A Program of TSET
Oklahoma Center for Adult Stem Cell Research

FAQ- Grant Applications- Updated January 2020

1. **What kinds of grants are awarded?**
   We award grants for research projects, shared equipment, travel/education and enabling technology. See detailed descriptions below in FAQ #4.
2. **For how many years are the grants awarded?**
   OCASCR grants are awarded for 1 year.
3. **Who is eligible?**
   Any Oklahoma Principal Investigator working with adult stem cells and/or regenerative medicine is eligible to apply. Applications from universities, research institutions and private industry are welcome. Thus far, all successful applicants have been experienced PIs. However, the funds might be appropriate for establishing new labs, provided that there is evidence of independence and that all criteria listed below are satisfied.
   To be eligible to receive an OCASCR grant, the principal investigator must meet the following criteria:
   - Hold a Doctor of Medicine (M.D.), Doctor of Philosophy (Ph.D.), Doctor of Science (D.Sc.) or equivalent degree (i.e. D.O.).
   - Be a professional or faculty member (Professor, Associate Professor or Assistant Professor) at an appropriate educational, medical or research institution. Research track investigators (i.e. Research Assistant Professor or Research Assistant Member) and trainees (i.e. predoctoral or postdoctoral fellows) are not eligible.
   - Be qualified to conduct and mentor a program of original research within their own independent laboratory.
   - Assume both administrative and financial responsibility for the grant.
   - Have access to institutional resources necessary to conduct the proposed research project.
4. **What should I include in the proposal?**
   All applications should include the 1-page application cover page. Additional requirements are listed below according to the proposal category. In all cases, the total length of the application should be no more than 10 pages—this includes the application cover page, CVs, budget, etc. If you would like the committee to be aware of other supporting information (copies of articles, etc.), please indicate that in your proposal and provide a web link to the information. There is no guarantee that any information over 10 pages will be reviewed.
   a. Research Grants: Research Grants should be focused on adult stem cells and/or regenerative medicine. For applications focused on adult human stem cells, OCASCR defines adult human stem cells as those obtained from umbilical cord blood or other adult samples. For applications focused on regenerative medicine, those projects related to diseases caused by smoking or obesity (i.e. cancer, cardiovascular disease, diabetes, etc.) will be prioritized, since OCASCR funding comes from the Oklahoma Tobacco Settlement Endowment Trust (TSET), which is dedicated to reducing these leading causes of death in Oklahoma (see FAQ #15). Studies involving experimental animals and model systems will be considered. Reprogramming of adult cells for use in tissue regeneration and stem cell-based reconstruction are of interest, as are studies devoted to a better understanding of tissue-specific stem cells, development, and regeneration. These are not inclusive examples, and exciting advances are possible in many areas of adult stem cell and regenerative medicine research. For Research Grants, up to five pages of narrative (Arial, 11 pt font) are permitted and can be described with your format of choice (i.e. Aims, preliminary results, rationale, research plan). In addition, you may attach highly selected references. Small equipment (<$10,000) can be included in

your research budget as long as it is necessary for the research. The application will include the following:

- Application cover page
- NIH Biosketch form(s)
- PHS 398 Budget form—Do not include indirect costs (see FAQ #7)
- No more than 5 pages of narrative
- Highly selected references
- Other supporting documents

b. Shared Equipment Grants: Requests for shared equipment should include a manufacturer's quote, information about users, and the location where the equipment will be housed. If matching funds are available for the purchase of large equipment (>$50,000), please indicate this on the cover page of the proposal. Please acknowledge in your proposal that the equipment will be part of a virtual OCASCR core facility and available to investigators in other Oklahoma institutions, regardless of where the equipment is housed. The budget should only include the cost of the equipment. It is assumed that personnel or supply costs will be absorbed by the institution or charged to users. The application will include the following:

- Application cover page
- NIH Biosketch form(s)
- No more than 5 pages of narrative
- Highly selected references
- Other supporting documents
- Manufacturer's quote: We understand that the length of the quote may cause the proposal to exceed ten pages.

c. Education and Travel Grants: Requests can be made for support for the PI to attend educational opportunities regarding stem cells and/or regenerative medicine, participate in courses, or train in other laboratories. State if you are an invited speaker and whether other funds are available. Links to web site announcements should be provided. . Support will also be considered for "mini-sabbaticals" to learn stem cell and regenerative medicine-related technology. The application will include the following:

- Application cover page
- NIH Biosketch form(s)
- No more than 5 pages of narrative. Provide information about what you hope to learn and how it would apply to your work in Oklahoma. Also provide some narrative about how you will share the knowledge that you will obtain when you return to Oklahoma.
- Other supporting documents: Include the announcement of the meeting and or a letter from the scientist that will be doing the training.

d. Enabling Technology Grants: Investigators with current OCASCR funding or federal funding for stem cell and/or regenerative medicine research may apply for help in obtaining enabling technology, such as commercially available animal models, monoclonal antibody preparation, or genetic assays. The enabling technology should have the potential to make the investigator's stem cell and/or regenerative medicine research more competitive for subsequent or additional federal funding. The application will include the following:

- Application cover page
- NIH Biosketch form(s)
- PHS 398 Budget form
- 5 pages of narrative
- Highly selected references
- Other supporting documents. Include the abstract and budget pages for ongoing NIH, NSF or OCASCR grants that currently support your stem cell and/or regenerative medicine studies.

e. Other: OCASCR is aware that there may be other valuable ways to support adult stem cell and regenerative medicine research, and inquiries are welcome. For example, partial salary support might be requested for personnel in core facilities that are heavily used by OCASCR grantees. A successful proposal would have to document need and show how this funding mechanism would be uniquely valuable. The application will include the following:

- Application cover page

- NIH Biosketch form(s)
- PHS 398 Budget form
- 5 pages of narrative
- Highly selected references
- Other supporting documents

5. **That is a lot of information to include in 10 pages. Can I include more pages so the committee will understand my research?**
   No. In general, the most important part of your proposal is the 5 pages of narrative. The application cover page should only be one page. Signatures will be obtained if you are awarded a grant. Only include highly selected references. Provide a link to other references if absolutely needed.
   An example of the expected page count is as follows:
   - Cover page: 1 page (*All the extraneous instructions and spaces in the template can be deleted to ensure that the cover page does not exceed one page; use a readable font size that will allow you to adhere to the word limit and space limitation.*)
   - NIH Biosketch: 2 pages
   - Budget: 1 page
   - Narrative: 5 pages
   - Selected references: less than 1 page
6. **How much should I request in my budget?**
   There is no formal limit but it would be unlikely for a Research Grant to be funded for more than $150,000 in direct costs per year. To date, most awards have averaged around $100,000. The purpose of the grants is to provide seed funding, and we aim to support as many worthwhile projects as possible. Please go to our website at www.ocascr.org to see what grants were successful in the past.
7. **What should I leave out of the budget for the proposal?**
   The OCASCR Governing Board has authorized 12% for indirect costs for research grants. Don't include indirect costs in your budget request, since this will be automatically added for non-equipment costs on Research Grants. Education and equipment grants will not have indirect costs. Do not include travel in your budget. You can apply for a travel grant if needed.
8. **My research is very complicated and it is hard to put in lay language on the grant cover page. Does it really need to be at an 11th grade level?**
   The lay paragraph is very important and will become publicly available if an award is made, so an average person should be able to understand it. Please have a non-scientist evaluate the paragraph for clarity prior to submitting your proposal. We recommend: "If your mother doesn't understand it, then you need to rework it." The paragraph should include what your project is, how you will do it, and how it will ultimately benefit the community. If the lay paragraph is difficult for the average person to understand, the proposal may be administratively denied. An example of an appropriate lay paragraph follows:

   Our bodies have the capacity to repair themselves through an intricate process that closes the wound and returns the damaged tissue to a functional state. This works remarkably well when we are young, but not as well when we age. Non-healing chronic wounds commonly occur in the elderly and those who have poor circulation due to diabetes or immobility. There is a tremendous need for new technology to solve the medical problems of non-healing wounds, and this can only come through a better understanding of the repair process. Injured or stressed tissues produce a small protein signal called platelet-derived growth factor (PDGF). Some cells have specific PDGF-receptors located on the cell surface that allow them to sense PDGF in the wound environment. PDGF stimulates wound repair, but too much PDGF causes scar tissue. Therefore, our bodies must maintain a careful balance for proper healing. Some adult stem cells, called mesenchymal stem cells (MSCs), have PDGF-receptors. It is not known why MSCs have PDGF-receptors or if they are important in the overall wound-repair process. We hypothesize that MSCs may hold the key to optimal tissue repair via their response to PDGF in the wound environment. The studies in my laboratory are designed to understand how PDGF works in wound repair and how MSCs are involved. We study genetically engineered mice with altered PDGF receptors in their MSCs to understand how they are involved in wound repair. By understanding the function of MSCs we hope to improve therapies for chronic wounds.

Furthermore, although your proposal will be evaluated by highly qualified scientists, they will not necessarily be familiar with jargon specific to your field. We recommend that you have a scientist outside your field read your lay paragraph to ensure that it is clearly written.

9. **How/where do I submit the application?**
Submit the application form and supporting documents as one PDF file via email to cascr@ocascr.org with subject line "grant request". Do not send the proposal to any other email. You will receive a return email indicating delivery. If you do not receive a return email with 24 hours, please contact Kelly Gentry at kelly-gentry@ocascr.org- 405-271-7473.

10. **Do I need to get signatures from my research office?**
You need to determine what the procedure is for your organization. If your organization requires a "routing" sheet, it is your responsibility to obtain it. OCASCR will accept all proposals that are sent to the email with or without a "routing sheet". Signatures will be obtained if funding is approved.

11. **How are the proposals evaluated?**
The applications are evaluated in periodic meetings of the OCASCR Steering Committee, which uses procedures typical of other review groups (i.e. NIH study sections). An important difference is that the Steering Committee does not expect OCASCR applications to reflect mature projects with extensive preliminary data. However, the projects must have merit that the public can understand. As is always the case, applications are ranked relative to each other with respect to scientific merit and feasibility and must be applicable to adult stem cell and/or regenerative medicine research. Since OCASCR funding comes from the Oklahoma Tobacco Settlement Endowment Trust (TSET), which is striving to reduce preventable deaths in Oklahoma caused by smoking and obesity, the Steering Committee will prioritize applications related to diseases associated with smoking or obesity (i.e. cancer, cardiovascular disease, diabetes, etc.). However, scientific merit is still the top evaluation criteria for the Steering Committee, so any project related to adult stem cell and/or regenerative medicine research will be seriously considered.

12. **If I do not receive funding, will I get feedback?**
No. In general, most successful proposals have:
    - Direct relevance to adult stem cells and/or regenerative medicine
    - Historical success of the PI in the proposed area of research
    - Clear evidence of independence and sound training
    - Ability to communicate significance to a lay audience
    - Likelihood of obtaining support from a major funding agency

13. **Will you buy equipment for my lab?** Requests for small equipment (<$10,000) can be included in a Research Grant budget, provided the equipment is critical for the proposed research. OCASCR also awards Shared Equipment Grants, which facilitate purchase of equipment that becomes available to all Oklahoma scientists via the virtual OCASCR Core Facility—regardless of whether the equipment is housed in an individual lab or in an institutional core facility. A list of such equipment is maintained on our website at www.ocascr.org. Large equipment purchased through this Shared Equipment Grant mechanism (>$50,000) is often complemented with matching funds. Smaller shared equipment is also available through this mechanism, particularly during the January application cycle.

14. **What is an Education and Travel Grant?** OCASCR will provide funding for scientists to attend training/meetings. Some awards have been used to attend a scientific meeting, while others have been used to pay for travel and lodging while working with a scientist in another city. We want to facilitate acquisition of knowledge for Oklahoma scientists. When you write your proposal, tell us explicitly about the training opportunity you are seeking and how it will facilitate your work with adult stem cells and/or regenerative medicine. In addition, please explain how you will pass on the information gained to others. As detailed above, all awardees must be regular faculty members.

15. **How is OCASCR funded?** OCASCR funding comes from the Oklahoma Tobacco Settlement Endowment Trust (TSET). The funding began in April 2010, was increased in 2011, and is expected to continue as long as progress is being made. We have made a commitment to the board of TSET to be good stewards with the funds. Hence, the administrative costs for OCASCR are merely 5%. As we are expanding OCASCR's focus to include research on regenerative medicine starting in 2019, we are particularly seeking regenerative medicine grants with a relationship to diseases caused by smoking and obesity (i.e. cancer, cardiovascular disease, diabetes, etc.), since the mission of TSET is to reduce preventable deaths in Oklahoma caused by these two major risk factors.

16. **What if I want to do stem cell and/or regenerative medicine research but I do not meet the eligibility criteria?**
    We want to encourage new scientists to explore adult stem cell and regenerative medicine research. However, support for those without appropriate academic rank must come via grants awarded to an independent principal investigator.
17. **What if I receive funding and then leave the state?** OCASCR funds are exclusively for research conducted in Oklahoma. Transfer of a project to another PI is theoretically possible but would be considered on a case-by-case basis and would not be guaranteed. Formal collaborations with investigators elsewhere are encouraged. Teamwork between scientists within the state could also be helpful.
18. **What if I don't use all the funds in the specified time frame?**
    Any funds remaining at the end of the funding period are forfeited by the scientist.
19. **What about the paperwork?** We believe that the application and grant administration processes are simpler than for other funding agencies. Our aim is to free up your time and promote research. However, certain procedures are required by state law and are necessary to ensure good stewardship of these precious funds. An explanation of procedures and required forms are posted on: www.ocascr.org. Kelly Gentry is available to answer your questions and help with compliance.
20. **If I receive information that might be germane to the proposal, can I submit that information after the application deadline?**
    No supplemental information will be entertained after the application deadline.
21. **What if I am applying for continued funding?**
    You must apply for a new grant, and your application will be evaluated relative to the other applications received. You will want to clearly state in your proposal what, if any, progress was made with previous OCASCR support. Failure to state clearly what was previously achieved/not achieved will diminish your chances of future support. You may use up to ½ page of additional space to provide this information. Your application should include an outline of plans for continuation or revision of the study and your strategy for obtaining future federal funding.
22. **Do I have to use the cover page?**
    Yes. The cover sheet was updated in January 2019, so be sure to use the one that has that date at the bottom of the page. Note that you can delete the extraneous instructions and spaces in the cover page template to ensure that your completed cover page does not exceed one page. Use a readable font size that will allow you to adhere to the word and space limits.
23. **What if I have other questions?**
    Kelly Gentry is available to help at kelly-gentry@ocascr.org or at 405-271-7473. She will not "put a finger on the scales" for you, but wants to make sure the application process is a positive experience.