Working *DRAFT* campus-wide Research and Creative Scholarship (RCS) metrics at UM

5/14/18 VERSION AFTER FINAL RCS Spring 2018 MEETING WHERE WE DISCUSSED THE SUGGESTIONS MADE BY FULL FACULTY

(*L. Scott Mills, Chair***)**

[See Appendix A for Full RCS metrics Committee, consisting of 20 faculty across many disciplines]

PURPOSE: Research and Creative Scholarship (RCS) at University of Montana plays an essential role in improving human and planetary well-being, as well as in student recruitment, retention, and overall success. Both the University and RCS Strategic Plans underscore the critical importance of RCS to the mission of the university. And yet, no platform currently exists to recognize the breadth and depth of our Research and Creative Scholarship (RCS) at the University, community, national and international level. Therefore, our goal was to assemble a manageable list of RCS metrics (roughly 50 or less) that enumerate the broad span of RCS productivity at UM.

To develop this draft we used an iterative, collaborative, transparent, and highly engaged process within our 20 person interdisciplinary RCS committee (see Appendix A). Then in early May 2018 we sent our draft out to the full UM/Missoula College faculty (>800). We received quite a few comments, which we considered in a final spring 2018 RCS committee meeting on 5/9/18. **The resulting metrics, attached, should be considered a reasonable draft but also an organic and living document subject to revision.**

Importantly, these draft metrics are *not* intended to compare UM units against each other, but rather to capture and broadcast our collective RCS excellence across and among disciplines.

Some principles embraced by the committee included:

- These are numerical (count-based) metrics to be collated annually for each faculty member. They could then be scaled up for *summaries* at the unit or university level. Data analytic programs may assist in compilation.
- These numeric (quantitative) metrics do not replace or affect unit-specific standards or faculty evaluation procedures. We fully recognize that different units have different measures of 'worth' – many of them qualitative – and here we are not trying to capture those detailed measures for any sector.
- Although the goal of having a list of metrics that trumpet RCS annual outputs becomes unwieldy with inclusion of non-numeric criteria, we provide in each section an opportunity to write in "Other contributions missed by these metrics". These comments will help us update and revise the metrics going forward.
- Because not all metrics apply to all units, any given faculty member or unit will likely have a N/A or 0 for certain categories. That's ok.
- Please see footnotes both for rationale of inclusion of certain metrics and for further guidance/definitions of what would be included. (We may turn this into more of a "User Manual"-type Appendix if the number of details continues to increase).
- Some metrics could go in different categories; again, though, remember we are not trying to mimic/replace any unit standards.
- We recognize that some of the categories are broad and so include some outputs that might represent much more work than others.
- All metrics should be anchored to work conducted as part of one's University of Montana-based RCS.

- Nothing in the order of these metrics implies a hierarchy of perceived 'importance' or 'priority'. In the committees view, these are essentially random in order.
- Students and post-docs are critical contributors to beneficiaries or the RCS in all categories; these are all collected in our category IV: Mentoring/Training.
- If the purpose still is not clear, here's some metaphors borrowed from some faculty member comments (outside the RCS Committee) that we believe nicely capture what we are trying to do:
  - ... now you are incorporating successfully a kind of Fitbit mechanism so that we can measure the walk that we share with our colleagues across campus.
  - ... this is a quantified greatest hits of accomplishments for things we all do that can be captured with a numerical count
  - "celebrate the wonderful things that we do"

Going Forward:

- Annual compilation with high (complete?) faculty participation is required for this to mean anything. To accomplish this will require considerable effort and remains a priority that the Office of Research and Creative Scholarship (ORCS) will work on over the summer. Compilation details may necessitate tweaking some of the metrics.
- As noted above we sought feedback from the full faculty at the end of spring semester 2018. We have posted online both the comments received (with names redacted) and our response. We also have discussed the specific suggestions made, which led us to numerous changes to this document.

The current METRICS (No hierarchy is implied by order or numbering system)

I.   **GRANTS/FELLOWSHIPS/COMMISSIONS Submitted/funded during this year**

A. External Grants/Fellowships/Commissions for which you are primary Principal Investigator[1]

    1. Number submitted
    2. Total $$ of submitted
    3. Number funded
    4. Total $$ funded

B. Number of grants/fellowships/commissions submitted as a co-PI[2]

C. Internal (within UM) Grants/Fellowships/Commissions
    5. Number submitted
    6. Total $$ of submitted
    7. Number funded
    8. Total $$ funded

COMMENT BOX (300 character limit): specific suggestions of a different/additional metric that you feel are necessary to capture your RCS in this category.

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[1] Grants for which an Eprop is submitted can pre-populate this metric for each PI. Faculty may need to manually input dollars that come from outside Eprop, such as those through the UM Foundation, etc. We recognize that some grants are more competitive than others, but those details should be captured in unit standards. For contributions as co-PI we have added a separate metric (IB).

[2] As a balance between adding a lot more metrics for contributions as co-PI, and yet recognizing that co-PI contributions represent collaboration often across disciplines, we include this single metric.

B. PUBLICATIONS/CREATIVE SCHOLARSHIP[3]   *(give total number for each)*

A. Peer-reviewed journal articles[4]
   a. Total
   b. As sole author[5] *
   c. As corresponding or primary author[6]

B. Books / scholarly monographs / textbooks

C. Scholarly/professional publications not included in the previous categories that may be peer-edited and refereed. Examples may include book chapters, collections of scholarly essays and/or primary source material; critical editions of translated works; revised translations or editions; review essays; encyclopedia articles; articles in popular journals; reports (eg crime lab, state or federal agencies) and book reviews
   a. Total
   b. As sole author
   c. As corresponding or primary author

D. Creative scholarship: Number of original creations of literary, fine, performing, applied or media arts including but not limited to: visual art works, compositions, choreographies, literature, poetry, plays, films, scenic/costume/sound/lighting design, graphic design, virtual art, computer animation, digital art, computer graphics/software/hardware, databases, documentaries, podcasts, and interactive art and installations.
   a. Total
   b. As sole author
   c. As corresponding or primary author

E. Other Published creative UM-based work: Original musical compositions/art works/theatre works/novels/films.

COMMENT BOX: (300 character limit) Specific suggestions of a different/additional metric(s) that you feel are necessary to capture your RCS in this category.

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[3] Note: We discussed at length various metrics of publication 'impact' (eg citation counts, H-index, etc.). We saw no way around the well-known pitfalls of each of these metrics, a problem amplified by the vast variability in the appropriate measure of 'impact' across disciplines. We hope that a way forward on this might emerge through the 'comments' box that we now include for each section.

[4] "Peer review" is a crucial measure for many STEM-based disciplines. We recognize that other disciplines do not emphasizer peer-review yet still publish scholarly, prestigious, often fiercely edited publications (certainly true for Law School, among others). We include these in other metrics below.

[5] Sole authorship is a crucial measure for Humanities faculty. As with Peer Review, this is an example of a metric that is critical in some disciplines but might not be valued in another. That's ok.

[6] Even in the sciences, different disciplines differ as to which individual is 'senior' or 'primary'; please follow your unit standards for interpreting this.

C. PRESENTATIONS/PERFORMANCES/EXHIBITIONS *(give total number for each)*

A. Performances/exhibitions
   a. Total
   b. As solo performer

B. Spoken presentations
   a. *Invited* (eg keynotes, plenaries, other universities, etc.)
   b. *Refereed* conference presentations
   c. Other Professional Presentations (include contributed presentations)

C. Poster presentations not included in previous categories.

D. Artistic Directions and/or Reconstructions[7]

COMMENT BOX (300 character limit): specific suggestions of a different/additional metric that you feel are necessary to capture your RCS in this category.

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[7] Artistic "reconstructions" rebuild an original dance composition or play for an entirely new cast of performers. This work requires a different set of skills than when one is choreographing or creating a new work entirely on their own, and tends to be research heavy in the areas of history and analysis.

D. **MENTORING/TRAINING DURING RCS ACTIVITIES** [8]

    A. Number of:
- a. Postdoctoral Fellows mentored
- b. Graduate Students mentored
- c. Undergraduate students mentored in RCS activities
- d. RCS Products spanning all previous metric categories (eg grants, publications, presentations that have student/postdoc co-authorship.

    B. Fellowship/Scholarship/Awards for UM students/postdocs
- a. *External* Number
- b. *External* Total $$
- c. *Internal* (within UM) Number
- **d. *Internal* (within UM) Total $$**

COMMENT BOX (300 character limit): specific suggestions of a different/additional metric that you feel are necessary to capture your RCS in this category.

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[8] By "Mentoring/Training" we mean to count those students/post-docs for which you were the **primary** advisor/mentor. We realize that we are not capturing the many other ways that faculty RCS contributes to student engagement; for example by serving on the committees of graduate students, informal mentoring, training in certain skill sets, etc. But in the interest of a manageable set of metrics we are focusing here on your contributions as primary advisor/mentor.

E. **PROFESSIONAL IMPACT**   *(give total number for each)*

A. *Peer Reviews* of other colleagues through requested reviews of articles, textbooks, fellowships/grants, outside tenure and promotion evaluations, program/department reviews, etc.
B. Number of journal Editor/Associate Editor roles
C. Number of professional organizations in which serving on Board or in leadership capacity
D. Number of conference/workshops/exhibitions/performances/curating that were organized, hosted, chaired, or moderated.
E. Number of review panels served on for national and international fellowship and grant competitions
F. Number of adjudications for arts exhibitions.
G. Number of media interviews or coverage
H. Number meritorious[9] recognition/honors (eg Fulbright/Nobel/Guggenheim/Macarthur/National Academy, etc.)
I. Commercialization/Entrepreneurship: Commercialization of IP via licenses, formation of startup companies, commercial partnerships, patent/intellectual property applications

COMMENT BOX (300 character limit): specific suggestions of a different/additional metric that you feel are necessary to capture your RCS in this category.

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[9] Although we give some examples, faculty should use their unit standards to decide what is 'meritorious'.

F. **CIVIC ENGAGEMENT** *(total number for each – do not count items already counted in previous categories)*

A. Professional consulting / outreach as a public service (eg for agencies, communities, schools, public forums, camps, legislators, etc.)[10]
B. Participation or leadership in collaborative projects intended to bring RCS to a general audience including (for example): consulting for, organizing, and otherwise contributing to speakers' bureaus, community discussions, digital humanities projects, public exhibits.
C. Number of hostings of music and arts festivals, science fairs, etc.
D. Number of op-eds and invited participation as an expert in media stories in local, national and international print, radio, social media, and television appearances.

COMMENT BOX (300 character limit): specific suggestions of a different/additional metric that you feel are necessary to capture your RCS in this category.

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[10] Could be paid or unpaid – just do not include things already accounted for in previous sections such as Grants/awards.

Ex Officio: Scott L. Whittenburg, Vice President for Research and Creative Scholarship

Chair: L. Scott Mills, Associate Vice President of Research for Global Change and Sustainability

[alphabetical ordering of members]:
Rebecca Bendick, Geosciences
Nicole Bradley Browning, Dance
Blakely Brown, Health and Human Performances
Barry Brown, Mansfield Library
Jackson Bunch, Sociology
James Caringi, School of Social Work
Kasper Hansen, Biomedical and Pharmaceutical Sciences
Colin Henderson, Missoula College
Kelsey Jencso, Forest Management
Nat Levtow, Humanities Institute
Libby Metcalf, Society and Conservation
Josh Millspaugh, Ecosystem and Conservation Sciences
Jakki Mohr, Marketing
Curtis Noonan, Public Health
James Randall, Music History
Rachel Severson, Psychology
Steve Sprang, Division of Biological Sciences
Jingjing Sun, Teaching and Learning
Klaus Uhlenbruck, Business
Travis Wheeler, Computer Science
Julie Wolter, Communicative Science and Disorders