

# Flight Tracker Consortium Meeting

April 7, 2021



# Meeting Agenda



**NIH RePORTER gets an Update...  
...and so does Flight Tracker  
What's New & What's Next?  
Office Hours with ~~Rebecca~~ & Scott**

# NIH RePORTER Update



NIH RePORT RePORTER FAQs API Sign In

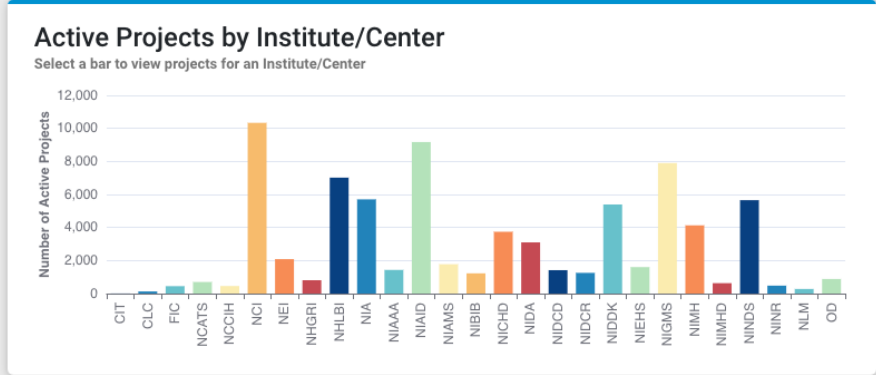
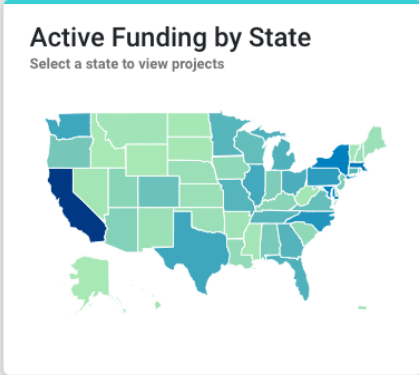
### Quick Search

 Search

Enter just about anything to find NIH projects and funding information: text, PI names, project numbers, fiscal year, agency

**Welcome to the new NIH RePORTER**  
Rebuilt from the ground up, leveraging the latest technologies, to bring you an enhanced experience. Faster performance, mobile ready, and an intuitive, all-new Quick Search brings the power of NIH RePORTER to your fingertips.

[Feedback](#)



# NIH RePORTER Update



NIH > RePORT > RePORTER FAQs API Sign In

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# Thoughts? Love it or Leave it?

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### Active Funding by State

Select a state to view projects

### Active Projects by Institute/Center

Select a bar to view projects for an Institute/Center

Institute/Center	Number of Active Projects
CIT	~100
CLC	~100
FIC	~500
NCATS	~1000
NCCIH	~500
NCI	~10,000
NEI	~2,000
NHGRI	~1,000
NHLBI	~7,000
NIA	~5,500
NIAAA	~1,500
NIAD	~9,000
NIAMS	~1,800
NIBIB	~1,200
NICHD	~3,800
NIDA	~3,000
NIDCD	~1,500
NIDCR	~1,200
NIDDK	~5,500
NIHHS	~1,500
NIGMS	~8,000
NIMH	~4,000
NIMHD	~800
NINDS	~5,800
NIINR	~500
NLM	~500
OD	~1,000

# NIH RePORTER Update



NIH > RePORT > RePORTER FAQs API [Sign In](#)

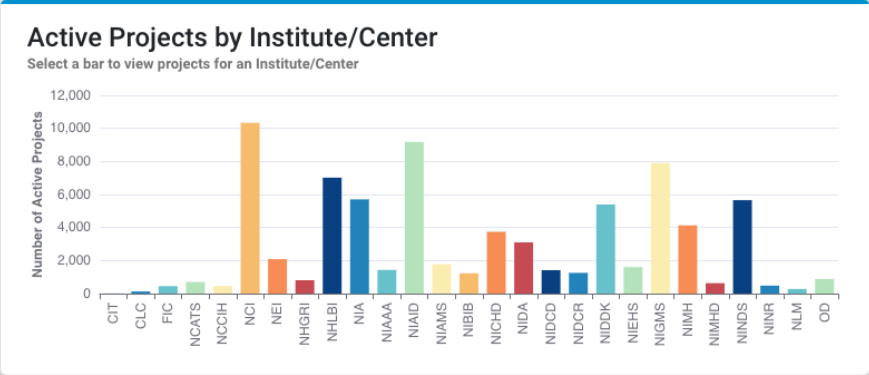
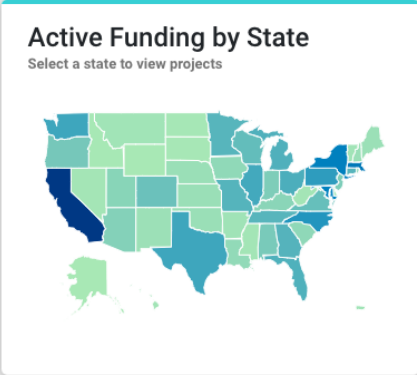
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[Search](#)

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# NIH RePORTER Update



NIH > RePORT > RePORTER

FAQs **API** Sign In

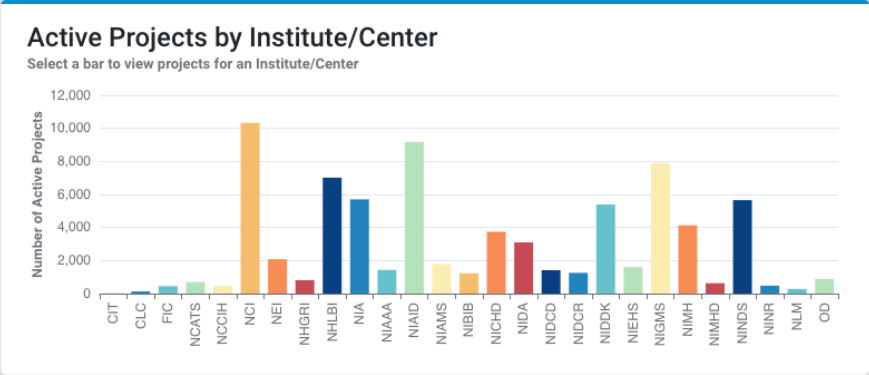
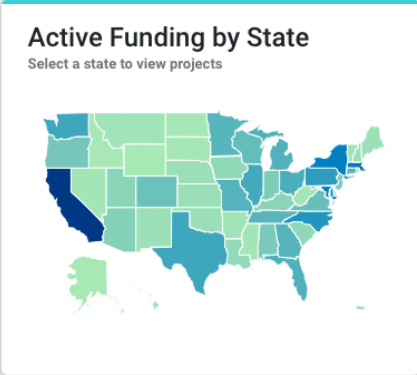
### Quick Search

Search RePORTER

Enter just about anything to find NIH projects and funding information: text, PI names, project numbers, fiscal year, agency

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[Feedback](#)



# NIH RePORTER Update



NIH RePORTER HOME



## Intro

[Purpose](#)

[Audience](#)

## API Endpoints

[Search](#)

[SearchAsync](#)

## Constraints/Limitations

## Data Input and Output

[Output for Search  
Endpoint](#)

[Data Elements](#)

## Intro

### Purpose

NIH RePORTER APIs are designed to programmatically expose relevant scientific awards data from both NIH and non-NIH federal agencies for the consumption of project teams or external 3rd party applications to support reporting, data analysis, data integration or to satisfy other business needs as deemed pertinent.

### Audience

Primary focus groups consist of developers, solution architects, and technical architects. Business users such as CIOs, program managers, project managers or other technology executives are another potential audience who might be interested in understanding the value of NIH RePORTER API for their projects before involving their technical teams.

## API Endpoints

For the endpoints supported by the NIH RePORTER APIs, the interface below lists the payload criteria that can be used to retrieve the relevant data in JSON format. You can enter a valid value for one or more criteria parameter and click the "Try it Out" button. System will return:

- Curl script for executing the API using a command line interface (CLI).
- The Response Body showing the actual data.
- Request URL, Request Headers, and Response Headers with relevant information.

# NIH RePORTER Update



- **Valuable Data:** All NIH grants back to 1985; most extensive source
- **Backstory (2018)**
  - Federal RePORTER API, but no NIH RePORTER API
  - NIH ExPORTER – downloadable Microsoft Excel spreadsheets
- **Original Algorithm**
  - Download entire NIH RePORTER database in Excel every Monday
  - Search the spreadsheets line-by-line for your names and institutions
  - Import Exporter spreadsheets into Flight Tracker/REDCap
  - Handled by Flight Tracker's computational system
- Very much imperfect; helped by duplication with Federal RePORTER





# Flight Tracker Update



## Goals

- Hook up NIH RePORTER API to new REDCap form (NIH RePORTER)
- Hook up new form to Flight Tracker's **computation engine**
- Write hookup in a way that will enable quick and easy searching for both RePORTERs in the future – **instant searching**
- **Stress-test** hookup with new internal project with Rebecca to debug
- Preserve old ExPORTER data & add new NIH RePORTER data
- Search by PI (or co-PI) name and institution



# Flight Tracker Update



Two weeks later...



# Flight Tracker Update



## Same Bread & Butter

- Project number, funding, project dates, title, etc. from 1985 onwards

## New Unique Data

- MESH terms
  - Preferred terms
  - Abstracts
  - COVID flag
- ➔ These new fields will be leveraged by future development down the road...

Contact PI Name	ABDEL-KADER, KHALE	Save & Exit Form
Program Officers	KEVIN E Chan	Save & Stay
Agency IC Admin	National Institute of D	-- Cancel --
Agency IC Fundings	[{"fy":2020,"total_cost":640271}]	
Congressional District	TN-05	
Spending Categories		
Project Start Date	2018-08-01 Today Y-M-D	
Project End Date	2023-07-31 Today Y-M-D	
All Text		
FOA	PA16160	
Full Study Section		
Award Notice Date	2020-07-23 Today Y-M-D	
Is New?		
Mechanism Code	RP	
Core Project Number	R01DK116957	

## How to Get It



1. REDCap Administrator upgrades to Flight Tracker Version 2.34.1 (out now)
2. Update your data dictionary on the Flight Tracker Home page.
3. Then the NIH ExPORTER will be turned off and the NIH RePORTER API will be turned on.
4. Will continue to auto-update every Monday morning at midnight.



## Future Dreams



Dreams for RePORTER system from Flight Tracker:

- ~~NIH RePORTER searchable API~~
- Search by ORCID identifier – better data verification
- Continued growth in linking with PubMed
- Direct dollars listed in NIH RePORTER API



# NIH RePORTER Take Home



New interface  
Quicker searching  
More data

A screenshot of the NIH RePORTER website interface. The top navigation bar is dark blue with the NIH logo and "RePORT" on the left, and "RePORTER" on the right. On the far right of the navigation bar are links for "FAQs", "API", and a "Sign In" button with a dropdown arrow. The main content area has a dark blue background with a network diagram pattern. On the left, there is a "Quick Search" section with a search input field containing the placeholder text "Search RePORTER" and a blue "Search" button. Below the input field, there is a line of text: "Enter just about anything to find NIH projects and funding information: text, PI names, project numbers, fiscal year, agency". On the right, there is a light green callout box with the heading "Welcome to the new NIH RePORTER" and a paragraph of text: "Rebuilt from the ground up, leveraging the latest technologies, to bring you an enhanced experience. Faster performance, mobile ready, and an intuitive, all-new Quick Search brings the power of NIH RePORTER to your fingertips." At the bottom right of the callout box is a "Feedback" button.

## What's New & What's Next?



- Missingness Report gets a facelift
- Expansion of degrees
- Grant Wrangler updates
- Display all grants



# What's New?



## Missingness Report

- Under View menu
- Finds where holes in data exist – measures completeness
- Facilitates targeted data collection efforts, especially before reporting statistics to outside groups
- Developed early in Flight Tracker efforts → not as beautified
- Added dates of last contact; made more graphically appealing



# What's New?



## State of Missing Data

Green = Self-Reported   Yellow = Computer-Reported   Purple = Manual Entry   Red = Missing

Cohort:

[Export to CSV](#)

[View All Missingness Worksheets](#)

927 missing items across 259 records

To fill missing data, you can enter it yourself in the Manual Import form, electronically send them a survey, or print off a Missingness Worksheet for them to fill out themselves.

Name	Email	Degrees	Gender	Race / Ethnicity	DOB	Citizen?	Division	Rank	Position Start	Tenure	Gender Identity	Transgender?	Sexual Orientation	Last Admin Update	Last Survey Contact
<b>1 Khaled Abdel-Kader</b> <small>(Missingness Worksheet)</small>	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Missing	Missing	2020-08-07	2020-10-26
<b>2 Ty Abel</b> <small>(Missingness Worksheet)</small>	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Missing	Missing	2020-07-31	N/A
<b>3 Robert Abraham</b> <small>(Missingness Worksheet)</small>	Present	Present	Present	Present	Present	Missing	Present	Present	Present	Missing	Present	Missing	Missing	2020-07-31	N/A
<b>365 Aaron Aday</b>	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	2020-12-04	2020-11-01
<b>456 Rajiv Agarwal</b> <small>(Missingness Worksheet)</small>	Present	Present	Present	Present	Present	Present	Present	Present	Present	Missing	Present	Present	Present	2020-11-10	2020-11-01
<b>335 Aimalohi Ahonkhai</b> <small>(Missingness Worksheet)</small>	Present	Present	Present	Present	Missing	Missing	Present	Present	Missing	Missing	Missing	Missing	Missing	2020-06-16	N/A
<b>4 Melinda Aldrich</b> <small>(Missingness Worksheet)</small>	Present	Present	Present	Present	Present	Present	Missing	Present	Present	Present	Present	Present	Present	2020-11-05	2020-11-01
<b>452 Matthew Alexander</b>	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	2020-11-01	2020-11-01
<b>443 Ryan Allen</b> <small>(Missingness Worksheet)</small>	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Missing	Missing	2020-08-05	N/A
<b>5 Peggi Angel</b> <small>(Missingness Worksheet)</small> <b>Left: 2014-02-01</b>	Present	Present	Present	Present	Present	Present	Missing	Present	Present	Present	Present	Missing	Missing	2020-08-25	2019-06-27

## What's Next?



### Propose changing the following concerning degrees:

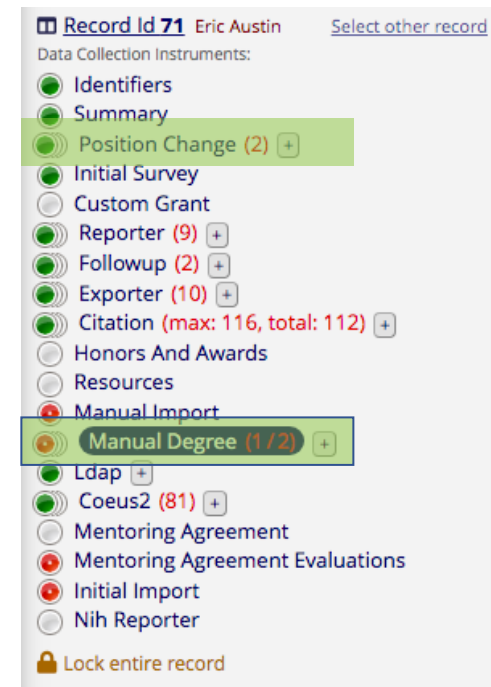
1. On Manual Degree form, provide list of all possible degrees, including bachelor's degrees
2. On summary form, MD → MD or equivalent; PhD → PhD or equivalent; etc.
3. Add checkbox list of all degrees
4. Institutions: Include institutions on Manual Degree form in institution list (in addition to Position Change form)

(Proposed by Vanderbilt MSCI program)

# What's Next?

## Position Change and Manual Degree forms

- Repeating REDCap forms
- Used to track career progression, especially outside of your institution



## What's Next?



### Proposed Change in Categories of Race

- Add “More than one race” to options
- Text sometimes, but not always, used by federal government
- Preferred over multi-racial
- Goal is to map to federal, especially NIH, categories

(Proposed by Krista Metz of the University of Cincinnati)



National Institutes  
of Health

## What's Next?



### Proposed changes in Grant Wrangling: Common mismatched name(s)

- Flight Tracker lives and dies by matching by name and by institution
- ORCID hopefully supplanting over time, but not “there” yet
- Sometimes, names mismatch within your institution
- *E.g.*, at Vanderbilt, Harold Moses and Harold Moses, Jr.  
Or also at Vanderbilt, Marion (Lee) Sanders and Michael Lee Sanders



- Add an “exclude list” to the Grant Wrangler – a list of names to exclude from matching
- Also, delete old matches from exclude list

# What's Next?

## Current Grant-Viewing Options in Flight Tracker:

- Stylized CDA table views career trajectory among major awards
- Uses definition of \$250k/year for 3+ years for R01-Equivalent
- Reflected on Summary form
- **BUT** excludes smaller awards that may represent significant professional steps, especially among trainees of training grants

<a href="#">View Record 4</a> <a href="#">View Profile</a> <b>Melinda Aldrich</b> Years of Awards: [2012 - 2024] Birth: 1970 First External R: 07-01-2013 First R: N/A <a href="#">Show Timeline</a>	<b>K12/KL2</b> 07-01-2012 scholar <a href="#">See Grant</a> VCTR5	1 years b/w starts	<b>Individual K</b> 07-01-2013 nh_reporter <a href="#">See Grant</a> K07CA172294	6.9 years b/w starts	<b>R01 Equivalent</b> 05-07-2020 nh_reporter <a href="#">See Grant</a> U07CA253560
<a href="#">View Record 5</a> <a href="#">View Profile</a> <b>Peggi Angel</b> Years of Awards: [2011 - 2025] Birth: 1974 First External R: N/A First R: 07-03-2020 <a href="#">Show Timeline</a>	<b>Internal K</b> 08-01-2011 scholars (\$100,000) <a href="#">See Grant</a> VCTR5	8 years b/w starts	<b>R01 Equivalent</b> 08-01-2019 nh_reporter <a href="#">See Grant</a> U07CA242096	0.9 years b/w starts	<b>R01</b> 07-03-2020 nh_reporter <a href="#">See Grant</a> R01CA253460
<a href="#">View Record 6</a> <a href="#">View Profile</a> <b>Amy Arnold</b> Years of Awards: [2014 - 2019] Birth: 1982 First External R: N/A <a href="#">Show Timeline</a>	<b>K99/R00</b> 11-15-2014 nh_reporter <a href="#">See Grant</a> K99HL122507	1.5 years b/w starts	<b>K99/R00</b> 08-01-2016 fellowships (\$27,280) <a href="#">See Grant</a> R00HL122507		



# Office Hours with ~~Rebecca & Scott~~

