

**Wednesday, November 1, 2006 NRI TPG Conference Call
4-6p Eastern / 3-5p Central / 1-3p Pacific**

Attendees: Ming-Ren Lin (AMD), Zoran Krivokapic (AMD), Bruce White (Freescale), Tak Ning (IBM), Tom Theis (IBM), C.Y. Sung (IBM), George Bourianoff (Intel), Paolo Gargini (Intel), Frank Robertson (Intel), George Thompson (Intel), Gurtej Sandhu (MICRON), Bob Doering (TI), Jeff Welser (NRI), Lisa Bevins (NRI)

NSF-NRI Pre-Proposal Discussion

- To view current proposals, visit the hub at <http://thehub.src.org/SRCForums/dispatch.cgi/nriproposals/docProfile/100087/d20061003213252/No>
- Twelve proposals have been submitted that were discussed at length. The majority of the proposals were considered quite good, with only a couple that did not fit as well with our main NRI focus. (Details of the discussion on specific proposals were not captured here, for fear of “memory-bias” on the part of the chair.)
- Two proposals from the SWAN team will be submitted by Friday 11/3, as they are still working to find an appropriate NSEC/MRSEC to partner with. They will be considered in our final discussion and rankings.
- Jeff set up a separate TPG proposal selection meeting on Monday, November 6 at 4-5 eastern. Lisa has sent a calendar invitation.
 - At this meeting, we will decide our final ranking / plans for all of the proposals, and Jeff will subsequently prepare the appropriate support letters. **Therefore, be sure to submit your final scores by 11/6 AM.**
- NRI does not vote on NSF board – we simply send our letters of support. We will likely send a letter for all (or most) of the proposals we have received; however, we will most likely only fund 5. Last year, we wrote letters for the majority. We can do 3 tiers of letters: very strongly support, strongly support, support. Jeff will close with Larry Goldberg on exact form the letters should take.
- Last year, Hans gave a debriefing to the non-supported proposals, Jeff plans to do the same. We will give the letter (on NRI Letterhead) to the PI for them to submit to NSF.

NRI Mission Statement Discussion

- Jeff submitted the following suggestion for the revised Mission Statement via email dated October 19
 - NRI Mission: Demonstrate novel computing devices capable of replacing the CMOS FET as a logic switch in the 2020 timeframe. These devices should show significant advantage over end-of-the-roadmap FETs in power, performance, density, and/or cost to enable the semiconductor industry to extend the historical scaling trend of increased information processing per dollar beyond the limits of CMOS. To meet these goals, NRI is focused primarily on research on devices utilizing new computational state variables beyond electronic charge. In addition, NRI is interested in new interconnect technologies and novel circuits and

architectures, including non-equilibrium systems, for exploiting these devices, as well as improved nanoscale thermal management and directed self-assembly for these structures and circuits.

- Frank and George had sent comments by email, which all agreed made sense to add. Additional changes suggested:
 - Maybe not say “End of Road Map – 2020”, say “ultimate”. Change to presently conceivable transistors.
 - Tom suggested change “increase info” to extend historical trends in price/performance for information technology”
 - Paolo – suggested continuous transition and integrability with CMOS as a desirable outcome
- Jeff will draft changes and take more comments. **Will have final discussion at Monday TPG proposal selection meeting, and will then submit changes to GC at Wednesday meeting for approval.** Want to complete so at the NRI Review we’re consistent in our message

Summary of SWAM Kickoff

- For a full report:
<http://thehub.src.org/SRCForums/dispatch.cgi/nritpg/docProfile/100036/d20061017221239/No/t100036.htm>
- Meeting went very well, everyone was impressed with how Sanjay pulled together different folks in different areas (chemists, physicists, etc). The profs are very eager to work together and plan to set up telecons to continue work.
- Bob thought the strongest aspect was that Sanjay took advantage of a clean slate. He is impressed with the group. People across the board were pleased.
- There will be logistical work over the next few months, e.g sub-contracts with other universities, these tend to be problematic, but definitely off to a good start.

NRI Review update

- Chairs – work with center leaders to bring the review materials together. We will plan to get booklet together for attendees with presentations, so we’ll need the “final” set of charts by November 9. We will send these out to chairs.
- Industry liaisons do not need to present, just act as chair and present introduction.
- NIST will be sending 2 scientists to look for other opportunities where we can work together. Jeff has encouraged industry folks to network with NIST/NSF, as well as any other government reps who may attend.

Open Mike

- **Hans J Coufal Scholarship update** - The Fellowship mailing was sent on Nov 1 to NRI PIs. **Completed applications must be received at NRI by close of business on February 15, 2007.** To learn more about the Fellowship, visit http://www.src.org/nri/Fellowhip_Coufal07.asp

December NRI TPG currently scheduled for Wed, Dec 6 at 4-6p Eastern / 3-5p Central / 1-3p Pacific.