Interdisciplinary Research: Appointment, Promotion, and Tenure (APT) Toolkit

APT Toolkit to recognize, support, and reward interdisciplinary research and collaboration at the University of Washington

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Preface

Acronyms

APT: Appointment, Promotion and Tenure
CTSA: Clinical and Translational Science Award
ITHS: Institute for Translational Health Science
IR: Interdisciplinary Research
UW: University of Washington
WWAMI: Washington, Wyoming, Alaska, Montana, and Idaho

Background and Executive Summary

"Interdisciplinary thinking is rapidly becoming an integral feature of research as a result of four powerful drivers: the inherent complexity of nature and society, the desire to explore problems and questions that are not confined to a single discipline, the need to solve societal problems, and the power of new technologies." (National Academies of Science, 2015, p. 41)

In 2017, the University of Washington (UW) Institute of Translational Health Sciences (ITHS) received a 5-year Clinical and Translational Science Award (CTSA) from the National Institutes of Health to support translational research in the WWAMI region. A new component of the grant for all CTSA programs was to carry out Team Science education and training to support team science or interdisciplinary research (IR). This work has been co-led by Brenda Zierler (Nursing), Jonathan Posner (Engineering), Erin Blakeney (Nursing), and Nicole Summerside (Health Administration). An ongoing area of work for the ITHS Team Science initiative is to promote the recognition and reward of interdisciplinary research (IR) in promotion and tenure processes at UW. There is currently a lack of well-defined criteria and associated metrics for documenting team science contributions when compared to the well-established criteria and achievement metrics for independent research contributions (e.g., PI role on grants, first or senior author, number of externally funded grants as PI, etc.).

To better understand the current landscape and support for interdisciplinary research (IR) at UW, we administered a survey to faculty across the six Health Sciences Schools and the College of Engineering in 2018. The purpose of the survey was to assess attitudes, perceptions, and current structures for APT within the context of IR within their schools and colleges. Survey results showed that the majority of respondents indicated that IR is valued, and a high percentage of faculty are currently conducting IR (95%); however, the faculty noted the lack of policies and infrastructure at the university level to support and reward faculty to engage in IR. Also noted was a lack of awareness by APT committees on what constitutes, and how to evaluate IR, since APT criteria mostly focuses on individual accomplishments and not on individual contributions within a team conducting IR.

Over the past four years, we have organized workshops with APT committee members and champions across the six Health Sciences schools and the College of Engineering to gather recommendations and support for IR in the context of APT. We identified the need for guidelines and tools for documenting team science contributions to help individual researchers, chairs, deans, and APT committees evaluate team science-focused researcher's contributions to IR. These efforts have led to the development of this Toolkit. The APT Toolkit is designed to aid candidates, chairs, and APT committees in recognizing IR (or team science) during appointment and promotion processes. The Toolkit provides standardized language and definitions of IR for schools and colleges to incorporate into their APT criteria. With our APT Champions from the six UW Health Science Schools and College of Engineering, we hope to do the following: provide guidance and associated metrics describing team science achievements in the context of APT and policies; provide examples of how faculty participating in team science achieve success; and highlight institutional support for the value of team science through language changes in the UW Faculty Code.

Our goal is to disseminate this APT Toolkit broadly and provide biannual workshops to support early career faculty interested in becoming a team science researcher. The APT Toolkit is a living document that will be updated as we gather more information, feedback, and examples of successful promotion and tenure of team science-focused researchers. We will collaborate with APT leads across the UW to co-create guidelines for documenting team science achievements in order to decrease subjectivity and bias in APT reviews. If you are interested in learning more about the APT Toolkit please reach out through our contact information below.

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Definitions

Interdisciplinary research is a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice.

National Academy Press, 2005, p.2

Within the context of research, "Team Science" has been defined as a collaborative effort to address a scientific challenge that leverages the strengths and expertise of professionals trained in different fields.

> National Research Council. 2015. Enhancing the Effectiveness of Team Science. Washington, DC: The National Academies Press. https://doi.org/10.17226/19007.

APT Criteria Language

Interdisciplinary Research Suggested Language for APT Criteria

Here we provide a general paragraph that defines IR and could be included in promotion and tenure guidelines in the goal of recognizing and rewarding IR during promotion processes.

> *UW aims to promote and recognize interdisciplinary research (IR). The National Academies defines IR as, "a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice." The UW recognizes original research contributions in peer-reviewed publications as well as integrative and applied forms of scholarship that involve cross-cutting collaborations with business and community partners, including translational research, commercialization activities, and patents. IR often requires significantly more faculty time and effort. The evaluation of a candidate's research productivity will, therefore, encompass not only an individual's contribution to research but also assess the extent to which the individual worked beyond the bounds of a specific discipline and engaged in collaboration and cross-disciplinary activities.*

Examples of Language Implemented in Promotion and Tenure Guidelines

Below we provide some examples of promotion and tenure guideline language used at UW and Case Western University

UW School of Public Health – September 2014

> *"Members of the faculty at the University of Washington in the School of Public Health (SPH) are scholars in their respective disciplines in public health. Members of the faculty are encouraged to collaborate with fellow faculty or students whenever it is appropriate, and conduct themselves in a collegial manner. Interdisciplinary contributions are encouraged."*

> *"Innovative and interdisciplinary efforts in teaching, research, and academic Public Health Practice scholarship are encouraged and will be given special recognition in the promotion review."*

UW Department of Global Health – May 2009

"Interdisciplinary research: DGH aims to promote interdisciplinary global health interests throughout the UW. Interdisciplinary research can often require greater faculty time and effort; the evaluation of candidate's research productivity will therefore encompass not only an individual's contribution to research but also assess the extent to which the individual worked beyond the bounds of a specific discipline and engaged in collaboration and cross-disciplinary activity."

"DGH recognizes and assigns value to a wide range of teaching activities because of the inter-disciplinary nature of global health and its mission to build human and institutional capacity in resource-limited settings through education and related capacity-building activities. The critical role of interdisciplinary global health education and training within and beyond the health sciences frequently requires greater faculty time and effort than is usually necessary for the development and delivery of the more narrowly focused didactic and experiential education in many other fields. DGH appointment and promotion criteria must, therefore, emphasize the value of these interdisciplinary activities and reward them."

UW School of Medicine – February 2020

"Independence: changing paradigms of interdisciplinary work and "team science" can often make attribution of effort and the assignment of an individual's contribution to scholarship and a research program difficult. Independence in research is a hallmark of a member of the regular faculty and some research faculty. Yet defining it by classic roles and responsibilities, such as senior authorship or PI status on a grant, may be difficult. This is especially true of faculty on the research track where team science and programmatic needs may limit time and resources for independent scholarship. Clear enunciation of the candidate's contribution and impact on a scientific program is essential. This should be described in the self- assessment, the chair's letter, and in internal referee letters."

UW School of Nursing – May 2020

"Scholarship and research effectiveness encompasses multiple paradigms and methodologies. Systematic inquiry includes empirical research inquiry, clinical practice inquiry, historical and policy analyses, and systematic and synthetic reviews of knowledge. Scholarship, as described in the Faculty Code and Governance (Section 24-32) is reflected in contribution to knowledge, performance of students related to inquiry, constructive professional contributions, quality of scholarly products, impact of work, funding, and interdisciplinary research."

For Assistant/Associate Professors
  Participates on nursing research teams in focused area of scholarship.

For Associate Professors
   Participates in interdisciplinary research teams in focused area of scholarship.

For Full Professors
   Leads interdisciplinary research teams in focused area of scholarship.

Case Western School of Medicine – February 2019

"Typical team scientists are those for whom the greater portion of their research accomplishments, publications, and national reputation rest on original, creative, indispensable, and unique contributions made either a) in conjunction with a group of other scientists or b) with a changing series of groups of other scientists. A team scientist may play the same or different roles within each team. A successful team scientist will be able to document national recognition for the research area, approach, technique or theme that characterizes his or her work through such means as study section memberships, invited presentations, editorial positions on boards of peer review journals, national awards for such work, etc.

   a. *Team candidates' personal statements should include a detailed description of the type or types of contributions they have made to the team or teams of which they are a part and describe the type of team scientist they believe themselves to be;*

   b. *Team candidates should annotate each team publication and team grant on their CV to indicate the precise role and the nature and extent of the contribution they made to that publication or research;*

   c. *At least two of the four collaborators/mentors/colleagues selected (see IV. F. below) to write on behalf of the candidate should be identified as a Team Colleague, and one of these should be the team's leader. Such referees will be explicitly asked to address the question of the candidate's contributions to team science;*

   d. *Team candidates should keep this status in mind when identifying their external referees. "A significant portion of a candidate's contributions may be made both as an independent and a team scientist, in which case the candidate should identify himself or herself as both types."*

"Letters from research collaborators (for team scientists only): These letters are intended to elucidate the candidate's role in collaborative research projects or other cooperative efforts."

"Professional self-description. Candidates are required to provide a narrative professional self-description (three pages or less) in which they highlight their major accomplishments in the areas of research, teaching, or service and comment on relevant matters not discernible from the CV (e.g., specific role within a research team; research theme in grants/articles not easily recognized by those without intimate knowledge of the field; importance to the department/school/hospital of teaching or service activity, etc.). Team scientists and Individual and Team scientists should be certain to explain the precise nature and extent of their contributions."

Resources and Examples for Faculty

Section 1: Faculty Candidate

Each school or college has their own promotion and tenure requirements that should be described in a set of published guidelines. Each unit will request that a curriculum vitae (CV) be submitted that describes the candidate's education, training, honors, publications, students advised, and funding. Some units will provide specific instructions on how this information should be formatted and included in your packet. For example, each unit will likely request that information on grants submitted and awarded; however, some will require this information to be provided in a CV, while others may require it in a separate worksheet, or in the Goal/Self-Assessment Statement. The goal of this appendix is to provide suggestions on how a candidate can clearly articulate their engagement, role, and contributions to scholarship (e.g. publications, trainee mentoring, grants, community engagement) in interdisciplinary collaborative work that is conducted in teams into a CV, self-assessment statement, and other worksheets. The examples provided here are only suggestions and an individual candidate should ensure that they are also meeting the criteria and expectations for their promotion packet as outlined in their respective units.

Item A: Highlighting Interdisciplinary Collaborative Research in a Goal or Self Advocacy Statement

Most units require a candidate seeking promotion to submit a Statement that describes their scholarly activity and contributions to their field or discipline. Each school or college has their own Statement requirements that should be carefully addressed. If a significant fraction of your activities can be described as IR contributions to a collaborative team, then you may benefit from connecting your activities to the specific IR promotion and tenure guidelines in your school. This includes collaborative mentoring of trainees, publications, community engagement, and research grants. It is important to communicate the overall goals of the project, why it is critical that achieving the goals requires an interdisciplinary team, as well as your role in the project.

Consider answering the following questions your goal/self-advocacy statement:

- What are the important challenges you are trying to address and why is an interdisciplinary team critical to meeting this challenge?

- What was your role in identifying this challenge and in assembling or leading the team?

- How are you and your trainees contributing to solving these challenges? What specific contributions did you make to the team?

- How was the project funded? What publications resulted? How were your contributions critical to the success of these quantifiable outputs? Could this research have been carried

out without your expertise or contributions?

Item B: Highlighting Interdisciplinary Collaborative Research in a Curriculum Vitae

In this section, we list various areas of scholarship (mentoring, publications, funding, etc.) and a description of how contributions in interdisciplinary collaborative research may be highlighted and included in your CV.

Mentoring of Trainees

It is important that your trainees significantly contribute to scholarship and benefit from your direct mentoring. In the case of interdisciplinary collaborative research some students will have more than one mentor and will receive training from a wide range of advisors. In some cases, you may mentor a student outside of your department, school, or university. It is important to clarify your role in providing training and how it may have enabled the trainees individual or project success.

Template

Trainee Name, degree earned, department, school, university, (years trained), title of project, your role in mentoring trainee (primary or secondary mentor) and how this student may have contributed to an interdisciplinary collaborative research project.

Examples: (in this case the students name is Jane Doe and the candidate seeking promotion is Bill Jones who is a professor at University of Washington, and co-mentored by Robert Roe, an MD at Columbia University)

Jane Doe, Ph.D., Mechanical Engineering, College of Engineering, University of Washington, "Development of a Home-based Nucleic Acid Diagnostic Test for SARS-COV-2," Bill Jones served as her primary mentor and she was co-mentored by Robert Roe, MD (Columbia University Medical School) Dr. Doe received required interdisciplinary training on user research (Roe), isothermal amplification (Jones), analytical evaluation (Jones), clinical feasibility (Roe), and diagnostic test validation (Jones and Roe).

Alternatively, this information can be contained in a table format:

Past/ Current	Name	Degree/ Department/ School/ University	Period	Title of Research	My Role	Co- mentoring Description	Current Position
Past	Jane Doe	PhD, Mechanical Engineering, College of Engineering, UW	2015-2020	Development of a Home-based Nucleic Acid Diagnostic Test for SARS-COV-2	Primary mentor in areas of isothermal amplification, analytical evaluation,	Co-advised by Robert Roe, MD in areas of user research, clinical feasibility,	Staff Scientist, Fred Hutch

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|				diagnostic test validation	diagnostic test validation	
Current	Hermione Grainger	MPH Hogwarts School of Public Health & Magic	2018-2019	Feasibility and Acceptability of Home Based SAR-COV-2 Diagnostics Tests	Served as co-mentor and trained student on physics of operation of molecular diagnostics	Dr. Umbridge was primary mentor at University of St. Louis	

Publications

In cases when your student is first author and you are the senior, corresponding author (typically listed last), it is straightforward for external and promotion committee reviewers to understand the role and leadership that you and your trainee have provided in the published work. If your trainees are not first author and you are not the senior author, it is important to denote trainees that you mentored using emphasis (e.g. underline, asterisks, or other). Also highlight the corresponding, senior author, with bold font. Some journals allow for multiple senior authors and if your contributions are equivalent to another of the lead investigators, you may consider dual-senior-authorship publication. After each publication listed that was the result of interdisciplinary collaborative research, you should provide a few sentences on the project, your role and your students role, the impact of the work, and why the interdisciplinary collaboration was critical in making the work possible.

Hermione Grainger, Ron Weasley, Bellatrix Lastrange, Jane Doe, Bill Jones, Robert Roe, **_Dolores Umbridge_**_. Feasibility and Acceptability of Emergency Use Authorization SARS-COV-2 Home Based Nucleic Acid Diagnostic Tests., Journal of Molecular Diagnostics, 2020, June 5, 125:5._

This publication resulted from a multi-PI (Umbridge and Jones) NIH funded project focusing on evaluating existing COVID-19 diagnostic tests for use at home by untrained users. Jones' group provided analytical and clinical evaluation of the diagnostic tests.

Alternatively, if you have contributed to a publication with a large number of authors you could consider including a matrix, as shown below, that lists all the authors on one axis and the various contributions on the other axis. This matrix is a compact way to describe the contributions of each author to the published. You could denote your initials and those our trainees in **bold**.
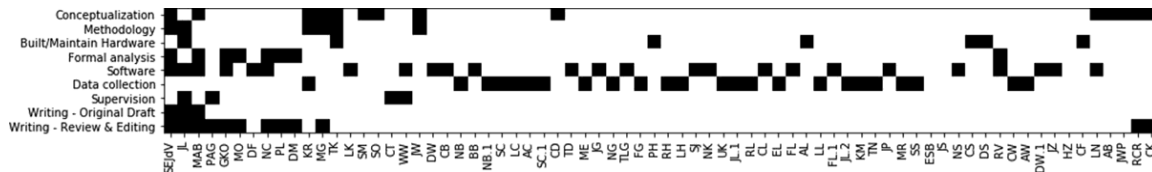
An example authorship matrix suggested by Nick Steinmetz, University of Washington

Research Funding

Funding enables research to be conducted, the publication of manuscripts, training of students, and facilitates collaboration. Serving as the PI of interdisciplinary research grants demonstrates leadership in team-based research. Although research funding in itself may not be an explicit requirement for promotion or evidence of scholarship, it demonstrates evidence of sustainable scholarly activity and may highlight the interdisciplinary nature of your work. Clearly articulate your role in obtaining research funding and how you and your groups' contributions made work possible.

For example, you can use table to articulate the funders, project, investigators, amount of funding, and your role.

Agency	Title	Period	PI	Role	Total Award	Jones' Award
NIH/NIAID	Evaluation of Home-based COVID-19 diagnostic tests	2019-2023	Umbridge, Jones, Multi-PI	PI for UW, expertise in operation and analytical/ clinical evaluation of diagnostic tests	$2300k	$955k
DoD	Development of HCV Rapid Diagnostic for Warefighters	2014-2018	Jones	PI	$550k	$550k

Section 2: Promotion Letters

Item C: Review of Potential Letters

At the UW, the review process for appointment and promotion varies depending on school, college, or even department. For example, the UW School of Nursing has three letters total for the APT process (Chair's letter, APT committee letter, Dean's letter), plus the external letters (evaluation and letters of support) that the department chair seeks. The following paragraphs outline specific language or examples to highlight individual contributions to team science. The paragraphs are separated by the key stakeholders who provide letters throughout the APT process that may be required in your department, school, or college.

Department Chair: The Department Chair can best describe the candidate's obligations of disciplinary and departmental activities including publications, service, and teaching and then describe their IR contributions. Department Chairs will need to identify reviewers who understand the overall quality of the IR work, especially if there less emphasis and output of disciplinary research productivity. Interdisciplinary research requires extra time to build collaborative relationships with peer faculty from other disciplines. Highlighting successful collaborations and subsequent funding or discoveries is key. Chairs can highlight the following items for external reviewers:

- Provide assessment of the candidate's contributions to IR, including grants, publications, students mentored, engagement with the community, industry, or other groups.

- Joint appointments (faculty has appointments and obligations in two schools)

- Collaborative research and teaching is the norm for this department

- Recognition of role on IR grants. Some funding agencies only recognize one PI, but departments (Schools) can recognize dual PIs if the contributions from both is essential to conduct the research. The chair would need to highlight the dual PI role and possibly sharing of indirect costs.

- Sharing of indirect cost returns (ICR) across departments or schools can be highlighted to demonstrate significant contributions of the researcher to the success of the grant (if they were not the PI)

- Highlighting time spent on activities related to interdisciplinary research centers or affiliations in other schools that support IR

- Highlight mentorship of faculty member from other disciplines

APT Committees: Department and School APT Committees are advisory to the chair or dean, respectively. They are comprised of faculty who review appointment and promotion portfolios based on established criteria that documents metrics for promotion. APT Committees are not typically experienced in evaluating a candidate's contribution to IR. APT Committees will need continuing education and training in IR to provide an informed review specific to a team science researcher. The APT Committee Chair can identify the potential candidate as a team science researcher from the candidate's goal statement, the letter from the Chair, review of CV, and letters from external reviewers who are judging the promotion materials from an IR perspective. APT Committees are also responsible for updating their school/college criterion based on changes to UW Faculty Code.

Dean: The Dean's letter summarizes the outcome of the APT Committee's evaluation and vote. All highlighted bullets from the various stakeholders listed above will facilitate a positive letter of support from the Dean. The Dean will have to justify to the Provost that the faculty candidate has met the criteria. The Dean will need to emphatically state that although the candidate is an IR that they have independently contributed to the development of the science. In addition to the examples above, we've provided an exemplar letter in the next section from an external reviewer. This template can also be used and adopted for any of the letters referenced for the APT process.

Item D: Letter to external reviewers (evaluation letter)

This letter is intended for Department Chairs to send to external reviewers to evaluate a faculty candidate seeking promotion. The exemplar letter below highlights and provides sample language to demonstrate the value of specific individual contributions working within interdisciplinary research. If a school does not have associated metrics for documenting team science contributions described in the criteria that is shared with external reviewers, then the Department

Chair will need to highlight the candidate's team science achievements in the context of APT and policies and highlight institutional support for the value of team science at UW.

APT TOOLKIT: DEPARTMENT CHAIR LETTER TO EXTERNAL REVIEWER

From: Department Chair
Sent: Friday, June 28, 2019 2:00 PM
To: XXX@UX.edu
Cc:
Subject: University of Washington - Promotion Evaluation Request – Dr. XXXX

Dear Dr. XXXXX,

The School of Nursing is considering Dr. XXXXX for promotion to the position of Associate Professor, Tenure Track in the Department of Biobehavioral Nursing and Health Informatics, School of Nursing at the University of Washington. Dr. XXXX has provided your name as a possible reviewer/evaluator to assist in our decision-making process. We would appreciate your candid assessment of Dr. XXXXX's scholarly contributions. If you agree to be a reviewer we will electronically forward you his CV, samples of his published papers, and his professional goal statement. In addition, we will send for your reference the Appointment, Promotion, and Tenure Criteria for the University of Washington School of Nursing.

I know that you are busy but I sincerely hope you will consider our request. If you agree to provide an evaluation for Dr. XXXXX, we will email the materials to you by [Date]. We would need your evaluation by **[Date].** The opinions of outside reviewers are a necessary and valued part of the University of Washington's appointment process. Your letter will help us to document the external evaluation of Dr. XXXXX's work.

Of note, Dr. XXXXX has described himself as an interdisciplinary researcher. He has been a major scientific contributor on several funded research grants, but not necessarily as the principal investigator. Interdisciplinary research is highly valued at the University of Washington and we intentionally seek reviewers with experience in interdisciplinary research. We recognize that the challenge of solving complex unmet challenges and its scholarship as an intellectual pursuit may not be limited to one discipline. In order to assist in the evaluation and assessment of interdisciplinary scholarship and how it integrates with the candidate's scholarly portfolio, all candidates for promotion who identify as interdisciplinary researchers are required to provide additional materials. These materials include a statement of their role in the design and conduct of funded research in their promotion packet if they served as a major scientific contributor but not as a principal investigator on a funded research grant. The candidate is also asked to briefly describe (in the goals statement) any interdisciplinary scholarship, including details of the interdisciplinary nature of the activity or project, departments of disciplines involved, their role in the activity and the contribution of their work to the related disciplines. They are to include publication and submitted grants (funded or not) derived from these activities, and participation in interdisciplinary centers. We would appreciate your assessment of this candidate within the context of an interdisciplinary researcher.

Under University of Washington policy your letter, as part of the official personnel file, will be held in confidence. While not given access to it, the candidate and/or members of the public may be, upon formal request in accordance with the Washington State Public Records law, provided with excerpts of all such confidential evaluations in the candidate's file without disclosure of the identifications of the evaluators.

Interpretations by the courts of the Washington State Public Disclosure law have held that external letters of evaluation sought in the normal course of appointments are exempt from disclosure. The University treats these letters as internal confidential documents and does not release them to the candidate nor others outside of faculty and administrators directly involved in the appointment decision process. We commit to retain your evaluation in such confidence, except to the extent we are required to disclose its contents by adjudication or court order, and even then, we will make every effort to protect your personal identity.

Thank you very much for your consideration and please let me know at your earliest convenience whether you can do the evaluation.

If you have any questions, please feel free to call me at 206-XXX-XXXX.

Department Chair
Department of XXXXXXXX
University of Washington
Seattle, WA 98195

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Section 3: Institutional Structures & Policies

Item E: UW Office of Research Resources

Resources from the UW Office of Research include 1) Guidelines for Collaborative Research sharing, and 2) Best Practices for Coordination and Set-up of Cost Sharing for Collaborative Proposals. Links to multiple collaborative resources including funding opportunities, web resources, and more can be found on their website here.

Guidelines for Collaborative Research

Introduction

Collaboration between units is important for our research success now, and is expected to become an increasing trend for the future. Our deans and chancellors have endorsed collaboration, see documented titled *"Statement on Collaboration- Endorsed by Board of Deans and Chancellors, May 2014."* As part of a strategy encouraging collaboration, it is important to share resources and credit with all investigators associated with your funding. Guidelines for how to use the existing policies most effectively will help units support collaborative research while maintaining a positive environment for all of their researchers.

Sharing of RCR for Collaborative Research

Collaborative research often involves investigators from different units (departments, programs, schools, and colleges) as key personnel. The current practice is that 35% of the indirect costs recovery (ICR; also known as F&A) generated by grants supporting the research is returned by the Office of Planning and Budgeting to the unit that spent the money in budgets assigned to their organization code. To promote collaboration in research, the Office of Research expects deans, directors and chairs to negotiate the sharing of a portion of the returned ICR among key participating units. Sharing of returned ICR is part of the ABB principle of directing revenue to the unit that generates the activity, in this case, the unit carrying out the research effort. In the interests of flexibility and recognizing that different units may have different preferred approaches to accomplishing the goal of directing resources to where the activity occurs, the Office of Research will allow alternative approaches.

The most straightforward approach to resource sharing is to establish sub-budgets that are administratively managed by a participating unit, and for which an investigator in the participating unit is identified as the PI of the sub-budget. The Office of Research recommends this approach for two reasons: 1) F&A will automatically be returned to the college/school in which the budget resides and 2) expenditures on sub-budgets provide a more accurate picture of research activities carried out at the unit level when sub-budgets are used. Sub-budget redistribution of F&A from the parent unit to a secondary unit recognizes that: the secondary unit is providing space and access to laboratory equipment used in the research; graduate students and/or post-docs in the secondary unit are being supported by the grant; professional and/or classified staff in the secondary unit are contributing significant FTE to the grant; or unusual resources (e.g., specialized equipment of facilities) critical to the grant are based in a secondary unit, which provides maintenance and operations costs for the facility. Since sub-budgets create administrative burden, small funding amounts may not warrant a sub-budget. However, if the funding to another unit is at least $25,000, sub-budgets should be established, and in many cases, even smaller amounts warrant setting up a sub-budget.

Alternatively, some units prefer to negotiate net ICR differentials each year at the dean's office level, and redistribute accordingly to departments or programs within the school or college. In this case, two units with frequent collaborative projects might decrease administrative burden by using this approach, but could use the subaccount approach for units with less frequent collaborations.

In yet another alternative, the primary unit may agree to transfer funds for a specific purpose, for instance to support a portion of the FTE of a staff member in the secondary unit, or to cover part of the costs of equipment maintenance agreements for equipment based in the secondary unit (but utilized by the other units associated with the grant).

Regardless of the chosen approach, the end result must be to support the goal that revenue is apportioned to the units that carry out the activity.

Office of Research 11.20.14

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Office of Research
Best Practices for Coordination and Set-up of Cost-Share for Collaborative
Proposals _____
9.27.13

1. The Office of Research has developed assistance for coordination and set-up of cost-share for collaborative proposals. This process was drafted in response to requests from principal investigators (PI) and Associate Deans for Research for clarification and increased efficiency with the grant process.

2. The Vice Provost for Research (VPR) expects that one of the first steps for the PI is to work with their dean or associate deans for research to create a timeline for the process for gathering the required approvals. The first step in construction of the timeline is to work backwards from the date the proposal is due in the Office of Sponsored Programs (OSP).

3. Roles of the Principal Investigator and the Office of the Dean

    3.1. PIs

        3.1.1. Work in collaboration with the dean or associate dean for research

        3.1.2. Review your school/college cost-share and matching fund guidelines and policies

        3.1.3. Work with your dean's office to draft the support/commitment letter (if needed)

    3.2. Dean's Office for the PI of the Proposal

        3.2.1. Take the lead in cost-share negotiations and inform the PI of this process

        3.2.2. Work with the PI on the final budget and total cost-share needed

        3.2.3. Draft the funding plan involving department and deans' offices, assuming one-third (total) will come from the provost

        3.2.4. Arrange with the PI to work with the other investigators to make requests of their department chairs and/or deans' offices

        3.2.5. Develop a plan that will include the contributions of each unit

        3.2.6. Contact the other relevant dean's offices(s) and make the request

        3.2.7. Obtain written commitments (email is fine but the communication must be clear)

        3.2.8. Assemble the approval emails and create a spreadsheet or a list of the contributions as a summary

        3.2.9. Fill out the matching request form and submit to orfunds@uw.edu with the approval emails (3.2.8) or copy the chancellor/dean or chair's office that have approved the matching funds.

        3.2.10. If a support/commitment letter is needed from the Vice Provost for Research, work with the PI to draft the letter for the VPRs review. Please send the draft to the VPR at least one week before OSP submission to allow for editing and iterations as necessary.

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Item F: Scholarly Identify and Digital Portfolios

In our current academic environment, it is vital to create and maintain your scholarly identify and digital portfolio in order to be findable. The following resources are available to help faculty maintain an Author Profile to make their research and interests visible to a larger audience. These resources help measure research impact and can also be used in promotion folders and packets.

ORCID

This free resource creates a permanent 16 digit identifier that will follow you throughout your career. It is being required more by funders and publishers. You can write a biographical statement, add your education, grants, and works.

Google Scholar

Some might scoff at using Google Scholar, but it is one of the most used search tools. Google Scholar is the most straightforward resource to set up to claim your profile. It will gather what it thinks are your papers automatically. If you have a common name, please double-check that the papers listed are in fact yours. Claim your co-authors on the far right. Citation counts in Google Scholar can be inflated as there are lots of duplicates.

Web of Science (subscription database through UW Library)

Web of Science is a subscription database that is very respected and used by many departments to obtain citation counts for promotion.

Semantic Scholar

Semantic Scholar is a relatively new database for the STEM field, produced by the Allen Institute. This is a good resource for early-career faculty going up for promotion. Your profile tells you your citation count and how many Influential Publications you have been cited in. It will also inform you if you were cited in the Background, Methods, or Results sections of the citing paper.

Dimensions

This is another free database that is created by the people that own Altmetrics. Again, this is very useful for early-career faculty. You can sort your papers by citation count or by Altmetric score. Altmetrics measures your impact in social media and non-scholarly sources: you may have been cited by the CDC or WHO, New York Times or Huffington Post, or on the news. Many researchers are concerned with breaking out of their subject silos – this is a great way to observe how far your work has traveled. In addition, it pulls data from your ORCID (among other sources), so it's important to keep that up to date.

For more information or questions, please contact Lynly Beard (lynly@uw.edu), *Research Impact and Social Work Librarian,* with the UW Health Sciences Library.

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