

# Flight Tracker Consortium Meeting

September 4, 2024



[www.edgeforscholars.org](http://www.edgeforscholars.org)

[X @EdgeForScholars](https://twitter.com/EdgeForScholars)

[https://redcap.link/flight\\_tracker](https://redcap.link/flight_tracker)

# Meeting Agenda



Current Version:  
**v6.13.1**

## **What's New?**

Scholar Portal: Find a Collaborator  
iCite References & "Cited By" Lists

**Deep Dive:** Pearls of Publication Wrangling

## **What's Next?**

Mentee-Mentor Agreements v2.0  
More Information from ORCID  
My Bibliography API




# What's New?

## Find a Collaborator



- Out in **v6.13.0**, improved in **v6.14.0**
- Searches through all Flight Tracker publications for those with a given MeSH Term → Enhances networking
- In Scholar Portal
  - For your scholars to access
  - Link on Flight Tracker Home page beneath top header

**Flight Tracker Central**  
v6.13.1 (latest version)  
Watch Your Scholars Fly - [Flight Tracker Community Support](#)  
from  **Edge for Scholars**  
[Click to Share the Scholar Portal Link with Your Scholars](#)

**[Live Demo](#)**

## iCite Citation Links



- Thanks to a tip, I recently discovered that the API for NIH's iCite provides a list of:
  - All PMIDs that a paper refers to ["references"]
  - All PMIDs that cite the paper ["cited by"]
- In **v6.14.0**, these fields will be downloaded into Flight Tracker
- Long term: Brainstorming "stories to tell" through data about a paper's scientific history based on reference chain





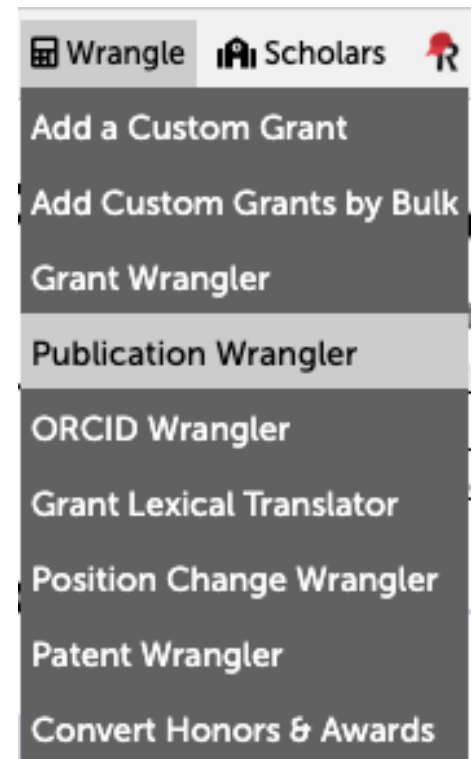
# Deep Dive

Pearls of Publication Wrangling

# Publication Wrangling



- Page is under the **Wrangle** menu
- Two-step process to expedite
- Biggest upkeep step: Publications **must** be wrangled for Flight Tracker to use them!
- ORCID bypasses publication wrangling
- We're looking into asking the NIH to build an API for My Bibliography as another bypass route
- The burden is heaviest at first
- Scholars can wrangle their own pubs in the Scholar Portal



# Overview



Publication Wrangling has two steps.

- **Step 1:** Group auto-approval in 7 components
- **Step 2:** Limited individual review in 9 components



## Step 1: Overview



- Common names: 2010 census
- Short/long names
- Overriding recommendations
- Over-represented groups
- A massive influx of pubs
- 2014 & PubMed data
- Opening someone's "Step 2"

# Step 1: Auto-Approve?



- Flight Tracker matches by name and by institution
- Certain names are likely to have false positives
- Filtering out low-risk names can save administrative time
- Green check ✓ = Auto-approve; hand 🖱️ = Handle manually

**Record 18: Jason R Becker** (1 new publication)  
Uncommon last name: Therefore, recommend approving ✓. Override & Handle Manually?  
[PMID39087355](#)<sup>[X]</sup>

**Record 29: Jennifer U Blackford** (1 new publication)  
Uncommon last name: Therefore, recommend approving ✓. Override & Handle Manually?  
[PMID39069211](#)<sup>[X]</sup>

**Record 35: Craig R Brooks** (1 new publication)  
Common last name: Therefore, recommend handling manually 🖱️. Override & Auto-Approve?  
(You will wrangle new publications individually.)

# 2010 US Census: Common Names



- We grabbed a list of names used **more than 200,000 times in the 2010 US Census**. [2020 data aren't yet available.]
- Those names are considered “common” enough to avoid because they are more likely to produce a mismatch.
- *E.g.*, Craig R. Brooks
  - 251,663 people have the last name Brooks in 2010.
  - Thus, his name likely produces false matches on PubMed.
  - Therefore, Flight Tracker recommends handling Craig Brooks’ publications manually. 🖋️

Record 35: **Craig R Brooks** (1 new publication)

Common last name: Therefore, recommend handling manually 🖋️ . [Override & Auto-Approve?](#)

(You will wrangle new publications individually.)

## Short/Long Names



- Short names also pose a problem because PubMed can match them to a part of a longer name.
- *E.g.*, Wood can be matched to Brookwood.
- Theoretically, such mismatches can happen with ANY name, but the likelihood decreases as name length increases.
- By trial and error, we find that names with **4 letters or less** provide a good threshold to handle manually. 🖋️

Record 255: **Wesley H Self** (2 new publications)

Short last name: Therefore, recommend handling manually 🖋️ . Override & Auto-Approve?

(You will wrangle new publications individually.)

# Overriding Recommendations



- **You get to make the final call!** You can toggle by clicking the “Override & ...” link. It will toggle between ✓ & ✎.
- Scenarios to force to handle manually:
  - Family members at same institution:  
*E.g., Harold Moses, Sr. & Harold Moses, Jr.*
  - Doppelgangers at same institution:  
*E.g., A. Scott Pearson & Scott J. Pearson*
  - Difficult prior wrangling with a scholar
  - Over-represented populations in academe  
*E.g., common Asian names like Chang, Mukherjee*



## Massive Influx of Pubs



- Step 1 lists all the PMIDs yet to be wrangled
- If there are many more than expected in the given timespan, consider handling manually [Step 2] to see what's happening
- *E.g.*, a scholar should not have 50 new publications over the one month since someone last wrangled. Something went wrong!
- In Step 2, we'll look at possible actions to remedy this scenario

Uncommon last name: Therefore, recommend approving ✓. Override & Handle Manually?  
PMID38758100<sup>[X]</sup>, PMID37702663<sup>[X]</sup>, PMID36847497<sup>[X]</sup>, PMID36804844<sup>[X]</sup>, PMID36356223<sup>[X]</sup>,  
PMID36306506<sup>[X]</sup>, PMID35876336<sup>[X]</sup>, PMID35548696<sup>[X]</sup>, PMID33556253<sup>[X]</sup>, PMID32754022<sup>[X]</sup>,  
PMID32202919<sup>[X]</sup>

## Better PubMed Data After 2014



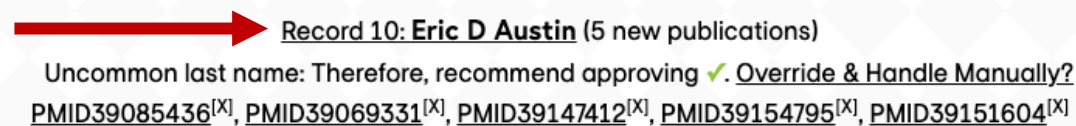
- For general awareness, PubMed did not keep institution data for all authors until **after January 1, 2014!**
- Because Flight Tracker matches by institution, its ability to match publications before 2014 is significantly decreased
- As time proceeds, the 2014 threshold becomes less important
- For older scholars, you can input a list of PMIDs manually in Step 2. Consider copy/pasting from their CV.

**2014**

## Viewing Someone's "Step 2"



- You can click a scholar's name to look at their "Step 2" directly in a new window



- When complete, click the Auto-Approve Publications button at the bottom to accept all green checks

Auto-Approve Publications

- The program will then take you on to Step 2



## Step 2: Overview



- Institutional affiliations
- Sharing among projects
- Investigating a paper
- Toggling by name
- Manually adding items
- Exclude lists: names & title
- Why was this pub excluded?
- Restarting from scratch
- Adjusting institutions

# Step 2: Individual Scrutiny



- Step 2 has a finer granularity than Step 1
- It looks at new publications one scholar at a time
- The increased scrutiny requires a slower pace

10: Eric D Austin

Last/Full Name:

View Next Record With New Data

Access PubMed

**Click to check on or off**

5 New Citations

Select All New Citations | Deselect All New Citations

- ✓ 1. PubMed Search: Sullivan RT, Austin ED. Pulmonary Hypertension in Children. Clin Chest Med. 2024-09-01; 45(3):685-693. doi:10.1016/j.ccm.2024.04.001. PubMed PMID: 39069331 Citation in REDCap PMC11296661. Original Research
- ✓ 2. PubMed Search: Griffiths M, Simpson CE, Yang J, Vaidya D, Nies MK, Brandal S, Damico R, Hassoun P, Ivy DD, Austin ED, Pauciulo MW, Lutz KA, Martin LJ, Rosenzweig EB, Benza RL, Nichols WC, Manlihot C, Everett AD. Multiple biomarkers are equivalent to clinical pulmonary arterial hypertension survival risk models. Chest. 2024-08-16. doi:10.1016/j.chest.2024.06.3824. PubMed PMID: 39154795 Citation in REDCap Original Research
- ✓ 3. PubMed Search: Varghese NP, Austin ED, Galambos C, Mullen MP, Yung D, Guillerman RP, Vargas SO, Avitabile CM, Chartan CA, Cortes-Santiago N, Ibach M, Jackson EO, Jarrell JA, Keller RL, Krishnan US, Patel KR, Pogoriler J, Whalen EC, Wikenheiser-Brokamp K, Villafranco NM, Abman SH, Pediatric Pulmonary Hypertension Network (PPHNet). An Interdisciplinary Consensus Approach to Pulmonary Hypertension in Developmental Lung Disorders. Eur Respir J. 2024-08-15. doi:10.1183/13993003.00639-2024. PubMed PMID: 39147412 Citation in REDCap Original Research

Finalize Publications

**Click to accept all checked items**

## Step 2: Individual Scrutiny



- A list of Existing Publications that have already been accepted is at the bottom

**Tells how the citation was gathered**

**Category from iCite [12% error rate]**

<input checked="" type="checkbox"/> 22. <b>ORCID ID Match:</b> Kerchberger VE, <b>Bastarache JA.</b> : A Step Closer to the Full Picture. Am J Respir Crit Care Med. 2022-06-08. doi:10.1164/rccm.202205-1019ED. PubMed PMID: 35675564 Citation in REDCap PMC9799262.	<b>Original Research</b> <small>reset</small>
<input checked="" type="checkbox"/> 23. <b>PubMed Search:</b> Meegan JE, Komalavilas P, Cheung-Flynn J, Yim TW, Putz ND, Jesse JJ, Smith KD, Sidorova TN, Lee HNR, Tomasek T, Shaver CM, Ware LB, Brophy CM, <b>Bastarache JA.</b> Blocking P2X7 receptor with AZ 10606120 exacerbates vascular hyperpermeability and inflammation in murine polymicrobial sepsis. Physiol Rep. 2022-06-01; 10(11):e15290. doi:10.14814/phy2.15290. PubMed PMID: 35668576 Citation in REDCap PMC9170948.	<b>Original Research</b> <small>reset</small>

**Click "reset" to undo acceptance**

# Institutional Affiliations



- At the top, it will include a list of publications for that author
- “Home Team” + any Position Change institutions
- Note: The Veterans Health Administration is turned on by default; you can turn this off in the Configure Application page
- I make a mental note of non-Home Team institutions for later

## Publication Wrangler

This page is meant to confirm the association of publications with authors.

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**10: Eric D Austin**

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**Institutions Searched For:** Emory University, University of Colorado, Vanderbilt, Vanderbilt University, Vanderbilt University Medical Center, VU, Vanderbilt University School of Medicine, VUMC, Meharry, Meharry Medical College, Veterans Health Administration, and Tennessee Valley Healthcare System

# Data Sharing



- If a scholar is in more than one Flight Tracker on your server, you might see data about publications that other projects have accepted and yours has not
- Based on name-matching, so watch out for mismatches!
- You get final choice on which pubs to add



4 Already Accepted from PubMed  
In Record 10: Eric D Austin in Newman Society (pid 66635)

[Add All for This Project & Refresh Page](#)

PMID 286805 [add](#) Eric D Austin in Newman Society  
Nickel NP, O'Leary JM, Brittain EL, Fessel JP, Zamanian RT, West JD, Austin ED. Kidney dysfunction in patients with pulmonary arterial hypertension. *Pulm Circ.* 2017 March; 7(1):38-54. doi:10.1086/690018.

PMID 21041561 [add](#) Eric D Austin in Newman Society  
Austin ED, Hamid R, Ahmad F. Somatic mutations in pulmonary arterial hypertension: primary or secondary events?. *Am J Respir Crit Care Med.* 2010 November 01; 182(9):1094-6. doi:10.1164/rccm.201007-1147ED.

# Investigating a Paper



✓ 1. PubMed Search: Sullivan RT, Austin ED. Pulmonary Hypertension in Children. Clin Chest Med. 2024-09-01; 45(3):685-693. doi:10.1016/j.ccm.2024.04.001. PubMed PMID: 39069331 Citation in REDCap Original Research  
PMC11296661.

↑  
**Link to PubMed Central**

↑  
**Link to paper**

↑  
**Link to PubMed**  
[I usually click this]

↑  
**Link to REDCap Data**

# PubMed Citation



Review > Clin Chest Med. 2024 Sep;45(3):685-693. doi: 10.1016/j.ccm.2024.04.001.

## Pulmonary Hypertension in Children

Rachel T Sullivan <sup>1</sup>, Eric D Austin <sup>2</sup>

Affiliations + expand 

PMID: 39069331 PMCID: PMC11296661 (available on 2025-09-01)

DOI: [10.1016/j.ccm.2024.04.001](https://doi.org/10.1016/j.ccm.2024.04.001)

### Abstract

Pulmonary hypertension (PH) may manifest at any age, including during childhood. While pediatric PH frequently associates with early life alterations that cause occult or overt pulmonary vascular

# PubMed Citation



Review > Clin Chest Med. 2024 Sep;45(3):685-693. doi: 10.1016/j.ccm.2024.04.001.

## Pulmonary Hypertension in Children

Rachel T Sullivan <sup>1</sup>, Eric D Austin <sup>2</sup>

Affiliations – collapse

**Do NOT pay attention to other authors' affiliations, just your author's**

### Affiliations

- 1 Division of Cardiology, Department of Pediatrics, Vanderbilt University Medical Center, Monroe Carrell Jr Children's Hospital, Nashville, TN 37232-2578, USA.
- 2 Division of Pulmonary Medicine, Department of Pediatrics, Vanderbilt University Medical Center, Carrell Jr Children's Hospital, Nashville, TN 37232-2578, USA. Electronic address: eric.austin@vumc.org.

**Look for match with their list of institutions**



# Toggling by Name



- Clicking a green name will toggle all citations with that name as checked or unchecked
- *E.g.*, clicking “Morrow E” will toggle all citations with Morrow E
- **Warning:** If a publication has both Morrow E and Morrow EL no it, toggling one will uncheck the publication

Morrow EL (10)

Morrow E (1)

11 New Citations

[Select All New Citations](#) | [Deselect All New Citations](#)



1. PubMed Search: Morrow EL, Duff MC. Sleep Disruption Persists and Relates to Memory Disability After Traumatic Brain Injury: A Cross-Sectional Study of Adults in the Chronic Phase of Injury. J Head Trauma Rehabil. 2024-05-14. doi:10.1097/HTR.0000000000000957. PubMed PMID: 38758100 Citation in REDCap

Original Research

# Manually Adding Items



- You can manually add any item with a PubMed ID [PMID]
- Click “Switch to Bulk” to add more than one PMID, one per line
- Click “Go!” to look up

A screenshot of the Flight Tracker interface. On the left, there are two sections: 'Lookup PMID' and 'Lookup PMC'. Each section has a text input field, a 'Go!' button, and a 'Switch to Bulk' link. To the right of these sections is a large, empty rectangular text area with a thin border and a small cursor icon in the bottom right corner. The entire interface is set against a light gray diamond-patterned background.

# Manually Adding Items



- Click green button to add to accepted publication list

**Lookup PMID**

[Switch to Bulk](#)

**Lookup PMC**

[Switch to Bulk](#)

Octaria R,Rebeiro PF,Kainer MA. Methodologic Considerations for Small Cohort Studies. Clin Infect Dis. 2019 Oct 15;69(9):1644. PubMed PMID: 30852613

←

## Exclude Lists



- To prevent persistent mismatches, at the top, you can provide:
  - A list of authors to ALWAYS exclude in future downloads
  - A list of words in the title to ALWAYS exclude in future downloads
  - Items in each list should be separated by commas
- Don't forget to click the Update button!

To undo any actions made here, open the Citation form in the given REDCap record and change the answer for the **Include?** question. Yes means accepted; no means omitted; blank means yet-to-be wrangled.

Comma-Separated Author Exclude List:

Comma-Separated Title-Words Exclude List:

# Skipped Publications



22. **ORCID ID Match:** Kerchberger VE, **Bastarache JA.** : A Step Closer to the Full Picture. Am J Respir Crit Care Med. 2022-06-08. [doi:10.1164/rccm.202205-1019ED](https://doi.org/10.1164/rccm.202205-1019ED). PubMed PMID: 35675564 Citation in REDCap [PMC9799262](#). Original Research  
reset

23. **PubMed Search:** Meegan JE, Komalavilas P, Cheung-Flynn J, Yim TW, Putz ND, Jesse JJ, Smith KD, Sidorova TN, Lee HNR, Tomasek T, Shaver CM, Ware LB, Brophy CM, **Bastarache JA.** Blocking P2X7 receptor with AZ 10606120 exacerbates vascular hyperpermeability and inflammation in murine polymicrobial sepsis. Physiol Rep. 2022-06-01; 10(11):e15290. [doi:10.14814/phy2.15290](https://doi.org/10.14814/phy2.15290). PubMed PMID: 35668576 Citation in REDCap [PMC9170948](#). Original Research  
reset



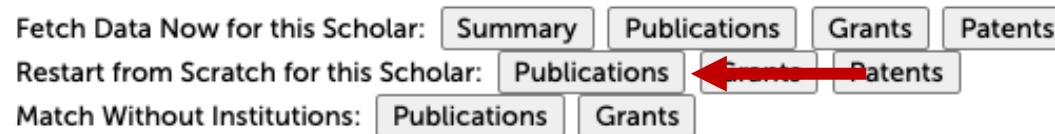
**Click “reset” to undo acceptance**

- Resetting a publication will change the value of the “Include?” in REDCap’s Citation form
- Yes = accepted; No = omitted; [blank] = not wrangled

# Restarting from Scratch



- When dozens of false publications [rarely] download, take the following steps:
  1. Discover & fix the problem by changing name, changing institutions [*cf.* next slide], or using exclude lists
  2. Click the “Restart from Scratch for this Scholar” button for Publications
  3. This will erase all publication data & download a new crop



# Adjusting Institutions & Retrying



- When publications are missing, one of three things are wrong:
  - An institution is not matching
    - If special institution, add it to the scholar's REDCap record on the Position Change form
    - If Home Team, adjust via General menu → Configure Application
    - Your institution must match exactly how it spells out in PubMed!
    - Fix & click “Fetch Data Now” Publications button
  - The publication is before 2014  
→ Add by PMID
  - Your name is not matching [rare]
    - *E.g.*, Hilary Surratt & Surratt HL  
[PubMed did not know the full first name, just the initials]



# Recap



## Step 1

- Common names: 2010 census
- Short/long names
- Overriding recommendations
- Over-represented groups
- A massive influx of pubs
- 2014 & PubMed data
- Opening someone's "Step 2"

## Step 2

- Institutional affiliations
- Sharing among projects
- Investigating a paper
- Toggling by name
- Manually adding items
- Exclude lists: names & title
- Why was this pub excluded?
- Restarting from scratch
- Adjusting institutions



## Three Extras



- ORCID Wrangler
- Wrangling by the scholars themselves: Scholar Portal & Surveys
- Debugging via Flight Tracker's Logs



# Extra: ORCID Wrangler



- When ORCID is pulling no information or bad information, look to the ORCID Wrangler [Wrangle menu]
- Instructions on how to use tool are on the webpage

Name	Outside Institutions in REDCap	Block All Searching?	ORCID's in REDCap	ORCID's on Website
16: Julie A Bastarache	[none listed]	No <input type="button" value="block"/>	0000-0003-0458-6507 <input type="button" value="remove"/> <input type="text" value="Add Custom ORCID"/> <input type="button" value="add"/>	0000-0003-0458-6507 [in REDCap]

**Turn off ORCID?**

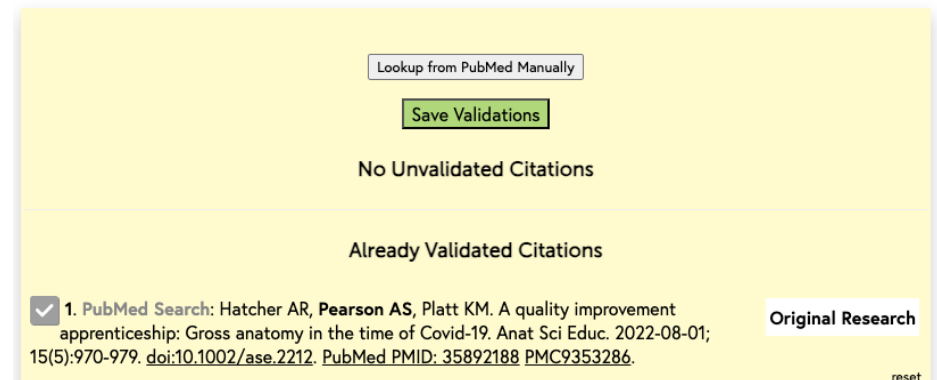
**Currently using these ORCID's**

**ORCID's that currently show up on ORCID's website for this name**

## Extra: Scholar Wrangling



- Your scholars can wrangle their own publications!
- Option 1: Send out an Initial Survey or Followup Survey
- Option 2: Give your scholars a link to the Scholar Portal
  - They can access via the **Your Info menu → Validate Your Publications page**
  - A similar interface to Step 2



## Extra: Debugging via Logs



- What's really happening when Flight Tracker searches PubMed?
- Same process as an Advanced Search from [www.pubmed.gov](http://www.pubmed.gov)
  - Name[s] & institution[s]
- To see actual search, go to **General menu → Logging page**
  - Search for the person's last name
  - Find URL that starts with <https://eutils.ncbi.nlm.nih.gov> and has the name in the URL
  - Link: Encoded data about how PubMed interprets search

2024-08-27  
03:42:14

[https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?db=pubmed&retmax=100000&retmode=json&term=\(Searcy,+Madeline%5Bau%5D\)](https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?db=pubmed&retmax=100000&retmode=json&term=(Searcy,+Madeline%5Bau%5D))

2024-08-27  
03:42:14

Contacting [https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?db=pubmed&retmax=100000&retmode=json&term=\(Searcy,+Madeline'](https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?db=pubmed&retmax=100000&retmode=json&term=(Searcy,+Madeline')

Next Month



# Creating a Flight Tracker that Accepts Sign Ups from a REDCap Survey



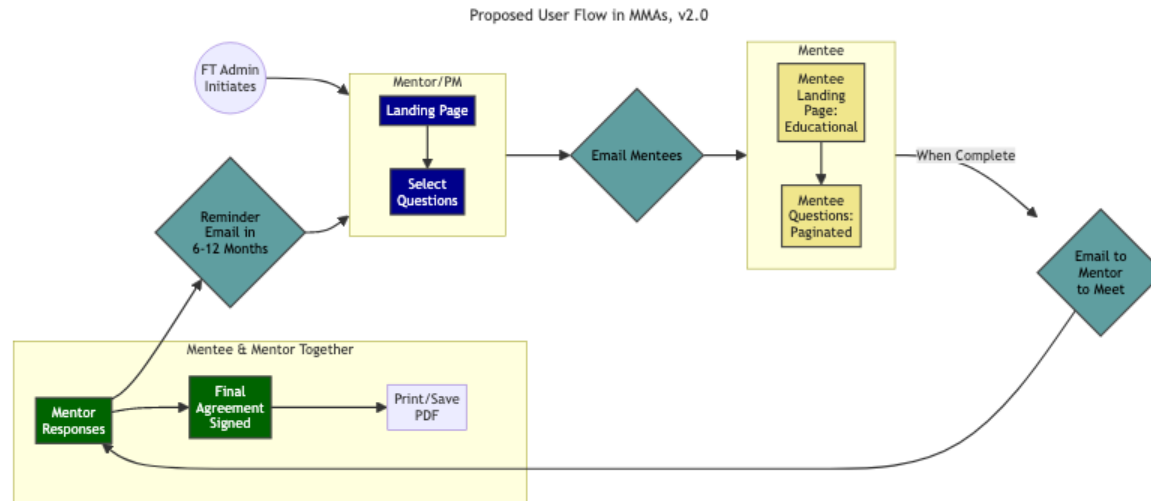


# What's Next?

# Mentee-Mentor Agreements v2.0



- NIH has a renewed emphasis on mentorship in training grants
- This month, I plan to work on a substantial revision with better control, selecting questions, and customizing questions



## More Information from ORCID



- ORCID has a profile that can contain info about a scholar's career history
- **Alexis Ranalli & Brad Samuels** of Nemours have written code to fetch this information & put into a scholar's REDCap record
- Brad has submitted the code; I plan to review & adapt it

ORCID



## Request for My Bibliography API



- Rebecca Helton has drafted a letter to the NLM & NCBI to request the development of an API for My Bibliography
- Scholars verify their own publications to My Bibliography, so an API would allow Flight Tracker access to bypass pub wrangling
- Idea generated by conversations with the U of Washington
- **We want this letter to be co-signed by many institutions**
- We're working on getting administrative approvals locally...
- More in **October**

# Long-Term Projects



- Exploring an **online video course**
- Writing a **journal article** about Flight Tracker
- **Software improvement:** Non-NIH Grants from Dept. of HHS [TAGGS]
- Updated **NIH Training Tables** by January 25, 2025 [NOT-OD-24-129]



# Flight Tracker Community



## Support Forum

**"Better than Email"** - Ask me for an Account in the Chat

<https://redcap.vanderbilt.edu/flightracker/>

A screenshot of the Flight Tracker Community forum interface. The top navigation bar includes the logo, a search bar, a "Create post" button, and a "Spaces" dropdown. Below the navigation bar, a welcome message reads "Welcome to Flight Tracker Community!". The main content area is titled "All Posts in Flight Tracker Community" and lists several posts with their authors, dates, and topics. On the right side, there is a sidebar with the "efe EDGE SCHOLARS" logo and a list of navigation links.

FLIGHT TRACKER for scholars

Search for posts, topics, and users... [+ Create post](#) Spaces

Logged in as [scott.pearson](#)

Welcome to Flight Tracker Community!

### All Posts in Flight Tracker Community

- Using FT for New T32 Applications (Jump to latest comment)  
new t32s | 5 Comments | 0 Likes
- Identical name at same institution (Jump to latest comment)  
identical names | 1 Comments | 0 Likes
- Honors & Awards Survey  
honors and awards | survey | 0 Comments | 0 Likes
- email not sent, make sure "Enable module on all projects by default" is NOT checked. (Jump to latest comment)  
email | module setting | 1 Comments | 0 Likes
- Publication results limited by the "Institutions Searched For" (Jump to latest comment)  
publication wrangler | 3 Comments | 0 Likes

efe EDGE SCHOLARS

- Home
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- Getting Started with Flight Tracker
- Next Consortium Meeting & Past Slides
- Newbie Session Agenda
- Edge for Scholars Blog
- Edge for Scholars at Vanderbilt
- X: @EdgeForScholars

# Troubleshooting Call



## Monthly Troubleshooting Call – optional

Third Wednesday at 1pm Central Time  
September 18, 2024

*Driven by Your Questions & Problems*

All are welcome!

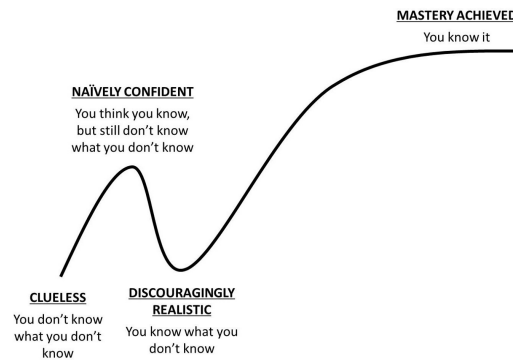
Ask to join our email list in the chat for an invitation...



# Newbie Call



## Just getting started with Flight Tracker?



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

**Monday, September 16, at noon Central Time**

**(Tuesday, October 15, at 11am Central Time)**

Leave your email in the chat to receive an invitation

# Getting Started Workshop



After each month's newbie call, we're hosting a separate Getting Started Workshop to get the ball rolling on implementation. Questions will center only around starting out. No advanced questions will be discussed.

Our next call will be on **Thursday, September 16, at 11am CT.**

All newbie call participants will be invited.  
Let me know if you want an invitation to the next one.

# Flight Tracker Consortium Meeting

September 4, 2024



[www.edgeforscholars.org](http://www.edgeforscholars.org)

[X @EdgeForScholars](https://twitter.com/EdgeForScholars)

[https://redcap.link/flight\\_tracker](https://redcap.link/flight_tracker)