

Flight Tracker Consortium Meeting

November 2, 2022



www.edgeforscholars.org

 @EdgeForScholars

https://redcap.link/flight_tracker

Meeting Agenda



What's New?

Email Highlights

Scholar Resource Use

Major Potential Bug with Data Dictionary Upgrades

Deep Dive: Uploading Data from CSVs

What's Next?

Downloading Grants from the Dept. of Education

Office Hours with Rebecca & Scott






What's New?

Email Highlights



Flight Tracker Cron Report

 noreply.flighttracker@vumc.org <noreply.flighttracker@vumc.org>
To:  Pearson, Scott James;  Wright, Verna N

Sunday, October 23, 2022 at 8:39 PM

Flight Tracker Nightly Update

Project: [Flight Tracker - Hearing & Speech Sciences \(Faculty\)](#)
PID: 143789
Server: <https://redcap.vanderbilt.edu/api/>

Impact

13 New PubMed Publications

For Scholars: [Stephen Camarata](#), [Michael De Riesthal \(4\)](#), [Melissa Duff](#), [Rene Gifford](#), [Jourdan Holder](#), [Ben Hornsby \(2\)](#), [Gary Jacobson](#), [Alexandra \(Sasha\) Key](#), and [Richard Roberts](#)

Total Number of Impacted Records

11

Overnight Cron Jobs Run

getPubs (3 Batches)

Succeeded
10 Records (1 - 10)
Start: 2022-10-22 20:28:24
End: 2022-10-22 20:33:16

Succeeded
10 Records (11 - 20)
Start: 2022-10-22 20:35:13
End: 2022-10-22 20:40:49

Succeeded

Email Highlights



Contains a summary of jobs run & a description of impact

- Names of people who downloaded grants, publications, or patents
- Links to REDCap
- Counts of records impacted
- Citations of high-impact papers (RCR > 8 or Altmetric Score > 100)
- If < 20 grants downloaded, show quick summaries of new grants (budget, dates)
- In development: **What would you like to see?**



Scholar Resource Use



- Wanted easy, attractive way to view who's used what resource
- Under **Resources** → **Scholar Resource Use (v4.18.1)**

	Edge for Scholars							VICTR				
	Shut Up and Write	Manuscript Sprint	Science of Writing	Grants Repository - Have Access	Grants Repository - Shared	Grants Repository - Accessed After 1/1/2021	Grant Pacing	Edge Reviews	Studio	Community Engage Studio	Pathways Studio	Pilot Funding
Khaled A Abdel-Kader				✓			✓	✓✓				✓
Ty W Abel				✓								✓
Robert L Abraham				✓					✓			✓
Melinda C Aldrich	✓	✓✓		✓	✓		✓	✓✓✓ ✓✓ ✓	✓✓✓ ✓✓ ✓			✓✓✓✓ ✓✓ ✓
Peggi M Angel		✓		✓			✓					
Amy C Arnold				✓					✓✓			✓✓✓✓ ✓✓✓ ✓
Donald H Arnold			✓	✓	✓	✓	✓	✓✓ ✓✓ ✓✓	✓✓✓ ✓✓ ✓			✓✓✓✓ ✓✓✓ ✓✓ ✓✓ ✓✓ ✓✓

Major Potential Bug



- 2 reports of issues with upgrading the Data Dictionary / Metadata (most complex process)
- Entire Data Dictionary will be erased; data will remain but become inaccessible
- **v4.18.4** (out last Saturday) has a proposed fix to recover metadata
- Root cause remains **unknown** → inserted hidden, automatic reporting of failures of metadata upgrade
- **Please contact scott.j.pearson@vumc.org if you encounter this issue**



Major Bug



- v4.18.1 was misinterpreting apostrophes and ampersands
- Important impacts:
 - Scholar names like O'Neil and O'Connor
 - Institution names like Brigham & Women's, Children's Hospital
- Manifestations:
 - Dozens/hundreds of publications are incorrectly downloaded to records
 - Grant Wrangler is non-operative
- Fixed in **v4.18.4** (out last Saturday). A clean-up script is automatically run to delete incorrect data. Upgrading the software will fix it within 24 hours. **You do not need to do anything besides upgrade.** Skipping v4.18.1 completely will also bypass this issue.



Deep Dive

Uploading Data from CSVs

Using Spreadsheets in REDCap



Spreadsheets can upload data into REDCap.

Cons (-)

- Not a friendly interface
- More cumbersome with smaller datasets
- Funky file formats
- Hard to implement in web browser

Pros (+)

- Quicker to input larger amounts of information
- Easier to sort
- Easier to run calculations
- Good, easy-to-read storage format



CSVs



- **C**omma-**S**eparated **V**alues
- Save in plain-text format
- Can open with a text editor
 - Commas and quotes
- Can also open with any spreadsheet program (Excel, Numbers)
- Relatively small file size

Flight Tracker Forms



- **Identifiers** – names, institutions, emails, etc.
 - **Summary** – generated by computer; changes will be overwritten once a week; “the computer’s best guess”
 - **Initial Import, Manual Import** – where admins can write demographics; input once
 - **Initial Survey, Followup** – surveys that are input by scholars
 - **Position Change, Manual Degree, Custom Grant** – where admins can input career traits; repeating
 - **Citation, NIH Reporter, Patent, etc.** – Downloaded
- (Red = forms for you to put in)

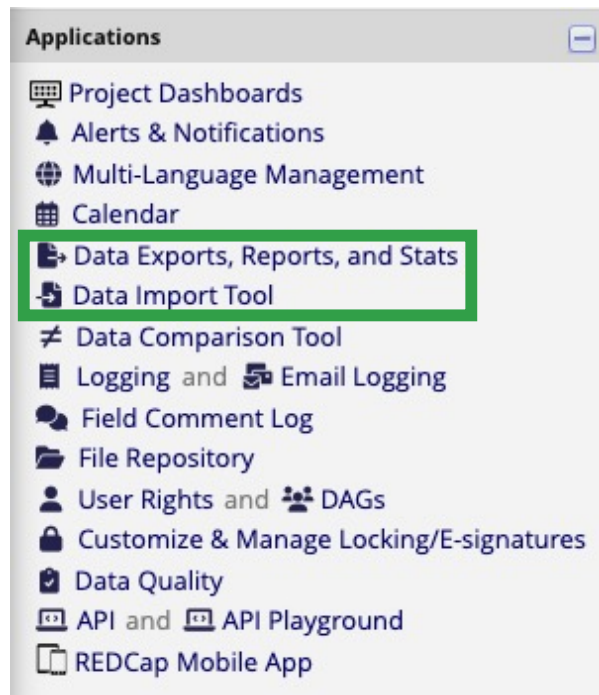
CSVs & Flight Tracker



Multiple Options

- REDCap – Data Exports & Data Import Tool
- Add New Scholars – intake form
- Import General Data – forms for you to put in (cf. **red** on previous slide)
- NIH Training Tables – upload prior training tables

REDCap Tools



Left-hand toolbar in REDCap

If missing, make sure permissions are added in User Rights

Data Import Tool & Data Exports



- Most important column: Record ID/`record_id` – ties to a particular record while hiding personal information
- Every field gets its own column
- Repeating instances add two columns
 - `redcap_repeat_instrument` – form name (blank if not repeating)
 - `redcap_repeat_instance` – instance number (blank if not repeating)
 - Columns not on the repeating instrument remain blank
- **Difficulty**: Flight Tracker has thousands of fields (bulky)
- **Advantages**: Good for small sets of data; simple; reliable; well-used

Data Exports/Reports



- See last month's Deep Dive for how to compile a custom report
- Generates a table
- Can export to CSV (or to statistical packages)
 - **Raw Data** = field names (with underscores, computer language)
 - **Labels** = field labels (human language; can be verbose)
 - Again, readable by any spreadsheet program (like Excel)
- Can leave other options unchecked

The screenshot shows a dialog box titled "Exporting '*NSF*'" with a close button in the top right corner. Below the title bar, there is a subtitle: "Select your export settings, which includes the export format (Excel/CSV, SAS, SPSS, R, Stata) and if you wish to perform de-identification on the data set." The dialog is divided into three main sections: "Choose export format", "De-identification options (optional)", and "Advanced data formatting options".
1. "Choose export format": This section has a vertical list of radio buttons. The first two are grouped under "(data)" and the next two under "(labels)". The options are: "CSV / Microsoft Excel (raw)", "CSV / Microsoft Excel", "SPSS Statistical Software", "SAS Statistical Software", "R Statistical Software", "Stata Statistical Software", and "CDISC ODM (XML)".
2. "De-identification options (optional)": This section contains several checkboxes. Under "Known Identifiers", there are options for "Remove All Identifier Fields (tagged in Data Dictionary)", "Hash the Record ID field (converts record name to an unrecognizable value)", and "Free-form text: Remove unvalidated Text fields (i.e. Text fields other than dates, numbers, etc.)" and "Remove Notes/Essay box fields". Under "Date and datetime fields", there are options for "Remove all date and datetime fields", "OR --", "Shift all dates by value between 0 and 364 days (shifted amount determined by algorithm for each record) What is date shifting?", and "Also shift all survey completion timestamps by value between 0 and 364 days (shifted amount determined by algorithm for each record)". A "Deselect all options" link is at the bottom of this section.
3. "Advanced data formatting options": This section has a yellow background. It includes "Export blank values for gray Form Status?" with a dropdown menu set to "Export gray Form Status fields with value of '0'", "Set CSV delimiter character" with a dropdown menu set to "(comma) - default", and "Force all numbers into a specified decimal format?" with a dropdown menu set to "Use fields' native decimal format (default)". A red "NOTE" at the bottom states: "NOTE: Your data formatting selections above will be remembered in the future and will be pre-selected upon your next export." At the bottom right of the dialog are "Export Data" and "Cancel" buttons.

Data Import Tool



Pro Tips

- Delete empty rows
- Can add instances as “new” to auto-number the instances
- Multiple choice fields (dropdown, radios) must have value instead of the label.

Record format: The file to be uploaded has its records stored as separate

Format for date and datetime values:

Allow blank values to overwrite existing saved values?

Name the imported records automatically (force record auto-numbering) ?

Choose the delimiter for the uploaded file:

Upload your CSV file:

No file chosen

Data Import Tool – Steps



1. Make the CSV – same format as Data Exports
 - **Pro Tip:** Export the fields that you want to import; clear out the data, and use the format to import
 - Use **Raw Data** field names (computer language)
 - Don't use REDCap's "Data Import Template" – will have too many fields
2. Upload the CSV
3. Adjudicate – final review to make sure REDCap understands your wishes properly (not finalized yet)
4. Commit Changes – finalize



Flight Tracker Intake Form



- Downloadable either during the installation or on the Add a New Scholars page – “Template” or “this example”
- Most important fields are names and institutions
- Provides other general demographics, ORCID, and mentor
- Provide **labels** for values (options in brackets)
- Uploads to Manual Import form

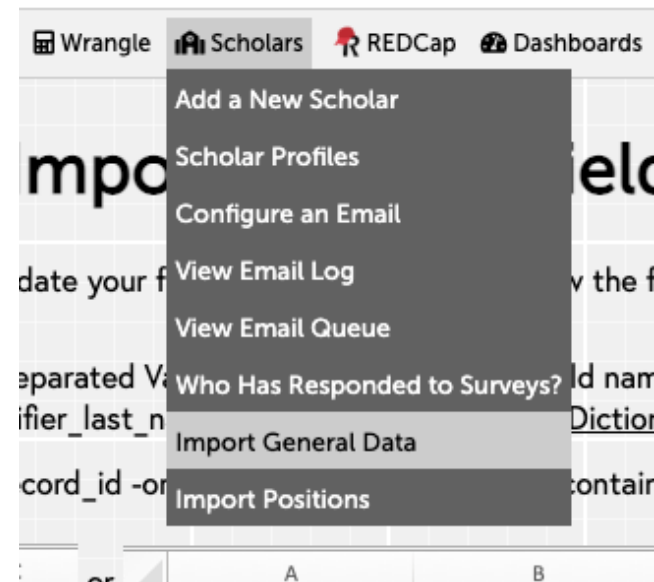
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	First Name	Preferred Na	Middle Nam	Last Name	Email	Additional In	Gender [Mal	Date-of-Birt	Race [Ameri	Ethnicity [His	Disadvantag	Disability [Y	Citizenship [I	Primary Men	ORCID

Import General Data



Great for **new** Flight Tracker Data, like:

- Custom Grants
- Position Changes
- Degrees
- Initial Import
- Manual Import
- Your own forms



Import General Data: Setup

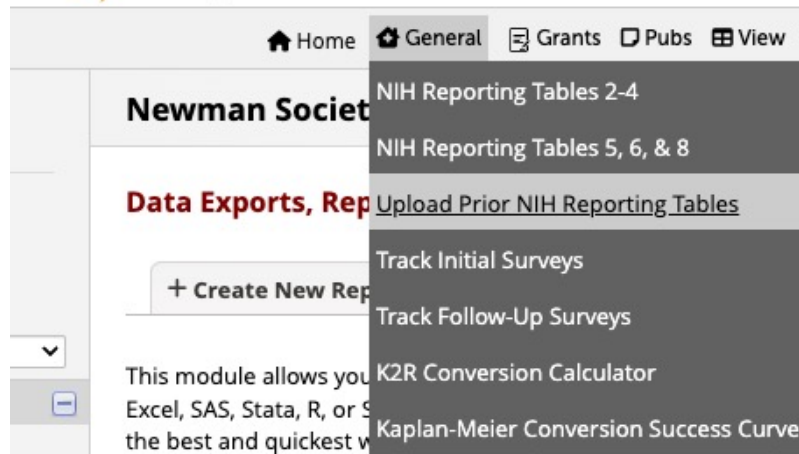


- Matches on either:
 - Record ID (`record_id`)
 - First and last name (`identifier_first_name` and `identifier_last_name`)
- Automatically handles numbering of repeating instances
- Meant to be an easier option to Data Import Tool

	A	B	C	D
1	identifier_last_name	identifier_first_name	field_1	field_2

	A	B	C
1	record_id	field_1	field_2

NIH Training Tables



Currently Supported Tables

- Table 2 – Faculty
- Table 4 – Faculty Research Support
- Table 5A – Predoc Pubs
- Table 5B – Postdoc Pubs
- Table 8A – Predoc Outcomes
- Table 8C – Postdoc Outcomes

NIH Training Tables



Upload Prior Years to Flight Tracker: Tables 2, 4, 5 & 8

Convert prior years' data into Flight Tracker. Warning: Automatically looking up the publications for Table 5 can take some time.

Status

Upload File → Adjudicate → Upload to REDCap

Remaining Work: 0 issues
REDCap Rows Ready to Upload: 0
(Uploads complete only at end of adjudication.)

Upload a CSV Below to Begin

Start a New Upload

Table:

Date When These Tables Were Submitted:

What is the Award Number for this Grant?

File with Table as CSV (Comma-Separated Values): No file chosen

NIH Training Tables: Steps



Translates into Flight Tracker/REDCap format

1. Upload CSV with one row per scholar (rows can have multiple lines)
 - **Note:** Table 5 looks up publications in PubMed to ensure proper formatting; this can take a few minutes for larger projects
2. Adjudicate issues as directed – review step
3. Upload to REDCap – finalize





What's Next?

Education Grants



- Current: Download grants from all federal agencies (health & NSF) ...except Department of Education
- The Institute of Education Sciences (IES) has a way to search Funded Grants & Contracts (but no API, only through web)
- Potential support to track educators & CTSA's educational mission

IES Institute of Education Sciences ≡ MENU

FUNDING OPPORTUNITIES | SEARCH FUNDED RESEARCH GRANTS AND CONTRACTS

Search Term(s): Any Word | [clear search](#)
 All Words

Search by: Title Awardee Principal Investigator Description Program Award Number

ADDITIONAL SEARCH OPTIONS

Awardee <input type="text" value="Search All"/>	Principal Investigator <input type="text" value="Search All"/>	Year <input type="text" value="Search All"/>	
Program <input type="text" value="Search All"/>	Type <input type="text" value="Search All"/>	Center <input type="text" value="Search All"/>	Fund Type <input checked="" type="checkbox"/> Grant <input checked="" type="checkbox"/> Contract



Upcoming Deep Dive Topics



December: All about REDCap Forms

January: The Metrics of Mentoring

February: Celebrating, Wrangling,
& Analyzing Grants



Troubleshooting Call



Monthly Troubleshooting Call (optional)

Third Wednesday at 1pm Central Time
November 16, 2022

Driven by Your Questions & Problems
All are welcome!

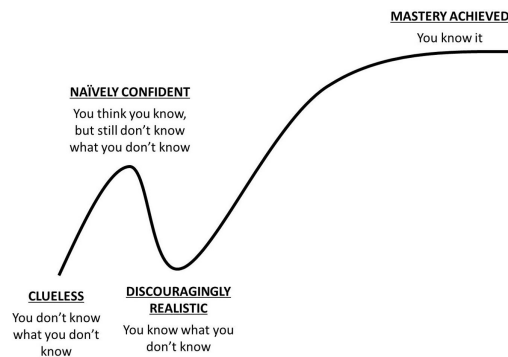
Ask to join our email list for an invitation...



Newbie Call



Just getting started with Flight Tracker?



There's a definite learning curve.
Move up more quickly by joining
November's "newbie" call.

Thursday, November 10, at 12pm Central Time
[Monday, December 12, at 10am Central Time]

Leave your email in the chat to receive an invitation

Office Hours with Rebecca & Scott



Office hours



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