Flight Tracker Consortium Meeting

June 4, 2025

www.edgeforscholars.org

https://redcap.link/flight_tracker

Meeting Agenda

FLIGHT TRACKER *for scholars*

Current Version:
v6.21.1

What's New?
Release v6.21.1: Many Bug Fixes
Increasing Minimum REDCap Version in July
Transcripts for Flight Tracker Help

Deep Dive: Finding "Special" Data Points

What's Next?
"Find a Collaborator" Major Upgrade
Mentee-Mentor Agreements: Custom Questions
"Leaky Pipeline" Detection Survey

What's New?

Flight Tracker v6.21.1

- **To be released any day now [in review]**
- Automated ORCID pulls are turned off;
  now ORCID Wrangler is used
- On Summary form, add a field to count all grants
- Bug fixes:
  - Error with "null" value with publications
  - IES & NSF grants are included in grant analyses
  - Sometimes, pubs dashboard had bad Unconfirmed count
  - Stylized Grant Tables have corresponding headers
  - Stray text in Scholar Portal
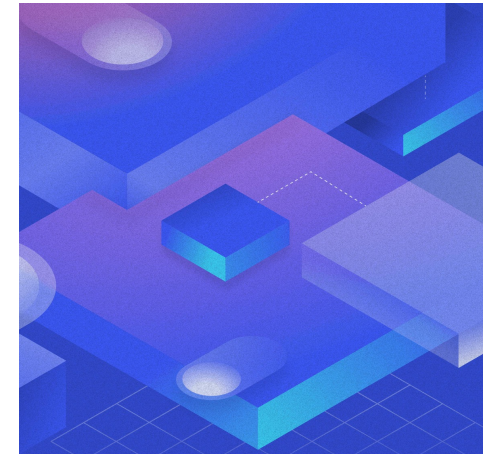
Minimum REDCap Version

- In **July**, Flight Tracker's minimum REDCap version is increasing from **v13.1.0** to **v14.0.2**
  - This will affect 10 projects on REDCap **v13.x.x**
  - **Impact:** After July, you will not be able to upgrade Flight Tracker unless your system upgrades REDCap first!
- Latest REDCap versions: **v15.0.26** [LTS] and **v15.4.2** [Standard]
- If you are affected, contact your REDCap administrator to request a REDCap upgrade. By upgrading, your institution will receive new features, bug fixes, and security patches.

Transcripts for Flight Tracker Help

- https://edgeforscholars.vumc.org/flight-tracker-tutorials/
- Green items exist;
  black items are coming
- **Coming in a few days:
  NIH Training Tables**
- We have plans to add online
  videos to each transcript

The Educational Module
for Flight Tracker

These pages are under development. We will first provide a written transcript
and then aim to add a video introduction to the topic.

- Steps to Get Started
- History & Overview
- REDCap Instruments
- REDCap Surveys
- Wrangling Data
- Scholar Data
- Publication Graphics
- Grant Data
- NIH Training Tables
- Cohorts
- REDCap Reports
- Scholar Portal Administration
- Using Your Flight Tracker Profile on the Scholar Portal
- Tracking Resources & Effectiveness
- Mentee-Mentor Agreements
- The Kaplan-Meier Curve
- Where Can I Find What Data Points?
- Project Dashboards
- [Data Aggregation – to come]

Deep Dive

Finding "Special" Data Points

Overview

For "special numbers:"

- Summary form in REDCap
- Scholar Profile
- Dashboards
- Grants & Pubs in REDCap
- Corrections

- Your Feedback

What specific information does Flight Tracker provide?

Where can it be found?

Summary Form

- Each scholar's Summary form has the most data points
    - The computer calculates this instrument each week
- Three parts:
    - Top: Demographics
    - Middle: Publication & grant metrics
    - Bottom: Deduplicated career-defining grant awards
- The middle part is our focus

Summary Form: Middle

- Dates:
  - Start of First Training Grant
  - End of Last Training Grant
  - First Any K Grant [any K-class grant]
  - Last Any K Grant
  - First External K Grant
  - Last External K Grant
  - First R01-Or-Equivalent Date/Type
  - First R01 Date

Summary Form: Middle

- Timespans in years:
  - First Any K to First R01/Equiv
    [This represents the time on K-class funding]
  - First External K to First R01/Equiv
  - Last Any K to First R01/Equiv
    [This represents time unfunded – needing bridge funds]
  - Last External K to First R01/Equiv

Timespan (years): First Any K to First R01	7.751014736784465	View equation
Timespan (years): First External K to First R01	6.245051803482162	View equation
Timespan (years): Last Any K to First R01	6.245051803482162	View equation
Timespan (years): Last External K to First R01	6.245051803482162	View equation

Summary Form: Middle

- The conversion categories are interested in three items:
  - Did you convert?
  - If so, what type of grant did you convert from?
  - Did you convert while on K or not while on K?

Ever Converted External K (First) to R01 or equivalent?	Converted External K to R01-or-Equivalent Nc ∨
Ever Converted External K (Last) to R01 or equivalent?	Converted External K to R01-or-Equivalent nc ∨
Ever Converted First Any K to R01 or equivalent?	Converted Any K to R01-or-Equivalent not Wt ∨
Ever Converted Any K (Last) to R01 or equivalent? (This contains the 'conversion status.')	Converted Any K to R01-or-Equivalent not Wt ∨

- Conversion categories:
  - Ever converted from first External K to R01/Equiv?
  - Ever converted from last External K to R01/Equiv?
  - Ever converted from first Any K to R01/Equiv?
  - Ever converted from last Any K to R01/Equiv? [Traditional "conversion status" field]

Summary Form: Middle

- Activities in grants & publishing [Dates]:
  - First Grant Activity
  - Last Grant Activity
  - First Publication
  - Last Publication

First Grant Activity	2007-07-01	Today	Y-M-D
Last Grant Activity	2028-07-31	Today	Y-M-D
First Publication	2005-09-01	Today	Y-M-D
Last Publication	2025-05-01	Today	Y-M-D

Summary Form: Publishing

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- H Index:
  - From iCite – only one needed
  - From Web of Science – if applicable
  - From Scopus – if applicable
- Odd bibliometrics, derived from iCite: [Formulas are in the field notes]
  - HI
  - HI,norm
  - HI,annual
  - G Index – most used

Publishing Metrics		
H Index calculated from iCite		37
H Index calculated from Web of Science		30
		To enable, place user id and password in Application Configuration
H Index from Scopus		
		To enable, place API key in Application Configuration
HI calculated from iCite		3.539
		hIndex / [average number of authors in contributing pubs]
HI,norm calculated from iCite		14
		normalizes each H-Index input to [number of citations] / [number of co-authors]
HI,annual calculated from iCite		0.700
		HI,norm / [number of years of publications]
G Index calculated from iCite		60
		the largest integer such that the most-cited g articles received together at least g^2 citations
Total Budget		12089551

Summary Form: Totals

- Number of Career-Defining Grants [update in queue]
- Number of All Grants [soon to be added]
- Number of Publications [wrangled]

Pre-Calculated Values for Statistics		
Number of Grants		10
Number of Publications		129

Scholar Profile

- Many values in a profile reflect the Summary form
- The profile's unique values will be shared in these slides' lists
- Publications:
  - Number of First-Author Articles
  - Number of Last-Author Articles
    - Simply based on order of authorship
  - Confirmed Original Research Articles
  - Total Citations by Others

Scholar Profile

- Total dollars for all grants [Note: Flight Tracker is not a financial application, and these values may be incorrect]
- Resources used [if tracked]
- Number of confirmed patents [if using Patent Wrangler]
- Average Relative Citation Ratio from iCite

|			
Number of Confirmed Patents:	0		
Number of Publications During Training:	123	Number of First-Author Publications During Training:	16/123
Number of Last-Author Publications During Training:	25/123		
H Index calculated from Web of Science:	30	Average Relative Citation Ratio from iCite Scores:	3.079
H-Index, calculated from iCite figures from iCite (NIH):	37	HI, calculated from iCite figures (hIndex / [average number of authors in contributing pubs]):	3.539
HI,norm, calculated from iCite figures (normalizes each H-Index input to [number of citations] / [number of co-authors]):	14	HI,annual, calculated from iCite figures (HI,norm / [number of years of publications]):	0.700
G-Index, calculated from iCite figures (the largest integer such that the most-cited g articles received together at least g^2 citations):	60		

Dashboards

- Flight Tracker has numerous dashboards on a variety of topics
- The Dashboards menu has all the options, too many to list here
- **Categories:**
    - Overall
    - Grants
    - Grant Budgets
    - Grant Budgets by Year
    - Honors, Awards & Activities
    - Emails
    - Demographics
    - Dates
    - Resources
    - Mentee-Mentor Agreements
    - Publications:
        - By Year
        - By Category
        - By Journal
        - By Publication Type
        - By MeSH Terms
        - Miscellaneous Metrics

Dashboards: Pearls

Numbers or Figures	Dashboard Page
Number of Confirmed Publications	Publications by Category
Average & Median Citations by Others	Publications Misc. Metrics
Average & Median Relative Citation Ratio	Publications Misc. Metrics
Total Citations by Others	Publications Misc. Metrics
Total Number of First/Last Authors	Publications Misc. Metrics
Graph for funding by year [at bottom]	Grant Budgets By Year →
REDCap surveys completed	Emails
Demographic data completed	Demographics
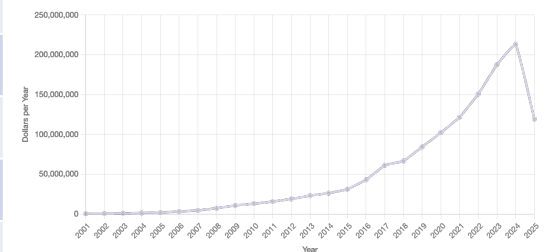
REDCap Figures: General

- Flight Tracker downloads all available fields from a data source
- Fields are displayed on individual REDCap forms
- These figures are good for unique questions
- Trick when on a REDCap Data Form:
  - Get field name by clicking faint H – short for "History"
  - Turn into a REDCap Report – filter or data point

Activity Code   Ⓗ   R01

Data History for variable "nih_activity_code" for record "16"   ✖

Listed below is the history of all data entered for the variable **"nih_activity_code"** for Record Id "**16**". The data history results are sorted from earliest to most recent.

Date/Time of Change	User	Data Changes Made
12-12-2024 10:23:34 (most recent data change)	SYSTEM	R01

REDCap Figures: Grants

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- Focus on **NIH RePORTER** instrument:
  - Program Officers
  - Agency IC Admin
  - Congressional District
  - FOA ID
  - Award Notice Date
  - RCDC Terms
    [like MeSH terms]
  - Abstract
  - COVID-related?

Principal Investigators	(H)	Julie Anne Bastarache; Lorraine B Wai
Contact PI Name	(H)	WARE, LORRAINE B
Program Officers	(H)	Lora A. Reineck
Agency IC Admin	(H)	National Heart Lung and Blood Institu
Agency IC Fundings	(H)	["{"fy":2018,"total_cost":501431}"]
Congressional District	(H)	TN-05

REDCap Figures: Publications

- Focus on **Citation** instrument:
  - Include? [Is the pub wrangled?]
  - Is Flagged? [Is the Pub Flagger used?]
  - Source [Name search v. ORCID]
  - Full PubMed Citation
  - Timestamp [Date of publication]
  - PMCID [if registered]
  - Components of citation [Authors, title, journal, pages, etc.]
  - DOI [add https://doi.org/ to beginning]

REDCap Figures: Publications

FLIGHT TRACKER *for scholars*

- Focus on **Citation** instrument:
  - Publication Types
  - MeSH Terms
  - Associated Grants
  - PubMed Keywords
  - Abstract

REDCap Figures: Publications

- **iCite** info from **Citation** instrument:
    - Is Research? [Original Research v. Not Original Research – iCite automatic designation]
    - Times Cited by Others
    - Relative Citation Ratio [RCR]
    - Clinical PMIDs Citing This Paper
    - PMIDs Citing This Paper
    - PMIDs This Paper Cites
    - iCite Last Update

How to Correct

- Beyond the scope of this presentation
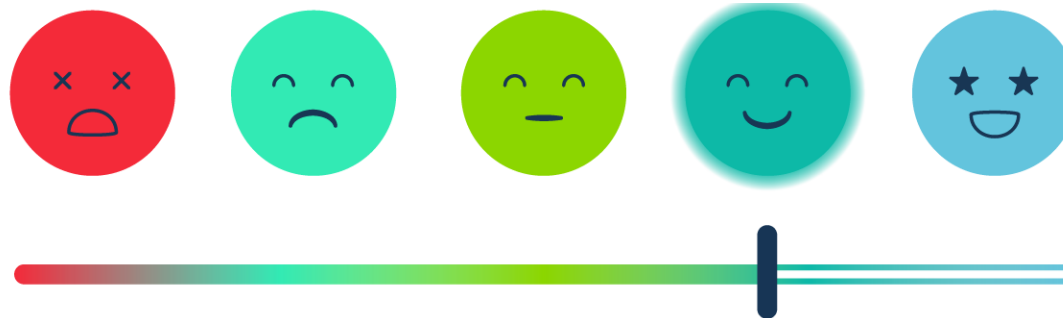- Generally:
  - Grants: Grant Wrangler & Custom Grants
  - Publications: Publication Wrangler

Your Feedback

- By Julie Elworth's request, I'm going to turn this topic into a video & transcript for online help.
- **I need you to tell me how I can improve it:**
  - What did this presentation do right?
  - What should be included but wasn't?
  - What can be explained better?

Recap

- Summary form in REDCap
- Scholar Profile
- Dashboards
- Grants & Pubs in REDCap
- Corrections

What's Next?

Find a Collaborator

- Earlier in 2024, the Scholar Portal added a way to search all Flight Trackers for a certain publication topic [MeSH term]
- We've been using it to focus emails for career opportunities, like a research grant for "Health Services Research"
  - Avoiding excess email noise
- We love the targeting; we want to improve it:
  - Make a more advanced interface
  - Make a table of outputs
  - Add it to the admin side of Flight Tracker, too
- **In internal reviews**

Mentee-Mentor Agreements

- **Nearing completion**
- Admins can turn off certain sections
- Admins can add custom questions for all mentees
- Individual mentors can add custom questions for their mentees

"Leaky Pipeline" Detection Survey

- What factors could cause a "leaky pipeline" in a program?
- The literature has explored a lot of fixed, personal traits like race & gender. **What dynamics can be more directly changed?**
- *E.g.*, mentor-mentee ratio, size of program, administrative support, etc.
- Idea: Send out a survey to study contributing factors that might be more easily changed

Support Resources

Forum: Flight Tracker Community
Free accounts available

Monthly Troubleshooting Call
3rd Wednesday, June 18, at 1pm CT

Monthly "Newbie" Call
Monday, June 16, 11.30am CT

Monthly Getting Started Workshop
Friday, June 20, noon CT

Type your email in the chat for more info

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