Frequently asked questions about VIVO Scholar

Benefits of VIVO Scholar

Our institution already has a VIVO site. Why should I use VIVO Scholar?

VIVO Scholar was created in response to the Leadership Group's Product Direction statement for 2019, which calls for modernizing VIVO's user interface or presentation layer and decoupling the VIVO architecture. VIVO Scholar is a separate component, part of VIVO's move towards a more modular architecture.

VIVO Scholar's biggest benefits are:

- It's easy to customize. The VIVO Scholar user interface can be customized by a web developer skilled in HTML, CSS, and JavaScript. The VIVO Scholar user interface is built with web components, which are reusable elements with encapsulated functionality.
- It publishes VIVO data using GraphQL. Installing VIVO Scholar Beta includes GraphQL, which is a user-friendly query endpoint that simplifies sharing data with others in your institution. GraphQL is modern, accessible, and easy to configure. Web developers love the browsable schema documentation and an interactive query builder.

With GraphQL, your institution can display your VIVO data on departmental, lab, and individual websites, such as for a list of recent publications, a faculty directory, and a search for researchers by discipline, such as cancer or infectious diseases. VIVO Scholar provides an institutional workflow for faculty to update their data in one place. "Update once, use everywhere."

What new and improved features does the VIVO Scholar Beta offer?

VIVO Scholar Beta provides:

- Improved facets and filters in Search results to enable users to find exactly what they need. Back-end developers can add facets customized to their own data. Details about how to do this will be available later in the VIVO Scholar README in GitHub.
- Lightweight so it loads pages quickly.
- Accessible and confirms with the Worldwide Web Consortium Content Accessibility Guidelines (WCAG 2.0 Level AA).
- Localized so that page headings and labels will be displayed in supported languages. (With the community's help, we can make future versions of VIVO Scholar fully language-aware.)
- A mobile-friendly, responsive design that works with devices of all sizes.

Will we lose any functionality using VIVO Scholar profiles instead of VIVO profiles?

The VIVO Scholar Beta is read-only. VIVO Scholar works with VIVO, which can serve as the editing interface.The VIVO Scholar Beta is a minimally-viable version of VIVO, supporting people, organizations, publications, grants, and courses data.

Here's a quick comparison of VIVO and VIVO Scholar profiles:

- Visualizations in a VIVO profile are not yet available in a VIVO Scholar profile. Visualizations can be added by VIVO Scholar developers, and we hope that they will be.
- Tabs on a VIVO Scholar profile are consolidated into fewer tabs than on a VIVO profile.
- More data fields are available on a VIVO profile. Other data types can be added by a back-end developer; details about how to do this will be available later in the VIVO Scholar README in GitHub.
- Contact information is shown at the top of a VIVO Scholar profile rather than on the Contacts tab in a VIVO Profile.

The search results in VIVO and VIVO Scholar differ as follows:

- VIVO Scholar shows search results in tabs, with People, Publications, and Funding.
- VIVO Scholar has facets that allow users to restrict search results by school, department, position, and other facets on the People page. Publications can be restricted by type, date, author, and publisher. Funding results can be restricted by contributor or funding source.
- VIVO Scholar enables results to be sorted by, for example, relevance, title, name, or date.

What are the benefits of GraphQL?

VIVO Scholar's GraphQL endpoint provides an easy, developer-friendly mechanism for sharing VIVO data with local websites at your institution. GraphQL makes it easy to create dynamic web content such as:

- A list of publications that is updated when new publications are added to VIVO
- A faculty directory with names, titles, and photos, depending on your data in VIVO
- A list of research outputs created by a search topic, for example, recent grants about cancer
- Faculty profiles customized for a department's or lab's website

 The GraphQL endpoint works like VIVO widgets does for institutions such as Duke; with GraphQL, web developers can easily set up data feeds to their local websites. Repurposing data is an important institutional benefit because it makes institutional data available to the units for their own purposes.

Data can be loaded to systems for reporting and dashboards, such as Tableau, and other content management systems such as Drupal.

Evaluating system requirements

What are the system requirements?

There is no single recommended configuration for VIVO; it depends on how much data will be loaded into VIVO. For more information, see the VIVO hardware and software requirements page in the VIVO wiki.

For specific information about installing VIVO Scholar, refer to the VIVO Scholar README in GitHub. For information about installing Scholars Discovery, read the Scholars Discovery README in GitHub.

Which tools and technologies are used in VIVO Scholar and what level of familiarity is needed for each?

This depends on how much customization is planned for your implementation. To customize VIVO Scholar to your own institution, to add search facets, and to consume data from GraphQL, web developers will need to be skilled in HTML, CSS, and Javascript. The following tools are used:

- Web Components
- GraphQL

To add data fields, customizations, or more functionality to the VIVO Scholar UI, back-end developers will need a familiarity with the following:

- VIVO ontologies
- GraphQL
- Scholars Discovery
- Java

Do VIVO and VIVO Scholar run at the same time?

Yes. The VIVO Scholar Beta currently works only with a VIVO implementation.

Existing VIVO implementations can add VIVO Scholar + Scholars Discovery to their VIVO project. New VIVO implementations can install VIVO and VIVO Scholar + Scholars Discovery.

Another option is to install VIVO and with Scholars Discovery, then use the GraphQL endpoint to create your own user interface. For information about Scholars Discovery, see the Scholars Discovery README in GitHub.

I don't have a VIVO instance running. Can I still use VIVO Scholar?

No, the VIVO Scholar Beta works only with VIVO. However, future development work may add capabilities to use VIVO Scholar without VIVO, in accordance with the discussion at the 2019 Architectural Fly-In. For more information, contact anyone on the VIVO Scholar Task Force.

Which ontologies does VIVO Scholar support?

VIVO Scholar displays data provided by GraphQL and Scholars Discovery. Scholars Discovery supports the VIVO ontologies. To find more about Scholars Discovery, refer to the scholars-discovery repository.

Which versions of VIVO are compatible with VIVO Scholar and Scholar Discovery?

VIVO sites using versions 1.10 and 1.11 enable data to be exported in TDB file format, which is the simplest way to load data into Scholars Discovery. Data exported in SDB format from earlier versions of VIVO can be used with Scholars Discovery too, and there is also a SPARQL interface for loading data into Scholars Discovery. See the harvester information in the Scholars Discovery README in GitHub.

How does the VIVO ontology map to GraphQL – is that documented?

One of the great features of GraphQL is that it's self-documenting. Just refer to the GraphQL endpoint list to see the data available.

What's the process for setting up VIVO Scholar?

Installation instructions are detailed in the VIVO Scholar README and the Scholars Discovery README. Additionally a Docker-based quickstart is available at: https://github.com/vivo-community/vivo-scholar-ui-demo

How do I use Scholars Discovery and GraphQL without the VIVO Scholar UI?

Yes, Scholars Discovery provides both GraphQL and REST APIs based on your VIVO data. Use these to provide data to non-semantic consumers.

What will happen to my existing VIVO site and my existing URLs?

Your existing VIVO will continue to function as is. Vivo Scholar provides an alternate UI with its own URL scheme.

Loading data

How long does it take to import data?

That depends on your data set. Loading time depends on the number of people, publications, grants and courses being loaded. The sample data set includes 26 sample researchers and loads quickly, in just a few minutes. We estimate that TDB files take about 15 minutes per 100 researchers to load. Objects with lots of properties also affect loading time.

What are my options for loading data into Scholars Discovery?

By default, Scholars Discovery loads from a specified TDB directory. SDB and Sparql harvesters are available. See the Scholars Discovery README for more information.

How should I prepare my data for VIVO Scholar and Scholars Discovery?

To use the default TDB harvester, export your data in TDB format.

Customizing VIVO Scholar

What internationalization goals does VIVO Scholar address?

VIVO Scholar provides translation of static text and labels. VIVO Scholar could become fully language-aware in future versions.

How are photos managed?

The image exists only in the running instance of VIVO. Scholars Discovery could (eventually) harvest images and put in a file store. Currently, we can't make images part of the sample dataset.

How can I customize the layout of the profile pages?

VIVO Scholar runs on Go Buffalo (https://gobuffalo.io/en/) and uses Plush templates (https://github.com/gobuffalo/plush).

How do I apply my institution's color pallet to VIVO Scholar?

Colors are set via environment variables documented at /docs/elements/color-palette of your running instance. Default values can be seen at: https://vivo-scholars-scholars.cloud.duke.edu/docs/elements/color-palette

Planning future enhancements

What's the process of transitioning the beta release to a production release?

This is a discussion currently underway in the VIVO committers group. It's possible that we can schedule a community sprint in the fall of 2020 to move VIVO Scholar to a production release.

What enhancements are planned for Scholar Discovery?

Stay tuned for more information.

What enhancements are planned for VIVO Scholar?

Enhancements to VIVO Scholar Beta will come from two groups:

- The VIVO developer and committer communities will provide guidance regarding necessary enhancements as well as help develop, test, and document enhancements.
- Duke University and others on the VIVO Scholar Task Force will continue to contribute enhancements and improvements throughout 2020 as they deploy VIVO Scholar in their own institutions.

Will the VIVO Scholar Task Force continue to meet?

With the beta release, regular weekly task force meetings have been suspended and the task force will continue to meet upon request.

Who can I contact if I have questions or find problems?

Please send development questions and issues to the VIVO-Tech email list. Strategic and implementation questions can go to the VIVO-Community list. Of course, you're welcome to reach out to anyone on the VIVO Scholar Task Force. We're happy to help directly or point you to someone who can give you more information.