LETTERS

Thousands of Black-tailed godwits (*Limosa limosa*) passing through Portugal's Tagus estuary would be disrupted by flight paths to Lisbon's new airport.

Edited by **Jennifer Sills**

Portugal's airport plans threaten wetlands

In December 2019, the European Commission announced The European Green Deal, a plan to facilitate a transition to sustainability with the goal of making Europe climate neutral by 2050 (*1*). Green Deal objectives include preserving and restoring biodiversity and reducing net emissions of greenhouse gases (*1*). The EU Parliament adopted a resolution supporting these environmental goals in January (*2*). Lisbon, Portugal's capital, has been designated the European Green Capital 2020 for spearheading sustainability efforts (*3*). However, Lisbon's airport has reached capacity, and plans to build an additional airport are at odds with Green Deal objectives.

The proposed location for the new airport is a peninsula at the heart of the Tagus estuary (*4*), a vast coastal wetland of key importance for breeding, wintering, and passing migratory birds in the East Atlantic Flyway (*5*, *6*). This wetland is a major hub linking Palearctic and Nearctic breeding areas with Afro-tropical wintering areas for an estimated 300,000 waterbirds and many other migratory bird species. The region is protected under national legislation, EU directives, and international conventions (*5*–*7*). However, the privately funded proposed airport received an environmental license in early 2020 (*8*), and, despite the aviation sector facing unprecedented reductions in activity due to the coronavirus disease 2019 (COVID-19) pandemic (*9*), the Portuguese government reiterated in July its intentions to go forward with this new infrastructure (*10*).

By expanding its airport capacity, this EU member state will deliver a negative contribution toward climate targets by neither retiring nor halting new infrastructure (*11*), as well as threaten biodiversity through negative, permanent, and irreversible effects on bird species in an EU-designated protected area. These species already face massive declines globally [(e.g., (*12*)]. We urge the Portuguese government and the European Union to put the Green Deal into action by abandoning this project.

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Systemic racism in higher education

The nexus of Black Lives Matter protests and a pandemic that disproportionately kills Black and Latinx people (*1*) highlights the need to end systemic racism, including in science, technology, engineering, and mathematics (STEM), where diversity has not meaningfully changed for decades (*2*). If we decry structural racism but return to the behaviors and processes that led us to this moment, this inexcusable stagnation will continue. We urge the Academy to combat systemic racism in STEM and catalyze transformational change.

Everyone in academia must acknowledge the role that universities—faculty, staff, and students—play in perpetuating structural racism by subjecting students of color to unwelcoming academic cultures (*3*). Universities are not level playing fields where all students have an equal opportunity to participate and succeed. The misuse of standardized tests such as the GRE excludes students who could have otherwise succeeded (*4*). Once admitted, Black, Indigenous, and people of color (BIPOC) face challenges when transitioning to college life (*5*) and are more likely to be nontraditional students. Innovative pedagogies (*6*) and programs (*7*) can overcome these challenges but are not widely applied in higher education. Evidence-based, institution-wide approaches focused on equity in student learning are foundational to eliminating structural racism in higher education. Once we abandon the view of "fixed" student ability, more BIPOC students will succeed (*8*).

Academic culture also fails BIPOC faculty, who receive fewer federal grants due to systemic bias (*9*) and topic area (*10*). BIPOC faculty are most likely to invest substantial time in activities that promote diversity, which are devalued in the tenure and promotion process (*11*). BIPOC faculty are further disadvantaged in tenure decisions through cultural taxation of unequal service and mentoring demands. Given these burdens, BIPOC faculty cannot be expected to be the primary agents of institutional change. Instead, those most empowered to make change—non-BIPOC faculty—must join BIPOC faculty in their efforts to prioritize recruiting, supporting, and championing diversity.

Finally, the false dichotomy of "excellence or diversity" must end. Diversity results in better, more impactful, and more innovative science (*12*), and it is essential to building novel solutions to challenges faced by marginalized and nonmarginalized communities. Catalyzing these culture shifts in the Academy, however, will require making tenure dependent on excellence in research, teaching, and service that centers on equity and inclusion.

Making STEM equitable and inclusive requires actively combating racism and bias. All faculty, staff, and students should commit to learning about racism, engaging in courageous conversations with non-BIPOC colleagues, and calling out unfair practices to prevent the normalization of discriminatory behavior. Faculty should examine courses for ethnicity and gender performance disparities, ask whether departmental and lab demographics reflect society at large, and actively remedy any disparities.

Breaking down the barriers of systemic racism in STEM and achieving the promise of diversity, equity, and inclusion in STEM require unwavering dedication and real work. It is time to make the commitment to be an agent of change.

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SUPPLEMENTARY MATERIALS

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List of signatories

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University–pharmacy partnerships for COVID-19

The global coronavirus disease 2019 (COVID-19) pandemic has accelerated epidemiologic data collection and reporting to a scale that has never before been achieved (*1*). Both data volume and segmentation have grown enormously, with granularity of data to track infection now available at the county level or below (*2*). Years of disinvestment in U.S. public health infrastructure (*3*) have resulted in the immediate need for new mechanisms to support micro-epidemiologic efforts. Universities and community pharmacies, both trusted institutions with established infrastructure, are uniquely positioned to facilitate micro-epidemiologic efforts by creating partnerships (*4*).

Micro-epidemiology has been used to track the spatial and temporal prevalence of infection in distinct communities (*5*). Coupled with longitudinal testing, micro-epidemiology serves as a sentinel for viral emergence and evolution (*6*), which can be applied to the COVID-19 pandemic. Harnessing the established infrastructure of community pharmacies enables coordination of appropriate testing, tracing, and isolation in these communities.

Ninety percent of U.S. residents live within 5 miles of a pharmacy, and in some underserved communities, pharmacists are the only health care provider (*7*). Community pharmacists are pillars of their communities with trusted connections with patients (*4*). Pharmacists are trained and authorized to order and administer COVID-19 testing (*8*) and have widespread authority to administer vaccinations (*9*). In addition, increasing numbers of pharmacists are participating in practice-based research networks (PBRNs) (*10*), which are designed to improve community-based health care by providing higher-quality chronic disease management.

University–community pharmacy partnerships follow the PBRN paradigm and harness the strengths of both institutions. Community pharmacies provide a geographically distributed network of accessible health care professionals and can serve as nodes for patient recruitment, whereas the university serves as a logistical and research hub to provide testing, reporting, contact tracing, educational resources, and the research infrastructure required to facilitate such studies. The University can also provide research personnel capable of managing these efforts, allowing the pharmacists to prioritize patient care.

The U.S. Centers for Disease Control and Prevention has recommended that health departments leverage community pharmacy partnerships to improve public health emergency response (*11*, *12*). We call on schools of pharmacy and public health to forge new relationships and leverage existing partnerships with community pharmacies to meet the current critical need to understand and mitigate COVID-19 and prepare for future pandemic response.

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