



# **A quick snapshot of how the College of Engineering and Computer Science has been using Academic Analytics**

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**ASEE ERC meeting, March 7-9  
2016**



# Strategic Plan

## Moving Forward

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- All Ph.D. programs in top 50
- Half of Ph.D. programs in top 25
- We have been using the Academic Analytics database to measure attainment of these goals.



# **Overview of Academic Analytics from Glauser's point of view**

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# Academic Analytics

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- Tool for assessment of research productivity
- Data gathered for individual faculty members, then aggregated to programs, departments.
- Population: Ph.D. granting institutions in the United States.
- AAU Universities seem to be driving this...



# Academic Analytics – Basic Data

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- Books (LCCN or British Library)
- Journal Publications (journal list similar to Web of Science, Scopus)
- Refereed Conference Proceedings (AA decides what is “refereed”)
- Citations
- Federal Funding (federal sources only; all \$\$ credited to 1<sup>st</sup> PI)
- Honorific Awards (national/international awards; fairly high bar at present)



# Elements of the Faculty Scholarly Productivity Index (FSPI)

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## 1. Books metrics:

- Percentage of faculty who have authored a book
- Books published per faculty member

## 2. Journal publication metrics:

- Percentage of faculty who have authored a journal article
- Journal articles published per faculty member

## 3. Conference proceedings metrics:

- Percentage of faculty who have authored a conference proceeding
- Conference proceedings published per faculty member

## 4. Citations metrics:

- Percentage of faculty with at least one published journal article cited at least once
- Citations per faculty member
- Citations per journal article

## 5. Federal funding metrics:

- Percentage of faculty who have won new and competitive federal research funding
- Grants per faculty member
- Grant dollars won per faculty member
- Dollars per grant

## 6. Honorific awards metrics:

- Percentage of faculty who have won an honorific award
- Honorific awards per faculty member



# A Few Details

- Faculty roster set for year “N” (e.g., 2015)
- Journal articles counted for rostered faculty for years N-4 to N-1 (2011-2014)
- Citations counted only for articles published in years N-5 to N-1 and cited in years N-5 to N-1 (2010-2014)
- FSPI is a weighted index (discipline specific):

	CIVIL	AEROSPACE
– Citations:	20%	24%
– Articles:	28%	19%
– Awards:	16%	18%
– Grants:	31%	30%
– Conf Proc:	5%	9%



# A Few Details (cont.)

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- For each faculty member Academic Analytics provides a quintile distribution **comparison to those in your discipline** across all other Ph.D. granting programs within the US.
- Positive steps moving forward... Propose that each professor be aware of where they stand now in the quintile distribution... then explore with department chair and the dean's office an approach/plan to help each faculty member move up or sustain current level.
- Remember, data gathered for individual faculty members, then aggregated to programs, departments.





# My calibration of the AA database

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- I was Research Dean for 5 plus years before starting to use AA and knew my faculty really well...
- My own assessment of our faculty only differed for 2 colleagues... AA ranked them lower...
- Both of these faculty receive most of their funding from Industry and/or New York State... not tracked in AA
- What I did in this case was come up with an “effective” AA funding profile for these two faculty
- Important for SU since we are growing our industrial funding and we receive significant \$\$ from NYS