

To: John Cochran, Chair, Department of Criminology

From: Michael J Lynch, Professor

Re: Summary of results from a study of author influence, with a focus on criminology.

Below, for your information, is a summary of the results of a study examining the influence of scholars who have published in various fields by Ioannidis et al (updated, 2019). Here, I am summarizing the results for criminology in Part II for the years 1996-2017. Part II shows the results for criminologists where the measure for inclusion is career. Part I explains the study methodology.

As we discussed previously, I am included in the 1996-2017 period file (Part II). You are in the career ranked list, which runs through 2018 (Part III).

I am forwarding this information to you because it may be something that is useful for the department, or in reports you must complete for the college.

## **Part I: The study from which these results are drawn is:**

**“A standardized citation metrics author database annotated for scientific field.”** John P. A. Ioannidis, Jeroen Baas, Richard Klavans, and Kevin W. Boyack, Plos Biology, August 2019:

<https://doi.org/10.1371/journal.pbio.3000384>

Abstract: Citation metrics are widely used and misused. We have created a publicly available database of 100,000 top scientists that provides standardized information on citations, h-index, coauthorship-adjusted hm-index, citations to papers in different authorship positions, and a composite indicator. Separate data are shown for career-long and single-year impact. Metrics with and without self-citations and ratio of citations to citing papers are given. Scientists are classified into 22 scientific fields and 176 subfields. Field- and subfield-specific percentiles are also provided for all scientists who have published at least five papers. Career-long data are updated to end of 2017 and to end of 2018 for comparison.

- (1) The purpose of the study was to create a “large-scale database that systematically ranks all the most-cited scientists in each and every scientific field to a sufficient ranking depth...”
- (2) Data for the study were drawn from SCOPUS.
- (3) Prior studies indicate that SCOPUS profiles are 98% accurate.
- (4) The authors created an index that represents “a composite indicator that considers six citation metrics: (total citations; Hirsch h-index; coauthorship-adjusted Schreiber hm-index; number of citations to papers as single author; number of citations to papers as single or first author; and number of citations to papers as single, first, or last author).”
- (5) The SCOPUS search returned 6,880,389 authors who have published at least five papers in 22 fields and 176 subfields.
- (6) Due to increased missing data in SCOPUS the further back one goes, the authors limited the main portion of the metric analysis to SCOPUS data from 1996-2017.
- (7) Based upon the years selected, the top scholars across fields for 1996-2017 were identified using the index briefly identified in #5 above.
- (8) These ranking data are found in the supplemental tables provided for this study. The data for #8 are found in Table S4 ( <http://dx.doi.org/10.17632/btchxktzyw.1#file-bade950e-3343-43e7-896b-fb2069ba3481>).
- (9) This Table includes approximately 105,000 researchers identified as the most influential scholars across 22 fields and 176 subfields, 1996-2017.
- (10) All of the data files for this study are located here: <https://data.mendeley.com/datasets/btchxktzyw/1>

## **Part II: The Criminology Subfield, 1996-2017 analysis**

- (1) I have created a sublist from Ioannidis et al's study of researchers identified as having published in the subfield of criminology who are on the 1996-2017 list.
- (2) Ioannidis et al. indicate three subfields for each author on the list. The criminology list was created by me if criminology was identified as a person's specialty in any of the three subfields associated with an author by Ioannidis et al.
- (3) Using this methods, 218 influential criminologists were identified from the Ioannidis et al study for the 1996-2017 time period.
- (4) Keep in mind – this study does not use citations alone, but includes measures of an author's role on a manuscript (sole; first), with corrections for self-citations, and includes an H-Index factor.
- (5) The results for criminologists, sorting by various factors and the overall index, for USF researchers identified as criminologists (R. Borum, MJ Lynch, N. Poythress) for the period 1996-2017, out of the 218 criminologists, are as follows, with rank out of 218 in ( ):

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| (A) Total number of publications rank: | Lynch (24); Poythress (75); Borum (165)  |
| (B) Overall rank using author index:   | Lynch (33); Borum (101); Poythress (175) |
| (C) N citations, 1996-2017:            | Lynch (62); Borum (78); Poythress (103)  |
| (D) H-Index:                           | Lynch (52); Poythress (55); Borum (76)   |
| (E) N sole-authored papers:            | Lynch (6); Poythress (86); Borum (165)   |
| (F) N citations, sole-authored papers: | Lynch (32); Borum (92); Poythress (201)  |
| (G) N papers, sole and first author:   | Lynch (9); Poythress (101); Borum (181)  |
| (H) N citations, sole & first author:  | Lynch (63); Borum (163); Poythress (179) |
| (I) N papers cited in:                 | Lynch (50); Borum (91); Poythress (107)  |

## **Part III: Criminology Subfield, Career ranking**

- (1) A third portion of the study, which has recently been updated, shows rankings for each of the top individual in a field for the span of their career. Here, there is no effort to standardize the period examined, and some of the individuals in this portion of the study may rank very highly because of the length of their career.
- (2) The career portion of the study identified the top 269 criminologists.
- (3) This portion of the study include Professor John K. Cochran.
- (4) Dr. Cochran ranks:
  - (A) 197<sup>th</sup> in terms of total citations
  - (B) 132<sup>nd</sup> in terms of h-index
  - (C) 87<sup>th</sup> on the Ioannidis influence index
  - (D) 57<sup>th</sup> on number of cited publications