

ORCID US Community presents: Structured Recognition via Rescognito & ORCID

October 10, 2019

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Structured Recognition via Rescognito and ORCID

10/10/2019 Richard Wynne, CEO https://orcid.org/0000-0002-9217-0407 https://rescognito.com/0000-0002-9217-0407

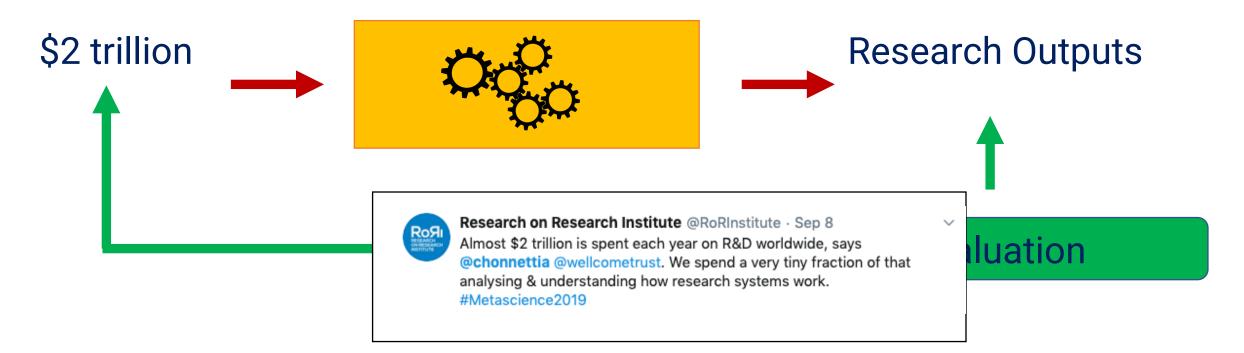
Agenda

- Introduction Improving evaluation of research outputs using PIDs (10 mins)
- Audience Participation Hands-on experience (10 mins)
- Presentation ORCID, DOI, ROR, CRediT for Peer-to-Peer and Curated/Institutional Recognition (10 mins)
- Demo (10 mins)
- Presentation Practical use cases for libraries (10 mins)
- Questions (As long as you like!.,)



Annual Global Research Investment

\$2 trillion per year¹ invested in research



1. https://www.nsf.gov/statistics/2018/nsb20181/report/sections/research-and-development-u-s-trends-and-international-comparisons/cross-national-comparisons-of-r-d-performance



Research/Researcher Evaluation Depends on Publications and Citations

- "Mechanical problems" of identification and attribution
- Counterproductive incentives
- Overlook contributions



"Mechanical problems" of identification and attribution

Morgun A, Shulzhenko N, Unterkircher CS, Diniz RVZ, Pereira AB, Silva MS, et al. Preand post-transplant anti-myosin and anti-heat shock protein antibodies and cardiac transplant outcome. The Journal of Heart and Lung Transplantation. 2004;23(2):204–9.

Contributions

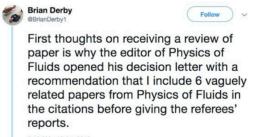
Y.Z. and J.F. conceived and initiated the project; Y.Z. designed, performed and quantified most experiments, including scRNA-seq data analysis and interpretation; X.X. maintained cell culture, participated in experiments and independently repeated experiments; Y.S. helped to design experiments; S.W. developed the TCF/Lef:H2B-GFP reporter line and helped with scRNA-seq data analysis; Z.L. fabricated silicon moulds; S.N.E. helped with hPGCLC-related experiments; J.M.M., J.N.L. and V.M.W. provided the T-mNeonGreen reporter line; Y.Z., D.L.G. and J.F. wrote the manuscript; J.F. supervised the study. All authors edited and approved the manuscript.

- Text string identification of contributors ambiguity
- Contribution implied from format rather than explicit
- Imprecision (e.g.10 contributors cite 10 contributors)
- No citation reason or weighting
- No contribution labeling...
- Contributor acknowledgement sections often entirely missing
- Initials and text string identification
- Inconsistent display and not structured
- Idiosyncratic taxonomies and implementations
- Not interoperable/reportable



Counterproductive incentives

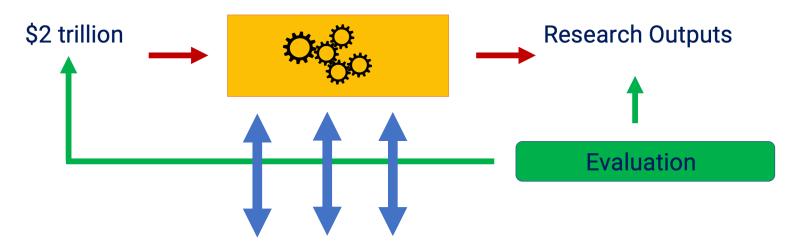
- Research "productivity" is equated to generation of publications and citations
- Rational response is to produce more publications and citations
 - "Do research to get grants not get grants to do research"
- Tricks of the trade
 - Salami slicing
 - P hacking
 - Harking
 - Overselling of correlations and effects
 - Focus on self-promotion rather than rigor
- Citation optimization
 - Journal tricks
 - Reciprocal
 - Citation "packing"



The result? "Crisis" – scientific process undermined in public eye and research funding becomes
vulnerable



Overlooked contributions



- Research lifecycle generates many milestones and outputs that can be usefully recognized:
 "Research is not article shaped" Alison Mudditt, CEO PLOS
- DORA (Declaration of Research Assessment): "There is a pressing need to improve the ways in which the output of scientific research is evaluated by funding agencies, academic institutions, and other parties."



• Stephen Curry, Imperial College: "Researchers deserve to be judged on the basis of what they have done, not simply where they have published — and to be given credit for the many contributions they make above and beyond the publication of research papers."



....article citations indicate a possible connection between any of number of ambiguouslyidentified authors

..... to an unspecified number of ambiguously-identified authors in the cited manuscript....

.... for an unspecified reason....

.... in recognition of unspecified contributions....

.... for motivations that are not transparent....

.... while totally excluding non-manuscript related contributions....

On this basis we generate and use derivative measures of "impact" that are reported as accurate to three decimal places...

..... and then use the result to evaluate careers of millions of researchers and direct trillions of dollars in annual investment.



What Would a Better, PID-enabled System Look Like?

- Signal Produces a more useful "signal" than current system
- Open Free for individual researchers
- Transparent Direct recognition not mediated through indirect attribution and opaque measures of impact
- Democratic Anyone can participate
- Granular Broad range of *factual* contributions recognized
- Attributable Assertions that are verifiable
- Standards-based means Interoperable



What is Rescognito?

A Platform for Recognition:

Peer-to-Peer Recognition







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Audience participation!





The Rescognito Open Ledger

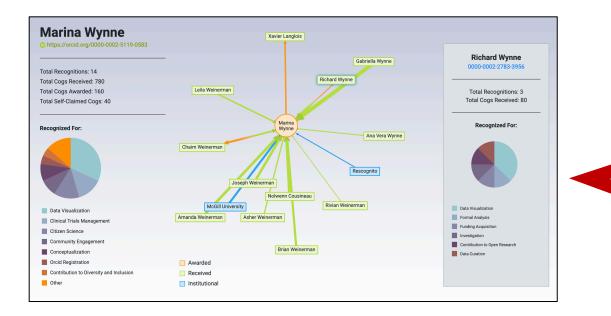
A structured, attributable, granular transcript of Recognition:

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	9/24/2019	30	Institutional	PLOS		er review OS peer review, date recorc	led: 2019-08-31	
	9/13/2019	10	Institutional	PLOS	Lir	iting - review and editing k: CD4 count recovery and long individuals	associated factors	
	9/13/2019	10	Institutional	PLOS	Lir	thodology development k: CD4 count recovery and long individuals	associated factors	
	9/13/2019	10	Institutional	PLOS	Lin	rmal analysis <mark>k:</mark> CD4 count recovery and long individuals	associated factors	
	6/27/2019	-	Work/Publication	Wellcome Open Research	Lir	k: rdhs: an R package to in	teract with The	Recognize
	5/31/2019		Work/Publication	Crossref		k: CD4 count recovery and ong individuals	associated factors	Recognize
	5/6/2019	-	Work/Publication	Crossref		k: Optimizing HIV testing s ica: cost	ervices in sub-Saharan	Recognize

- Carrots, not sticks
- Easy and convenient
- Fair, open and transparent
- Recognizes a *full* range of activities (code, data curation, mentoring etc.) *"Research is not article shaped"*
- Granular and accountable
- Amplitude for better quality signaling
- Standards-based
- Build on what's already there



Rescognito Open Ledger:



What can be recognized?







What does Peer-to-Peer Recognition Look Like?

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About Terms	FAQ Cor	ntact English -		NAME ¢		٩
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Date	COGs	Туре	Depositor/Source	Reason/Contribution		
7/7/0010						
7/7/2019	20	Peer	Vítor Vasconcelos 0000-0002-4621- 5272	Conceptualization Link: Consensus and polar complex contagion proces		
7/4/2019	20	Peer Work/Publication	0000-0002-4621-	Link: Consensus and polar	ses	Recognize
	-		0000-0002-4621- 5272	Link: Consensus and polar complex contagion proces Link: Optimal diversificatio	ses n strategies in the	Recognize
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What does "Curated" (Institutional) Recognition Look Like?

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-	Date	COGs	Туре	Depositor/Source	Reason/Contribution				_
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	10/8/2019	30	Institutional	盦	IR Deposit Link: IR Deposit - "Librarians multi-institutional team proj				
	7/26/2019	20	Peer	Richard Wynne 0000-0002-9217- 0407	Writing - original draft Link: DigitalHub: A Reposito	ory Fo	cused on the Future		
	7/26/2019	20	Peer	Richard Wynne 0000-0002-9217- 0407	Mentoring				





How is Institutional Recognition Recorded?

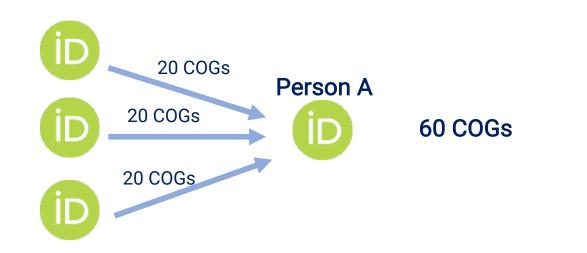
- 1. Manually by an authorized individual
- 2. Semi-automated by uploading a templated spreadsheet
- 3. Fully automated by real-time API



Demo



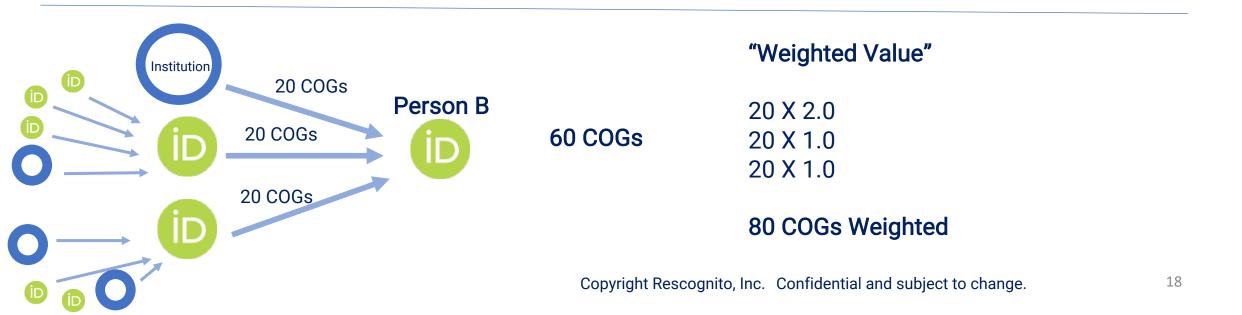
Visualizing and Interpreting COGs



"Weighted Value"

20 X 0.1 20 X 0.1 20 X 0.1

6 COGs Weighted



Candidate Library Pilots - for Discussion

- 1. Assigning CRediT
- 2. Recognition of IR deposit
- 3. Amplification of institutional Awards and Prizes



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Abstract Full Text Info/History Metrics	Preview PDF
ABSTRACT	Subject Cell Bic
Proteins that contain a Centrosomin Motif 1 (CM1) domain are key regulators of γ -tub	pulin
complex-dependent microtubule nucleation, but how they are organized in higher-ord	er Subj
structures is largely unknown. Mto1[bonsai], a truncated functional version of the	
Schizosaccharomyces pombe CM1 protein Mto1, interacts with Mto2 to form an Mto1	/2[bonsai] All A

https://rescognito.com/...doi

http://rescognito.com/10.1101/754457

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Architecture of the 10.1101/754457	Mto1/2 microtubule nucleation comple	x	
Contributors	Reasons (5 COGs per selection)	Reason Selections	
Harish C. Thakur 0000-0001-6996-2046	Data curation -	Data curation	
Eric M. Lynch 0000-0001-5897-5167	2 items selected	Conceptualization, Writing - original draft	
Weronika E. Borek 0000-0001-5805-9986	Investigation -	Investigation	
Xun X. Bao 0000-0003-4733-3550	Writing - review and editing	Writing - review and editing	
Sanju Ashraf 0000-0003-2453-3576	Writing - review and editing	Writing - review and editing	
Juan Zou 0000-0003-2594-6217	Funding acquisition	Funding acquisition	
Juri Rappsilber 0000-0001-5999-1310	3 items selected	Data curation, Data visualization, Formal analysis	
Atlanta G. Cook 0000-0003-2087-9772	Nothing selected	Select a reason	
Kenneth E. Sawin 0000-0002-2607-2219	Nothing selected -	Select a reason	

CRediT Recognition for Your Faculty

• DORA compliance



"8. Encourage responsible authorship practices and the provision of information about the specific contributions of each author."

- Free and easy: www.rescognito.com/doi
- Encourages greater ORCID adoption
- Increase faculty satisfaction especially ECRs
- Signal your institutional expertise to research funders
- Reportable
- Branded and customized options available

Appearance-based tro 10.1111/bjc.12234	ust processing in schizophre	nia				
Contributors	Reasons (5 COGs per selection)	Reason Selection	ons			
Clare A. M. Sutherland 0000-0003-0443-3412	Nothing selected		rt Gordon /orcid.org 03-0854-5497	Admin Login SI	hare My Ledger My Setting	gs 🝺
Gillian Rhodes 0000-0002-3631-8518	Nothing selected	About Terms FAQ Contact English -		Name -	Quentin pittman	
Nikolas Williams 0000-0003-4349-906X	Nothing selected	Reduced Microglial Activity and Eni 10.1523/JNEUROSCI.0398-18.2018	hanced Glutamate Tran	smission in the Baso	lateral Amygdala in Early CNS	Autoimr
Emily Connaughton 0000-0002-0370-2935	Nothing selected	Contributors Kanchan Bisht 0000-0002-2575-8913	5	5 5	5 COGs Data curation Robert Gordon 0000-0000-000	0-0000
Louise Ewing 0000-0001-5263-1267	Nothing selected	Lucas Benoit 0000-0003-1824-7899	10	10	5 COGs Conceptualizati Robert Gordon	
Nathan Caruana 0000-0002-9676-814X	Nothing selected	Quentin J. Pittman	20		5 COGs Data curation	0-0000
Robyn Langdon	Nothing selected	0000-0003-0984-7665		15	Robert Gordon 0000-0000-000	0-0000
0000-0002-1044-7194					5 COGs	



Candidate Library Pilots - for Discussion

- 1. Assigning CRediT
- 2. Recognition of IR deposit
- 3. Amplification of institutional Awards and Prizes



Recognize IR Deposits

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	Date	COGs	Туре	Depositor/Source	Reaso	n/Contribution						
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	7/26/2019	20	Peer	Richard Wynne 0000-0002-9217- 0407	-	ı - original draft igitalHub: A Reposito	ry Fo	cused on the Future				
	7/26/2019	20	Peer	Richard Wynne 0000-0002-9217- 0407	Mento	ring						

• Structured recognition:

- Branded
- Quantified
- Contextualized
- ROR.org ID for Institution
- Convenient for recipient
- Interoperable/Reportable
- Requires no researcher "membership"
- Simple and low cost to implement



Candidate Library Pilots - for Discussion

- 1. Assigning CRediT
- 2. Recognition of IR deposit
- 3. Amplification of Institutional Awards and Prizes



Recognize Prizes and Awards

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10/8/2019	00	montational	1111		stitutional team proj				
10/8/2019 7/26/2019	20	Peer	Richard Wynne	multi-ins	stitutional team proj	ects'			

- Turn local recognition into international visibility
- Structured recognition:
 - Branded
 - Quantified
 - Contextualized
 - ROR.org institutional identification
- Convenient for recipient
- Interoperable/Reportable





PIDs make possible our vision:

An open environment where researchers and research professional are recognized for a wide range of behaviors and contributions that benefit the Open Research ecosystem

> 10/10/2019 Richard Wynne, CEO https://orcid.org/0000-0002-9217-0407 https://rescognito.com/0000-0002-9217-0407

richard@rescognito.com