

Board meeting of the USTAR Governing Authority
09-03-2015 Meeting Minutes - Approved

GA Members: Greg Bell, Richard Ellis, Jennifer Hwu, Rich Lunsford, Derek Miller, Susan Opp, and Will West

Excused: Ron Mika and Val Hale

USTAR: Cherie Anderson, Justin Berry, Lincoln Clark, Ivy Estabrooke (Exec. Director), Jared Goodspeed, Elenor Heyborne, Jillian Hunt, Joe Kusluch, Scott Marland, Teresa McKnight, Koa Perlac, Andrew Sweeney, Ryan Thelin, Shirlayne Quayle, and Thom Williams (Managing Director)
By Phone: Mary Cardon and Donna Milakovic

Other: Bobby Mohanti (UofU), Kevin Jessing (Navillum), Jeff Edwards (EDCUtah), Chris Pieper (AGs Office), Greg Jones (UofU), Corrine Garcia (UofU),
By Phone: Noelle Cockett (USU)

Mr. Bell welcomed everyone to the meeting. He provided the meeting minutes to approve.

Mr. Miller motioned to approve the June 4th, July 9th, and July 23rd meeting minutes. Mr. Lunsford seconded the motion. Mr. Bell called for a vote and the vote passed unanimously.

Mr. Bell noted we have Noelle Cockett and Donna Milakovic on the phone. He introduced a new Governing Authority member, appointed by President Niederhauser, Will West and asked him to introduce himself.

Mr. West stated he is a serial entrepreneur currently working in a healthcare venture. Although, most of his career has been spent in home automation companies. He was the chair of Utah Fund of Funds for most of the last decade and has been involved with the UTC.

Dr. Estabrooke introduced Thom Williams as the new managing director. Mr. Williams stated his first six weeks has been full of learning. He was in the Marine Corp for 30 years. He started in air traffic control and worked a lot with the infantry. He worked with the Missile Defense Agency and worked later at the Office of Naval Research. He was in charge of 500 simultaneous programs in all areas of advance technology research. Dr. Estabrooke also introduced Shirlayne Quayle as the Southern TOIP office director. She has significant experience working with the TVC at the U of U.

Dr. Estabrooke discussed the SRI recommendations from the July GA meeting. Three new areas proposed: university industry linkages, improving risk capital in the state, and managerial talent. We anticipate our TOIP having a big role in both the

industrial partnerships program and the new ventures program as we go forward and have the statute changes.

PROGRAM RECOMMENDATIONS and METRICS

GAP	RECOMMENDATION	ACTIVITIES	SHORT-TERM OUTPUTS	LONG-TERM OUTPUTS
Industry-University Linkages	Industrial Partnerships Program	Companies Assisted	Solutions Found	New Sales/ Revenue
		Projects Awarded	Follow-on Investment	New Direct Jobs Average Wage
Limited Risk Capital	New Ventures Program	# of Companies Assisted	Follow-On Investment	New Sales/ Revenue
Managerial Talent		# of Companies Awarded Pre-Seed Investment		New Direct Jobs Average Wage
Research Capacity Building	Research Capacity Building	Faculty Hired	Leveraged Funding	University Ranking
		Collaborations	Patents/Licenses	Research Jobs
		Infrastructure	Publications	Average Wage



USTAR

USTAR Overview 7/29/2015

In July, the GA requested more details on the TOIP budget. Below you will find the overview. The General Fund is our primary source, a few dedicated credits coming from the fees at our SBIR center and the non-lapsing carry forward funds bringing the total to approximately \$2.9 million for the FY16 budget appropriation.

TOIP BUDGET

- Appropriations
 - General Funding: \$2,586,900
 - Dedicated Credits: \$11,000
 - Anticipated Non-lapsing Carryforward: \$332,000*

Total FY16 Appropriations:
\$2,929,900

*CARRYFORWARD
INTENT LANGUAGE

Non-lapsing was authorized for \$332,000 for the Go-to-Market Program and SRI's Program Impact Study



USTAR

9/28/15

A more detailed breakdown on that budget shows personnel as the largest expense. As a function of our entire budget, this is about 10% of our approximately \$22

million-dollar appropriation. There is a new line for funding budgeted to try and work on an industry/university pilot program that SRI recommended to build the relationships between the state, universities, and industry. We have this built into our TOIP budget to allow us to spread the funding across the state rather than be restricted to the research I universities. This small amount will require industry partner to match funding that will come in. We are trying to use this as away to get the programmatic figured out to see how much success we have with engaging industry as we move into the legislative session.

TOIP BUDGET OVERVIEW

Budget Category		Total	Notes
Personnel		\$1,569,276	
Travel		\$53,700	
Operating Expenses (<i>Rent, HR, DTS, Liability Insurance, Phones, Office Supplies, etc...</i>)		\$100,614	
Programs			
Sponsorships	\$95,016		
SRI TOIP Impact Survey	\$74,144		
Database	\$75,000		
G2M (North, Central, & South)	\$375,000		
North Start-up Weekend	\$9,500		
North Renovations	\$300,000		
Central RDC/TTA (Tech Transfer Accelerator)	\$30,000		
South Mentor and Expert Engagement	\$20,000		
SBIR/STTR Assistance Centers (SSAC)	\$27,650		
Industry/University Pilot Program	\$200,000		
Total Programs		\$1,206,310	
Total TOIP		\$2,929,900	



USTAR

10/13/15

Mr. Ellis stated there is \$300,000 dollars of carry forward one time funding budgeted for the north TOIP renovations, a one-time expenditure. Dr. Estabrooke responded that the industry university program would be a continuous program, and that we are working with legislators to help with making our budget more flexible so we can be more successful. This budget is for administering the programs and some program funds such as the G2M program, small seed grants for companies who are working through our accelerator program. We are working on revamping the curriculum for the G2M program. There is a sponsorship budget and the impact survey next year. We have a draft of the impact survey done by SRI that will be included in the annual report and will be audited before it is released publically. We anticipate doing it again next year with some changes to the methodology and the cost will decrease over time as we are doing only the data collection.

Dr. Estabrooke stated TOIP is administering the accelerator programs, networking and mentoring, and working with companies. The SBIR/STTR center works with helping companies with grant proposals. The BioInnovations Gateway is under this program, as well as the north incubator being established by Teresa McKnight.

We can provide a chart showing a breakdown of what TOIP is administering. When the GA gets a chance to go over the results of the impact survey it's broken out by a set of metrics around what the economical development impact has been. We are looking at these metrics to help structure TOIP. The companies who responded and we received data from will help structure by using the pieces and offerings that TOIP provides that align to the companies with the most positive outcomes. We can start strengthening those and integrating the recommendations of SRI.

Dr. Estabrooke stated Thom Williams has spent his first six weeks at USTAR talking about the TOIP as an amorphous piece. It was six months ago that all the outreach employees were university employees, and many of them wore different hats. Now they are dedicated USTAR employees and we have a specific mission. We are looking their activities and how they align with USTAR's mission. We are still working out what pieces are USTAR's and what are the business resource centers (BRC) at the universities. In some cases, historically, the USTAR director was also the BRC director. Doing away with this helps make clearer what our direction is.

We are looking at it strategically and figuring out what services are needed across the state. In some areas we need incubator space and equipment for startups in that specific area. In other cases there are other entities that provide services such as business plans. The SBDC provides business plans, however, we need to be networked into them so we can send the businesses to them first. After, they can come to us for prototyping or technology specific startup information. We are trying to map out what resources we have and how do we make it available to everyone across the state. For example we have the nanofabrication facility and would like to have it accessible to everyone across the state.

Dr. Estabrooke stated we have a subcommittee of the USTAR Governing Authority who reviews and approves budgets before it is brought to the rest of the governing authority. The proposals go to the budget subcommittee and then there is an analysis and evaluation within that group to provide recommendations to the governing authority as a whole. The personnel breakdown for TOIP is: Thom Williams the managing director, 6 directors, 4 assistant directors and 11 interns/part-time employees. Most of these part-time employees are grad students working 10 – 20 hours a week for us while doing their degree. Usually interns are only employed for six months to a year or on a focused project.

Ms. Opp motioned to approve the TOIP budget. Mr. Lunsford seconded the motion. Mr. Bell called for a vote and the vote passed unanimously.

Dr. Estabrooke stated we are working on the annual report and we anticipate having a draft of the narrative to the board for review in the next week. Elenor Heyborne has done a great job in designing and gathering information that will be in the annual report. It is a nice compendium that describes each of the researchers work and the history of what they have been doing. We are working through all of the metrics that will be a part of the annual report. There is a challenge when the fiscal year ends and the university fiscal year ends, getting the data and doing the internal audit procedures before it is turned over to the legislative auditor. We have been in contact with the auditors through this whole process and will turn over the annual report to be audited as soon as we have done our due diligence on the information.

Mr. Perlac stated Dr. Estabrooke explained most of the audit update of the annual report. We hope to have a draft to the legislative auditors towards the end of the month. Dr. Estabrooke stated if you look at the statute, our annual report requires a significant amount of narrative. For each project and researcher there needs to be a narrative on what they are working on, their background, and what the focus of their research is. There also needs to be what services our TOIP provides and who are the people around that we are working with. The data of how much federal funding has been expended by each researcher as well as the salary of each researcher needs to be provided for the annual report. They also need number of people hired by the universities, disclosures, and number of licensing agreements etc. It's a combination of narrative and data. An appendix will be provided with the majority of the data to go along with the narrative portion. We would like feedback from all of the governing authority members and we will work with each one on what is easiest to provide for you.

Mr. Perlac stated we are on track for the audit to move forward. He spoke with the auditors and with their schedule it will likely be a month turn around for them to complete the audit. The report should be completed in time for Dr. Estabrooke to present it to the legislative committee in either October or November meetings. We have done a year-end financial close. Dr. Estabrooke stated they will likely go and do onsite testing. One of the challenges we had faced last year, they had accepted data as we could collate it and get it organized and sent to them. In order to meet our statutory deadline we were trying to do it before the books had really closed at the universities. For most agencies we would be giving them the FY14 budget instead of the FY15 budget. We have discussed various options for the process to be adjusted with both the auditors and legislative staff. They do not want to receive any information unless it is whole and 100% complete. We need to recognize Koa Perlac who has pulled a part our statute, which is vague on metrics required. He has been trying to define them so we know what we are reporting, the universities know what we are asking for, and the auditors should be able to see how we have chosen to measure our success. Thank you to both research universities for working with us to get the data needed.

Mr. Clark stated this is supporting detail to the administrative budget. The personnel budget is the top line item. Dr. Estabrooke stated at the July governing

authority meeting the GA had approved the administrative budget but asked for a breakdown of expenditures. We are not asking for any changes, this is just the breakdown. One thing to note is we have moved a number of functions that previously were done at the regional universities when our people were employed there. However, since we have moved the outreach employees back to USTAR we are now doing things such as contracts, sponsorships, etc. through USTAR headquarters so we have better control. One of the challenges we have found is that many of the agreements or contracts made on behalf of USTAR, instead of getting the funding back if a company was successful it went back to the hosting university not back to the state. This is also to make sure we do not have companies going to all the different regions for go to market funds.

ADMINISTRATIVE BUDGET OVERVIEW

Budget Category	Total	Notes
Personnel	\$759,749	
Travel	\$31,500	
Operating Expenses (<i>Rent, HR, DTS, Liability Insurance, Phones, Office Supplies, etc...</i>)	\$141,821	
Programs		
Sponsorships	\$39,810	
SRI Overall	\$90,000	
Audit Allowance	\$60,000	
Website	\$40,000	
Database	\$75,000	
Marketing	\$27,120	
Confluence and Other Events	\$25,000	
Legal Costs (IP Review)	\$45,000	
Annual Report	\$10,000	
Total Programs	\$411,930	
Total HQ	\$1,345,000	



USTAR

10/13/15

Dr. Hwu asked what the IP review is for. Dr. Estabrooke responded one of the things that has become clear over the last six-months as we have been working with the AG and reviewing licensing agreements for USTAR technologies that are being licensed out is vetting and protecting IP. Our recommendation is that we have someone whose client is USTAR and can evaluate the license agreements to make sure our IP is protected. While we have been aligned with the TVC or commercialization offices at the universities there have been some agreements made where having more expertise looking at those could have protected USTAR or the state's position in those agreements. We need to have access to those lawyers who deal with IP negotiations. The AG's office does not deal with this frequently. There has been a request out to the legal community for information to get an idea what it would be to have a firm on retainer.

Dr. Estabrooke stated we have a couple amendments to budgets for the Utah State FY16 budget. As we went through the Utah State budget we had a few projects that

their funding was contingent on getting an independent market assessment. We agree it is best that we run that out of headquarters. The \$50k is available for two market assessments we have requested, as well as gives some room for additional assessments. These are for two energy programs. Bioresin that pushed through a paralysis process at Utah State where there was some question if there really was a market at the price point given for the energy input for this. The other was an atmospheric mercury detector being developed in the Uintah Basin. We want to make sure there really is a market for this technology before investing more money into them. We are doing an RFP process through procurement

Dr. Estabrooke stated we are asking for approval for Thom Williams to approve travel that were previously approved by Val Hale and Greg Bell. It is standard policy for the managing director of an agency to approve the executive director's travel. Ms. Anderson stated with the previous administration we only had the executive director and a finance manager. To help with internal controls we created a policy to have either the chair or vice chair be the second signature required to approve travel. We are looking to revoke this to policy to bring us to the state policy.

Dr. Estabrooke stated we have the closing numbers for FY15. We lapsed TOIP money because we had many positions that were gapped over the course of the year as we tried to determine what skill sets we needed. There were two rounds of recruitment for many of the positions, leaving many positions open for a while. We are now almost fully staffed. The carry forward for the universities will be put in restricted accounts to buy down the liability for the start up packages at the universities. This will cover all of the remaining startups at Utah State. At the UofU there will be roughly another 8 million needed for remaining startup funds. In FY14 we approved \$10 million in new packages for the Health Science Centers over 5 years. In FY17 we anticipate we will have the liability taken away. Most of the salary tails are ongoing. We are putting into place an MOU that creates a 4% cap on increase of salary at the universities. Allowing us to predict 30 years out what those salary tails will be. The salary tails are likely to decrease over time due to faculty leaving to other positions. Currently we are not looking to hire more faculties. The SRI recommendation is if USTAR is helping to recruit new faculty it would need to align with an industry need in the state. We will help with the startup packages not the salary tails.

FY15 CLOSING NUMBERS

Program	Expenditures	Carry Forward	Lapsing
Administration	\$916,734	\$350,000	\$12,822
TOIP	\$2,611,289	\$332,000	\$303,470
University of Utah	\$10,002,164	\$2,806,034	\$0
Utah State University	\$6,301,558	\$1,349,154	\$0



USTAR

Presentation Title 10/14/15

Mr. Bell stated there is sensitivity to these salary tails for the universities due to the commitment they have made to USTAR faculty. Dr. Jones stated in order to recruit these researchers many of them have been offered tenure. If USTAR does not provide the budget then those tails fall onto the universities. So we are creating milestones and accountability for those faculty members.

Dr. Estabrooke stated the department of commerce economic administration has an open call for proposals. Teresa Mcknight has created a proposal to help create the aerospace incubator. There is also a seed fund support category we are discussing. One of the pieces of the SRI recommendations is establishment of a seed fund. We would have someone come in and do an assessment and help us with the programmatic for seed funding. What should our parameters look like? This is funding to help do the analysis for our economy. These are federal programs. This would help us see if USTAR were to do a seed fund where the emphasis should be, is there a sector the state is lacking in or looking at the economy and finding there is not a need for seed funding.

In the SRI assessment study of how USTAR and Utah's ecosystem align there were a lot of conversations of need for a pre-seed fund. Jennifer from SRI has talked to life science community, the IT community, and angel funding community etc. some say we do not need pre seed investment and those who say we desperately need this. We need more than a handful of opinions if we are going to argue the need for pre seed funding to the legislature. How does the state administer this? Are there enough independent organizations or 501c3's that have the capacity to run pre seed programs? Pennsylvania has 3 501c3's that administer the funding and mentoring support. Mr. Bell stated the two biggest criticisms out of the SRI study is not investing in late stage research and the second is the valley of death at the early stage of companies.

Dr. Estabrooke stated we have a few amendment requests from the University of Utah. These are additions to the FY16 budget. The first is a PI, Cem Yuksel who is

asking to use additional 100K from his startup funds. It will not be an increase in his total budget. For the level of detail accounting needed from the university we need to put forth additional \$33,480 for administration to assist in the collection of data. Recommendation is to approve both this requests.

Mrs. Opp motioned to approve the additions to the UofU FY16 budget: Cem Yuksel +\$100,000, Administration: + \$33,480. Mr. Miller seconded the motion. Mr. Bell called for a vote and the vote passed unanimously.

Dr. Estabrooke stated the FY13 expense came to us in FY15 is for the microscope used out of a startup package. The proposal is for the university to provide half of the funding. There were challenges on both sides why the invoice was not put through. The recommendation is for the FY14 reimbursement is to reimburse smaller amounts. We have put a process in place that all of the invoices should be put in within the fiscal year. On our research appropriation, approximately \$15 million, has been approved; it will all come out of the delta.

- FY13:
 - Korenberg Microscope \$450,622.24 Total
 - Reimbursement = \$225,311.12
- FY14 Total: \$162,146.18
 - Reimbursement = \$81,073.09
 - Detail:
 - Porter \$15,519.70
 - White \$40,224.18
 - Korenberg \$87,410.63
 - Saffarian \$7,404.32
 - Ji \$12,587.35

Mr. Miller stated many of us on the board predate the purchase of the microscope and would like to note to vote in favor of the purchase for the microscope to clean up the books. Mr. Bell stated we now have a point of contact at a high level at the universities. We are currently amending budgets. This represents an unfortunate part of our history. Mr. Lunsford stated we want to go through phased approvals, as there is progress or not. Mr. Bell stated we have our staff and university staff meeting together to provide transparency. All of the actions discussed were integrated into a legal document.

Mr. Ellis motioned to approve the UofU expenses from FY13 and FY14 amendments. Mr. Lunsford seconded the motion. Mr. Bell called for a vote and the vote passed unanimous.

Dr. Estabrooke stated these are requested changes to the FY14 USU budget. Historically expenses rolled across the fiscal year budgets. These are expenses from FY14 but will come out of the FY16 budget delta.

- FY14 Expenses Total Request: \$98,636.99
 - UATI Track \$14,526.86
 - Commercialization \$84,110.13

Mr. Miller motioned to approve the USU expenses from FY14. Mr. West seconded the motion. Mr. Bell called for a vote and the vote passed unanimously.

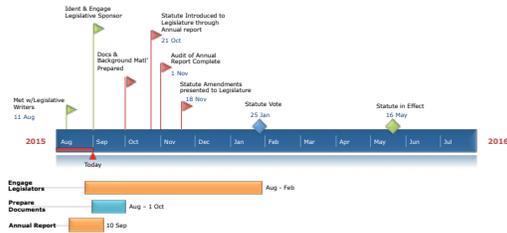
Dr. Estabrooke stated back in May when USU's budget was approved there was funding set aside to hire two employees to support commercialization of technologies. The expectation is one would be in the engineering field and the other in life sciences. After going through the recruitment process, and it's only a one-year commitment in funding, USU has requested no change in the dollar value but to hire consultants rather than taking on employees at USU. This will allow for getting more specific expertise that is better aligned to the technologies that are maturing.

Mr. Miller motioned to approve the USU FY16 commercialization budget to be used to hire consultants with the expertise to support commercialization in within the university. Mr. West seconded the motion. Mr. Bell called for a vote and the vote passed unanimously.

Dr. Estabrooke stated BioInnovations Gateway (BiG) has historically been a part of our TOIP program. It's a life science incubator and have approximately 14 companies in there at any one time. We also support other companies by having core life science equipment that can be used for the day. It is housed at the Granite technical institute and meets our mission by incubating and helping bring commercial technology products to market. Granite School District's mission is met because our companies are required to take on interns or teach students from Granite. Historically an independent 501c3 was set up to have governance of BiG. USTAR provided a state employee as the director and provided some funding as needed for equipment. The USTAR Executive Director is on the board. This governing structure is not aligned to state policy and creates a conflict of interest to have a state employee directed by a 501c3. Working closely with the Granite School District we have a draft agreement that the functionality of BiG will not change and will no longer have a board. The USTAR board will provide the policy and guidance on the commercialization activities.

Mr. Williams stated we are working on getting the changes needed in our statute as to why these changes are needed. We want the statute to align better with the states' needs and other agencies like ours. Dr. Estabrooke stated we presented to the Business and Economic Interim committee about the SRI recommendations. Mr. Williams stated the legislators were excited to have the input and we are moving into the next phase of USTAR. Looking more at a task oriented program. Also, we need to be able to manage incoming funds. Some of the metrics required are not as easily measurable. We want to put forward a program that can be measured as well as creating more of a competitive process to receive funds. There is a meeting on the

21st of October to discuss the annual report and introduce the statute changes. On November 18th we are hoping to have a more formal discussion with the legislators with more specific items to change with the statute. Senators Shiozawa and Milner will work with us to provide support.



Dr. Estabrooke stated we have the USTAR confluence coming up on September 28th through September 30th. There will be a VIP reception the evening of Monday, September 28th. On Tuesday, September 29th it will be a full day with a keynote speaker for GE. We are trying to focus on the direction we are trying to move in. There will be a poster session during the lunch break. Wednesday, September 30th Jennifer Ozawa from SRI will give an out brief of their assessment. High potential commercial products will be displayed. There will be an SBIR/STTR panel discussion with those who have won grants. USTAR will have a team at the heart walk. There will be a Tedx talk on the economic growth of the community. The finalized report from SRI will be completed by Friday, September 4th. The prospectus will be available in October. The TOIP impact study addresses some of the metrics and will be integrated into the annual report.

Mr. Bell called the meeting to adjourn.