FORM 8

SIGNATURE SHEET FOR EVALUATIVE CRITERIA APPROVED CRITERIA SHALL HAVE ALL REQUIRED SIGNATURES

Department/Office: Biolog	gical Scien	ngo	_	1 1 .		
Department Chair: Michael Grove			_	mulul Des		
	Print		Signature			
Academic Year (circle):	15-16	16-17	17-18	18-19	19-20	
Date Sent to Dean/Supervisor:	10/6/17					
Signature			Date		Approved	
Dean/Supervisor:		_	10/6/1	7	(Y)/P/N	
Add'l Admin:			ő 		Y/P/N	
Provost/designee:			3-10	-18	Y)P/N	
Troyoga designee.					Y/P/N	
President/designee:						
Y = Approved	P = Approved p	ending mo	odifications	N = Not	approved	
For P or N decisions, the depart suggested changes to the criteria						
DIRECTIONS: Sign each line and print or stamp name below the line. This signature page must accompany the						
evaluative standards throughout the approval process. After all le duplicated, and a copy sent to the Department/Office.	evels have approved	the evalua	ative standards, this co	ver page and th	e criteria shall be	
SUGGESTED TIMETABLE:			DATE			
성급 (T)			September 25 (earlier if possible)			
Dean provides feedback regarding criteria			October 9	ctober 9		
Final administrative approval and forwarding to Senate, Nove Department, and Dean			November 1			

BIOLOGICAL SCIENCES (2017-2018) DEPARTMENTAL CRITERIA FOR TENURE AND RECONTRACTING

Criteria for recontracting and tenure are based on the following areas, as defined in the AFT contract:

- Teaching
- Scholarship
- Contributions to the University Community
- Contributions to the Wider and Professional Community

This document interprets these criteria in terms of the mission of the Department of Biological Sciences and in terms of the scholarly conventions of biological research. It outlines the kinds and range of activities that are expected of pre-tenure faculty and identifies the appropriate evidence for documenting these activities and their consequences. With regards to scholarly activity, benchmarking data provide verification of the relevance of the types of evidence identified by the department as well as the department's assessment of appropriate expectation for tenure.

DEPARTMENT OF BIOLOGICAL SCIENCES MISSION STATEMENT

The mission of the Biological Sciences Department is to provide quality education and experiences in biology to majors and non-majors at the undergraduate level. It is our aim to provide our students with a variety of challenging courses containing hands-on experiences in the various subdisciplines of biology, thereby providing them with the opportunity to become well-rounded, and to best prepare them for their personal career and growth goals. The department is committed to excellence in instruction and scholarship, and to promoting rigorous inquiry, integrative reasoning and decision-making. We desire, through example and training, to instill in students the commitment to become active members of their community as scientists, teachers, health care professionals, environmentalists and scientifically literate citizens. The mission of the Department is consistent with the objectives of the University.

SELECTION AND COMPOSITION OF THE TENURE AND RECONTRACTING COMMITTEE

The selection and composition of the Department Tenure and Recontracting Committee will be done in accordance with the Memorandum (Section 2.43).

ROLE OF DEPARTMENTAL CHAIR

The department Chairperson will serve on the recontracting committee and can serve as committee Chair if elected by the committee.

WEIGHTING OF EVALUATION CRITERIA

The Department recognizes that all faculty are to be evaluated on the basis of:

- 1) teaching effectiveness;
- 2) research and scholarly activity; and

3) service to the Department and University and contributions to the wider or professional communities.

	Assistant Professors	Instructors
Teaching Effectiveness	50%	80%
Scholarly and Research Activity/Professional	35%	0%
Development (instructors only)		
Service to the Department, College and University	10%	10%
Community		
Service to the Wider and Professional Community	5%	10%

The Department recognizes that meeting the expectations described below for each evaluative component is sufficient evidence that the candidate has satisfied the weighting presented above.

<u>DEPARTMENT OF BIOLOGICAL SCIENCES CRITERIA FOR EVALUATION OF</u> TEACHING EFFECTIVENESS

<u>Standards for effective teaching.</u> The department expects faculty to demonstrate the following teaching competencies:

Mastery of content. This category includes:

- Appropriate background for courses taught
- Knowledge of subject
- Up to date in fields relevant to courses

Appropriate structure and organization. This category includes:

- Use of class time
- Use of class space, materials, and equipment for instruction
- Appropriate syllabi
- Development and maintenance of course schedules
- Use of appropriate devices and standards for evaluation of student learning

Effective communication. This category includes:

- Clarity of instruction
- Responsiveness to student questions and other input
- Timely information on changes in syllabus and schedule
- Feedback to students on their progress

Appropriate teaching methods. This category includes:

- Student-centered teaching
- Inquiry-based teaching
- Engagement of students in learning
- Incorporation of scientific methodology into the course
- Promotion of interaction among students and students learning from each other

• Using learned concepts to solve new problems

Promotion of a positive learning environment. This category includes:

- Enthusiasm for subject
- Fairness and impartiality
- Student comfort in asking questions, engaging in discussion, or approaching instructor
- Promotion of student participation
- Promotes appropriate classroom behavior

Academic advising. This category includes:

- Guidance of students through graduation requirements
- Counseling of students on postgraduate plans and opportunities

Teaching Expectations For Reappointment And Tenure.

Courses assigned to probationary faculty should reflect, at least in part, the role for which the faculty member was hired. The evidence for the faculty member's competency in the various categories given above (other than academic advising) will include the following:

- Candidate self-assessment
- Peer observations
- Student evaluations
- Other testimonials related to instruction

For pre-tenure submissions, the candidate will be expected to show competency in each of the categories of standards, or to provide appropriate reflection on teaching effectiveness, and a thoughtful plan for rectifying any deficiencies.

For tenure, the candidate should demonstrate positive outcomes for each of the categories directly related to instruction. If any categories are still deficient, the candidate should provide evidence of significant progress in addressing the deficiencies since they were identified in prior submissions, and that there is a reasonable expectation that these deficiencies will be satisfactorily overcome within a short time after tenure.

Academic Advising Expectations For Reappointment And Tenure.

The Department's practice has been to divide new advisees in the biology major equally among tenure-track faculty. Probationary faculty members are expected to spend their first two years learning about the institution in preparation for their role as academic advisors to Biology majors. In their third year, probationary faculty will be assigned a proportionate share of freshman advisees and may receive a proportionate share of new advisees each subsequent year.

DEPARTMENT OF BIOLOGICAL SCIENCES CRITERIA FOR EVALUATION OF RESEARCH AND SCHOLARLY ACTIVITY

The department expects that probationary faculty will demonstrate an appropriate record of past scholarship and evidence of continuing to pursue research beyond the awarding of tenure. The

primary types of evidence for scholarly productivity are given below. The primary evidence for continued scholarship will come from the faculty member's narrative for future research plans. The faculty member will indicate in the narrative the quality of the publications and his or her contributions to the work. It is expected that the faculty member will demonstrate research activity since the beginning of his or her appointment, and the products of research should reflect some effort at Rowan University. However, it is also acknowledged here, and in most cases should be expected, that the faculty member's research at Rowan will build upon efforts prior to his or her arrival here and may incorporate proposals, data, and even results from pre-Rowan work.

<u>Types of evidence of scholarly activity.</u> The department recognizes the following categories of items that provide evidence of productive scholarship:

1) Peer-reviewed publications in the candidate's area of research. Typically, this includes research in a subfield of biology or a related field. Note that scholarship of teaching falls into this category if the candidate was hired specifically to contribute as a scholar of biology (or general science) education. Furthermore, for candidates with joint appointments this might include scholarship that falls outside of the realm of biology. Publication in peer-reviewed journals is the primary form of dissemination of research results. Publications in other peer-reviewed venues, such as edited volumes and monographs, also fall into this category.

Venues for publications in this category should be peer-reviewed and have a readership appropriate to the segment of the scientific community interested in the candidate's subfield of biology. The department does not use metrics such as impact factors to set any minimum standards of significance for a peer-reviewed venue. However, the department recognizes publication in especially selective venues as a significant accomplishment. The candidate should provide some brief discussion of the quality and appropriateness of the journals and other venues in which he or she publishes.

While the candidate need not be the primary author on all publications, the candidate should be making original contributions appropriate for an independent researcher. In many cases, the candidate's authorship will adequately convey the significance of the candidate's contributions, e.g., if the candidate is the sole, lead, or (in the case of publications where a student in the candidate's lab is the lead author) last author. In those cases where authorship alone does not indicate the candidate's contributions, he or she should discuss his or her role in the production of the publication and the science behind it.

2) External grant submissions and awards. This includes all forms of external funding, though greatest weight is given to competitive programs that incorporate peer review in the evaluation process. Unfunded, favorably reviewed submissions are valued as evidence of scholarly effort.

The general expectation of the department is that a candidate should be able to sustain his or her research without additional direct support from the institution beyond start-up

funds, adjusted load, and allocated laboratory space. Thus, the candidate is expected to pursue external funds for other direct costs required for the execution of his or her research. The department does not specify any dollar amount, only that the candidate is able to obtain sufficient funds to maintain research productivity.

External grant submissions and awards are useful in other ways to the evaluation process. First, they provide evidence of the value of the candidate's research through peer reviews of proposals and through the validation of successful funding. Second, because they reflect ongoing or future research, they speak to the candidate's prospects for future productivity.

- 3) Presentation of research. This category includes oral and poster presentations of research at scientific meetings, as well as invited talks at other institutions in the candidate's area of research. As with publications, the relative significance of the candidate's contributions to presented research should be reflected by authorship, or else the candidate should explain his or her role in the presented research. Greatest weight will be placed on those presentations where the candidate has the greatest responsibility for bringing the research to the attention of his or her fellow scientists, particularly where either the candidate or his or her student is the presenter.
- 4) Scholarship of pedagogy. This category includes the conduct, presentation, and publication of peer-reviewed research on the teaching of biology, particularly at the postsecondary level. This category distinguishes scholarship of pedagogy from research in the biological subfield for which the candidate was hired. If a candidate were hired as a scholar of science education, then this distinction would not exist and scholarship of pedagogy would be considered the same as the candidate's area of research for evaluating publications and presentations.
- 5) Student mentoring. This category includes any evidence pertaining to the mentoring of Rowan undergraduate or graduate students in research activities, where the student is an active participant in the scientific process. Evidence of student mentoring includes formal inclusion of students in scientific pursuits, either for credit or for pay, participation of students in presentation of research at institutional or extramural scientific conferences, and student authorship on peer-reviewed publications. The department recognizes that, because of the need for students to be trained first in the appropriate research methods, and because student aptitudes for research can vary greatly, student research progresses at a much slower pace than faculty research.

Research Expectations For Reappointment And Tenure

Pre-tenure reappointment

For recontracting submissions prior to the submission for tenure (i.e., first, second, and third year submissions), the faculty member should provide evidence that his or research program is being established and is on schedule to produce the appropriate outcomes for receiving tenure. Initially, this will include the use of any start-up funds to outfit a research lab and later should include

evidence that the faculty member's research is producing results that peers in the disciplinary community will recognize as contributing to advancing knowledge in the discipline. Typical evidence for this would include authorship on presentations at national or international scientific conferences or regional conferences of the national organization of the discipline, as well as peer-reviewed publications and proposals.

Appointment with tenure and role of the external evaluator

It is expected that applicants for tenure will provide evidence of research productivity and promise for continued scholarship. The types of evidence should generally fall into the categories described above and should be appropriate in terms of quantity and quality for disciplinary norms given the length of the tenure clock and the constraints of necessary institutional support. Given wide variation in publication and funding rates across the many sub-disciplines of biology, it is inappropriate to assign a single number or measure for a given type of evidence. In addition, simple quantities of deliverables might not properly reflect the quality of the research that produced them. Benchmarking data is available in the department.

The Memorandum of Agreement now requires that candidates for tenure provide an evaluation of their research by an external reviewer at another institution with expertise appropriate for assessing the candidate's research. The department will consider more than one reviewer if the candidate wishes to provide more. The department will ask the external reviewer(s) to comment on 1) the quantity and quality of the candidate's research, and 2) the merit of the candidate's accomplishments in scholarship taking into account Rowan's infrastructure, institutional support for research, and other institutional factors that affect research productivity.

Research Expectations for Instructors

Candidates for tenure and recontracting at the rank of instructor do not have the expectation to develop a research program. Rather, their scholarly and creative activities are designed to focus on maintaining currency in their field to be able to instruct students in the current state of the art in their area of expertise and to use modern pedagogical and technological tools and methods to do so. Candidate written self-appraisal should focus on how they have maintained currency in their area of expertise and their detailed plans for maintaining that currency in a section on plans for future growth. The administration recognizes that engaging in fundamental or applied research activities is one way to stay current, but the research itself is not the goal, but rather one possible mechanism towards achieving the goal of maintaining currency.

DEPARTMENT OF BIOLOGICAL SCIENCES CRITERIA FOR EVALUATION OF CONTRIBUTIONS TO THE DEPARTMENT AND UNIVERSITY

The department recognizes service to the department and university as a significant aspect of faculty development. The expectations of the department reflect the need for a probationary faculty member to learn about the institution, participate in the non-academic operations that are necessary for the functioning of the academic enterprise, and contribute to the institution in rewarding ways. At the same time, the expectations reflect the need for probationary faculty to balance commitments to service with their responsibilities for teaching and research.

The following categories of service to the department and institution are recognized here:

Basic departmental service: This category includes those functions in which all or most of the department faculty would normally participate, including participating in department meetings and serving on departmental committees that do not have membership restrictions. This is the most appropriate type of departmental service for probationary faculty.

Advanced departmental service: This category includes service to the department that is generally more involved than basic service and often is restricted to faculty with tenure, such as serving on departmental committees for T&R or promotion. It also includes serving as a departmental representative for any committee with a significant workload, such as the CSM/SHP Math and Science Curriculum Committee. Probationary faculty members are not expected to engage in departmental service at this level.

Departmental leadership: This category includes leadership roles within the department, such as:

- chairing committees in the advanced service category
- serving as departmental chair or assistant chair
- serving as departmental representative to the University Senate.

Probationary faculty members are not expected to engage in departmental service at this level.

Basic university service: This category includes participation in college or university committees that are generally open to all faculty members. Typical examples of this level of service include serving on (but not chairing) college or university committees that are not restricted in their membership (e.g., Senate T&R Committee would not be in this category) and are not heavy in workload (e.g., college or university curriculum committees would not be in this category).

Advanced university service: This category includes participation in university committees that have responsibilities or workloads that exceed what should be expected of junior faculty. Committees in this category often require faculty members to have tenure or promotion above the Assistant Professor level, or evaluate numerous submissions from various departments or individuals across the college or university. Examples of such committees include:

- Senate T&R
- Senate Promotion
- Senate Curriculum
- Sabbatical Leave
- CSM/SHP Math and Science Curriculum
- CSM/SHP Promotion
- CSM/SHP Adjusted Load
- Search committees for senior administrators

Probationary faculty members are not expected to engage in college or university service at this level.

University leadership: This category includes taking on leadership roles in service to the college or university, such as:

- chairing college or university committees
- serving as an officer in the Senate or AFT.

Service Expectations For Reappointment And Tenure

Probationary faculty members in their first two years are expected to participate in basic departmental service in their first two years, with the first year focusing on learning about the department and institution, and the second year seeing the faculty member engage in some actual basic departmental service. Basic departmental service is the only category of departmental service expected of probationary faculty.

In the third year, it is expected that the probationary faculty member will engage in basic university service and continue at this level through the application for tenure.

DEPARTMENT OF BIOLOGICAL SCIENCES CRITERIA FOR EVALUATION OF FULFILLMENT OF RESPONSIBILITIES TO THE WIDER AND PROFESSIONAL COMMUNITY

The department expects that faculty will remain engaged in the promotion and development of their disciplines by participating in academic organizations appropriate to their fields of expertise and inquiry.

The following categories of service to the profession are recognized here:

Basic service to the profession: This category includes maintaining membership in scientific societies and other academic organizations appropriate to the faculty member's field.

Advanced service to the profession: This category includes more active levels of engagement in the profession than basic service, such as:

- serving as a reviewer of manuscripts for publication
- serving on committees of appropriate organizations
- serving as a reviewer of grant proposals
- chairing or moderating technical sessions at meetings.

Probationary faculty members are not expected to engage in service to the profession at this level.

Professional leadership: This category includes leadership roles within the profession, such as:

- serving as an officer of an appropriate organization
- serving on an editorial board or as an editor for a journal
- organizing regional, national, or international meetings of an appropriate organization.

Probationary faculty members are not expected to engage in service to the profession at this level.

Expectations For Service To The Profession For Reappointment And Tenure

As indicated above, probationary faculty members are not expected to demonstrate more than basic service to the profession throughout their probationary period in order to receive tenure. Of course, a faculty member who performs advanced service to the profession or engages in professional leadership would exceed the requirements for tenure. Service for any faculty member can include coordination of introductory courses, coordination of laboratory instruction, coordinating peer advising, and/or strong of student clubs or outreach activities.