

## MEMO

May 21, 2015

From: Luis Garcia, Dean

To: David Rosowsy, Provost

Subject: CEMS Research Productivity Metrics

The Research Productivity Metrics are very much in line with some of the metrics that the College of Engineering and Mathematical Sciences collects as part of the faculty annual evaluation process. The college is using some of these metrics in determining the workload for next year (amount of teaching is dependent on research metrics).

**1.** A narrative explaining the process that was used to develop the recommended metrics (including how faculty were engaged and how they participated), the specific rationale for the metrics selected (whether at the department/program level or at the college/school level), and a statement of how the recommended metrics align with existing guidelines (e.g., RPT).

I sent your memo regarding the research productivity metrics to all CEMS faculty as part of my January 9<sup>th</sup> Friday check-in e-mail and asked that each unit discuss them and provide me feedback by February 13th. Each unit (Department of Computer Science, School of Engineering and Department of Mathematics and Statistics) discussed the metrics and in the college leadership meetings we discussed them at least a couple of times (the leadership of the units represented the view of their faculty) and we coalesced around the list shown below.

The specific rationale for the metrics selected:

CEMS has being using this metric for as part of the annual evaluation.

• Number of Google Scholar Citations (All, and Within last 5 years)

CEMS has being using these metrics for as part of variable amount of workload allocated to research vs teaching that we are implementing for next year.

- Number of peer-reviewed Journal papers published (averaged over last 3 years)
- Number of peer-reviewed conference papers published (averaged over last 3 years)
- Number of books written (averaged over last 3 years)
- Number of book chapters published (averaged over last 3 years)
- Number of books edited (averaged over last 3 years)
- Number of invited talks, including keynotes (averaged over last 3 years)

COLLEGE OF ENGINEERING AND MATHEMATICAL SCIENCES OFFICE OF THE DEAN 109 Votey Hall, 33 Colchester Avenue, Burlington, VT 05405-0156 802-656-8413 www.cems.uvm.edu

- Annual external direct funding (averaged over last 3 years; direct, F&A, total)
- *Number of MS, and PhD students graduated (averaged over last 3 years)*
- Coverage of faculty research in popular press (averaged over last 3 years)

In addition, the following metrics will be collected but not averaged over the last 3 years.

- Patents awarded
- Major Honors and Awards
- *Major Artifacts Created (e.g. software, hardware)*
- Members of National Academies, Major Society Fellows, etc
- Journal editorships and editorial board memberships

## 2. A narrative suggesting how you, as dean, or your department chairs might use these metrics, and how the information tracked and reported might be used to inform your decision-making and strategy for your college/school.

These metrics will be extremely helpful for me as dean and the CEMS department chairs as we implement a variable workload in the college. It will allow us to recognize and reward those individuals that are generating results in these metrics that we view as key. In addition recognition and improvement in the faculty performance in these metrics should translate into a more engaged and research active set of faculty. These in turn should eventually be reflected in better national rankings and attract better students (graduate and undergraduate) as well as faculty.