aimee ORCID logoORCID: <https://orcid.org/0000-0002-5574-6040> and Natarajan, Lucy (2022) Call for reimagining institutional support for PAR post-COVID. *Frontiers in Sustainable Food Systems*, 6. Art 916384. doi:10.3389/fsufs.2022.916384**

Official URL: <http://doi.org/10.3389/fsufs.2022.916384>

DOI: <http://dx.doi.org/10.3389/fsufs.2022.916384>

EPrint URI: <https://eprints.glos.ac.uk/id/eprint/12246>

### **Disclaimer**

The University of Gloucestershire has obtained warranties from all depositors as to their title in the material deposited and as to their right to deposit such material.

The University of Gloucestershire makes no representation or warranties of commercial utility, title, or fitness for a particular purpose or any other warranty, express or implied in respect of any material deposited.

The University of Gloucestershire makes no representation that the use of the materials will not infringe any patent, copyright, trademark or other property or proprietary rights.

The University of Gloucestershire accepts no liability for any infringement of intellectual property rights in any material deposited but will remove such material from public view pending investigation in the event of an allegation of any such infringement.

PLEASE SCROLL DOWN FOR TEXT.



## OPEN ACCESS

## EDITED BY

Priscilla Claeys,  
Coventry University, United Kingdom

## REVIEWED BY

Ahmed Allahwala,  
University of Toronto  
Scarborough, Canada  
Barbara Van Dyck,  
Coventry University, United Kingdom

## \*CORRESPONDENCE

Jeremy Auerbach  
jeremy.auerbach@ucd.ie

## SPECIALTY SECTION

This article was submitted to  
Social Movements, Institutions and  
Governance,  
a section of the journal  
Frontiers in Sustainable Food Systems

RECEIVED 09 April 2022

ACCEPTED 21 November 2022

PUBLISHED 15 December 2022

## CITATION

Auerbach J, Muñoz S, Walsh E,  
Affiah U, Barrera de la Torre G,  
Börner S, Cho H, Cofield R,  
DiEnno CM, Graddy-Lovelace G,  
Klassen S, Limeberry V, Morse A and  
Natarajan L (2022) Call for reimagining  
institutional support for PAR  
post-COVID.  
*Front. Sustain. Food Syst.* 6:916384.  
doi: 10.3389/fsufs.2022.916384

## COPYRIGHT

© 2022 Auerbach, Muñoz, Walsh,  
Affiah, Barrera de la Torre, Börner, Cho,  
Cofield, DiEnno, Graddy-Lovelace,  
Klassen, Limeberry, Morse and  
Natarajan. This is an open-access  
article distributed under the terms of  
the [Creative Commons Attribution  
License \(CC BY\)](#). The use, distribution  
or reproduction in other forums is  
permitted, provided the original  
author(s) and the copyright owner(s)  
are credited and that the original  
publication in this journal is cited, in  
accordance with accepted academic  
practice. No use, distribution or  
reproduction is permitted which does  
not comply with these terms.

# Call for reimagining institutional support for PAR post-COVID

Jeremy Auerbach<sup>1\*</sup>, Solange Muñoz<sup>2</sup>, Elizabeth Walsh<sup>3</sup>,  
Uduak Affiah<sup>4</sup>, Gerónimo Barrera de la Torre<sup>5</sup>,  
Susanne Börner<sup>6</sup>, Hyunji Cho<sup>7</sup>, Rachael Cofield<sup>8</sup>,  
Cara Marie DiEnno<sup>3</sup>, Garrett Graddy-Lovelace<sup>9</sup>,  
Susanna Klassen<sup>10</sup>, Veronica Limeberry<sup>10</sup>, Aimee Morse<sup>11</sup> and  
Lucy Natarajan<sup>7</sup>

<sup>1</sup>School of Geography, University College Dublin, Dublin, Ireland, <sup>2</sup>Department of Geography and Sustainability, The University of Tennessee, Knoxville, TN, United States, <sup>3</sup>Center for Community Engagement to Advance Scholarship and Learning, University of Denver, Denver, CO, United States, <sup>4</sup>School of Geographical and Earth Sciences, University of Glasgow, Glasgow, United Kingdom, <sup>5</sup>Lozano Long Institute of Latin American Studies, University of Texas at Austin, Austin, MN, United States, <sup>6</sup>School of Geography, Earth and Environmental Sciences, College of Life and Environmental Sciences, University of Birmingham, Birmingham, United Kingdom, <sup>7</sup>Bartlett School of Planning, University College London, London, United Kingdom, <sup>8</sup>Department of Geography and Anthropology, Kennesaw State University, Kennesaw, GA, United States, <sup>9</sup>School of International Service, American University, Washington, DC, United States, <sup>10</sup>Institute for Resources, Environment and Sustainability, University of British Columbia, Vancouver, BC, Canada, <sup>11</sup>Countryside and Community Research Institute, University of Gloucestershire, Cheltenham, United Kingdom

Although we believe academic researchers have a critical role to play in transformative systems change for social and ecological justice, we also argue that academic institutions have been (and continue to be) complicit in colonialism and in racialized, patriarchal capitalism. In this essay, we argue that if academia is to play a constructive role in supporting social and ecological resilience in the late stage Capitalocene epoch, we must move beyond mere critique to enact reimagined and decolonized forms of knowledge production, sovereignty, and structures for academic integrity. We use the pandemic as a moment of crisis to rethink what we are doing as PAR scholars and reflect on our experiences conducting PAR during the pandemic. A framework is presented for the reimagining of institutional support for the embedding of scholars in local social systems. We propose an academy with greater flexibility and consideration for PAR, one with increased funding support for community projects and community engagement offices, and a system that puts local communities first. This reimagining is followed by a set of our accounts of conducting PAR during the pandemic. Each account begins with an author's reflection on their experiences conducting PAR during the pandemic, focusing on how the current university system magnified the impacts of the pandemic. The author's reflection is then followed with a "what if" scenario where the university system changed in such a way that it mitigated or lessened the impacts of the pandemic on conducting PAR. Although this framework for a

reimagined university is not a panacea, the reliance on strong in-place local teams, mutually benefiting research processes, and resources for community organizations putting in the time to collaborate with scholars can overcome many of the challenges presented by the pandemic and future crises.

#### KEYWORDS

participatory action research, academic capitalism, neoliberal university, scholar activism, COVID-19

## Introduction

In “Displacement of the Scholar: Participatory Action Research under COVID-19, we—a community of 15 scholar-activists—explored the varied impacts COVID-19 had upon us as we worked to carry out our diverse, critical participatory action research initiatives, and the ways in which we adapted and responded in the face of this multifaceted global crisis (Auerbach et al., 2022). Reflecting on our diverse experiences in community together, we explored similarities and differences, and outlined a set of propositions and recommendations to support ongoing participatory action research in these times of disruption and displacement. In this essay, we broaden our gaze, stepping back to (1) examine the long arc of institutional and relational patterns that contributed to the displacement and devastation surrounding the COVID-19 pandemic; (2) explore how critically, compassionately engaged participatory action research (PAR) can serve as an intervention point to disrupt these patterns of exploitation, extraction, and exclusion and enact liberatory relations of mutual care, reciprocity, and integrity; and (3) radically imagine how scholar activists can self-organize in efforts to co-create structures that support the transformative potential of PAR in—and beyond—university systems as we currently know them.

## Co-emergence of academia and Capitalocene

As a point of departure, we acknowledge that displacement is an overarching experience of our current apocalyptic moment, and that the COVID-19 pandemic is but one example of disruptive change contributing to processes of displacement, dispossession, and extermination. While the International Geological Congress declared in 2016 that Earth has shifted from the Holocene into a new geological epoch, “the Anthropocene,” based on the profound impact of human activities recorded in deposits in the geological record<sup>1</sup>, we join environmental

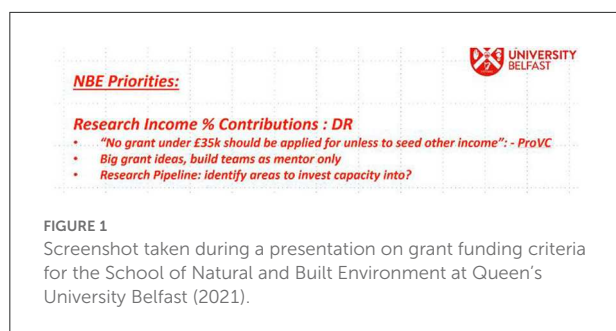
historians in referring to this epoch as the Capitalocene (Altwater et al., 2016; Moore, 2017; International Commission on Stratigraphy, 2019). We believe that this nomenclature offers a more critical and precise understanding of this period, given that observed changes are not endemic to all human activity, but rather emerge from *capitalism*, understood as a particular economic system of extractive, exploitative, and exclusive power relations focused on “discovering” and appropriating “nature” for use by global elite power brokers at the expense of the majority of human beings and more-than-human beings (McKittrick, 2013). As such, we employ the Capitalocene to highlight the root causes of climate change, displacement and other contemporary planetary crises, while also acknowledging that human beings can—and have—intentionally developed economies, cultures, and knowledge production systems that are rooted in less exploitative and more reciprocal relationships with the living systems of which they are part (Merchant, 1990; Ostrom et al., 1999; Salmón, 2012; Kimmerer, 2015; June, 2022).

Although we believe academic researchers have a critical role to play in transformative systems change for social and ecological justice, we also argue that academic institutions have been (and continue to be) complicit in colonialism and in racialized, patriarchal capitalism. In “Displacement of the Scholar? Participatory Action Research Under COVID-19” we discussed how the increasing neoliberalization of academic institutions over the past few decades [i.e., “academic capitalism” with its focus on entrepreneurial models in education and research, coupled with reduction of public resources (Slaughter and Leslie, 2001; Slaughter and Rhoades, 2009)] challenges authentic, critical PAR, even while publicly professing a commitment to “community participation” and “public good” (Auerbach et al., 2022). We also acknowledged that these tensions are built into capitalism itself, and that Indigenous and Black scholars in both the decolonial and Black Radical tradition have long highlighted the profound influence of racialized capitalism upon academia—from its epistemologies to its modes of production and control (Robinson, 1983; Eaves, 2019).

Building on this foundation, we extend our reflection on the complicity of academia in processes of displacement,

<sup>1</sup> Geologists have yet to choose which geological deposit marker will be used to signal this profound change, but candidates include radioactive elements from nuclear bomb tests, plastic pollution,

aluminum and concrete particles, high levels of nitrogen and phosphate in soils, and even the preponderance of domesticated chicken bones.



dispossession, and extermination from the past several decades to the past several centuries. We acknowledge that modern capitalism, academia, and western democracy co-evolved, all operating under the influence of Enlightenment Era conceptions of sovereignty and rationality/epistemology, with profound implications for the exercise of power in relation to land and people, and in the mission of universities (Santos, 2014, 2017). Sovereignty in this world view means "supreme authority within a territory," primarily by the State (e.g., nation state), but also by elite private property owners (e.g., gentry, and those responsible for gentrification) (Hern, 2017). In this context, cartography developed as a means through which the State could make its land and labor legible; that which can be (re)defined, divided, and controlled (Scott, 1999). Moreover, this way of "seeing like a State" profoundly shaped the axiological and epistemological assumptions of research paradigms, and universities evolved to privilege the pursuit of generalizable, a-contextual, objective truths by established scientists (Flyvbjerg, 2001; Edney and Pedley, 2020). Further supporting processes of colonization, academic institutions in North America—especially land grant universities<sup>2</sup>—developed as a critical infrastructure for settler colonialism, encouraging new settlement built on stolen land (Stein, 2020). Operating under these assumptions about sovereignty and epistemology, academic institutions from the Enlightenment Era on have contributed to colonizing processes of displacement and dispossession of Indigenous people from their homes, coupled with erasure of ways of knowing, relating, and governing that supported the regenerative vitality of those habitats.

In this essay, we argue that if academia is to play a constructive role in supporting social and ecological resilience

<sup>2</sup> A land-grant university is an institution of higher education in the United States designated by a state to receive benefits through the Morrill Acts of 1862 and 1890. The Morrill Acts were part of the colonization policies; they not only encouraged westward immigration through subsidized access to higher education, land grant universities provided new settlers with skills needed to conquer the west, including agriculture, military science, and engineering. Yet, land-grant universities are celebrated for the ways they have democratized higher education, especially through their cooperative extension offices.

in the late stage Capitalocene epoch, we must move beyond mere critique to enact reimagined and decolonized forms of knowledge production, sovereignty, and structures for academic integrity. For decades, academic researchers have documented and critiqued displacement, without disrupting institutionalized patterns of displacement or significantly changing social or material relations (Wisner, 1993; Chapple and Zuk, 2016; Richardson et al., 2019; Easton et al., 2020). As Matt Hern asserts in *What A City Is For: Remaking the Politics of Displacement*, "any attempts to ameliorate displacement are doomed if not rooted in an aggressively equitable and decolonized politics of land, ownership and sovereignty" (Hern, 2017, p. 30). Academic institutions and scholars will need to decolonize underlying assumptions of sovereignty and power, which drive the epistemological assumptions of university systems, as well as their institutional cultures, infrastructural investments, and broader politics of land (Santos, 2017).

## PAR as a leverage point for geographies of radical resilience

We assert that critically and compassionately engaged PAR has the potential to disrupt exploitative, extractive and exclusive relations endemic to the Capitalocene while co-creating liberatory social relations and infrastructures to cultivate the knowledge and power required to enact geographies of radical resilience (Muñoz et al., 2022) through a *prefigurative politics of flourishing*.

In naming PAR's role in supporting a "prefigurative politics of flourishing," we are:

- Speaking to its value to diverse collaborators committed to "building the new society within the shell of the old" (Raekstad and Gradin, 2020), in the tradition of the Zapatistas' commitment to changing the world, "not to conquer the world, but to make it anew" (Holloway, 2002);
- Acknowledging that research is always political and that by participating in research, we are necessarily participating in politics and shaping the future through our everyday actions and interactions; and
- Positing that by practicing emancipatory, collaborative PAR methods in communities of praxis, we are better equipped to cultivate the kinds of embodied, embedded, and emplaced wisdom and power that support thriving, rooted, resilient communities.

While acknowledging that mere "participation" and "action" in research are not liberatory in and of themselves, we affirm that the roots of participatory action research (PAR) and the heart of ongoing PAR praxis support emancipatory research through collaborative, place-based, cyclical processes of learning,

acting, reflecting and intentional adaptation (Rappaport, 2020). Moreover, PAR's epistemological and methodological diversity is, unto itself, a key leverage point for transformative, decolonial, liberatory systems change within and beyond university systems (Santos, 2017; Walker and Boni, 2020). In contrast to the hegemonic ontological, axiological, and epistemological assumptions and conceptions of sovereignty that have shaped academia and the politics of land in the Capitalocene, PAR has been at the heart of pluriversal scholarship that embraces relational ontologies, epistemological multiplicity, contextual awareness, and autonomy (Vasudevan and Novoa, 2022).

Importantly, “autonomy” in this sense is generally rooted in Indigenous understandings of sovereignty that challenge the hegemonic view of sovereignty as a right to exercise supreme control over bodies (e.g., of land, water, people). More than a supreme right to control, sovereignty becomes an innate responsibility for care. Anishinabe spiritual leader Eddie Benton-Benaie profoundly expressed sovereignty as “a responsibility you carry inside yourself” (Harjo, 2019, p. 60)—an embodied, embedded, emplaced sovereignty that translates into care for self, neighbors, and the earth. This view of sovereignty translates into axiological and epistemological assumptions geared toward cultivating practical wisdom and collective power to support the profound cultural and ecological transitions needed to face the inter-related crises of climate, food, energy, poverty, and meaning. If universities are to respond to public demands that they address “grand challenges” like climate change and social inequity, multi-actor networks will need to incorporate decolonial PAR agendas into university systems. In our collective lived experience, embodied praxis of a politics of flourishing supported by PAR is enlivening and energizing, although not without risk.

The co-authors of this essay come from different continents, disciplines, languages, and experiences in academia, to find parallels in respective attempts at and journeys in community-based scholarship, PAR, and scholar activism. We draw upon a wide, robust, and growing literature on this work, the struggles it entails, and the reflexivity it demands. Female scholars of color have long been leading this crucial line of critical methodological inquiry and action (Kobayashi, 1994; Nagar and Geiger, 2007; Pulido, 2008; TallBear, 2014; Osborne, 2017; and others) while Geographers have long been reflecting on the opportunities and challenges of PAR (Kindon and Elwood, 2009; Pain, 2009). Our current essay is not a comprehensive review of this literature, and it does not purport to originate these ideas. What we trace in this essay is how and why calls for community-based and even community-led action research, grounded in antiracist, decolonial, and feminist (to name only a few) commitments, hits impasses in academia (Kindon et al., 2007; Chatterton et al., 2010; Derickson and Routledge, 2015; Hammelman et al., 2020; Henry and Fay, 2021; Montenegro de Wit et al., 2021; Roman-Alcalá, 2022). What accounts for the entrenched institutional roadblocks? How does the university care for its staff? What is

the role of the university in regional development? We identify co-optation of public good ethics as central to these dynamics. What will it take to transform these obstacles?

## Practicing PAR and a prefigurative politics of flourishing

Our review of literature and collective lived experience make it clear that authentic PAR has emancipatory potential for long-term systems transformation. As such, we also acknowledge that PAR necessarily threatens dominant power structures and their exclusive, extractive, and exploitative relational patterns. Engaging in authentic PAR within current university systems also requires that PAR practitioners engage what we call the “public good paradox.” On one hand, we acknowledge that in this current moment of the neoliberal university, universities increasingly endorse “public service” as a means by which university students can cultivate skills that make them marketable as future employees, and university researchers are encouraged to demonstrate measurable and marketable impacts of applied, entrepreneurial research (Auerbach et al., 2022). Moreover, universities are under increasing pressure to address “grand challenges” and sustainable development goals<sup>3</sup> such as climate change and social inequity (i.e., through the production of knowledge and the development of professionals), even private universities are increasingly adopting a “public good” mission (DiEnno and DePrince, 2019).

We also acknowledge that in this current moment of the neoliberal university, PAR can easily be co-opted by academic capitalism to reproduce dominant social, economic, and ecological relations. As philanthropic and academic funding increasingly favors investment in applied research in sustainability and resilience (such as the National Science Foundation's Civic Innovation Challenges or Sustainable Regional Systems Research Networks), PAR researchers will need to continue asking critical questions of ourselves and our partners about whether initiatives are intended to sustain capitalist economic growth and support the resilience of systems of oppression, or to advance equity, vitality, and resilience

3 “The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing—in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth—all while tackling climate change and working to preserve our oceans and forests.” <https://sdgs.un.org/goals>.



in living systems by disrupting dominant economic systems (Walsh, 2018).

In alignment with these aims and our collective praxis of PAR and a prefigurative politics of flourishing, we affirm that support of PAR is essential to a transformative agenda for higher education. In writing this essay, we are also reclaiming our own faculties for vision, intuition, and radical imagination, recognizing that these forms of knowledge are essential to navigating our way to geographies of radical resilience—within university campuses, as well as the neighborhoods and bioregions in which they are situated. We affirm that PAR is not just a tool to support community-university relationships “off-campus”—it is also an essential tool for us to support intentional, liberatory systems transformation from *within* the university, so that it may be an inclusive and liberatory geography nested within larger systems and communities. If students, adjuncts and others in the university community are undervalued or exploited, then the very presumptions and ethics of public-facing community-engagement ring hollow and disingenuous. We understand that practicing a prefigurative politics of flourishing implies that we must apply PAR to engage in the large scale work of decolonizing universities, with particular attention to supporting the material needs of students (especially those with marginalized identities) and investing in strengthened infrastructure to support community-based PAR (e.g., through cooperative extension offices). As such, we share insights on our journeys as we heed Boyer (1996) call for campuses to be staging grounds for action:

“At one level, the scholarship of engagement means connecting the rich resources of the university to our most pressing social, civic, and ethical problems... Campuses would be viewed by both students and professors not as isolated islands, but as staging grounds for action... Increasingly, I’m convinced that ultimately, the scholarship of engagement also means creating a special climate in which the academic and civic cultures communicate more continuously and more creatively with each other...enriching the quality of life for all of us.” (Boyer, 1996)

We take the COVID-19 moment as a crisis moment from which we can both learn and use to build new and more inclusive institutions. We offer examples of challenges we faced and the insights and possibilities they have inspired to invite readers into a broader conversation about how to use PAR as a leverage point for systems change. These examples are more than mere anecdotes. This overview of cases is not comprehensive, but forms a process of finding parallels across our international and multidisciplinary research experiences so as to build communities of praxis. In the next section, we identify necessary changes and improvements within the university in terms of the role and expectations put on its scholars, students,

and researchers that will lay the groundwork for a reimagining of academic support for PAR. Subsequently, through (1) an analysis of our professional experiences as researchers and scholars during the COVID-19 pandemic and lockdown and (2) an exercise of our faculties for radical imagination, we present “what-if” scenarios: what if we worked in this reimagined academia, and how, could these PAR experiences during the pandemic have been different? The pandemic provided a moment of crisis to rethink what we are doing as PAR scholars and why we are doing it this way. These “what-if” propositions are used to identify what conditions need to be in place to promote more socially just, transformative scholarship of engagement that can offer alternatives that will adequately and effectively allow communities to overcome future crises. We offer these stories in keeping with our commitments to engage in desire-based research, a PAR methodology from Indigenous studies (Tuck, 2009).

## The neoliberal university contributed to and magnified the social issues from the COVID pandemic

We use the pandemic as a moment of crisis to reflect on what we did as PAR scholars during the pandemic, focusing on how the patterns of settler-colonialism and neoliberalism shaping the current university system magnified the impacts of the pandemic<sup>4</sup>. We deliberately chose cases drawn from our experiences that reflect key challenges and opportunities that were revealed in the apocalyptic moment of the pandemic—and which can be addressed through PAR. We chose one case that reflects the way universities continue contributing to displacement while “seeing like a State” and acting as a corporate developer beyond the campus environment. We chose one case that highlights how patterns of exploitation shape dynamics within the university system, especially through treatment of

4 A more detailed description of each author’s PAR project is provided in this special issue (see Table 1 in Auerbach et al., 2022). The authors’ research are with and for diverse communities, such as migrant farmworkers, Indigenous and queer communities, youth in the urban periphery, and urban housing coalitions. These communities are located in the global North (Canada, UK, and the US) and South (Brazil, Mexico, and Peru). The projects were at different stages of development when the pandemic started, and include some that were initiated during the pandemic. The authors represent a group of international scholars at different career stages (students, research staff, and early, mid-career faculty), and are from a representative set of institutes (teaching, research, small, and large). Our methodological approaches were equally diverse, and include a wide-ranging set of tools to meet the needs expressed by our community partners, such as interviews, focus groups, participant observation, and digital, community, and participatory mapping techniques.

emerging scholars. We chose one case to highlight tensions posed by the “public good paradox” and challenges faced in creating institutional infrastructure to support authentic PAR. Following these cases and the critique they generate, we explore opportunities to reimagine and enact alternative futures for PAR as a leverage point for transformative change post-COVID-19.

## The neoliberal university is a corporate developer and driver of displacement

Where one lives should provide some degree of safety and stability, from which individuals and families can go to work and school, and access resources in the community that allow them to thrive. During the COVID-19 pandemic, neoliberal housing policies and growing economic inequalities led to increased rents and home prices across the globe (Xu and Hale, 2022) while corporate investors bought as much as 20% of homes for sale in some regions (Katz and Bokhari, 2022). One of the most important and powerful land investors is the university, and in many communities it has remarkable power to choose where and how to operate in corporate or public interest ways (Holley and Harris, 2018). Universities have historically been inextricably linked to processes of dispossession and displacement (e.g., *via* colonization of Indigenous land and the exploitation of Black slave labor), and current trends reflect the university's increasing involvement in the development of the neighborhoods where they are situated (Glasson, 2003). Research shows that capital expenditures related to campus expansions have little positive impact on student achievement and retention, especially in comparison to increases in operational spending (Baron, 2022). Yet, impacts on surrounding communities are clear: when universities expand their footprint, longtime, low-income residents are often displaced (Gilderbloom, 2005).

The destructive roles of the university as a corporate developer, colonizer, and driver of displacement has been front and center in public debates surrounding Colorado State University's (CSU) plans for its new “CSU Spur” campus through a planned redevelopment of the historic National Western Center (NWC). In 2015, CSU received \$200 M from the Colorado State Legislature to construct a 30,000 m<sup>2</sup> facility in the heart of Denver, and 100 km from CSU's campus. According to the CSU Spur website, the campus will operate as a mutually beneficial anchor institution, in that it will “host families and tourists, K-12 student field trips, conferences, and meetings; it will house researchers in state-of-the-art labs; college students pursuing degrees in fields related to agriculture and sustainability; and local artists creating pieces in on-site studios<sup>5</sup>.”

5 <https://nationalwesterncenter.com/>. In 2020, the NWC received national acclaim for its 2050 Food Vision “How the West Was One,” centered around becoming a global, state, regional, and local

The NWC is situated within the historically redlined and marginalized neighborhoods of Globeville, Elyria, and Swansea (GES)—within a zip code that is arguably the most polluted in the nation (Svaldi, 2022). However, these well-publicized development proposals neglect to name how the plans will generate substantive economic and healthy benefits for immediate neighbors. Similarly, the NWC has yet to announce strategies for redressing long standing environmental injustices or for proactively addressing the gentrification threats its development poses. NWC is compounding displacement pressures in GES: in the 10 years prior to the pandemic, Denver was ranked third in the US for rent increases, up 88.2% (Clark, 2019), and like other formerly redlined neighborhoods, GES was hit hard by the pandemic, both in terms of COVID-19 morbidity and eviction threats (Németh and Rowan, 2020).

At the time the COVID-19 quarantine began in 2020, Colorado-based authors JA, CD, SM, and EW were all participating with a few colleagues from CSU in a loose interinstitutional network of action-oriented researchers committed to co-producing knowledge and power with Denver based community partners to advance regenerative development without displacement. They had developed relationships and research initiatives with multi-sector community stakeholders in historically marginalized neighborhoods that were experiencing escalating displacement pressure. CD also participated with CSU staff in the Denver Anchor Network, a group of institutions that aim to leverage their economic power to help close the racial wealth gap through procurement, hiring, and investment practices<sup>6</sup>. The CSU faculty and staff in these networks have been committed to building authentic community partnerships and advancing equitable, community-based development<sup>7</sup>. However, at the system level, development of the National Western Center complex has positioned CSU – a founding

hub for applied research on regenerative agriculture. <https://www.rockefellerfoundation.org/meet-the-top-visionaries-food-system-vision-prize/>. Ironically there is no mention in this vision of CSU's role in “how the West was won” through the obliteration of the original regenerative agriculture system. CSU's agricultural programs helped transform the Buffalo Prairie ecosystem into monocultures of grain production.

6 <https://www.communitywealthbuilding.org/denveranchornetwork.html>

7 Press coverage of CSU faculty and staff efforts to create community partnerships includes: <https://denverite.com/2022/01/12/globeville-and-elyria-swanssea-residents-are-burnt-out-on-projects-they-say-dont-benefit-them-but-there-is-hope-for-csus-spur-campus/>; <https://source.colostate.edu/csu-spur-anchored-in-community/>; <https://gesgazette.com/csus-terra-building-latest-to-open-on-spur-campus/>; <https://gesgazette.com/stock-show-csu-spur-into-action/>

partner of the National Western Center<sup>8</sup> – in the role of corporate developer. The 2015 master plan for regenerative development of the NWC campus fails to mention the threats it poses to gentrification, let alone recommend strategies to mitigate such harm<sup>9</sup>. In 2021, the City and County of Denver proposed a \$190 million bond for capital investments in the National Western Center. This decision was in direct opposition to what residents desired. Neighborhood organizers had been very clear that the proposed development was not what the local community needed or wanted, and instead is another example of state-led gentrification. Moreover, as a result of their savvy community organizing, networking, and communication efforts, 58% of voters rejected the referendum (Swanson, 2021).

## The university exploits scholars

At the time of writing, much of the world is experiencing significant inflation, with rates far exceeding annual academic pay increases<sup>10</sup>. Students are especially struggling with rising rents, low wages, inadequate healthcare and childcare coverage, and discrimination and sexual harassment in the academic workplace. Several large labor strikes between student workers and their universities recently occurred, such as the 2021–2022 Columbia University Strike (Wong, 2022) that demanded, among other things, an increase in wages, and increased healthcare and childcare coverage. During the pandemic, students experienced increased academic stress and isolation under conditions that in so-called “normal” times already included a high workload, with demanding courses, weekly deadlines, the struggle to balance university and private life, and the rising financial costs of education and living expenses. In the US, the average room rate among public 4-year institutions rose 111% from 1989 to 2019, after accounting for inflation, while in the UK, dorm rents rose 60% from 2010 to 2020 (National Center for Education Statistics, 2021; National Union of Students, 2021). At the same time, minorities, women, LGBTQ+, and international students experience higher rates of violence on and off campus (Gómez, 2022).

The COVID-19 pandemic has also exacerbated these health, finance, and education issues, which are linked to a greater risk of distress and reduced academic achievement (Misra and McKean, 2000; Kerr et al., 2004; Stallman and Hurst, 2016; Burns et al., 2020). Attaining a graduate degree often involves a number of challenging conditions that can have negative impacts

on students, such as student loan debt, unpaid or underpaid teaching or research responsibilities, multiple and continuous deadlines that require long nights of study and work, and schedules that are both isolating and require students to be very self-disciplined at all times. For students who are poor, first-generation, BIPOC, differently-abled and who are spouses and/or parents, these challenges can be even more daunting. At the same time, even with some institutional acknowledgment and support, students are mostly expected to manage these challenges on their own, with many faculty and administrators seeing them as “rights of passage.”

These conditions must be understood not simply in the context of tradition or status quo, but rather in the current context of neoliberalism. We argue that the current capitalist, neoliberal context in academia is taking a toll in unprecedented ways that have not been sufficiently acknowledged. Instead, universities are increasingly being revamped to act as corporations, with students and faculty required to be increasingly more productive and competitive even as working conditions become more exploitative and precarious.

At American University (AU), a private, liberal arts university in a wealthy suburb of Washington DC, students face exorbitant tuition fees atop increasing costs of living. AU does provide some grants and scholarships, but these pale in comparison to skyrocketing rent and food costs in an aggressively gentrifying city. Thankfully, a new student food pantry, respectfully called “The Market” has arisen to provide free groceries on campus. A team at AU were able to convince the leaders of AU’s farm (located in Virginia) to grow food not just for the overpriced meal plan, but also for The Market. Yet, 2 years have gone by without this being actualized. Administrative turnover, a bunker-like location, and lack of publicity originally hampered The Market’s capacity, and then COVID-19 disruptions exacerbated the logistical issues—and student need. But grassroots student leadership arose anew, and demanded increased administrative investment in the project—from central relocation to amplified offerings. As a result of these changes and activism, The Market has been successful in reaching students and even in broader outreach. Recently, impressive undergraduate student leaders, from the student-founded Unity Coalition, have arranged for The Market to purchase foods from Black farmers in the DMV area, while facilitating the transfer of surplus harvest from these BIPOC food sovereignty initiatives back to The Market. As a faculty member, author GGL has tried to support this work by hiring students as research assistants for the semester as they do this innovative (and emancipatory) food recovery, by moving funds to support a Food Justice panel featuring the students and farmers (with honorariums and funding for a shared meal), and by incorporating this work into a Community-Based Learning class (to fulfill requisite hours of CBL). But these efforts do not suffice, and rarely last past the semester at hand.

<sup>8</sup> <https://nationalwesterncenter.com/about/>

<sup>9</sup> <http://nationalwesterncenter.com/wp-content/uploads/2017/10/NWC-Master-Plan-2015.pdf>

<sup>10</sup> Several strikes occurred in the UK and Australia during the 2021–2022 academic year over the lack of increased faculty and staff wages and reductions in pensions (<https://www.nature.com/articles/d41586-021-01183-9>).



Author VL (one of GGL's students at AU) finds that even when universities recognize the needs of students (such as the student food bank for low-income, food insecure students), they rely on students themselves to volunteer, run the program, and bill it as a “service” and “extracurricular engagement.” The University could easily assign university funds to creating actual centers of food access (including free meal plans, university funded and staffed food banks, free pantries, and free food boxes available in dorms, etc.). Instead, the onus is put on the most impacted students to identify systems that perpetuate inequality, and to set up and organize initiatives to resolve access to something as fundamental as food.

This leads to pressing questions about how methodological questions of community-based research interact so directly to material wellbeing—and lack thereof—of those in the university community itself, namely students, but also adjunct faculty and underpaid staff. At AU, longstanding frustrations by these groups simmered into union organizing and intense negotiations with the administration in the spring and summer of 2022. The Staff Union, when administrators ended negotiations, voted to strike—the week of student move-in. Many faculty mobilized in support of the union, and the first year students walked out of the President's welcome convocation en masse, in vocal solidarity with the Union. The next morning, administrators returned to the negotiation table and agreed to union demands, also agreeing to demands by Adjunct Union. The ordeal, overall an improbable success of labor equity and university community solidarity, became a real-time lesson in collective bargaining, university political economies, and coalition-building amidst neoliberalizing trends in higher education. Having made local and national news, the strike, faculty support, and student solidarity walk-out made its way into civil society news in DC and beyond. Current and potential community-based research partners are taking note.

## Structural challenges limit the university's commitment to community-engagement

While PAR research aims to build collaborative, trusting, and flexible collaborations between local communities and researchers, it also faces administrative challenges in the process of establishing and navigating these partnerships. To carry out her research on young people's experiences living with and adapting to resource insecurity in conditions of disaster risk in the urban periphery of São Paulo, Brazil, author SB relied to a large extent on the support from the extension office of the School of Public Health at the University of São Paulo (USP). As part of her research to understand everyday experiences and adaptive practices to resource scarcity (food, water, energy) and disaster risk, author SB implemented a university extension course aimed at ~40 young people aged 12–18 in two Social

Assistance Reference Centers in the municipality of Franco da Rocha in the São Paulo Greater Metropolitan Area.

Author SB's research experience illustrates how university extension offices can play a fundamental role in establishing, maintaining and deepening relations between the university and local partner communities. However, they are also often understaffed and underfunded, and part of the highly bureaucratic institutional structures in which they are embedded. Extension offices also often lack flexibility and an understanding of the (administrative) challenges of working with peripheral communities (e.g., in SB's project, not all young people were in the possession of an identity card or an email address, a prerequisite for registration). The administrative process in universities can already be very challenging in “normal” times and requires a lot of back and forth between the community and the extension office. Thus, in moments of crisis, like the COVID-19 pandemic, university extension offices are slow to adapt to changing conditions. In author SB's research, the leading researcher and local gatekeepers (staff implementing the course at two local Social Assistance Reference Centers in the urban periphery) were responsible for much of the administrative process which included: (a) obtaining the necessary data from the participants for enrollment, (b) completing the enrollment forms, and (c) communicating the data to the university extension office at USP.

In author SB's case, with the onset of COVID-19, the extension office (the committee in charge of approving the extension course) showed support and flexibility in (a) adjusting the dates for the extension course and (b) enabling an online modality to be conducted *via* “informal” means, such as WhatsApp. Moreover, the inscription process was facilitated by sending the inscription forms *via* email and collecting the necessary student data *via* social media (e.g., WhatsApp) without requiring a signature on the inscription forms. This flexibilization facilitated the enrollment process enormously and SB was able to enroll 33 young people, of which 15 completed the course with an attendance rate above 75%, which was required to receive a certificate of attendance from the university. However, the role of the leading researcher as a key link between local communities and the extension office was essential to facilitate the administrative process and to create mutual trust. In the process, the researcher also provided informal capacity-building to the extension office staff to foster a better understanding of the structural (administrative) challenges of implementing an extension course in peripheral urban communities and the additional barriers imposed by the COVID-19 pandemic.

## A reimagining of the university to support PAR

As PAR scholars in various roles (students, faculty, and engagement officers) and in different career stages (graduate

students, postdoctoral fellows, and early- and mid-career faculty and officers) working within academia, we draw from this diversity to reimagine an academia that supports PAR, and in turn, supports resilient communities. We identify the need not only for increased academic infrastructure, such as funding for PAR and extension programs, but also a fundamental change in academic culture, such as greater flexibility, meaningful and sustained community-engagement, and most importantly, greater prioritization of community needs and demands by the University. This reimagining is followed with “what-if” scenarios, illustrating possible changes that could have mitigated or lessened the impacts of the pandemic on PAR and communities.

## Centering frontline communities

Universities have played a historically significant role in settler colonialism (e.g., as land-grab institutions) and imperialism (e.g., as partners with the military-industrial complex). Similarly, they have historically remained outside of the communities in which they are located, and ignoring or dismissing their impact on these communities. We argue that Universities must be aware and mindful of their impact on the communities where they are located and develop policies and practices that work with and support them. Universities are part of the power-knowledge networks of regional development. As such, they can and should be key players in building a more socially just approach to learning, and implementing programs and partnerships with community leaders and organizations that address the development needs and priorities where they are embedded and beyond<sup>11</sup>.

There is a rich history of attempts to both decolonize the university and to broaden its role and mission to one that is more inclusive (Goldstein et al., 2018) and liberatory. In the 19th century, “pracademics” like Ellen Swallow Richards (who created the MIT Women’s Lab for Food, Air, Water and an international correspondence program to take science into the home), and George Washington Carver (who led the Tuskegee Institute regenerative agriculture program and cooperative extension to repair harm to soil and people from agriculture systems based on enslavement and monoculture), were all responding to social and ecological crises of their time with novel education systems rooted in alternative epistemologies

and social relations conducive to mutual aid and cooperation (Hines and George, 1979; Boles et al., 2016; Walsh, 2018). Following this tradition, in recent times there have been growing calls for academic institutions to play a larger role in supporting their communities, and many universities have responded by initiating programs or policies that support methodologies such as PAR and community outreach and engagement<sup>12</sup>. To support the integrity and liberatory potential of these programs, centering the voices of marginalized community partners at the leadership table is important. This must occur not only at a level of a research project, but also within the university, e.g., on local university boards of directors. Similarly, in light of the COVID-19 pandemic, increasing social strife, and growing inequalities, it has become clear that much more centering and support is needed.

We follow the scholars that have called for the decolonizing of the university [such as la paperson (2017)] and find that a university that centers frontline communities and decolonizes regional politics of land is one that:

- Repurposes the industrial machinery,
- Terminates contracts and receiving profits from relationships with organizations that have a history of human and environmental abuse (e.g., fossil fuel companies and the military),
- Returns land and Indigenous artifacts,
- Helps in the accumulation of third world power rather than simply disavowing first world power,
- Engages the local communities in research and co-production of understandings of desirable change,
- Acts upon financial systems rather than just critiquing them,
- Economically and socially values the students, staff and faculty, and
- Is a school-to-community pipeline as well as a community-to-school pipeline.

Similarly, we also ask:

What if the university stopped being a corporate developer and developed with and for the local community? Universities are important actors in terms of providing jobs, opportunities, capital and other benefits to the communities where they are located. The benefits of engagement of communities within planning for urban change is also an epistemic matter. In other words, local knowledge and community understanding and experience is significantly distinct from professional expertise and institutional approaches and can add important nuances

11 The role of the university as a developer is part of the larger role as a global land colonizer. The Teachers Insurance and Annuity Association (TIAA) manages the retirement funds of faculty and staff at 15,000 universities, hospitals and non-profits in the US, and has invested these funds to purchase 3 million acres of land making it the largest manager of farmland in the world, and a leader in the timber industry. Sign this petition to TIAA demanding divestment from land grabbing and climate destruction: <https://www.stoplandgrabs.org/en-us/take-action>.

12 Some examples include: Center for Community Engagement to Advance Scholarship and Learning at the University of Denver (<https://www.du.edu/ccesl/>) and the Columbus Community Geography Center at Columbus State University (<https://history.columbusstate.edu/columbus-community-geography.php>).

often ignored by experts and institutions who want efficient and simple answers. While the debate continues around quality of regional development, and development is also regulated in different ways globally, it is clear that the local stakeholders' perspective is paramount and should be a key consideration in the choices over development. Institutions such as universities are major players with significant potential to be agents of change in this respect (see for instance the work of Just Space, where University College London academics support the civil society network to have greater voice in development matters of the Greater London area)<sup>13</sup>.

Even at the smallest scale, community-university knowledge networks can shape regional development in important and beneficial ways. University developments such as halls of residence could be built with greater attention to the experience of students (Goodstadt, 2014), and wider campus developments could embrace the socio-spatial knowledge of local communities (Natarajan, 2017). The reputation and finances of institutions are at stake and it is undoubtedly beneficial to avoid mistakes, and reduce the risk of future judicial review or stop orders on construction. 'Do it right or do it twice' as they say in the building trades. This learning together is powerful and can be possible where there are trusting community-university relations.

We argue that: if universities were to assume a greater partnership and more cohesive relationship with the local communities where they are located, they could:

- Further institutionalize their commitments as an anchor institution in the community. This is a boon to the university itself; it helps in building the long term reputation of the university by boosting its capacity for bridging social capital (Birch et al., 2013).
- Support the co-production of development strategies with local community stakeholder involvement to produce strategies that include local hiring, local procurement of goods and services, local investment, catalyzing of new business, creating career pathways, collecting and disseminating research findings, sharing resources, and developing local equity-centered partnerships.
- Promote development in and around their estates that work better for local residential stakeholders, by learning with them. Protection of spaces with functions that are important to quality of place and support community wellbeing. For instance it could be important to deliberate which spaces are given over to parking when transit networks temporarily close. Similarly the detail of the construction can be managed better, to protect air quality and ecologies during the period of change. Local communities know their localities and the societal uses of urban development (including the built and natural elements) intimately.

- Pursue investments in decolonial, inter-institutional, intersectional, community-engaged applied research networks working to disrupt infrastructural racism and support geographies of radical resilience (Muñoz et al., 2022).
- Universities can decline state monies and ask they be directed for affordable housing<sup>14</sup>.

## Providing greater academic flexibility and support for PAR scholarship

The increasingly neoliberal and corporate University severely impacts many of the goals of university faculty, staff and students who are committed to social justice through participatory action research with surrounding communities and beyond. One of the principal ways this occurs is through inflexible institutional requirements and demands that limit the ways in which PAR scholars and others are able to do research and develop relationships with community. Mentioned earlier in regards to extension offices, bureaucratic barriers are just one example of institutional inflexibility that create a less hospitable environment for PAR partnerships to flourish.

Flexibility is foundational for PAR and becomes especially necessary during crises where research is interrupted, derailed, and reconstructed. Academic institutions need to allow for this "failure" (Davies et al., 2021), and to provide time, space and support for readjustment when necessary. Relationships of trust, care and mutual reliance take time to build (Gerhard and Keller, 2022). Under conditions of extreme precarity, conditions that characterize many neighborhoods and communities where PAR scholars are located, relationship building requires even more time, presence and often unplanned visits and interventions. Capitalist models of higher education that prioritize efficiency and quantitative metrics to determine scholarly progress and merit severely hinder other, less quantifiable educational and research models.

The authors identified several administrative barriers that slowed or created added work and limitations for those engaging in PAR. In one situation experienced by one of the authors of this essay, a grant opportunity that was designed to provide direct support for scholar-community partnerships (The University of British Columbia, n.d), negatively impacted the relationship between the scholar and the community due to the "unwelcoming" administrative requirements that donees must have charitable status in order to receive the grant directly. The requirements for charitable status in Canada exclude multiple groups who do not have secure funding sources,

<sup>13</sup> <https://justspace.org.uk/>

<sup>14</sup> If CSU had declined the original \$200 million in government funding it received and asked that it be used for affordable housing, ~400 affordable housing units could have been built.

paid staff or otherwise limited capacity. Although the project was successful in securing funding, these requirements created unnecessary work for both the community partner and the researcher to get and distribute the funds accordingly.

Another challenge to PAR is the ways in which funding interests and allocation do not necessarily reflect community needs and realities. Large funding organizations and institutions are often focused on macro-scale data findings, analysis and outcomes that are tied directly to policy and planning. As such, the criteria used to assess what types of research will be funded or rewarded by various funding bodies largely depend on national policies for research and innovation. For example, some countries use an academic funding model that includes a wider societal impact of research (see REF model in the UK; Bornmann, 2012), while other cases tend to rely on quantifiable outcomes such as impact factors of published papers and the number of patents from the research.

Academic institutions also require faculty to apply for these large, national and international grants that provide institutional revenue, while discouraging them from applying to smaller grants or outside funding for PAR related, community based projects. For example, at Queen's University Belfast (UK), author JA was informed by the school's administration and leadership that they would not support funding applications that did not include overhead or that awarded <£35K, as these were deemed an inefficient use of institutional resources (see Figure 1). These institutional barriers block applications for small-scale and pilot community partnership funds (e.g., the community-engagement grants provided by the Urban Studies Foundation<sup>15</sup> among others), and highlights how the criteria and priorities of a funding body as well as the receiving institution, inevitably impact how research is developed, conducted, and managed, often to the detriment of PAR and other community-based and social justice research. The focus on large-scale projects and grants with lengthy and highly specific outcomes is often antithetical to community needs and interests that are generally smaller in scope and more immediate, requiring levels of flexibility that current funding models lack. Instead, small-scale grants and community projects may better generate catalytic impacts by cultivating the kinds of knowledge, power, and emergent strategies needed for effective, long-term change that starts at the community scale and moves incrementally into other local spaces and contexts.

Finally, and in relation to university community relations, it is important to note that wider funding structures often appear to undervalue the need for deep and long-term connections between universities and local communities. Firstly, through their very nature, universities tend to support formally recognized relationships. In the case of researchers, university funds tend to be allocated to tenure-track and tenured professors, since scholars with short-term or temporary

contracts often cannot sustain long-term relationships with local communities in the same way. Secondly, external funding institutions often reduce the relationship between universities and communities to a rather distanced funder-recipient relationship, instead of seeing universities as integrally part of the communities in which they are located (Moore, 2014). This means that those working at the institutional level may be expected to maintain the position of a neutral party with regards to external funding sources, a common expectation and policy that is grounded in the hard sciences, but that does not reflect the methods nor objectives of PAR. In practice, funding for relationship building may come from universities' core funds, e.g., where researcher time or institutional resources are given over to "impact work: as seen in the UK."

Much of the relationship-building ground work essential for PAR is conducted by researchers outside of contracted hours or goes un/underfunded. During the pandemic, some researchers were able to maintain relationships with local communities while they changed institutions (Auerbach et al., 2022). In other cases, the authors of this essay reworked their agenda and were able to undertake additional data collection regarding the impact of COVID-19 on the communities where they were already embedded, which the original funding did not cover. One of the authors was unable to access funding to complete their research and found adjunct positions that helped to keep them afloat and also took time away from their dissertation research. These anecdotes and analysis suggest the existence of barriers to PAR research at multiple stages and scales of the research process as well as to institutional and community relationships.

We argue that the institutional position and organizational structure of universities must be more deeply understood when considering the importance of relationships between universities and communities. Greater academic flexibility and a consideration for PAR scholarship should include:

- Time and material support scholars to build community relationships,
- The inclusion of community-engagement in hiring and promotion,
- Faster and more contextually responsive ethics reviews (e.g., IRB),
- Less rigid funding support (e.g., the removal of overhead requirements, barriers for partner organizations, and strict deadlines),
- Increased availability of small or short-term grants aimed at building trust and community relationships or working with the community, and
- Financial support for emerging scholars and adjunct professors leading PAR, especially in ways that support communities of practice in the university.

What if the university practiced flexibility and care and acknowledged the material reality of students? Centering

<sup>15</sup> <https://www.urbanstudiesfoundation.org/funding/>



frontline communities also includes centering a university's students and staff. In many areas where Universities are located, students, staff and non-tenure track faculty often live in precarious conditions or far away from campus. Furthermore, when scholars are themselves unsupported and in precarious positions, then mental load and invisible labor limits and interrupts the ability to build, grow, and maintain genuine relationships with the community. If students/adjuncts and others in the university community remain undervalued or exploited, then the very presumptions and ethics of public-facing community-engagement ring hollow and disingenuous. A university infrastructure of caring for students and staff would:

- Recognize the differences among students in terms of their material realities and provide material assistance such as increased funding for life expenses, child support, and summer pay,
- Reduce mental and physical health issues facing student workers, including building faculty capacity for healthy working environments, such as providing “How-to mentoring” that include real sensitivity training by experts—not just a video you watch for human resources,
- Provide flexibility with student deadlines when students face academic, financial and non-academic issues, and
- Encourage friendships among students, not competition—these social relationships are important for mental health and building networks of care.

## Improving community-engagement infrastructure

While adequate resources are certainly a key ingredient vital to the success of any effort, we believe that changes in campus climate and culture are also an important currency and necessary pre-conditions to ensure success. These shifts take time and dedicated effort from both within and from outside the institution. Good, ethical PAR doesn't just happen, it is forged with intentionality, deep reflection, openness, and collaboration. The commitment to such processes can be challenging when viewed as an individual practice and thus, institutional support for PAR is crucial to ensuring the greatest possibility of scholarship that leads to social change (as with SB's case study in Section Structural challenges limit the university's commitment to community-engagement). Such support can and should be multilayered: within the academy, it can reside among scholars with shared affinities (e.g., PAR collaborators), within institutions (e.g., engagement offices), and across institutions (e.g., civic and science organizations)<sup>16</sup>.

Within institutions, the infrastructure and backbone support that engagement offices and officers can provide is often paramount to the success of community-engaged faculty who seek to use PAR methods. Such officers often function as boundary spanners (Weerts and Sandmann, 2010). Such centers have often built a level of trust and credibility across both campus and community to serve as movement-building leaders, who “bring together a diverse group of stakeholders, including those not in traditional institutions or seats of power, to build a vision of the future based on common values and narratives” (Cabaj and Weaver, 2016). These officers bring a respect for and ability to connect community perspectives with people and programs at their institution that can lead to rich collaborations grounded in mutual benefit (Dostilio, 2017). Such offices can help academics understand the difference between doing work *\*on\** communities and doing work *\*with\** and *\*driven by\** communities. Some scholars can fall into the academic belief that just because their work is related to, connected to, or even involves community stakeholders that it will ultimately benefit communities. This faulty assumption can cause more harm than good as a history of such issues has shown. Community-engaged work requires a commitment to constant dialogue between both academic and community collaborators to ensure that mutual benefit and reciprocity stay central to any scholarly work. This also requires a commitment to the co-design and co-implementation of projects and the willingness to adapt and change as necessary to ensure “shared voice and power and insist upon collaborative knowledge construction and joint ownership of work processes and products” (Jameson et al., 2010, p. 264).

Engagement offices can provide support for:

- Physical and digital spaces for teaching, workshops, and meetings,
- Community-engaged research methods (e.g., translation services) and pedagogy,
- Funding opportunities, and
- Building and maintaining relationships between scholars and community organizations.

However, we are aware that creating this culture of collaboration and shared responsibility between researchers and extension offices requires not only a topping up of financial

---

one example, where scholars across and beyond formal disciplines engaged in research on and for agroecology and agrarian justice are developing operating Principles for collaborative research with and for frontline movements. From anti-oppression training to ongoing political education, ARC aims to co-conduct research and shared analysis with grassroots coalitions, while mobilizing campus resources and supplying logistical and informational support to movements (Montenegro de Wit et al., 2021). Such community organizing within academic spaces helps solidify and expand communities of practice alongside and even beyond formal engagement centers on campus.

<sup>16</sup> Scholar-activists pursuing community-based scholarship have been self organizing. The Agroecology Research-Action Collective (ARC) is



means to hire (additional) support staff. In addition, what is needed is capacity-building and training to enable extension staff to (a) develop a more in-depth understanding and ownership regarding the research projects they are supporting, (b) an awareness and sensitivity to situate administrative processes in the context of local realities (which may require a greater flexibility); and (c) a forum for continuous engagement with communities locally and globally to not only build but also maintain and strengthen resilient networks of collaboration. Under these conditions, extension offices could assume a key role in building and supporting mutually trusting networks between local communities and universities.

What if the university strengthened its extension office? More funding, an increase in (trained) staff and capacity-building for university extension is necessary in order to be able to take a more active and meaningful role as intermediary between the university and the community. Currently, extension offices are the “administrative arm” of the principal investigator with little autonomy or knowledge of the individual research projects or even of the realities of the communities where they work. Strengthening the financial and technical staff capacities of the extension office could enable a more proactive role of the extension offices. Especially in critical situations such as the COVID-19 crisis, extension offices could then assume a key role as a link between local communities and the researcher. Where researchers were displaced from the field and international researchers like SB had to spend several months outside the country, relying on local colleagues with a good knowledge of the administrative processes to collect paperwork and to request course changes from in-person to online was essential. Strengthening the extension offices could alleviate such additional pressure on academic staff.

Building up staff and financial capacities of the extension office, e.g., by putting in place key individuals who can act as a coordinators/connectors between researchers/university research staff, university administration, and local communities could lead to:

- Providing more autonomy to extension offices which would allow for deeper engagement with the research process as well as university-community collaborations.
- Streamlining the administrative processes of the university extension office.
- Allowing for more flexibility and resilience in adapting to changing external circumstances and crises. This includes a targeted support of (national and international) researchers doing overseas fieldwork especially during COVID-19 and preventing a disruption of the research by finding viable remote solutions and streamlining communication.
- Establishing strong, centralized, and ongoing links between local partner communities and the universities which could enhance a mutual understanding for the administrative

requirements in each and foster a culture of mutual trust and shared responsibility.

## Conclusion

As set out above, we reflected on our own research experiences during the COVID-19 pandemic to reflect on the challenges of doing PAR under quarantine and in the broader context of the neoliberal university. Even though COVID-19 has demonstrated that community-based, public-good, action-research scholarship has never been more necessary, the pandemic has also exposed the challenges of PAR and the university system in an on-going neoliberal age in which the Capitalocene reigns. The impacts of COVID-19 have not only laid bare the impacts of academic capitalism on community relationships, but have also highlighted how the neoliberal university model is unevenly providing resources with effects that have the potential to work against the general PAR ambition of broadening institutional engagement with communities. While there were instances where institutional supports enabled PAR to continue (or even catalyzed it in one instance), for the most part it was the commitment of the individuals involved; relationships held by researchers and community organizations (not universities) and the use of unconventional digital tools (e.g., WhatsApp and Zoom) that enabled PAR during the pandemic. In many ways we had to relearn and reevaluate how to do our work in ways that made it possible and that remained true to the nature of PAR. For those of us who had already established strong relationships with community members and organizations, and had strong institutional support, the shift was easier than many of us expected.

Of course, scholar-community relationships are at the heart of trusting and equitable PAR work, but institutions can do more to create the conditions for and reduce barriers to creating and maintaining these relationships. Reflecting on the wider academic context, the analysis of these case studies provide insights on the direction and possible alternatives of institutional support for PAR. Even though there is no panacea, several changes to the current academic system are put forward. Firstly, the university must center genuine partnerships and collaborations with the local communities where they are located and to acknowledge and address historical and on-going practices of colonialism. Second, there must be greater academic flexibility and financial support for PAR. Third, it must create or expand autonomous community-engagement programs or extension offices to provide the support PAR scholars need during future crises. This institutional support can help place researchers in an active and sustained role during crises instead of being reactionary, interrupted, and displaced. COVID-19 has not only impacted the communities for whom we work and displaced the scholar, but it has also provided a clarion call to

institutions of higher education to return to a place of relevance, reciprocity, and embeddedness with their communities.

## Author contributions

JA and SM conceived the original idea. UA, JA, GB, SB, HC, RC, CD, SK, VL, AM, SM, LN, and EW contributed to the analysis and writing. All authors contributed to the article and approved the submitted version.

## Funding

SB's research Building resilience in the face of nexus threats: local knowledge and social practices of Brazilian youth (NEXUS-DRR) was funded by the European Union's Horizon 2020 Research and Innovation Programme, Marie Skłodowska-Curie Grant Agreement No. 833401, NEXUS-DRR.

## References

- Altwater, E., Crist, E. C., Haraway, D. J., Hartley, D., Parenti, C., and McBrien, J. (2016). *Anthropocene or Capitalocene?: Nature, History, and the Crisis of Capitalism, 1st Edn.*, ed J. W. Moore. Oakland, CA: PM Press.
- Auerbach, J., Muñoz, S., Affiah, U., Barrera de la Torre, G., Börner, S., Cho, H., et al. (2022). Displacement of the Scholar? Participatory action research under COVID-19. *Front. Sustain. Food Syst.* 6, 762065. doi: 10.3389/fsufs.2022.762065
- Baron, E. J. (2022). School spending and student outcomes: Evidence from revenue limit elections in Wisconsin. *Am. Econ. J.: Econ. Policy* 14, 1–39. doi: 10.1257/pol.20200226
- Birch, E., Perry, D. C., and Taylor, H. L. J. (2013). Universities as anchor institutions. *J. Higher Educ. Outreach Engag.* 17, 7–13.
- Boles, D. D., Hopps, J. G., Clayton, O., and Brown, S. L. (2016). The dance between Addams and Du Bois: collaboration and controversy in a consequential 20th century relationship. *Phylon* 53, 34–53.
- Bornmann, L. (2012). Measuring the societal impact of research. *EMBO Rep.* 13, 673–676. doi: 10.1038/embor.2012.99
- Boyer, E. (1996). The scholarship of engagement. *Bull. Am. Acad. Arts Sci.* 49, 18–33. doi: 10.2307/3824459
- Burns, D., Dagnall, N., and Holt, M. (2020). Assessing the impact of the COVID-19 pandemic on student wellbeing at universities in the united kingdom: a conceptual analysis. *Front. Educ.* 5, 582882. doi: 10.3389/educ.2020.582882
- Cabaj, M., and Weaver, L. (2016). *Collective Impact 3.0: An Evolving Framework for Community Change*. Tamarack Institute Community Change Series, 2016, 1–14. Available online at: <http://www.tamarackcommunity.ca/library/collective-impact-3.0-an-evolving-framework-for-community-change> (accessed November 27, 2022).
- Chapple, K. and Zuk, M. (2016). Forewarned: The use of neighborhood early warning systems for gentrification and displacement. *Cityscape*. 18, 109–130. Available online at: <https://www.jstor.org/stable/26328275>
- Chatterton, P., Hodkinson, S. and Pickerill, J. (2010). Beyond scholar activism: making strategic interventions inside and outside the neoliberal university. *ACME* 9, 245–275.
- Clark, J. (2019). *U.S. Renters Paid \$4.5 Trillion in Rent in the 2010s*. Available online at: <https://www.zillow.com/research/total-rent-paid-2010-2019-26112/> (accessed February 01, 2022).
- Davies, T., Disney, T., and Harrowell, E. (2021). Reclaiming failure in geography: academic honesty in a neoliberal world. *Emot. Space Soc.* 38, 100769. doi: 10.1016/j.emospa.2021.100769
- Derickson, K. D., and Routledge, P. (2015). Resourcing scholar-activism: collaboration, transformation, and the production of knowledge. *Profess. Geogr.* 67, 1–7. doi: 10.1080/00330124.2014.883958
- DiEnno, C. M., and DePrince, A. P. (2019). Tackling grand challenges: community engagement and collective impact in public problem solving. *Metropolitan Univ. J.* 30, 20–39. doi: 10.18060/22813
- Dostilio, L. D. (Ed.). (2017). *The Community Engagement Professional in Higher Education: A Competency Model for an Emerging Field*. Boston, MA: Campus Compact.
- Easton, S., Lees, L., Hubbard, P., and Tate, N. (2020). Measuring and mapping displacement: The problem of quantification in the battle against gentrification. *Urban studies* 57, 286–306. doi: 10.1177/0042098019851953
- Eaves, L. (2019). The imperative of struggle: feminist and gender geographies in the United States. *J. Feminist Geogr.* 36, 1314–1132. doi: 10.1080/0966369X.2018.1552564
- Edney, M. H., and Pedley, M. S. (2020). “The history of cartography”, in *Volume 4 – Cartography in the European Enlightenment* (Chicago IL: University of Chicago Press).
- Flyvbjerg, B. (2001). *Making Social Science Matter: Why Social Inquiry Fails and How it Can Succeed Again*. Cambridge, MA: Cambridge University Press.
- Gerhard, U., and Keller, J. (2022). No place for trust-the significance of trust in housing development. *Urban Geogr.* 1–22. doi: 10.1080/02723638.2021.2010434
- Gilderbloom, J. I. (2005). *Promise and Betrayal: Universities and the Battle for Sustainable Urban Development*. Albany, NY: Albany State University of New York Press.
- Glasson, J. (2003). The widening local and regional development impacts of the modern universities — a tale of two cities (and north-south perspectives). *Local Econ.* 18, 21–37. doi: 10.1080/0269094032000073799
- Goldstein, J., Paprocki, K., and Osborne, T. (2018). A Manifesto for a Progressive Land-Grant Mission in an Authoritarian Populist Era. *Ann. Assoc. Am. Geogr.* 109, 673–684. doi: 10.1080/24694452.2018.1539648
- Gómez, J. M. (2022). Gender, Campus Sexual Violence, Cultural Betrayal, Institutional Betrayal, and Institutional Support in U.S. ethnic minority college students: a descriptive study. *Violence Against Women* 28, 93–106. doi: 10.1177/1077801221998757
- Goodstadt, V. (2014). *Roger Dudman Way Review: Main Report and Executive Summary*. Available online at: <https://mycouncil.oxford.gov.uk/documents/s16562/RDW%20INDEPENDENT%20REVIEW%20FINAL%20REPORT%20140107%2017th%20Jan.pdf> (accessed November 27, 2022).
- Hammelmann, C., Reynolds, K., and Levkoe, C. Z. (2020). Toward a radical food geography praxis: integrating theory, action, and geographic analysis in pursuit of more equitable and sustainable food systems. *Hum. Geogr.* 13, 211–227. doi: 10.1177/1942778620962034

## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

- Harjo, L. (2019). *Spiral to the stars: Mvskoke Tools of Futurity*. Tucson, AZ: University of Arizona Press.
- Henry, J. V., and Fay, D. (2021). 'Not in Our Name': vexing care in the neoliberal university. *Nordic J. Sci. Technol. Stud.* 9, 65–76. doi: 10.5324/njsts.v9i1.3549
- Hern, M. (2017). *What a City Is For: Remaking the Politics of Displacement*. Cambridge MA: MIT Press.
- Hines, L. O., and George, W. (1979). Carver and the Tuskegee Agricultural Experiment Station. *Agric. Hist.* 53, 71–83.
- Holley, K. A., and Harris, M. S. (2018). "The 400-Pound Gorilla": the role of the research university in city development. *Innov. High. Educ.* 43, 77–90. doi: 10.1007/s10755-017-9410-2
- Holloway, J. (2002). *Change the World Without Taking Power*. London: Pluto Press.
- International Commission on Stratigraphy. (2019). Working Group on the 'Anthropocene'. Available online at: <http://quaternary.stratigraphy.org/working-groups/anthropocene/> (accessed November 27, 2022).
- Jameson, J., Clayton, P., and Jaeger, A. (2010). "Community-engaged scholarship through mutually transformative partnerships," in *Participatory Partnerships for Social Action and Research*, eds L. M. Harter, J. Hamel-Lambert, and J. Milleson (Dubuque, IA: Kendall-Hunt), 259–278.
- June, L. (2022). *Architects of Abundance: Indigenous food systems, Indigenous land management, and the excavation of hidden history* (Dissertation). University of Alaska. Available online at: <https://www.lylajune.com/phd-dissertation> (accessed November 27, 2022).
- Katz, L., and Bokhari, S. (2022). Real-Estate Investors Bought a Record 18% of the U.S. Homes That Sold in the Third Quarter. Available online at: <https://www.redfin.com/news/investor-home-purchases-q3-2021/> (accessed April 06, 2022).
- Kerr, S., Johnson, V. K., Gans, S. E., and Krumrine, J. (2004). Predicting adjustment during the transition to college: alexithymia, perceived stress, and psychological symptoms. *J. Coll. Student Dev.* 45, 593–611. doi: 10.1353/csd.2004.0068
- Kimmerer, R. W. (2015). *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants (First Paperback Edition)*. Minneapolis, MN: Milkweed Editions.
- Kindon, S., and Elwood, S. (2009). Introduction: more than methods – reflections on participatory action research in geographic teaching, learning and research. *J. Geogr. High. Educ.* 33, 19–32. doi: 10.1080/03098260802276474
- Kindon, S., Pain, R., and Kesby, M. (eds.). (2007). *Participatory Action Research Approaches and Methods: Connecting People, Participation and Place*. London: Routledge. doi: 10.4324/9780203933671
- Kobayashi, A. (1994). Coloring the field: gender, "race," and the politics of fieldwork. *Profess. Geogr.* 46, 73–80. doi: 10.1111/j.0033-0124.1994.00073.x
- la paperson (2017). *A Third University Is Possible, 1st Edn*. Minneapolis, MN: Univ of Minnesota. doi: 10.5749/9781452958460
- McKittrick, K. (2013). Plantation futures. *Small Axe* 17, 1–15. doi: 10.1215/07990537-2378892
- Merchant, C. (1990). *The Death of Nature: Women, Ecology, and the Scientific Revolution (Reprint edition)*. New York, NY: HarperOne.
- Misra, R., and McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. *Am. J. Health Stud.* 16, 41–51.
- Montenegro de Wit, M., Shattuck, A., Iles, A., Graddy-Lovelace, G., Roman-Alcalá, A., and Chappell, M. J. (2021). Operating principles for collective scholarship: early insights from the Agroecology Research-Action Collective. *J. Agric. Food Syst. Commun. Dev.* 10, 319–337. doi: 10.5304/jafscd.2021.102.022
- Moore, J. W. (2017). The capitalocene, part I: on the nature and origins of our ecological crisis. *J. Peasant Stud.* 44, 594–630. doi: 10.1080/03066150.2016.1235036
- Moore, T. L. (2014). Community-university engagement: a process for building democratic communities. *ASHE High. Educ. Rep.* 40, 1–129. doi: 10.1002/aehe.20014
- Muñoz, S., Walsh, E. A., Cooper, J. A., and Auerbach, J. (2022). Community-engaged regenerative mapping in an age of displacement and COVID-19. *Ann. Am. Assoc. Geogr.* 112, 847–858. doi: 10.1080/24694452.2021.1978838
- Nagar, R., and Geiger, S. (2007). "Reflexivity and positionality in feminist fieldwork revisited," in *Politics and Practice in Economic Geography*, eds A. Tickell, E. Sheppard, J. Peck, and T. Barnes (London: Sage), 267–79. doi: 10.4135/9781446212240.n23
- Natarajan, L. (2017). Socio-spatial learning: a case study of community knowledge in participatory spatial planning. *Prog. Plan.* 111, 1–23. doi: 10.1016/j.progress.2015.06.002
- National Center for Education Statistics. (2021). *Fast Facts*. Available online at: <https://nces.ed.gov/fastfacts/display.asp?id=76> (accessed November 27, 2022).
- National Union of Students (2021). Rent rises of over 60% in a decade across student halls. Available online at: <https://www.nus.org.uk/articles/rent-rises-of-over-60-in-a-decade-across-student-halls> (accessed February 2, 2022).
- Németh, J., and Rowan, S. (2020). *Is your neighborhood raising your coronavirus risk? Redlining decades ago set communities up for greater danger. The Conversation*. Available online at: <http://theconversation.com/is-your-neighborhood-raising-your-coronavirus-risk-redlining-decades-ago-set-communities-up-for-greater-danger-138256> (accessed November 27, 2022).
- Osborne, T. (2017). Public political ecology: a community of praxis for earth stewardship. *J. Polit. Ecol.* 24, 843–860. doi: 10.2458/v24i1.20970
- Ostrom, E., Burger, J., Field, C. B., Norgaard, R. B., and Policansky, D. (1999). Revisiting the commons: local lessons, global challenges. *Science* 284, 278–282. doi: 10.1126/science.284.5412.278
- Pain, R. (2009). Commentary: Working across distance spaces: connecting participatory action research and teaching. *J. Geogr. High. Educ.* 33, 81–87. doi: 10.1080/03098260802276599
- Pulido, L. (2008). "FAQs: frequently (un)asked questions about being a scholar activist," in *Engaging Contradictions: Theory, Politics, and Methods of Activist Scholarship*, ed C. R. Hale (Oakland, CA: University of California Press), 341–366. doi: 10.1525/9780520916173-017
- Raekstad, P., and Gradin, S. S. (2020). *Prefigurative Politics: Building Tomorrow Today*. Polity Press. Available online at: <http://ebookcentral.proquest.com/lib/du/detail.action?docID=6028000> (accessed November 27, 2022).
- Rappaport, J. (2020). *Cowards Don't Make History: Orlando Fals Borda and the Origins of Participatory Action Research*. Durham, NC: Duke University Press. doi: 10.1215/9781478012542
- Richardson, J., Mitchell, B., and Franco, J. (2019). Shifting Neighborhoods: Gentrification and cultural displacement in American cities. Technical Report. National Community Reinvention Coalition.
- Robinson, C. (1983). *Black Marxism: The Making of the Black Radical Tradition*. Chapel Hill, NC: University of North Carolina Press.
- Roman-Alcalá, A. (2022). Five practical strategies for those who work for food systems change. *J. Agric. Food Syst. Commun. Dev.* 12, 1–4. doi: 10.5304/jafscd.2022.121.001
- Salmón, E. (2012). *Eating the Landscape: American Indian Stories of Food, Identity, and Resilience*. Tucson, AZ: University of Arizona Press.
- Santos, B. S. (2014). *Epistemologies of the South: Justice Against Epistemicide, 1st Edn*. New York, NY: Routledge.
- Santos, B. S. (2017). *Decolonising the University: The Challenge of Deep Cognitive Justice*. Cambridge, MA: Cambridge Scholars Publisher.
- Scott, J. C. (1999). *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven, CT: Yale University Press.
- Slaughter S., and Leslie L. L. (2001). Expanding and elaborating the concept of academic capitalism. *Organization.* 8, 154–161. doi: 10.1177/1350508401082003
- Slaughter, S. and Rhoades, G. (2009). *Academic Capitalism and the New Economy: Markets, State, and Higher Education*. Baltimore MD: Johns Hopkins University Press.
- Stallman, H. M., and Hurst, C. P. (2016). The university stress scale: measuring domains and extent of stress in university students. *Aust. Psychol.* 51, 128–134. doi: 10.1111/ap.12127
- Stein, S. (2020). A colonial history of the higher education present: rethinking land-grant institutions through processes of accumulation and relations of conquest. *Crit. Stud. Educ.* 61, 212–228. doi: 10.1080/17508487.2017.1409646
- Svaldi, A. (2022). *Northeast Denver neighborhood is the nation's most polluted. The Denver Post*. Available online at: <https://www.denverpost.com/2017/02/16/denver-most-polluted-zip-code/> (accessed February 16, 2022).
- Swanson, C. (2021). *Denver's proposed National Western Center opens old wounds in Globeville-Elyria-Swansea. The Denver Post*. Available online at: <https://www.denverpost.com/2021/08/21/denver-national-western-center-globeville-bonding-measure/> (accessed February 01, 2022).
- TallBear, K. (2014). Standing with and speaking as faith: a feminist-indigenous approach to inquiry. *J. Res. Pract.* 10, 1–7.
- The University of British Columbia. (n.d.). *Partnership Recognition and Exploration Fund. Community Engagement*. Retrieved from: <https://communityengagement.ubc.ca/our-work/partnership-recognition-and-exploration-fund/> (accessed October 1, 2022).

- Tuck, E. (2009). Suspending damage: a letter to communities. *Harvard Educ. Rev.* 79, 409–428. doi: 10.17763/haer.79.3.n0016675661t3n15
- Vasudevan, R., and Novoa, E. M. (2022). Pluriversal planning scholarship: embracing multiplicity and situated knowledges in community-based approaches. *Plann. Theory* 21, 77–100. doi: 10.1177/14730952211000384
- Walker, M., and Boni, A. (2020). *Participatory Research, Capabilities and Epistemic Justice: A Transformative Agenda for Higher Education, 1st Edn.* New York, NY: Springer. doi: 10.1007/978-3-030-56197-0
- Walsh, E. A. (2018). White fragility as an obstacle to anti-racist resilience planning: Opportunities for equity-conscious partnerships. *J. Urban Manag.* 7, 181–189. doi: 10.1016/j.jum.2018.12.005
- Weerts, D. J., and Sandmann, L. R. (2010). Community engagement and boundary-spanning roles at research universities. *J. Higher Educ.* 81, 632–657. doi: 10.1080/00221546.2010.11779075
- Wisner, B. (1993). Disaster vulnerability: Scale, power and daily life. *GeoJournal* 30, 127–140. doi: 10.1007/BF00808129
- Wong, A. (2022). *Student Workers at Columbia End 10-Week Strike After Reaching a Deal.* New York Times. Available online at: <https://www.nytimes.com/2022/01/07/nyregion/columbia-student-workers-strike-ends.html> (accessed January 07, 2022).
- Xu, J., and Hale, D. (2022). *December Rental Data: Rents Surged by 10.1% in 2021.* Realtor.com. Available online at: <https://www.realtor.com/research/december-2021-rent/> (accessed January 26, 2022).