Flight Tracker Consortium Meeting

March 3, 2021





Meeting Agenda

Flight Tracker's Internal Data Sharing Algorithm Email Lists What's New? What's Next? Office Hours with Rebecca & Scott

Data Sharing: Central Problem



If you have more than one Flight Tracker operational at your organization, a scholar may be tracked in more than one instance.

Thus, possible to have multiple survey requests and wrangling.

Want to avoid extra work if possible.

→ Automatic Data Sharing Inside a REDCap Installation





Data Sharing: Characteristics

- Every Saturday
- Only on same REDCap server
- Only on projects with Flight Tracker External Module
- Only on matching first names and last names (all derivations)
- Pairs every project with another project
- Only writes over blank information
- *** Does not use user-ids in matching
- →Surveys, Publication Wrangling, and Grant Wrangling





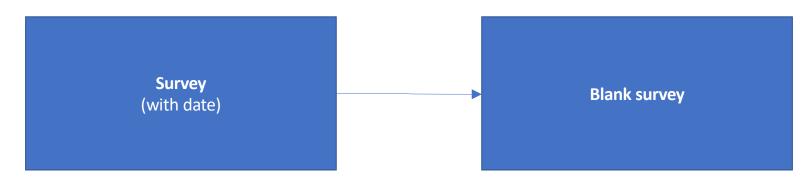
Name Matching Algorithm

- Explode "First-name (Nickname)" into: First-name, Nickname
- Explode "Maiden-Last" into: Maiden-Last, Maiden, Last
- Explode "Maiden Last" into: Maiden Last, Maiden, Last
 - Except for van, von, van der, de, or de la
- **Pair all combinations** (*e.g.*, First-name Maiden-Last, Nickname Maiden-Last, First-name Maiden, Nickname Maiden, ...)
- Require a match on both first names and last names
 - If name is less than or equal to 4 characters, require exact match
 - If name is more than 4 characters, require that one name fits in the other



Data Sharing: Surveys

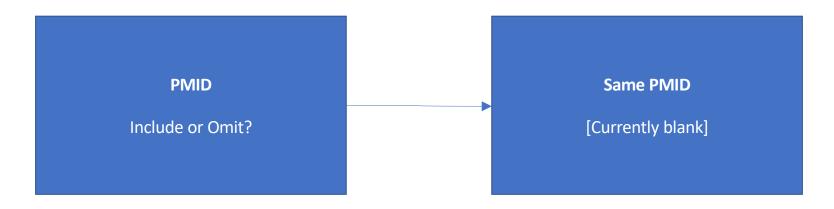
- Only Initial Survey and Follow-up Survey
- Only a complete survey (no incompletes) onto a blank survey
- Copies all fields
- Will be filtered into Flight Tracker's email utility with date
- Therefore, a scholar should not have to fill out unnecessary surveys!



Data Sharing: Publication Wrangling



- Matches on PMID (along with scholar name)
- Only copy include/omit information onto a blank publication
 - No blanks written onto include/omit information
 - No include/omits written onto another include/omit \rightarrow can disagree



Data Sharing: Grant Wrangling



- Changes for Computer for each grant can be shared across projects
- Copy only if no other changes requested for that grant

Comp	uter's Guess 🛛 —		All Awards —	Changes for Computer	
Career	Progression	List of	All Possible Awards	Awards to Handle Manually	
1. Assigned Person Budget Start Date Budget End Date Project Start Date Budget (Total)	'ABDEL-KADER, KHALED A,' '2013-8-1' '2017-06-30' '2011-8-1' '2016-7-31' '516861'	Click Assigned Person Budget Start Date Budget End Date Project Start Date	to Prepare to Remove 'ABDEL-KADER, KHALED A;' 2013-8-1 2014-7-31 '2011-8-1'	None.	
Budget (Direct) Sponsor	'478945' 'NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES' 'NATIONAL INSTITUTE OF	Project End Date Budget (Total) Budget (Direct) Sponsor	'2016-7-31' '172287' '159710' 'NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND		



Email Lists

Received multiple requests for contact information of Flight Tracker lists. I have deliberately not yet fulfilled those.

Therefore, poll group with two separate questions:

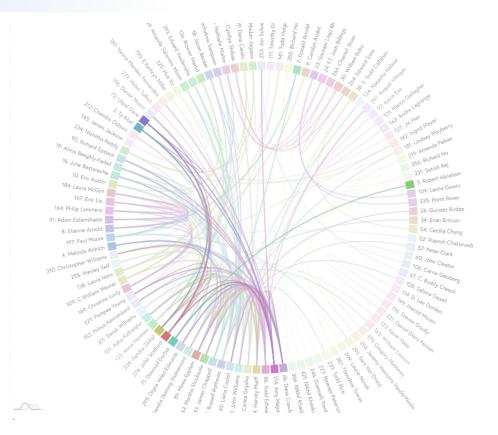
- 1. Would adding to Edge for Scholars' email list be helpful? (You can always unsubscribe.)
- 2. Would providing information to commercial groups be helpful?





Social Network Graph of Collaborations on Grants

- →Same infrastructure as for collaborations on publications
- →Under **View** Menu





Financial Report of active grants' budgets at a date

- \rightarrow Ordered by department
- → View Menu → Active Budgets at a Time

Active Grants in Project at 03-01-2021

No-Cost Extensions are not represented in these data

 \square

Active on 03/01/2021

Group	Number of Faculty	Number of NIH Grants (Active)	Direct Dollars of NIH Grants (Active)	Total Dollars of NIH Grants (Active)	Number of Federal Grants (Active)	Direct Dollars of Federal Grants (Active)	Total Dollars of Federal Grants (Active)	Number of All Grants (Active)	Direct Dollars of All Grants (Active)	Total Dollars of All Grants (Active)
Medicine/Nephrology [104375]	15	8	\$12,612,743	\$18,449,380	8	\$12,612,743	\$18,449,380	9	\$12,986,283	\$19,038,891
Pathology [104500]	15	9	\$5,429,089	\$8,401,194	9	\$5,429,089	\$8,401,194	10	\$5,479,089	\$8,451,194
Medicine/Cardiovascular Medicine [104333]	15	8	\$3,737,351	\$4,855,074	8	\$3,737,351	\$4,855,074	9	\$3,877,351	\$5,009,074
Surgery/Thoracic Surgery [104726]	2	2	\$1,552,579	\$1,790,731	2	\$1,552,579	\$1,790,731	2	\$1,552,579	\$1,790,731



Set Custom Grants as higher priority than surveys

Old Source of Truth

- 1. Manual Modifications
- 2. NIH EXPORTER
- 3. Federal RePORTER
- 4. COEUS (Vanderbilt)
- 5. Follow-Up Survey
- 6. Initial Scholar's Survey
- 7. REDCap Custom Grants

New Source of Truth

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Quicker publication data pulls

An **API** is an Internet URL that will fetch data from another database. Most time is spent in accessing the server across the network. Therefore, the goal is to make each call retrieve as much as reasonably possible in one fetch.

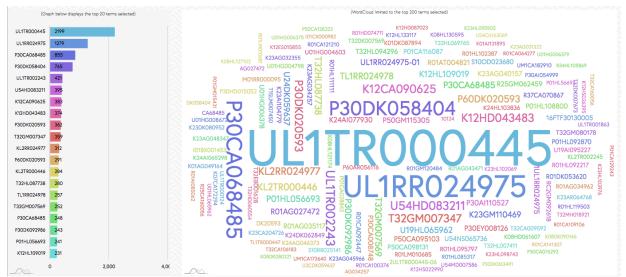
- Optimize <u>iCite</u> calls
- Optimize <u>PubMed</u> calls
- <u>Altmetric</u> began talks about each site getting an API key (for cost)





Correlate publications with a certain grant

Can produce a Word Cloud of grants cited by your publication View menu → Word Clouds of Publications → Associated Grants





Correlate publications with a certain grant

Can now make a publication list for a specific grant

(View menu → Publication List)

Have to search through all publications to make a list \rightarrow please be patient





Correlate publications with a certain grant

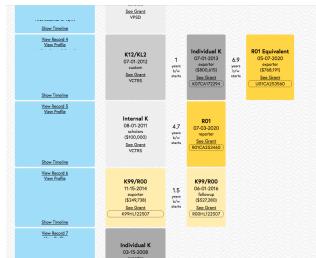
	Publications	
Dowr	lload as MS Word doc	
C	ustomize	
Turn on Altmetrics	Show Pubs During Training	
Sourced from the Web, altmetrics can tell you a lot about how often journal	Additional Days: Re-Configure	
articles and other scholarly outputs like datasets are iscussed and used around the	Pubs Associated With a Grant	
world.	UL1TR000445 (2199 names in citations) ~	
	Re-Configure	



What's Next?

Adjustments for pre-docs and T-class training grants

- Minor miscellaneous adjustments
- Better count grant progression for Ts
 - T \rightarrow K \rightarrow R
 - T \rightarrow Other grants
 - T \rightarrow Science job
- Stylized CDA Table with training grants
- Mentors' publishing with trainees
 - Mentor stats
 - Already have co-authorship social network graph among trainees & mentors





What's Next?

Targeted Projects

- Everything: Mentoring + patents + publications + grants (default)
- Publications only
- Grants only
- Mentee-Mentor Agreements only
- Applicant Tracker (including intake survey)



Office Hours with Rebecca & Scott



