I propose a long-term, community-based, multidisciplinary project that will engage residents of and visitors to Colorado Springs through guided experiences and curated stories that highlight the many ways research and creative works produced in higher education draw from, contribute to, and impact our city, region, and people. It will ultimately engage our local community members as both audiences and active participants in reflective and productive experiences, providing residents and visitors alike with a gallery of opportunities to better understand how the liberal arts and sciences are integral both to their everyday lives and to exceptional situations and experiences.

Why COS Interactive?

Importantly for the current moment, public understanding of the value of a liberal arts and sciences education—or even of what the liberal arts and sciences might be—is lacking, enabling the phrase to be reframed as something elitist and disengaged from most people’s needs and everyday existence. This kind of public messaging has led to common perceptions of higher education as a threat to the well-being of the general population—something that affects our ability to attract and retain students, to teach effectively in ways that lead to critical thinking, and to gain traction for our research. This project is designed to reframe public perceptions of the liberal arts and sciences. I strongly believe this will increase our ability as representatives of institutions of higher education to communicate across constructed divides, enhance our resiliency, and open conversations that can lead to thoughtful change as we work with our home community to reconsider what matters in our city and our world.

The project’s interdisciplinary approach will allow us to address these questions from multiple perspectives and through a variety of lenses, rendering our research more compelling and flexible as we engage community members in conversation. The transmedia elements we plan to employ will engage people from a variety of learning modalities and across several digital and direct platforms.

Access and accessibility

Accessibility is central to the success of this project. For that reason, we envision several (interconnected) ways to engage with the material we collect. First, we will develop on-the-ground experiences embedded within the Colorado Springs landscape, where participants will learn about how UCCS research has transformed or contributed to understandings of the areas they visit and where they can follow particular narrated experiences. These will be facilitated through placing metal tags with symbols and QR codes throughout the city. Symbols will correspond to general areas of knowledge (nature, health, history, creative works, etc.) to facilitate their being used as supplementary learning materials in middle and high school.
classrooms. QR codes will lead to thematic, interactive online exhibits—storymaps—integrating photos, videos, maps, archival resources, recordings of community members’ stories, and other information highlighting the interconnections of college and community as well as the ways individuals’ experience might be impacted by our work.

Second, we will create an online rollover map of Colorado Springs to enable those who may not be able to access the QR codes in the city (whether due to distance from their home or school, cost or availability of public transportation, issues of physical accessibility, or other) to have a virtual experience very similar to the embodied one.

Each thematic trail will correspond to a page in a virtual “passport” where interactors can collect “stamps” for each site they visit and engage with. Student interns under my direction will work to develop collaborative game frameworks that lead people through the different trails, each of which will have different levels of information (aimed at middle school students, high school students, and the general public). All these opportunities will be available and accessible to the public, and I am working with local teachers to develop modules for local classroom use (grades 6-12). The goal of the collaborative gaming is to incentivize people to complete the passport-modules while emphasizing the value of collaboration and collective knowledge, something that will further underscore our message on the many ways liberal arts and sciences engage with one another and with our collective quality of life and everyday lived experience.

**How will the project work?**

Under my direction and that of a coordinator (see budget below), students hired to work on this project (one per department or program) will collect and curate information from faculty and students in their major program within the College of Letters, Arts & Sciences about how research, creative works, and/or community-based outreach in the program reflect or impact spaces and experiences in our city and local landscape. The coordinator and I will group these into thematic “trails,” each of which focuses on a particular discipline, question, or experience—so, for example, we might have a geological “trail,” a medical “trail,” a historical “trail,” a literary “trail,” or a technological “trail,” each of which would have “trail markers” with QR codes linking to information about how work done at UCCS by faculty, students, and/or staff resulted in the item/event/experience/information at that trail marker.

For example, a medical trail might include sites where biotechnological solutions developed among our physics, biology, chemistry, engineering, and psychology faculty are built, tested, or implemented in medical centers; its QR codes might lead to stories about how those solutions were developed and whom they have helped. An environmental trail might highlight contributions from the dozen-plus departments where faculty and students conduct research around sustainability, urban gardens, alternative transportation, conservation, energy science, environmental chemistry, ecological economics, or the history and archaeology of mining and water in Colorado. Additionally, a single site might include markers for several “trails.” For example, at Garden of the Gods we could see intersecting historical, archaeological, literary, ethnic studies, and geological trails.
Using ArcGIS StoryMaps, a platform for which UCCS already holds a site license and for which we have a dedicated server, the project coordinator and I will design templates for each thematic series (that is, each trail) that will enable us to present accessible, visually compelling, and locally relevant public engagement materials and resources. Our ultimate goal is to give everyone, from longstanding community members to visitors, enjoyable interactive experiences that effectively impart a better understanding of how the liberal arts and sciences impact their lives in positive ways.

**Measuring impact**

Since both the field sites and the rollover map will have virtual components, it will be easy to embed web counters into each storymap that will track web traffic from the online and field-located QR codes. This will demonstrate engagement with the sites—both the online storymap and individual posted QR tags within the physical landscape. Patterns of engagement with the physical QR tags will also help us understand where to expand the project and where it is less effective in encouraging interactions. Finally, we can track how many people complete each “trail” using those web counters—this will both help us understand where the greatest interest is and give us insight into more ways we can engage the public.

Additionally, each of the “trails” will be tracked on a comprehensive virtual “passport” for which each scanned QR code will log a “stamp.” This encourages viewers to keep seeking additional information or points on the “trails,” much like passports of the National Parks do.

One way we hope to increase and prolong engagement with the stories themselves—and the impact of higher education in the local landscape those stories reveal—is to create mini-challenges and Easter eggs within the storymaps. For example, a storymap highlighting a particular site or event might ask people to upload a photo of that site/event with a comment for an additional “stamp” in the passport. Another storymap might alert viewers that there is collectible digital content (“Easter eggs”) hidden within the storymap, incentivizing their close engagement with that storymap—and we can embed web counters into those Easter eggs to see how many viewers find them.

**Additional benefits**

Because this project is designed to work both virtually and within the physical landscape, it will be able to serve as a resource for anyone, including those farther afield wanting to learn more about Colorado Springs as well as local students and community members during any kind of stay-at-home situation.

Further, because QR codes point to stable digital locations whose content is easily updated, we will be able to integrate invitations to events (talks, exhibits, performances, activities, summer camps, courses, certificates, etc.) related to the passport themes generally or to the specific subjects covered in an individual storymap, further encouraging and facilitating the public’s connection to higher education. Finally, we can track attendance at those events and include QR codes in promotional materials for those events that lead back to the trails themselves.
Timeline and workflow

Once we have hired a project coordinator, we will ask each department to identify a student who can serve as the liaison for that department and collect information about public-impact research done by members of that department (month 1). From then on, the project workflow will incorporate four main components: collecting information and grouping it into themes that will be used to develop experiential paths, or “trails” (months 2-7); creating storymaps as subcomponents of each of these trails (months 3-9) as well as designing the overall passport and rollover map (months 8-10); printing the aluminum QR tags and placing them in relevant locations throughout the city (following meetings with Kurt Schmitt in City Planning) and placing the corresponding geolocated points on a digital rollover map (months 10-12); and promoting the passport and trails via social media and posters downtown (month 12). Thereafter, we will track both the online interactions with the QR codes/storymaps/rollover map, and the numbers of people who follow their storymap experiences with direct engagement in any of the temporary activities highlighted in the virtual sites.

Budget ($49,375)

- $33,000  Half-time project manager (graduate student or recent graduate) to compile information on relevant research projects; delegate specific tasks to department-based student workers; oversee student work and be responsible for quality of materials produced; manage and update website; work with archivists; conduct outreach with local schools; coordinate production and posting of tags with City
- $15,675  Hourly pay for developing content (storymaps, audio narration, etc.), publicizing on social media, and updating as necessary (19 students, $15/hr, 55 hrs each)
- $700  200 UV-stable aluminum tags with QR codes

Note: Storymaps will be housed on the UCCS server currently managed by Geography & Environmental Studies; UCCS has an institutional license for ESRI ArcGIS StoryMaps software.

Future directions

Ideally, beyond the scope of the Timmerhaus funding, I hope to negotiate rewards for classrooms or community groups completing these passports—rewards that also serve the broader goal of enhancing public visibility and valuing of UCCS and the CU system. For example, if a high school history classroom completed a trail on Colorado Springs history and created their own storymap on some aspect of local history to add to the public archive, we might negotiate a $100 UCCS scholarship for each student in the class. The cost of the scholarship would be offset by increased enrollment; we would be constructing pipelines from local schools to our campus. We might create a virtual “treasure hunt” for middle school classrooms, or negotiate a discount coupon for a local business for visitors or those new to Colorado Springs (those with out-of-state IDs or license plates).