## COLORADO HIGHER EDUCATION COMPETITIVE RESEARCH AUTHORITY

Minutes of the February 27, 2017 Annual Board Meeting

Chairman Joe Garcia called the meeting to order at 9:05 a.m.

In attendance were Board members Tony Dean (School of Mines), Robert Houser (UNC); and Theresa Fiez (University of Colorado); in attendance by telephone was Board member Alan Rudolph (Colorado State University). Also in attendance were Inta Morris (Secretary and Treasurer), Richard Maestas, DHE Chief Financial Officer, and Trisha Esquibel, DHE Lead Accountant.

**Approval of February 5, 2016 minutes**. The motion was made and seconded to approve the February 5, 2016 minutes. The motion passed unanimously.

**Financial Update.** Inta Morris introduced DHE's new Chief Financial Officer, Richard Maestes, and new Lead Accountant, Trisha Esquibel. Ms. Morris and Trisha Esquibel provided a summary of the Authority's financial position. They noted that CHECRA began 2016 with \$4.9 million in the bank and ended the year with \$4.1 million. In 2016, CHECRA received the anticipated \$2.1 million from limited gaming revenue and disbursements totaled \$2.8 million.

Inta Morris also summarized the budget forecast, which shows anticipated expenses and income through 2018 based on current commitments. Items shown in red on the financial forecast are commitments CHECRA has made for which the awards are still pending.

Terri Fiez and Tony Dean noted that neither the CU nor Mines proposals for a Gen-3 Engineering Research Center had been funded, thus increasing the bottom line numbers in the forecast by \$800,000. Tony Dean also noted that the \$200,000 per year committed to the REMADE manufacturing Institute is an upper limit and that likely the amount to be requested from CHECRA in 2017 would be less.

Alan Rudolph recommended CHECRA consider conducting an economic impact study of the projects it had funded, including an analysis of the types of projects – large center projects such as ERCs and MRSECs compared to one-off projects and Major Research Instrumentation (MRIs) awards.

Tony Dean moved to accept the financial statements, Robert Houser seconded, and the motion passed.

**MRI Proposals.** Board members discussed the number of MRI proposals each institution had submitted for funding in 2017, totaling 11, as follows:

### CSU:

- Kristen Buchanan and Stuart Field (Physics). Acquisition. Acquisition of a Maskless Lithography System for Materials Research. \$50,000 matching funds requested.
- Carol Seger. Acquisition. A Multi-Use 3T MRI to Advance Imaging Capabilities and Technologies at CSU. Estimated 30% total required match \$870,000.

• Jorge Rocca, et al. Development proposal. Development of an Ultra-Bright Laser for Frontiers Research in Science and Technology. Estimated 30% total required match \$250,000 – 300,000.

### Mines

- Corrine Packard, "TOF-SIMS" Required match: \$428K
- Brian Gorman, "Development of Aberration Corrected Atom Probe Tomography" Required cash match: \$254K
- Aaron Stebner "Development of High-Throughput High-Energy X-ray Diffraction Microscope" Required Match: \$140K

# **University of Colorado (provided following meeting)**

- Dr. Dashti, Professor in the Department of Civil, Environmental, and Architectural Engineering, NSF MRI proposal entitled, "MRI: Development of Two Parallel Bi-Axial Centrifuge Shake Tables for Engineering Research and Education." 30% match equivalent of \$298,271
- Dr. Michl, Professor in the Department of Chemistry and Biochemistry, NSF MRI proposal entitled, "MRI: Acquisition of a 600 MHz NMR Spectrometer." 30% match equivalent of \$402,433
- Dr. Srubar, Professor in the Department of Civil, Environmental, and Architectural Engineering, NSF MRI proposal entitled, "MRI: Acquisition of a 4D High-Resolution X-Ray Micro-Computed Tomography System for the Rocky Mountain Region." 30% match equivalent of \$343,504

## **University of Northern Colorado**

- Nicholas Pullen, et. al (Biology). Acquisition: A Next-Generation Sequencing Workflow for the Enrichment of Interdisciplinary Genomics Research and Education of a Diverse Workforce in Northern Colorado. \$41,000 matching funds requested.
- Charles Kuehn, et. al (Physics and Astronomy). Acquisition: Northern Colorado Research and Education Telescope. \$212,000 matching funds requested.

Alan Rudolph opened a discussion about CHECRA's role with the research universities, noting that he was getting pressure to use CHECRA funds for projects outside the traditional large center-type projects. He suggested the Board discuss how to optimize CHECRA funding for the State. All agreed that the institutions have recently been more successful with MRIs than other awards, and that for the MRIs the CHECRA funding is enormously helpful. Board members reminded themselves that in a previous discussion, they agreed that among the infrastructure benefits, MRIs also promote collaboration.

Tony Dean moved to increase funding for MRIs in 2017 to \$500,000, assuming institutions receive awards; Terri Fiez seconded and the motion passed.

Alan Rudolph returned to his suggestion of conducting an analysis of optimizing CHECRA funding, given that MRIs are every year, ERCs, STCs and MRSECs are every two years, and so forth. Inta Morris agreed to work on an analysis with Dr. Rudolph.

Terri Fiez reported that she is anticipating pressure on research infrastructure needs at CU. She noted that institutions have very few sources of funding for research infrastructure, which is making it increasingly difficult to remain competitive. Board members agreed that it is important for the research institutions to tell their story more publicly, particularly those projects that are easily understood by the general public and legislature. They added that CHECRA should seek to develop an economic impact report with easy to understand benefits of research (e.g., every research dollar leads to X jobs in the community).

Terri Fiez mentioned a recent meeting with the new Executive Director of the Office of Economic Development and International Trade and suggested that office might be a future partner. Inta Morris agreed that the Department would seek a meeting with her to let her know about CHECRA.

Board members engaged in a discussion about the Collaboratory and whether CHECRA should seek to work more closely with it. They agreed to continue discussions before taking any action on this issue.

**Annual Audit**. Trisha Esquibel said that CHECRA has undergone an annual audit and while we did not have the final copy, there had been no findings.

The meeting adjourned at 10:25 am.