# Supplemental Material CBE—Life Sciences Education

Dumanis et al.

# Medical Center Graduate Student Organization

### **SRGP** (Student Research Grant Proposal)



### Form 1-1 Coverpage

Date:	
0	New O Revised
Name:	
NetID:	
Department:	
Mentor:	
Lab/Office Number:	
Work Phone:	
Cell Phone:	
Application Ch	ecklist
Application Title:	

#### Did you include:

Abstract/Specific Aims (Form 1-2)

- Research Plan (Form 1-3)
- Biosketch (Form 1-4)

Preliminary Data and Tables (Optional) (Form 1-5)

Budget (Form 1-6)

Departmental and Mentor Confirmation (Form 1-7)

#### Have you applied for other extramural funding:

O yes	() no
Where was application submitted?:	Explanation (if no):
Date submitted:	
Budget Information:	For Committee Only:
Total Budget Requested:	

Georgetown University MCGSO 3970 Reservoir Road NW Washington, DC

### Form 1-2 Abstract and Aims

PI (Last, First):

#### Application Title:

Abstract (do not exceed the space provided):

Specific Aims:

Research Plan will be scored based on the following 3 criteria: Significance, Innovation and Approach In 3 pages or less outline relevant background, specific methods, and outcomes/interpretation, while addressing the criteria above. Document must have 0.5" margins and use Arial 11 typeface. References are not included in the page limit, and should be complete (full author list).

### Form 1-4 Biosketch

PI (Last, First):

### **Education/Training**

Institution and Location	Field of Study	Degree
Georgetown University, Washington, DC		PhD

## **Research Experience** Please list/describe your previous research experience (prior to joining your current lab)



### **Dissertation Topic** Please describe (briefly) your dissertation topic



### Abstracts

Please list all abstracts for talks and presentations given at professional meetings

### Papers

## Please list all publications in scientific journals (if not yet published, indicate if "in press" or "accepted" or "submitted")

Preliminary Data and Tables Not to exceed 1 page Document must have 0.5" margins and use Arial 11 typeface.

### Form 1-6 Budget

Application Title:

Catagory	Description		Amount
Reagents			
Animals			
Use of core facilities			
Participant costs			
Equipment			
Software			
Travel*			
Other**			
		Grand Total	

\*, \*\* in addition to budget justification, you must include additional justification for these categories in the boxes below

### **Internal Use Only**

Amount Awarded:	
Start Date:	

### Form 1-7 Departmental and Mentor Confirmation SRGP - Student Research Grant Proposal

Student Name (Last, First):	
Degree Program	0
Thesis Mentor (Last, First):	

### **Departmental Confirmation**

I certify that \_\_\_\_\_\_ is in good standing in his/her Ph.D. program, has passed required comprehensive examinations and has begun thesis research.

Signature (Director of Graduate Studies)

Date

### **Mentor Confirmation**

I am aware that	is applying for a student research grant
under MCGSO.	

This confirms that the proposed experiments are beyond the scope of what is supported in my laboratory, and require another source of funding to be completed.

### **Mentor Letter of Support**

Please evaluate the likelihood of this projects success and comment on how it would expand training for your student.

#### Modified from:

#### grants.nih.gov/grants/peer/guidelines\_general/scoring\_system\_and\_procedure.pdf

#### Instructions for Reviewers:

- The MCGSO-SRGP grant application scoring system uses the same 9-point scale used by NIH.
- A score of 1 indicates an exceptionally strong application with essentially no weaknesses.
- A score of 9 indicates an application with serious and substantive weaknesses with very few strengths; 5 is considered an average score.
- Ratings are in whole numbers only (no decimal ratings).
- This scale is used by all eligible (without conflict of interest) SRG (Scientific Review Group) members to provide an overall impact/priority score and for assigned reviewers to score four individual criteria (e.g., Significance, Investigator, Innovation, Approach)
- For the impact/priority score rating, strengths and weaknesses across all of the review criteria should be considered
- For each criterion rating, the strengths and weaknesses within that review criterion should be considered
- Reviewers should consider not only the relative number of strengths and weaknesses noted, but also the importance of these strengths and weaknesses to the criteria or to the overall impact when determining a score
- For example, a major strength may outweigh many minor and correctable weaknesses

#### **Preliminary Scores:**

- Before the review meeting, assigned reviewers will determine preliminary scores for each of the four scored review criteria and a preliminary score for the overall impact/priority
- The impact/priority score should reflect the reviewer's overall evaluation, not a numerical average of individual criterion scores
- Reviewers should consider the full range of the rating scale and the scoring descriptors in assigning preliminary and final scores
- However, a reviewer should not assume that the applications assigned to him/her necessarily cover that entire range of scores, and should assign scores as appropriate for the work or science proposed.
- An application does not need to be strong in all categories to be judged likely to have major impact, for example, a project that by its nature is not innovative may be essential to advance a field

### **Criterion Scoring:**

- Criterion scores are intended to provide additional information on how each assigned reviewer weighed that particular section so that the reader has a better idea of strengths and weaknesses that need improvement
- Providing scores without providing comments in the review critique is unacceptable
- The impact/priority score for the application is not intended to be an average of

#### Modified from:

grants.nih.gov/grants/peer/guidelines\_general/scoring\_system\_and\_procedure.pdf

criterion scores

- If the reviewer's opinion changed as a result of discussion at the meeting, the reviewer should change his/her criterion scores to match his/her critiques and overall impact/priority score
- The criterion scores appear in a table at the beginning of each critique in the summary statement

### Impact/Priority Score:

- Applications will receive numerical impact/priority scores from all eligible reviewers (e.g., without conflicts of interest)
- The impact/priority score for an application is based on each individual reviewer's assessment based on the four scored criteria plus additional criteria (regarding training potential, relationship to thesis, and budget).
- Reviewers are guided to use the full range of the rating scale and spread their scores to better discriminate among applications
- Reviewers whose evaluations or opinions of an application fall outside the range of those presented by the assigned reviewers and discussant(s) should ensure that their opinions are brought to the attention of the entire committee
- In addition, the SRO and Chairperson should ensure that all opinions are voiced before final scoring is conducted
- Reviewers should feel free to assign the score that they believe best represents the impact of the application, and not feel constrained to limit their scores to the upper half of the score range if they do not feel such a score is warranted
- After the meeting, individual reviewer scores will be averaged and the result multiplied by 10 to determine the final impact/priority score
- The range of the final application scores is from 10 to 90
- For the impact/priority score and for the individual criterion scores, the far right column (in the table below) provides a descriptive guide of how strengths and weaknesses are considered in assigning a rating

Minor weakness: easily addressable weakness, does not substantially lessen impact Moderate weakness: lessens impact Major weakness: Severely limits impact

#### Modified from: Grants.nih.gov/grants/peer/critiques/rpg\_critique\_template\_example.doc

### **MCGSO-SRGP** Review

Principal Investigator:

### **OVERALL IMPACT**

Please provide an overall impact score to reflect your assessment of the project. This score should reflect your weighting of the review criteria below. An application does not have to be strong in every category to have a positive overall score. You may weight the different strengths and weaknesses as you deem appropriate.

The MCGSO grant application scoring system uses the same 9-point scale that NIH uses (ie. the lower the score, the better the application). Therefore a score of 1 would be for an exceptionally strong application with essentially no weaknesses. Ratings are in whole numbers only (no decimal ratings).

Overall Impact Write a paragraph summarizing the factors that informed your Overall Impact score.

Overall Score:

### **SCORED REVIEW CRITERIA**

Reviewers will consider each of the five review criteria below in the determination of scientific and technical merit, and give a separate score for each.

1. Significance: Will this research advance the student in his/her scientific career?

Strengths

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Weaknesses

Score:

2. Investigator: How productive has this investigator been prior to submitting this application?	
Does the investigator have the necessary skills to complete this proposal?	

Strengths

Weaknesses

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Score:

#### Modified from: Grants.nih.gov/grants/peer/critiques/rpg\_critique\_template\_example.doc

3. Innovation: How novel is this research?	
Nill this research contribute to the scientific field?	
Strengths	
•	
<b>Weaknesses</b>	
•	
Score:	

4. Approach: How clear and organized is the applicant in outlining his research?Is this proposal likely to be completed given the times and funds requested?Are the methods proposed likely to answer the question asked?

Strengths	
•	
Veaknesses	
•	
Score:	

### ADDITIONAL REVIEW CONSIDERATIONS

Relation to Thesis/Further Training Potential

Comments:

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Budget and Period of Support: How reasonable is the budget for this proposal? If not, what would be a reasonable budget?

Recommended budget modifications:

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### FOR RESUBMISSION/RENEWALS

If Applicable:

Comments:

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### ADDITIONAL COMMENTS TO APPLICANT

Reviewers may provide guidance to the applicant or recommend against resubmission without fundamental revision.

Additional Comments to Applicant (Optional)

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#### MCGSO-SRGP CERTIFICATION FORM

### RE: CONFLICT OF INTEREST, CONFIDENTIALITY, AND NON-DISCLOSURE FOR REVIEWERS OF GRANTS

Name (Last, First):

Address:

Date(s) of review:

I certify that I am not a member of the lab or currently collaborating with the lab from which a proposal was submitted. I certify that to the best of my knowledge I have disclosed all conflicts of interest that I may have with the applications and I fully understand the confidential nature of the review process and agree: (1) to destroy or return all materials related to it and (2) not to disclose or discuss the materials associated with the review, my evaluation, or the review meeting with any other individual except as authorized by the Program Coordinators (3) not to disclose procurement information prior to the award; and (4) to refer all inquiries concerning the review to the Program Coordinators.

Signature:

Date:

What was your role in the SRGP (check all that apply)

 Reviewer
 Applicant (funded)
 Applicant (non-funded)
 Program Officer

2. To what degree has your SRGP experience helped you with the following aspects of grant writing:

Conceptualizing a projectNot HelpfulSlightly HelpfulModerately HelpfulVery HelpfulDefining the projectNot HelpfulSlightly HelpfulModerately HelpfulVery HelpfulRefining the project and<br/>approachNot HelpfulSlightly HelpfulModerately HelpfulVery Helpful

Understanding the review Not Helpful Slightly Helpful Moderately Helpful Very Helpful process

Organization, formatting, and Not Helpful Slightly Helpful Moderately Helpful Very Helpful style

3. To what degree:

Did your SRGP experience enhance your professional Not at all Mildly Moderately Strongly development?

Would you recommend participating in SRGP to your Not at all Mildly Moderately Strongly friends/colleagues?

4. For those that resubmitted: How much did you change your application in response to reviewer feedback?

0% 1-25% 26-50% 51-75% 76-100%