

iDigBio may receive additional funding for the remainder of the grant. What do you think are our most pressing needs?

- Persons hired on supplemental funds
 - One FTE, in the administrative unit of iDigBio, is an important liaison with TCNs.
 - A second FTE, in ACIS, is developing a state-of-the-art user interface to provide consumers of data easy access to data in the specimen data portal.
 - The third, a 0.5 FTE, at FSU, is a software developer who is responsible for integrating the Morphbank image management system into the iDigBio software.
- New positions:
 - 1 FTE to assist with IT aspects of data migration from TCNs/other institutions to iDigBio; a data integration expert to be the point contact person for new data sources that need to be represented in iDigBio's systems.
 - 1-2 FTEs to focus on the integration of public participation into the digitization of biodiversity specimens: (1) a post-doctoral scholar in the Mast lab at FSU to focus on methods of establishing public participation as part of iDigBio, and (2) a programmer in ACIS who focuses on both producing interoperability between iDigBio and existing cyberinfrastructure for digitization of biodiversity specimens and tailoring the iDigBio portal interface to meet citizen science needs.
 - 1 FTE to enable the use of collections data in addressing big-science questions by integrating tools and services into a computational environment for data integration, analysis and visualization.
- Ingesting data
- Additional professional training workshops – including reaching out to non-ADBC funded collections that need opportunities to improve workflows and best practices.
- Improving efficiency of the actual digitization process
- Positions identified by PIs during NSF Site Visit
- No real knowledge of this.
- Maintaining Present Funding levels through year 5.
- Funding on-site data mobilization support, possibly as a full time staff position.
- Infrastructure.
- Ramping up E&O, for sure. If we are serious about the feedback from the site review panel, then we need to allocate more resources to Evaluation, and develop metrics of success.

- The staff and resource facilitating the code development is the core and most pressing needs.
- Unfortunately, I am not well suited to answer this question. It seems to be a managerial level inquiry.
- From an IT perspective, it is the opportunity to do more in areas that were not anticipated earlier as good areas of investment: crowd-sourcing cyberinfrastructure, and closer engagement with data providers for smoother and faster data integration.
- Development of the portal and development of interoperability with other cyberinfrastructure, including that which engages the public in digitization.
- Good copy / technical writers
- Lending material for small collections digitization, organization of workshops, funds for outreach projects
- Not really in a position to answer this one...
- Getting enough data into the system so that it is a critical resource for researchers and collections.
- Making sure all the different audiences are not only aware of iDigBio but also users.
- Reaching underrepresented groups was a clear priority of site visit reviewers. Achieving that is an important but very challenging outcome.
- Coming up with an effective way for the TCNs to engage the public and use crowd-sourcing for data entry etc.
- In particular, IT needs someone specializing on data-related IT issues and testing.
- A partial hardware refresh/extension may be needed in two years.
- Meeting the off-site storage expectation.
- Sustainability. It's surprising to me that sustainability isn't addressed before a NSF project has started. However, that appears to be consistent across NSF informatics projects as I've observed.
- Absolutely must get online a workable search engine that will retrieve images. It is an embarrassment to try and demonstrate the functionality (and therefore potential) of the hub.
- Have Specimen (Collection Object) Identifiers model working – as a community example.
 - Other identifiers too if possible as a working model, a la MISC, (BiSciCol).
 - Whatever it takes to get this to happen with specimens connected to related documents, other sites, and media objects.
 - If a new extension is needed to DwC, we need to get this started.

- This would be a major accomplishment.
 - include requirement to use Global Repository of Biodiversity Collections (GRB) for
 - Institution Code
 - Collection Code
 - (Owner Institution ID)?
- Once we have some successful examples – easier to show others it works – for them to follow suit.
- Use GNA – set up a successful example.
- I think iDigBio should continue providing resources to the digitization community via workshops and symposia. I think it is imperative that we take a deeper look at the impact of the development of the specimen portal on our resources and make adjustments necessary as they impact the priorities mentioned in question 2.
- Support for expanding the data acquisition and management activities.
- Marketing! If iDigBio is successful in developing a solid marketing plan for engaging our end users, we will need money to implement its activities. We can think creatively about what vehicles are most effective in engaging our audiences--e.g., increased presence at scientific meetings, popular media, and educational programming. However, these activities will require significant financial resources. Do we have budget for this? In most cases, it is cheaper to farm out the work than it is to hire and maintain the staff to carry out the work.
- The above list (answers to #2) are essentially what we proposed to NSF and are funded to deliver. However, accomplishing all of this in the allotted time with the allotted funds seems like a HUGE challenge at this point. Minimally, we need to get the portal fully functional; if this happens, most of the rest will follow.
- Staff to support targeted onsite digitization consultation, funding to award competitive digitization start-ups (mostly for equipment), increase staff to support expanding opportunities for public participation in collections digitization, purchase digitization equipment stations to be owned by iDigBio for testing and learning and to use in workshops, initiate image analysis research and development to enhance and maximize the use of specimen images.
- IT development. Alex and others on the IT team are great, but they can only do so much.
- Also, in terms of coordination we are only starting to engage and be noted by international and national organizations that could be (and want to be) partners in various ways. For example, there's the blog item about genetic resource repositories, but I missed significant reference to Genomic Observatories, GGBN, and GGI, nor do they reference iDigBio in their

literature, though they do talk about vouchers and biorepositories in general. Whether or not genetic repositories is part of the iDigBio scope, the vouchers that go with the tissues and genetic material are.

- I'd think focusing on the pressing needs in working closely with our multiple providers to mobilize data into our system, and also working closely with and integrating software tools from the bio-collections community.