

The John J. Kopchick Molecular and Cellular Biology/Translational Biomedical Sciences Research Fellowship Award
Academic Year 2019-2020

Proposal Receipt Deadline: 4:00 p.m., Thursday, Aug. 15, 2019

Notification of Award: end September 2019

STATEMENT OF PURPOSE

The John J. Kopchick Molecular and Cellular Biology/Translational Biomedical Sciences Research Fellowship Award (Kopchick MCB/TBS Research Fellowship Award) was established by a generous gift provided by John J. Kopchick, PhD, Goll-Ohio Eminent Scholar and Distinguished Professor of Molecular Biology and Char Kopchick, Assistant Dean of Students. The goal of the gift is to promote a rich interdisciplinary and entrepreneurial environment that fosters discovery research resulting in intellectual property that will bring about the development of new technology and transfer of that technology to the private sector, where it might be deployed for the benefit of human health and well-being.

The Kopchick MCB/TBS Research Fellowship Award will provide funding (up to \$10,000) for Ohio University PhD or DO/PhD students to support translational biomedical research, reinforce the application of new knowledge to clinically relevant and unmet needs, and position the students for success in subsequent 'real-life' professional activities.

The Kopchick MCB/TBS Research Fellowship Award provides support for research activities for 12 months following notification and account establishment.

Additionally, funding (up to \$5,000) is available for a one semester, off-campus internship*. The internship should contribute to the awardee's understanding of product development, technology transfer, business operations, project management, intellectual property management, commercialization strategies, and principles of entrepreneurship.

*Must be a minimum of four weeks and up to one semester.

ELIGIBILITY

Applicants must meet all of the following criteria:

1. Be a Molecular and Cellular Biology (MCB) or Translational Biomedical Sciences (TBS) PhD or DO/PhD student under the guidance of MCB program faculty or faculty participating in the TBS program;
2. Be in the 2nd to 5th year of their graduate work leading to a PhD and in good academic standing; and
3. Be conducting translational biomedical research and scholarly activities.

For the purposes of this program, translational biomedical sciences is defined as the translation of basic research effectively into enhanced healthcare outcomes for the entire population in fields such as biomedical research, bioengineering, drug development, informatics, communications, health policy and planning.

Students must be enrolled and maintain graduate/medical student status during the proposed project period. Recipients of previous awards may apply for renewed funding.

REVIEW AND EVALUATION/SELECTION CRITERIA

Proposals will be reviewed by a committee that will include: the directors of the TBS and MCB programs, the chairs/directors of the Department of Biomedical Sciences, the School of Applied Health Sciences and Wellness, the Biomedical Engineering program, and the Edison Biotechnology Institute, and the Vice President for Research and Creative Activity. Note: if the director of the MCB program is a faculty member outside of the College of Arts and Sciences (A&S), the dean of A&S will select a representative from the college to serve on the committee.

The scholarly merit of the project is the primary criterion used for proposal evaluation. In addition, the following criteria, as well as other factors as special circumstances dictate, are considered in the proposal review:

1. The relevance of the proposed research to translational biomedical sciences.
2. The strength of the scientific rationale.
3. The probability that the research will lead to new and relevant scientific information and may result in patent-protected intellectual property and/or know-how.
4. The likelihood that the awards will contribute to the positioning of the student for success in subsequent 'real-life' professional activities.
5. Evidence, when applicable, that funding is not a duplication of other internal or external support.

PROPOSAL PREPARATION GUIDELINES

Please review the guidelines before submitting a proposal. Very meritorious proposals are often not funded because these guidelines are not followed and information needed to make an informed, objective decision is not available to the committee. Many reviewers feel that the care with which a proposal is prepared indicates the care with which the work will be done by the investigator.

The proposal must be written by the student with the review and approval of the mentor (as signified by the signature on the cover page and the mentor's endorsement included in the proposal).

****Please Note: The committee has the right to return without review any proposals that do not conform to these format requirements.****

The goal of the requirements for type size, spacing, and margins is to provide legible documents of roughly similar length. The use of unusual typefaces defeats the goal the committee hopes to achieve. Please review all electronic attachments before submitting.

Questions concerning proposal preparation process should be directed to Roxanne Male'-Brune, Office of the Vice President for Research and Creative Activity, 101A RTEC, Ohio University, Athens, OH 45701-2979, Phone: 740-597-1227, E-mail: male-bru@ohio.edu.

PROPOSAL SECTIONS

- Number pages to facilitate the review process.
- If you are submitting multimedia files, 'film or sound', please see the multimedia section.
- Do not submit any hard copies in any form.
- Proposal **must** be submitted as a single PDF document, including scanned images of the fully signed cover page, checklist, and if applicable, the International Travel form (OHIO – Affiliated Travel Form) [excluding multimedia attachment, if appropriate].

Assemble the PDF in the following order with the following formatting/page limits:

- | | |
|--|--|
| 1. Cover page | use Kopchick MCB/TBS Research Fellowship Award form |
| 2. Biographical Sketch | one page |
| 3. Project Narrative | 4 double-spaced pages |
| 4. Research Internship Description | one double-spaced page (if applicable) |
| 5. Mentor's Endorsement | one page |
| 6. Budget and Justification | no limit specified (Including the OHIO-Affiliated Travel Form, if applicable): |
| 7. Appended Materials/Multimedia Files | 5 pages; and no more than 10 minutes of footage (*see below for movie/sound files) |

The project narrative and research internship description **must be double-spaced and use 12-point type** that is clear and legible, standard size. Figures, charts, tables, figure legends, footnotes/endnotes in these sections and the bibliography may use a smaller font size and may be single-spaced but **must** be clear and readily legible. **Margins must measure one inch (1") or greater on all sides.**

All other sections: biographical sketch, mentor's endorsement letter, budget and justification, and appended materials may be single-spaced in a legible typeface.

****Please note: The committee has the right to return without review any proposals that do not conform to these format requirements.****

1. Cover Page

Prepare a cover page (see form below). Signatures **must** be obtained by the applicant and are required on the submitted proposal. The cover page **must** be the first page of the proposal.

2. Biographical Sketch

Include a one-page biographical sketch of the applicant's (student's) scholarly interests and activities.

The biographical sketch should include the following, preferably in tabular/bulleted format:

- Applicant's Name
- GPA
- Educational training of the student, including: institution, degree, date of completion/anticipated date of graduation
- Publications and presentations
- Relevant coursework
- Language skills (if applicable to the research)
- Honor and awards
- Current, pending, and previous funding

The biographical sketch must also include a brief statement of the applicant's long-term plans and how this award will help in achieving these goals.

3. Project Narrative

The four double-spaced page narrative should discuss the main objectives of the research, a brief discussion of the materials and methods to be used to conduct the experiments, and any preliminary data generated.

1. **Objective and scope** of work: *"What do you intend to do?" "What will this research, scholarship, or creative activity accomplish?" "What problem does this project address?" "Why does this project need to be done?"*

Remember, it is important to contextualize your project in relationship to others' works and to explain how the project differs from previous, related work. *"What has previously been done in the area?"*

2. **Materials/methods:** *"How will the work be accomplished?"*

Discuss the hypotheses or research questions, operationalization and instrumentation, research sites or context, research design, data collection, preliminary results, and data analysis.

The applicant should clearly state how this project will produce new and relevant scientific information and how this work may result in patent-protected intellectual property and/or know-how.

3. **Significance** of the project: *"Why is the work important to your field?"*

4. **Intellectual Property:** *"How might this research lead to new innovations?"*

5. **Bibliography:** The narrative may include up to 10 references. A carefully selected bibliography can strengthen a proposal by indicating to the reviewer that the applicant is aware of significant and current literature in the field.

Confidentiality: If the proposal discloses ideas, practices, or processes for which patent protection will be or is being sought, the word "Confidential" should be placed at the top and bottom of each page that contains such information. Also, the following statement should be placed on the cover sheet immediately above the signature section.

"The data contained in this proposal is confidential and proprietary and shall not be duplicated, used, or disclosed in whole or in part for any purpose other than to evaluate the proposal without the written permission of the author. Permission is hereby granted to the review committee to evaluate this proposal in accordance with its normal procedures, which may include evaluation by evaluators both within and outside the University, with the understanding that written agreement not to disclose the information shall not be required of or obtained from any such evaluators. This restriction does not limit the right of any such evaluators to use information contained in this proposal, if it is obtainable from another source without restriction."

4. Research Internship

Recipients are strongly encouraged to participate in a one-semester, off-campus internship, which may be supported through this award. The internship must be a minimum of four weeks and up to one semester, and can be during the fall, spring, or summer. The purpose of the internship is to provide valuable experience and training in biotechnology in the areas of drug and diagnostics discovery and development that ultimately will help transition students and products from the laboratory to the marketplace.

If applicable, this one double-spaced section must identify and explain how the internship contributes to the awardee's understanding of any and each of the following: product development, technology transfer, business

operations, project management, intellectual property management, commercialization strategies, and principles of entrepreneurship. A letter of commitment from the internship site or verification of application to an internship site must be included in the appended materials.

NOTE: If funds are available, award recipients may be allowed to request funds for the research internship during the tenure of the award if they did not previously identify an opportunity.

5. Mentor's Endorsement

The mentor's endorsement is limited to one page and must include: (1) an assessment of how the award would benefit the student and (2) a description of his/her role in the project proposed by the student.

6. Budget and Justification

Budget expenditures encumbered before the award date will not be reimbursed.

Funds are available for 12 months following notification and account establishment and can cross fiscal years.

This section should include the breakdown of the budget by line items, total budget request, sources of matching funds (if appropriate), and budget justification.

The maximum award is \$10,000 with an additional \$5,000 available for an off-campus, semester-long internship.

- Up to \$2,500 is available to support the academic advancement and achievement of the applicant. This includes but is not limited to:
 - Workshops for professional development
 - Purchase of scholarly supplies, including computers and software, for personal use.
 - Publication costs, patent fees, and professional memberships fees.
 - Stipend for the applicant
- Up to \$7,500 is available to support translational biomedical sciences research. This includes but is not limited to:
 - Research supplies and equipment
 - Travel for research
 - Conference travel
- Up to \$5,000 is available to support an off-campus, semester-long translational biomedical science internship. This includes but is not limited to:
 - Travel costs to site
 - Living expenses
 - Research costs

Travel: Travel expenses **must** be broken down into transportation, meals, and lodging categories, and the basis for the figures must be provided. Where appropriate, use the OU Travel Reimbursement Policy 41.121 to determine limits on travel expenses. Budget requests are scrutinized carefully, and requests, especially for long periods of travel, should reflect efforts to economize.

- For domestic travel: Meal expenses will be reimbursed as per the U.S. General Services Administration per diem rates, www.gsa.gov/perdiem.^{*} Federal employees are only eligible for 75 percent of the total M&IE rate for the location to which they are traveling on the first and last day of travel; all other days are reimbursed at 100% the rate.

**unless the applicant stipulates a lower reimbursement through the Concur system.*

- For international travel: Any international travel will need to be fully justified. The Travel Registration Form (TRP) is required of all students who are participating on an educational experience abroad affiliated with Ohio University. Students may be earning credit from Ohio University but will not be receiving transfer credit. These activities include but are not limited to: independent study or research abroad, volunteer or service-learning abroad, international conference travel, or work abroad. These may be non-credit or for-credit experiences. The TRP will register students for international health insurance, International SOS, a security services that provides support to students while they are traveling abroad, and ensure they are registered appropriately with their embassy.

The completed TRP is required to be turned in four weeks prior to departure and must include the students flight itinerary and a copy of their passport. For more support on international travel, risk ratings for destinations and planning an international experience students may contact the Office of Global Opportunities global.opportunities@ohio.edu or attend Walk-In advising at 10am-4pm Monday-Friday at Walter International Education Center.

A draft of the completed TRP should be included in the budget. The TRP can be downloaded at <https://www.ohio.edu/research/funding.cfm>.

- Meal expenses and hotel rates will be reimbursed as per the U.S. Department of State per diem rates, https://aoprals.state.gov/web920/per_diem.asp.^{*}
**unless the applicant stipulates a lower reimbursement through the Concur system.*
- The following must also be addressed in the justification for international travel:
 - i. What are potential safety concerns in the region (as noted on the U.S. State Department's travel warning page: www.travel.state.gov), and how do you propose to take precautions?
 - ii. According to CDC recommendations (<http://wwwnc.cdc.gov/travel/>), what immunizations must you get prior to arriving in the country and what other measures do you need to take to ensure that you remain in good health abroad? When do you plan on getting these immunizations?

Please Note: For all travel arrangements, hotel and airfare must be booked using a p-card and the Concur system. If the vendor does not accept the p-card, then you may pay for the expense out-of-pocket and be reimbursed through the Concur system.

Equipment: All major items of equipment, including computers, which are to be purchased with Kopchick MCB/TBS Award funds, should be listed with the estimated cost of each item and components of each item if applicable. Because of limited funds available to the committee, requests for equipment should be made only after a conscientious search has been conducted to determine whether this equipment is already on campus and available through a loan or share arrangement. The duration of use and percent time used, project-based activities supported, and inability to secure through other resources should be addressed. For computers, the specifications and capabilities must be stated and justified. Any equipment purchased is the property of Ohio University.

12. Appended Materials/Multimedia Files

All appended materials must be submitted electronically as part of the electronic application unless otherwise approved prior to submission. The Appendix is an appropriate place to provide copies of test instruments, questionnaires, survey forms, and letters of collaboration or financial support.

Proposals that include an internship must include documentation of the acceptance of the applicant's participation. All materials included in the Appendix should be briefly referenced in the Project Narrative section.

Applicants are strongly advised to write the Project Narrative as a "stand-alone" document without the reviewer needing to refer back and forth to the Appended Materials. Supplemental text and figures in the appended materials are not permissible if they clearly seek to circumvent the page limits of the Narrative.

PROPOSAL SUBMISSION

Submit one **(1) one electronic copy*** of the proposal (with required signatures) to Roxanne Male'-Brune, Office of the Vice President for Research and Creative Activity: male-bru@ohio.edu, or 101A RTEC.

Proposals must be received no later than 4:00 P.M. on the deadline date.

*Electronic copies **must** be submitted as a **single file** in Adobe Acrobat format (Mac users must include the file extensions .pdf in the file name) and presented on a CD-ROM or emailed to male-bru@ohio.edu by 4:00 p.m. on the deadline date. Electronic copies **must** contain the entire proposal, including appendix, unless authorized prior to the deadline.

*If your appended materials include sound and/or movie files, they should be exported as MP3s or QuickTime MP4s or MOVs. There is an email limit of 10MB. Therefore, it may be necessary to send electronic files in segments.

SPECIAL INSTRUCTIONS

If there is anything about your proposal that requires special handling or consideration, it is essential that you contact Roxanne Male'-Brune, Office of the Vice President for Research and Creative Activity, 101A RTEC, Ohio University, Athens, OH 45701-2979, Phone: 740-597-1227, E-mail: male-bru@ohio.edu.

REPORTING REQUIREMENTS

A final report that describes significant outcomes, discoveries, or results must be submitted to Roxanne Male'-Brune, male-bru@ohio.edu, within four months following expiration of the award. If this award results in additional, external funds, please list the sponsors and amounts. **No future VP for Research and Creative Activity-funded internal awards will be made to the applicant without receipt of the final report.**

The John J. Kopchick Molecular and Cellular Biology/Translational Biomedical Sciences Research Fellowship Award

Cover Page

Academic Year 2019-2020

NAME OF APPLICANT: _____

NUMBER OF YEARS IN THE MCB OR TBS PROGRAM: _____

E-MAIL ADDRESS: _____

DEPARTMENT: _____

EXPECTED GRADUATION DATE (Month and Year): _____

TITLE OF PROJECT: _____

FACULTY MENTOR INFORMATION:

NAME: _____

E-MAIL ADDRESS: _____

DEPARTMENT: _____

BUDGET: Total Request _____

(May not exceed \$10,000 plus an additional \$5,000 if participating in an internship)

STATEMENT OF HOW THE RESEARCH IS RELEVANT TO TRANSLATIONAL BIOMEDICAL SCIENCES* (500 character limit)

*For the purposes of this program, translational biomedical sciences is defined as the translation of basic research effectively into enhanced healthcare outcomes for the entire population in fields such as biomedical research, bioengineering, drug development, informatics, communications, health policy and planning.

IRB AND IACUC APPROVAL:

To ensure that the University is in compliance with all federal regulations, complete the checklist below. *Note: your proposal can be approved prior to IRB or IACUC approval (put "pending" or "to be submitted" instead of approval number), but funding will be withheld until notification of approval or exemption.*

Yes	No	Office of Research Compliance	Policy #
		Human Subjects in Research (including surveys, interviews, educational interventions): Institutional Review Board (IRB) Approval #: Expiration Date:	19.052
		Animal Species: Institutional Animal Care & Use Committee (IACUC) Approval #: Expiration Date:	19.049

SIGNATURES

Applicant's Signature		Faculty Mentor's Signature	
Signature		Signature	
Name		Name	

Optional: Yes No

If selected for funding, I give permission to the Office of the Vice President for Research and Creative Activity to use my proposal as an example during training and workshop exercises.