2022-23 CFE/Lenovo Instructional Innovation GrantsLetter of Intent/Final Submission Form

Tier 2 – greater than \$20,000

Instructions: All fields are required. Save this application form to your personal workspace. When you have completed it and are ready to submit, include your last name in the name of the final document (e.g., CFE Lenovo Application - Smith.doc) and upload it using the Qualtrics form by 5:00 PM on April 18, 2022.

After submitting your letter of intent, a meeting with CFE representatives will be scheduled to discuss the proposal. The meeting will either:

- Identify this as a project that should continue at the Tier 2 level and offer feedback for improving the submission, to be resubmitted by April 18, 2022, OR
- 2. Determine that this proposal might be more appropriate to revised to a Tier 1 level, to be resubmitted by Monday March 31, 2022

Principal Investigator Name(s): Sean Sylvia

PI's Academic Unit: Department of Health Policy and Management, Gillings School of Global Public Health

Pl's Email Address: sean.sylvia@unc.edu

Co-Principal Investigator Name(s) (if any):

Collaborators:

Please provide the name(s), status (faculty member, staff member, research assistant), and academic unit of all project collaborators and briefly describe each team member's anticipated roles on the project.

Feel free to reformat the table (add lines, resize columns, etc.) as necessary.

Collaborator Name	Unit	Role
Diane Pozefsky	Comp Sci	Advisor

Descriptive title for your project:

AcademicLife OS: A flexible productivity tool to support junior faculty

Course or Experience Learning Goals:

What course or experience will be the focus for your project? If appropriate, include a course number and title.

This project will focus on the junior faculty experience, particularly those new to UNC.

How often is it offered?

N/A

Briefly describe the role and importance of the course or experience in your unit's curriculum.

Junior faculty strategic planning and productivity is of general importance for research, teaching and service in every unit.

Please list the primary learning goals for the course or experience.

The tool will complement resources from CFE and elsewhere that teach new faculty:

- How to design a strategic plan linking longer-run goals with short-run objectives, projects and tasks
- Approaches to getting writing/research done
- Effective decision-making regarding project management
- Achieving work-life balance
- Efficiently engage and communicate with students and mentees
- Course design and continuous improvement

Personal Commitment / Interest in proposal:

Share a brief personal statement (maximum 300 words) of your personal interest in this project and effort available to implement this project. Why are *you* interested in this project, or what experiences brought you to ask the questions that inform this project?

This project began as a piece of software that I designed for my own use, trying to keep my head above water as a new Assistant Professor at UNC.

About a year in, I felt extremely unorganized — my previous workflow that I had used since graduate school no longer worked as I took on more research projects, students, teaching, and service. I started consuming all of the advice that I could find on academic workflows and productivity from podcasts, books, workshops etc. (in retrospect, I probably spent too much time doing this). There are a lot of great resources and strategies out there, but I personally struggled to put them into practice in a systematic way. I started building this software as a way to help me do this by giving myself a single "home base" that had these built in, automating practices where possible, and streamlining my workflow. As a behavioral economist, I've also tried to work in evidence-based "nudges" to help me meet writing goals and build good habits.

As I've spoken with colleagues at UNC and elsewhere, it seems that many of us struggle with the same question of how to organize our workflow and make sure we're using our time efficiently to achieve our goals. Of course, there are many productivity and project management applications out there, but nothing has seemed to be well-suited to academia. More recently, as a member of the Equity in Hiring Task Force in our department, we've discussed how something like this could be a useful tool for onboarding if pre-loaded with departmental resources, contacts, etc. (these are currently spread around shared folders on Sakai). I've also started to build a version for my graduate students, which I think will help them put in place good practices early on and will serve as a useful advising tool.

Proposed Innovation and the Role of Technology:

Describe your proposed innovation. What technologies do you plan to use and what role will they play in the innovation?

My current (prototype) version of this software is built in a no-code platform called Notion. This prototype works well, but there are constraints in Notion that limit what I'd ideally like to do. A more robust solution could be a dedicated SaaS implemented through Carolina CloudApps.

At its core, the Innovation is essentially a "Getting Things Done" (GTD) & project management application built for academics. The real innovation, though, is that it is a tool built to help junior faculty implement a system based on evidence-based advice on managing life as an academic: It's designed based on Systems Science and Behavioral Economics principles to systematize goal-setting, streamline workflow, and incorporate a system for feedback and improvement over time.

I've made a diagram of the system as currently designed and posted screenshots of the prototype here:

https://whimsical.com/academiclife-os-v0-1-3aURLmcHXw4WiXGLWpk33t

As you can see, this is a system of interlinked databases and dashboards dedicated to specific areas of work/life (This is based loosely on a similar system developed for non-academics called "PPV"). Though not currently implemented, I would also like to incorporate "decisions support tools" that use user data (shared optionally) & a series of questions to give junior faculty guidance on key decision points based on principles for optimal decision-making under uncertainty (I teach these as part of my Health Economics course for Masters in Health Administration Students).

When viewed together, the whole system is admittedly overwhelming – this is why there are a couple of main entry points that bring everything together in a digestible way. The main one is the "Daily Dashboard" where you can see all of your tasks planned for the day and quickly enter new tasks, meeting notes, etc as they come in, as well as see a calendar to look ahead at upcoming events and deadlines. The other is the Strategic Planning dashboard. Here, I've implemented an adapted version of Semester Planning and Weekly Planning processes taught by the National Center for Faculty Development and Diversity. The templates on this page essentially walk one through each of their steps in a systematic way.

There are many other features to this. Another key piece for academics that is not possible with other tools out there is a way to easily share project plans, meeting notes, task assignments/progress with multiple different teams of collaborators and students. While most people mostly work in single teams, many academics collaborate with several co-authors and groups of Co-investigators and project teams. It is possible in other project management software, this is difficult to implement and pricing models often make this prohibitively expensive.

Clearly, not all of the features as implemented would be applicable or useful for all faculty. Ideally, this would be implemented so that faculty could easily customize it to their needs.

Alignment with Learning Goals:

How will the proposed innovation support the stated learning objectives for the course or enhance student learning? If applicable, share how universal design principles or diversity, equity, or inclusion inform the proposal.

This innovation will enhance student learning by helping their professors be more organized and effective. The software also has features that support student advising – for example, I currently share a page of the system with my advisees that we refer to during advising sessions. Here, we have a template for their Individual Development Plans, meeting agendas, links to past meeting notes, etc...all this is shared by me and my students in Notion (kind of like an interactive shared google doc).

As mentioned above, I believe this could be a helpful tool to advance DEI goals. On the Equity and Hiring Task Force in my department, we've explicitly discussed how this can help with new faculty onboarding, which is a major obstacle for faculty from underrepresented groups. It can also be a useful tool for students/junior faculty of diverse backgrounds who often lack access to this type of "hidden curriculum" information.

Impact:

Describe the significance of the proposed project within a course or curriculum. How many students do you expect to participate each semester or academic year?) What, if any, potential exists for use in instructional settings beyond UNCCH? How might it impact the way other courses are taught?

This won't contribute directly to a course or curriculum, but will indirectly by making instructors more effective.

I've shared this with several colleagues outside of UNC-CH and have the impression that this would be widely useful. There are currently no software applications on the market or available open source that address the unique needs of academics.

Implementation Plan and Feasibility:

What are the major milestones for the project? Provide a rough timeline of activities indicating how and when your innovation will be implemented. What will be the major activities for the project, both leading up to and during the semester the innovation is implemented?

I already have a working prototype implemented in Notion. My plan is to first use this prototype to get feedback from other faculty willing to "alpha test" during summer 2022. Development of the dedicated software implemented on Carolina CloudApps can then begin in the fall and beta testing can take place in Spring 2023, for release in summer 2023. A potential detailed timeline is as follows:

- Summer 2022: Alpha testing using Notion prototype & incorporation of user feedback
- Summer 2022: Feature planning
- Fall 2022: Backend/database development for new application (CloudApps)
- Fall 2022: UX/UI design
- Spring 2023: Beta testing & iteration
- Summer 2023: First version release
- Fall 2023 onward: Maintenance/evaluation

Technology Support

What technical support, if any, will be needed to successfully implement the technology that you are planning to use? How much experience do you have working with the technology? Have you identified a person or organization to provide support? If so, please list that person(s) as a collaborator in your proposal in the collaborators section.

Although I have some experience designing platforms and software, I am not a developer. I would need to hire frontend and backend developers to work with me and interface with the ITS/the CloudApps team. Diane Pozefsky (UNC computer science faculty) has agreed to serve as an advisor on the project.

Sustainability:

What, if any, aspects relate to sustainability of the project (such as future updates, ongoing costs, shelf-life)?

My plan is to make this freely available to the UNC community and faculty at other select institutions (such as HBCUs). To support maintenance and updates, there are several sources of revenue that could be explored: 1) make available as "pay-what-you-can" software (this would involve making it freely available on an individual basis, but requesting that those who download pay what they are able to (donations); 2) licensing to organizations outside of UNC-CH; 3) external and internal grant funding. The extent of support, regularity of updates, development of new features, would depend on level of funding.

Relevance

Explain why the project matters. This may note how the project builds upon existing endeavors, or contributes to new, generalizable, knowledge or technologies related to teaching and learning.

Many junior faculty struggle with organization and developing and adhering to a work plan to achieve their goals. This is a tool – actually a system – that can help them achieve professional goals, achieve work-life balance, and be better teachers and mentors. For many new faculty, this will also save large amounts of time but by helping them to be more efficient and by alleviating the need to spend time researching and developing a system of their own from scratch. Anecdotally, many faculty spend large amounts of time doing this in their first year or two as new faculty members – this could give them that time to spend directly on achieving their professional and personal objectives.

Review of Similar Projects:

Conduct an informal search for projects like the one you are proposing and share any citations or links that you find particularly helpful.

For Tier 2 *Final Submission* you **are** expected to conduct a formal literature review. For the Tier 2 *Letter of Intent* we are simply asking you to make a good-faith effort to see how the work of others might inform your own proposal.

Ironically, I've personally spent an inordinate amount of time trying different tools for task and project management as well as researching evidence-based practices for strategic planning and productivity. There are good applications for task management (e.g. todoist) and project management (Asana, Trello, etc). There are also many good resources (workshops, articles) on managing life as an academic and academic productivity. There is currently nothing on the market or available for free that brings these together that I am aware of. Specifically compared to other task and project management applications, what I am proposing:

- Systematically implements of strategic planning; helping faculty set and adhere to long-term, semesterly, and weekly goals
- Links these goals to projects and tasks
- Automatically collects data on time use, daily writing practice, and other metrics that faculty can use to improve over time
- Provides "decision-making tools" based on evidence-based practices to help faculty decide what projects/papers to take on, when to kill unsuccessful projects, what journals to submit to, how to prioritize, and other critical decisions
- Facilitates collaboration with multiple sets of collaborators and students through shared project and paper pages
- Incorporates templates for project management, different types of meeting notes, documents (e.g. journal review reports), etc
- Is flexible and can easily be adapted to the specific needs of individuals, departments, institutions

Budget:

Funds can be requested to cover the direct costs of any product or service integral to the success of the proposed innovation (e.g., technology, faculty stipends, staff, student salary support). Please list the total amount requested and an estimate for each item. For each line item, please provide a brief rationale.

Note: For projects that require the purchase of commodity hardware (e.g., computers, tablets), you are not required to purchase Lenovo products. However, you may be asked to consider comparable Lenovo product offers because of our ability to work with them directly.

Feel free to reformat the table (add lines, resize columns, etc.) as necessary.

Item	Estimated	Brief rationale	
	cost		
Note: These are estimated cost for development of initial working version			
(activities until end of Fall 2023). Does not include subsequent maintenance,			
evaluation, updates – funds for this could be raised externally.			
Graduate student support	\$7,680	Student to assist with user-testing over	
		summer	
Backend development	\$40,000	5 calendar months of developer time to	
		build backend	
Front-end developer	\$10,000	3 calendar months frontend developer	
(UI/UX)		time	
Digital assets/Art	\$1000	Licensing costs for digital assets	
Cloud Computing	\$0	Carolina CloudApps or donated credits	
		on AWS (Initial – will	
Project manager	\$20,000	50% time project management support	
		for 1 year	
Consulting Faculty – UX/UI	\$4,000	0.5 calendar months faculty time to	
		consult on UI/UX Design	
Consulting Faculty CS	\$6,000	0.5 calendar months faculty time to	
		consult on backend development	
PI time	\$7,000	5% (0.6 calendar months) PI time to lead	
		project	
Total	\$95,680		

Dean/Department Chair/Director signoff

By your signature below, and that of your dean, department chair, or director, you each certify that this proposal is consistent with the goals of your unit and the professional goals of participating faculty members, staff, and graduate students.

Grant applicant (primary contact)

Department Chair or Dean