

**Senate and House of Representatives
State of Idaho
Biotechnology Task Force**

**Senate Majority Caucus Room 350
State Capitol, Boise, Idaho
November 1, 2005**

Minutes

The meeting was called to order at 9:30 a.m. by **Cochairman Senator Gary Schroeder**. Other committee members present were Senator Hal Bunderson, Senator Chuck Coiner, Senator Russell Fulcher, Representative Darrell Bolz, Representative Ann Rydalch, Representative Frank Henderson and Representative Nicole LeFavour. Senator Bert Marley was absent and excused. Staff members present were Maureen Ingram and Juanita Thompson.

Others present at the meeting were Melinda Hamilton, Idaho National Laboratory; Greg Zickau, staff, Information Technology Resource Management Council; Phil Syrdal, BioIdaho; Shelby Kerns, Idaho State Department of Agriculture; Mark Dunham, Boise State University; Craig Herzog, representing Senator Burkett; Marty Peterson, University of Idaho; Karl Tueller, Idaho Office of Science and Technology; Norm Semanko; and Jimmi Sommer, Technology Law Group.

Representative Bolz moved that the minutes of September 29, 2005, be approved, seconded by **Representative LaFavour**. **Representative Henderson** offered a substitute motion, seconded by **Representative Bolz**, that the minutes be approved with a correction on page 21 involving a quote by **Representative Henderson** clarifying use of the phrase "scarcity of investment capital" that should be attributed to a spokesman from the Idaho National Laboratory. The substitute motion passed unanimously on a voice vote.

Senator Schroeder commented that this would be the last meeting of the task force and the plan today was to approve recommendations to the legislature for more discussion and exploration.

Mr. Phil Syrdal, BioIdaho, distributed discussion papers that identified issues of priority based on the presentations and discussions of the task force's previous three meetings. It was his intent to spend a few minutes discussing each of the proposals. An information sheet on each proposal was also distributed to members of the task force, and all his documents are available from Legislative Services Office.

Mr. Syrdal said the task force has seen a rather broad and strong biotech infrastructure that offers a lot of potential in Idaho. The question is what can be done to put the bricks or foundation in place to build on this infrastructure rather than let these individual pieces die out. According to **Mr. Syrdal**, the good thing about this industry is, if infrastructure is provided, it can compete for dollars.

Mr. Syrdal said the first proposal is in regard to the ability to electronically share data. In order to have

state collaborations, particularly between the INL that is on one far edge of the state and the University of Idaho which is on the other part of the state with a 11 ½ hour travel distance, there has to be a way for scientists to share data on critical subjects. Since the genome was dissected, information data and data crunching has become a lot more prevalent in the industry. This is a team approach that is necessary to be able to compete for federal grant moneys. Some of this data has to be shared in almost a super computer so the computers can crunch the data to allow these scientists to work together. **Mr. Syrdal** said the interconnecting fiber optic network does not exist. We cannot link the University of Idaho to the INL. We do not have the infrastructure in the state that we need to pull all the universities on line and including the rural health environment. There are a lot of benefits to developing this infrastructure spine for Idaho.

Mr. Syrdal discussed the specifics of his proposal as it relates to interconnection as follows. This information is included in the handout he distributed to task force members.

- C Provide conduit and fiber along Highway 95 from Lewiston to Coeur d'Alene, and then along I-90 to Post Falls and Spokane. He said I-95 is torn up for construction currently so now would be the perfect time to put in the fiber optic cable.
- C Connect Idaho Falls (including University Place) and the INL complexes (Reactor Technology Complex, Materials and Fuels Complex and Science and Technologies Complex) through to a connection at ISU at Pocatello, then to Salt Lake City.
- C Support the planned connection from Boise to Salt Lake City, and in Boise to U of I and BSU.
- C Create "spurs" along these routes for connections to rural communities and schools and that would include our state college system.
- C Provide connections through Twin Falls and through Nampa and Caldwell to connect these colleges and communities to the network. Support should also be provided for termination infrastructure at each institution for this broadband capability.

Mr. Syrdal said that without the broadband, it is impossible to do the data moving necessary for on line collaborative teams. In Idaho, with our extensive geography and other issues, this needs to be done.

The second major proposal is to establish competitive tax and investment incentives that support the needs of biotechnology companies. The testimony that has transpired over the last three or four months has shown that the bioscience industries are different in many respects from the standard business - they are particular and have specific financial needs. They rely heavily on intellectual property and early technology transfer. Once a discovery is made, the ability to license that discovery is not always available. There is not enough data to prove that the discovery can work in a larger system. He said this step is almost a prelude for being able to successfully license any discovery. Once a licensing agreement is established, it takes another seven to twelve years for the development of the technology. That is a long time for an investor to wait. Investors need to recoup their money at some stage of this development process. In order to attract these investors, incentives need to be offered for small startups, particularly in biotechnology or for younger companies that we can recruit to the state of Idaho to work or intersect with university programs and the talented researchers that we have in the state.

Mr. Syrdal distributed a copy of the act that was recently passed in Maryland. He said one of our great assets in Idaho is that we can work together. Everyone knows each other and we can move together more quickly. These incentives that Maryland is providing to investors form something that Idaho should seriously consider. In his opinion, this meets the general objectives of the state for development.

Mr. Syrdal summarized the Maryland model and its target companies and investors as follows:

- C A biotechnology company would be primarily engaged in research and development and commercialization of proprietary technology that deals with biological material including biomolecules, cells, tissue or organs.
- C The company would have fewer than 50 full time employees and have been in business no longer than 10 years.
- C Qualified investors are either individuals who invest at least \$25,000, or corporations that invest at least \$250,000. An investment tax credit reserve fund would be set up and the money in that fund would be invested and reinvested by the treasurer. Interest and earnings would be credited to the general fund.
- C Investors would submit an application for an initial tax credit certificate so before they can invest, they become qualified to get these tax benefits. In Maryland, investors apply for this initial tax credit certificate to the Maryland Department of Business and Economic Development. Upon approval, the investor has 30 days to invest in a biotech company.
- C Allowable tax credits are 50% of the investment not to exceed \$50,000 for individuals; \$250,000 for corporations and venture capital firms. Investors may claim a refund for any excess amount.

He said incentives are important in Idaho. Idaho unfortunately had a bad start when one of the largest venture capital firms, in order to put together its cash for the initial investment pool, declared it would refrain from investing in biotechnology companies. This led those investors to have a negative idea of what those investments might be worth in the bioscience area. **Mr. Syrdal** said a lot of investors have “lost their shirts” in biotechnology but many investors have made millions of dollars in biotechnology. The winning approach in biotechnology is the fact that you get a double trump: you get the investment in the company, but then you have this competitive opportunity and sharing with the universities. Companies can tap into university talent, and also share in the major equipment a university has that a company cannot afford. This allows leveraging of everything that comes in with grants. **Mr. Syrdal** suggested that the legislators begin to focus on how this leverage can work in the state of Idaho.

Regarding the tax incentives proposal, **Mr. Syrdal** proposed forming a small committee or group of members to review Idaho’s existing incentive tax investment programs, look at the applicability of these incentives to a growing bioscience industry in the state and review the legislation that has passed in other states. He suggested that this small committee propose legislation to be introduced in the upcoming legislative session, that the legislation be referred to the appropriate committees in the Senate and House, and note that it has the support of this Biotechnology Task Force.

Mr. Syrdal went on to discuss the creation of a “Collaboration Board” made up of directors from

research institutions, the investment community, and Idaho's business sector, and the research sector which includes public and private universities. This board would review and select applications from researchers who need small amounts of funding to develop a promising technology. Testimony given by Gem Pharmaceutical stated the difficulty in moving a good idea to the next level. This company had a world class idea at the VA that they had to take to Alabama for funding in order to get it to the next level. This is now developing some very exciting, new anti-cardiotoxic, chemotherapeutic approaches that in phase two will probably have a product. This could not be done in Idaho due to lack of infrastructure and funding.

Mr. Syrdal said these small grants could serve two really important purposes:

1. It would overcome Idaho's geographical barriers to collaboration by supporting travel and communication expenses. He said people can be hooked together by computer but there is nothing better than "eyeball to eyeball" contact. Idaho has to find a way to overcome distance. University of Idaho is a premier research institute and there has to be a way to integrate it to be able to use BSU, ISU and INL key researchers and be able to physically get those researchers together.
2. It would establish teams that share talent and facilities so that they can develop selected technology programs to the point where grants and investment support can be attractive. Questions have been asked regarding how much support individual research is given and whether scientists are encouraged to license technology. In theory, in an academic institution, a scientist's main job is to publish. If he does not publish, he does not get grants. **Mr. Syrdal** said we need to quickly focus on the key technologies that could go to the next level and determine how to get them bridged into that next level.

Mr. Syrdal discussed a third proposal, asking the task force to consider supporting a bonding mechanism for improving and expanding laboratory and bioscience facilities. The question is how to make these laboratory facilities capable of competing. One of the things that was discussed was to try not to overlap or create redundancy among institutions and their areas of research. One of the things our universities have done pretty well, due to under funding, is to share equipment, share expertise, and bring teams together. In order to get researchers to Idaho to develop these ideas that are worth money to the state, to our students and faculties and that help generate business and economic development, there has to be a way to provide funding to give the researchers a reasonable base from which to compete. They cannot be expected to provide these technologies without facilities. **Mr. Syrdal** said he has proposals dealing with how to build a basic facility and keep it modernized using a bonding mechanism and using money from the state building fund.

The fourth major proposal is to develop a regional research center located at the Boise Veteran's Administration campus. This regional research center would bring the state's biomedical research assets together through core programs and collaboration. **Mr. Syrdal** said the point is that Idaho has talent here but needs to attract a little bit more to intersect with what we have. We do not need to pull full time teaching equivalent positions away from the universities to be able to create or have access to a regional research facility, but doing so would create a tremendous amount of synergy that would benefit our veterans. He said it is appropriate to build such a facility on the VA campus because it is a regional center for veterans health care, and would be helpful in keeping the talented people that are here from

leaving Idaho. Testimony from the University of Idaho said the biggest problem Idaho has is that we lose a lot of good people. We recruit very sharp, young faculty who have great attributes and wonderful technology. It takes a significant amount of time for a researcher to receive major grants for the first time; the average age is 42. The way these researchers can compete best is to be part of a team that is successful in attracting grant funds. Once name identification for grants is established, it is easier to compete for funds in the future. Idaho has got to be able to find a way to pull those talents together. According to **Mr. Syrdal**, building a regional research center is an ideal way to do this. He suggested the task force pass a resolution that would encourage pushing this concept forward.

Mr. Syrdal offered three additional proposals for consideration:

1. Directed to the Idaho Department of Agriculture, BioIdaho supports the following proposed addition to the statute governing the duties of the director of the Department of Agriculture, at Section 22-103, *Idaho Code*:

“(27) Cooperate with producers, industry and technology groups, and other agencies to encourage the growth of technology within the state’s agricultural industries while protecting, as necessary, the integrity of existing agriculture and marketing channels.”

This proposal allows the director to both encourage the development of agricultural technology and to also be protective of specific segments of the industry, as for example, making sure our pure seeds don’t get mixed with biotech seeds.

2. Development of biofuels and alternative energy from biomass. BioIdaho would support a proposal that mandates a 2% level of biodiesel fuel in each gallon of diesel fuel sold in Idaho with requirements on qualifying production levels patterned after the Minnesota mandate. According to Dr. Jon Van Gerpen from the University of Idaho, about 7 ½ million gallons of domestic production would have to be in place before the mandate would become effective. The biggest reason for the mandate is evidenced in the newspaper as you watch the price of gas. The price of gas is now dropping to \$2.45 and then \$2.35; these prices are about 15 cents a gallon less than it would cost to produce the biodiesel fuel, and the impact of a 2% mandate is only about a penny or two per gallon. On the other hand, this encourages the investment in the state by people who are willing to put in biodiesel facilities and invest in the biomass necessary to run these facilities and gives them some kind of stable market by putting in the 2% mandate.
3. Intellectual property. BioIdaho supports a focus on managing the intellectual property, this data base of available technology, from its public research institutions such that information is centrally collected, publicly available, and disseminated to prospects for development. In working this through with the Office of Science and Technology and the governor’s committee, this recommendation seems to be on track. The focus should continue so that a method of funding early, promising technology can reach the point at which it can be successfully licensed.

Mr. Syrdal concluded by saying that in the last 2 ½ years, BioIdaho has been involved in virtually every sector of the bio field and some very encouraging things have happened in the state. The Office of Science and Technology has a mandate to develop core competencies in the state of Idaho, and to determine what Idaho can do to compete. That is what these recommendations focus on. These

recommendations are what BioIdaho believes Idaho needs to do specifically to build on our strengths. The infrastructure for these exists now and the state needs to find ways to support it. He said these recommendations need to be made by this task force and then the governor's office needs to be approached for support.

Senator Bunderson asked if the recommendation for interconnectivity via a high capacity fiber optic network has been discussed with Pam Ahrens, Department of Administration, as chairman of the Information Technology Resource Management Council (ITRMC). **Mr. Syrdal** said not at this time. **Senator Bunderson** said that ITRMC has met and will be making recommendations on the approach to connect Idaho. There is a question of whether it will all be fiber or whether some will be wireless. The idea is to come up with one state system. He said funding is an issue but it is believed that existing funds should be able to handle it. **Senator Bunderson** commented that if that is successful, **Mr. Syrdal's** first proposal is in the process of being addressed. **Mr. Syrdal** said it would be wonderful to have a recommendation from the task force to get some direction including that. **Senator Bunderson** indicated ITRMC's recommendation will likely be presented to the legislature and will carry considerable credibility.

Representative LeFavour said this task force is looking at what goes beyond the state system and is also looking at private partnerships. She suggested it might make sense for the task force to put forward something that encourages private development of biotechnology. She clarified that the issue at hand is whether ITRMC, which manages the state telecommunication and other technology systems, is the appropriate place for an initiative to take place or if it would be better to pull together a broader committee or broader body to include industry, other governments, county governments, and even interstate relationships to leverage that.

Senator Bunderson said this task force could support the efforts of ITRMC to produce an enterprise statewide information technology system that will provide broadband services across the state. He said the task force can support what is ongoing right now, and is sure there will be discussion on this in the upcoming legislative session.

Mr. Syrdal commented regarding a wireless connection, that unfortunately in the area of data transmission and coordination, wireless will not carry this kind of data. The industry needs to have a strong enough broadband fiber connection to be able to carry and process massive amounts of data that need to be exchanged between the institutions. He recommended that the committee make that clear. **Senator Bunderson** said that according to Director Ekern of the Idaho Transportation Department and Idaho State Police Director Charboneau, that size of pipe is big enough to accommodate all of that. He said the court system uses it as does emergency disaster services. Regarding disaster services, **Senator Bunderson** said it is fairly complex because in a disaster you have to dedicate a part of that pipe to first responders. This is much more extensive than connecting universities, which do have some connectivity now.

Representative Rydalch said she had received a proposal from Dr. Hamilton, Dr. Laskowski and Mr. Syrdal in regards to facilitating communications through a statewide high speed fiberoptic network. The proposal includes five specific items listed that Dr. Laskowski from the University of Idaho and Dr. Hamilton from the Idaho National Laboratory had worked through with different groups. She asked Rich Elwood and Greg Zickau, ITRMC (Department of Administration) to comment on those five

points. The five points are the same as what **Mr. Syrdal** discussed earlier (see page 2.)

Greg Zickau, ITRMC, qualified his comments by clarifying that he did not do a complete evaluation of the proposal but would try to provide some general information. He said the proposal seems to be advocating Internet 2. He agreed that the wireless connection would be insufficient to meet the needs of the kind of data rates they are talking about. They need fiber connectively that can handle equipment that will carry two orders of magnitude above what is currently carried on the IdaNet. IdaNet is the administrative wire network run by the Department of Administration, Department of Commerce and Labor and Department of Health and Welfare. The entire state as a whole would benefit greatly from this.

To connect to IdaNet, which a lot of state agencies rely upon, to go from Meridian to Coeur d'Alene, the connection goes through a couple of hops; both of those rely on Spokane. It goes from Meridian to Spokane, Spokane to Lewiston, Lewiston to Spokane again, and finally Spokane to Coeur d'Alene. That is the way the traffic passes. As a result of that, there is not any way to get high speed data at the levels of data rate these researchers require, directly from our area here, up to Lewiston and Coeur d'Alene.

In general response to the items presented by **Mr. Syrdal**, **Senator Bunderson** said incentives were reviewed about a year ago and a report came out that was very specific as to what incentives would really work. He inquired if **Mr. Syrdal** is asking the task force to endorse the plan that was passed in Maryland. **Mr. Syrdal** said his proposal asked that a small group be formed to decide on what incentives to offer and produce legislation. He used the Maryland case because it is something that would make Idaho competitive almost immediately and it fits with our philosophy. The work that was done last year analyzing the incentives that are currently in place needs to be dovetailed and needs to be reviewed in context with the biotechnology industries. He said a small committee could do that and support it through the legislature.

Senator Bunderson asked if the Office of Science and Technology has specific recommendations or a legislative package that deals with incentives at this time. **Mr. Tueller** said that package has not been fully presented to the governor yet. **Mr. Syrdal** said that if there were a small committee, he and Mr. Karl Tueller would be happy to be part of it. **Senator Bunderson** said that he thinks the legislature will respond better to having some legislation laid before it that a responsible body endorses.

Senator Schroeder said that the task force has discussed what they can do regarding biotechnology in a proactive way and to turn the responsibility over to another committee would be counter productive to the reason the task force was formed.

Representative LeFavour said that it would be her hope that recommendations on incentives would include a special emphasis on the investment being for an Idaho company so that the state sees the returns and that there really is an economic development incentive rather than just an unaccountable tax break.

Senator Schroeder clarified that the state has invested money in having this task force meet and make recommendations. He said this task force has a responsibility to do that because of the investment taxpayers have made in these deliberations.

Senator Bunderson said this is the first time this committee has talked about analyzing anything since receiving information. No part of the information received as yet, other than these thoughts today, includes the work that has already gone on in looking at tax incentives. For example, the analysis of the Economic Incentive Task Force for the Economic Development Association of last year, was not even considered by this task force. That report was a 40-page report and it has an analysis of all the states in the nation and the various incentives they offer. It has a matrix which shows all the options and puts forth a number of options for Idaho.

Senator Schroeder said he thinks BioIdaho recognizes those were not discussed in length by the task force and they would like someone with that expertise and knowledge like **Senator Bunderson** to work with them to see what the possibilities are as we move forward. **Senator Schroeder** agreed with **Senator Bunderson** that this task force should not appoint another committee. He noted that they could recommend some individuals to work with **Mr. Syrdal** to “dig out” some information and make some recommendations. It would be especially important to work with those people who already have the wealth of that information available.

Regarding the proposal to provide for the replacement, upgrading and building of new laboratory, **Senator Bunderson** asked if the universities are in agreement with building additional facilities and where should they be constructed. **Mr. Syrdal** said that proposal was drafted in collaboration with the universities. The conversation was restricted to building a center at the VA. This is a university need and they are trying to keep it very foundational.

Mr. Marty Peterson, University of Idaho, stated that the real, elementary problem that we are dealing with, with respect to the universities, is one of the permanent building fund. The permanent building fund has been in something of a revenue crisis for a lot of years. The amount of money that is available through the permanent building fund for alterations and repairs and new construction, when you consider the demands statewide, is nominal. About the only time that we see capital facilities with respect to alterations and repairs or with respect to new construction significantly addressed is when there is a large state surplus and the legislature or governor is looking for a means of running one-time expenditure items so that there are not on-going obligations.

Mr. Peterson said there is a fair amount of truth to the comment stating universities get a new building every eight years. There are surplus periods and all of a sudden everybody gets a new building of some sort. Two years ago the governor and legislature demonstrated great wisdom with their decision to do the statewide \$68 million dollar bond issue to construct new facilities with the state, primarily with the postsecondary education institutions.

Mr. Peterson emphasized that those needs are not all in the science and technology area. For example, the \$12 million the University of Idaho received went to the renovations of the old university classroom center and the new teaching and learning center. He said classes taught in there are related to science and technology, but it is not a laboratory. The U of I is now dependent upon the federal government for the construction of laboratory facilities. The biotech laboratory building at the U of I was the last building to be funded by Congress for university agricultural research. The title on the farm bill that it was funded under continues to be authorized but Congress has not put money into it for years. He said they are working in collaborations with federal agencies right now to try and meet our laboratory needs. The current example is one that BSU, ISU and the U of I are doing in conjunction with laboratory of

Idaho Falls, the Center For Advanced Energy Studies. There will hopefully be a laboratory facility constructed there. The U of I put up half of the money for that from a variety of sources. It is anticipated the laboratory will put up funding for the other part of it. The U of I right now is working collaboratively with the U. S. Department of Agriculture on the development of a laboratory facility in Billingsley Creek in the Hagerman Valley. From the standpoint of U and I, **Mr. Peterson** anticipates all future laboratory construction will have to be collaborative with other universities, with federal agencies and so on. He said he does not see a current source of funding that is going to allow universities to be able to build a free-standing building on their own.

Senator Bunderson said that is the vision we need. If we have a vision and we say for Idaho to move forward, we have got establish a presence or footprint with bioscience. Once there is information regarding where bioscience needs to be and how it is going to be organized, perhaps agreement can be reached with the building authority to finance it through a bonding arrangement. **Senator Bunderson** said, in his opinion, for the task force to deal with this proposal on building laboratory facilities, this is the vision necessary and more work needs to be done.

Senator Schroeder said research is economic development. Some of the information that was provided shows that Idaho benefitted as much as eight to ten dollars for every dollar the state has invested through the additional money that investment has attracted and through the economic benefits that occur in having those institutions here. He said we need to identify the strengths in this area that currently exist in the state of Idaho. We want all of these labs and scientists to work together collaboratively and cooperatively, and if possible, pull them all together to be able to move forward as we enter a new era.

Senator Schroeder said that **Mr. Syrdal** mentioned estimates that 51% of the people could die from the avian flu which is worse than the black plague. That is just someone speculating, of course, but it brings out that things will arise in which biotechnology is very necessary to the future of mankind. In asking these groups what they need, certain needs are always mentioned. One of those is the need to communicate. He commented that this makes sense because most businesses are able to communicate with their purchasing departments, sales departments and so on. The state should be able to communicate on the same level.

Senator Schroeder went on to say that if, in fact, research is economic development and a spin off of the private sector from that is also beneficial, what do we do to most effectively maximize the use of the resources we have and be able to identify or attract other sources of dollars to help us? He said the task force's role is not to identify a building that's going to be here or the details, but to stick with very general statements of principle that say the task force thinks the state wants to go in this general direction and these are the recommendations. Other committees, the legislature and other agencies will deal with these recommendations and utilize the expertise on this committee to write legislation as needed. We will have accomplished something if we just set a general vision based on the meetings and testimony this summer, recognizing that this is just a start to gather up all this expertise and get them working together, and see where it goes.

Mr. Syrdal, in response to an earlier question of **Senator Bunderson's**, said that even though the universities all have different tracks, they are also synergistic; by looking at the facilities statewide, you can see why. Researchers across the state are being recognized: about two weeks ago, a BSU faculty member was published in the Journal of Oncology; their work is a on a track that could end up to being

instrumental in cancer and oncology. There is a young researcher making that next step at BSU and there is a similar situation at ISU.

Representative Bolz asked for more information regarding **Mr. Syrdal's** item four on building a regional research center at the Boise VA and his discussions with U.S. Senator Larry Craig. **Mr. Syrdal** answered that as he understands it, moneys for the project are totally federal funds, and it will be a Veterans Administration facility. The idea being that veterans with needs for medical care and research needs would be addressed from the building. There would also be additional space which would be leased by other laboratories and create programs that will support that research and even add new research programs to the VA's "arsenal" for patient care. He said they did not want to push this idea too far, too fast until all the universities, the medical centers and community representatives that could support it through building foundation funds, were on board. He said new sources of funds are necessary including state, federal, and local, medical community and foundations that are formed around medical technologies that support new medical discoveries. There are a lot of entities that come into this. The initial proposal is just with the federal government to establish a facility on the campus of the VA and that would be considered a facility that would have the synergy of using all the state's resources to benefit that regional-center approach.

Representative Bolz asked what the task force can do in that regard. **Mr. Syrdal** said a strong recommendation and a strong proposal that indicates the strength of our belief for the federal government to step in and take care of this region. He noted having a regional responsibility for the health care of veterans is a very big deal for the federal government. It is a big responsibility and it is something that they should do well. These facilities are in dire need of upgrading. We can add significantly to that system and accomplish many of the needs of the university system by augmenting or supplementing that. He suggested that this task force needs to strongly recommend that our federal delegation look at this concept. As a state, there is an obligation that our veterans get taken care of. That is a big obligation and right now many of them are sent to other markets for health care. Locating a regional center here would allow these veterans to receive that care with the side benefit of economic development, grants, and the ability to drive the university research that we have in the state.

Mark Dunham, Boise State University, said that Boise State is in a similar situation to the comments **Mr. Peterson** made about U of I. The university relies heavily on federal dollars for a lot of the programs. Much time has been spent trying to identify funding sources for research facilities on campus. There are quite a few researchers on campus who are operating in antiquated laboratories and inadequate facilities. There is difficulty recruiting young research facility members to come to the university simply because laboratory space cannot be guaranteed, also making it difficult to retain researchers. The individual that was mentioned doing research in breast cancer and being published in a national publication is an example of that. One of BSU's primary needs is a funding source for research facilities. **Mr. Dunham** said the bonding bill that the legislature and the governor put forth a couple of years ago was wonderful in terms of helping with academic space to meet that need as enrollment grows. The next step is some assistance and some leadership in determining how best to leverage our resources and research facilities. If the legislature saw fit to recommend some sort of bonding program through the state building authority, he said that would be very helpful.

Senator Schroeder commented that in his opinion, the thinking is that once laboratories are built, that is it. He said in his business, things become obsolete very quickly and this is the same for laboratories.

A laboratory that was built 20 years ago or so is not the laboratory that you need today. He said the state needs to face that reality and upgrade to the modern world.

Mr. Syrdal commented that we have invested, and these universities have worked and invested, in hundreds and millions of dollars over the years in building the capacity to do the research that we have today, but this infrastructure can be torn down so much faster. It has taken tremendous time and research investment to get us to a point where these resources exist. If you started from scratch, you could not get there from here. Protecting the resource that exists in Idaho is the important thing. It is necessary to look at it from that way to make this fully effective.

Following a short break, the task force began discussions on specific recommendations and offered motions to address previously identified areas of importance.

1. Interconnectivity

Representative Rydalch said that her discussion paper identifying five specific pathways for interconnectivity was generated by the research community. Using an analogy, she said we use trucks for our communities to move goods, and in the research community, this electronic connectivity would be their trucking system. Without some type of connectivity, we are not going to be able to accomplish the things we need to. She said it was her hope that with the expertise of **Senator Bunderson** and others who regularly meet with the ITRMC group, these five recommendations for electronic pathways could be sent to ITRMC. She said she realizes it would be quite expensive to implement these recommendations, but in her opinion, it is not up to the task force to determine funding at this point. The fact is, there is a need for this, if we indeed want our universities to become premier research institutions, a long-time goal of hers.

Senator Schroeder said it is his understanding that the expertise at both INL and the universities exists to guide the implementation of this with respect to infrastructure.

Senator Bunderson moved that the committee authorize **Senator Schroeder** as chairman of the task force to write a letter to Pam Ahrens as chairman of ITRMC. The letter would use the language that is included in **Representative Rydalch's** paper specifying our support for the efforts that ITRMC is doing, to have an enterprise-wide broadband connectivity system, and this is to be included in our formal report as a recommendation of this committee. The motion was seconded by **Representative Rydalch**.

Representative Rydalch suggested that the letter also be sent to leadership in both houses. **Senator Bunderson** said he would modify the motion to cover that, and with **Senator Coiner's** suggestion, to also include the governor's office in the distribution. **The motion carried unanimously on a voice vote.**

2. Establish competitive tax and investment incentives

Senator Bunderson distributed a report produced by the Economic Incentives Tax Force of the Idaho Economic Development Association dated February, 2005. This association works in collaboration with the Idaho Office of Science and Technology and the Science and Technology Advisory Council. This

report includes a number of tax incentives and a number of recommendations that the legislature did not approve last year. For example, \$950,000 was not appropriated for the rural initiative, and \$375,000 was not appropriated for science and technology and TechConnect.

Senator Bunderson asked that the Office of Science and Technology be invited to put forth tax incentives legislation that would address the needs that have been expressed to the task force. He said **Mr. Tueller** from the Office of Science and Technology indicated a tax package would be forth coming from the governor's office relative to the Office of Science and Technology. **Senator Bunderson** asked **Mr. Tueller** what kind of time line his office would need to do this. **Mr. Tueller** said the response from the Science and Technology Advisory Council has been pretty specific on one element of dealing with investment incentives for angel networks. It would take some more participation by players to review the paper that was done earlier to see what would be feasible. **Mr. Tueller** said incentives are a huge area of issues and whether it is bio or technology or business in general. He said quite a few incentives were passed last year that they are still trying to develop, but what they can do is get a group together to look at specific recommendations.

Senator Schroeder offered the suggestion that this task force could make a generic statement that it supports some type of incentives which are to be given to biotechnology. In other words, the task force would support the development of investment incentives for needs of biotechnology companies.

Representative LaFavour said she would support such a move if it were really specific to Idaho companies and that it be tied somehow to employment. **Representative LaFavour** suggested using some of the language **Senator Schroeder** used above but adding that the intent is to encourage investment in Idaho companies with a goal of increasing employment and ensuring economic development through growth of these companies in Idaho.

Senator Schroeder summarized the task force's discussion to this point: the task force would support establishment of investment incentives for Idaho biotechnology companies with the goal of increasing employment and ensuring economic development through the growth of these companies in Idaho.

Representative Rydalch moved that the Idaho Department of Commerce and Labor and BioIdaho come up with the wording for a resolution, working in conjunction with this task force, to be presented at the next legislative session. **Senator Bunderson** seconded the motion.

Representative LeFavour asked to make sure that what she requested earlier regarding support of Idaho companies and increasing employment in Idaho, was in the record; **Senator Schroeder** assured her it will be in the record.

Senator Fulcher asked for clarification of the motion to make sure he understands the concepts being merged. **Representative Rydalch restated the motion** as follows:

That the task force ask the Department of Commerce and Labor and BioIdaho to work the wording for a resolution with "Whereas's" showing support for opportunities for capital formation or opportunities for incentives for science and technology for Idaho companies to participate for incentives, with the resolution being passed in the next session.

Senator Fulcher said that **Representative LeFavour** is trying to insert a specific addition in the language to allow for that benefit to be strictly for Idaho companies and Idaho clients. **Representative LeFavour** agreed and added that the incentive be conditional, with the intent of increasing Idaho employment.

In response to **Senator Schroeder's** query regarding the suggestion to form a collaboration board, **Senator Bunderson** said the membership of the Science and Technology Advisory Council includes the university presidents and includes the chief executives of a number of the high tech companies in the state, and he would suspect that their combined judgment on prioritizing what needs to occur next would probably be the best indication of that need.

Mr. Syrdal added this task force is looking at the opportunities that exist for the state in biotechnologies. He said that biotechnology is much different than regular businesses. It requires different treatment than most traditional industries. He emphasized that this task force needs to recognize that biotechnology has special needs and that the infrastructure for it is already there. He said without support, that infrastructure could fail.

Representative Henderson said his comments are based upon experience and the work he has done for some pretty sophisticated research companies for many years and he does know that biomedical research, sometimes, does have a special consideration for investment. If the motion includes an invitation to BioIdaho to have a representative look at the final recommendations, that would be appropriate. **Representative Rydalch** reminded the task force that her motion includes enlisting the aid of both the Department of Commerce and Labor, and BioIdaho.

Senator Schroeder asked staff to repeat the motion. He noted that regardless of the motion, there is the full understanding that **Representative Rydalch** will work with the Department of Commerce and Labor, and BioIdaho to prepare a resolution and take that resolution forward to the House of Representatives.

Staff rephrased **the motion: The director of the Department of Commerce and Labor would move to the Office of Science Technology this request to provide wording for a resolution in conjunction with the input from BioIdaho which would support opportunities for tax and investment incentives in the bio sciences for Idaho companies with the intent of creating economic and employment opportunities for Idaho citizens.**

Representative LaFavour said she would like a little stronger language that the intent be specially tied to economic development and the creation of employment opportunities so that these incentives are conditional upon the creation of jobs.

Senator Bunderson said he would like to discuss in this resolution the concept acknowledging or specifying that Idaho is a science and technology state. We have long been recognized as a potato state. He clarified he would like some discussion on the advisability of that, then if there is general agreement to the concept, he would modify the motion. He suggested the task force consider inserting in the motion, with some specificity, defining Idaho as a science and technology state. The fact is that over 70% of our exports are technology exports, they are not agriculture anymore, and we have a science and technology license plate program.

Senator Schroeder explained that **Senator Bunderson** is suggesting one of the “Whereas’s” in the resolution acknowledge Idaho as a science and technology state. **Representative Rydalch**, as mover of the motion, agreed to the addition to the motion.

The motion passed unanimously on a voice vote.

Senator Schroeder asked the committee to consider recommending reestablishing the \$500,000 that was taken from the Higher Education Research Council (HERC) a few years ago, money which helps provide small grants to companies.

Representative Rydalch referred to her discussion paper distributed earlier entitled *Focus for Recommendations* that includes eleven recommendations, two of which talk about reinstating the small research grants through HERC and increasing the number of graduate student stipends at universities and colleges. She encouraged the committee to follow that pursuit, and asked for some committee discussion.

Senator Bunderson said there is a committee that reviews and identifies uses for spending the Tobacco Fund money and suggested that committee would have to weigh in on such a recommendation. **Senator Bunderson** suggested that a direct appropriation may be a better approach. **Senator Schroeder** suggested they deal with restoring HERC funding separately, as suggested in item 7 of **Representative Rydalch’s** list, using the direct appropriation approach and recommend that the funding be reestablished.

Mr. Tueller said the Science and Technology Advisory Council will be making a recommendation to do exactly that but it is for about three times more than the \$500,000 mentioned above. He said he does not know what the specific amount really ought to be for the legislature but they are going to be looking at a pretty bold effort to put more money into higher education research in support of all the core costs. **Senator Schroeder** said his understanding was that when the funding was cut years ago and the \$500,000 was taken away, those funds would eventually be restored.

Representative Rydalch moved that the task force, through a memo to the Joint Finance-Appropriation Committee and the leadership, recommend reinstating the small research grants.

Senator Bunderson questioned using the word “reinstate” because the task force is recommending funding the program, not reinstating it. **Representative Rydalch** agreed to fund, or increase funding, through HERC for small research grants. **Representative Henderson seconded the motion. The motion carried unanimously on a voice vote.**

Following a break for lunch, the committee continued its discussions and presentation of motions to address previously identified areas of importance.

3. Provide for the replacement, upgrading and building of new laboratory facilities on an accelerated basis through bonding financing

Representative Henderson said it would be his opinion that because there is a variety of financing mechanisms, that perhaps it’s not the place of this committee to identify those. He does think that it is

the place of this committee to recite the fact that new facilities for volume for technical science research are needed and the need is critical.

Representative Rydalch said that there is no question that she wants the universities to have the necessary laboratory buildings to become premier research facilities. She said she could support a recommendation to U. S. Senator Craig or Congress in regards to the VA medical center because that is federal funding and that would help the veterans in our state. She does not feel comfortable going to bonding at this time, or for the state to build a new laboratory facility. She also wondered if BioIdaho could organize and work within the existing structure of the Office of Science and Technology to leverage funding.

Senator Bunderson said the committee heard from people involved in aquaculture, and as he recalls, they send information and do testing here because Idaho has water, but does not have a core of technology that goes with that. With the VA situation and what exists at the universities, he suggested the task force could support building infrastructure that will complement and advance research in Idaho technologies that will become core technologies. As far as infrastructure is concerned, that may mean buildings, it may mean retrofitting, it may mean equipment, it may mean a variety of things. As far as the financing is concerned, he said he not as negative on bonding as Representative Rydalch because the state finances through various means. We either save and buy; we borrow and buy; or we pay out of current cash flow. All those options are available as a financing tool. Now, debt leads to an obligation, but he also thinks there are different kinds of debt. He said the state should never borrow money for consumer perishable items. When it comes to brick and mortar for which there is a clear need, that has a different character. When we decide on these financing tools, we need to realize that they are indeed financing tools and we are using current funds to pay them off. He said most of us would not have a home or a car if we had not borrowed for it. He said the recommendation can be crafted to move with the infrastructure and maybe include a more generic description of funding on using the options that are available at the time. The legislature will decide the funding anyway.

Representative Rydalch said she hoped her remarks were not construed to not be in favor of universities doing something about bonding. She said she did not have a problem if it is connected to our system that way. Her thought was that if we go down the road of other laboratories, the private sector could come in and start instituting some of those kinds of things. **Senator Bunderson** said that was a great point. He said the university system is a structure we already have, along with the aquaculture group and the VA. It was noted that the Department of Agriculture also participates in this through the U of I.

Representative Bolz noted there is a need for a research center, but his concern is for the management and distribution of limited moneys. He would not want the legislature to provide money for a facility at the expense of the universities, making them go further in the hole. His view was that in any funding mechanism, the universities should be included with a higher priority to begin with.

Senator Schroeder said that if the state is going to maintain what it already has, at some point in time, we are going to need to spend money from the permanent building fund. A recommendation could say that, while the task force supports this, the infrastructure needs of what is currently funded needs to be maintained. How Governor Kempthorne may propose to address the structural deficit of our current tax structure is unknown. Whether there is an opportunity to put additional funds into the permanent

building fund is not known, but at some point that needs to be done. There is a backlog of deferred maintenance at the universities, and that should not be allowed to get worse.

Representative Henderson moved, seconded by Representative Rydalch, that the task force authorize its chairman to author a communication to the leadership of the state which includes what this task force identifies as an urgent need for improved research facilities for both universities and private clinics, and that communication also suggest that in any investment incentives that may be contemplated, that tax credits be provided to the private sector if they are the investor in biomedical research facilities that are used for the general public.

Senator Bunderson asked if the motion was solely for biomedical facilities. **Representative Henderson** responded that he intended the broadest definition of biomedical research, and that it include the general purpose for which this task force has met. **The motion passed unanimously on a voice vote.**

4. Solicit the VA's building a regional research center that will bring the state's biomedical research assets together through core programs and collaboration

Representative Henderson said he had communications with BioIdaho on this subject. He said they have provided him with the rationale for this task force to offer communication to U. S. Senator Craig and the U.S. Veteran's Administration. Based upon that information, **Representative Henderson** called the group's attention to a draft resolution which concludes:

“... that the Biotechnology Task Force of the Idaho State Legislature, urges the U.S. Veterans Administration to execute its authority and leadership by authorizing the design and construction of a biomedical research facility on its Boise, Idaho, VA medical campus.”

Representative Henderson moved for adoption of the resolution; Representative Rydalch seconded the motion. The motion passed unanimously on a voice vote.

5. Encourage growth of biotechnology in agriculture and continue to protect the existing agricultural base

Senator Schroeder introduced draft legislation RSMLI453 (2006) which proposes to add a duty to the director of the Department of Agriculture as recommended by BioIdaho. **Representative Bolz** offered background information stating that this legislation was agreed upon by a biotechnology task force that was formed by the Department of Agriculture. It gives the director of the Department of Agriculture the authority to make rules on issues that might surface dealing with biotechnology or technology.

Representative Bolz moved, seconded by Representative Henderson, that the task force adopt this draft MLI453 (2006) concerning the duties of the director of the Department of Agriculture as related to encouraging the growth of agricultural technology and protecting the integrity of existing agriculture and agricultural marketing channels.

In response to a question from **Senator Bunderson**, **Representative Bolz** said the word “protecting” is included because without it there is no way to have rules to deal with the situation. Adding the words

“as necessary” gives the direction that this will only be done when necessary; rules will not be made all of the time or any time. **Representative LaFavour** said she wants to make sure this protects traditional forms of agriculture as well. **Representative Bolz** said that is why the wording says “existing agriculture.” Additional discussion centered around particular wording of the proposed language, but since the language does accomplish the objective, the committee was generally satisfied with the proposal.

The motion passed unanimously on a voice vote.

6. Biofuels and alternative energy

Senator Schroeder asked if the task force wanted to support the proposal that was discussed earlier mandating a 2% level of biodiesel fuel in each gallon of diesel fuel sold in Idaho and that adequate production levels would have to be in place before the mandate would take effect. **Representative Bolz** said the ethanol legislation from last year was not based on production levels and that there was a problem with a mandate if the supply wasn't adequate. Does BioIdaho's proposal tie in with the Farm Bureau's bill this year, which links production to mandatory usage? **Mr. Syrdal** responded it is tied to production levels but is not tied in with the Farm Bureau and its direction with ethanol production. He clarified that the biomass in Idaho is generally more suited to biodiesel than to ethanol production. He assured **Representative Bolz** that their interests were not at cross purposes. Investment would be Idaho based, but some of the biomass could be purchased outside of the state and would help to support regional interests.

There was general discussion of alternative fuels, pricing, prevailing market outlets and costs, federal tax incentives, energy costs to industries including agriculture, and energy security.

Representative Henderson moved that the task force support the development of alternative energy from biomass and that the task force directs its chairman to request from the Department of Commerce and Labor and the Department of Agriculture a report on the economic advantages of mandating the 2% level of biodiesel fuel in each gallon of diesel fuel produced and sold in the state of Idaho. Representative Bolz seconded the motion.

Senator Coiner asked if the motion could be amended to add “with the purpose of establishing legislation.” **Representative Henderson** responded that he would amend the motion to include that language. **Representative LaFavour** spoke of her concern about the long-term viability and targeted production levels and the effect on soils. **Representative Henderson** said he anticipated that the report requested from the Department of Agriculture would address these concerns. **Mr. Syrdal** explained that certain crops that are used to make biomass, for example, canola and mustard, are ones which can be rotated in with crops because they are natural herbicides and pesticides. So this is a relatively organic process and that is one reason it is so popular in Idaho.

The motion passed unanimously on a voice vote.

7. Intellectual property and transfer of technology

Representative LaFavour distributed a copy of the Kansas statute dealing with invention marketing

companies, unfair trade practices, and consumer protection. She said this was an example of something Idaho could do to protect inventors from fraud. She explained that some invention promotion services have taken advantage of inventors and have not clearly represented with their clients the consequences of their contracts. As a result, individuals in other states have lost many of their rights to benefit from their own inventions. This is consumer protection legislation that would require disclosure from marketing companies that seek to promote inventions.

Representative Rydalch explained the world of inventors which she deals with everyday. Inventors have to go through a process with the U.S. Patent and Trademark office if they want to get their invention into a marketable status. She said that inventors can accomplish what they need to do to protect their inventions now by contracting with an attorney, and expressed her opinion that legislation is not needed to do that. In her opinion, passing such legislation would be putting unnecessary contractual requirements on the books that private enterprise is already taking care of.

Representative LaFavour responded that the precise intent of the legislation was to ensure that people are protected from those who seek to impose fees or to take advantage of inventors. It is solely to make people aware of the difference between going with the invention promotion service versus using an attorney. It is a consumer protection piece of legislation for inventors. It is intended to regulate invention promotion services, and to specifically state that they are to disclose what the consequences to inventors would be for contracting with an invention promotion service. It helps inventors to make sure they are not taken advantage of.

Mr. Syrdal said the task force did not address the concept of collaboration committees when discussing incentives. In his opinion it would be helpful for the committee to address that during the discussion of intellectual property. He said it would be beneficial for the state to find a way to nurture inventions which will return far more to the state of Idaho if they are able to get from the laboratory to the point of licensing. **Senator Schroeder** commented that this is similar to the gap fund that was discussed earlier that would be used to assist with university technology transfer.

Representative Rydalch stated that one of her proposals deals with this idea. This proposal states:

“Work with colleges and universities, INL, Boise Veterans Administration Medical Center, Idaho Water Resource Institute, industry, and others to facilitate partnerships in transfer of technology. Lead agency: Department of Commerce and Labor.”

She said the Department of Commerce and Labor and the Office of Science and Technology is very adept and cognizant of this but because of manpower have not been able to focus on this area as much as they could have. She said the infrastructure is already in place through the Office of Science and Technology to work with technology transfer departments such as the U of I’s Foundation. **Representative Rydalch** noted that technology transfer at the U of I is much more perfected than the other two universities because they have been doing it longer. She suggested that BSU and ISU could model their technology transfer programs after the U of I.

Senator Coiner said that it did not seem that seed money for such a collaboration committee was a large amount. **Senator Schroeder** inserted that testimony to the committee at an earlier meeting suggested that such a gap fund be funded at \$500,000 a year for three years. **Senator Coiner** asked if

there is a chance to get this funded outside of state government through private investors or possibly a grant. **Mr. Syrdal** said an NSF grant exists that does that, and allows private industry to sit on the board and get the first look at the technology and, in a sense, pick off what they want. This is a mechanism that could be used. It does not give freedom to the licensor and takes away some of the freedom of the universities to be able to move forward and choose a licensee. The universities do not seem to be able to provide this funding on their own.

Representative Rydalch asked if Idaho TechConnect is currently doing this and whether they could do it better with proper funding. **Mr. Tueller** said there are three technology transfer efforts: the INL has its own system; the universities have a system; and there is private industry. INL's system is well-funded. The universities have not quite developed even the base yet for tech transfer. They do not even have the money to get the patents done, let alone have money to invest as seed money. The Science and Technology Advisory Council will be recommending that the legislature support the Idaho Research Foundation becoming a true statewide entity in order to get commercialization and technology licensed, and that does not include money to invest.

He said on the private sector side, the council is recommending TechConnect offices, of which there is already a network that was funded primarily through the INL's previous contractor. He said they are forming a statewide entity to be operated by a private, nonprofit board. State support to help fund the offices is being requested. That board will go out and raise private sector dollars to use as seed money to help with the gap financing coming out of the TechConnect offices.

In response to a question from **Senator Schroeder** regarding how much current deficiencies are costing the state, **Mr. Tueller** said his personal sense was that the figure is fairly large. He said they are putting together information to show return on investment for every dollar that is invested in the state in terms of support for research. **Representative Rydalch** said that even in the federal government tech-transfer world, there is a gap. Congress has repeatedly said to federal labs, they are not in the business of commercializing one technology over another or for one business over another. Once a person licenses the technology, the federal laboratory is out of the picture and private enterprise takes over. Federal funds cannot be used to commercialize technology. The gap is very real in all of the worlds, especially so with universities.

In response to a question regarding loss of Higher Education Research Council (HERC) money and the potential for restoring funding from that source, **Senator Schroeder** explained that HERC money is used to stimulate research in small projects. He said he did not know if it could be used for technology transfer funding.

Senator Fulcher asked if there should be any acknowledgment of ownership of intellectual property. **Mr. Syrdal** responded that there is recognition by universities and by the United Research Council that there is a 40/40/20 split, traditionally in the research allotments of license funds; 40% would go to the researcher; 40% would go to the institution; 20% would go to the department that produced the technology. He said it seems that people are relatively settled at the university levels of going with that kind of formula, and expressed the opinion that this is an attractive formula for Idaho.

Representative LaFavour stated that she supports efforts which favor inventors and support transfers of technology to create partnerships that make Idaho a greater force in biotechnology.

Following a short break, the task force resumed its discussion of the issue of intellectual property. **Representative Henderson** stated he is pleased with the work the task force has done in this meeting, but feels there is one more very important thing to be done. He referred to BioIdaho's paper entitled "Bioscience Industry-Enabling Incentives" which recommends formation of a "collaboration board." In addition, he referred to his paper on "Suggestions for 'Findings' of the Task Force." The point to be made is that nowhere in the discussions has he heard that experts in the marketing of products are part of a team. He suggests that a marketing expert be brought in as part of the marketing team and gave an example of its importance and the value of using such expertise.

Representative Henderson moved, seconded by Representative LaFavour, that the task force advocate the creation of the "Collaboration Board" made up of directors from research institutions, the investment community, and Idaho's business sector, and added that such board will utilize the services of marketing experts. Such board would review and select applications from researchers who need small amounts of funding to develop a promising technology.

In response to a question from **Senator Schroeder**, **Representative Henderson** said he wanted to make it clear that it was not absolutely necessary to create an entirely new board, that the Department of Commerce and Labor already has this basic function and is only lacking the expert marketing input. He emphasized the importance of using people who are active marketing and sales executives.

Following further task force discussion concerning the logistics of creating and funding a "Collaboration Board," and with further information from **Mr. Tueller** on the existing systems as TechConnect which, for the most part, serve the same purpose, **Representative Henderson withdrew his motion.**

Representative Henderson moved that the Biotechnology Task Force endorse the activity and funding as described by Mr. Tueller to create and fund regional and statewide boards and to empower the private sector in product development and marketing, licensure and technology transfer. Representative Rydalch seconded the motion.

Representative LaFavour suggested adding the following wording to the motion: "To create an environment that attracts, supports and protects Idaho inventors." **Representative Henderson** said he thought the wording was a separate subject and declined to put it in his motion.

The motion passed unanimously on a voice vote.

Representative LaFavour moved that the task force recommend to the legislature that the state of Idaho create an environment that attracts, supports and protects Idaho inventors, which may include an examination of its intellectual property laws to ensure they meet these goals.

The motion died for lack of a second.

Representative Rydalch added that the task force ensure any action taken is not in conflict with federal laws, and let the Department of Commerce and Labor's Office of Science and Technology, and the governor's science and technology advisors come up with their recommendations with regard to intellectual property and transfers of technology.

Representative LaFavour said her intent was simply to ask the task force to set some direction for any examination of intellectual property that goes forward and be presented with a perspective that supports, protects and attracts Idaho inventors. In some cases, they are taken advantage of, and these are Idaho people who are trying to do something with their ideas, and should be supported.

8. Federal funding in support of energy sources

Senator Bunderson, noting our nation's dependency on foreign oil and the serious dislocation it is having on the markets and the whole system, presented for discussion a working draft of a joint memorial to federal officials resolving that the legislature supports execution of an enhanced portfolio of bioenergy, hydropower, fuel reforming and related alternative and renewable energy research in Idaho at INL, and hereby requests that the U.S. Department of Energy, the administration and the Congress identify, commit and sustain the funding necessary to allow continued performance of this and other multiprogram energy and national-security-enhancing work so critical to the long-term well-being of these United States.

Senator Bunderson moved that the task force support the concept of this working draft joint memorial. Representative Rydalch seconded the motion.

Representative LaFavour noted there was no mention in the memorial of the waste products of nuclear energy, and that she is concerned the memorial would invite Idaho to become a defacto repository for nuclear waste. **Senator Bunderson** responded that technology has advanced dramatically and waste is not the issue it was before. However, there is still the fear that something horrible is going to happen. The perception of danger from nuclear waste could be overcome by public education, and this memorial was designed to help with that education process.

The motion passed on a voice vote; Representative LaFavour requested to be recorded as voting "no."

Senator Schroeder asked the task force to discuss whether or not it might want to recommend separate technology committees as standing, germane committees of the legislature. **Senator Bunderson** noted that in the House, that had already happened in a way, with one committee expanded to include technology: the House Environment, Energy and Technology Committee. He went on to suggest that perhaps in the Senate, technology could be included with the State Affairs Committee, with a change in name to State Affairs, Science and Technology. He said that would at least give the public a "go-to place" for such topics. **Senator Schroeder** noted that State Affairs already has a very full plate and concluded the discussion saying the proper protocol was to leave it to each body to follow its own protocol regarding standing committees.

9. University programs

Representative Rydalch spoke about the minutes of a prior meeting mentioning the lack in our higher education programs of technology, entrepreneurship and management education as a part of the whole business acumen. She felt it lacked clarification in regards to technology and getting that technology out to the marketplace. There are existing programs at Boise State University (BSU) and the University of Idaho (UI). Dr. Norris Krueger, BSU, and his students have been working at technology

entrepreneurship programs for several years with the Idaho National Laboratory and with the Office of Science and Technology. She would like to further solidify that talent pool for workforce development as new technologies are transferred either from universities or labs to Idaho businesses. There is a current effort of working with the business people through the Department of Commerce and Labor, and Dr. Krueger's effort, to further perpetuate in the higher education system the importance of the role of technology, entrepreneurship and management programs at our universities.

Representative Rydalch suggested that the task force ask the Department of Commerce and Labor to work with Dr. Krueger and any other similar university programs to advance the technology and entrepreneurship information crossover between universities, labs and businesses, which is really key to the workforce development for the state of Idaho.

Representative Rydalch moved that a letter be sent from the chairman of the Biotechnology Task Force to encourage technology, entrepreneurship and management programs at Idaho colleges and universities by utilizing the expertise of Dr. Krueger and other professionals in the field for Idaho's workforce development. Representative Henderson seconded the motion.

The motion passed unanimously on a voice vote.

Representative Rydalch spoke of the importance of ensuring that colleges, universities and state departments are involved in the development of Centers of Excellence. She noted that it does not take money to establish a Center of Excellence. By taking advantage of existing departmental resources, she feels that the Department of Agriculture is the best suited state department to be involved since agriculture is Idaho's best strength and would avoid duplication as universities expand the role of what is bio tech and bio science.

Senator Schroeder asked **Representative Rydalch** to describe what a Center of Excellence is and to describe how factors such as endowed chairs and distinguished professors tie into the concept. He also asked if this concept would conflict with universities' roles and missions. **Representative Rydalch** explained that a center of Excellence exists when a university decides they want to be the center for example, of bio-medical or bio-canola, or biodiesel. The Center for Excellence could include endowed chairs, although chairs can be endowed without a center. It is just a matter of terminology rather than establishing anything new or costly. The center would not conflict with roles and missions of universities, nor would she want it to. **Representative Rydalch** said as we go down this road of biotechnology, it is important to keep the agriculture base.

Representative Bolz asked **Representative Rydalch** if the lead agency should just be the Department of Agriculture or should it be a joint venture between the College of Agriculture and the Department of Agriculture? Following additional discussion on the appropriate lead agency, **Representative Rydalch moved to recommend the importance of further development and promotion of Centers of Excellence in agricultural technology and the biosciences at colleges and universities; that establishing endowed chairs does not need to involve additional funding; and that the College of Agriculture at the University of Idaho should be the lead agency to ensure there is no duplication among universities and there is no conflict of roles and missions. Representative Bolz seconded the motion. The motion passed unanimously on a voice vote.**

Senator Schroder asked if there were any further matters to discuss. There being none, he thanked each task force member for his individual contributions and hard work on behalf of the task force's charge as assigned by leadership of the House and Senate. **Representative Rydalch** thanked the staff for their work and the production of excellent minutes, and **Senator Coiner** thanked Chairman Schroeder for his leadership.

The meeting was adjourned sine die at 3:55 P.M.