

# **Scholars@Duke Data Consumer's Guide**

*Aggregating and consuming data from Scholars@Duke profiles*  
*February 2018*

# Contents

<b>Getting Started with Scholars@Duke Data</b>	<b>1</b>
Who is this Guide for?	1
Why consume Scholars@Duke data?	1
How up-to-date is Scholars@Duke data?	1
What limitations may I find in Scholars@Duke data?	1
<b>Using Scholars@Duke data</b>	<b>2</b>
Widgets	2
SPARQL Endpoint	5
Drupal Module	6
Sites@Duke (WordPress)	6
<b>Elements Reporting</b>	<b>7</b>
Features of the Elements Reporting Tool	7
Getting Started with the Elements Reporting Tool	7
Advanced Use of Elements Reporting	8
Getting Help and More Information	8
<b>Widgets Data Dictionary (Complete feed, JSON)</b>	<b>9</b>

# Getting Started with Scholars@Duke Data

## Who is this Guide for?

This guide is written for anyone who is interested in aggregating and/or exporting data sets from Scholars@Duke. Scholars@Duke provides several methods for exporting data for individual profiles, as well as profiles across entire organizations. This guide will help you get started by providing details about what data is available for consumption and what the options are for connecting to the Scholars data.

Once you have read this guide and become a Scholars Data Consumer, these are additional resources to help you stay engaged with updates to our system and data:

- Check the Recent Updates Page (<http://about.scholars.duke.edu/recent-updates>)
- Join the Scholars@Duke Data Consumers mailing list. Please email [scholars@duke.edu](mailto:scholars@duke.edu) to request to be added.
- Review the Support for Data Consumers page which provides maintenance guidelines for vendors and website administrators (<http://about.scholars.duke.edu/sites/default/files/Support%20for%20Data%20Consumers.pdf>)

## Why consume Scholars@Duke data?

Scholars@Duke displays researcher data sourced from official systems of record at Duke University. From each of these source systems, researchers and their delegates have the ability to maintain and customize the information that they prefer to display on their public profile. There are several benefits for re-using the information that is provided in Scholars@Duke:

- One-stop shop for Duke faculty data
- Authoritative information about Duke researchers
- Data is consistently structured across all researchers in all organizations
- The underlying linked data model facilitates data aggregation and complex network analyses
- Customizable and dynamic data feeds available in multiple formats
- Minimizes data maintenance in downstream systems and applications

## How up-to-date is Scholars@Duke data?

Scholars@Duke is refreshed nightly from its source systems. Researchers and their delegates can trigger real-time data refreshes via the “Manage My Profile” feature. When a new faculty appointment is created or ended, the updated information will be indicated in Scholars@Duke in 24 hours.

## What limitations may I find in Scholars@Duke data?

The data available in Scholars@Duke is ideal for most data consumer needs including downstream web applications and analyses. However, for tasks such as CV generation or non-public reporting, Scholars@Duke will provide a starting point from which additional information may need to be added.

- **Hidden/Private Data Not Available**

Scholars@Duke only displays data that is approved to be publically accessible. For the most part, researchers and their delegates are able to designate which elements of their profile they want hidden. This could include individual data elements, such as a grant or course, or entire sections such as Publications. Grants from private sponsors are hidden by default pending review of publicity restrictions.

- **Some Legacy Data Not Available**

Some data sections in Scholars@Duke such as Appointments & Affiliations, and Courses provide only the most recent data. Expired appointments and courses older than 3 years old are not be available.

- **Subject Heading are limited to select vocabularies**

In support of the linked data structure underlying Scholars@Duke, official controlled vocabularies are used whenever possible to facilitate data aggregation and data sharing. A user can select subject headings from one of three approved sources, the Medical Subject Headings (MeSH), the Library of Congress Subject Headings (LCSH), and the Scholars Duke Vocabulary. The Duke Vocabulary is relatively new and provides users a way to request that new subject headings be available. This list is curated by the faculty data team.

- **Only Current faculty and select researchers available**

Scholars@Duke provides web profiles for all current Duke regular-rank and non-regular rank faculty members. This means that the person has an active appointment in dFac, Duke's faculty appointment system. Faculty must maintain a current primary appointment at Duke in order for their profile to remain active in the Scholars@Duke system.

Web profiles are also available for some non-faculty researchers including Duke students, staff, and affiliates. Non-faculty profiles are created manually on an opt-in basis. Non-faculty profile must be added by a Scholars@Duke organizational editor based on the discretion of that organizational unit.

Scholars@Duke profiles are automatically generated and removed for regular and non-regular rank faculty members. All other profiles must be manually activated and deactivated. Once a profile is deactivated, a stale version of their data can still be exported for a limited amount of time.

## Using Scholars@Duke data

Depending on your data needs, there are three methods of aggregating and consuming data from Scholars@Duke. The following section compares & contrasts each of the following methods.

- Widgets
- SPARQL Endpoint
- Drupal module
- Elements, publications only via [elements.duke.edu](http://elements.duke.edu)
- *Coming in Fall 2017: Scholars@Duke in Tableau*

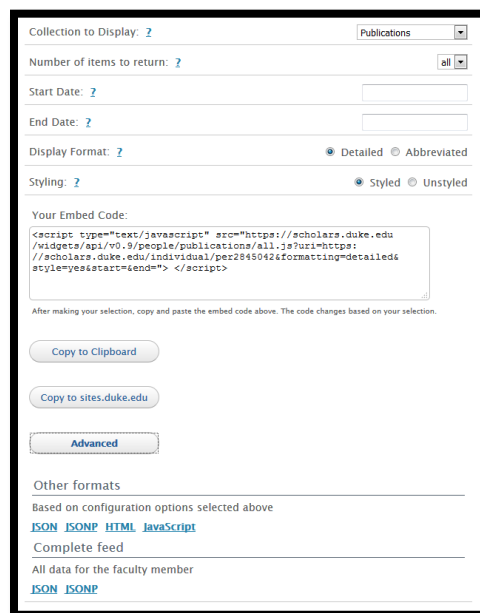
### Widgets

#### Widgets Overview

Widgets are a low-maintenance solution for consuming data about and individual or an entire organization. Data sets can be customized using the Widgets Builder tool, and then exported in various formats, including JSON. The widgets also provides embed code can to quickly paste dynamic data directly onto your own website. Widgets are accessible from a person's or organization's profile page by clicking the "Add Data to my Website" button.

## Basic Use of Scholars Widgets

- Anyone with a Duke Net ID can access the widgets by clicking the “Add Data to My Website” button on any Scholars profile or organization page. More information on the using Widgets Builder is available in the Scholars@Duke User’s Guide ([http://about.scholars.duke.edu/sites/default/files/Scholars\\_Users\\_Guide\\_April\\_2017.pdf](http://about.scholars.duke.edu/sites/default/files/Scholars_Users_Guide_April_2017.pdf)).
- Widgets include additional data attributes that may not be apparent from a person’s profile page (ex. appointment type, organizational unit numbers, and favorite publications).
- The Widget Builder Tool (pictured to the right) allows data consumers to return a subset of the full data. Available data formats using the widgets builder tool are JSON, JSONP, HTML, and JavaScript.
- Embed code is available only for the most popular data elements of a person or organization.



The screenshot shows the 'Widgets Builder' interface. At the top, it has a dropdown for 'Collection to Display' set to 'Publications' and a 'Number of items to return' set to '2'. Below are fields for 'Start Date' and 'End Date'. The 'Display Format' is set to 'Detailed' (radio button selected) and 'Styling' is set to 'Styled' (radio button selected). A 'Your Embed Code' section contains a JavaScript snippet: 

```
<script type="text/javascript" src="https://scholars.duke.edu/widgets/api/v0.9/people/publications/all.js?uri=https://scholars.duke.edu/individual/per2845042&formatting=detailed&style=yes&start=&end="></script>
```

 Below the code are buttons for 'Copy to Clipboard', 'Copy to sites.duke.edu', and 'Advanced'. At the bottom, there is a section for 'Other formats' with links for 'JSON', 'JSONP', 'HTML', and 'JavaScript', and a 'Complete feed' link.

## Advanced Use of Scholars Widgets

- **Getting data for an organization.** The organization widgets includes directory data (name, contact, overview, and image) for an organization. If you require more data than this, one way to pull data for an entire organization is to write a script that loops over the individual person widgets. For groups defined in Scholars@Duke, the organization widgets will provide you with a list of individuals. You can also loop through a custom list to create ad-hoc groups. You can pull individual widgets data using the Scholars unique URIs or the Duke Unique ID. These identifiers can be substituted into the following URL in order to access the JSON feed for an individual:

<https://scholars.duke.edu/widgets/api/v0.9/people/complete/all.json?uri=https://scholars.duke.edu/individual/per9294252>

**Scholars@Duke Person URI** – The person identifier (text in green) is specific to Scholars@Duke. This identifier is what is listed in the organizational widgets Person List and is also a part of the profile page URL.

**Duke Unique ID** – rather than using the person identifier, the widgets URL will also resolve using the Duke Unique ID.

- **Identifying changes in the widgets.** When using the embed code, updates will automatically display wherever that embed code is used. When consuming individual profile data from the Complete Feed as JSON, there is an attribute called ‘updatedAt’ that you can use to identify when a profile was last updated. There is a separate ‘imageModTime’ attribute that alerts you to changes in the profile picture. The ‘imageModTime’ attribute can be found both in the individual widgets and the organization widgets.
- **Widgets for inactive profiles.** When a profile becomes inactive in Scholars@Duke, all of their data is removed from scholars.duke.edu and they will be dissociated with all Duke organizations by removing them from the organizational widgets. However, a static version of their widgets data can still be accessed using the URL above. In this case, the widgets will reflect the state of the profile prior to being deactivated.

## Publications Metadata in the Widgets

Widgets provides a wealth of parsed publications metadata for downstream applications. Some examples of this metadata include “abstract”, “PubMed ID”, “digital object identifier”, and “full text link”. All of the metadata required to build a standard publication citation can be accessed as individual data elements via the widgets. Alternatively, the widgets provide 4 pre-formatted citation (APA, MLA, Chicago, and ICMJE) for each publication. These pre-formatted citations include a link to the publication’s page on the Scholars@Duke site. An example of the pre-formatted citations can be seen below:

```
publications: [
- {
  uri: "https://scholars.duke.edu/individual/pub1032620",
  vivoType: "http://purl.org/ontology/bibo/AcademicArticle",
  label: "Simultaneous transcranial magnetic stimulation and single-neuron recording",
- attributes: {
  icmjeCitation: "Mueller JK, Grigsby EM, Prevosto V, Petraglia FW, Rao H, Deng test.oit.duke.edu/individual/pub1032620>Simultaneous transcranial magnetic : 1136. PubMed PMID: 24974797.",
  mlaCitation: "Mueller, JK, Grigsby, EM, Prevosto, V, Petraglia, FW, Rao, H, [ test.oit.duke.edu/individual/pub1032620>\"Simultaneous transcranial magnetic 2014): 1130-1136.\",
  isFavorite: "false",
  authorList: "Mueller, JK; Grigsby, EM; Prevosto, V; Petraglia, FW; Rao, H; De datetime: "https://scholars.duke.edu/individual/dateValue201408",
  abstract: "Transcranial magnetic stimulation (TMS) is a widely used, noninva: methods for studying the influence of TMS on single neurons in the brain of a recording electronics that enable direct acquisition of neuronal signals at 1 recorded action potentials within ~1 ms after 0.4-ms TMS pulses and observed methodology is compatible with standard equipment in primate laboratories, a: devices, experiments and treatment protocols.",
  pmid: "24974797",
  apaCitation: "Mueller, JK, Grigsby, EM, Prevosto, V, Petraglia, FW, Rao, H, [ test.oit.duke.edu/individual/pub1032620>Simultaneous transcranial magnetic : (8), 1130-1136.",
  year: "2014-08-01T00:00:00",
  endPage: "1136",
  publicationSource: "epmc",
  chicagoCitation: "Mueller, JK, Grigsby, EM, Prevosto, V, Petraglia, FW, Rao, test.oit.duke.edu/individual/pub1032620>\"Simultaneous transcranial magnetic (August 2014): 1130-1136.",
  issue: "8",
  publicationVenue: "https://scholars.duke.edu/individual/jou1097-6256",
  publishedIn: "Nature Neuroscience",
  startPage: "1130",
  doi: "10.1038/nn.3751",
```

**Note:** Currently, the citation structure in Elements does not allow for the full first name of an author. This causes some limitations when trying to format for certain citation styles.

In Profile Manager (click “Manage My Profile”), anyone with a Scholars@Duke profile has the ability to set one of these four citation options to be their preferred citation style. Setting this preference will determine how citations are displayed on a person’s profile page and which style is used in the widgets HTML embed code. For those that have not selected a preferred citation style, the default style is the Chicago style. Whether or not someone has selected a preferred citation style, the widgets JSON feed will include all four citation styles. Therefore, when using the JSON data, it will be up to the data consumer to note which style (if any) has been selected as the preference. The preferred citation style will appear in the JSON feed as seen below. If no preference has been set, the *preferredCitationFormat* attribute will not exist.

```

attributes: {
  preferredTitle: "Non-Faculty",
  phoneNumber: "+1 919 660 0996",
  primaryEmail: "damaris.murry@duke.edu",
  imageUri: "https://scholars.duke.edu/individual/file_idm253",
  alternateId: "dm253",
  imageDownload: "https://scholars.duke.edu/individual/idm253",
  lastName: "Murry",
  firstName: "Damaris",
  imageThumbnailUri: "https://scholars.duke.edu/individual/file_tdm253",
  imageThumbnailDownload: "https://scholars.duke.edu/individual/tdm253",
  overview: "<strong>Data Curator for Scholars@Duke</strong>",
  preferredCitationFormat: "http://vivo.duke.edu/vivo/ontology/duke-extension#chicagoCitation"
}

```

## SPARQL Endpoint

### SPARQL Endpoint Overview

The SPARQL endpoint is a query service that implements the SPARQL Protocol for RDF and provides SPARQL query processing for RDF data available on the open internet. The Scholars@Duke SPARQL endpoint utilizes the full potential of querying RDF (linked) data by providing innumerable possibilities for aggregating and querying the data. This option may be considered if you require a subset of data that isn't readily available from the widgets.

Features of the SPARQL endpoint include:

- Similar to SQL queries, SPARQL queries contain the flexibility to answer more targeted questions about the data in Scholars@Duke.
- Formats include JSON, XML, Text, CSV, and TSV.
- Unlike the widgets embed code, the query results are static and the query will need to be run periodically to refresh the data.

**Scholars@Duke Sparql Query**

When constructing your query, you may find it helpful to browse the data using the Scholars@Duke triple inspector.

Api Key

Query

```

PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
PREFIX owl: <http://www.w3.org/2002/07/owl#>
PREFIX swrl: <http://www.w3.org/2003/11/swrl#>
PREFIX swrlb: <http://www.w3.org/2003/11/swrlb#>
PREFIX vitro: <http://vitro.mannlib.cornell.edu/ns/vitro/0.7#>
PREFIX bibo: <http://purl.org/ontology/bibo/>
PREFIX dcelem: <http://purl.org/dc/elements/1.1/>
PREFIX dcterms: <http://purl.org/dc/terms/>
PREFIX duke: <http://vivo.duke.edu/vivo/ontology/duke-extension#>
PREFIX event: <http://purl.org/NET/c4dm/event.owl#>
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
PREFIX geo: <http://aims.fao.org/aos/geopolitical.owl#>
PREFIX pvs: <http://vivoweb.org/ontology/provenance-support#>
PREFIX ero: <http://purl.obolibrary.org/obo/>
PREFIX scires: <http://vivoweb.org/ontology/scientific-research#>
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>
PREFIX vitro-public: <http://vitro.mannlib.cornell.edu/ns/vitro/public#>
PREFIX vivo: <http://vivoweb.org/ontology/core#>

#
# This example query gets 20 geographic locations
# and (if available) their labels
#
SELECT ?geoLocation ?label
WHERE
{
  ?geoLocation rdf:type vivo:GeographicLocation
  OPTIONAL { ?geoLocation rdfs:label ?label }
}
LIMIT 20

```

### Getting Started with the SPARQL Endpoint

Contact the Scholars@Duke team (scholars@duke.edu) to inquire about use of the SPARQL endpoint. Someone will be in contact with you to assist in evaluating your data needs and writing the appropriate query. Using the SPARQL endpoint requires a NetID and an API key.

### Advanced Use of the SPARQL Endpoint

SPARQL queries are specific to our underlying ontology. Details about the ontology are available at <https://wiki.duraspace.org/display/VIVO/VIVO-ISF+Ontology>

Available ontological attributes can be browsed using the SPARQL inspector:  
<https://sparql.scholars.duke.edu/inspector-request.html>

The Scholars@Duke team is available to assist in crafting and optimizing queries. Some basic resources for learning SPARQL can be found here:

- <http://www.linkeddatatools.com/querying-semantic-data>
- <http://jena.apache.org/tutorials/sparql.html>

## Drupal Module

As a way to support Drupal-based development at Duke University, Duke University Web Services (DWS) has developed a custom Drupal module that makes Scholars@Duke data available for Drupal using the widgets. For more information about the code and available support, please visit <https://webservices.duke.edu/code/>.

## Sites@Duke (WordPress)

Widgets data is now available for use in a Sites@Duke WordPress page. From a Scholars@Duke profile page:

- Go to ‘Add Data to my Website’
- Select the dataset you would like to add to WordPress
- Click Advanced
- Click JavaScript format. This will open up a new window with the JavaScript code.
- Copy the URL of this JavaScript page

On your sites.duke.edu site, go to the post or page where you want the Scholars info to appear and paste. It does not matter if you’re on the Visual or Text tab. You should see the info from Scholars@Duke instantly appear. Save/publish like usual in sites.duke.edu.

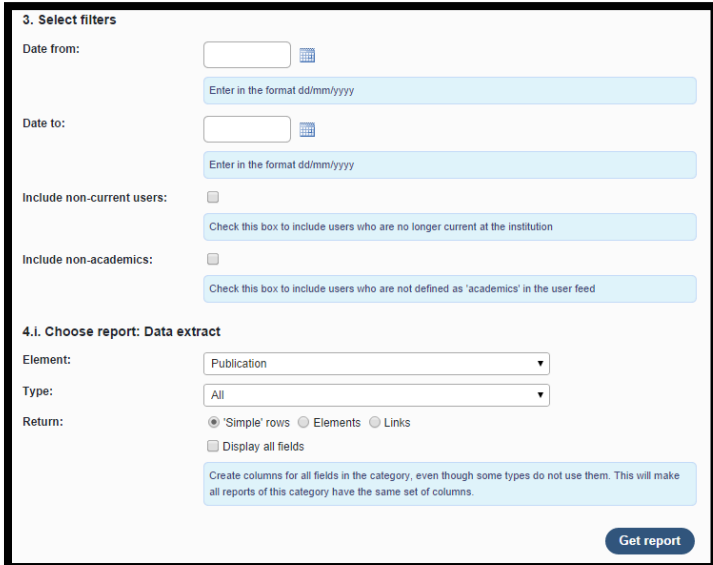


## Elements Reporting

Symplectic Elements is the publication managements system at Duke University and the source system for all publications in Scholars@Duke (elements.duke.edu). This application is managed by Duke Libraries and has reporting capabilities for data consumers who are interested in publications data for one or more organizations. For help with accessing reporting tools in Elements, please visit <http://scholarworks.duke.edu/elements>.

### Features of the Elements Reporting Tool

The Elements reporting tool enables aggregation and filtering for customizing queries. Data exports are available in CSV or Reference Manager/Endnote formats.



The screenshot displays the '3. Select filters' section of the reporting tool. It includes two date input fields labeled 'Date from:' and 'Date to:', each with a calendar icon and a light blue instruction box below it that says 'Enter in the format dd/mm/yyyy'. Below these are two checkboxes: 'Include non-current users:' and 'Include non-academics:', each with a light blue instruction box. The '4.i. Choose report: Data extract' section contains three dropdown menus: 'Element:' (set to 'Publication'), 'Type:' (set to 'All'), and 'Return:' (with radio buttons for 'Simple rows' (selected), 'Elements', and 'Links', and a checkbox for 'Display all fields'). A light blue instruction box below the 'Return:' section states: 'Create columns for all fields in the category, even though some types do not use them. This will make all reports of this category have the same set of columns.' A 'Get report' button is located at the bottom right of the form.

### Getting Started with the Elements Reporting Tool

Elements requires a Duke Net ID. To use the reporting tool, you'll need additional "statistician" (reporting) rights that must be granted by Duke Libraries. Please contact [elements@duke.edu](mailto:elements@duke.edu) for more information and to request this access.

## Advanced Use of Elements Reporting

Publications metadata available. Please be aware that only publications marked as ‘Visible’ in Elements will be loaded into Scholars@Duke.

ID	Open access	FDS ID	Proprietary ID
Name	ISSN	Translator	Source
Username	Issue	Citation count (Scopus)	Other sources present
Email	Journal OR Published proceedings	Citation count (Web of Science (Lite))	arXiv record exists?
User's Proprietary ID	Keywords	Citation count (Europe PubMed Central)	British Library record exists?
Primary group descriptor	Language	SNIP journal name	CINii EN record exists?
Primary group	Conference place OR Country	SNIP rank	CINii JP record exists?
Is current staff	Medium	ERA2010 journal name	CrossRef record exists?
Visible	Name of conference	ERA2010 rank	DBLP record exists?
Favourite	Notes	SJR journal name	Europe PubMed Central record exists?
Publication type	Article number	SJR rank	figshare record exists?
Reporting date 1	Pagination (start page)	Indexed in DOAJ	Google Books record exists?
Reporting date 2	Pagination (end page)	DOAJ CC Licence	ISI Proceedings record exists?
Abstract	Pagination (page count)	Romeo colour	Local Source 1 record exists?
Addresses	PII	Romeo colour last updated when	Local Source 2 record exists?
Authors	Place of publication	Files in Preproduction DukeSpace instance	Manual record exists?
Link to item	Publication date	Preproduction DukeSpace instance public URL	Mendeley record exists?
DOI	Status	Licence granted to Preproduction DukeSpace instance	ORCID record exists?
Edition	Publisher	Item status in Preproduction DukeSpace instance	PubMed record exists?
Editors	Publisher URL	Embargo period requested in Preproduction DukeSpace instance	RePEc record exists?
eISSN	Conference start date	Files in Production DukeSpace instance	SciVal Experts record exists?
External identifiers	Title	Production DukeSpace instance public URL	Scopus record exists?
Conference finish date	Sub types	Licence granted to Production DukeSpace instance	Web of Science record exists?
ISBN-10	Volume	Item status in Production DukeSpace instance	Web of Science (Lite) record exists?
ISBN-13	Type of conference publication	Embargo period requested in Production DukeSpace instance	Canonical journal title
			Journal data source

## Getting Help and More Information

To submit comments, questions, bugs, or enhancement requests concerning Scholars@Duke, please email [scholars@duke.edu](mailto:scholars@duke.edu) or submit a help ticket (<https://about.scholars.duke.edu/content/submit-scholarsduke-help-ticket>). To be added to the Scholars@Duke data consumers group listserv, please send an email to [scholars@duke.edu](mailto:scholars@duke.edu).

For specific information about support policies for website administrators and developers, please refer to the document “Support for Data Consumers” (<http://about.scholars.duke.edu/support-duke-faculty-delegates>).

## Widgets Data Dictionary (Complete feed, JSON)

The following Data Dictionary is also available in the link below with additional widgets API documentation:  
<https://scholars.duke.edu/widgets/docs/#/>

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### Summary of Profile

**active:** can take the values of true/false, indicating whether a profile has an active primary affiliation with an organization in Scholars@Duke

**label:** the Professional Name (Last, First, Middle) as designated in dFac for faculty. For non-faculty, this will be their name in the Duke Directory (or LDAP).

**title:** the Preferred (aka “highest precedence”) title as designated in dFac for faculty. In the widgets, this is the title in which the Position attribute of “Rank” has the lowest value. For non-faculty, this is the title in the Duke Directory (or LDAP).

**updatedAt:** date attribute to show when an individual’s widgets were last updated with changes from the profile. The updatedAt date also powers a query endpoint where you can find all profiles that have changed since a given date. To access the query endpoint to <https://scholars.duke.edu/widgets/search/modified.json?since=2016-04-15>.

**uri:** the unique identifier for a person in Scholars@Duke. The URI redirects to the URL of the Scholars@Duke profile.

**vivoType:** the type of affiliation with Duke. This is what determines the structure of the URI.

### Academic Positions

*Previous and current academic positions outside of Duke. This would include visiting professorships. In Scholars@Duke this section is labeled “Academic Positions Outside Duke”.*

```
academicPositions: {  
  uri: The unique identifier for the academic position  
  vivoType: the ontological categorization of the record (dukecv:NonDukePosition)  
  label: a concatenation of the role and institute attributes  
  attributes: {  
    institute: Name of academic institution  
    role: Title of academic role or position  
    startDate: YYYY-MM-DDT00:00:00  
    endDate: YYYY-MM-DDT00:00:00  
  }  
}
```

## Addresses

*For faculty, there are two addresses in Scholars@Duke--the mailing address (or work\_mailing) and the office location (or work\_location). For non-faculty, only one address will be in Scholars@Duke, with the work location taking precedence if both are available.*

**addresses:**

{

**uri:** the unique identifier for a person's address, either work\_mailing, or work\_location.

**vivoType:** using the vcard ontology, office location are categorized as vcard:Location, while mailing addresses are vcard:Address

**label:** concatenation of street, city, state, postal code

**attributes:** {

**address1:** line 1 of a street address

**address2:** line 2 of a street address

**city:** name of city

**personUri:** person associated with the office location/address

**postalCode:** postal code

**state:** initials of state

}}

## Artistic Events (Exhibitions, Screenings, & Performances)

**artisticEvents:**

{

**uri:** the unique identifier for the event

**vivoType:** Event

**label:** Event Title | Venue

**attributes:** {

**description:** event description

**venue:** venue

**startYear:** YYYY-MM-DDT00:00:00

**endYear:** YYYY-MM-DDT00:00:00

}}

## Artistic Works

*Artistic and/or non-print outputs that represent a faculty member's primary scholarship. These are works that are parallel to publications but not adequately captured as a publication citation in Elements*

**artisticWorks:**

{

**uri:** the unique identifier for the event

**vivoType:** Can be one or many types of artistic work. If multiple types of work are selected, then this value will be "Multiple Types" with the detail of these types listed in the "type\_description"

**label:** Title of work

**attributes:** {

**role:** One or many roles that a person contributed to the work

**abstract:** Description of the work

**commissioning\_body:** Name of the commissioning body, if available

**collaborators:** A list of all collaborators

**date:** The creation date for the work.

**date\_precision:** indication of what precision the date was entered (Year, Month/Year, or Monday/Day/Year)

**link\_label:** The label for a URL related to the work

**link\_url:** URL related to the work

**role\_description:** A description to further explain the one or many roles selected

**type\_description:** A list of the one or many categories that best describe the work

}

## Attributes (Additional Person Data)

*Information about a person where there can only be a single value. Attributes with an asterisk are required.*

**attributes:** {

**academicActivities**

**alternateId\*:** Duke Unique ID (will be the Net ID for non-faculty profiles that have not been active since June 26, 2017)

**clinicalOverview:** This section is meant to specifically highlight clinical activities and responsibilities

**firstName\*:** first name

**imageDownload:** link to full profile image

**imageFileName:** the file name for the profile picture.

**imageModTime:** This is the most recent date for which the profile image was updated.

**imageThumbnailDownload:** link to the 200x200 thumbnail of profile image

**imageThumbnailUri:** URI for page that links to thumbnail download

**imageThumbnail500Download:** link to the 500x500 thumbnail of profile image

**imageThumbnail500Uri:** URI for page that links to 500x500 thumbnail download

**imageUri:** URI for page that links to full image and thumbnail downloads

**interestsOverview:** This section is specifically for research interests that are not necessarily part of one's expertise. In Scholars@Duke, this section is labeled "Current Research Interests"

**lastName\*:** last name

**leadershipPositions:** paragraph summary of administrative, clinical, and/or leadership positions at Duke that are not represented by formal faculty appointments

**mentorshipAvailabilities:** coupled with the mentorshipOverview, this section allows users to specify who they are willing to mentor (affiliates, faculty, fellows, masters, PhDs, post-docs, professionals, residents, undergraduates, or other)

**mentorshipOverview:** paragraph about one's availability to advise and mentor

**middleName:** middle name (if available)

**netid\*:** net ID

**officehours:** office hours

**overview:** the overview paragraph that summarizes a person's research and research interests.

**phoneNumber:** phone number from enterprise directory

**preferredCitationFormat:** If the user has selected a preferred citation format, they will have that value here. If this field is blank, then no preference has been set and a default citation format is used in Scholars@Duke.

**preferredTitle\*:** the title in the "Positions" section of the widgets that has the lowest "rank" value (aka highest precedence value)

**prefixName:** title prefix

**primaryEmail:** email from enterprise directory

**profileURL\*:** this is the customizable, human-readable URL that is recommended for display on downstream sites. However, the URI attribute is the persistent identifier for both the public profile and the widgets.

**suffixName:** title suffix

**teachingActivities:** This section is meant to specifically highlight teaching activities and responsibilities

}

## Awards

*Awards & honors that are manually entered in Scholars@Duke.*

**awards:**

{

**uri:** The unique identifier for an award in Scholars@Duke.

**vivoType:** an award as defined in the VIVO-ISF ontology (vivo:Award)

**label:** a concatenation of the award name & awarding body

**attributes:** {

- awardedBy:** the name of the awarding body
- awardedByUri:** the Scholars URI for the awarding body
- date:** the date in text form
- description:** description of the award
- datePrecision:** the Scholars URI for the date
- name:** The name of the award
- serviceType:** Represents the level of award. Values can be “Department”, “International”, “National”, “Other”, “School”, “State”, or “University”.

}}

## Courses

*Courses taught in the past 3 years, not including summer terms*

**courses:**

{

**uri:** the unique identifier for the course. The value after “course” represents the course number. The URI for renumbered courses will automatically be updated for all course years.

**vivoType:** vivo:Course

**label:** a concatenation of the course name and course title.

**attributes:**{

**role:** the URI representing the role of a particular instructor on a course

**roleName:** currently, this field is a duplication to the course label (concatenation of the course name and course title)

}

## Education

*A faculty member’s education and professional training as displayed in dFac. This section is only available for faculty who are active in dFac.*

**educations:**

{

**uri:** the unique identifier that specifies the university name, graduation year, and degree earned

**vivoType:** ontological categorization of education URI (vivo:EducationalProcess)

**label:** concatenation of degree earned + graduation year

**attributes:** {

- dateTimeUri:** graduation/training year as time interval URI
- degree:** degree abbreviation
- degreeUri:** URI for degree type
- endDate:** graduation/training year as “YYYY-DD-MMT00:00:00”
- endUri:** graduation/training year as end date URI
- institution:** name of the university
- organizationUri:** the unique identifier for the university
- personUri:** the URI for the person associated with the education

}}

## Geographic Focus

*Geographic locations, primarily countries and US states, where a researcher has a scholarly relationship. These relationships are categorized as Expertise, Teaching, or Research. In Scholars@Duke, this section is labeled “Global Scholarship”.*

**geographicalFocus:**

{

- uri:** the unique identifier for a geographic region
- vivoType:** the ontological category for a geographic region
- label:** name of the geographic region
- attributes:**{
  - focusType:** URI for the relationship type between a person and a geographic region
  - focusTypeLabel:** specification of a person’s scholarly relationship to a particular geographic region
  - personUri:**URI for the person

}}

## Gifts

*This section contains competitive funding that is not captured in Duke’s Sponsored Projects System, but rather awarded directly to the PI. In Scholars@Duke this section is labeled “Fellowships, Supported Research, & Other Grants*

**Gifts:**

{

- uri:** the unique identifier that specifies the funding record
- vivoType:** ontological categorization of the funding URI (dukecv:Gift)
- label:** Name of the competitive funds



**attributes:** {

- dateTimeEnd:** funding end date as “YYYY-MM-DDT:00:00:00”
- dateTimeEndDay:** day value of the end date
- dateTimeEndMonth:** month value of the end date
- dateTimeEndValue:** URI version of the funding end date
- dateTimeEndYear:** year value of the end date
- dateTimeInterval:** URI version of the funding date interval
- dateTimeStart:** funding start date as “YYYY-MM-DDT:00:00:00”
- dateTimeStartMonth:** month value of the start date
- dateTimeStartDay:** day value of the start date
- dateTimeStartValue:** URI version of the funding start date
- dateTimeStartYear:** year value of the start date
- description:** description of the funding and/or the funded activities
- donor:** name of the donor
- giftAmount:** dollar amount of funds
- role:** the user’s role in relation to the funded activity (for example, “PI”)

}}

## In the News

*A combination of news stories tagged by Duke’s Office of News & Communication and entered manually. In Scholars@Duke, this section is labeled “In the News”*

**newsfeeds:**

{  
 }  
 }

## Licenses

*Medical licensure and other credentials not captured in dFac*

**licenses:** {

- uri:** The unique identifier for the license or credential record
- vivoType:** the ontological categorization of the record (dukecv:MedicalLicensure)
- label:** a concatenation of the license number, the licensing state, and the license year.
- attributes:** {

**datetime:** URI version of the year of licensure  
**number:** title of academic role or position  
**state:** Name of academic institution  
**year:** year of licensure as “YYYY-MM-DDT:00:00:00”  
 }}

## Past Appointments

*Duke appointment history, not including active appointments which are listed separately in the Positions section of the widgets*

**pastAppointments:** {  
   **uri:** the unique identifier for the historical appointment record  
   **vivoType:** the ontological categorization of the appointment record (dukecv:DukePastPosition)  
   **label:** the appointment title  
   **attributes:** {  
     **dateUri:** the URI version of the appointment date interval  
     **endDatetimeUri:** the URI version of the appointment end date  
     **endYear:** appointment end date as “YYYY-MM-DDT:00:00:00”  
     **organizationLabel:** the current name of the organization  
     **schoolLabel:** the name of the school  
     **schoolURI:** the URI of the school  
     **startDatetimeUri:** the URI version of the appointment start date  
     **startYear:** appointment start date as “YYYY-MM-DDT:00:00:00”  
   }  
 }}

## Positions

*Faculty appointments and center memberships contained in dFac. This section also includes non-faculty member’s HR title and non-faculty affiliations as designated in Scholars@Duke.*

**positions:**  
 {  
   **uri:** unique identifier for a position  
   **vivoType:** the type of affiliation a position represents. Position vivoTypes include: Primary Position, Secondary Position, Joint Position, Faculty Administrative Position, Professorship, Membership Position, Student Position, Non-Faculty Academic Position, Affiliate Position, Faculty Position  
   **label:** appointment title or non-faculty HR title. For students this will always be “Student”  
 }

**attributes:** {

- dateUri:** appointment start and end as a time interval URI
- endDatetimeUri:** appointment end date URI
- organizationLabel:** name of the department for which the appointment exists
- organizationUri:** department URI
- personUri:** URI for person who occupies this position
- rank:** display order for titles. These values have a default setting and can be edited in dFac using the Title Precedence form.
- startDatetimeUri:** appointment start date URI
- schoolLabel:** name of the school for which the appointment exists
- schoolUri:** URI for the school
- startYear:** appointment start date in YYYY-MM-DDT:00:00:00 format

}}

## Professional Activities

*These are scholarly activities related to Outreach & Engaged Scholarship, Service to Duke, Service to the Profession, or Presentation & Appearances*

### professionalActivities:

{

- uri:** the unique identifier for an activity in Scholars@Duke
- vivoType:** The category of professional activity. This can be “Service To The Profession”, “Service To The University”, “Presentation”, or “Outreach”
- label:** A concatenation of the role, serviceOrEventName, hostOrganization, and date.
- attributes:**{
  - description:** description of the event and the person’s role
  - endDate:** start date of the event as YYYY-MM-DDT:00:00:00
  - endDatePrecision:** indicates if the endDate was entered as YYYY, YYYY-MM, or YYYY-MM-DD
  - hostOrganization:** name of the host organization
  - locationOrVenue:** geographic location and/or venue name
  - nameofTalk:** Name of presentation (only relevant for vivoType = “Presentation)
  - serviceOrEventName:** Name of the event
  - serviceType:** Sub-categories of service that are specific to the vivoType.
  - startDate:** start date of the event as YYYY-MM-DDT:00:00:00
  - startDatePrecision:** indicates if the startDate was entered as YYYY, YYYY-MM, or YYYY-MM-DD

}}

## Publications

Each publication feeding in from Elements (elements.duke.edu) will have some of the following metadata. Metadata with an asterisk will be present for each publication, while the others are optional.

### Publications:

{

**uri**: the unique identifier for a publication in Scholars@Duke. The six-digit value after “pub” represents the identifier that comes from Elements. The URI redirects to the URL for the publication’s entity page in Scholars@Duke.

**vivoType\***: the type of publication as designated in Elements. For a complete list of publication types currently available, reference the “Browse By” list at scholars.duke.edu/research

**label\***: the title of the publication

**attributes**: {

**mlaCitation\***: Modern Language Association citation style

**abstract**: publication abstract

**apaCitation\***: American Psychological Association citation style

**authorList\***: list of all authors as “Last Name, First Initial”. A character limit has been applied to this value to better handle extraordinarily long author lists.

**authorshipType\***: relationship between person and publication. Values are “Authorship”, “Editorship”, “Translatorship”, or “Contributor”.

**chicagoCitation\***: Chicago citation style

**conferenceDatetimeStart**: URI version of the conference start time as “YYYYMMDD”

**conferenceStartDate**: conference start date as “YYYY-MM-DDT:00:00:00”

**conferenceStartDateDay**: day value

**conferenceStartDateMonth**: month value

**conferenceStartDateYear**: year value

**conferenceDatetimeFinish**: URI version of the conference end time as “YYYYMMDD”

**conferenceFinishDate**: conference end date as “YYYY-MM-DDT:00:00:00”

**conferenceFinishDateDay**: day value

**conferenceFinishDateMonth**: month value

**conferenceFinishDateYear**: year value

**conferenceLocation**: Location where a conference paper was presented

**conferenceName**: name of the conference where a conference paper was presented

**contributorList**: list of all contributors not already captured as authors, editors, or translators

**datetime\***: publication date URI as ‘YYYYMMDD’

**doi**: digital object identifier. To link to the full text on the publisher’s site, add the prefix “dx.doi.org/” followed by the DOI.

**Edition:** edition of the publication venue

**editorList:** list of editors

**endPage:** end page of publication (typically for an article or book section).

**icmjeCitation\*:** International Committee of Medical Journal Editors citation style

**isbn10:** international standard book number, 10 digits

**isbn13:** international standard book number, 13 digits

**isFavorite\*:** this attribute is set to “true” when an author has marked their publication as a “favorite” in Elements.

**issue:** journal issue

**numPages:** number of pages

**onlineContent:** this is the link to the open access copy of the publication (made available by DukeSpace).

**parentBookTitle:** for a publication of type “BookSection”, this field describes the name of the collective work.

**pmcid:** Pubmed Central ID. By adding the prefix <http://www.ncbi.nlm.nih.gov/pmc/articles/> to this ID, you can create a link to the PubMed Central version of the publication.

**pmid:** PubMed ID

**publicationSource\*:** the source of the publication record. Metadata will vary slightly between the various sources. A preferred source (per publication) can be selected in Elements. The default and preferred sources are PubMed and European PubMed.

**publishedBy:** name of publisher

**publishedIn:** A journal in which the ISSN is identified and is therefore represented as a linked URI

**publicationVenue:** A journal in which the ISSN is not identified and is therefore represented as unlinked text

**startPage:** start page of publication (typically for an article or book section).

**subtypes:** while the vivoType represents the format of the publication, the subtype relays the genre and/or content of the publication.

**translatorlist:** list of translators

**volume:** journal volume

**year\*:** publication date as “YYYY-MM-DDT00:00:00”

}}

## Research Areas

*Subject headings from MeSH & Library of Congress*

**researchAreas:**

{

that describe a person’s research & areas of expertise

**uri:** subject heading URI

**vivoType:** ontological categorization of subject headings is skos:Concept

**label:** name of the subject heading

**attributes:** {

**personUri:** the person associated with that subject heading

}

## Web Links

*Web links that were manually entered onto a person's profile (typically includes links to a CV, department site, personal site, or Google Scholar page, etc.)*

**Webpages:**

{

**Uri:**

**vivoType:**

**label:**

**attributes:**{

**personUri:**

**linkURI:**

    }}