About the Grant:

- **Q.** Is a tenure-track early-career investigator more likely to get the award than a non-tenure research track early-career investigator?
- A. No. Criteria to be considered by the review committee include, but are not limited to:
 - The scientific merit of the proposed work.
 - The extent to which the research has the promise to contribute directly to improving human health.
 - o The preparation of the ECI and their ability to conduct independent research.
 - The likelihood that the ECI will be more competitive and move into an independent research career after conclusion of the grant.
 - The likelihood that the ECI will produce publications, be promoted, or contribute new technology disclosures.
 - The reasonableness of the budget and the appropriateness of the timeframe proposed for the project.
 - Additionally, other criteria developed by the review committee that are commonly applied in a peer review process.
- **Q.** Does this award fund the investigator or fund the research? What is more important your research plan or potential for future career in investigative research?
- A. Both are true. The review panel takes a very close look at your research proposal for its impact and for its potential to lead to future research. We also very carefully look at the potential of each individual, we go over the biosketches very thoroughly, we actually read every line of every letter, and this gives us an impression of the potential of the individual, because the Boettcher Foundation is really interested in funding the leaders of the future in biomedical research. Both components of the grant, the information about you as a young investigator, and the information about the research plan are equally important and you should spend a fair amount of time perfecting both of those.
- **Q.** Are the CU awards assigned to specific campuses or could all of them go to the same campus?
- **A.** We do not assign awards to campuses. We take into consideration what campus the individual is on more so in regard to the facility, the collaboration, and expertise of the campus but there is no restriction to how many awards go to any of the CU campuses.
- Q. After reading through the application materials, I am unsure if I can list colleagues who will contribute to the project as co-investigators. Can you help to clarify the role of co-investigators?
- A. The purpose of the grant is to provide a non-mentored opportunity for an early-career investigator (ECI). A co-investigator who does not also qualify under the grant requirements is discouraged. Two investigators who both qualify as an ECI may collaborate on one application; however, the review committee will be left with the task of assessing the value of the proposed research as it advances both careers, which could place the proposal at some disadvantage. The best option is for one ECI to apply and include services (salary expense) from the second investigator in your budget.

- **Q.** Is this grant "mechanistic and hypothesis-based" like NIH, or is it meant to be more "high-risk and innovative"?
- A. Those two should not be mutually exclusive. Most of the grants that we receive are hypothesis-based. That doesn't mean that we are not open to assessing grants and to supporting grants that are not hypothesis-based. We are interested in funding innovative research that is going to move the field forward. We would like it to have innovation. If it is not innovative, it is unlikely to do very well. If it is innovative, it could still have a clear hypothesis; but hypothesis-driven research is not absolutely required, and we do support discovery-based type research as well.
- **Q**. How much of preliminary data is welcomed?
- A. It's not required but it is encouraged. The reviewers are usually expecting to see some preliminary data if it seems relevant that there would be preliminary data for that project. If you're providing so much preliminary data that the reviewer thinks that you've actually answered the question, it can eventually work against you; but unless you're going that far, preliminary data establishes feasibility and establishes a reasonableness of what you're trying to do will almost always be helpful.
- **Q.** With the relatively new NIH focus on rigor and reproducibility, do you suggest including that section in the application?
- A. Explaining how your research would be done in a rigorous fashion and will lead to reproducible results would be helpful. If you can fit it in, it definitely would not be a bad idea to do so.
- **Q.** Is there any preference regarding "basic science vs. clinical studies"?
- A. There is no specific preference; but if it's basic science you need to clearly link it to human health and disease. Most investigators that are involved in basic science nowadays have translational components to their research but for this award you must make it clear that it does link to human disease or human health. Most of the investigators who have been funded are actually doing laboratory research that is closely linked to human health in some way. We wouldn't discourage any investigator from basic to clinical research from applying. There is certainly no bias against basic science. In fact, many of the investigators who have been funded are doing laboratory-based research. However, we do not discourage any investigator from basic to clinical research or population science and behavioral research from applying.
- **Q.** Are projects focused on quality of life appropriate to submit for this award?
- A. We assume quality of life means that this is a clinical research project. We have in the past funded primarily T-0 preclinical work that had a very strong emphasis on how this could eventually improve human health, early human research, and occasionally research involving clinical trials or testing of new devices. Quality of life can certainly be included as one of the outcomes of any study, but if the study only focused on quality of life, it probably would score well but probably wouldn't reach the funding level. A lot depends on what the disease process would be, what the intervention is, its novelty and how this really advances the field. If the focus was on quality-of-life studies related to an ongoing clinical trial, for example, then I think that might be more favorably viewed, but if it was just on the quality-of-life issues, then it would not be what we usually fund here.

- **Q.** Is there a specific minimum amount of effort for the award?
- A. We don't assign a specific minimum amount of effort. Most of us would agree that a faculty member who has less than 70-75% effort devoted for research may not be competitive compared to the other faculty members that are applying for this award. However, we don't have a strict limit, but I think most of us believe for a young faculty member who is serious about a research career that they should have roughly 75% minimum time committed to research.

The total amount of effort that you're able to devote to research (that's not necessarily this particular project) would be the sort of thing that we're expecting to see in your chair's letter where they would spell out the amount of effort that you can devote to your research activities, as opposed to your other activities such as teaching or clinical work.

- **Q.** Are there research priorities that the award is interested in?
- A. The research priorities are something that will transform human health in some way. It doesn't have to transform human health at the time that you are doing your research, particularly if it's more of a preclinical basic science grant, but it must relate to human health. We do not specify a certain area of human health, a certain branch of biology, or a certain branch of medicine. This could be an engineering grant for instance, looking at a device to enhance human health. There are no other research priorities other than it must be something that eventually can be translated into improving human health. That can be both preventing and treating disease. A grant that was focused on prevention would meet these criteria. If it's a preclinical grant, you don't have to propose that your preclinical findings are going to instantaneously result in a treatment most of us who review the grants would say that it doesn't really make sense. Limit your proposal to what the results are going to be of your research but link it to human health.

Eligibility:

- **Q.** Which faculty titles are eligible to apply?
- A. University of Colorado Qualifying Titles: An investigator who received a terminal degree or completed their initial medical residency within 10 years of January 1 of the award/selection year. In addition, tenure-track appointments, non-tenure track research and clinical faculty are eligible to apply, assuming they meet all other eligibility requirements. Qualified "career-track academic appointments" based on the faculty titles [As outlined in APS5060-Faculty Appointment]:
 - o Tenure Track: Assistant Professor, Associate Professor
 - o Research or Clinical Track: Assistant Professor, Associate Professor

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- Q. Is eligibility related to independent grants greater than \$175,000 at the time of submission only?
- A. No. The eligibility requirement applies both at submission date but also must be met if the applicant is recommended for the award when names are submitted to the Boettcher Foundation.
- Q. Is an independent research award of at least \$175,000 for a single-year or multiple-year award?
- A. The \$175,000 direct costs threshold is based on total award, not an annual amount.
- **Q.** Are there any exceptions to your initial career-track academic appointment being within four years or having received a terminal degree or completed medical residency within the ten years preceding the application?
- **A.** Individual institutions can accommodate exceptions on a case-by-case basis following review and consultation (if needed) with the Boettcher Foundation. However, documentation to make or support any exception would be required. Contact the university program manager prior to submitting an application to confirm eligibility.
- Q. Is it possible to submit, in advance, information to CU internal reviewers about a previously received research grant award to see if it qualifies as "independent" level for purposes of eligibility for this Webb-Waring opportunity?
- **A.** If the campus can't decide on independence, we can review with Boettcher.

Application:

- **Q.** Is it important to list my career goals?
- **A.** Yes. The award is designed to improve the ECI's ability to obtain independent awards. An explanation of your career goals and how your current research and potential award are advancing those aims would be beneficial.
- **Q.** Can the specific aims for the Boettcher Webb-Waring grant be similar to ones submitted during this NIH review cycle?
- **A.** Yes.
- **Q.** If a researcher applies and does not get the Boettcher Webb-Waring grant, can that researcher apply in a subsequent year with a revised proposal or a different proposal altogether?
- A. Yes, you are allowed to reapply as long as you meet the eligibility criteria. For candidates who have previously applied, received feedback, and are resubmitting: a <u>Response to Prior Year</u>

 Reviewers form must be completed and included with your application.
- **Q.** How many times can an individual apply?
- **A.** As long as you meet the eligibility criteria, you can continue to apply.

- **Q.** In the research proposal, do figures count toward the page limit?
- A. Yes. Figures and tables. One should, therefore, not avoid putting figures in but you also should not shrink the figures and tables to the point where they are unreadable.
- **Q.** Where are the application forms and templates located?
- A. Here is the link to the application components page, which includes the biosketch template: https://www.cu.edu/bfww/application-components.
- **Q.** Since the awards have mostly funded preclinical work, do you have any suggestions for clinical trials, especially for exercise-based interventions?
- A. We have funded investigators who are performing solely clinical research. I don't want to make it sound like if you're a clinical investigator, don't apply that's absolutely incorrect. If you are proposing a clinical trial with any kind of intervention, it's just like how the NIH would look at it. You must demonstrate to us that this is an important problem that you are addressing, that you have the expertise to pull off this clinical trial and particularly that your expertise is more than just knowing how to run a clinical trial, but this is your field of interest. Hopefully, there's novel hypotheses and data that you're collecting and that you can clearly demonstrate to us that you know what you're doing. So please do apply if you're involved in clinical research and clinical trials but, for instance, if you're performing in an industry-sponsored clinical trial, you probably should not apply because we're looking for investigators who initiate the clinical trials and clinical research if you're going to be applying in that regard.
- **Q.** If my research involves data from collaborators do they need to provide a letter of support as well?
- A. A letter of support is helpful in any grant application, particularly if the collaborators are playing a major role, so we would encourage some documentation that the collaborators agree to provide their collaboration. If an early-career investigator (ECI) has one or more collaborators on their application, only one letter from a collaborator will be accepted, in addition to the four Letters of Recommendation specified later in this document.
- **Q.** Are both applications in clinical science and basic science considered? Is one looked upon more highly than the other?
- A. On the review committee, we have clinical scientists, basic scientists, translational scientists, and population scientists and we assign the application to the proper field of science. They may not be an expert in your exact disease, but it is important for you to make it clear for a strong scientist to understand your work even though they don't study your pathway or your organ system. Both are considered equally, and we use our scoring system in a similar manner for all applications, which is very similar to the NIH scoring system.

Reference Letters:

- **Q.** What is the length maximum on reference letters?
- **A.** There is no limit. However, any letter over two pages starts getting to be a bit long. It's recommended keeping letters at two pages although there is no max.

We suggest keeping the letters at two pages or less but if the letter runs over into a third page, we will certainly accept it. Letters over two pages may work against the investigator.

- **Q.** Can the mentor letter be a combined letter from two mentors?
- **A.** It can be a combined letter. If you have co-mentors, then a combined letter from both of them would be fine.
- **Q.** For the reference letters outside my institution, does the referee need to know me personally?
- **A.** They do not need to know you personally. It's going to be easier for them to write a strong letter if they are familiar with you. It's not a requirement.
- **Q.** Should these letters focus on the science or the applicant?
- **A.** If they are familiar with your science and they don't know you personally and you're asking them to write a letter that supports the science, that's probably just fine but they must be familiar with the science and/or you, hopefully both.

The evaluation of applications is an evaluation of both the individual and their science. It is not like a typical NIH or one evaluation where it's really the science that's most important here where these awards are designed to accelerate the career of an early-stage investigator. Applications are judged on both the investigator's track record, their passion and commitment, their prior productivity and the letters which state their promise and future directions as well as how scientifically sound the proposal is. Both are important components for the review committee to make the recommendations for funding.

- **Q.** For letters of recommendation, what if your division chief is also your mentor? Do you recommend getting two letters, combining the letters, or getting a letter from the department head?
- **A.** It's recommended getting a letter from the department head plus your division chief mentor. That's to your advantage.
- **Q.** Can you have previously published with the people from outside the institution who are writing your letters?
- **A.** Yes, if you have previously published with an expert in your field from outside of the institution and that person was able to explain your abilities and your research in their letter, it might be beneficial for you. No limitation on that. Former mentors and collaborators can certainly write your letters.

- **Q.** Can the mentor be outside of the institution?
- A. Yes.
- **Q.** Is it ok to have more than two external letters?
- **A.** The external letters are limited to two. A <u>maximum</u> of four letters of reference will be accepted, which includes:
 - a letter from your department chair, dean or other academic authority;
 - a letter from your mentor (if applicable) or advisor; and
 - one to two letters from researchers outside your institution who can address the merits of the science.
- **Q.** For the one to two letters from outside the institution, is it allowed and/or advisable to obtain letters from postdoc/doctoral supervisors?
- **A.** It's allowed and in fact it's quite common and that would be a perfectly appropriate thing to do. Your prior supervisors probably know your research better than anybody else and those letters frequently come across as very strong and convincing about the potential of the individual who is applying.
- **Q.** If my division chair is also my primary mentor, is it better to get the chair letter from my department chair?
- A. Yes. You need a primary mentor letter. The department chair can certainly write the letter that talks about the commitment to you. The department chair letter carries more weight than the division chair when it comes to the institution's commitment already to your career. If your division chief is your mentor, it's probably better to have the department chair write the department letter. We don't want the same person to write two letters.

Budget:

- **Q.** Do you expect mentors to be included in the budget?
- **A.** No, since this is considered an independent grant. However, it is not precluded if it is needed to advance the research project.
- **Q.** When budgeting, should you use the NIH salary cap?
- **A.** There is not a salary cap for this grant; however, it may pose concerns to the review committee if the entire grant was utilized for salary.

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- Q. Is there a preference, from the selection committee, for how the award is budgeted? I'm thinking in terms of 2 vs 3 years, salary support vs equipment. Does this impact selection?
- A. It does not usually impact the score; however, there would be some exceptions to that if, for example, you receive little support from your department and you had to use this to buy the required equipment that is needed to carry out basic aspects of your research, reviewers may question the department commitment to supporting your research career. There's no specific problem with however you want to propose to spend the money but be aware of more subtle things like that. Frequently, applicants do put a modest proportion of their salary support on this grant but if you were to put all the support to support your salary, it would be a great question as to what your department's commitment is to you for your early stage of your career. A portion of your salary on this grant is probably ok, all of it would be frowned upon.