

Title of Session: Science Resources K-20 - FermiLab

Moderator: Jeff Cooper

Guest Speakers: Laura Mengel, and Spencer Pasero

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BjB waves hi to Spencer and Laura

BjB: Jeff should be here shortly

BjB: Pat, have you met Spencer and Laura?

BjB . o O (they are with Fermilab)

LauraMM: Hi everybody, Happy New Year

SpencerP: Sorry I'm late; had the browser window open but for some reason wasn't properly logged in. Needed to refresh the window.

LauraMM: No, We have not met Pat V

SpencerP: And, happy new year. :)

BjB: happy new year to you too!

PatV: No. Could we do a round robin to introduce ourselves. I am Pat V. I retired from Cornell University June 30th. I had been the physics and astronomy librarian there for 15 years.

BjB: Pat led some physics discussions in Tapped In for a while before she retired

PatV: Laura? Spencer?

LauraMM: cool

SpencerP:, Education Office at Fermilab for 11 years. I mostly manage our local k-12 physical science programs, but also work with some special events and other assorted things.

BjB . o O (I'm hoping she won't be so busy during retirement that she won't come back and lead some more discussions....she's got some great resources)

BjB: great, Spencer...and you're not late!

PatV: I had the pleasure of touring Fermi Lab. You have an amazing education program going.

SpencerP: Pat, it's good to have you here. I've only been to Cornell once, in 2001, but it was a great experience. What a wonderful place!

SpencerP: Thank you very much!

SpencerP: When were you here?

SusanR joined the room.

BjB: Hi, Sue...good timing!

SusanR: greetings

LauraMM: Hi Susan, welcome

SusanR: Hi Laura

PatV: I think it was winter 2009 meeting of AAPT.

SpencerP: Excellent---that was a good meeting. I wasn't out here for the tour, though.

SpencerP: Hi, Susan!

SusanR . o O (wonders if these grants apply to Canadian teachers)

SusanR: Hi Spencer

BjB: Laura and Spencer, why don't you start? I know Spencer has limited time available

LauraMM: I'll introduce myself ...

LauraMM: since Spencer already did

LauraMM: I also work at Fermilab

LauraMM: and have run a program to work with teachers to do inquiry learning

LauraMM: as well as tech integration

LauraMM: and assist with those aspects of grant programs as they arise

JeffC joined the room.

LauraMM: Susan, can you tell us a little about you?

LauraMM: Hi Jeff

JeffC waves

BjB cheers...hi, Jeff!

JeffC is glad to see that Pat is here.

PatV: Hi Jeff. Glad to be here.

SusanR: I am a K to 3+ Occasional Teacher from Ottawa, Ontario. I moderate the ttwice monthly K to 3+ Great Resources Chats here at TI

SusanR: and look forward to the new year

LauraMM: I should come to that as I have a 1st grader

JeffC thinks that Pat and Laura (and Spencer) might have a Bogart--Rains friendship looming in the future (if they haven't already met).

SusanR: Please do

SpencerP: Okay, so a few things about the DOE ACTS program:

SpencerP: it's a nationwide effort to bring teachers into the science research community and help them become leaders in the science education community.

SpencerP: The program consists of three summer internships at a DOE national lab, with follow-up work through the subsequent academic years.

PatV: Laura: Since you are a techie, are you familiar with the www.alice.org program from Carnegie Mellon? I am trying to figure out what age student would use it.

SpencerP: Participants will be engaged in a science research project while at the lab, and will also devote time to working on education with a master teacher, their peers, and lab education staff.

LauraMM: I have heard about because I watched the "last lecture" of Randy P

BjB: ahhhh....that must be where I heard about it too!

SpencerP: I don't know about alice.org.

JeffC: Spencer, do you have a link for the DOE ACTS program to share?

SpencerP: Yep.

SpencerP: <http://ed.fnal.gov/acts/>

SpencerP: I can provide a little more information about the program as well.

JeffC: a reminder to hold the Ctrl key down when clicking links or accept popups from Tapped In

SpencerP: Participants earn an \$800/week stipend for their summer work, as well as housing and travel support for those who don't live near the lab.

SpencerP: And participants are eligible to apply for up to \$1,000/year to support equipment purchases for their classrooms, and another \$1,000 per year to support travel to professional development conferences.

JeffC: you have to love that... something that all professional development programs should do... pay teachers!

LauraMM: yes!

SpencerP: It is a nice addition.

JeffC: can they get university credit, Spencer?

SpencerP: Yes, we can arrange university credit.

JeffC: excellent

PatV: I am very happy to hear about the internships. I was dismayed to see that many places had to eliminate their summer programs for 2009. These programs provide many benefits to teachers and students alike.

SpencerP: We can't cover the cost of the credit, though, but the stipend is more than enough (way more than enough).

PatV: I monitor several listservs for teachers and will spread the word.

SpencerP: (to cover the credit, that is)

LauraMM: Pat, That would be great

SpencerP: Thanks, Pat; we really appreciate that.

LauraMM: I think last time the credit was \$45 per credit hour

BjB: Pat, Laura and Spencer are leading an hour discussion about the grant on Thursday, January

14 in their TI group room

JeffC: maybe you can all work out a grant together and pay the teachers so they get university credit at Cornell! (well... one can dream!)

LauraMM: So other people could come ask questions then

SpencerP: Yes, we'll have more time next Thursday.

LauraMM: One nice thing is that the teachers actually get to come to Fermilab and do science research here

LauraMM: Also, there is support and sharing about how to use what they have learned to improve teaching and learning back in their own classrooms

SpencerP: Right. We have regular online meetings during the academic year...

LauraMM: The 3rd component is leadership ...

SpencerP: ...and also generally meet at a national-level teachers meeting (like NSTA).

LauraMM: working with other teachers in the school or district

SpencerP: Does anyone have questions about the program?

BjB: sounds fabulous!

SpencerP: Thanks, BJ. It is a great opportunity.

BjB: I just posted the info to the Middle School Portal group

BjB . o O (also math and science)

LauraMM: thanks, the last cohort did online inquiry web projects (with their students) to transfer what they had learned to their classroom

SpencerP: Cool!

JeffC: will the last cohort be at all involved with this year's group?

SpencerP: No, they've just finished their three years.

PatV: Will the teachers be required to produce something? curriculum, lesson plan or presentation? If so, I suggest you ask you librarian to work with the group. I have done that for several years at Cornell, and the teachers seemed to appreciate it.

SpencerP: The teachers do have deliverables to produce, and we are lucky to have a great library staff at Fermilab.

JeffC thinks out loud... perhaps we could invite them to join your Fermilab group *here* and they could continue to spread the good word.

SpencerP: They're very helpful.

SpencerP: Invite the previous cohort? That's a good idea.

LauraMM: (The previous cohort was our first)

LauraMM: They could be guest speakers at chats or at Fermilab

JeffC: yes... but how about *everyone* from previous programs at Fermilab... as Laura will attest... I was there looong ago!

JeffC . o O (just a thought)

SpencerP: Jeff; could take a while to track them all down. :)

JeffC: yup

LauraMM: I am planning to send an email to some past participants to see if they are interested in being in this program (secondary science and math teachers)

JeffC: excellent, Laura

LauraMM: good idea

SpencerP: Thank you all very much for letting us talk with you.

LauraMM: Pat - if you were thinking about sending an email to a listserv ...

LauraMM: would you like us to send you a blurb for it?

JeffC: I'm also thinking you might want to invite some top science teachers as well... for example the teacher of the year from a year ago is in Oregon... and a science teacher.

JeffC: Michael Geisen

SusanR: great idea, Jeff

LauraMM: ok, we'll look him up

SpencerP: Is he a middle school teacher?

JeffC: He might be a good person to contact. I have his email address (don't know if it's still good). michael.geisen@crookcounty.k12.or.us

LauraMM: ok, thanks for the tip

SpencerP: Thanks.

JeffC: I'm going to promote both Laura and Spencer and Pat to Moderator status here (if you think of anyone to invite in the future here, please feel free to do so).

SpencerP: Thanks, Jeff.

PatV: That would be great. Also, I have been collecting professional development opportunities for STEM educators using connotea. I need to update some links, but here it is:

<http://www.connotea.org/user/pviele/tag/professional>

LauraMM: ok Pat, We'll send you a few sentences

JeffC: done... all three promoted.

PatV: Laura: include the information about the discussion you are planning. I also promote TI

LauraMM: nice list Par

LauraMM: ok, will do

PatV: I will add to the list. I had a surprise retirement AND built a new house so the past few months have been very hectic.

LauraMM: Thanks for the promotion Jeff :-)

JeffC: any time!

LauraMM: That does sound hectic

SpencerP: Wow, Pat.

PatV: By the way, my most recent Pat's Picks for STEM Educators is about science games. I mentioned Fermi lab. <http://expertvoices.nsd.org/pats-picks/>

LauraMM: We told Jeff, we would take about a half hour, so we do not want to preempt your usual discussion. We appreciate the input and your ideas for getting the word out.

JeffC: feel free to continue

JeffC: there's just us here

JeffC: unless Pat would like to spend a few minutes talking about the goings on at Cornell (please do!)

JeffC: remember... I'm not a science teacher... I just hang out here a lot.

LauraMM: Spencer needs to get back to his family

BjB . o O (I'm going to be at the NSTA conference in Philly in March)

LauraMM: But I can hang out a little while longer since mine just went to bed

JeffC: thanks for much for coming Spencer, and everything you're doing at Fermilab! (you too Laura!)

LauraMM: Thanks Jeff

SpencerP: Thanks for your time. Hope to see some of you and your friends next Thursday!

SpencerP: And thanks so much for inviting us.

LauraMM: Yes

SpencerP waves

JeffC: in a couple years you can just duct tape them and use the closet Laura... one is definitely too young to duct tape. and yes... I'll definitely be here Thursday.

SpencerP left the room (signed off).

PatV: Over the summer, I collaborated with the Director of Undergrad Ed (physics) at Cornell on physics careers: <http://www.physics.cornell.edu/careers/career-resources/>

JeffC: have you seen this before, Laura?

JeffC: and yes... I'm kidding about the duct tape.

BjB . o O (but not the closet ;-)

JeffC: lol

LauraMM: looking at the career-resources

LauraMM: bookmarked it, thanks

PatV: Erich and I devised a 4-part plan. The web site, a session for undergrads at Cornell on careers, a guest speaker once a month to talk about his/her career, and a big session for alumni to coincide with the opening of the new physical sciences building next fall.

LauraMM: That sounds extensive. Wish they had done that when I was an undergrad

PatV: Many people have said that the colleges should do this for every major.

LauraMM: Is this in progress, or have you completed a year?

LauraMM: They should probably start it in high school

PatV: We started with the session for undergrads in Sept. The session went well--about 100 students came. So--our plan is a work in progress. I hope Erich will give a talk about it.

LauraMM: nice - I bet the feedback you get at the end of the year will be positive

BjB agrees that this sounds like a great outreach program for high schools

PatV: I compiled a list of potential speakers. We have Cornell alumni with careers in teaching (all levels), government labs, industry, law, science writing, etc.

JeffC: there are definitely several excellent programs going on around the country... but as far as I can tell... they're still in the brick and mortar stage for the most part, even with online presence. when Gail Hoskins and the Eisenhower National Clearinghouse was around, I thought that there was a place where a science or math teacher could find what's going on out there... I wonder if there's a void now that it's gone. A place where science teachers on any level can go and see all the good stuff.

LauraMM: Be interesting to see if more students decide to stay on a science career track after a program like this, as compared without it

PatV: When I mentioned it on a listserv, I immediately had requests from high school teachers...

PatV: Laura: That is the idea. I hope it works.

JeffC: thanks to both of you for coming today

LauraMM: Thanks for having us

SusanR: Thanks, Jeff for hosting

BjB waves goodnight. Thanks, Jeff, Laura and Pat.

JeffC: i'll try and get in touch with Gail and tell her about next Thursday.

LauraMM: good night Susan and Pat, nice meeting you

LauraMM: And always a pleasure Jeff and BJ