



**Research Council Minutes
October 23, 2008
3:00 p.m.
Champ Hall Conference Room**

RESEARCH COUNCIL MEMBERS PRESENT:

Brent Miller, Chair
Chris Fawson
for Doug Anderson
Byron Burnham
John Elsweiler
for Richard Clement

Ed Glatfelter
for Yolanda Flores-Niemann
Nat Frazer
Jagath Kaluarachchi
for Scott Hinton

Don Cooley
for Mary Hubbard
Paul Rasmussen
Carol Strong
Vincent Wickwar

INVITED GUESTS:

Marv Bennett
Jim Dorward
Bryce Fifield
Adam Fowles
Jerilyn Hansen

Steve Hansen
Irene Jorgensen
Douglas Lemon
Arthur Mahoney
David Paul

David & Terry Peak
Russ Price
Teresa Seeholzer
Lorraine Walker
Dan Watson
Ned Weinshenker

ACTION ITEMS

1. **Approval of Minutes – September 25, 2008** - Brent Miller

Paul Rasmussen asked that all Federal agencies affiliated with the EPSCoR Program should be referenced in the minutes of September 25, 2008. With this amendment, Nat Frazer motioned to approve the minutes. Byron Burnham seconded the motion; motion carried unanimously.

DISCUSSIONS

1. **Welcome & Introductions** - Brent Miller

Dr. Douglas Lemon, New Director of Space Dynamics Laboratory, was introduced. Dr. Lemon graduated from USU with a bachelor's degree and Ph.D. in physics and brings over 30 years of experience at Pacific Northwest Laboratory (PNNL), Advanced Geographic Information Systems, and Battelle Corporate. His past experience and interface with the Department of Energy (Office of Science), as well as the Department of Homeland Security, will provide strategic opportunities for SDL, USURF, and Utah State. Dr. Lemon plans to participate with Research Council and increase interaction between SDL and the University.

2. College of Science Undergraduate Research Presentation:

Title: **“Parallel Motion Planning Using Rapidly-exploring Random Trees (RRTs)”**

Student Introduction by Faculty Mentor: Dr. Dan Watson

Presenter: Arthur Mahoney

Arthur described how “motion planning” is the process of finding a path that an object (robot) can follow that takes it from its initial configuration (position and orientation) to a final configuration. As various physical (obstacles) and kinematic (turn radius and velocity) constraints can present problems, paths must be identified that satisfy the constraints. Art’s research focuses on motion planning with robots so that they can be utilized to accomplish a specific task safely and effectively.

Applications which use motion planning include: 1) Robot manipulators that have complex robotic arms (i.e., manufacturing factories and NASA’s space shuttle), 2) Protein folding processes that determine how to fold strings of polypeptides into complex structures, and 3) Robot assisted surgery where surgeons need to move catheters through veins or perform tedious tasks.

Because motion planning algorithms take time to process, they are not efficient when critical tasks must be performed in a rapid manner. To “speed up” these tasks, RRT algorithms were developed. Arthur hopes to improve the speed by performing motion planning in parallel. He explained the process and how partitioning the space helps balance the load of the processors. The goal is to have the processors functioning at full capacity all of the time and implement multiple partitioning schemes that will result in faster response times.

Thus far, performance and speed results are very positive as compared to traditional RRT. Arthur noted that he and Dr. Watson are still working on space partitioning strategies; however, all of the inefficiencies cannot be resolved. Applications that are currently using this technology will ultimately benefit from this enhanced technology.

3. Undergraduate Research Recognition - Joyce Kinhead

Guests: David and Terry Peak

Annually, the VPR Office recognizes eight outstanding undergraduate student researchers at USU. Each of the colleges, as well as the regional campuses, selects their student researcher of the year. In April, 2008, the David and Terry “Peak Prize” was implemented as an endowment to support undergraduate research. Additionally, this award includes a cash prize of \$ 500.00 to each recipient and meets the criteria for recognition at the USU Robins Awards where a USU Undergraduate Researcher of the Year is selected from this group.

David and Terry have been exceptional supporters and mentors of undergraduate research over the years, both nationally and at USU. Joyce noted that David Peak was instrumental in establishing the Council on Undergraduate Research (CUR) as well as the National Conference on Undergraduate Research (NCUR).

In appreciation of their efforts and dedication to undergraduate research, Joyce presented the Peaks with a framed copy of the eight students as highlighted in the 2008 Robins Awards program.

4. **Graduate Student Travel Support** – Adam Fowles, ASUSU Graduate Studies VP

Adam gave an overview of the purpose of graduate student travel support and how this funding has been critical in helping grad students travel to workshops and conferences (professional development) to present. Students who have been awarded funding in the past, have received \$ 300.00 towards their travel expenses. Unfortunately, funding has been completely consumed from increased student requests and there are no “carry over” funds remaining. Based on preliminary projections, a shortfall of \$ 25,000, (or a reduction of 62 graduate students being able to obtain travel funding support) is expected this year.

Brent Miller noted that Adam Fowles and Dean Burnham discussed this shortfall earlier in the week and noted that it has been at least 8 years since this funding has been increased. Brent relayed that he was in favor of contributing \$25,000, which would be an increase of \$18,000 from the VPR Office. Funds would be allocated from recovered overhead money and would enable approximately the same number of students to travel this year as last year. Brent also noted that because travel costs have increased, this support would be required each year versus a one-time infusion.

Because travel costs and the number of student requests are likely to increase each year, Adam commented that additional funding support will be pursued with the Academic Opportunity Fund (Tier II funding).

Action Item: Marv Bennett made a motion that the funding increase be approved as outlined. The VPR Office will increase funding support from \$ 7,000 to \$ 25,000 per year, with the expectation that these funds will be leveraged with college and/or department funds. Dean Nat Frazer seconded the motion; motion passed unanimously. Lorraine Walker, VPR Senior Budget Officer, will process the transfer of funds to support this action.

5. **Adherence to USU Policies & Procedures** – Brent Miller

Input By: Carol Strong, Dean - Emma Eccles Jones College of Education & Human Services, Irene Jorgensen – Supervisory Accountant, Controller’s Office, and Lorraine Walker – VPR Senior Business Officer.

Compliance to USU’s policies and procedures and Federal regulations is essential to every department on campus. When procedures are not followed, it exposes departments and the entire university to unnecessary risk.

Brent commented that USU’s Internal Audit Services recently discovered that a campus unit had numerous instances of financial mismanagement. Examples were highlighted where adherence to USU’s policies and procedures were not followed, including: 1) Not following USU’s travel policy relative to how much mileage reimbursement can be claimed; 2) Allowed versus non-allowed (personal) purchases; 3) Inappropriate/excessive expenditures on grant funds; 4) Food and alcohol purchases without the required “Meals & Entertainment” form; 5) Lack of monthly reconciliation and review of index and account numbers; 6) Missing documentation showing the purpose and extent of the business travel (i.e., personal travel occurred in conjunction with a business trip and was not documented appropriately on the

travel authorization); 7) Accuracy of travel authorizations and what expenditures were approved on the grant (i.e., international travel not approved); 8) Not following University policy on per diem rates; 9) Not obtaining pre-approval signatures on travel authorizations; 10) Travel expenses for a non-related project/purpose were allocated to the wrong account; 11) Gift purchases; 12) P-cards were used for travel expenses which is not allowed; 13) Missing documentation on grant expenditures and final reports; 14) Deviation from approved expenditures and timeline outlined in the grant; 15) Inventory tags and equipment tracking on **all** purchases associated with the grant regardless of the dollar value.

Lorraine Walker commented that Federal grants and many other grants do not allow alcohol purchases. When reconciling monthly statements, this must be monitored closely.

This overview did not include names of those involved, but was a discussion of “lessons learned” to heighten awareness and vigilance of adhering to both agency and University policy and procedures. It was noted that USU lost funding on this project and will not receive future funding from this agency because of the non-compliance in the areas noted. All agreed that on-going training is a vital part of awareness to potential problems and the risks that can occur when individuals do not comply with policies and procedures.

David Paul noted that during Research Week each year (March 30 – April 3, 2009), as well as multiple times throughout the year, workshops are offered by SPO to all faculty on topics that cover compliance and business manager training. He encouraged all PIs to attend this training regardless of their grant experience or number of years at USU. It was also requested that the deans, departments, and centers help support and disseminate information about training sessions. These are excellent courses that educate anyone who has fiscal management and/or grant responsibilities. In addition to current USU policies and procedures, Jeff Broadbent commented that future mandatory training modules will be implemented. These modules will cover accountability, project oversight (Time and Effort Reporting, Budget Reporting), and preventive measures.

Action: USU has implemented a Management Training Initiative under the direction of David Cowley, V.P. for Business and Finance, where representatives from various departments are identifying proposed training modules. Additionally, USU has hired a training coordinator to assist with this initiative. Another update on this subject will be provided to Research Council in January, 2009.

6. Overview of Association for the Accreditation of Human Research Protection Programs (AAHRPP) Site Visit, October 22-23, 2008 – Jeff Broadbent & Russ Price

For the past three years, USU has been working to achieve AAHRPP accreditation. This accreditation is recognized as the “standard” in the area of human research protection and certifies that accredited institutions ensure the protection of human participants in research.

Jeff noted that participants in the two-day site visit included three AAHRPP site representatives who interviewed President Albrecht, IRB administrators and leadership, IRB PIs, and staff involved with human researchers projects. Overall the site visit went well and from the comments received during the exit meeting, it looks favorable for USU to achieve accreditation at AAHRPP’s next council review in March of 2009.

Jeff thanked Russ Price for his extensive efforts in preparing USU for this site visit. The reviewers relayed two commendations: 1) USU’s Standard Operating Procedures (SOPs) were well prepared and meet the established regulatory requirements, and 2) True Fox was

recognized for her experience, skills, breadth of knowledge, and professionalism in carrying out IRB responsibilities at USU.

Russ noted that the AAHRPP reviewers commented that USU's IRB program is very strong and continues to mature. The integration of individuals and collaboration of skills across campus is excellent and they complimented USU in the manner which individuals with disciplinary differences work together in innovative and productive team environments. The site reviewers commented that they were especially impressed with the educational research taking place in the Emma Eccles Jones College of Education and Human Services.

7. Wrap Up Discussion & Calendar Events - Brent Miller

- Introduction of Jerilyn Hansen - New VPR Proposal Development Manager (Jeff Broadbent)

Prior to joining the VPR Office, Jerilyn worked for USU as a Sponsored Programs Administrator. Her first project with the VPR Office is a complex NIH Indefinite Delivery/ Indefinite Quantity (IDIQ) grant with the Institute for Antiviral Research (potential funding of \$ 20 million). USURF's proposal development team will also assist USU on this proposal. Additionally, Jerilyn's role will include priorities with establishing USU's Grant Writer Institute in the summer of 2009, along with providing support with VPR seed funding grants (RC, SPARC, & GEM). Jeff Broadbent reminded Research Council that the VPR Office offers a first year salary match of 50% to those colleges and centers who employ a grant writer to team with the VPR Office in preparing proposals. The goal is to encourage involvement in the proposal development process as well as improve the quality and number of proposal submissions at USU.

- Updates of SP-01 Form – Shared Credit for Joint Research Awards & Expenditures (David Paul)

Copies of the revised SPO-1 form were distributed for review and comment. Additional improvements were suggested which SPO will add to the form. The goal is to have the form be clear and concise as to how coinvestigators identify percentages based on effort, recognition, and F&A distribution.

Calendar Reminders:

- November 1, 2008 - Research on Capitol Hill proposal deadline
- November 14, 2008 - Abstract deadline for CUR
- November 20, 2008 – Research Council (Due to Thanksgiving Holiday)
- December 1, 2008 - NCUR proposals deadline: Joyce Kinkead noted that with funding limitations, NCUR participants for 2009 will only include 1st time participants.
- January 29, 2008 - Research on Capitol Hill

Meeting adjourned at 4:35 pm.

Minutes Submitted By: Teresa Seeholzer, Research Council Secretary