

**Texas Higher Education Coordinating Board
Advisory Committee on Research Programs**

**June 7, 2011
Summary Notes**

Members present: Robert Curl, Chair, Bettie Sue Masters, Vice Chair, Allen Bowling, Rinn Cleavelin, Ramanan Krishnamoorti, and Max Summers

Members absent: Frank Gerome, Roberto Osegueda, and Renee Simar

Staff present: MacGregor Stephenson, Assistant Commissioner, Kevin Lemoine, Stacey Silverman, Reinold Cornelius, Ernest Jacquez, Elizabeth Mayer, and Suzanne Pickens

Welcome and Introductions

Robert Curl, Chair of the Advisory Committee on Research Programs (ACORP), convened the meeting at 10 am. The committee members, staff, and audience introduced themselves.

Consideration of Summary Notes of March 8, 2011 Meeting

Dr. Curl introduced the item. He and Dr. Masters reported that they had made inquiries to colleagues to serve as possible review panel chairs and would follow up with additional information.

A motion to accept the March 8, 2011, Summary Notes as written was made by Dr. Cleavelin and seconded by Dr. Bowling. The summary notes were unanimously approved by the Advisory Committee.

Review of HB 2631 Filed by Representative Branch

Staff reported that House Bill 2631 was passed by both houses and was sent to the Governor for signature. The bill would change the name of the grant program to the Norman Hackerman Advanced Research Program and would delete language that related a suggested funding amount to one-tenth of federal research funding for Texas.

Discussion and Action Related to 2011 NHARP Grant Competition Funding Priorities

Dr. Curl opened the discussion by asking for meaningful adjustments to the program that would see fewer and smaller awards in the coming biennium. Dr. Summers said the decision on how to spend the funds should be based on common sense. He added that ACORP should then spend its effort on highlighting the importance of NHARP and developing methods to sustain the program in the future. Dr. Summers added that not much could be accomplished with \$1 million in funding. However, it would be beneficial to use the time to ensure support for the program and of the projects supported over the years. He commented that NHARP is missing the visible and vocal support of the university systems and the state research association, The Academy of Medicine, Engineering and Science of Texas.

Dr. Masters said that the program's name change should be promoted and would serve to enhance the visibility of the program.

Dr. Stephenson suggested creating an NHARP day at the Capitol prior to the beginning of the next legislative session to showcase the benefits of the program and the projects supported.

Dr. Silverman presented background information to put current funding in perspective. She reviewed the NAHRP statute, which enumerates 15 disciplines as areas to support, and showed that additional areas were included in other statutes, including the specific reference to HIV research. Dr. Silverman noted that in the 2009 NHARP competition, with \$16 million in funding, ACORP recommended eight research areas receive funding. Two areas, engineering and biological sciences were further divided into two review panels given the large number of proposals from those areas. The Coordinating Board concurred with the ACORP recommendations for funding. As a result, eight areas were supported, which required 120 reviewers to conduct 10 review panels. Four review panels held face-to-face meetings, while the remaining six panels were conducted through teleconferencing.

Because funding was significantly reduced for the 2011 competition, staff developed a set of options for ACORP to consider that would maintain the program within the financial limits. Staff suggested that awards of up to \$50,000 could be made. However, because of the limited amount of available funds, the research areas supported would need to be restricted to one or two areas. The staff suggestion was to select two areas, such as environmental science and biomedical engineering.

Staff also proposed considering limitations on number of proposal submissions. Instead of limiting the institutions to a set number of submissions, staff suggested that applicants be limited to "early career" investigators. There was discussion related to the term "early career" and agreement that clear definitions were needed, so that institutions would have a clear understanding of who could submit an application.

Staff explained that in the past, the program received the ability to use returned program funding to support the administration of the program, including using funds to pay the reviewers. However, the program did not receive authority to use returned funds, unexpended balance (UB) authority, so there is no additional funding available to support the review process. The entire program, including the review process and project funding, will be supported with the general revenue appropriated \$1 million. Staff estimated that 9 to 14 reviewers would be needed to conduct two review panels. Reviewers are paid \$800 to conduct the reviews. The Chair of the review panel commonly receives additional funding, given the additional responsibilities of the role, which includes assignment and management of pre- and full proposals to each reviewer and facilitating the review process.

Dr. Cleavelin suggested an award match could be required for each funded project. Dr. Curl reminded the group that industrial support was often difficult to secure for basic research. Dr. Masters said the honor associated with an NHARP grant may give institutions incentive to obtain matching funds. Dr. Stephenson asked if early career investigator applicants would find it difficult to garner matching funds. Dr. Bowling suggested matching funds as an option for investigators.

Dr. Silverman brought forward the suggestion offered by Deputy Commissioner David Gardner to “consider a requirement that those who receive NHARP funding would have to submit a complimentary proposal to another funding source during the time the grant is funded.” This approach would encourage, but not require investigators to pursue additional grant funding.

Dr. Bowling said that a maximum award of \$50,000 for two years would be just enough for one graduate stipend, which is about \$24,000 annually. Dr. Masters said she would prefer that the program award ten distinguished awards of \$100,000. Dr. Silverman raised a concern about a low number of institutions that would benefit from that approach and additional management issues related to the selection process. Dr. Summers said it was clear that the low appropriation would not allow everybody to participate.

The ACORP proceeded to have an involved discussion of the benefits of having a few special awards of \$100,000 and the draw-back of having too few institutions participate with projects. The Committee compromised by recommending an award limit of a maximum of \$80,000. Members also said it would be acceptable if the awards were spent primarily on student research support.

Dr. Cleavelin suggested using three broad panel areas: 1) biology, 2) engineering together with material science, and 3) all other hard sciences combined. He added that the institutions would select two proposals each for submission. There was a lengthy discussion as to whether this was feasible, whether it would be an undue burden on the institutions, whether it was done routinely for other opportunities, and whether it would be too political within the institutions to be burdensome. The majority of members rejected the idea of letting institutions select limited submissions, because the selection would fall back to the decision of one or a few administrators who may not have sufficient insight into the scientific merits of the proposals.

The committee discussed the definition of the term “early career” faculty. Several options were considered, including length of employment at the institution of not less than five or more than seven years, counting the years from the time of graduating with a doctoral degree, and limiting eligibility to faculty with less than a specific amount of research funding. The committee and staff agreed that any definition would have to be verifiable by the Offices of Sponsored Projects and staff and easily understood by faculty and administrators.

Dr. Curl said that new faculty typically have sufficient start-up funds for the first two years and may encounter a dearth of funding between years two and five, after start-up funding runs out, and before they became more comfortably established with external funding.

The committee recommended that an “early career investigator” should be defined as a non-tenured, tenure track faculty or a research professional, who, at time of application, has been employed at a Texas institution for more than two, but less than five years.

In view of reduced NHARP funding and the administrative cost of a two-stage review process, the committee considered elimination of the pre-proposal selection stage and basing award selection solely on proposal review. After a lengthy discussion, the committee recommended retaining the pre-proposal selection stage.

Dr. Cleavelin suggested that in order to move forward, pre-proposals would be required to receive positive recommendations and a yes to move forward from both reviewers. He added that the reviewers should have an opportunity to discuss pre-proposals that receive only one recommendation to move forward and be allowed to amend recommendations following additional review and discussion. This approach would allow all pre-proposals to receive thorough reviews.

Dr. Krishnamoorti suggested that an additional notice of intent, including key-words, besides pre-proposals and proposals, could be useful for administration and reviewer selection.

The committee discussed possible research areas for funding. Dr. Cleavelin suggested three broad areas: biology, engineering, and hard sciences (math, physics, and chemistry). Dr. Masters suggested excluding cancer research, because it is well-funded through the Cancer Prevention and Research Institute of Texas (CPRIT). Dr. Curl agreed and suggested a biology research area defined as "cellular and molecular biology and genetics, non-cancer research."

The committee further considered panels for electrical engineering and computer science, chemistry, or material science and nanoscience. Dr. Krishnamoorti commented that if investigators were eager enough they would likely be able to fit their proposals into any of those submission categories.

Following additional discussion, the committee narrowed their recommendation to the following two research areas: biology, cellular and molecular biology and genetics, non-cancer research, and material science/nanoscience.

Based on the past competitions, the staff estimated approximately 400 pre-proposals would be received. The committee recommended a maximum of one proposal for each "early career" investigator. The program could fund up to 12 proposals with awards of up to \$80,000. Staff estimated that this approach would require approximately 20 reviewers at the pre-proposal stage, with each reviewer responsible for approximately 40 pre-proposals reviews. The reviews of the pre-proposals would result in invitations to receive 50 full proposals for the final panel review. The cost of the review process, including funding of the reviewers, would be approximately \$30,000.

Review and action related to the 2011 NHARP Request for Applications

Dr. Silverman explained that the Request for Applications (RFA), would be drafted by staff, reviewed and revised, and routed for approval. She explained that RFAs are reviewed by the agency's business services department, legal department, and Deputy Commissioner. She explained that the Board's subcommittee, the Strategic Planning and Policy Committee (SPP) and the full Board would provide the official approval to release the RFA. The staff expects to post the RFA shortly after the July 28 Board meeting.

Drs. Cleavelin and Masters made a motion to incorporate the following changes into the RFA:

- Establish two review panels:
 - Cellular and Molecular Biology and Genetics, Non-Cancer Research
 - Material Science/Nanoscience, for Basic/Fundamental Research.
- Split the panel funding allocation evenly, 50/50.
- Set a goal of 12 awards, with a maximum award of \$80,000.
- Plan for an estimated 450 pre-proposals and plan to allow 50 full proposals.
- Give pre-proposal reviewers a selection target; preferably not less than 15 percent.
- With two reviewers per pre-proposal, require two positive recommendations to submit a full proposal. Allow for discussion of pre-proposals with one positive recommendation and include the panel chair if necessary.
- Include a requirement that each PI of a funded project submit a proposal to another funding entity during the grant period.
- Keep the statutorily required support for undergrad and/or graduate students (including postdoctoral students).
- Limit eligibility to submit a proposal to early career investigators only. Early career investigators are defined as non-tenured, tenure track faculty or research professionals, who, at time of application, have been at a Texas institution for more than two years but less than five years.

The Committee unanimously approved the motion.

A question was raised about the timing of expenditures of NHARP funds. Dr. Silverman explained that, unlike previous appropriations where the Coordinating Board could carry funding over to the next grant cycle, NHARP funds appropriated for fiscal years 2010 and 2011 could not be expended by the Coordinating Board after August 31, 2011. However, NHARP funds disbursed by the Coordinating Board as awards may be expended by the investigators up to the end of the grant period, or July 31, 2012.

Review role of ACORP

Dr. Silverman reviewed the role of ACORP by citing passages from the NHARP statute, Texas Education Code 142.003, and Coordinating Board rules 14.71 through 14.73. She explained that now that NHARP had continuing funding for the next biennium, the agency would make the necessary appointments of new members and re-appointments of continuing members.

Dr. Summers said that he is retiring at the end of the summer and would not be available for re-appointment. Dr. Silverman reported that Frank Gerome communicated that he also was not available for re-appointment and that Dr. Simar was unavailable because of continuing health concerns.

Dr. Curl emphasized that he would like to see Dr. Masters re-appointed, and Dr. Masters stated that she is available for re-appointment. Dr. Silverman will verify that Dr. Osegueda is available for re-appointment.

Dr. Silverman encouraged members to put forward candidates for the three remaining vacancies. Members should suggest candidates from Texas industry for two Committee positions and could talk to their institutions about academic candidates for one position. She

said that geographic, ethnic, and gender diversity for the candidate pool would be welcome. The Commissioner would make the recommendation of appointments to the Board and the chair of the Board, Mr. Heldenfels, would make the appointments.

The Committee again expressed the desire to learn about the appropriations of special item research funding in Texas, especially as compared to the last biennium. Staff said they would compile data, once state appropriations for the coming biennium are final.

Discussion of ACORP Fiscal Year 2012 Meeting Schedule

Dr. Silverman said that the next ACORP meeting would be early next year, when the Committee would consider the outcome of the 2011 NHARP competition. If other unforeseen and pressing issues should come up, staff would ask ACORP to meet earlier.

ACORP members asked that they be informed about progress of the NHARP competition while it is ongoing, especially how many proposal submissions were received. Dr. Masters expressed interest in a list of previous panel chairs as help for recommendations of reviewers.

Staff presented a draft schedule for the upcoming competition. ACORP members set a tentative meeting date for Tuesday, February 14, 2011 from 10 am to 2 pm. If other dates should be considered, staff would contact the members to identify and schedule a date to meet.

Adjournment

Dr. Curl adjourned the meeting at 1:40 pm.