

Flight Tracker Consortium Meeting

February 7, 2024



www.edgeforscholars.org

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

https://redcap.link/flight_tracker

Meeting Agenda



Current Version:
v6.7.2

What's New?

- New NIH RePORTER Fields
- New Scholar Publishing Metrics
- Cron Performance Upgrades
- Grant Dashboard Upgrades
- Publication Fetch Rewrite
- Share Custom Surveys among Colleagues

Deep Dive: Tricks of Publication Wrangling

What's Next?

Proposed Change for Wording of Question



What's New?

New NIH RePORTER Fields



- The NIH RePORTER upgraded its API to v2 recently and deprecated v1. Flight Tracker upgraded support in **v6.7.0**.
 - Bad news: **v6.6.0** and before will NOT pull data from the NIH RePORTER any longer.
 - Good news! New data fields were added, and Flight Tracker is updating its data in REDCap.
- | | |
|--|---|
| <ul style="list-style-type: none">• Opportunity Number• ARRA Funded• Budget Start/End Date• CFDA Code• Funding Mechanism | <ul style="list-style-type: none">• Direct Cost Amount (!!!)• Indirect Cost Amount• Project Detail URL• Date Added to NIH RePORTER |
|--|---|



New Scholar Publishing Metrics



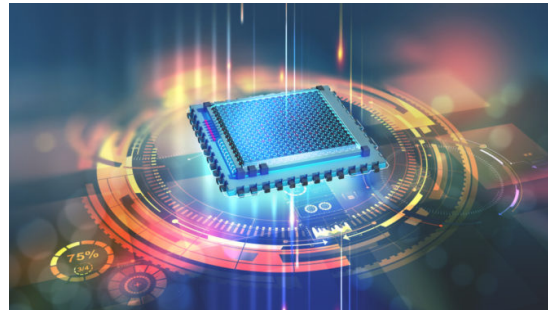
- For Scholar Portal & Scholar Profiles pages
- Stored on Summary form, with definitions
- **HI** = *H-Index* / [average number of authors in contributing publications]
- **HI,norm** = normalizes each H-Index input to [number of citations] / [number of co-authors]
- **HI,annual** = *HI,norm* / [number of years of publications]
- **G Index** = The largest integer such that the most-cited g articles received together at least g^2 citations



Cron Performance Upgrades



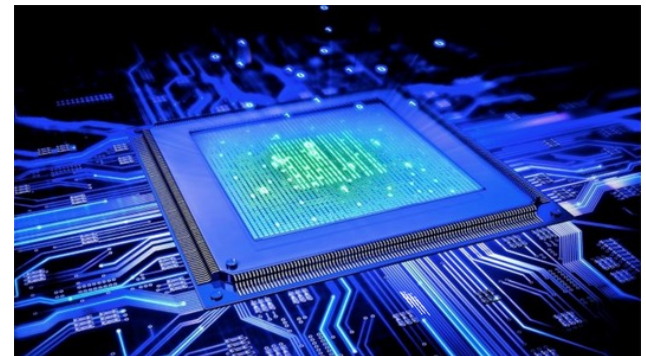
- Cron = overnight processes
- Vanderbilt situation:
 - ~6,000 scholars & ~70 Flight Tracker projects
 - Additional institution-specific jobs
 - Running almost 24/7
 - REDCap database server is already busy from 8am-6pm daily



Cron Performance Upgrades



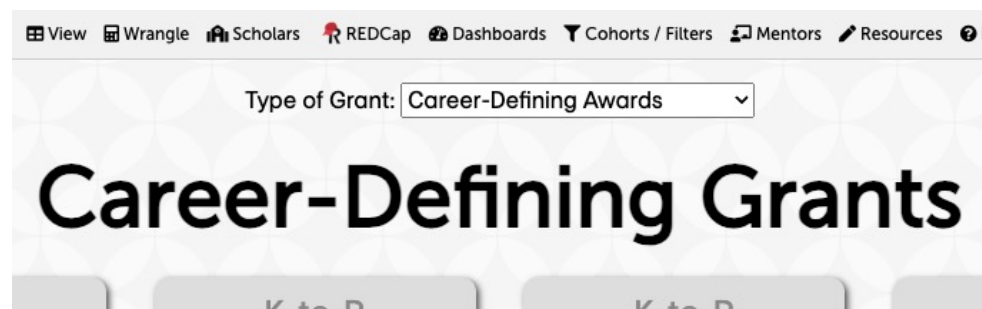
- Moved from one cron to three crons:
 - **External-API Cron/Queue** [24/7 but doesn't require computer resources]
 - **Resource-Intensive Cron/Queue** [doesn't run from 7am-7pm on weekdays]
 - **Long-Running Cron/Queue** [doesn't run from 6am-7.15pm on weekdays]
- The capacity has more than doubled
- Better protects REDCap during daytime
- **General menu → Batch Queue**



Grant Dashboard Upgrades



- Now, can filter statistics by type of grant on dashboards
 - Career-Defining Awards
 - All PI/Co-PI Grants
 - All Grants, regardless of role
[BUT... NIH RePORTER only matches on PI/Co-PI]
- Requested by the University of Southern California



Publication Fetch Rewrite

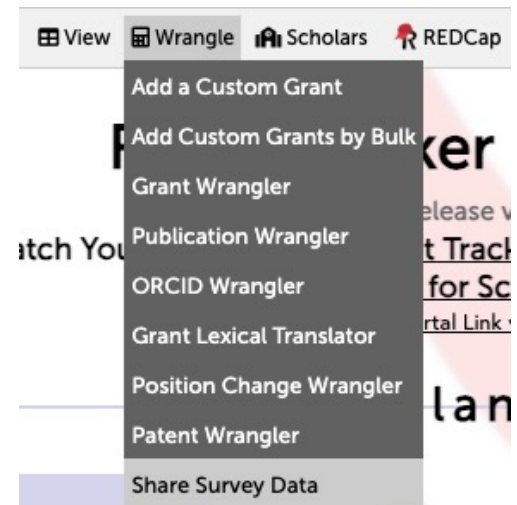


- Simplified algorithm to fetch PubMed publications in **v6.6.0**
- Result:
 - More accurate = less false-positive matches
 - 2-3x quicker
- Similar approach:
 - ORCID
 - Name- & institution-matching



Share Custom Surveys

- Goal: Better support custom institutional surveys
- Previously, you could create a custom survey in REDCap
- Now, you can share between projects:
 - If custom surveys exist, a new item appears in Wrangle menu → Share Survey Data
 - If another project has the same survey with the same fields AND the same scholar, can share data by clicking a button



Share Custom Surveys



Share/Pull Data For Additional Surveys

Please note that the survey/instrument names, field names, and settings for repeating instruments much match in order for copying to work. In the case of repeating instruments, only the latest survey will be copied.

Destination Record	Source Project	Source Record	Instrument(s)	Act
1: Michael Widlansky	MCW Widlansky [pid 55]	1: Michael Widlansky	Test Survey [Latest: 02-01-2024]	Refresh Latest Now

Requested by the Medical Center of Wisconsin



Deep Dive

Tricks of Publication Wrangling

Topics to be Covered



- **Basics:** PubMed, ORCID, Institutions, 2014 & Manual Additions
- Filtering by Publishing Names
- Refining Future Searches: Exclude Lists
- Searching for New Institutions on PubMed
- For Uncommon Names, Searching Without Institutions
- ERIC – Education Publications
- Upcoming Feature: Collaborating on Wrangling [Thanks MCW!]



Publication Wrangler: The Basics



- Matched by name & institution [or ORCID]
- Some false positives → need to wrangle
- **Step 1:** Sort out long, uncommon last names
- **Step 2:** Sift short or common names more closely
 - Orientation to page
 - Resetting publications



Publication Wrangler



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

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.

Exclude Lists
[discussed later]

Comma-Separated Author Exclude List:

Comma-Separated Title-Words Exclude List:

**Finalize
Publications**

Publication Wrangler

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

Name [including middle]

16: Julie A Bastarache

All Institutions

Institutions Searched For: 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

Bastarache is an uncommon last name in the United States.

You likely can approve these publications without close review.

[Click here to approve all the publications for this record automatically.](#)

112 Existing Publications | 1 New Publication

Publication Wrangler



112 Existing Publications | 1 New Publication

Add Custom Publications

Lookup PMID

[Switch to Bulk](#)

Lookup PMC

[Switch to Bulk](#)

Finalize Publications

Finalize Work

No matches in other projects.

New Publications
[Work to do]

1 New Citation

1. PubMed Search: **Bastarache JA**, Blackwell TS. Development of animal models for the acute respiratory distress syndrome. *Dis Model Mech.* 2024-01-12; 2(5-6):218-23. doi:10.1242/dmm.001677. PubMed PMID: 19407329 Citation in REDCap PMC2675821. Original Research

Existing Citations

Existing Pubs
[Work already done]

1. PubMed Search: Zehr EP, Erzen CL, Oshima K, Langouet-Astrie CJ, LaRiviere WB, Shi D, Zhang F, McCollister BD, Windham SL, Rizzo AN, **Bastarache JA**, Horswill AR, Schmidt EP, Kwiecinski JM, Colbert JF. Bacterial pneumonia-induced shedding of epithelial heparan sulfate inhibits the bactericidal activity of cathelicidin in a murine model. *Am J Physiol Lung Cell Mol Physiol.* 2023-12-19. doi:10.1152/ajplung.00178.2023. PubMed PMID: 38113313 Citation in REDCap Original Research

Publication Wrangler



1. **PubMed Search:** **Bastarache JA, Blackwell TS.** Development of animal models for the acute respiratory distress syndrome. *Dis Model Mech.* 2024-01-12; 2(5-6):218-23. [doi:10.1242/dmm.001677](https://doi.org/10.1242/dmm.001677). [PubMed PMID: 19407329](#) [Citation in REDCap PMC2675821](#).

Original Research

- **Checkbox:** Checked if match is good; click to uncheck if not
- **Data Source** in grey [ORCID v. PubMed Search]
- **Name** is bolded in citation
- **DOI:** Link to paper in journal
- **PubMed PMID:** Link to PubMed abstract [most useful]
- **Citation in REDCap:** Link to REDCap instrument
- **PMC:** Link to PubMed Central [text of paper]
- **Original Research:** Designation by NIH's iCite

Looking at PubMed



Save Email Send to Display options ⚙️

> [Dis Model Mech](#) 2009 May-Jun;2(5-6):218-23. doi: 10.1242/dmm.001677.

Development of animal models for the acute respiratory distress syndrome

[Julie A Bastarache](#)¹, [Timothy S Blackwell](#)

Affiliations + expand ←

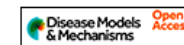
PMID: 19407329 PMCID: [PMC2675821](#) DOI: [10.1242/dmm.001677](#)

[Free PMC article](#)

Abstract

Injury to the lung parenchyma results in the acute respiratory distress syndrome (ARDS), which is a common and life-threatening cause of respiratory failure and mortality that develops after a variety of insults, including sepsis, multiple trauma, pneumonia, aspiration of gastric contents and severe burns. The pathogenesis of ARDS is complex with loss of the alveolar-capillary barrier and flooding of the airspaces with protein-rich fluid; injury to the alveolar epithelium; an influx of neutrophils and macrophages; and fibrin deposition as a result of activation of coagulation and inhibition of

FULL TEXT LINKS



ACTIONS



SHARE



PAGE NAVIGATION

Looking at PubMed



Found 1 result for 19407329

Save | Email | Send to | Display options ⚙️

> [Dis Model Mech.](#) 2009 May-Jun;2(5-6):218-23. doi: 10.1242/dmm.001677.

Development of animal models for the acute respiratory distress syndrome

[Julie A Bastarache](#)¹, [Timothy S Blackwell](#)

Affiliations — collapse

Affiliation

¹ Department of Medicine, Division of Allergy, Vanderbilt University School of Medicine, Nashville, TN 37232, USA. julie.bastarache@vanderbilt.edu

PMID: 19407329 PMCID: [PMC2675821](#) DOI: [10.1242/dmm.001677](#)

[Free PMC article](#)

Abstract

Injury to the lung parenchyma results in the acute respiratory distress syndrome (ARDS), which is a common and life-threatening cause of respiratory failure and mortality that develops after a variety of insults, including sepsis, multiple trauma, pneumonia, aspiration of gastric contents and severe burns. The pathogenesis of ARDS is complex with loss of the alveolar-capillary barrier and flooding of the airspaces with protein-rich fluid: injury to the alveolar epithelium: an influx of neutrophils and

FULL TEXT LINKS

ACTIONS

[Cite](#) [Collections](#)

SHARE

PAGE NAVIGATION

< Title & authors

Abstract

This is where institutions match

Looking at PubMed



Upcoming and urgent challenges in critical care research based on COVID-19 pandemic experience

Franck Verdonk ¹, Dorien Feyaerts ², Rafael Badenes ³, Julie A Bastarach ⁴, Adrien Bouglé ⁵, Wesley Ely ⁶, Brice Gaudilliere ², Christopher Howard ⁷, Katarzyna Kotfis ⁸, Alexandre Lautrette ⁹, Matthieu Le Dorze ¹⁰, Babith Joseph Mankidy ⁷, Michael A Matthay ¹¹, Christopher K Morgan ⁷, Aurélien Mazeraud ¹², Brijesh V Patel ¹³, Rajyabardhan Pattnaik ¹⁴, Jean Reuter ¹⁵, Marcus J Schultz ¹⁶, Tarek Sharshar ¹², Gentle S Shrestha ¹⁷, Charles Verdonk ¹⁸, Lorraine B Ware ⁴, Romain Pirracchio ¹⁹, Matthieu Jabaudon ²⁰

Affiliations – collapse

Affiliations

- ¹ Department of Anaesthesiology and Intensive Care, Hôpital Saint-Antoine Paris, Assistance Publique-Hôpitaux de Paris, France and GRC 29, DMU DREAM, Sorbonne University, Paris, France; Department of Anesthesiology, Perioperative and Pain Medicine, Stanford University School of Medicine, Stanford University, CA, United States.
- ² Department of Anesthesiology, Perioperative and Pain Medicine, Stanford University School of Medicine, Stanford University, CA, United States.
- ³ Department of Anaesthesiology and Intensive Care, Hospital Clinico Universitario de Valencia, University of Valencia, Valencia, Spain.
- ⁴ Division of Allergy, Pulmonary and Critical Care Medicine, Department of Medicine, Vanderbilt University Medical Center, Nashville, TN, United States.
- ⁵ Sorbonne Université, GRC 29, AP-HP, DMU DREAM, Department of Anaesthesiology and Critical Care Medicine, Institute of Cardiology, Pitié-Salpêtrière Hospital, Paris, France.
- ⁶ Critical Illness, Brain Dysfunction, and Survivorship (CIBS) Center, at the TN Valley VA Geriatric Research Education Clinical Center (GRECC) and Vanderbilt University Medical Center, Nashville, TN, United States.
- ⁷ Department of Medicine, Division of Pulmonary, Critical Care and Sleep Medicine, Baylor College of Medicine, Houston, TX, United States.

Only one institution needs to match for this publication to show up
→ False positive

You should check that your author matches with their institution

ORCIDs



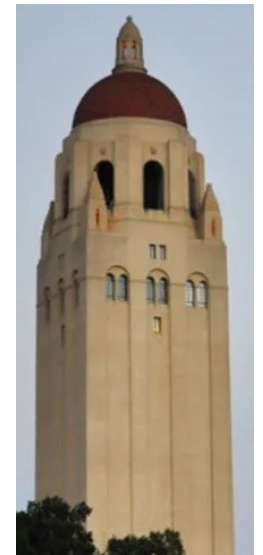
- Flight Tracker searches PubMed by ORCID Identifiers
 - On the Identifiers instrument on the REDCap record
 - Flight Tracker searches ORCID for identifiers; can be wrong
- ORCID IDs are unique identifiers [like SSNs, but not secretive]
- Flight Tracker accepts publications matched by ORCID IDs as already wrangled
- Adoption is increasing
- NIH is supportive
- www.orcid.org



Institutions



- Combination of two lists
 - Everybody: On the General menu → Configure Application page
 - Individuals: On the Position Change form on their REDCap record
 - VHA included by default; can turn off on configuration
- PubMed tries to match them with the author affiliations
- Can be tricky; check examples in PubMed
 - Focus on highly identifiable words like Duke, Pittsburgh
 - Avoid acronyms like UIC, VUMC
 - Avoid departments or long text that might be mismatched



2014: The Key Year



- Before 2014:
 - PubMed's database only stored institutional affiliations for first author and sometimes last author
 - Middle authors' affiliations were left out
- After 2014:
 - All authors' affiliations are searchable in the database
- Therefore, you might need to add a list of PMIDs [best in bulk]



Manually Adding Publications



- Search by PMID/PMCID
- Can copy/paste from CV
- Click Switch to Bulk to input a list [one per line]
- Click “Go!” to pull from PubMed

This screenshot shows the 'Lookup PMID' and 'Lookup PMC' sections in a 'Bulk' mode. Each section has a small text input field followed by a 'Go!' button. Below the 'Lookup PMID' section, there is a 'Switch to Bulk' link with a red arrow pointing to it from the right. A large, empty rectangular box is positioned to the right of these sections, intended for pasting a list of identifiers.This screenshot shows the 'Lookup PMID' and 'Lookup PMC' sections in a 'Single' mode. Each section has a larger text input field followed by a 'Go!' button. Below the 'Lookup PMID' section, there is a 'Switch to Single' link. A large, empty rectangular box is positioned to the right of these sections, intended for pasting a single identifier.

Manually Adding Publications



- “Go!” fetches citation
- “Include & Accept This Citation” will add it as wrangled

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

Filtering by Publishing Names



- Sometimes, multiple publishing names [abbreviated] can be used
- Sometimes, incorrect names can be pulled [doppelgangers]
- *E.g.*, Pearson S vs. Pearson SJ vs. Pearson AS for “Scott Pearson, Vanderbilt”
- Can turn on or off based on name:
 - Click green button
 - All names with that convention will turn on or off

Matches to Randall Lee Woltjer

Woltjer R (11)

Woltjer RL (32)

Exclude Lists



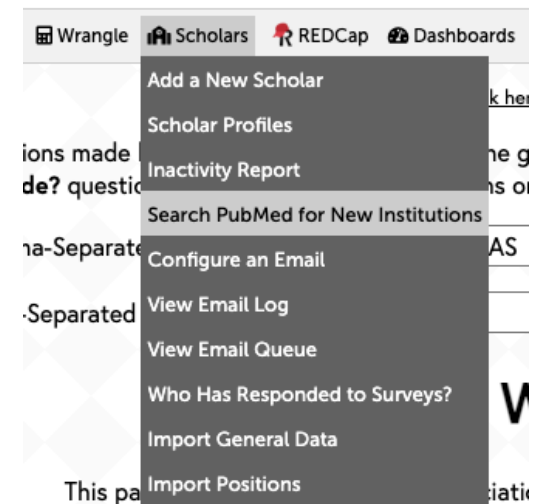
Comma-Separated Author Exclude List:

Comma-Separated Title-Words Exclude List:

- For consistent problematic mismatches
- Can enter a name to exclude at the top of the page
 - Format just like it appears in the citation
 - Don't forget to click Update!
- More than one name? Separate them by commas
- Flight Tracker won't download any names with that exclude list
- Can also exclude publications that have certain words/phrases in the title if publishing names are the same

Searching for New Institutions

- Can search PubMed for institutions that aren't in your Position Change forms
- Looks at “recent” publications [in last X months]
- Newer feature; beyond the scope of this call
- Scholars menu → Search PubMed for New Institutions



Searching Without Institutions



Fetch Data Now for this Scholar:
Restart from Scratch for this Scholar:
Match Without Institutions:

MSTP (Copy) 

- When on a personal record, buttons appear in the top toolbar
- Helpful when looking for data holes
- Fetch Data Now: Adds to existing data, just like overnight call [with institutions]
- Restart from Scratch: Deletes related data before starting anew [with institutions]
- Match Without Institutions: Adds to existing data, but without institutional matching
 - Helpful for uncommon names that aren't pulling in

ERIC: Education Publications



- The Dept. of Education offers a publication search tool: ERIC
 - More limited than PubMed
 - Does not track institutions
- Wrangled in same way as PubMed publications
- Used on graphs in same way as PubMed
- To avoid many false positives, turn on for individual scholars
- On Scholars menu
 - Scholar Profile
- Flip switch to left & click Save Settings



New: Collaborating on Wrangling



- Will show data wrangling of other Flight Tracker projects
 - Names must match
 - On same REDCap server
- If matches found, shows up under lookup by ID

A screenshot of a web interface for data wrangling. The interface has a light gray background with a subtle diamond pattern. At the top, there are two search 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 area. Below the search sections, there are three colored dots (blue, orange, green) and a progress indicator. At the bottom, the text "Searching for Matches from 26 Other Projects..." is displayed.

New: Collaborating on Wrangling



112 Already Accepted from PubMed
In Record 16: Julie A Bastarache in Newman Society [copy] (pid 16)

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

PMID 24059842 (PMC PMC3920200) Julie A Bastarache in Newman Society [copy]
Janz DR, Zhao Z, Koyama T, May AK, Bernard GR, Bastarache JA, Young PP, Ware LB. Longer storage duration of red blood cells is associated with an increased risk of acute lung injury in patients with sepsis. Ann Intensive Care. 2013 September 24; 3(1):33. doi:10.1186/2110-5820-3-33.

PMID 21277854 (PMC PMC6996826) Julie A Bastarache in Newman Society [copy]
Bastarache JA, Koyama T, Wickersham NE, Mitchell DB, Mernaugh RL, Ware LB. Accuracy and reproducibility of a multiplex immunoassay platform: a validation study. J Immunol Methods. 2011 March 31; 367(1-2):33-9. doi:10.1016/j.jim.2011.01.005.

PMID 25559436 (PMC PMC4359645) Julie A Bastarache in Newman Society [copy]
Chen W, Janz DR, Bastarache JA, May AK, O'Neal HR, Bernard GR, Ware LB. Prehospital aspirin use is associated with reduced risk of acute respiratory distress syndrome in critically ill patients: a propensity-adjusted analysis. Crit. Care Med. 2015 April; 43(4):801-7. doi:10.1097/CCM.0000000000000789.

Project Description
[can match multiple projects]

Add all for project

Add individual publications
[one at a time]

- **v6.8.0** and higher, out within a week
- Suggestion by the Medical College of Wisconsin

Summary



- Basics: PubMed, ORCID, Institutions, 2014 & Manual Additions
- Filtering by Publishing Names
- Refining Future Searches: Exclude Lists
- Searching for New Institutions on PubMed
- For Uncommon Names, Searching Without Institutions
- ERIC – Education Publications
- Upcoming Feature: Collaborating on Wrangling



Upcoming Deep Dives



March: Maximizing Value on
a New Project

We'll take requests for new
deep dives in March!



What's Next?

Proposed Change for Question



- On the Initial Survey, we currently ask:
Are you the first person in your family to attend college?
- A consortium partner suggested to change the question to:
Are you the first person in your family in your generation to attend college?
- Reason: More inclusive to siblings who have also had to overcome challenges.
- Rebecca & I are supportive.
Your thoughts?



Data in Community Initiatives



- Is your program involved in community initiatives? Are you willing to be interviewed about your program's work?
- Joshua Atura, MPH Candidate, Vanderbilt University
- He is interested in data management/use in non-profit healthcare organizations engaged in community initiatives



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. At the top, there is a navigation bar with the Flight Tracker 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. Each post includes the user's name, the time since the post was made, the topic, and the number of comments and likes. On the right side, there is a sidebar with the "efe EDGE SCHOLARS" logo and a list of navigation links including "Home", "Flight Tracker Video Vault", "Mentee-Mentor Agreements", "Getting Started with Flight Tracker", "Next Consortium Meeting & Past Slides", "Newbie Session Agenda", "Edge for Scholars Blog", "Edge for Scholars at Vanderbilt", and "X: @EdgeForScholars".

FLIGHT TRACKER for scholars

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

Logged in as [scottpearson](#)

Welcome to Flight Tracker Community!

All Posts in Flight Tracker Community

- 5 Comments 0 Likes
- 1 Comments 0 Likes
- 0 Comments 0 Likes
- 1 Comments 0 Likes
- 3 Comments 0 Likes

efe EDGE SCHOLARS

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- X: @EdgeForScholars

Troubleshooting Call



Monthly Troubleshooting Call – optional

Third Wednesday at 1pm Central Time
February 21, 2024

Driven by Your Questions & Problems

All are welcome!

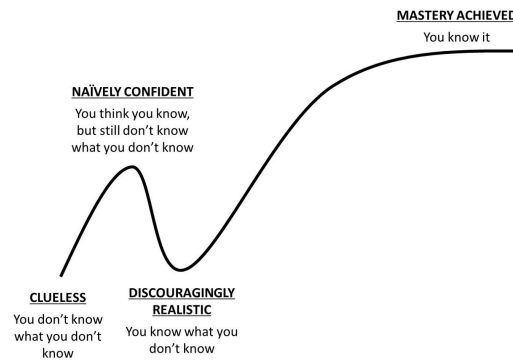
Ask to join our email list in the chat for an invitation...



Newbie Call



Just getting started with Flight Tracker?



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

Tuesday, February 13, at 11am Central Time

(Monday, March 18, at noon Central Time)

Leave your email in the chat to receive an invitation

Flight Tracker Consortium Meeting

February 7, 2024



www.edgeforscholars.org

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

https://redcap.link/flight_tracker