

Community Advisory Council
September 13, 2012
Action Items/Notes

Final

These notes are in the following order:

1. Attendance
2. Correspondence and Handouts
3. Administrative Items
4. Global & Regional Solutions Directorate
5. Agenda Setting
6. "A discovery! The Higgs?"
7. Community Comment

1. Attendance

Members/Alternates Present: See Attached Sheets.

Others Present: S. Aronson, S. Bogart, J. Carter, F. Crescenzo, N. Detweiler, D. Gibbs, H. Gordon, M. Holland, M. Israel, S. Johnson, R. Lee, M. Lynch, K. MacIntyre, R. McKay, P. Paul, S. Penn, G. Stokes

2. Correspondence and Handouts

Items numbered one through three were mailed to Members with a cover letter dated September 6, 2012. Items numbered four through six were available as handouts at the meeting.

1. Draft agenda for September 13, 2012
2. Draft notes for June 14, 2012
3. Meeting location change flyer
4. Global and Regional Solutions presentation
5. Pine Barrens research forum registration flyer
6. Information on upcoming Brookhaven Lecture

3. Administrative Items

The meeting began at 6:38 p.m. Reed Hodgins, facilitator, reviewed the ground rules and the agenda. Those in attendance introduced themselves.

Member Sprintzen commented that the meeting room (Bldg. 490 conference room), is too large and the screen is too far away from the horseshoe. Several others agreed with him and also mentioned that the lighting in the room was not good.

Updates

Robert Lee, Manager - Environmental Protection Division, said the 2011 Site Environmental Report (SER) is complete and available on the website. The paper copy will be distributed in October and the CAC will be given a presentation either next month or in November. He said the Lab has recently received all the permits necessary from the State to break ground for the Sewage Treatment Plant. Construction on the recharge basins and tree clearing has begun, and designs have been submitted to the DEC and Suffolk County to make sure they are in full conformance with County requirements. He also said the Laboratory has received permission for 14 units of the 4-Poster tick control system. The units are in the process of being purchased now, but they won't get field deployed until the spring.

Member Talbot asked how effective the 4-Poster system is and if the DEC will allow its' use elsewhere in New York State.

Lee said two pilot tests have been done and these units have been very effective. Hopefully, if we can show good results they will allow it to be used in more areas.

Hodgin said there is a membership item that will be discussed at next month's meeting. He said Member Blumer designated Member Madigan as her Alternate so he is now the Alternate member for two organizations. Next month we will discuss and decide on whether or not an individual can fill more than one position on the CAC and incorporate that decision into the Guidelines.

Nora Detweiler, liaison to the CAC, invited the members to attend a ceremony recognizing BNL's Chemistry Building on October 19th. She said the New York section of the American Chemical Society is designating the Laboratory's Chemistry Building as an historic landmark in recognition of the synthesis of ¹⁸FDG, the first successful radiotracer for PET imaging, now used worldwide. She also invited them to attend the Pine Barrens Research Forum, held at Brookhaven National Lab on October 4th and 5th.

Member Heil reported that the CAC new member orientation, held last Thursday, was well done. He said there were about eight CAC members present, with presentations given by Sherry Johnson, Bob Lee, and Bill Dorsch. They presented background information on the Laboratory, a history of the various plumes, and other specific items of interest to the CAC.

Approval of Minutes

Hodgin asked for corrections, additions, or deletions to the June 13, 2012 draft notes. Member Sprintzen asked for clarification on Member Shea's comment regarding 300 years vs. 30 years for the half life of cesium-137. The Notes were changed to reflect; *in regard to cesium-137, the area will be radioactive for about 300 years*, rather than, *cesium-137 will be radioactive for 300 years*. Member Ziems asked for clarification on the comment by Steve Musolino stating that no one was injured or killed by radiation overexposure from the Fukushima event. (After re-listening to the recording, the notes are an accurate record of Musolino's statements and will remain as stated.) The notes were approved as amended with none opposed and three abstentions.

4. Global & Regional Solutions (GARS) Directorate, Gerald Stokes – Director for GARS

Hodgin said we will hold off on discussing Fukushima this evening. This presentation is on the work that this Directorate does, there will be another presentation in the future to discuss Fukushima.

Gerry Stokes explained why the GARS Directorate was created and what the strategy is for fulfilling this role. He said the strategic intent of GARS is to revitalize and grow the applied research program at Brookhaven around achieving impact through deployment. He said this is achieved through an energy strategy, a non-proliferation and national security strategy and an aggressive technology deployment and commercialization strategy. He spoke about New York State's 80 by 50 plan and said it is an early driver for BNL's strategy. He said the Laboratory's energy goals and focus areas are aligned with the 80% Carbon Reduction by 2050. He spoke about the decarbonization of generation, how to get renewables integrated into the system, energy storage and batteries, SGRID³, the Long Island Solar Farm and the Northeast Solar Energy Research Center, thermochemical conversion of biomass to renewable fuels, superconducting magnets, photovoltaics, the dash to gas, and fracking.

Member Peskin said the work done in GARS seems episodic compared to basic science. How do you achieve stability?

Stokes said there are three things needed to keep you going. First, you have to be good at it. Second, you need to have a relationship with the customers. And finally, there is a strategy for doing this. It's important to understand the real context of technology.

Member Doroski said energy research is extremely important.

Stokes said the amount of energy is important, but so is the form of energy. We use a lot of energy to make electricity and that's considered valuable because it's so useful.

Member Doroski asked if the Laboratory does thorium research

Stokes said yes, we do.

Member Kaplan asked how much money New York State has invested in Brookhaven, beside SGRID³. He also asked about some of the successes of commercialization.

Stokes said NYS has invested about \$15 – 20 million in Brookhaven. The two most important successes right now are commercialization of core-shell nanoparticles for use as catalysts in fuel cells and the commercialization of PET technology.

Doon Gibbs responded to the question regarding funding from New York State. He said the State contributes to the Lab in many ways besides research funding. For example, through the hydro power allocation, cost avoidance of \$15M per year and other ways as well. He said the Laboratory is a good partner with New York State.

Member Sprintzen asked about Governor Patterson's 80 by 50 mandate. He asked if that has any impact on fracking in the State of New York.

Stokes said energy is seductive. He said the dash to gas is the single most dangerous thing for the climate system right now. He said electric vehicles will play a big part.

5. Agenda Setting

Detweiler said that next month, there will be a presentation on the 2011 SER, the deer Environmental Assessment, and the 4-Poster tick control system.

Member Doroski said the Japanese government recently came out with a final report on the incident at Fukushima. He would like to get some information on that at a future meeting, possibly a site expert to discuss it.

Member Shea suggested a panel of experts to discuss the health effects and other issues of Fukushima.

6. "A discovery! The Higgs?," Howard Gordon – Deputy Chair, Physics Dept. US ATLAS Deputy Operations Program Manager

Howard Gordon said this talk is about basic research. We are trying to understand the physics of the universe. This work is long term. He said this is about a discovery that was made this summer. We are not 100 percent sure that this is the Higgs boson. He said the results came out on July 4. He gave some background information and noted that the Higgs boson is perhaps the last particle to be discovered in the Standard Model. He spoke about the ATLAS experiment, the LHC, accelerators, computing, physics results, and future plans.

Member Jordan-Sweet asked how many collisions were made in 2012.

Gordon said there were trillions of collisions in 2012. Most collisions were not Higgs boson.

Member Sprintzen asked if this information is in written form.

Gordon said there is a website where all this information can be downloaded and there will be a publication available soon.

Member Peskin asked if this turns out not to be the Higgs boson, is there a theory for what else it could be.

Gordon said it could be a supersymmetric Higgs particle. The answer to that question is about \$10-20 billion.

Member Kaplan asked for a copy of Gordon's presentation and the web links.

Detweiler said she will email the information to the CAC. (The information links were emailed to CAC members on September 19, the entire presentation is located on the CAC website.)

Hodgin told the CAC to remember this night because you have one of the primary contributors to the ATLAS project here with you. This may fundamentally change our understanding of the universe and you may have just witnessed a Nobel Prize presentation.

7. Community Comment

There was no community comment.

The meeting adjourned at 8:54 p.m.

Agenda Topics
February 10, 2011 Poll

Homeland Security – 9
Nanotechnology Developments & Standards – 7 (3/10/2011 - E. Mendez)
Science & Politics – 7
Overview of BNL Land Use Plan – 6
Sustainability – 6
Photovoltaics – 6 (3/10/2011 - E. Mendez and R. Lofaro)
PET/MRI Research – 6
LISF Tour Prior to Completion – 6 (11/18/11 – ribbon cutting)
Business/Lab Integration of New Technologies – 6 (4/14/11 – Walter Copan)
Nano Patterning – 5
Natural Resources Management Plan – 5 (12/8/11 – Tim Green)
Nuclear Non-Proliferation – 4 (3/8/12 – Carol Kessler)
Nuclear Safety – 4
Catalysis & Super Conducting Magnets – 3
Cosmology – 3
Accelerate Long Island (as information becomes available) - 3
Safety Progress – 2
CRADAS – 2
Radio Isotopes – 2
Nuclear Stewardship - 1
Technology Transfer – 0 (4/14/11 – W. Copan)

P = Present	2012	Affiliation		First Name	Last Name	Jan	Feb	Mar	Apr	May	June	July no mtg.	Aug no mtg.	Sep	Oct	Nov	Dec
		ABCO (Garber - 04/02)	Member	Don	Garber	P	P	P	P	P	P						
		ABCO (Madigan -10/10)	Alternate	Michael	Madigan	P		P	P	P							
		American Physical Society	Member	Margaret	Malloy	P	P	P			P			P			
		American Physical Society	Alternate														
		Brookhaven Retired Employees Association (Peskin - 09/09)	Member	Arnie	Peskin		P	P	P	P				P			
		Brookhaven Retired Employees Association (Franz - 12/09)	Alternate	Eena-Mai	Franz	P	P	P		P	P						
		Citizens Campaign for the Environment	Member	Adrienne	Esposito	P	P	P	P	P				P			
		Citizens Campaign for the Environment	Alternate														
		Colonial Woods Whispering Pines (Birben - 06/09)	Member	Christine	Birben	P	P	P	P	P	P			P			
		Colonial Woods Whispering Pines (Rehbein -11/10)	Alternate	Eric	Rehbein	P	P	P	P	P	P			P			
		Coram Civic Association (Ziems - 06/12)	Member	Paul	Ziems						P			P			
		Coram Civic Association (Meade – 06/12)	Alternate	Kathy	Meade												
		E. Yaphank Civic Association	Member	Michael	Giacomaro	P	P	P		P							
		E. Yaphank Civic Association (Feinman - 02/09)	Alternate	Bob	Feinman	P		P	P	P	P			P			
		Emeritus (changed 3/8/12)	Member	Jean	Mannhaupt												
		Friends of Brookhaven (Kaplan - 07/01)	Member	Ed	Kaplan			P						P			
		Friends of Brookhaven (Schwartz - 11/02)	Alternate	Steve	Schwartz	P				P							
		Huntington Breast Cancer Coalition	Member	Mary Joan	Shea	P				P	P			P			
		Huntington Breast Cancer Coalition	Alternate	Scott	Carlin												
		IBEW/Local 2230 (Krsnak 01/07)	Member	Scott	Krsnak	P	P		P	P							
		IBEW/Local 2230	Alternate														
		Individual (changed 3/12)	Member	Karen	Blumer	P		P		P							
		(added 6/12)	Alternate	Michael	Madigan						P			P			
		Individual – (changed 3/12)	Member	Greg	Bush	P		P									
			Alternate	Adam	Martin	P											
			Alternate	Bruce	Martin	P				P	P						
		Individual – (changed 3/12)	Member	Jane	Corrarino		P			P							
			Alternate														
		Individual – (changed 3/12)	Member	Iqbal	Chaudhry		P	P		P	P			P			
		L.I. Pine Barrens Society	Member	Richard	Amper												
		L.I. Pine Barrens Society (Murdocco - 04/11, deleted 6/12) (Muller added – 8/12)	Alternate	Alexandra	Muller	P	P	P						P			

P = Present	2012	Affiliation	First Name	Last Name	Jan	Feb	Mar	Apr	May	June	July no mtg.	Aug no mtg.	Sep	Oct	Nov	Dec
		L.I. Progressive Coalition	Member	David	Sprintzen	P	P	P	P	P			P			
		L.I. Progressive Coalition	Alternate													
		Lake Panamoka Civic Association (Biss - 04/02)	Member	Rita	Biss		P	P	P	P						
		Lake Panamoka Civic Association (Grandal - 10/10)	Alternate	Bonita	Grandal		P			P	P					
		Longwood Alliance	Member	Tom	Talbot			P	P	P	P			P		
		Longwood Alliance	Alternate	Kevin	Crowley											
		Longwood Central School Dist. (Castro -06/09)	Member	Maria	Castro		P									
		Longwood Central School Dist.	Alternate	Allan	Gerstenlauer											
		Mastic Park Civic Association (Sicignano – 6/12)	Member	John	Sicignano											
		Mastic Park Civic Association	Alternate	Clara	McManus						P		P			
		NSLS User	Member	Jean	Jordan-Sweet		P	P	P	P	P			P		
		NSLS User (Ravel -02/11)	Alternate	Bruce	Ravel	P		P		P	P					
		Ridge Civic Association	Member	Pat	Henagan		P	P	P		P			P		
		Ridge Civic Association	Alternate													
		Town of Brookhaven (Graves - 06/06)	Member	Anthony	Graves											
		Town of Brookhaven	Alternate													
		Town of Brookhaven, Senior Citizens Office	Member	James	Heil	P	P	P	P	P	P			P		
		Town of Brookhaven, Senior Citizens Office	Alternate													
		Town of Riverhead (Doroski - 04/11)	Member	Isidore	Doroski		P			P	P			P		
		Town of Riverhead (Hulme - 04/11)	Alternate	Suzanne	Hulme	P	P	P								
		Wading River Civic Association	Member	Helga	Guthy	P	P	P	P	P				P		
		Wading River Civic Association	Alternate	Sid	Bail						P					