

Flight Tracker Consortium Meeting

June 3, 2020

Configuring Flight Tracker for Your Niche Needs

Scott J. Pearson



Meeting Agenda



- Configuring Flight Tracker for Your Niche Needs – Scott Pearson (Vanderbilt)
- What's New and What's Next?
 - Web of Science H-Index lookup
 - Data-Sharing within an Institution
 - Monthly Meetings Starting in July (1st Wednesday at 1pm)
 - Next Meeting: June 17 – Mentoring, Resources, and Feedback

Warning



This is a technical presentation. It deals with little details about how grants unique to your institution are handled.

Our hope is that you can worry about this once, set it up, and never have to worry about it again.

Central Problem

- Flight Tracker provides automated access to data from PubMed, the NIH, and other federal sources.
- What happens to outside grants? You can enter these on Custom Grants.
- You may also want to import them into another data form in REDCap for storage.

How can you get the data from outside sources to talk to Flight Tracker?



Big Idea

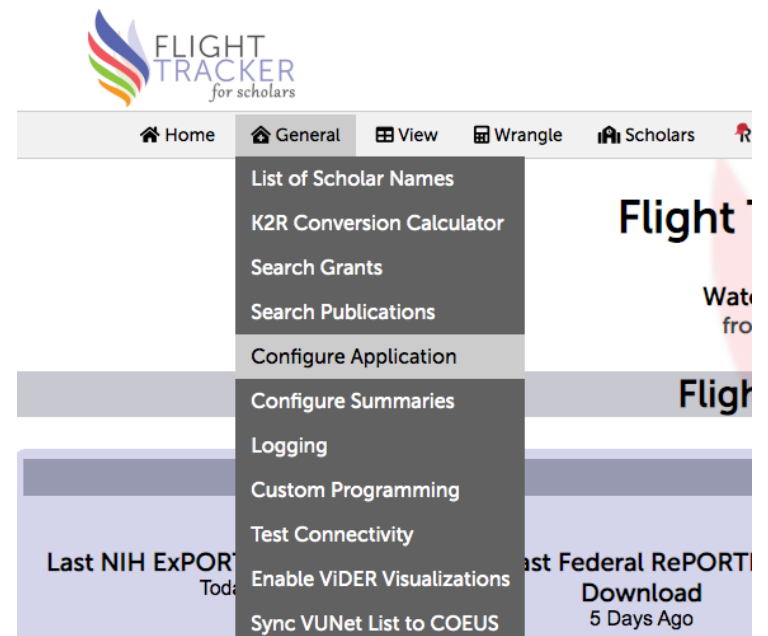


To track your scholars and your programs fully, you must hook up specific pipes to your institution.

Hopefully, this process is relatively easy and pain-free in Flight Tracker.

Configuration Pages

1. General Menu → Configure Application
2. General Menu → Configure Summaries
3. Wrangle Menu → Lexical Translator
4. General Menu → Custom Programming



Configure Application



- Internal Ks – CDAs from your institution
- K12/KL2 – CDAs from a K12 or KL2 grant distributed by your institution
- Individual K – CDAs directly from the NIH

Length of K Grants

Internal K Length in Years (default: 3)	<input type="text" value="3"/>
K12/KL2 Length in Years (default: 3)	<input type="text" value="3"/>
Length of NIH K Grants in Years (default: 5)	<input type="text" value="5"/>

Configure Application



Installation Variables

Full Name of Institution

Short Name of Institution

Other Institutions (if any); comma-separated

API Token

Event ID

Project ID

Server API Address

Administrative Email(s) for Flight Tracker Project; comma-separated

Project Name

Timezone

City or Cities

Grant Class Training Grant (T) Career Development Grant (K) Other (e.g., not related to a grant)

Grant Number

Department Names

Resources
 Shut up and Write
 Grant Pacing Workshop
 Edge Reviews
 Manuscript Sprint

Report Fatal Errors to Development Team? No Yes

Configure Application



- Automated emails are currently in *testing phase*
- This is a way to send survey links to your scholars
- More releases coming soon

Automated Emails

An initial email can automatically be sent out during the first month after the new record is added to the database. If you desire to use this feature, please complete the following fields.

Initial Email From Address

Initial Email Subject

Initial Email Message

Configure Application



- If you or your REDCap administrator is aware of a proxy server, you may have to configure it here.
- If you're successfully downloading information into Flight Tracker, then skip this step.

Proxy Server (Only if Applicable)

If your REDCap server has a proxy server, please fill out the following information. (If you don't know about this, you probably don't have one, so no worries then.)

Proxy IP Address

Proxy Port Number

Proxy Username

Proxy Password

Configure Summaries



- Central concept: **Source of Truth**
 - Look in *relevant fields* and use value in first field with a value
 - Hierarchy; priority given to top items
- How does the algorithm know which fields are “relevant?”
 - Default values in the code
 - Hard-coded
- But what if you customize Flight Tracker by adding additional data forms and surveys?
 - You can add to the default values in the code through the **Configure Summaries** page
 - Therefore, can override defaults!



Configure Summaries



Steps required:

1. Adding a new data source (e.g., a new REDCap survey)
2. Adding a new field to each summary data point



Configure Summaries



Add New Data Source

To add a new data source, you must create a code for it (no spaces [like `initial_survey`], then name it, and then select its type (computer-generated, self-reported, or manually entered). It will appear in existing data sources only when it is assigned to a field in the Source-of-Truth configuration below.

Default Data Sources

These are included by Flight Tracker by default. Custom data sources are shown in the dropdowns for a **New Source** below.

- scholars = Initial Survey (self-survey)
- followup = Followup Survey (self-survey)
- manual = Manual Form (REDCap)

Add a Custom Data Source

Code:

Name:

Type: ---SELECT---

Configure Summaries



Three types:

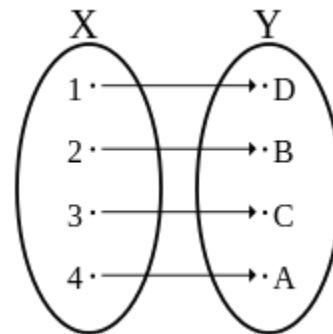
1. Adding one field to copy into one field (normal case)
2. Adding multiple fields to copy into one field (e.g., multiple degrees)
3. Dual fields to copy into one field (e.g., race/ethnicity)



Data Indexes in REDCap



Must be careful about REDCap **data-choice indexes** for drop-downs, radio buttons, checkboxes, etc.!



Data Indexes in REDCap



REDCap's Online Designer



Edit Field

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: Multiple Choice - Drop-down List (Single Ansv)

Field Label Use the Rich Text Editor

Paragraph **B** *I* [Link](#) [List](#) [List](#) [List](#) [List](#) [Undo](#) [Redo](#) [Table](#)

Gender

Choices (one choice per line) [Copy existing choices](#)

1, Female
2, Male

Enable auto-complete for this drop-down

Action Tags / Field Annotation (optional)

Learn about [@ Action Tags](#) or [using Field Annotation](#)

Variable Name (utilized in logic, calcs, and exports)
summary_gender Enable auto naming of variable based upon its Field Label?
ONLY letters, numbers, and underscores

How to use [Smart Variables](#) [Piping](#) [Field embedding](#)

Required?* No Yes
* Prompt if field is blank

Identifier? No Yes
Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment Right / Vertical (RV)

Align the position of the field on the page

Field Note (optional)

Small reminder text displayed underneath field

Save Cancel

If 1=Female and 2=Male in destination, then
1=Female and 2=Male must be encoded in source

Configure Summaries



Gender	
Initial Survey (self-survey) [check_gender]	
Manual Form (REDCap) [imported_gender]	
New Source:	<input type="text" value="---SELECT---"/>
New Field:	<input type="text"/>

Things You Can Do

- Drag-n-drop to reorder list (top gets priority)
- Enter a new data source

Configure Summaries



Configure Source of Truth

The "Source of Truth" defines which field provides the chosen value. These values are re-calculated every night. They are defined in an order, with the top being given priority. Starting with the top value, if a data value for a field exists, the field is chosen; if a data value for the field does not exist, we move down one rung in the order until no more rungs exist. You may sort the order and add new fields here. New fields must be added for new data sources to be hooked up.

Graduate Degrees

Followup Survey (self-survey) [followup_degree]

Initial Survey (self-survey) [check_degree1, check_degree2, check_degree3, check_degree4, check_degree5]

New Source:

New Field:

New Field (optional):

New Field (optional):

New Field (optional):

New Field (optional):

Configure Summaries

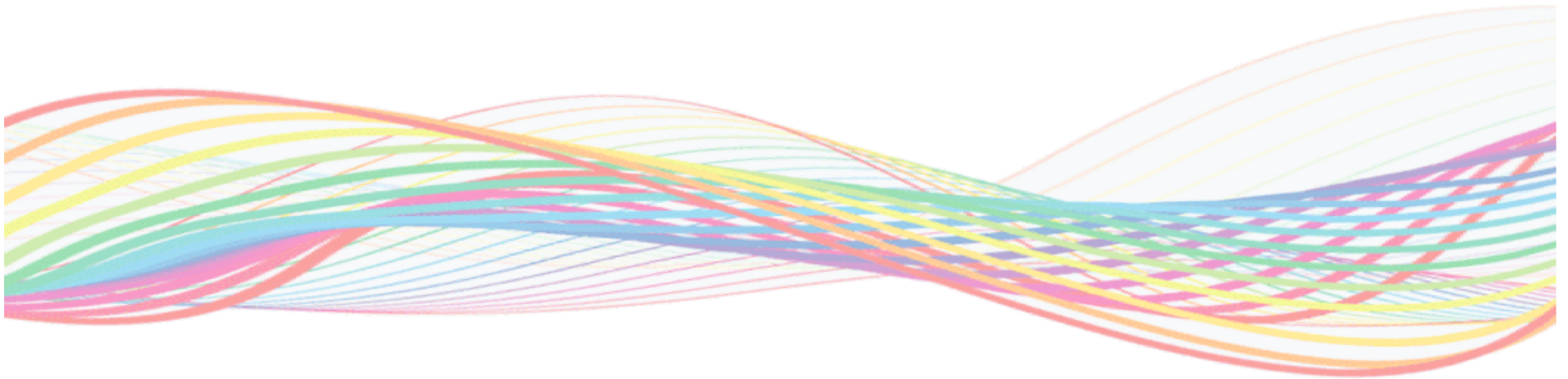


Race/Ethnicity	
Race	
Initial Survey (self-survey) [check_race]	
Manual Form (REDCap) [imported_race]	
New Source:	<input type="text" value="---SELECT---"/>
New Field:	<input type="text"/>
Ethnicity	
Initial Survey (self-survey) [check_ethnicity]	
Manual Form (REDCap) [imported_ethnicity]	
New Source:	<input type="text" value="---SELECT---"/>
New Field:	<input type="text"/>

Configure Summaries – Use



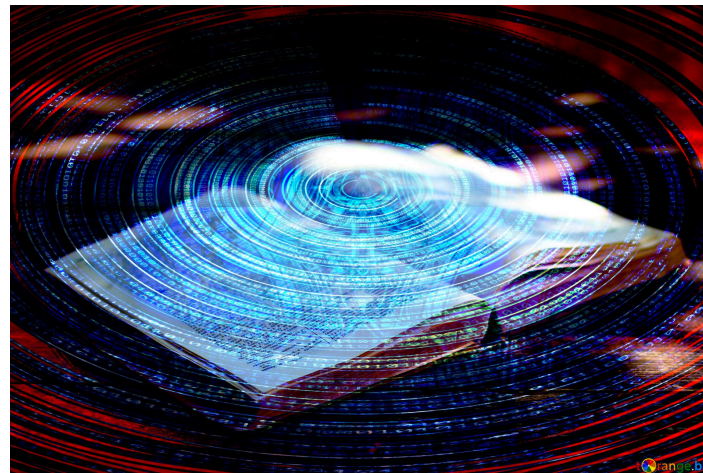
- This allows you to add new data sources to your Flight Tracker project, like new surveys or new imports from CSVs
- Together with the **Import Data** page, you can allow Flight Tracker to talk to other resources



Lexical Translator



- Literally means: “translator of words” (from Greek **λεξικός**)
- Translates your institution’s terminology about grants into Flight Tracker’s “vocabulary”
- Used in the nightly summary algorithm to pick up grants



Lexical Translator



Central Problem: How does the grant algorithm know what a VCTRS or a V-SCHOLARS grant is?

- These are internal resources that have no universal definition.
- We would like the algorithm to associate these with a certain grant type (like Internal K, K12/KL2, or K-Equivalent).
- → Lexical Translator



Lexical Translator



Lexical Translation for Grants

Manage Grants Specific to Vanderbilt University Medical Center

This page is complex. [Click here to show help.](#)

Items at the top take priority. [Reorder here.](#)

Each Award Number Parcel must contain a direct (case-insensitive) match to part of the Grant's award number.

Award Number Parcel 1	<input type="text"/>	→	Type	<input type="text" value="---SELECT---"/>
Award Number Parcel 2	<input type="text"/>	→	Type	<input type="text" value="---SELECT---"/>
Award Number Parcel 3	<input type="text"/>	→	Type	<input type="text" value="---SELECT---"/>
Award Number Parcel 4	<input type="text"/>	→	Type	<input type="text" value="---SELECT---"/>
Award Number Parcel 5	<input type="text"/>	→	Type	<input type="text" value="---SELECT---"/>

Lexical Translator



Lexical Translation for Grants

Manage Grants Specific to Vanderbilt

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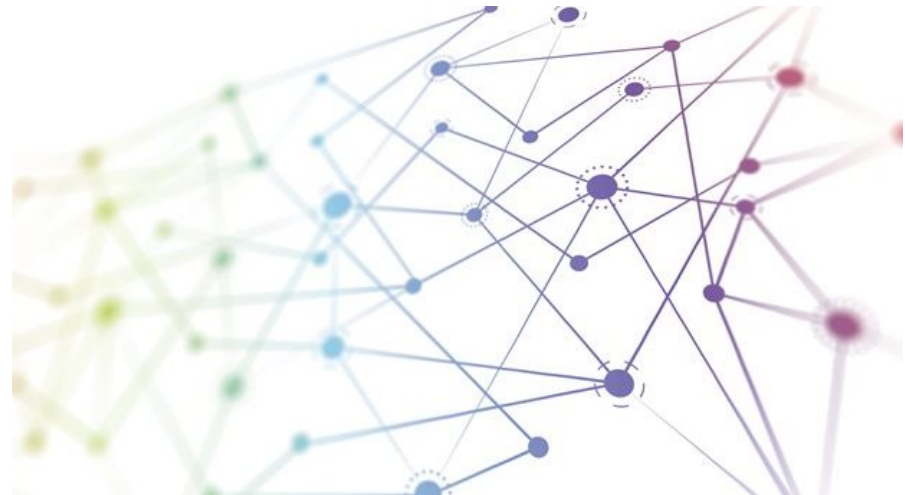
Each Award Number Parcel must contain a direct (case-insensitive) match to part of the Grant's award number.

- VCTRS → Internal K
- VCRS → K12/KL2
- VPSD → Internal K
- VFRS → Internal K
- VA Merit → R01 Equivalent
- VA Career → K Equivalent
- VACDA → K Equivalent
- VA CDA → K Equivalent
- VCORCDP → K12/KL2
- VEHSS → K12/KL2
- NIEHS → K12/KL2
- VEMRT → K12/KL2
- VICMIC → K12/KL2
- V-POCKET → K12/KL2
- BIRCWH → K12/KL2
- Human Frontiers in Science → K Equivalent
- Clinical Scientist → K Equivalent
- FTF → K Equivalent
- Robert Wood Johnson → K Equivalent

Lexical Translator



- Every time that the summary algorithm sees certain text in a grant title (like, again, VCTRS or V-SCHOLARS), it associates that grant with that given type.
- Otherwise, many of these grants would be wrongly associated or overlooked altogether.



Lexical Translator – Use



- Critical for ascertaining the Return on Investment (ROI) for CDAs and other training grants
- If you don't have the initial group association made, then you might never be able to track its successes
- Do it once instead of doing it many times in the Grant Wrangler.



Custom Programming



- Instead of manually importing from a CSV, you may wish to automatically download data from an institutional resource into Flight Tracker
- Requires a PHP programmer broadly familiar with REDCap
- There is a page in Flight Tracker devoted to this process
- Please contact me if you are interested. I can give you tips to save time and resources...



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