

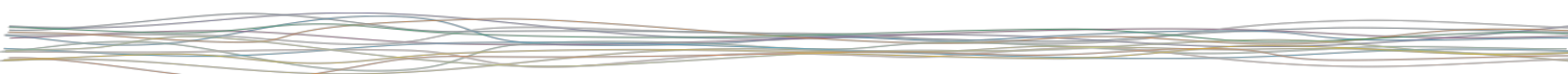
# VIVO

connect • share • discover



# Product Evolution Update

March 1, 2019



VIVO  
connect • share • discover

# Background

- VIVO Strategy Meeting, March 1, 2018.
- One of the action planning areas: Product Evolution. The purpose of action planning is to create a plan and execute it over the the twelve month period March 1, 2018 to Feb 28, 2019.
- See Planning doc <https://goo.gl/Uxzrp2>

# Process

- Maximize cross-institutional contribution and participation
- Weekly meetings
- Work incrementally and iteratively in short iterations or code sprints
- Documentation!
- Slack, Git Hub, Google Docs
- Participants attending two or more meetings
  - Duke (Richard, Damaris, Hans, Greg, Rob, Harry, Jim)
  - U. of Colorado (Don, Alex)
  - Weill Cornell Medicine (Sarbjit, Paul)
  - U. of Alabama at Birmingham (Ralph)
  - Stanford (Michael G., Aaron C.)
  - U. Penn (John Mark, Joe)
  - UCSF (Eric)
  - Virginia Tech (Andi)

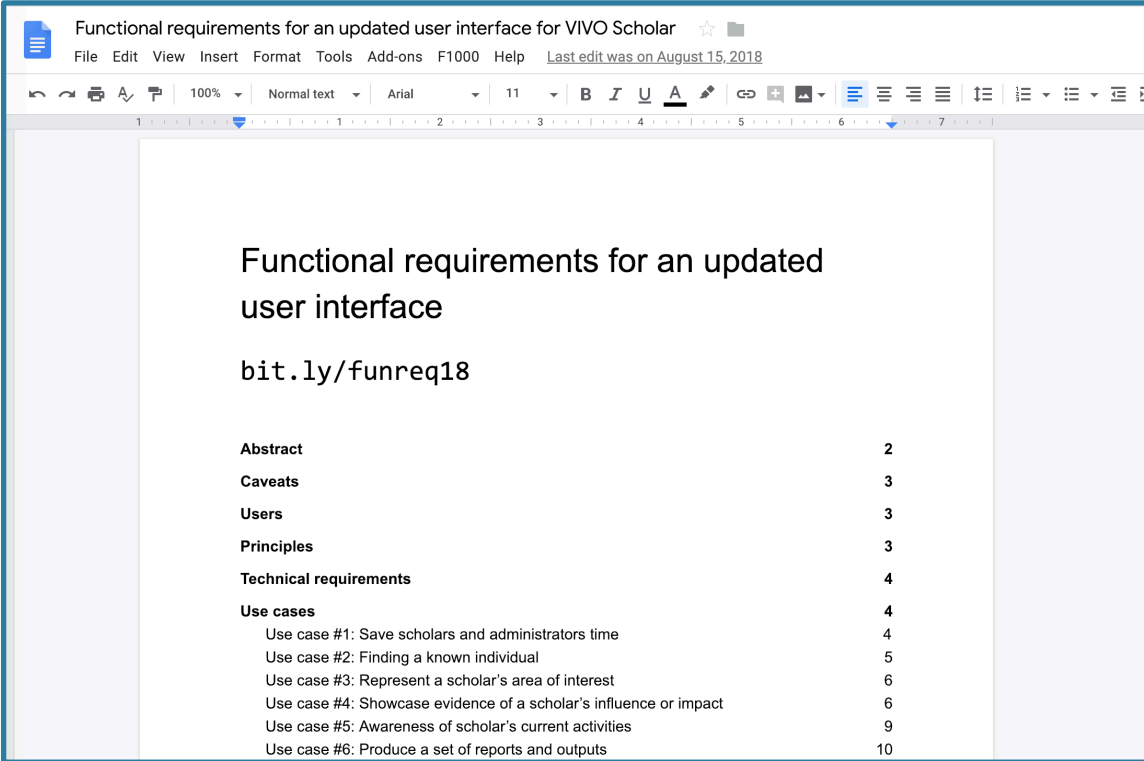
# Vision

- Produce a minimal viable product (MVP) for an agile web/mobile application that showcases the researchers, units, and scholarly works of an institution with their branding.
- This proof of concept will prioritize the most urgent needs of existing and prospective VIVO users.
- Branding:
  - Initiative: Product Evolution
  - Product: VIVO Scholar

# Analysis: Hierarchy of needs

- Level 0: Profile system is reliable
- Level 1: Institutional developer can easily configure profile system to import data from other systems.
- Level 2: Profile system has polished, functional, and captivating interface
- Level 3: System exposes data for reuse in institutionally maintained systems
- Level 4: System supports institutionally-driven reporting and analytics
- Level 5: System shares data with third-party extra-institutional systems
- Level 6: System effectively manages semantic data requests for data from unknown requestors
- More: <https://goo.gl/7pkCZb>

# Analysis: Functional requirements for UI



Functional requirements for an updated user interface for VIVO Scholar

bit.ly/funreq18

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<b>Users</b>	3
<b>Principles</b>	3
<b>Technical requirements</b>	4
<b>Use cases</b>	4
Use case #1: Save scholars and administrators time	4
Use case #2: Finding a known individual	5
Use case #3: Represent a scholar's area of interest	6
Use case #4: Showcase evidence of a scholar's influence or impact	6
Use case #5: Awareness of scholar's current activities	9
Use case #6: Produce a set of reports and outputs	10

<http://bit.ly/funreq18>

# Goals

- System insulates all parties from complexity. Easy to: install, seed with data, extend, use...
- Beautiful and functional
- Users can explore the data in any number of ways
- Code is highly modular
- Uses open source technologies
- Internationalization
- More: <https://bit.ly/2SqpfDX>

# Out of scope

- Full integration with VIVO ontology
- VIVO/Vitro "core" development
- Retrieving data from source systems
- Data management
- Syndication
- Data hub
- Cross-site search

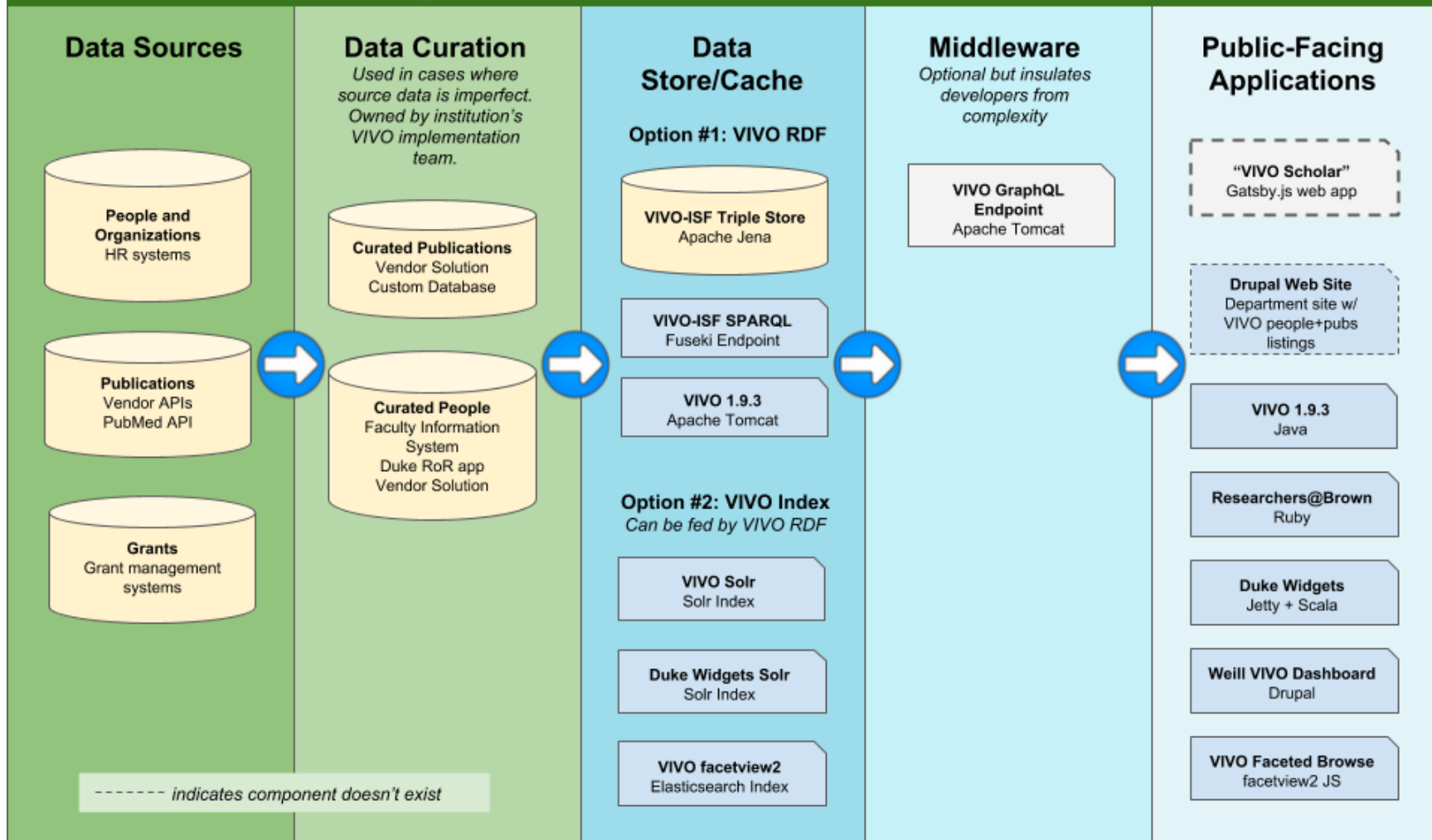


# Architecture

- Data store (ElasticSearch)
- Web application including search and visualizations (ReactJS)
- Query endpoint and manipulation language (GraphQL / GraphiQL)
- Static site generator (Gatsby?)
- Deployment tool (Docker?)
- Back end

# VIVO Scholar Proposed Architectural Stack

Last updated Feb. 26, 2019



# Planning: Data specification

Product Evolution Data Specification v0.1

File Edit View Insert Format Data Tools Add-ons Help Last edit was made 13 days ago by Richard Outten

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fx Professional contribution outside the institution

	A	B	C	D
	Field (key)	Usage	Data type	Obligation
2	person	Profiled person	Hash	[0,n]
3	person.id	Unique identifier associated with a person	String	[1,1]
4	person.sourceId	Unique identifier associated with a person as maintained in third-party source system	String	[0,1]
5	person.uri	URI, constructed from the ID, associated with a person	URI	[1,1]
6	person.name	Name for the person represented by the document.	Hash	[1,1]
7	person.name.firstName	First name for the person represented by the document.	String	[1,1]
8	person.name.middleName	Middle name for the person represented by the document.	String	[0,n]
9	person.name.lastName	Last name for the person represented by the document.	String	[1,1]
10	person.name.suffix	Suffix for the person represented.	String	[0,1]
11	person.name.prefix	Prefix for the person represented.	String	[0,1]
12	person.identifier	Other identifiers for the person represented	Hash	[0,1]
13	person.identifier.orcid	ORCID for the person represented	String	[0,1]
14	person.identifier.isni	ISNI for the person represented	String	[0,n]
15	person.type	An institutionally defined designation for the person represented.	Hash	[0,n]
16	person.type.code	The source system's code for the designation.	String	[0,1]
17	person.type.label	The label for the type associated with the source system.	String	[1,1]
18	person.primaryTitle	The primary institutional title for the person represented. May be curated.	String	[1,1]
19	person.keyword	Term for a concept that applies to or describes the Person's area of work.	Hash	[0,1]
20	person.keyword.id	Unique identifier associated with a keyword	String	[1,1]
21	person.keyword.uri	URI, constructed from the ID, associated with a keyword	URI	[1,1]
22	person.keyword.label	Textual form or label of the keyword	String	[1,1]
23	person.keyword.source	Source vocabulary for the keyword label and identifier.	String	[0,1]
24	person.keyword.sourceId	Identifier for the keyword within the vocabulary.	URI	[0,1]
25	person.image	Image associated with a person	Hash	[0,1]
26	person.image.thumbnail	URL to a thumbnail view of the headshot.	URL	[0,1]
27	person.image.full	URL to full view of the headshot.	URI	[0,1]

<https://goo.gl/qBqz4e>

# Planning: Mockups

**Scholars** | Colgate University

disambiguation

[EDIT MY PROFILE](#)

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**Michael Bales**  
**Research Impact and Evaluation Informationist**  
My research explores the use of information systems to promote communication and collaboration in patient care and biomedical research. The goal is to develop models that increase our understanding of...  
✉ [meb7002@med.cornell.edu](mailto:meb7002@med.cornell.edu) ☎ 646-962-1321

**Paul Albert**  
**Associate Professor**  
Identity management, scholar information management, and author disambiguation. I have dual roles at Cornell Medicine (WCM), both of which provide concrete value to the institution...  
✉ [paa2013@med.cornell.edu](mailto:paa2013@med.cornell.edu) ☎ 646-962-1321

**Stephen B. Johnson**  
**Professor of Healthcare Policy and Research**  
My research explores the use of information systems to promote communication and collaboration in patient care and biomedical research. The goal is to develop models that increase our understanding of...  
✉ [johnsos@med.cornell.edu](mailto:johnsos@med.cornell.edu) ☎ 646-962-1321

**Johnny NoHeadShot-NoOverview**  
**Professor of Medicine**  
**Keywords:** Author disambiguation Biomedical informatics Cheese-puffs  
✉ [johannoheadshot@med.cornell.edu](mailto:johannoheadshot@med.cornell.edu) ☎ 646-962-1321

**Department**

- Anesthesiology (12)
- Biochemistry (6)
- Brain and Mind Research Institute (3)
- [Show all...](#)

**Types**

- Full-Time Faculty (12)
- Voluntary Faculty (6)
- PhD Student (3)

<https://goo.gl/YtCJ76>

**UAB** | SCHOLARS @ UAB

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**Seth A. Landefeld, M.D.**  
**Professor and Chair**  
Women's Committee of the Spain Rehabilitation Center  
Endowed Chair in Rehabilitation Research  
DEPARTMENT OF MEDICINE

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**Biography**

In October 2015, Dr. Herbert Chen was named as the new Chairman of the Department of Surgery. A native of Wisconsin, Chen received his undergraduate degree from Stanford University and began his medical education at the Duke University School of Medicine, graduating in 1992. He completed his surgical residency in general surgery at Johns

# Roadmap

- Pre-MVP
  - GraphQL endpoint up and running
  - Reasonably complete sample data populated in ElasticSearch
  - Data specification represented as JSON
  - Create sample pages: person, publication, home, search by object, display of facets
  - Output pages using static site generator
- Post-MVP
  - Reconcile existing data model against VIVO ontology or its successor
  - Continue as Task Force
- More: <https://goo.gl/M88Qhs>

# GraphiQL demo

- GraphiQL instance - <https://goo.gl/RSQ7pR>
- Sample queries - <https://goo.gl/8S9rtV>

# Future plans

- Finish remaining milestones
- Figure out how we integrate/operate with vivo core
- Extend Product Evolution as a task force