

## Research & Scholarship Council Recommendation

The Faculty Senate Research & Scholarship Council (SCORS) recommends UF provide campus-wide access to project management and Electronic Lab Notebook software. These software support faculty conducting research projects and allow for greater collaboration and communication. The exploration should focus on two software tools. One would be a Project Management tool and the other one would be electronic lab notebook software. Accordingly, we designed a brief survey that we emailed once to our salaried faculty. 183 Faculty responded and the extended results are attached and summarized below.

### Project Management:

- 84.0% Do not already use or own Project Management Software
- 86.4% Would use it (yes and maybe)
- They would like to use it for example for: Multiple project management, Collaboration, Communication, % project completion, Time tracking, Issue tracking, etc.

### Comments from different respondents:

- *it is critical, I had hoped around for a whole year and seeing that UF was not doing anything decided to use Onenote.*
- *Research reproducibility tools are increasingly being expected from federal funding sources, with public access to all data. I think this could help organize us from the beginning...*
- *Would greatly facilitate multidisciplinary teams*
- *Time management and lab workflow*
- *I rely heavily on BaseCamp for large grant projects - having a UF-based software (NOT Sharepoint) would be very beneficial.*
- *Helps with managing projects with my Co-PIs.*
- *Communicating across groups and platforms is common so having software to facilitate this would be valuable. I am currently using Basecamp through a NIH funded consortium*
- *This has been discussed for years that it was coming and it is still pending. Any rigorous investigators need it now. There are more regulations by the NIH and the FDA and others that such system is now essential. This would ease the life of investigators and all faculty members. It would be great if the University can sponsor part of the cost. While we are not looking for one system fits all, a system that can work with our calendar and standard Microsoft doc would be great. The goal is to be able to manage each project over time (and from anywhere) without having to send many emails. Thanks for such effort.*
- *I haven't used such software but I could potentially see this as a highly valuable research tool.*
- *Necessary, would be great to have an integrated tool*
- *I would like to use PMS for all 3 of my ongoing research projects, and I would like to have a lab-wide project as well. I'm VERY interested, having had a lot of success with PMS in the past.*
- *It would to help manage several projects (5-10) and I need the ability to plan, execute, and monitor projects.*
- *I think it would help organize members of our collaborative teams.*
- *I think is becoming more critical to the future success of my research group.*
- *I think our lab would definitely use it... I think an ELN would be a higher priority though*
- *Can be extremely useful provided my team gets proper training*
- *Makes management of multiple projects easy*
- *I would also be very hesitant to trust "mission critical" information for my research to software without a long-term, >10years, of support from the vendor.*

### eLabNotebook (ELN):

- 91.3% Do not already use or own ENL
- 79.7% Would use it (yes and maybe)

Comments from different respondents:

- *Have not used, but am interested*
- *We absolutely need this*
- *Extremely useful to prevent data and info loss*
- *Highly useful for both data security, integrity, and accessibility*
- *Critically needed for documenting student and project progress, as well as lab meetings, collection of pertinent data and literature.*
- *We use paper notebooks but they are incomplete because it is difficult to get all the important data we need in a paper notebook.*
- *It has been extremely useful for sharing data and protocols with other lab members.*
- *This would be very useful. Most of our data is electronic, so with electronic notebooks we can keep the data and other experimental records and notes in the same place.*
- *This would highly ensure quality and version control. This would also provide a way for the PI to supervise lab members' work.*
- *Extremely useful to us as researchers and also the University OTL if the notebook is properly utilized*
- *We have MANY simultaneous projects and keeping track of all projects without something falling through the cracks is the main issue.*
- *It's about time, in 2017 that UF is considering this. While most companies and serious research institutions have been investing in it. This is essentially now required by the new rules and regulations for the NIH about Rigor and Transparency, etc. This is also required by anyone who wants to file an IND or apply to the FDA. This would help all faculty members to satisfy these new requirements and then it can be mentioned such that it would increase our percentile on grant submission through the Study Sections. 1. It would provide transparency; 2. it would facilitate collaboration; 3. it would store info/data in a secure server; 4. it would improve accuracy and precision; 5. it will be searchable; 6. it will be developed in parallel with lab info management systems, 7. It has the potential to directly collect data; 8. At this end this is very cost effective; 9. These are the traditional lab notebook of the future and we need now. We need it to teach our students and next generation of scientists. It is just a question of time before everyone has one.*
- *Might be useful for our undergraduate volunteers.*
- *It is always problematic when students want to take their lab notebook with them when they graduate, but I need to keep it here. Plus, they are not very organized with the notebooks, and I should be making them all follow a similar recording procedure. However, it seems like it would be rather clumsy to do a chemistry type of experiment and record observations when the lab notebook is not laying next to you on the lab bench. But if they can snap a photo with their cell phone, and type in observations on a cell phone or lab iPad, or other data by that means, it might be useful.*
- *PIs need a way to search data entries, even after lab personnel leave the lab. There needs to be a central place for data storage with an easy way to link all data from 1 experiment together.*
- *We switched to an ELN this year. It is hard to get used to but I can tell that our notebooks are now much better quality. Now that we are used to it, it is a much better way to archive data than a paper notebook*
- *I would like to know more I hate wasting paper*
- *I have 2 labs... electronic notebook would help with not having data in the right place at the right time.*
- *This too will be critical to my group's future success.*
- *This would be a big help to our lab*
- *ELN software is essential to my research. I use it daily and refer to it often.*

SCORS recommends creation of a working group with proper stakeholders to plan implementation of campus-wide electronic tools to help faculty members to be more productive using Project Management software and electronic Lab Notebook.

Here is one (or many) website reviewing Electronic Lab Notebooks (ELN):  
<http://splice-bio.com/the-7-best-electronic-lab-notebooks-elN-for-your-research/>