Flight Tracker Consortium Meeting

November 6, 2024



www.edgeforscholars.org



https://redcap.link/flight_tracker

Meeting Agenda



Current Version: v6.17.2

What's New?

Downloading ORCID Profile Information ORCID Wrangler Updates

Deep Dive: Visualizing Publications

What's Next?

NIH Training Table Updates from NIH More Customizable Mentee-Mentor Agreements [v2.0] Update "Find a Collaborator" on Scholar Portal

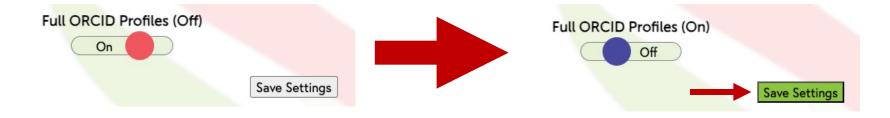


What's New?

Downloading ORCID Profile



- Thanks Nemours! Specifically, Alexis Ranalli & Brad Samuel!
- ORCID profiles contain information about scholars
- That information can now be downloaded into Flight Tracker
- You must turn on this feature to access the data:
 - Go to the Flight Tracker Home page [leftmost menu item]
 - Move "Full ORCID Profiles" to on & click Save Settings



ORCID Wrangler Updates



Name	Outside Institutions in REDCap	Block All Searching?	ORCIDs in REDCap	ORCID Profile	
1: <u>Jere</u> <u>Palmer</u> <u>Segrest</u>	Vanderbilt University	No block	0000-0002-0676-7996 remove Add Custom ORCID add	ORCIDs 0000-0002-0676-7996 [in REDCap]	Profile Personal: Given Name: Jere Family Name: Segrest
2: <u>Jerry R.</u> <u>Mitchell</u>	ClinTrials Research Inc.	No block	0000-0002-0654-4418 remove Add Custom ORCID add	ORCIDs 0000-0002-0654-4418 [in REDCap]	Profile Personal: Given Name: Jerry Family Name: Mitchell Credit Name: Jerry T. Mitchell
3: <u>John M.</u> <u>Rainey</u>	Wayne State University	No block	None Add Custom ORCID add	No ma	atches!

It now displays information from their profile if it exists

When available, it displays names, employments, organization memberships & locations





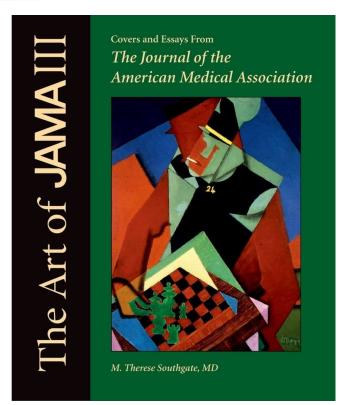
Deep Dive

Visualizing Publications

Overview

FLIGHT TRACKER for scholars

- Why Publications?
- Lists & the Brag Widget
- Word Clouds
- Publication Impact Measures
- Social Network of Collaborations
- Multi-Site Collaborations: Institutions
- Multi-Site Collaborations: Countries
- Publications with Mentor[s]
- Institutional History of a Publication [Proposed]



Why Publications?



- Publications have a lot of data going on: keywords, MeSH terms, abstracts, associated grants, journals & co-authors
- PubMed publications are more abundant than grants: 1 million biomedical per year, 2 papers per minute & 1,000+ per day
- Therefore, Flight Tracker does a lot with publications that just isn't possible with grants



About Publications



Science

- PubMed is the standard we use for graphs because that's the language of the NIH
- PubMed pre-prints are supported & revised when published
- Educational publications from ERIC are also supported but must be turned on individually for each scholar

Non-indexed papers are covered in the Honors, Awards & Activities form & survey

 PubMed's institutional tracking got better after 2014, so Flight Tracker pulls better/ more for pubs after 2014

Publication Lists





- 1. Many customization options:
 - Altmetrics images on/off
 - Filter for dates
 - Sort by date or impact measure
 - Author positions
 - Publications during training + X days
 - Cohorts
 - Filter by particular grants cited
 - Filter by words in title [e.g., research topics]
- 2. View for one author or all authors

Publication Lists



Step 1: Customize

Turn on Altmetrics Sourced from the Web, altmetrics can tell you a lot about how often journal articles and other scholarly outputs like datasets are discussed and used around the world.	Show Pubs During Training Additional Days After Training: Re-Configure
Filter for Timespan Start Date: mm/dd/yyyy End Date: mm/dd/yyyy Sorting By Date By RCR By Altmetric Score Filter for Author Position First Author Middle Author Last Author Re-Configure	Cohort:SELECT Currently showing all pubs Click to Limit Pubs to After 2014 PubMed's match-quality increased after 2014 Filter by Grants Cited Filter by Word(s) in Title (one per line; case-insensitive): Re-Configure

Brag: Publications Widget



- Connect your outside website with Flight Tracker
- Shows recent publications for your scholars
- It can be for an individual scholar on a profile page
- It can be for publications only during training
- It can be for a cohort
- Great morale booster
- A great way to involve friends & family



Brag: Publications Widget



Publications

Check out these recent publications from our current and former students!

2024-05-17. doi:10.1007/s10877-024-01165-y. PubMed PMID: 38758402

Tsujimoto Y, Tsutsumi Y, Kataoka Y, Shiroshita A, Efthimiou O, Furukawa TA. The impact of continuity correction methods in Cochrane reviews with single-zero trials with rare events: A meta-epidemiological study. Res Synth Methods. 2024-05-15. doi:10.1002/jrsm.1720. PubMed PMID: 38750630

Jia G, Ping J, Guo X, Yang Y, Tao R, Li B, Ambs S, Barnard ME, Chen Y, Garcia-Closas M, Gu J, Hu JJ, Huo D, John EM, Li Cl, Li JL, Nathanson KL, Nemesure B, Olopade Ol, Pal T, Press MF, Sanderson M, Sandler DP, Shu XO, Troester MA, Yao S, Adejumo PO, Ahearn T, Brewster AM, Hennis AJM, Makumbi T, Ndom P, O'Brien KM, Olshan AF, Oluwasanu MM, Reid S, Butler EN, Huang M, Ntekim A, Qian H, Zhang H, Ambrosone CB, Cai Q, Long J, Palmer JR, Haiman CA, Zheng W. Genome-wide association analyses of breast cancer in women of African ancestry identify new susceptibility loci and improve risk prediction. Nat Genet. 2024-05-13; 56(5):819-826. doi:10.1038/s41588-024-01736-4. PubMed PMID: 38741014 PMC11284829.

Woo KP, Ellis RC, Maskal SM, Remulla D, Shukla P, Rosen AJ, Wetzka I, Osei-Koomson W, Phillips S, Miller BT, Beffa LR, Petro CC, Krpata DM, Prabhu AS, Menzo EL, Rosen MJ. The association of permanent versus absorbable fixation on developing chronic post-herniorrhaphy groin pain in patients undergoing laparoscopic inguinal hernia repair. Surg Endosc. 2024-05-06. doi:10.1007/s00464-024-10866-z. PubMed PMID: 38710888



Brag: Publications Widget



- Three configuration steps:
 - 1. Select a group
 - 2. Select a time period
 - 3. Click re-configure button
- Include this Page as a Widget in Another Page

Copy the following HTML and place into another HTML webpage to display your scholars' publications. Your website must likely have cross-origin framing turned on (which is the default).

<iframe src="https://localhost/redcap/plugins/career_dev/brag.php?pid=16&NOAUTH"
 title="Recent Publications" style="width: 100%; height: 400px;"></iframe>

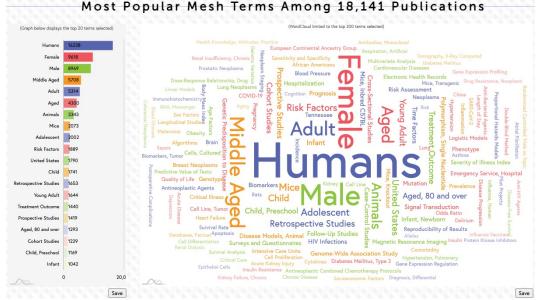
Cop

- Then copy/paste HTML to your website
- Technical: Your website & REDCap server must support "iframes"
 - If you run into trouble displaying the page, let your IT folks know this, and they might be able to help!

Word Clouds



- Fields: Journals, MeSH Terms & types of Grants Cited
- Filter by authorship: First, middle, last author
- Filter by dates & cohorts
- Filter by only papers with certain MeSH Terms
- Shows top 200 items
- Bar chart of top 20 items
- Great to profile a group!





NIH's iCite: Relative Citation Ratio [RCR]



- Normalizes the number of citations to a scholar's field
- 1.0 is mean the average paper in the field
- 2.0 = cited twice as often as the average paper in its field
- 0.5 = cited half as often as the average paper in its field

Altmetric score

- Based on newer media activity on Internet
- *E.g.*, e-reader downloads, tweets, Facebook posts, news articles, policy mentions



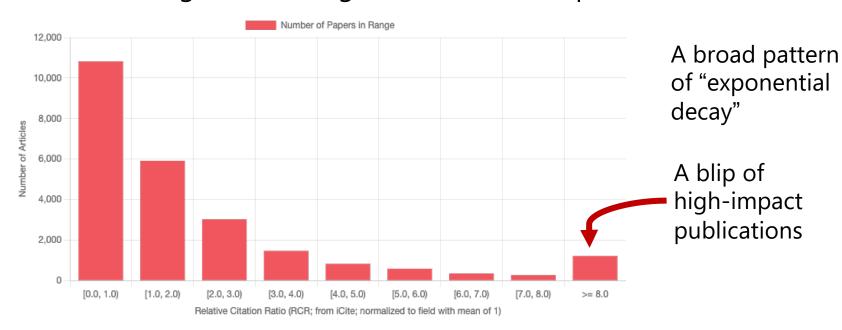


- For RCRs & Altmetric scores:
 - Histogram showing distribution of impact measure
 - Line chart of mean/median impact measures over time
- Bar chart of high-impact RCRs [> 8.0] over time
- List of papers with RCR above 2.0, each with its Altmetric score



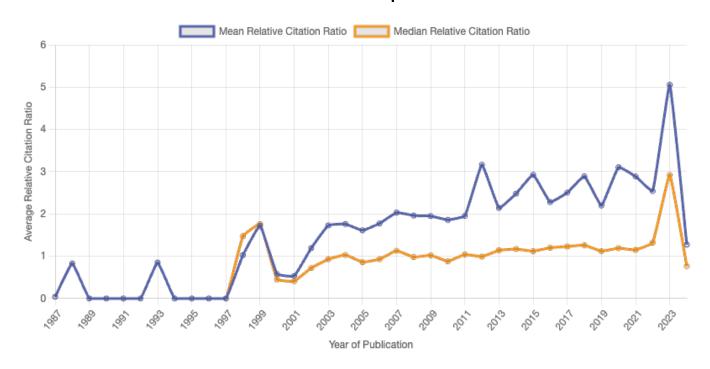


Histogram showing distribution of impact measure



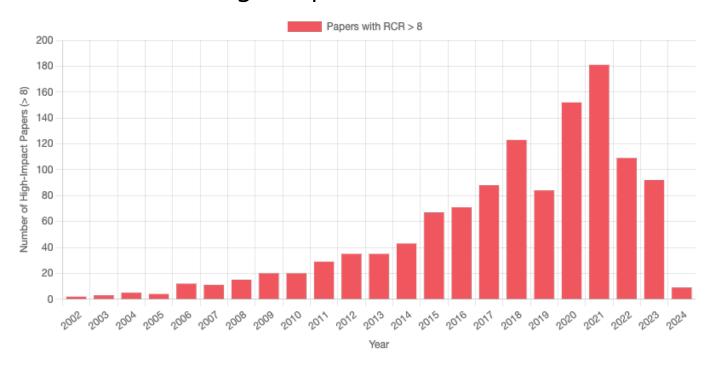


Line chart of mean/median impact measures over time





Bar chart of high-impact RCRs [> 8.0] over time





List of papers with RCR above 2.0, each with its Altmetric score

High-Performing Citations (Above RCR of 2, Count of 5,891)

Baden LR, El Sahly HM, Essink B, Kotloff K, Frey S, Novak R, Diemert D, Spector SA, Rouphael N, Creech CB, McGettigan J, Khetan S, Segall N, Solis J, Brosz A, Fierro C, Schwartz H, Neuzil K, Corey L, Gilbert P, Janes H, Follmann D, Marovich M, Mascola J, Polakowski L, Ledgerwood J, Graham BS, Bennett H, Pajon R, Knightly C, Leav B, Deng W, Zhou H, Han S, Ivarsson M, Miller J, Zaks T, COVE Study Group. Efficacy and Safety of the mRNA-1273 SARS-CoV-2 Vaccine. N Engl J Med. 2021-02-04; 384(5):403-416. doi:10.1056/NEJMoa2035389. PubMed PMID: 33378609 PMC7787219. RCR: 688.48. Altmetric Score: 10633.582.

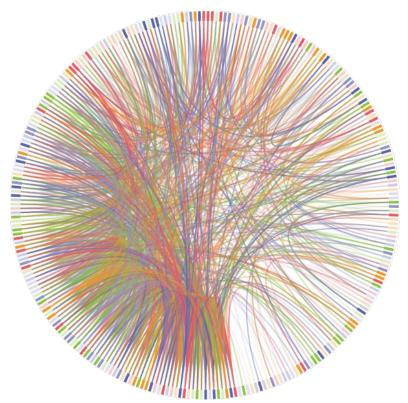
Beigel JH, Tomashek KM, Dodd LE, Mehta AK, Zingman BS, Kalil AC, Hohmann E, Chu HY, Luetkemeyer A, Kline S, Lopez de Castilla D, Finberg RW, Dierberg K, Tapson V, Hsieh L, Patterson TF, Paredes R, Sweeney DA, Short WR, Touloumi G, Lye DC, Ohmagari N, Oh MD, Ruiz-Palacios GM, Benfield T, F¤tkenheuer G, Kortepeter MG, Atmar RL, Creech CB, Lundgren J, Babiker AG, Pett S, Neaton JD, Burgess TH, Bonnett T, Green M, Makowski M, Osinusi A, Nayak S, Lane HC, ACTT-1 Study Group Members. Remdesivir for the Treatment of Covid-19 - Preliminary Report. N. Engl. J. Med. 2020-05-22. doi:10.1056/NEJMoa2007764. PubMed PMID: 32445440 PMC7262788. RCR: 357.91. Altmetric Score: 12658.75.

Your scholars' names are in bold

Collaborations Social Network



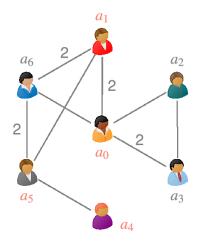
- Each node is a person
- Each line is 1+ co-authored papers together
- "Hairball graph"
- Busier = more collaboration
- A busy graphic shows whether your environment supports collaboration

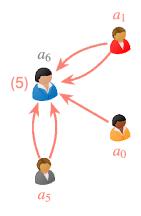


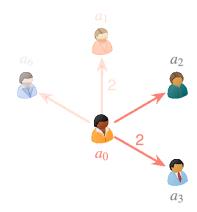
Collaborations Definitions



- Collaboration = one co-authorship pair per one paper
- Collaborations = number of co-author pairs x number of papers
 - Papers are NOT deduplicated in collaborations
- Total papers & total citations ARE deduplicated







Collaborations by the Numbers



- Total number of papers
- Total number of citations
- Collaborations
- Individual success:
 - Number of individual collaborators
 - Number of collaborations

Given Citations <u>to</u> others in network				
Total Number of Papers	1,441			
Total Number of Citations by Papers	57,070			
Total Collaborations	6,993			
Number of Scholars with Collaborations	n = 270			
Average Number of Collaborators with at least one Collaboration	6.9			
Mean of Collaborations	μ = 25.8			
Average Collaborations with a Collaborator	3.7			
Median of Collaborations	8			
Mode of Collaborations	2			
Standard Deviation	σ = 42.4			
Maximum Collaborations	Leading 3 Entries 377 (Wesley H Self) 307 (Jonathan D Casey) 272 (Timothy J Hohman)			
Maximum Number of Collaborators	Leading 3 Entries 34 (Jonathan D Mosley) 31 (Douglas B Johnson) 29 (Deepak K Gupta)			

Multi-Site Collaborations



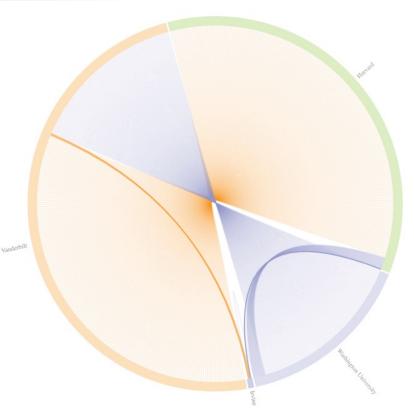
- Under Pubs menu → Multi-Site Collaborations
- Two options:
 - Institutional Collaborations from your list of institutions
 - International Collaborations from all the countries of world
- Configuration options:
 - Cohorts
 - Dates for publications
 - Arcs on map from a given location
 - Turn on/off whether to show numbers on each country
 - Export to CSV



Institutional Collaborations



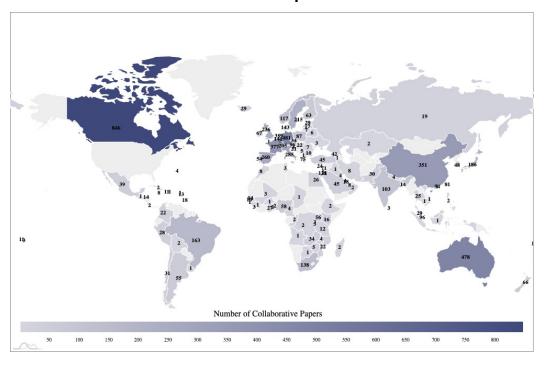
- You provide a list of institutions to match against PubMed's institutional affiliations
- Short, distinct names best instead of lengthy names [e.g., Harvard, Irvine for UC-Irvine, Washington University, Vanderbilt]
- The line widths scale with the number of collaborations as do the nodes' size around the circle
- Great for consortia



International Collaborations



- "Choropleth Map" show statistical data on a map
- Grabs countries from PubMed institutional affiliations & places them on a map
- Darker = more collaborations
- Great for Global Health departments



Publications with Mentors



- Ways to input mentors:
 - Manual Import form
 - Mentors menu → Add Mentors for Existing Scholars
- Pubs menu → Publications with Mentor[s]
- A list of collaborative publications with trainees' & mentors'

names bolded

Jeffrey R. Balser (6 publications with mentor Dan Roden)

Export to CSV is supported

Ritchie MD, Denny JC, Crawford DC, Ramirez AH, Weiner JB, Pulley JM, Basford MA, Brown-Gentry K, **Balser JR**, Masys DR, Haines JL, **Roden DM**. Robust replication of genotype-phenotype associations across multiple diseases in an electronic medical record. Am J Hum Genet. 2010-04-09; 86(4):560-72. doi:10.1016/j.ajhg.2010.03.003. PubMed PMID: 20362271 PMC2850440.

Petersen CI, McFarland TR, Stepanovic SZ, Yang P, Reiner DJ, Hayashi K, George AL, **Roden DM**, Thomas JH, **Balser JR**. In vivo identification of genes that modify ether-a-go-go-related gene activity in Caenorhabditis elegans may also affect human cardiac arrhythmia. Proc Natl Acad Sci U S A. 2004-08-10; 101(32):11773-8. doi:10.1073/pnas.0306005101. PubMed PMID: 15280551 PMC511051.

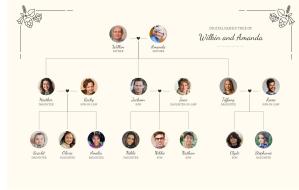
Proposed: History of a Publication



- iCite provides a list of which papers cite other papers & keeps data up to date
- A Vanderbilt group suggested finding whether a given paper has a history among other Flight Tracker scholars at Vanderbilt

 Thus, a paper's collaborative history could be told, kind of like an ancestry

- If the data are there, a pretty ancestry graphic could be built to tell a story
- Andrew Johnson plans to explore this idea more in the spring of 2025



Recap







In This Issue

Assessment
 Clerkship Grading
 Pain Management Education

Feedback
 Entrustment
 COVID-19



- Why Publications?
- Lists & the Brag Widget
- Word Clouds
- Publication Impact Measures
- Social Network of Collaborations
- Multi-Site Collaborations: Institutions
- Multi-Site Collaborations: Countries
- Publications with Mentor[s]
- Institutional History of a Publication [Proposed]



What's Next?

NIH Training Table Updates



- NIH Guidance: NOT-OD-24-129
 - Thankfully, a <u>simplified</u> new format for training tables
 - In effect on January 25 next round
 - Last round of the old table format was due on October 25
 - Existing grants are <u>NOT</u> affected, only new applications & renewals
- Flight Tracker tables will be updated accordingly in November



Mentee-Mentor Agreements v2.0



- Mentee-Mentor Agreements are crucial to everything we do:
 - Support good mentoring practices
 - Collects data on mentoring to evaluate best practices
- New changes will allow program managers & mentors to customize the surveys
 - Custom questions can be asked
 - Questions or sections can be skipped
- New momentum from NIH emphasis on mentorship
- Can give programs a strategic edge in applications

Spotlight: Mentoring

- Mentee-Mentor Agreements
- A main goal is to promote mentoring
- Another long-term goal is to identify best practices of academic mentoring
 - We want to try to correlate success signs like grants & publications with mentoring practices
 - We're interested in gathering partners to collect data and co-author a publication together
- We'll discuss this topic in depth whenever v2.0 is ready





Scholar Portal: Find a Collaborator



- Currently searches all Flight Trackers for one MeSH Term
- Proposed new additions:
 - Download publication keywords
 - Search publication keywords: more flexible than MeSH Terms
 - Search multiple MeSH terms

complement-targeted therapy for treating these comorbidities. This information leads to support for a therapeutic anti-inflammatory strategy by targeting the ComC, where the arsenal of clinical-stage complement-specific drugs is available, especially for patients with ALI/ARDS due to COVID-19.



Keywords: ARDS; COVID-19; clinical trial; complementome; connectome; multiome; pathobiology; therapeutics.

Copyright @ 2023 Yang, Nicholson, Cancio, Cancio and Li.

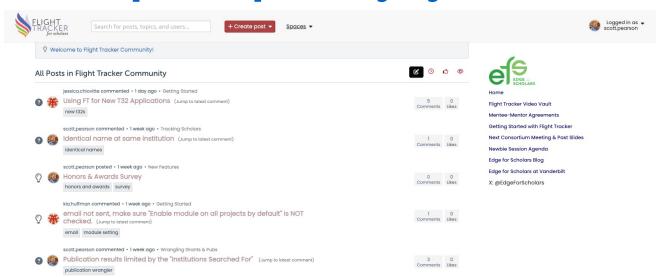
Flight Tracker Community



Support Forum

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

https://redcap.vumc.org/flighttracker/



Troubleshooting Call



Monthly Troubleshooting Call – optional

Third Wednesday at 1pm Central Time November 20, 2024

Driven by Your Questions & Problems

All are welcome!

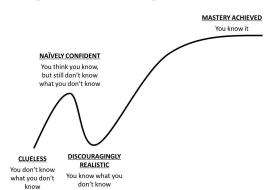
Ask to join our email list in the chat for an invitation...



Newbie Call



Just getting started with Flight Tracker?



There's a definite learning curve.

Move up more quickly by joining

November's "newbie" call.

Thursday, November 14, at noon Central Time (Tuesday, December 10, at noon 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 Friday, November 15, at 10am CT.

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

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