

# ESCOP Science and Tech Committee Meeting Minutes

Covington, KY  
April 24 – 25, 2006

**Participants:** Lou Swanson, Steve Puppeke, Nancy Cox, Dan Rossi, Charles Boyer, Eric Young, Dan Schmoltdt, Terry Nelsen, Ed Rajotte (by phone), and Frank Boteler (by phone)

## 1. ARS Report – Terry Nelsen

- Some budget cuts for FY07
- Worst cuts expected in 08
- Biofuels & obesity will be big issues
- Others are being emphasized
  - Relation with university
    - Adjunct professor okay
    - No tenure
    - Guest lecture only at university where they work
    - Search committee - ex-officio no voting
    - No compensation like function breaks or athletic tickets
    - Can serve on grad committees and hire students
    - Can be journal editors, but can't make budget decisions
- New internal regulations handbook is being written

## 2. CSREES Report – Dan Schmoltdt

### *FY 2006 CSREES Budget*

Compared to many other federal agencies, CSREES continues to do well in the appropriation process. For fiscal year 2006, each of the President's, House's, and Senate's budget for CSREES included an increase from the previous year. The final enacted Agriculture Appropriation Bill for fiscal year 2006 (signed Nov. 10) provided CSREES \$1.199B. This included a federal-wide rescission and, yet, represents a 2% increase over the FY 2005 appropriation.

Where did the FY 2006 budget increases occur in CSREES programs? Well, unfortunately, they did not appear in what we would term "healthy" ways. Except for minor increases for the National Research Initiative and the Expanded Food and Nutrition Education Program, approximately 60% of the pre-rescission increase results from new or increased special grants (i.e., Congressional earmarked funds). This continues a trend that has existed over the past 6-8 years, where special grants are the fastest growing segment of the CSREES budget. In the long run, this is not the best way to build responsive and effective research, education, and extension programs.

Still, during a time when many federal agencies face shrinking budgets, this small increase is much bigger than the actual number would indicate. Most everyone in CSREES attributes our appropriation successes over the past several years to the excellent work performed by our many land-grant partners and the impact that those research, extension, and education activities are having. So, budget increases for CSREES are really tangible acknowledgement of the successes of our State institutions.

#### *FY 2007 President's Budget*

The FY 2007 CSREES Budget includes discretionary funding totaling \$1.04B. This represents an increase of \$5.4M or approximately 0.52 percent above the FY 2006 President's Budget amount.

The FY 2007 Budget supports the Administration's commitment to competitive programs and to the streamlining of program delivery and responds to stakeholder input. In a time of limited resources this is accomplished by: a) increasing funding for the National Research Initiative (NRI), b) maintaining funding, but restructuring the allocation of the Hatch Act and McIntire-Stennis Cooperative Forestry programs by redirecting a portion of the formula funds to nationally, competitively awarded multi-state/multi-institutional projects while retaining a portion to be awarded on the formula basis, c) eliminating the Animal Health and Disease, Section 1433 Research Program, and d) transferring programs authorized by Section 406 Integrated Programs—Water Quality, Food Safety, and IPM—to the NRI.

The budget proposes funding of \$247.5M for the NRI to support: a) bioinformatics, emerging issues in food and agriculture biosecurity, ecology and economics of biological invasions, plant biotechnology and water security; b) water quality, food safety, pest related, methyl bromide transition and organic transition programs formerly funded under Integrated Activities; and c) ongoing research activities under the program. This is an increase of \$66.3M (including \$42.3 million for the 406 programs) over the FY 2006 Appropriations Act post-rescission amount.

As always, earmarked Special Research Grants, Extension and Research Federal Administration projects and grants, and several specific, targeted programs are not proposed for funding in FY 2007.

The FY 2007 Budget proposes changes in the general provisions including increasing the amount provided for the NRI that may be used for competitive integrated activities from a maximum of 22 percent to a maximum of 30 percent. Also proposed is the elimination of the cap on indirect costs for competitively awarded grants? This elimination allows full indirect cost recovery under competitive awards.

#### *Multi-State Competitive Grants Program*

While Formula Funds are popular with Experiment Station Directors because they provide important base funding to support a wide variety of activities, they are not popular with the White House or the Hill. Consequently, Formula Fund appropriations have languished for many years—falling behind inflation—and are in danger of

things like green labels. He outlined the pesticide part of the equation, and said that others are in the pot with us. Among those he cited were the Heinz Center for the Environment and the Environmental Working Group. He said that one of our roles is the "Pest-side" of the equation – why pesticides are necessary. He directed us to a website for ecolabels - [www.eco-labels.org](http://www.eco-labels.org)

He mentioned that IPM certification is practice-based, and that this would fit interests of organizations and companies. He said that the Rainforest Alliance certifies for companies like Chiquita, Ben and Jerry's and Kraft. The Rainforest Alliance has 81 employees and a \$9 million certification budget. Forest product stewardship is an interesting area now being pursued – certifying products for companies like Lowe's and Home Depot. There are also non-ag ecolabels including IPM STAR and NPMA Quality Pro (by the National Pest Management Association).

30% of consumers are interested in ecologically produced products. An eco-product 'must have' quality, convenience, and price to be competitive, however. In the wholesale marketplace, where food producers are, there must be accountability with the certification.

There was discussion of the SYSCO Corporate Sustainability Effort. SYSCO does it because it is the "Right thing to do", it is doable, and it can document annual corporate social responsibility. Training food alliances and groups like the AIB (American Institute of Baking) is one thing promoted. The supplier pays for the certification and training.

Benefits of training include

- Real improvements
- Continuing education
- IPM/BMP Sustainability
- Reduced liability
- Greater job satisfaction
- Recognition for a job well done

Eco portfolio for customers and stakeholders

Land Grant research outputs form the basis for NGO developed standards. However, NGO's are a leading resource for credibility, standards for development, and program operation. Certification and training should be independent, because it is necessary to take heat off of extension.

There are government ecolabel certifications, examples include: Organic, Energy Star, and Pesticide Applicator Certification. For an email of the PowerPoint presentation from Tom Green contact him at: [IPMworks @IPMinstitute.org](mailto:IPMworks@IPMinstitute.org)

Thursday, Oct. 6, 2005

Carla Thomas of the National Pest Detection Network made a presentation to the group on Weather Systems and IPM. She mentioned that there exists in many areas a weather data

Planning continued for the 5<sup>th</sup> National IPM Symposium to be held in St. Louis, Missouri in spring, 2006. The previous 4 National IPM Symposia (held in 1989, 1994, 1996 and 2003) have all been organized by or with considerable input from the Pest Management Strategies Subcommittee. The last meeting, held in Indianapolis, was attended by over 700 participants including many stakeholders, and was very well received. A meeting similar in size and scope is anticipated.

Wednesday, Oct. 5, 2005

The National IPM Committee held its annual meeting at the USDA-CSREES headquarters in the waterfront Building in Washington, DC October 5 and 6, 2005.

Following introductions, Mike Fitzner, CSREES National Program Leader for IPM offered an update from the agency. He mentioned that the IPM Center's response to the Soybean Rust introduction was well received around D.C. Most people (agency and stakeholders like the American Soybean Association) are pleased with the effort's management. \$2.4 million has been secured for tracking soybean rust and expanding this effort to other invasive pests.

There are increased interactions between IPM and the Water Quality program both of which are funded through the 406-program line.

Dr. Fitzner offered a 2006 Budget update, and cited stresses due to the war and Katrina as reasons why IPM will likely remain stable in funding for 2006. At the time of the meeting, everything was in a holding pattern. The proposal to revert to previous budgets was OK for most IPM programs, but IR-4 could get cut in this scenario. There was some talk of a rescission whereby programs would have to work with 80% of the current budget, but hopefully it won't be this bad. Tom Fritz mentioned that the Northeast Experiment Station Directors were in town and explained that their feeling regarding the Partnership was that we are "Allies in a Common Cause". Mike asked, "Do we still have that?" He mentioned that the IPM Centers are a lynchpin for Federal support for IPM programs – they are "the best thing we have going. He stressed that there is a need to make this a success, and also to also ensure IPM 3d funding.

Rod Hedberg (the CSREES Legislative Advisor) presented an update on the Farm Bill. He mentioned that IPM and CSREES couldn't afford to be a stealth program and agency. It is important for the Farm Bill to convey the value of work we are doing "we can't afford to be a stealth industry" to recognize the funding stream. The action related to the Farm Bill is occurring around "Farm Bill Forums". There is guidance from those sessions and then from administration before things go forward. It is useful to attend these sessions and to submit comments in writing. Be sure to cc CSREES so the agency will review the comments, and make sure the grower communities are in attendance. How important research & extension? This is a small piece of the discussion. Commodity support is most important so it is important that they are present and supportive. Regarding IPM Centers, there is an advantage that can be related to by

disappearing altogether. The FY 2007 President's Budget takes a more moderate position from last year's requested budget wherein half of Hatch and McIntire-Stennis base funding was to be replaced with a competitive agricultural experimentation station program. Under the current budget proposal, Hatch Funds would transition to a 55-44% split of competitive vs. formula funding (McIntire-Stennis, 59-41%) over five years. The proposed competitive program would support multi-state/multi-institutional projects, replacing the current portfolio of multi-state projects. That is, as multi-state projects reach completion at the end of each fiscal year, they would not be renewed and their funds would be funneled into this new competitive program, along with an initial 30%—so that the current 25% rate multi-state funding rises to 55%. At this time, there are no details about how such a program would operate, but it is clear that crafting the details will involve both CSREES and State partners.

### *CSREES Liaisons to States*

Beginning in January of 2006, CSREES has assigned two National Program Leaders to each State to act as CSREES liaisons to the land-grant institutions in that State. Most NPLs have two state assignments, also (see the included table). One of the primary initial liaison tasks will be to assist States in preparing new Plans of Work (due in 2007), in particular using the new on-line system for Plan of Work preparation and review. In general, however, this liaison program is intended to be much broader. There are two main reasons for augmenting the current federal-state partnership in this way: (1) to help NPLs become more familiar with the full suite of research, education, and extension activities occurring in the States and (2) to provide each State with two prime contacts within the agency that they can go to for questions and information. Not all NPL liaison responsibilities have been assigned yet, but they *may* include annual (by one of the liaisons) visits to the institutions and CSREES seminar presentations during those visits. Any previous Plan of Work development and review activities by particular NPLs will be superseded by these new assignments.

<b>List of NPL Liaisons to the States</b>	<b>As of:</b>	<b>December 2, 2005</b>
<b>State</b>	<b>Liaison</b>	<b>Team</b>
Alabama	Sherman, Gary	Sureshwaran, Suresh
Alaska	Graves, Chuck	Jerkins, Diana
American Samoa -- See Hawaii		
Arizona	Jones, Dan*	Tuckermanty, Elizabeth
Arkansas	Bolton, Herb	Menzel, Bruce*
California	Meyer, Rick*	Smith, Greg
Colorado	Gerrior, Shirley	Hipple, Pat
Connecticut, Storrs and New Haven	Cardwell, Kitty	Tate, Tom
Delaware	Bailey, Mark	Saltos, Etta
District of Columbia	Parochetti, Jim	Valentine, Nancy
Florida	Ebodaghe, Denis	Morant, Mervalyn
Georgia	Bowers, Michael	Purcell-Miramontes, Mary
Guam, Micronesia, Northern Marianas	Blanche, Catalino*	Tupas, Luis*
Hawaii, American Samoa	Burfening, Peter	Tupas, Luis*
Idaho	Bewick, Tom*	Dorsey, Maurice*
Illinois	Jones, Preston	McLean, Gail
Indiana	Brayton, Peter	Valco, Tom

Iowa	Jacobs-Young, Chavonda	Johnson, Monte*
Kansas	Hamernik, Deb	Wozniak, Chris
Kentucky	Cleland, Charles	Wright, Sherri
Louisiana	Jensen, Gary	Mirando, Mark
Maine	Crocoll, Caroline*	Eastwood, Basil
Maryland	Hegg, Richard	Johnson, Peter*
Massachusetts	Meyer, Rick*	Thomas, Edith
Michigan	Johnson, Peter*	LeMenestrel, Suzanne
Micronesia -- See Guam		
Minnesota	Lin, Liang-Shiou	Swanson, Marilyn
Mississippi	Bailey, Carmela**	Hood, Richard
Missouri	Auburn, Jill*	Lawrence, Irma
Montana	Bailey, Carmela*	Hunt, Fen
Nebraska	Maggard, Sally**	Thro, Ann Marie*
Nevada	Jones, Dan*	Willis, Wells*
New Hampshire	Hoffman, Bill	Schuchardt, Jane
New Jersey	Bahn, Henry*	Torrence, Mary
New Mexico	Bahn, Henry*	Johnson, Monte*
New York	Crocoll, Caroline*	Menzel, Bruce*
North Carolina	Reynnells, Richard*	Wysocki, Joseph*
North Dakota	Chen, Hongda	Norland, Eric
Northern Marianas -- See Guam		
Ohio	Rao, Ram*	Welsh, Susan*
Oklahoma	Trotman, Audrey	Wysocki, Joseph*
Oregon	Auburn, Jill*	Qureshi, Muquarrab
Pennsylvania	Rozum, Mary Ann*	Schmoldt, Daniel*
Puerto Rico , Virgin Islands	Afele-Fa'amuli, Saleia	Welsh, Susan*
Rhode Island	Cavallaro, Nancy	Gill, Joan*
South Carolina	Goldner, Bill	Rao, Ram*
South Dakota	Reynnells, Richard*	Willis, Wells*
Tennessee	Crosby, Greg	Garrett, Byron
Texas	Green, Jim	Kaleikau, Ed
Utah	Blanche, Catalino*	Singleton, Jan
Vermont	Nowierski, Bob*	O'Neill, Mike
Virgin Islands -- See Puerto Rico		
Virginia	Lichens-Park, Anne	Rozum, Mary Ann*
Washington	Bewick, Tom*	Dorsey, Maurice*
West Virginia	Knighton, Ray	Schmoldt, Dan*
Wisconsin	Gill, Joan*	Nowierski, Bob*
Wyoming	Maggard, Sally*	Thro, Ann Marie*

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\*Indicates that individual has two assignments.

### 3. NRI Priority Setting Process – Eric Young

- Clusters appropriate?
- Programs, too many?
- Relationship with Science Roadmap
- Social Science is currently scarce
- Need to be sure process allows social science & economics to rise as appropriate
- Use Roadmap as framework for setting priorities

- Administrative questions
  - Number programs
  - Funding level
  - Length of grant
  - Portion of integrated
- Request information from Anna on how input was used in setting RFA
- Roadmap objective should be goals
- Which of these objectives should NRI focus on in 08?
- What are some researchable areas that would address those objectives?
- Should approach be primarily research or integrated?

#### **4. Pest Management Strategies Committee – Ed Rajotte**

- IPM Roadmap added urban and residential IPM as high priority areas
- Market demand driven decisions related to pest management
  - Wave of public opinion includes
    - Organic, sustainable, environmentally friendly, locally grown
- NRCS should be more tied into IPM programs at LGUs
- Pest Management minutes below:

Report from Pest Management Strategies Subcommittee, 2005  
 Frank G. Zalom, Dept. of Entomology, UC Davis  
 ESCOP Chair

The Pest Management Strategies Subcommittee (aka the National IPM Committee) remained active in 2005, fulfilling its primary goal of serving as a liaison between the Land Grant institutions and our Federal partner. To that end, our 2 day annual meeting was organized and held in October 2005, at CSREES headquarters in Washington DC. The meeting was jointly organized with Ed Rajotte, The Pennsylvania State University who serves as ECOP Co-Chair of the National IPM Committee and James Van Kirk, North Carolina State University who is Director of the Southern Region IPM Center. This is the 4<sup>th</sup> consecutive year in which our committee has met jointly with the Directors of the 4 Regional IPM Centers in an effort to maximize communication and collaboration with that important program.

The meeting agenda reflected updates of new and ongoing programs within Federal agencies focusing on how the Land Grants could best interact with these programs, and also included invited stakeholders to provide their assessment of mechanisms for enhancing the future of IPM efforts nationally. A copy of my notes from that meeting and the agenda are attached, as are lists of committee members and those who attended the annual meeting.

I was called upon during this year to survey former members of the National IPM Committee and administrative advisors to the regional IPM coordinating committees as to their assessment of and recommendations for the Regional IPM Centers for their mid-term review. The survey was conducted and presented in February 2006, to the review committee selected by CSREES to review the program.

Congress - moving Research and Extension programs closer to stakeholders. The Secretary wants to hear from stakeholders, not from folks in D.C., so the most valuable input is from beneficiaries. Since the USDA is part of the Administration it does not enjoy the freedom of the universities. The Farm Bill is not just about IPM, but also about all of agriculture so in terms of Research and Extension these groups must find common cause. The possibility of redistribution of support dollars into research on environmental issues is not likely. Rather redistribution to implementation (such as conservation groups and sustainable agriculture networks that are already involved in this) is more likely. His advice is to plug into conservation groups.

Eldon Ortman, former Chair of this ESCOP Subcommittee and now working part time with CSREES, spoke on the restructuring of the CSREES grants portfolio. The President's budget directs programs to NRI. Why? It is a way to grow the NRI, and some IPM funds had been moved earlier. This is important to remember since these funds are lost for IPM research. The philosophy has been to add new programs rather than consolidate grant lines, but the agenda has changed because individual lines are easier to defend. It would be OK to promote management through 406 funds with 3 funding lines, research that addresses IPM are intermediate term, those that address immediate needs that are shorter term, and those creating sustainable programs that are longer term.

Jim Green discussed the topic of Master Gardener Programs and IPM, which had not been presented to the ESCOP group in previous meetings. He provided a handout on the program, which mentioned that 90,000 volunteers are trained every year. He gave kudo' to Susan Ratcliffe ((University of Illinois and present at the meeting) for her Rapid Response Education Programs which are useful to the Master Gardeners.

The Chairs of the 4 Regional IPM Coordinating Committees gave updates of their activities for the past year. Many of the regions mentioned new interactions with the NRCS, which had been a major topic of the previous year's National IPM Committee meeting. There was some discussion about concerns that some IPM efforts are becoming individual efforts rather than building upon the coordinated programs that have long been strength of IPM in most states.

Carol Pilcher (Iowa State University) presented an overview of her efforts in evaluating IPM, and how IPM impacts might be drawn from filling in a matrix drawn from the IPM Roadmap. She will be leading an evaluation effort that helps to address GAO concerns from their 2001 report.

The afternoon was initiated with an interesting discussion by stakeholders who attended this meeting on their own funding because of their long-term interest in IPM. They included Ted Batkin of the Citrus Research Board (CA) and Bill Nelson of Wine America.

Ted Batkin addressed "How do we improve support?" He spoke about actions and carrying them through with the process being a focus on results and outcomes. Industry

is interested in solving problems, and IPM is there 100% in the citrus industry. look outside of federal funds for support, and this can't continue to be the primary source. They need to partner with government for funds to expand and move forward. How to capitalize stakeholders? How to stimulate stakeholder involvement? How to target request to submit a request to a specific commodity that won't fund philosophical research or an academic exercise.

Commodities will fund results-oriented programs. He said to "Get inside of their heads - don't read books, get out and see how their crop is grown." It will be important to get commodities together to collectively look at problems. Building a coalition doesn't just happen, it takes effort. Researchers could get funds from individual commodities groups, but collective support can create new funds. You do this by lobbying. Take proposals to all possible groups to gain mass lobbying strength. You can't necessarily do this, but you can plant the idea with commodities or other stakeholders to support it.

Mr. Batkin also spoke about his interests in invasive pests and diseases, which have been important to his commodity (citrus) because of introductions like the Medfly. He said that invasive species are not just an agriculture issue, but are universal. In California, it has been a challenge on how to tie agriculture to urban constituencies. The Medfly did this - teeing teamsters, shoe manufacturers, etc. who all supported the sterile male release program for Los Angeles. It is important to ask the question "How to bring commodities together with environmental groups?" This should have been done long ago.

Bill Nelson mentioned that advocates know that what you (Land Grants) do is for the public good. Who are these advocates? They include industry or commodity groups, public interest groups, and academics. Industry and commodity groups have the biggest clout since they produce economic goods. To be successful the entire sector must advance. The size of individual farms is relatively small, but they are not like Intel who can do in-house research. Public Interest Groups are concerned about what happens to their constituents. If there are no advocates, then nothing will happen. In terms of IPM and Sustainable-, we may have to rely on public interest groups, but not entirely. The National Grape and Wine Initiative has endorsed sustainability. "Farmers want to do the right thing because they are the ones who have the most to lose."

Bill also noted that there is a possibility that Specialty Crops research will come from funding from the Farm Bill, and these funds will probably be moving through commodity boards to researchers. There is a proposal for up to \$1.0 billion.

Bob Holm, Director of the IR-4 Program and an annual guest of this committee spoke about marketing IR-4, their Commodity Liaison Committee, and the fact that IR-4 is a "Specialty (Not Minor) Crops Program". He noted that \$45.0 billion of the \$95.0 billion of US agricultural production is in specialty crops. IR-4 uses this as a benchmark for evaluation the number of clearances.

Tom Green of the IPM Institute in Madison, Wisconsin, and a close collaborator for many in the Land Grants spoke about Demand Side IPM - creating a demand for IPM by

infrastructure. There are lots of good state networks. A regional or national management might be good, but IPM is local, therefore precision in data at local level and interpretation is needed. Their new method of interpolation is called PRISM, and a contact for this is Dr. Christopher Daly-SCAS Director <http://www.OCS.orst.edu/prism>

Scott Isard of the Pennsylvania State University spoke about the PIPE (Pest Information Platform for Extension & Education) program, which is used, for the soybean rust information system structure. In that program, seminal plots are used to monitor occurrence of soybean rust. This is funded by APHIS and uses industry spore collectors. The success is due to advancements in information technology from prior investments. The 2006 proposal for soybean rust expand to other legumes and to soybean aphid. Another possibility for expansion is to Citrus Greening Disease, which is transmitted by aphids. Their vision is to expand the platform and provide a relation to NAPIS and other databases. Also, how to integrate state efforts in a national network.

There was a presentation by the USDA Coordinator for Invasive Species Issues, Hilda Diaz-Saltero. She works with seven agencies that are involved in invasive species, and has a limited budget of about \$500,000 for salary and support, about \$150,000 for projects and \$95,000 that is provided to CABI for their pest compendium. Within the Federal government there are 12 secretaries and 40 agencies including Agriculture, Interior, and Commerce with something to do with invasive species. There is \$1.4 billion in invasive species funding across the 40 agencies, and \$1.2 billion of it is APHIS. The Coordinator's office traces back to an executive order from the Clinton Administration. The main purpose of her presentation was to ask if the IPM Centers want to participate in helping fund the CABI compendium.

Each of the Regional IPM Center Directors gave updates from their Centers, and they mentioned that there will be a mid term review of the centers to be held in February. One question was how best to get input on the Centers from the Regional IPM Coordinating Committees and Extension IPM Coordinators. This was discussed among the group.

Some of the discussion focused on a survey? How to identify groups? How to summarize? Whether there is a need for direct dialogue – e.g. is it important to do the survey face-to-face or written?

The final discussion was on the IPM Roadmap and the Federal IPM Coordinating Committee (FIPMCC). The objective of this committee is to provide a forum for discussion among agencies on IPM, and to help to respond to the 2001 GAO report. The committee is “Trying to get their hands around interagency collaboration.” Successes include IPM training for federal agencies, DOD and Forest Service collaborations. The committee is interested in marketing the roadmap – first to use the Roadmap to market IPM to their agencies. Externally, regions are using the Roadmap to guide their RFA's.

##### **5. Social Science Subcommittee – Lou Swanson**

- Very concerned about changes in NRI relative to markets and trade funding areas
- Demand for evidence of economic impact of rural development is increasing, but research data is very limited

- Developing linkages with agencies other than USDA, i.e. Department of Justice, HHS
- Would like to have formal ECOP representation
  - 5 extension members
  - Represent 5 regions
  - Social science / economics broadly
- CREATE21 discussion surfaced a concern about a “reductionist” approach that did not put things in perspective of social & economic systems
- Along with Federal Reserve Bank in Kansas City, Social Sciences Subcommittee is looking at how can entrepreneurs be supported to help them succeed
- Need research on how and why rural entrepreneurship succeeds in context of a rural setting

#### **6. Data Searching Software Pilot Proposal – Frank Boteler**

- Software system that searches complex databases that looks for underlying concepts and commonality
- Could be used on CRIS, NIMSS, POW’s, etc to look for work that contributes to a particular end, i.e., sustainable communities
- Also describes how strongly a set of work contributes or has contributed
- Going to be used initially to analyze food and ag security and determine what is being done in NC region
- If pilot study goes well, this type of query may be made available to LGUs
- Will be proposed as a NRSP to provide a funding mechanism for the pilot and potentially to implement it for wider use.
- Can send Henry Bahn any questions and he will send a proposal summary.
- May be better done under NRSP-1

#### **7. Science Roadmap Update – Eric Young**

- Edits and suggestions for clarification were discussed
- Further comments on draft should be sent to Eric
- Hope to have it completed and available to hand out at Joint COPs

#### **8. Genomics Subcommittee – Charles Boyer**

- There is no pressing need for this subcommittee at present and it should be terminated

#### **9. Future Actions – Steve Pueppke**

- General public brochure on Roadmap