

Dear Faculty Member:

Dr. Robert Yuan spoke at the March 6, 2007 Ohio Valley Affiliates for Life Sciences (OVALS). Dr. Yuan is a member of the National Academy of Sciences (National Research Council or NRC) and has played a significant role in the review of Third Frontier Grants. The purpose of Dr. Yuan's address was to convey tips on how to write a success proposal for Third Frontier funding. One of the most significant points that he made in his address was that the Third Frontier Commission has never rejected the recommendations made by the National Academy Review Panel. We hope that this summary of his points aids you in writing for Third Frontier Funds.

OVALS Conference—March 6, 2007

Notes on presentation made by Dr. Robert Yuan (National Academy of Sciences, National Research Council)

Topic: "Funding Translational Research"

The Ohio Third Frontier Program

Two research areas: Physical Sciences and Biosciences (primarily Biomedical)

Biomedical Research and Commercialization Program (BRCP): operational
Wright Centers of Innovation (WCI): facilities and equipment
Wright Mega-centers of Innovation (WMCI): major consortia and industrial conglomerates

NRC Review Committees—

- Composed of researchers, industry specialists, financial specialists.
- Up to 15 members per committee.
- Reviewers are not paid for their services.
- Each proposal is reviewed by a primary and secondary reviewer plus an external expert.
- Before generating a report there may be a meeting with either forward or reverse site visits. At this time questions can be asked and answers evaluated.
- The review committee then generates a report on each proposal.

The NRC reviews all the reports for each competition and advises the Third Frontier Program (TFP). With successful proposals, the NRC recommends funding, but the final decisions rest with the TFP.

Note: to date, the TFP has followed all of the NRC recommendations.

Criteria for review:

1. Compliance with the RFP
 - a. Respond to all questions. Fill in the details.
 - b. Provide documentation; e.g., letters of collaboration from partners.
Letters from individuals who agree that the research is a "good idea" are not useful. NRC is looking for commitment!

2. Past performance in the Third Frontier Program
 - a. Very important! Remind us of the great things you did with the money we already gave you.
3. Scientific merit
 - a. Peer recognition of leading investigators.
 - b. **Don't bundle disparate NIH-type proposals!** Have a clear interrelationship amongst partners. The center should be one where synergies are obvious and that you will make progress more quickly with the synergy generated or you will be able to tackle problems that soluble with other structures.
 - c. Problems with uneven quality of science. Don't put junior faculty on the proposal. All science proposed must be "great."
4. Center concept
 - a. Justification; i.e., what is the need? In other words, "what great things are you doing that the others are not?"
 - b. Link to commercial partners
5. Game Changing (Wright Mega-centers)
 - a. Novel product/processes that will change the market.
 - b. The Center concept must be novel on a world scale and GAME CHANGING. That is the reason for its existence is such that you can't innovate properly without this center and the way it is constructed.
6. Commercialization Potential
 - a. Business Plan.
 - i. Your commercialization plan should look much like a business plan.
 - ii. Should show an integrated approach to translational research and commercialization. Timelines must be appropriate, given the time it actually takes to commercialize. Dr. Yuan showed that regulatory hurdles simply took time and that proposers who had shorter timelines weren't being realistic and were downgraded for it. You need to be realistic!
 - b. Key team members.
 - c. Roles of partners, including firms.
 - d. Short- and long-term objectives--might include the following:
 - i. Creation of high-quality jobs;
 - ii. Creation of high-tech companies;
 - iii. Innovate new businesses in existing companies.
 - iv. Research should create new products and processes.
 - e. Timeline.

Other considerations:

What is the IP position on new discoveries?

Regulatory strategy.

Leveraging of resources (sponsor funding and in-kind)

Global positioning—look past the U.S.!

Economic potential—consistent with the business plan and market projections

Proposal requires close collaboration and an imaginative concept.

PIs should select the best program for their needs.

Use the best science and technology. No weak projects permitted!

Key personnel all need to be KEY to the success of the project.

The Business plan needs to be professional and very credible as some of the reviewers are financial types.

Timeline (period of performance and beyond).

How are you going to cope with regulatory agencies (if any) and how does this affect the timeline?

Analysis of the competition. Can you prove you can beat any competitors out there?

Projected outcomes. These outcomes ought to be significant and justify the cost of obtaining them.

Risks and benefits. What are the risks and how will you minimize them and how will you maximize the benefits.