Supercomputing Challenge Board of Directors
Meeting Minutes - August 26th, 2013
Home of Bill and Nancy Blackler, Rio Rancho, NM

1. 10:08 AM - **Call to Order**

2. 10:09 AM - **Quorum Achieved; Board Members Present:**

Ed Angel	Present	
Bill Blackler	Present	
Bob Bolz	Present	
Tom Bowles	Present	
Ron Davis	Present	(joined at 10:31 AM)
Celia Einhorn	Present	
Betsy Frederick	Present	(by phone)
Tony Giancola	Present	
David Kratzer	Present	
Lorie Liebrock	Present	(by phone)
Patty Meyer	Present	
Richard Oliver	_____	
Bob Robey	Present	
David Rogers	Present	(joined by phone at 11:08 AM for biz plan discussion)
Tim Thomas	Present	
Teri Roberts	Present	(by phone)

Others Present: Jim Ahrens and Pat McCormick (both by phone for biz plan discussion)

3. 10:11 AM - **Approval of Agenda**

1. (10:00 am)   Call to Order
2. (5 min)   Quorum
3. (5 min)   Approval of Agenda
4. (5 min)   Approval of Previous Minutes
5. (5 min)   Board membership issues: resignations, additions, nominations
6. (20 min)   Treasurer's report: IRS Form 990; 2013-14 Budget Proposal -- Bill Blackler, Betsy Frederick
7. (10:40 am 20 min) Recent Activity and News: STI; Meetings with UNM (Michalis Faloutsos, Jed Crandall, Karen Kinsman), Udall STEM-H
8. (11:00 am 15 min) Business Plan and Action Plan -- Tom Bowles (visitor call-in Jim Ahrens)
9. (11:15 15 min)   Marketing Plan
10. (11:30 15 min)   Accounting Plan -- OMB Circular A-110
11. (11:45 30 min)   Kickoff Plan
12. (12:15 20 min)   **Lunch**
13. (12:35 25 min)   Deferred discussion
14. (1:00)   Adjourn
15. (1:00-2:00)   Committee meetings

Approved unanimously - Celia moved, Teri seconded.

 4. 10:14 AM - **Approval of Previous Minutes**

One correction: 10.g) "$8L" → "$18K"

Accepted unanimously - Tony moved, Tom seconded.

 5. 10:16 - **Board membership issues**: resignations, additions, nominations

  a) We need representation from SNL. Betsy and will follow up with Richard Oliver to see if he is still interested. David Rogers has moved from SNL to LANL and was not able to attend this meeting; David may have a good suggestion. Tom suggests Rob Leland. Patty recommended Christina Montoya, an alum who runs the cyber security center at SNL.
  b) A second SNL representative would not hurt.
  c) Tom B: Sandia has a lot of admin people who could help; don't need to be Board members. E.g., Elizabeth Keller, who runs their outreach program for the science park.
  d) Ed recommended Lydia Tapia from UNM. Tony G. introduced Celia to Pamela Weese at UNM – who had a lot of ideas about fundraising. Need to watch for conflicts of interest. Celia suggested Michalis Faloutsos at UNM Computer Science.
  e) Lori recommended Scott Chadde from NMT.
  f) Ed: Eric Whitmore is another good possibility.
  g) Lori, with respect to the legal and biz development side, recommended Mark Fidel, a lawyer and president of CAaNES, LLC (http://www.caanes.com/).
  h) Celia: John Donahue, one of Joel's ex-students who works with Mark, is interested; they have donated scholarships and they help with the kickoff.
  i) If we are thinking about expanding to the south, we need Board representation from NMSU. Tom B. suggested Nicole Vogt, a professor at NMSU (see http://astronomy.nmsu.edu/dept/html/directory.faculty.nicole.shtml; this is the daughter of Caltech Professor Rochus E. (Robbie) Vogt; see http://directory.caltech.edu/cgi-bin/search.cgi?uid=vogt). Gary Caruthers just became president there – Tom knows him and many other people there. Celia suggested Becca Galves. Lori suggested looking at the NMSU people doing the GK12SF program.
  j) Terry and Bob will follow up on these names, for Board membership and other roles.
  k) Since we lost Jordan, Celia recommends another student for the Board: Randy Van Why.
  l) Turns out there is no concept of a student member in the bylaws; we can treat students as guests.
  m) We'll try to re-org the agendas to accommodate guests.

6. 10:30 AM - **Treasurer's report**: IRS Form 990; 2013-14 Budget Proposal -- Bill Blackler, Betsy Frederick

a) Bill is going to focus on the Profit and Loss Statement for the full year, which he handed out… these documents will be placed in an electronic repository, currently being organized.
b) Of the $21K, $18K came from LANL CCS, so we have to move this from donations to scholarships.
c) "Cash income" (Total Income) was $194,910.70; Total Expenses were $156,197.56, leaving a Net Ordinary Income of $38,713.14.
d) From this we had budgeted income of $124,300; we ended up at $70K; of that $60K came from LANL.
e) Bob R. recalled that LANL gave us next year's money early. David K reminded us that we can't get the next shot until January.

f) On the **income** side, the major shortfall was participation fees. We anticipated that we were going to have $12,000, but we only got about half of that. Where it comes from: we have to shake the bushes harder; when schools don't have the money, we "scholarship them". We did get some money from GUTS/Challenge teams … six months later.
g) **Two Action Items: (1)** we need to continue to follow up on these things (for this year); **(2)** we need to discount that budgeted item - if we are getting 60% return, we need to get that into the budget.

h) We need to be hitting the budgeted numbers within about 20%.

i) We actually held down **expenses** ($90K under): budgeted $247,010; actually spent $156,197.56. The major deviations: saved on the Executive Director; on the lodging and rooms, we saved $19,820.34 - HPC3 covered that; saved $19,850 on stipends - EPSCoR and the NM Tech MST program helped cover STI; saved $5,708.49 on meals and snacks - Elie (NMT marketing group) paid for the pizza party (see previous Minutes.)
j) We exceeded the expense budget in four areas: (1) awards: $11,162.63 – we held the budget down, anticipating reduced income; (2) scholarships: same thing… and we exceeded that budget by $15,15.00; (3) lead consultants: same thing… we had budgeted a cut in pay, but since we had the money, we went ahead and paid them; (4) the accountant came in $2,136 above expected.
k) Bob R.: the purpose of a Treasurer's Report is to explain discrepancies in the numbers; all this would be easier for the Board to absorb if we made **footnotes** attributing these discrepancies to in-kind contributions.
l) It was suggested that we ask Gary to join the Board, but Tom pointed out that we are already talking about adding 6 or 8 more Board members; it gets logistically harder to add more.

IRS form 990

m) Bottom line: all problems solved!
n) It was a date error: we were approved as a non-profit in April 2006, which was Federal FY 2005 (FFYs are identified by the calendar year as of Dec 31st.) It was in FFY 2008 that we received the $567K income, so it may have become beyond the statute of

limitations. After they were pressed on this point, they went ahead and eliminated the requirement for the audit.

o) **Motion**: Tom moved to accept the past Treasurer's Report as amended; Tim seconded; **approved unanimously.**

More / Misc.

p) (Budget for next year to be discussed after lunch.)

q) David K.: Good news… LANL (or LANS) has some money: $30K. LANL prefers that this money be spent on next year's STI. Carol Rutten told us to send the bills. **We need to verify** if it was LANL / LANS (It was LANL money, dhk). We have paid all the expenses for this year; we have not received the bill from NMT. This year's STI may have cost $75K.

r) Current balances… checking account: $40,914.24; savings account: $73,965.57.
s) We still have to pay ~$20K to NMT, so the check book is getting low.
t) Bill: when comparing the assets at the beginning of the FY with those at the end, we are down about $60K. Some of that money was expended in the current FY, not the last one, covering a period from July 1st to Aug 24th , and a lot of that went for STI. It is important for us to track this.
u) Ed & Bob: our cash position is much weaker; this is going to continue to be an issue as we move forward through the economic downturn.

 7. 10:50 AM - **Recent Activity and News**: STI; Meetings with UNM (Michalis Faloutsos, Jed Crandall, Karen Kinsman), Udall STEM-H

STI

a) David sent out the report that Irene sent to Google: got $13K from CS2HS; also $5,500 from GUTS to support the GUTS participants.
b) 52 teachers, 20 facilitators / staff / instructors (these numbers include CS4All.)
c) UNM EPSCoR (Mary Jo Daniels) did provide $19,900 (**did we get the check yet?** – we think not) to cover stipends and travel. (Check has been received, dhk.)
d) Lori will double-check that NMT EPSCoR is money coming from NMT – about $35K is coming in to pay for this just-finished STI.
e) We have not yet received a bill from NMT dorms (~$20K); it was nice that the roughly 30 people who took the course for credit had their housing paid for by NMT, thanks to George Becker and Lori (our instructor of record). So we did not have to worry about paying tuition, and we also got a room-related discount of $125 per person.
f) Lori had all the people who took it for credit send two-page reports; it was very uplifting to read them. There were only a couple of less-than-stellar reports; only one was very negative ("totally lost")

g) Bill would like to invite Susanna Martinez to the kick-off; would like to send the STI comments. We think this would be fine; make sure to let Lori and Dr. Dan know about it all.

h) Bob R.: As our teachers find out whether or not they will be supported to run a program, we would like to track that and follow up. If they cannot get their school to run a program, they need to do *something*; e.g., volunteer to mentor other schools. We want to make sure they are moving forward with their professional development somehow.

Other items

i) Celia has been busy with UNM: she met with Michalis Faloutsos and Jed Crandall. Michalis wants to support us. He has many ideas; e.g., he wants us to connect to an entrepreneur contest happening at UNM's Anderson School of Management.

j) UNM is going to step up to the plate; they already do a lot. Ed pointed out that we used to be supported by UNM/IT, but recently not. We should try again.

k) Jed Crandell (UNM), Lori L. (NMT), Neal Pickett (LANL), and Christine Montoya from Sandia are beginning to plan for a cyberdefense team at Kickoff 2014. Tom pointed out that the NMTC has a cybersecurity working group. Tom is involved, running it for the NM Tech Council. Celia: SNL, UNM, LANL are quite excited about this.

l) Patty and Celia went to a free the United Way lunch at the Embassy Suites Hotel, where they met Karen Kinsman at the UNM STEM outreach office; she runs the Science Fair and maintains a large database. She holds free teacher workshops; e.g., technical writing, mentoring, etc. She is excited to work with us.

m) At Tom B.'s suggestion, Celia and Patty went to meet with Tom Udall's folks at UNM West, people who are running a 'STEMH (Health)' workshop out of Udall's office. There were keynotes, panel discussions: Kurt Steinhaus gave one, advertising his Espanola Science and Math Academy; another was by Tony Maffaletto, who is starting another charter school, on STEM/Health; there was a woman from innovate/educate working with St. Vincent's. It seemed clear that we are doing best practices in STEM – rigor and relationships. There are many career opportunities in STEM/Health.

n) (Deferring continued discussion of recent news until after lunch.)

8. 11:08 - **Business Plan and Action Plan** -- Tom Bowles (visitor call-in Jim Ahrens)

Introduction…

a) Jim Ahrens, Pat McCormick and David Rogers on the phone.

b) Earlier in the summer (July 8th), Tom had sent out a long-term plan, featuring the long-term goal of making the Challenge a national scale program.

c) President Obama and others are recognizing how critical these types of skills are for future economic development and competition; we're falling further and further behind in STEM education; a NY Times article yesterday provided an update: 14th overall, 22nd in computing skills in the world, etc. In Tom's opinion, "we are looking at the demise of the USA."

d) But we also need a tactical plan. We went back and revised it to include a tactical plan, featuring a regional effort… Years 1 and 2: go to NMSU; Years 3 – 5: go to Colorado and Arizona, through contacts.

e) Bob R.: A key issue is: do we need to expand to remain viable?

f) Tom: See page 5 of the plan… There are 9 action items that we need to start executing. At the end of the presentation, the Board needs to decide what of these to adopt.

g) We should engage sponsors in a different way than we have in the past, so that there's direct value and ROI to them; marketing and publicity efforts should be tuned to optimize such connections. In the document sponsors are grouped within certain categories.

h) Tom took us through the proposed Actions (#1 - #9; they are not repeated here; these documents will be placed in an electronic repository, currently being organized)…

Regarding Action #1…

a) We should try to implement as much of **Action Item #1** as possible by **next spring;** some elements of this may take up to a year; some elements may already be in place; Tom will work with Bill to check on this.

b) What typically happens, in the late spring and summer, Feds come out with calls for next FY. So we need to be ready to do this by next spring.

Regarding Action #2…

a) This **must be initiated in Fall 2013.** We need to meet with Ben Ray Lujan, Heinrich and Udall, and Pierce, who are (mostly) supportive. We'll need legalities in place to be able to accept funds programmed for the Challenge. We must be plugged into such funding networks. Also, we must get our success rate up above 50% to be viable; this is really important for us as an organization.

b) Bob R: the folks on the phone are all in the LANL/CCS group. They have contacts nationally with vendors, DOE, etc.

c) Jim A: ...has already talked to Nvidia. They are quite interested. They expect to hear back in about a week. We will approach more than one vendor at a time.

d) Bob R: We are trying to initiate a parallel processing sub-theme at the Kickoff to set the stage for Nvidia and Intel.

e) Jim: For parallel processing, there is an opportunity to talk about Thrust Libraries, a higher level of abstraction. (Lori: That's much more appropriate for this group of students.)

f) Jim: Also, there are discussions at LANL about how the lab is supporting CS… it would helpful for the Challenge to articulate more specifically what money is needed for what and how LANL will benefit.

g) Tom: DOE secretary Moniz has just announced that he is reorganizing innovation, entrepreneurship and tech transfer programs within the DOE. Tom knows the Secretary

well; the Secretary knows NM well, knows the needs, understands business… we should be able to complete effectively. The time is ripe.

Regarding Action #3…

a) The Legislature and Executive Branch used to support the Challenge, but when the downturn hit, they turned off everything. We need to find champions ahead of time to sponsor legislation.
b) Last week, Tom met with Carl Trujillo, chair of the Science, Technology and Telecommunications Committee. He's a materials scientist at LANL and understands the situation. There should be more champions in the Legislature, since there is too much turnover elsewhere.
c) There is a meeting coming (next Thursday) up with a public comment period.
d) We need to get on the agendas for the fall committee meeting (see the report.)
e) We need at least four champions, both Republican and Democratic.
f) Tom: If we are going in for O($50K), we need to have those people in place; by the beginning of December, they need to be drafting legislation
g) This is a long-term endeavor; we need to be setting the groundwork. That said, our needs should be articulated as short-term, not for administration; funds could be STI or for expansion.

Regarding Action #4…

a) An intern program could bring in students to work at Intel, HP, etc… this is something that Jamie Grindatto would support; he has said that he can't find enough US Citizens to fill his positions (worldwide!)
b) We should be going after cyber-security groups.

Regarding Action #5…

a) This will get people more connected and realizing the benefits to them.
b) We need to launch this this year and then ramp it up.
c) Lori: this will work only if we engage Anderson School and Entrepreneur Group at NMT. We need to make an **action item** for this, under this Action.

Regarding Action #6…

a) Historically, David, Bob and Bill have data on how many students went on to UNM, etc. But now we need to be able to lay this out in a very business-like fashion. This is a key element – the observation has been that we train people here, and then they leave and go elsewhere. We need to start with harder data on this problem.

Regarding Action #7…

a) Bob R.: We need to be publishing at national conferences, etc. We can't get Federal funding if we are being asked "who are you?"
b) Observation: the web site is fine for students, but it is not adequate for marketing to new people.

Regarding Action #8…

a) We should start another STI down south.

Regarding Action #9…

a) Expansion in Colorado and Arizona would constitute the nucleus of a southwestern consortium.
b) Bob R. would like to expand around the DOE cluster; also the EPSCoR cluster… depends on who we get money from.
c) Ed: We have to talk about what we have to offer - a lab-based program, versus a regional program.
d) Lori: Another State not to forget is Utah.

General Discussion…

a) Bob R.: We need to pick three items to tackle this next quarter. Tom proposed that we act on the first three items and state that the Board supports the regional program. Also, who is going to take on all these tasks?
b) Lori: a very fundamental issue is that your introduction's Mission/Vision does not match the SC Challenge's current one. Would this change the Challenges Mission and/or Vision?
c) Tom: This has never been aligned to the Board; no motion has ever been made to that effect. At this time, this is simply his vision of what is going on in right now in entrepreneurship and innovation.
d) Bob R. felt there was a consensus among Board members that this is at least a working document; that the mission/vision is that of the Board, if not yet that of the "the program".

e) **Motion**: Ed moves that **this is a Board-endorsed plan and an internal document**; it should not be distributed publicly; people receiving it need to be associated with the subcommittee. Bob B. seconds - **approved** unanimously.

f) **Motion**: Tom moves to immediately implement the first three items – to obtain federal and state funding. [There was no recorded second, nor a recorded vote on this motion.]

g) Bob needs to get a sense from the Board and the staff about the accounting issue – this is a big deal. Right now we do not have the system to deal with Federal contacts. Hopefully by this time next year we will be ready for this. We have to have rules and procedures for purchases (and any action that we do.) We are not specifying what the rules are at this point, but we have to have them. Hotels, travel, contracts, staffing, etc. Applied in a consistent manner. We would need to shift to an accrual-based method of accounting, with an overhead rate.

h) We have to run the Challenge as a business, with everything that entails. We have to adhere to Federal Compliance protocols as well. If a federal contract comes in, the first thing they are going do is audit the books. We need to be prepared for this.

i) Expertise can be found in the likes of the Santa Fe Community Foundation, EPSCoR, United Way, GUTS (SFI is the fiscal agent), Innovate/Educate. What used to be called OMB circular A110 encodes standards for universities and non-profits; it's still less rigorous than the standards for commercial business.

j) Going forward, we need to have a policy manual draft entry for each type of purchase. All we've done so far is set some limits in the bylaws. Also, we are going to have to justify the overhead rates to the feds. The labs are under increasing pressure to meet these criteria for these donations.

k) Bob R.: If we don't do this, we are not viable. If we do have this, there is great potential to broaden to other STEM projects; we can talk about designing separate programs; we can become the go-to organization. It's do or die.

l) We need an executive director – a single face for the Challenge. We can't afford now. At this point, the plans are addressing how to increase our resources.

m) We need to think about how tasks are allocated between the Board and the staff.

n) We should be willing to pay some money for this; this should go into our budget. It is a hard goal, but there seems to be a consensus; we all seem to be on-board.

o) (Remainder of discussion deferred until after lunch.)

9. 12:00 - **Marketing Plan**

DEFERRED

10. 12:00 - **Accounting Plan** -- OMB Circular A-110

DEFERRED

11. 12:01 - **Kickoff Plan**

a) We are shooting for 350 students and 50 to 75 teachers.

b) We are getting laptops like crazy; APS is coming through; SFI; the State; donations from a laptop rental company… we have out-grown NMT available capabilities.

c) We're working closely with Irene and U. of Chicago to focus on epidemiology work. Did some at expo and the kids loved it. The U of C people are willing to do Meet The Scientist, etc.

d) Bob R.: N.B., there is a new epidemiology expert at LANL, Sara Del Valle. (http://public.lanl.gov/sdelvall/)

e) We're doing a survey monkey to measure what level the alums are with us. We have some fantastic on-the-ground help with Chris and Scott at NMT. We are going to make a site visit on Sept 20th.

f) We were contacted by Glorieta – they are interested in us coming back there. Some didn't care for this, wanting to be on a college campus. It was noted the 90% of attendees came to the STI with their own computer; we need to watch out for 'BYO Device' issues.

g) The curriculum is just coming together: There will be technical writing (Kathy Pallis), parallel programming, data analysis…

12. 12:14 PM - **Lunch**

13. 1:02 PM - **Deferred discussions**

BACK TO THE BUSINESS PLAN…

a) Coming up on Sept 5 and 6 is the STT Committee meeting at the UNM Science & Technology Park – see page 6 of the Biz Plan.) Carl Trujillo is the chairperson of the committee. Public comment sessions are late in the afternoon on both days; probably not a good place for students, but we should have someone from the Board make a presentation: tell them about the program, that it's we think this is an under-pinning of NM STEM and eco-dev efforts… etc.

b) We have two minutes to stand up and make the point. "I support this… It is important because…" (The last one of these that happened, there was a sign-up sheet.) We then need to follow up; set up something a week or two later.

c) There are two points that we can make: (1) we need to expand to meet the needs of the State; (2) the state used to support us, but they've stopped.

d) If they are going to put something into a bill, what are we asking for? They need an idea of the scale; if we are trying to meet the needs of companies like Intel, we need a couple of $100Ks.

e) Concerning going after Federal funding: for policy building matters, the possibilities are to do a formal report on each event, with a list of sponsors on it as a contract item, or do an end-of-year report; it depends on what the sponsor wants to see.

f) If we want to get Federal funding for next year, we may have to do something like go through SFI.

g) We may want to do a dry-run: we take the money coming in for STI and try to follow all federal guidelines… every time we hit something we don't have a policy for, we can draft one. Do the Feds have rules about bidding? Our policies already speak to this to a certain extent. Also, there is a different standard for 501c3. The guidelines say you must have a policy manual. It doesn't say what the policy is, but there has to be one. E.g., time-sheet, etc…

h) The 'other DOE', the Education Department is much more stringent than the Energy DOE. NTC's had large grants recently, and the E.D. is very picky; it is not like NSF or (energy) DOE. We do need to worry about the E.D.

i) Tom recommends that we start working on performance measures, management, ROI, technical performance, etc. This is a big job; the Feds don't need this; they only care about the deliverables. But for sponsors, this is important.

j) For NSF grants, we have to do evaluations at the end of the grant… and we need to have costs and comparisons of outcomes for the students; would our students have done as well without us? We've not had those data in the past; PED hit us very hard under the previous administration. But there are all kinds of privacy constraints.

k) When Bob R. visited the Colorado School of Mines last year, there was a woman who relentlessly queried students about job offers, etc… We would like a parents group to gather this info. We may want minority and low-income status on the list for data collection. We might get help from Peter Winograd, who is responsible for statistics at UNM.
l) Out at the schools, you can't get that info from the kids unless they offer it. We need to check if the IRB covers those kinds of questions.

m) Referring to the proposed budget table (see p. 18 of the business plan)… It was suggested that HP, Nvidia, Steve Ballmer, foundations, economic development groups ought to be added. Most of these all ought to be cases where we already have contacts; we should not walk in the door blind.
n) There are two distinct groups: longer-term clients; and sources of smaller donations.
o) We might assign urgency looking at end-of-year money at SNL. They are trying now to figure out what to do. We need to get visibility in the Director's office.
p) Tom volunteered for the Business Plan committee lead. Bob B. would like to contribute. We expect Terry Roberts is also going to want to be interested.

BACK TO THE MARKETING COMMITTEE AND PLAN…

a) Bob R. is willing to be a lead member of a marketing committee.
b) We'll need a staff person / funding to fix up the web page. Lori suggested look at getting help from the technical communications programs at NMT and/or UNM; this could be a low-cost way to develop marketing materials. Tom suggested that you really want this integrated into one package, and this is best done by a professional.
c) Various committees were reviewed… most need to be re-invigorated.
d) We need to pull out at least the three, maybe four time-critical action items into a separate document and focus on those for the six months.

BACK TO THE ACCOUNTING DISCUSSION AND PLAN… -- OMB Circular A-110

a) Since he now has the end-of-year data, Bill will get the QuickBooks software.
b) Rule of thumb for overhead: a factor of two if there are reasonable benefits. Power, phone, internet access, website management, compliance costs… all of these are included in the overhead. There was some confusion about the segregation of fringe versus overhead. There was a question as to whether office space for employees is a direct expense or overhead. It was suggested to get a lease agreement first, then build that also into the overhead.
c) With multiple contracts, there may be issues of fairness.

14. 1:54 PM - **Adjourn**

Respectfully submitted to the Board,
T.L. Thomas, Secretary