Social and Environmental Justice in Science, Technology, & the Production of Knowledge

A Nomination to the UNC Charlotte R1 Commission
(Nominating under "Areas of Existing and Emerging Excellence")

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Executive Summary (1 page):

Faculty in this area consider how science, technology, and the production of knowledge shape and are shaped by issues related to social and environmental justice--gentrification, access to medicine, food insecurity, air quality, access to and development of technology, building and neighborhood safety, resource extraction and use, and more. How do we understand the interplay between built/natural/and conceptualized environments (past and present)? And how might the theory and application of science, knowledge-making, and technologies inform our understanding of these areas (past and present)?

These questions are not, of course, relevant only to the present, or to the future. And if we ask them only of our present moment, we neglect the lessons we may learn from those who have struggled with similar pursuits throughout history; we also know that our present moment is only a partial picture of the lives of those who have come before us, so thinking through these questions as they have been framed in our past also provides alternative perspectives and ways of redressing the issues we face today. As such, we must look to how people have in the past sought to address similar questions in order to address our own. This enterprise, then, is necessarily interdisciplinary, spanning colleges and disciplines across campus.

The production of knowledge, whether in science or technology, is not linear but rather evolutionary and it cannot help but be shaped by the social and cultural contexts that necessarily complement the growth of knowledge. Many of the disciplines under the umbrella of science and technology focus on the fragile notion--albeit necessary--claim of "truth," and most make their claims for that truth with the voice of clear and unadorned assertion. And yet, this area emphasizes how both the so-called truths and the clear assertions in science and technology have little value without contextual *meaning*.

Fueled by works in the philosophy of science, feminism, environmental studies, post-colonial thought (to name but a few approaches) recent scholars have explored the very nature of how knowledge is constructed, to say nothing of how it achieves meaning in a wide array of cultural contexts. In these and other ways, the production of knowledge is neither experienced equally nor along lines of parity in human or nonhuman terms. To that end, the scholars listed have devoted their careers to excavating the cultural and social implications of knowledge and, in doing so, are strengthening the very ideas that must inevitably influence both social discourse and social action.

Challenging paradigms, an idea drawn from Thomas Kuhn's *The Structure of Scientific Revolutions*[1], is precisely the objective of the scholars assembled in our group. As Kuhn points out in his seminal work, advancements in science (or knowledge) are frequently the outcome of "outsiders" look at a discipline and questioning what is "normal" and thus conventional in an effort to break away from familiar and formulaic approaches to inquiry. Kuhn's own intervention, into the history of science, helps make the case for his argument. And we understand very well that our objectives as researchers and educators is to facilitate new ways of thinking in the many communities with which we intersect, which means collaborating among Humanities, Social Sciences, STEM, and Arts faculty to address the problems we face today.

Evidence of Strength and Excellence (2 pages):

The last decade has seen faculty at UNC Charlotte coalesce around issues of equity, social justice, environmental sustainability, and the significance of the cultural status of both sciences and technologies. In particular, the diverse faculty who are described in this proposal have worked to enhance the education of our students by offering insights into the kinds of intellectual skills needed in a regionally heterogeneous and internationally complex environment. In addition to the education that students have acquired about the intersections among science, technology, and culture, they have also learned about the very intricate and deeply nuanced issues associated with the production of knowledge in virtually every discipline.

Recent work at the *National Library of Medicine* (NLM), in conjunction with its parent organization, the *National Institutes of Health* (NIH) is a case in point. The NLM's travelling exhibit on Mary Shelley's *Frankenstein*, illustrates a ready-dialogue across fields to think about how work on science and technology might be informed by questions of social and environmental justice. Similarly, an early modern transcription project, collecting English recipes, stems from the collaborative efforts of literary scholars, botanists, and medical historians is sponsored by the renowned Folger Shakespeare Library (Washington, DC), the Royal College of Physicians, and the Wellcome Medical Library (both in London). Yet another project, the "Integrated Network For Social Sustainability: Concepts, Language, and Assessment" ($718,055), a SEES-RCN (Science, Engineering, and Education for Sustainability Research Coordinated Network) is funded by National Science Foundation; its purpose was to bring STEM, Social Science, and Humanities approaches to sustainability into greater dialogue. The breadth of work by faculty in our area is ideally situated to further and extend this disciplinary dialogue as they conduct research related to environmental health, the history of technologies, sustainability, and more.

Whether trained in the sciences and technology fields or the social sciences, or the arts, and humanities, we have collectively produced outstanding scholarship devoted to the cultural, social, ethical, and economic ambiguities inherent in both the production and ultimately the dissemination of "knowledge." This is a strength and an area of excellence that we are very proud of given that this approach develops convergence in colleagues, students, and community members who not only respect the mutually dependent natures of disciplines on campus, but actively encourage the open exchange of ideas. Intellectual growth requires the kind of integrity, dedication, and broad interdisciplinarity reflected in our group.

The notion of an "environmentally responsible and sustainable campus," is central to our work to promote environmental justice, and to enhance a sense of responsibility about social justice. If the university is to have standing at both local and national (if not internal) levels, it must evince a genuine engagement in social equity. But no less important, if we truly aspire to R1 status is the depth of our commitment to the kind of insatiable intellectual curiosity that is the hallmark of the greatest universities worldwide. This group reflects perhaps the most diverse array of disciplines forwarded to the R1 Commission as an interdisciplinary "area." Every one of these disciplines, taken separately or together, are the core of the very best universities, not necessarily in terms of yearly revenue, but in the kind of excellence that garners—from every constituency--respect, admiration, and distinction.

Our commitment to outreach to the Charlotte community can be found in virtually every faculty profile in this document. We have been dedicated to finding opportunities for growth in commerce, public service, health sciences, and community development, to name a few areas. And that dedication is reflected in the many academic achievements whether through distinguished publications, lectureships, awards, fellowships, and service to professional societies. The UNC Charlotte community has been strengthened by these achievements which have helped garner national and international attention for our campus, benefitting all students, faculty, and staff.

Our area faculty are accomplished in their own right, and while we have identified our group as aliging with an "emerging" area of excellence, some have already collaborated with each other. Faculty in this area are board members of non-profits and businesses (such as Clean-Air Charlotte), so they are already well networked with other experts and practitioners with whom we might forge further collaborations; they have received substantial funding from the NIH, NSF, and NEH (others?), and so they are already versed in writing and administering grants. Our group includes a Fulbright Scholar; an American Cancer Society Research Scholar; a national teaching award winner and Lemelson Center Fellow (Smithsonian Institution); an ASCE Fellow; an American Association for the Advancement of Science - Science and Technology Policy Fellow; and more. And our faculty have edited major scholarly journals and served as fellows and PIs on grants totaling over $8 million.

Further resources to build on the area group's successes would allow the group to channel its interdisciplinary strengths into the creation of an interdisciplinary Center that considers what we might do to navigate the challenges and opportunities we face related to climate change, the development and use of technologies, and the production of knowledge related to them, as well as how and why we might address them equitably in human and nonhuman terms. This Center, modeled after a similar center at Princeton University,[2] could consider the following topics as they relate to one another and as understood through the lens of multiple disciplinary (Arts, Humanities, and STEM in equal measure) perspectives, all with a particular eye toward social and environmental justice:

1. climate change, geography, and migration
2. host pathogen interactions and disease (for instance, COVID and EBOLA, etc)
3. organism/environment interactions both on a large scale that accounts for their material and cultural interplay (such as urbanization impacts, effects of acidified oceans and sea-level rise, extreme temperature fluctuation and infrastructure stress)
4. history/historical reference of humans and environment

With a focus on applying these questions to our pedagogy, we would also request resources to support team teaching and curriculum building that might model the sort of interdisciplinary work our faculty and Center understand as critical to redressing some of the most pressing issues of our time. Under the auspices of this Center, resources might also help support existing PhD programs as well as the potential development of others.

Alignment with Regional and National Priorities (1 page):

With its focus on social and environmental justice, this area considers more than just the "what" or the "how" of research and applications in science and technology, but also the "why" related to such pressing issues as climate change and sustainability, technological developments, environmental health, and more.

The National Science Foundation pays particular attention to Interdisciplinary Research and place less emphasis on the specific disciplines involved than on the need to "solve problems whose solutions are beyond the scope of a single discipline or area of research practice."[3] The NSF is aware of the fact that the work submitted to them may not conform with "an identified program," in which case they encourage contact with a project director. The NSF has supported conventional work—in environmental sustainability, for instance—but is also eager to expand inquiry into areas that integrate "field research" with the activity of centers and to support proposals that "challenge current paradigms." Our area is ideally positioned to submit just such proposals as the interdisciplinary quality of our group means that we naturally come to pressing issues from a variety of key perspectives.

It is well worth recognizing that these forms of inquiry are gaining traction in many academic and professional communities where they may have been neglected in the past. ABET, the accrediting organization for Engineering programs, insists on "quality standards," for a "better-educated, geographically mobile, diverse technical workforce well-prepared to advance innovation and excel professionally in fields of critical importance to society." In a similar fashion The American Society for Engineering Education (ASEE) has recognized the need for self-scrutiny in engineering practices in education. A telling reminder of the social and cultural problems facing engineering can be found in a statement produced by the ASEE which asks professionals "to advocate and act for positive change and sustained action addressing the inequities we see in ASEE, in engineering education, and in our local, national, and international communities."

This call to action is an important reflection of changing national priorities. As well-intended as it is, however, the concerns posed by the ASEE Commission require insights that have a long and complex history not merely in terms of "diversity, equity, and inclusion" of students, but in a comprehensive overview of the impact of "engineering history." Western countries have become so comfortable with technological determinism and techno-optimism, that there has been far too little attention to social impact of once admired and revered engineering "achievements" and "triumphs." Ring roads, like Charlotte's Belk Freeway, and cut-through highways, like Atlanta's I75-85 corridor, which received high praise only decades ago, are now reviled for choking the very cities they sought to enhance, and for displacing the disenfranchised citizens whose concerns were ignored.

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[1] Thomas Kuhn. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press, 1962.
[2] https://environment.princeton.edu/about/

Supporting Documents (Table and CV/Biosketch):

Name	Department	Area of expertise
Nicole Barclay	ENGR	My areas of expertise include socio-technical analysis of infrastructure systems, stakeholder engagement in water infrastructure planning and design, and engineering education for sustainability.
Balaka Basu	ENGL	We are still in the early stages of conceptualization, archival research, and data collection, but in this book, we plan to examine how the study of viral epidemiology, especially when considered within racial contexts and ecosystems, offers a greater understanding of how public health narratives, folklore, and misinformation travel through and thrive in various communities. Our focus will be on tracking such textual spread through print media during and directly following the 1918 H1N1 pandemic, beginning in white and Black neighborhoods in New York City and moving regionally outward from there. We have observed similarities between these 1918 narratives, the 1980s narratives regarding the HIV-AIDS pandemic, as well as present day Covid-19-related digital media, stories, and memes. It is our hope that the greater understanding of narrative "infections" can help to inoculate us against future pandemics.
Sandra Clinton	GEOS	Dr. Sandra Clinton studies a diversity of urban water issues including impacts of stormwater runoff on stream health, role of green infrastructure for improving water quality, and evaluating stream restoration as a mechanisms for increasing urban ecosystem services. She integrates these concepts into her teaching at the undergraduate and graduate level along with themes of sustainability, environmental justice, and environmental equity. She leads the Carolina effort of PROGRESS - Promoting Geoscience Research, Education & Success Program (https://geosciencewomen.org/) with collaborators from the Front Range region of the United States. PROGRESS improves the

		recruitment and retention of women in the geosciences through a series of mentoring and professional development activities. She is a member of the Department of Geography and Earth Sciences , Equity, and Inclusion (DEI) ad hoc committee and the University Graduate Recruitment and Success Working Group.
Sara Gagne	GEOS	My research, teaching, and service are very relevant to the R1 Commission proposal theme “Social and Environmental Justice in Science, Technology, and the Production of Knowledge." As an urban landscape ecologist, I explicitly consider the role of spatial heterogeneity in my work, an element that is central to many environmental justice issues in cities, such as the uneven distribution of street trees and the ecosystem services they provide. I also strive to consider how human values, activities, and social processes interact with the environment to influence biodiversity conservation. A major objective of my research, teaching, and service moving forward will be to focus on environmental justice issues in Charlotte and other urban areas so that the benefits of nature may be equitably shared by all city residents. The next paragraph provides more detail about my research, teaching, and service activities. My research focuses on understanding 1) the distribution, abundance, and diversity of organisms in relation to land covers and uses and their spatial arrangement in urban landscapes and 2) how socioeconomics, including human behavior and preference, influence species occurrence and persistence in urban areas. My research program also includes a translational component targeted at practical planning and design applications for urban biodiversity conservation. I employ a broad taxonomic lens in my research that encompasses birds, anurans (frogs and toads), the coyote (Canis latrans), and ground beetles (Carabidae). My recent projects include an investigation of the effect of urban form at multiple spatial scales on biodiversity, the

		identification of forest bird traits that predict responses to urban matrix quality, and a survey of southeastern US planners about the information they need to adequately conserve biodiversity in their jurisdictions. I teach urban ecology, landscape ecology, and field methods courses and I am the coordinator of the M.S. in Earth Sciences program in my department. I am also an active member of the local biodiversity conservation community in Charlotte.
Eric Hoenes	RELS	Eric Hoenes del Pinal's research focuses on the roles of language, communication, and religion in the changing lives of Q'eqchi'-Mayas in Guatemala. His project "Reading Laudato Si' in the Verapaz" examines the intersection of Catholic and indigenous understandings of human-nature relations in the face of climate change.
Katie Hogan	ENGL/WGST	For many of the world's people, animals, waterscapes, and landscapes, the urgency of climate change is not a new, isolated phenomenon but an echo of colonialism, slavery, racism, and capitalist extraction. Rising sea levels, wildfires, droughts, hurricanes, and earthquakes are entangled with histories of kidnapping, stolen land, invasion, and Christian patriarchy--the very mentalities and processes that put climate change into motion centuries ago. As trans poet Vivek Shraya boldly puts it, planetary degradation is linked to "whiteness the meteor that fractured our planet." These insights raise critical questions: For whom is the Anthropocene/climate change a familiar apocalypse and for whom is it singular and unprecedented? What kinds of climate futures do writers from communities deemed threatening, "apocalyptic," and "futureless"--Black, Indigenous, people of color, LGBTQ+--create? How do writers and theorists draw on their subjugated histories and critical imaginations to expand the boundaries of cli fi and environmental criticism? Imagining Climate Futures Through Queer and Trans Literature will explore these questions through

		a focus on texts that depart from the standard narrative of impending climate catastrophe and the heroics of white male geo-engineering schemes. The project explores the roles of white supremacy, enslavement, Christian glorification of gender binaries, and capitalist injustice to delineate what "counts" as world-ending for diverse queer and trans people.
Kyoung-Hee Kim	ARCH	Dr. Kim's research expertise lies in sustainable building technology toward an equitable and healthy built environment. For example, the patent pending microalgae window funded by the NSF contributes to building energy reduction, carbon sequestration, improved air quality, and occupant productivity and performance. In particular, this technology aims to improve air quality and occupants by deploying at residentials and K-12 schools located in environmentally injustice regions with bad air quality. Additionally, another NSF sponsored regenerative building system promotes off-grid self clean-powered buildings and electrifications for equitable and healthy built environment.
Janaka Lewis	ENGL/WGST	As I examine representations of Black girlhood in American literature and film through current research on Black girlhood and stories of liberation, (monograph in progress), I am also continuing research and grant-seeking toward a monograph for a public audience tentatively titled *Growing Towards Light: Black Women and Nature in Writing, Activism and Art.* This project asks what it means to look to Black women's writing about nature, land and food justice in conversation with media about what is being grown and created by Black women (both food and art) and natural spaces as sources of healing and sustenance. Following conversations continued rather than initiated by the COVID-19 pandemic and tragic incidents of anti-Black violence in 2020, this study examines representations of land claiming and connection in rural and urban settings alongside use of land to navigate

		justice and wellness in African American communities.
Paola Lopez-Duarte	BIOL	I have been working on the Climate Change Discovery and Adaptation effort led by Missy Eppes and the Environment and Sustainability proposal led by Rebekah Rogers and I've appreciated the perspective this has given me to the multidisciplinary approach to climate change within UNCC." Her comments give me even more thought that thinking forward and developing a real integrative institute structure would be great here. It seems that many of the pieces are already here but need to be brought together. I wish the Ignite Proposal deadline wasn't last week because we could ask for money to hold a "workshop/meeting" with speakers in each of these areas, and even include community stakeholders, and planning meetings about what something like thai would actually look like. I'm going to put this on my calendar for next year.
Brian Magi	GEOS	Brian Magi is an atmospheric scientist and climate scientist in the Department of Geography and Earth Sciences, with expertise in Earth system science and air quality. He is on the Board of Directors for Clean Air Carolina, working on outreach and events associated with CAC activities that themselves are thematically connected to climate change and air quality, and he closely works with CAC on planning out and managing the distributed network of low-cost air monitors that supply data for community outreach, public health, and air quality. He also has worked with UNC Charlotte's Charlotte Teacher's Institute (connecting UNC Charlotte with Mecklenburg K-12 teachers), sits on the Mecklenburg County Air Quality Commission, and gives over 10 public presentations every year about climate change to a wide variety of audiences.
Liz McCormick	ARCH	With a sizeable portion of the globe occupying hot-humid climate zones, Liz McCormick's research strives to enhance architectural innovation and construction technologies in

		rapidly developing tropical regions. She is an architect, educator, and researcher whose work explores climatically sensitive and contextually appropriate building enclosure designs that connect the occupant to the outdoors and reduce the dependence on energy-intensive mechanical conditioning.
Juan Meneses	ENGL	Juan Meneses works at the intersection of literary studies, culture, and political theory. His research and teaching are concerned with a variety of themes, all encompassed by an agenda focused on the examination of forms of political dispossession and efforts to restore political agency by the disenfranchised. His publications and courses deal with such issues as national identity, environmental justice in the Global South, inhabitancy and citizenship, foreignness, and visual representation.
Jen Munroe	ENGL/WGST	Munroe has published numerous monographs, essay collections, book chapters, and articles in the field of early modern ecostudies (with a special focus on the relationship between literature, material culture, and environmental justice). She is at work on another monograph, *Mothers of Science: Women, Nature, and Writing in the Seventeenth Century in England*, an ecofeminist literary history of science that examines the relationship between women, knowledge-making, nature, and writing in seventeenth-century England. In addition, Jen is a founding member and Steering Committee member for EMROC (Early Modern Recipes Online Collective), a group that is developing a public-access database of transcribed manuscript recipe materials from the early modern period. She also blogs about recipes and sustainability for EMROC, Shakespeare's World (a crowdsourcing resource that partners the Folger Shakespeare Library with Zooniverse), and The Recipes Project (an international, award-nominated blog series). Munroe's work with these groups stems from her interest in making women's manuscript recipes and the way women's everyday practices with plants in particular are instructive about their

		relationship with the nonhuman natural world available to a wider public as well as from her commitment to collaborative research.
Nicole Peterson	ANTH	Dr. Nicole Peterson examines how current food systems create inequities in access, as well as how participants envision how food could be better integrated into other kinds of systems and efforts, particularly non-governmental organizational responses to food insecurity. This work involves looking at how food is experienced, and how inequities in access tie to long-term discriminationatory processes in policy, land ownership, and definitions of food insecurity and hunger. Seeking food justice is both environmental justice and social justice, reaching from processes of production to distribution to consumption (and health) to waste. Currently, Dr. Peterson is collaborating with many food justice organizations in Charlotte to examine the current state of the local food system and its potential futures. In the past, Dr. Peterson led the Integrated Network for Social Sustainability, and the effort for Earth Semester at UNC Charlotte in 2020, as ways to bridge university and community interests around sustainability and social justice. An American Association for the Advancement of Science - Science and Technology Policy Fellowship from 2015-2016 provided key insights into policymaking relevant to environmental issues.
Alan Rauch	ENGL	Born in Montréal, Québec Rauch received his B.Sc. in biology from McGill University and also earned his MA in zoology with a thesis entitled "An Ethogram of Captive Bottlenose Dolphins." He studied English Literature at Rutgers University, where he obtained both the M.A. and the Ph.D. Rauch's research deals with the intersections among science, technology, and culture and his published work in that area includes *Useful Knowledge* (Duke, 2001). He has also published *Dolphin* (2014) and is completing a book on sloths. Currently at UNC Charlotte, he was on the faculty at Georgia Institute of Technology,

		where he implemented the degree program in Science, Technology, and Culture (STAC) and was a founding editor of the interdisciplinary journal, *Configurations: A Journal of Literature, Science, and Technology* (Johns Hopkins), which he edited for a decade. He has served as President of the Society for Literature, Science, and Art and is on the advisory Board of the Publications of the Modern Language Association, the premier journal in literary studies. His published essays have addressed scientific ethics in *Frankenstein*, the importance of "Observing the Unobserved in the Practices of Knowledge," and the notion of "extinction" in science and culture. He was a Fellow at Pembroke College, Cambridge, and was a recent TedX speaker on animals and social responsibility
Valerie Reynolds	GEOS	My academic and research background has been in geology. Specifically, I have studied the geochemistry of rocks from Earth, Mars, and asteroids. This background has given me experience in a variety of analytical methods as well as data interpretation. My interest in environmental justice developed somewhat accidentally in 2008 while I was teaching a Physical Geology course (in Maine) about how coal forms and what purpose it serves. I began researching mountaintop removal coal mining in Appalachia and coal ash contamination. Both of these issues have disproportionate impacts on low income communities and communities of color, and the latter is relevant to NC. Last year, I mentored an honors student on a project studying potential causes of groundwater contamination that may be a result of unlined coal ash ponds. However, the degree to which these contaminants are naturally occurring is not well-understood. I continue to work on this project.
Christine Richardson	BIOL	Dr. Christine Richardson is part of a broader group of researchers/PIs in BIOL with an interest in integrated health and environmental research (IEHR) that has been a focus of

		BIOL and it's 5 year strategic plan. Dr. Richardson studies a range of environmental agents/supplements/toxins that promote genetic mutations and disease. Elevated exposure to these can be related to air quality, water purification, climate change, and global warming. Thus, Dr. Richardson's research has implications for social justice questions around access to better living conditions or who may be more susceptible to altered climate and environmental conditions. In some of her studies, genomic data is obtained and genetic predisposition to sensitivity to certain environmental agents are determined. In these, Dr. Richardson's research considers who might have access to quality health care that enables information about predispositions and public health warnings.
Matt Rowney	ENGL	My work focuses on the intersection between literature and the natural world. More specifically, I study British Romantic literature in terms of shifting ideas as to the role of the natural world and the place of the human within it. My recent book project studies five substances (Stone, Wood, Oil, Salt, and Moss) in terms of the work of five Romantic authors, and seeks to uncover a story that these substances tell about the human/nonhuman divide through their literary, cultural, ecological, and economic instantiations. I am also interested in Literature and Science Studies, and have published an essay on Borges and Neuroscience. A current essay that I am revising for publication also deals with consciousness and environmental pollution as it relates to Coleridge's *Rime of the Ancient Mariner*.
Clayton Tarr	ENGL/WRDS	*Subterranean Imagination* traces the explosion of the geological sciences (including archaeology and paleontology) during the nineteenth century and locates connections to the development of children's literature. Through the study of stratification, geology shattered biblical time scales, evidencing humanity's brief period in the history of the

		earth. The study of fossils also revealed the diversity of pre-human organisms. But such diversity was also being discovered in the earth's nineteenth-century depths, as explorations of caves and the deep sea yielded new, ever more wonderful, species. This study shows that Golden Age children's literature also obsessed over depths, staging fantastic worlds in subterranean spaces. But the earth is not the limit of this fascination. In the latter half of the Victorian period, psychology developed amidst heated debates over the physiological construction of the brain and the material limits of cognition. *Subterranean Imagination* locates and examines fantasy worlds beneath the earth, under the sea, and into the mind to demonstrate how the nineteenth-century's fascination with the deep inspired and structured Golden Age children's literature. This project also studies the importance of deep thinking—mind, body, and matter—in childhood development, showing that the construction of the modern subject relied on building children's "depth of knowledge." This knowledge links environmental science with humanistic concerns, educating children on matters of social justice, inclusivity, and shared experience through the depths of the material world.
Oscar de la Torre	AFRS	Oscar de la Torre is Associate Professor of Africana Studies at UNC Charlotte. He obtained his History PhD from the University of Pittsburgh in 2011, and a Postdoctoral Fellowship from Yale University's Gilder-Lehrman Center for the Study of Slavery, Resistance, and Abolition, in 2014. He investigates slavery and the post-emancipation period in Brazil, Cuba, and the USA, with a special focus on the connections between environment, labor, and identity. He is also interested in the history of Amazonia; the oral history of slavery; in present-day black peasant movements across the Americas; and in the comparative analysis of race relations in Latin America and the U.S. De la Torre is the

		author of The People of the River (UNC Press, 2018), a social and environmental history of black communities in Amazonia that won the Association for the Study of the Worldwide African Diaspora's 2019 Outstanding First Book Prize, the Latin American Studies Association's Best Book in Amazonian Studies Award 2020, and an honorable mention at the 2020 Brazilian Studies Association's Roberto Reis Book Award . He has also co-edited special issues at Boletín Americanista on post-emancipation societies, and at Ofo: Journal of Transatlantic Studies on community engagement in the African Diaspora. He has served as a book and article reviewer for Hispanic American Historical Review, The Americas, The Journal of African American Studies, Latin American Research Review, and many others. Currently embarked in a study of the coexistence of inter-racial experiences and racist ideas in Matanzas (Cuba) in the realms of labor, leisure, and disease, Dr. De la Torre remains engaged in a permanent dialogue with scholars and activists from the U.S., Brazil, Cuba, and Europe, and enjoys surprising the students with the unexpected features of race relations in Latin America.
Brett Tempest	ENGR	Brett Tempest is an Associate Professor of Civil and Environmental Engineering at UNC Charlotte. His research is related to the development and performance evaluation of concrete and masonry construction materials, particularly from the standpoint of sustainability. This includes incorporating natural and recycled materials, improving durability, safety, and understanding the lifecycle of products from cradle to cradle. He is also active in engineering education research related to building student diversity and integrating service learning into the engineering curriculum.
Ralf Thiede	ENGL	Boisvert & Thiede (2020) propose that we treat language like any other natural resource to which society regulates access, such as water, food, and land. There is tremendous

		disparity, amounting to a de-facto apartheid system, in the quantity and quality of access to those resources. A few have it all: uncontaminated water, organic fresh foods, waterfront property at Lake Norman—and unhindered, unfiltered access to language and to the knowledge it unlocks. Alas, those privileged few that enjoy such resources in abundance tend to erect fences and paywalls around what they have.
Aaron Toscano	ENGL	My research interests relate to the above themes because I analyze technologies as products of society and how ideology influences the science post-industrial economies pursue. Whether I am examining the rhetoric of Guglielmo Marconi's wireless or detailing the experts' messages about facial coverings during an emerging pandemic, my goal is to understand how messages attempt to create an image of, idea about, or interest in technical subjects. Although my next book-length project is a comparative analysis on European and American values surrounding firearms, it follows the cultural analysis research I did in my previous monographs examining socially constructed technologies. I have a current lesson on COVID-19 rhetoric for my Science, Technology, and Society course that is the basis for an article I am currently researching. In terms of environmental research, I have an analysis of the video game *Fallout: New Vegas* that discusses how the immersive world's narrative challenges the prevailing neoliberal myth of resource abundance in contemporary Western throw-away societies. The player, forced to roam a wasteland in search of resources, reflects the vacuous nature of hyper-consumption in an anti-intellectual world that recycles old technologies because the previous pre-apocalyptic world's technological goal was 'advanced destruction.' The video game's storyline is of an alternative future, but the narrative comments on American culture's profligacy.

Greg Wickliff	ENGL	Greg Wickliff's research has been focused on the rhetoric of nineteenth-century American photography in scientific and technical texts and he is seeking a publisher for a monograph he has written on the subject. Much of his recent research explores the writing and photography of John William Draper, an important professor of chemistry and physiology at New York University, as well as a social historian of the nineteenth-century in the United States. Wickliff's research seeks to explain Draper's philosophy and to explore his many innovations in scientific photography and illustration. Wickliff's research into Draper's writing has led to funded research through the Smithsonian Institution and the Lemelson Center for the Study of Invention and Innovation. Wickliff has also written and presented work on environmental rhetoric and science communication more broadly.