REPORT TO THE
LOUISIANA BOARD OF REGENTS

REVIEW OF THE POST-KATRINA SUPPORT FUND INITIATIVE (P-KSFI) PRIMARILY RESEARCH SUBPROGRAM (PRS)

Report of the Final Panel

May 3-4, 2007

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REPORT OF THE FINAL PANEL

BOARD OF REGENTS SUPPORT FUND
POST-KATRINA SUPPORT FUND INITIATIVE (P-KSFI)
PRIMARILY RESEARCH SUBPROGRAM (PRS)
FY 2006-07

INTRODUCTION

The final panel highly commends the Board of Regents for providing, through the P-KSFI PRS, high-level support for scientific research initiatives with the potential for contributing substantially to Louisiana's economic development. The unusually high quality of both the proposals submitted and presentations during the interview sessions with finalists are manifestations of the value of this initiative.

BACKGROUND INFORMATION

Thirty-two (32) proposals were submitted in response to the Request for Proposals (RFP) to the FY 2006-07 Primarily Research Subprogram (PRS) of the Board of Regents Support Fund (BoRSF) Post-Katrina Support Fund Initiative. Proposals were solicited for major multi-institutional, multidisciplinary research projects in Biological Sciences, Information Technology and Materials Science disciplines. A summary of proposals submitted in the P-KSFI PRS is attached to this report and provides the following information for each proposal: number, title, subject area, institution, and principal investigator (see Appendix A).

THE REVIEW PROCESS

A two-phase evaluation process was used to review PRS applications. The process focused first on in-depth reviews by three subject-area panels. This was followed by the final panel's review of proposals across the subject-matter areas.

Phase I: In-Depth Review by Subject-Area Panel

In Phase I of the review process the thirty-two (32) proposals were distributed among three subject-area panels corresponding to the general disciplines eligible for funding consideration through the P-KSFI PRS. Each panel was comprised of three to four out-of-state experts with broad expertise in the disciplines represented by the proposals, as well as familiarity with similar competitive grants programs. Using the criteria set forth in the FY 2006-07 P-KSFI PRS Request for Proposals, panel members worked individually and then collaboratively by telephone and e-mail to determine which proposals in each subject area met all eligibility requirements and were most likely to produce results of high quality and economic impact. Through a telephone conference, the subject-area panel members discussed the relative merits and shortcomings and then ranked proposals for the subject area.

The subject-area panels placed proposals into one of three categories: Recommended for Funding (Priority I), Recommended for Funding if Additional Monies Become Available (Priority II), and Do Not Fund (Priority III). In each subject area, those proposals classified in Priority I were invited to participate in interview sessions with the final panel. In Materials Science, two (2) proposals were recommended for interviews, while three (3) were invited in the Biological Sciences subject area. The Information Technology subject area was unique: one (1) proposal was placed in Priority I, while three (3) additional proposals were considered of equal merit and placed in Priority II. In order to provide the final panel with the opportunity to consider multiple proposals in all subject areas, the decision was made to interview both Priority I and Priority II proposals in Information Technology. Because the proposals in Priority II were ranked as equal by the subject-area panel, all three were invited to participate in interview sessions.

The subject-area review process proved highly valuable to the final panel, identifying meritorious projects within each discipline and providing detailed scientific evaluations of each.

Phase II: Final Panel Review and Funding Recommendations

A five-person final panel comprised of four senior out-of-state professionals whose expertise spans the eligible disciplines, as well as one individual with broad expertise in economic development and technology transfer, convened in Baton Rouge on May 2-4, 2007. This panel interviewed representatives of nine (9) proposals selected by the subject-area panels in individual forty-five minute sessions on May 3, then discussed and compared the top-ranked proposals. Ultimately, the final panel considered the overall rankings of proposals across the subject areas and formulated final funding recommendations to the Board of Regents. These funding recommendations are contained in this report.

The six principal criteria as published in the RFP, used by the final panel in making its funding recommendations, were as follows: (1) scientific excellence and innovation in science and technology; (2) multidisciplinary and multi-institutional focus; (3) economic development and broad impact; (4) leveraging of resources; (5) management plan and objectives; and (6) sustainability. The final panel also considered the appropriateness of budget requests in making final funding recommendations.

The final panel was informed that a total of $21,100,000 would be available in the P-KSFI PRS, including $1,200,000 in Enhancement for Severely Impacted Programs (ESIP) funds, to support PRS projects over multiple years. Utilizing the criteria described previously, the final panel recommended four (4) proposals which it strongly believed were worthy of support and placed them in the Priority I category, provided in **Table I**. From the total available in the P-KSFI PRS, the final panel recommends that proposals ranked 1 through 4 be funded.

Table II lists those proposals that were ranked as Priority II. Though funds are available to support only the four (4) highest ranked proposals, the final panel strongly urges the Board of Regents to seek supplementary resources to provide support for as many additional proposals as possible. Should supplementary resources become available, the panel recommends that additional Priority II proposals be funded in descending rank order.

Table III lists proposals that were not considered by the final panel.

HIGH QUALITY OF INVESTIGATORS

Rating scores reflect the relative merit of proposals as presented to the final panel. For diverse audiences it is important to emphasize that all proposals considered are led by nationally recognized and established researchers. Addressing concerns as noted in the report could elevate to a much higher level a number of proposals which received relatively low scores.

GENERAL PANEL RECOMMENDATION

The final panel strongly recommends that the Board of Regents engage a team of out-of-state consultants to comprehensively review the status of each funded project following the second year of funding. This review should measure progress based on recommendations in the report and benchmarks identified by the principal investigators of each funded project.

TABLE I

HIGHLY RECOMMENDED FOR FUNDING (PRIORITY I) (4)

Rank	Proposal #	Institution	Principal Investigator	Total Amount Requested	Total Amount Recommended
1	008	LSUHSC-NO	Alistair Ramsay	$7,212,558	$5,500,000*
2	011	LA TECH	Vir Phoha	$3,638,104	$3,600,000
3	005	LSU-BR	Edward Seidel	$14,730,021	$7,000,000
4	032	UNO	Charles O'Connor	$8,800,000	$5,000,000*
TOTAL				**$34,380,683**	**$21,100,000**

*** This amount includes $600,000 in ESIP funding.**

TABLE II

RECOMMENDED FOR FUNDING IF ADDITIONAL MONIES BECOME AVAILABLE (PRIORITY II) (5)

Rank	Proposal #	Institution	Principal Investigator	Total Amount Requested	Total Amount Recommended
5	010	LSUHSC-S	Steve Pruett	$7,235,650	$5,000,000
6	007	LSUHSC-NO	Nicolas Bazan	$9,450,000	$6,000,000
7	021	TULANE	Wayne Reed	$13,000,000	$5,000,000
8	029	ULL	Dmitri Perkins	$6,554,925	$3,000,000
9	009	LSUHSC-NO	Hilary Thompson	$2,500,000	$1,250,000
TOTAL				**$38,740,575**	**$20,250,000**

TABLE III

NOT CONSIDERED BY THE FINAL PANEL AND NOT RECOMMENDED FOR FUNDING (23)

001 (Bastian)	002 (Liu)	003 (Acharya)	004 (Lian)
006 (Voyiadjis)	012 (Varahramyan)	013 (Chesney)	014 (Shuh)
015 (Norton)	016 (Li)	017 (Mbarika)	018 (Owens)
019 (Diebold)	020 (Parker)	022 (Tasker)	023 (Deininger)
024 (Miller)	025 (Navar)	026 (Prockop)	027 (Kolluru)
028 (Meselhe)	030 (Zappi)	031 (Kura)	

***Note*:** These proposals are listed by proposal number, not in order of merit. Reviews for all proposals are available in the relevant subject-area report, posted on the Board of Regents' website, http://laregents.org.

COMMENTS AND FUNDING STIPULATIONS FOR PRIORITY I AND PRIORITY II PROPOSALS

General Comments and Stipulations

This section provides comments and stipulations set forth as conditions for funding the nine (9) proposals considered by the final panel. Comments are provided in rank order. Each proposal's rank is provided in the upper right corner of the comment page.

Rank: 1

Post-Katrina Support Fund Initiative (P-KSFI) Primarily Research Subprogram (PRS)
Criteria for Review

Proposal Number	**008PKSFI-R-07 (Biological Sciences)**
Proposal Title	**Center of Excellence for Vaccine Development**
Submitting Institution/PI	**LSUHSC-New Orleans/Alistair Ramsay**
Total Amount Requested	**$7,212,558**

1. Scientific Excellence and Innovation in Science and Technology (40%): SCORE: 40

- ❖ Scientific merit and significance of proposed work
- ❖ Scientific and technological innovation in proposed work
- ❖ Existing research strengths and relationship to proposed activities
- ❖ Faculty experience and expertise in proposed areas
- ❖ Degree to which prior experiences prepare the project team for proposed work

Comments:

- This proposal studies a very important health issue in Louisiana and in the nation.
- These well-funded, productive, and outstanding researchers have the expertise to make the program successful.
- The leadership is outstanding.
- Concise and coordinated development of a translational research capacity for the State should occur.
- If successful, this could become a world-class center.

2. Multidisciplinary and multi-institutional focus (10%): SCORE: 10

- ❖ Nature and depth of partnerships among participating disciplines and campuses
- ❖ Breadth of expertise at multiple campuses
- ❖ Combination of resources from all partners

Comments:

- This is a strong multidisciplinary and multi-institutional proposal.
- There is effective synergistic expertise among the campuses.

3. Economic Development and Broad Impact (15%): SCORE: 14

- Present level of activity – patents and licenses; project-related private-sector involvement
- Potential to advance private-sector commercialization of science and technology
- Potential to attract and/or build private-sector involvement/investment in project activities
- Potential to advance job creation and training opportunities

Comments:

The program has significant potential for development of vaccines for the marketplace through a well-supported technology transfer office.

4. Leveraging of Resources (10%): SCORE: 10

- Degree to which project activities and focus fit institutional priorities
- Degree to which participating institutions provide necessary support for project activities
- Non-institutional support garnered for the project or related to project activities

Comments:

The investigators and campuses have done an outstanding job of leveraging pre-existing funds and it is anticipated that they will continue leveraging at a high level.

5. Management Plan and Objectives (10%): SCORE: 10

- Appropriateness of the level of management and oversight
- Degree to which external agents, including advisory boards, are involved in management of the project
- Alignment of objectives with activities
- Achievability of the objectives
- Plan for formative and summative assessments

Comments:

The management plan is outstanding.

6. Sustainability (15%): SCORE: 12

- ❖ Institutional and partnership commitments to sustaining project activities beyond BoR funding
- ❖ Realistic plans for sustaining activities over a long term
- ❖ Direction of project activities toward long-term development and stability

Comments:

There is a high level of potential based on the track record and promise of this group of investigators.

TOTAL SCORE: 96

BASES OF RATING

Summarize briefly the notable features of the proposal which influenced most decisively the rating given. Views of the entire review panel will be summarized in the general report.

This is an outstanding proposal to develop a vaccine center for the State of Louisiana which could have national and international prominence. Due to budgetary limitations, the panel recommends that funding be reduced from the requested level of $7.2 million to $5.5 million, of which $600,000 is to come from ESIP. Matching funds should remain at the level indicated in the proposal. Recommended PRS funding by project year is:

Year 1	Year 2	Year 3	Year 4	Year 5
$1,448,956	$1,010,901	$1,012,117	$1,013,368	$1,014,658

Rank: 2

Post-Katrina Support Fund Initiative (P-KSFI) Primarily Research Subprogram (PRS)
Criteria for Review

Proposal Number	**011PKSFI-R-07 (Information Technology)**
Proposal Title	**Center for Excellence in Integrated Smart Sensor Surveillance System**
Submitting Institution/PI	**LA Tech University/Vir Phoha**
Total Amount Requested	**$3,638,104**

1. Scientific Excellence and Innovation in Science and Technology (40%): SCORE: 38

- ❖ Scientific merit and significance of proposed work
- ❖ Scientific and technological innovation in proposed work
- ❖ Existing research strengths and relationship to proposed activities
- ❖ Faculty experience and expertise in proposed areas
- ❖ Degree to which prior experiences prepare the project team for proposed work

Comments:

- The principal investigators are experienced and highly qualified, with a strong history of external funding and current active research programs.
- The proposal is well-organized and cogently written.
- The research is innovative, significant, has high scientific merit, and is consistent with goals of the program.

2. Multidisciplinary and multi-institutional focus (10%): SCORE: 8

- ❖ Nature and depth of partnerships among participating disciplines and campuses
- ❖ Breadth of expertise at multiple campuses
- ❖ Combination of resources from all partners

Comments:

- While only two institutions are participating in this project, the investigators presented plans for expansion and future development to include additional investigators and institutions.
- There are strong letters of support from prospective partners, including the Air Force.

3. Economic Development and Broad Impact (15%): SCORE: 14

- ❖ Present level of activity – patents and licenses; project-related private-sector involvement
- ❖ Potential to advance private-sector commercialization of science and technology
- ❖ Potential to attract and/or build private-sector involvement/investment in project activities
- ❖ Potential to advance job creation and training opportunities

Comments:

- The proposal targets highly competitive, vibrant, and high-growth markets.
- The proposal offers a well-supported and comprehensive technology transfer and commercialization plan.

4. Leveraging of Resources (10%): SCORE: 10

- ❖ Degree to which project activities and focus fit institutional priorities
- ❖ Degree to which participating institutions provide necessary support for project activities
- ❖ Non-institutional support garnered for the project or related to project activities

Comments:

- The investigators have done an excellent job of leveraging resources.
- The institutions have created new faculty positions especially for this program.

5. Management Plan and Objectives (10%): SCORE: 10

- ❖ Appropriateness of the level of management and oversight
- ❖ Degree to which external agents, including advisory boards, are involved in management of the project
- ❖ Alignment of objectives with activities
- ❖ Achievability of the objectives
- ❖ Plan for formative and summative assessments

Comments:

- The management plan is well written and describes the areas of research to be conducted.
- There are appropriate management and oversight plans that include advisory boards.
- There are measurable and achievable objectives.

6. Sustainability (15%): SCORE: 13

- ❖ Institutional and partnership commitments to sustaining project activities beyond BoR funding
- ❖ Realistic plans for sustaining activities over a long term
- ❖ Direction of project activities toward long-term development and stability

Comments:

The extensive institutional and partnership commitments are long-term.

TOTAL SCORE: 93

BASES OF RATING

Faculty expertise and experience is outstanding. The research is significant, innovative, and important. This project achieves the goals of the P-KSFI PRS. The budget is justified and matching commitments are appropriate. The final panel recommends full five-year funding at a level of $3.6 million. Recommended PRS funding by project year is:

Year 1	Year 2	Year 3	Year 4	Year 5
$380,634	$805,620	$827,455	$845,146	$741,145

Rank: 3

Post-Katrina Support Fund Initiative (P-KSFI) Primarily Research Subprogram (PRS)
Criteria for Review

Proposal Number	**005PKSFI-R-07 (Information Technology)**
Proposal Title	**The LONI Institute: Advancing Biology, Materials, and Computational Sciences for Research, Education, and Economic Development**
Submitting Institution/PI	**LSU Baton Rouge/Edward Seidel**
Total Amount Requested	**$14,730,021**

1. Scientific Excellence and Innovation in Science and Technology (40%): SCORE: 37

- ❖ Scientific merit and significance of proposed work
- ❖ Scientific and technological innovation in proposed work
- ❖ Existing research strengths and relationship to proposed activities
- ❖ Faculty experience and expertise in proposed areas
- ❖ Degree to which prior experiences prepare the project team for proposed work

Comments:

- The potential for advancement of science is strong. The network's support for a broad range of science critical to the State's needs is important.
- The network technology is scientifically sound.
- The program has strong faculty and administrative leadership on several research campuses.
- Computational science research in Louisiana will be strengthened by the plan to hire new faculty in this area.
- The Institute adds value to graduate education and provides an excellent training environment for postdocs and graduate students.
- LONI has made significant advances in the State's computing infrastructure and enables leading-edge research in the areas of computational materials, computational biology, and computational science.

2. Multidisciplinary and multi-institutional focus (10%): SCORE: 10

- ❖ Nature and depth of partnerships among participating disciplines and campuses
- ❖ Breadth of expertise at multiple campuses
- ❖ Combination of resources from all partners

Comments:

- LONI is an excellent cooperative and multi-institutional partnership with which to further the State's research and educational missions.
- The leadership at LONI embraces a breadth of expertise and resources across multiple campuses.

3. Economic Development and Broad Impact (15%): SCORE: 12

- ❖ Present level of activity – patents and licenses; project-related private-sector involvement
- ❖ Potential to advance private-sector commercialization of science and technology
- ❖ Potential to attract and/or build private-sector involvement/investment in project activities
- ❖ Potential to advance job creation and training opportunities

Comments:

- As a large-scale initiative, LONI's economic development, research, and educational focuses will greatly benefit from establishment of the proposed Institute.
- The computational facility afforded by LONI has potential to impact wide-spread university research, industry and economic development in the State.

4. Leveraging of Resources (10%): SCORE: 10

- ❖ Degree to which project activities and focus fit institutional priorities
- ❖ Degree to which participating institutions provide necessary support for project activities
- ❖ Non-institutional support garnered for the project or related to project activities

Comments:

- Building on previous efforts of LONI, this proposal will significantly enhance the scientific capability of Louisiana institutions.
- The institutional matches committed are impressive.
- The investigators have done an outstanding job of raising federal and other dollars to support this initiative.
- A strong set of supporting letters from national leaders of existing high-performance computing facilities recognizes the potential impact of the Institute.

5. Management Plan and Objectives (10%): SCORE: 10

- ❖ Appropriateness of the level of management and oversight

- ❖ Degree to which external agents, including advisory boards, are involved in management of the project
- ❖ Alignment of objectives with activities
- ❖ Achievability of the objectives
- ❖ Plan for formative and summative assessments

Comments:

- The team has collaborated well together and been successful in attracting resources across participating campuses.
- The formation of leadership and scientific committees as well as an external advisory board is appropriate.
- The objectives and activities are effectively aligned and the assessment metrics are appropriate.

6. Sustainability (15%): SCORE: 12

- ❖ Institutional and partnership commitments to sustaining project activities beyond BoR funding
- ❖ Realistic plans for sustaining activities over a long term
- ❖ Direction of project activities toward long-term development and stability

Comments:

- As evidence of cost-sharing and continuing commitment, the universities have pledged salaries for new faculty members beyond the five-year funding period.
- The institutions have committed other funds and support to the Institute and are expected to continue to do so.
- The program has a track record of successful funding.

TOTAL SCORE: 91

BASES OF RATING

The panel unanimously recommends that the proposal be funded at a level of $7 million for a five-year period. The rationale for the requests for new faculty positions and graduate fellowships as well as the support of 26 existing faculty is not adequately justified. The program can be successful with appropriate reductions in the subcontracts and central program. Much of the infrastructure has been previously funded and is in place. The additional staffing allowed by the $7 million funding should be adequate to achieve the program goals. The panel recommends that the matching commitments in the proposal remain as stated. Recommended PRS funding by project year is:

Year 1	Year 2	Year 3	Year 4	Year 5
$1,601,390	$1,322,040	$1,339,074	$1,359,589	$1,377,907

Rank: 4

Post-Katrina Support Fund Initiative (P-KSFI) Primarily Research Subprogram (PRS)
Criteria for Review

Proposal Number	**032PKSFI-R-07 (Materials Science)**
Proposal Title	**A Center for Advanced Materials and Nanotechnology in AMRI at the University of New Orleans**
Submitting Institution/PI	**University of New Orleans/Charles O'Connor**
Total Amount Requested	**$8,800,000**

1. Scientific Excellence and Innovation in Science and Technology (40%): SCORE: 38

- ❖ Scientific merit and significance of proposed work
- ❖ Scientific and technological innovation in proposed work
- ❖ Existing research strengths and relationship to proposed activities
- ❖ Faculty experience and expertise in proposed areas
- ❖ Degree to which prior experiences prepare the project team for proposed work

Comments:

- This is a very strong group of well-established and productive investigators, many of whom have worked together previously.
- Several of the investigators have a substantial entrepreneurial orientation.
- These investigators are very well funded.
- There is a well-founded collaboration between materials science and health-care research professionals.
- The investigators have been invited to participate in major research initiatives centered at other universities, which indicates their high standing in the fields of advanced materials and nanotechnology.

2. Multidisciplinary and multi-institutional focus (10%): SCORE: 5

- ❖ Nature and depth of partnerships among participating disciplines and campuses
- ❖ Breadth of expertise at multiple campuses
- ❖ Combination of resources from all partners

Comments:

Management and integration of 22 individual investigators are difficult tasks and plans for doing so are not well articulated in the proposal.

3. Economic Development and Broad Impact (15%): SCORE: 15

- ❖ Present level of activity – patents and licenses; project-related private-sector involvement
- ❖ Potential to advance private-sector commercialization of science and technology
- ❖ Potential to attract and/or build private-sector involvement/investment in project activities
- ❖ Potential to advance job creation and training opportunities

Comments:

- The proposal presents very solid technology transfer and commercialization plans which are comprehensive in scope and well supported.
- The project would have consequential links to the State and regional economies.

4. Leveraging of Resources (10%): SCORE: 10

- ❖ Degree to which project activities and focus fit institutional priorities
- ❖ Degree to which participating institutions provide necessary support for project activities
- ❖ Non-institutional support garnered for the project or related to project activities

Comments:

- There is a strong institutional match proposed and the project activities fit institutional priorities.
- UNO has pledged to add two faculty positions to AMRI as well as start-up funds for each position.
- Researchers have previously done an excellent job of leveraging resources.

5. Management Plan and Objectives (10%): SCORE: 7

- ❖ Appropriateness of the level of management and oversight
- ❖ Degree to which external agents, including advisory boards, are involved in management of the project
- ❖ Alignment of objectives with activities
- ❖ Achievability of the objectives
- ❖ Plan for formative and summative assessments

Comments:

- There is a well-structured technical advisory board, which includes a good mix of individuals with high-level expertise.
- The management plan lacks a mechanism for how investigators might redirect funds based on progress toward program goals.

6. Sustainability (15%): SCORE: 12

- ❖ Institutional and partnership commitments to sustaining project activities beyond BoR funding
- ❖ Realistic plans for sustaining activities over a long term
- ❖ Direction of project activities toward long-term development and stability

Comments:

- The investigators have a realistic plan for sustaining both the Advanced Materials Research Institute (AMRI) and this program.
- Submitting a Materials Research Science and Engineering Center (MRSEC) application is an appropriate goal for this program.

TOTAL SCORE: 87

BASES OF RATING

This proposal contains compelling and innovative research ideas, especially in the energy storage work. The collaboration between materials science and health care professionals is a major strength. There is high potential for sustainability and economic impact. This program has the potential to become a center of excellence in Louisiana. The panel recommends that the proposal be funded at a level of $5 million over 5 years and that the institutional match be maintained at the proposed level. The panel recommends that $600,000 come from ESIP funds. Recommended PRS funding by project year is:

Year 1	Year 2	Year 3	Year 4	Year 5
$1,363,636	$909,091	$909,091	$909,091	$909,091

Rank: 5

Post-Katrina Support Fund Initiative (P-KSFI) Primarily Research Subprogram (PRS)
Criteria for Review

Proposal Number	**010PKSFI-R-07 (Biology Sciences)**
Proposal Title	**Center for Experimental Cancer Therapeutics (CECAT)**
Submitting Institution/PI	**LSUHSC-Shreveport/Steve Pruett**
Total Amount Requested	**$7,235,650**

1. Scientific Excellence and Innovation in Science and Technology (40%): SCORE: 30

- Scientific merit and significance of proposed work
- Scientific and technological innovation in proposed work
- Existing research strengths and relationship to proposed activities
- Faculty experience and expertise in proposed areas
- Degree to which prior experiences prepare the project team for proposed work

Comments:

- The goal of developing new cancer drugs in a rapid manner is laudatory.
- The consortium of scientists has impressive expertise in several aspects of drug development and considerable expertise in toxicology.
- Using State dollars, the Center for Experimental Cancer Therapeutics (CECAT) is now operational and progress is being made towards the goal of developing new cancer drugs in a rapid manner.
- Expertise in the drug development field within the group is apparent.
- Some concern exists regarding the lack of expertise in organic chemistry.
- Expertise and productivity among the participating faculty are variable.

2. Multidisciplinary and multi-institutional focus (10%): SCORE: 8

- Nature and depth of partnerships among participating disciplines and campuses
- Breadth of expertise at multiple campuses
- Combination of resources from all partners

Comments:

The proposal meets the qualification for being multi-institutional; however, the infrastructure seems to be centralized at the LSUHSC-S.

3. Economic Development and Broad Impact (15%): SCORE: 12

- ❖ Present level of activity – patents and licenses; project-related private-sector involvement
- ❖ Potential to advance private-sector commercialization of science and technology
- ❖ Potential to attract and/or build private-sector involvement/investment in project activities
- ❖ Potential to advance job creation and training opportunities

Comments:

- The faculty participants exhibit a strong entrepreneurial orientation.
- The technology transfer and commercialization plans are adequate.

4. Leveraging of Resources (10%): SCORE: 10

- ❖ Degree to which project activities and focus fit institutional priorities
- ❖ Degree to which participating institutions provide necessary support for project activities
- ❖ Non-institutional support garnered for the project or related to project activities

Comments:

Institutional matching funds are satisfactory.

5. Management Plan and Objectives (10%): SCORE: 10

- ❖ Appropriateness of the level of management and oversight
- ❖ Degree to which external agents, including advisory boards, are involved in management of the project
- ❖ Alignment of objectives with activities
- ❖ Achievability of the objectives
- ❖ Plan for formative and summative assessments

Comments:

A good management plan is in place.

6. Sustainability (15%): SCORE: 7

- ❖ Institutional and partnership commitments to sustaining project activities beyond BoR funding
- ❖ Realistic plans for sustaining activities over a long term
- ❖ Direction of project activities toward long-term development and stability

Comments:
The plan for sustainability is highly dependent on the success of the screens and drug development.

TOTAL SCORE: 77

BASES OF RATING

This is a worthwhile project with potential. The lack of expertise in synthetic organic chemistry could jeopardize the success of the project. This proposal could be considered for funding if additional resources are available and issues of concern rectified. If additional funding is made available, the total budget should be reduced from $7.2 million to $5 million. The institutional match should remain at the level proposed.

Rank: 6

Post-Katrina Support Fund Initiative (P-KSFI) Primarily Research Subprogram (PRS)
Criteria for Review

Proposal Number	**007PKSFI-R-07 (Biological Sciences)**
Proposal Title	**Neuroprotection**
Submitting Institution/PI	**LSUHSC-New Orleans/Nicolas Bazan**
Total Amount Requested	**$9,450,000**

1. Scientific Excellence and Innovation in Science and Technology (40%): SCORE: 33

- ❖ Scientific merit and significance of proposed work
- ❖ Scientific and technological innovation in proposed work
- ❖ Existing research strengths and relationship to proposed activities
- ❖ Faculty experience and expertise in proposed areas
- ❖ Degree to which prior experiences prepare the project team for proposed work

Comments:

- This is a highly focused, research-intensive, scientific proposal seeking to understand the molecular basis for neuroprotection.
- The research proposed is potentially important and is driven by a strong leader.
- While the research is potentially significant, the focus is narrow and the ultimate impact may be limited.

2. Multidisciplinary and multi-institutional focus (10%): SCORE: 5

- ❖ Nature and depth of partnerships among participating disciplines and campuses
- ❖ Breadth of expertise at multiple campuses
- ❖ Combination of resources from all partners

Comments:

While multi-institutional on paper, the proposal appeared to be highly LSUHSC-NO-centered.

3. Economic Development and Broad Impact (15%): SCORE: 9

- ❖ Present level of activity – patents and licenses; project-related private-sector involvement

- ❖ Potential to advance private-sector commercialization of science and technology
- ❖ Potential to attract and/or build private-sector involvement/investment in project activities
- ❖ Potential to advance job creation and training opportunities

Comments:

- The potential for a drug working via the identified pathways in the near future is unclear.
- The economic impact potential for Louisiana appears to be limited relative to the other proposals evaluated.
- There are no coherent technology transfer and commercialization strategies.

4. Leveraging of Resources (10%): SCORE: 4

- ❖ Degree to which project activities and focus fit institutional priorities
- ❖ Degree to which participating institutions provide necessary support for project activities
- ❖ Non-institutional support garnered for the project or related to project activities

Comments:

- There is a strong history of leveraging resources, especially at the NIH level.
- The budget is excessive relative to the match.
- The project's dependence on unfunded investigators is of concern.

5. Management Plan and Objectives (10%): SCORE: 9

- ❖ Appropriateness of the level of management and oversight
- ❖ Degree to which external agents, including advisory boards, are involved in management of the project
- ❖ Alignment of objectives with activities
- ❖ Achievability of the objectives
- ❖ Plan for formative and summative assessments

Comments:

The management plan is adequate.

6. Sustainability (15%): SCORE: 11

- ❖ Institutional and partnership commitments to sustaining project activities beyond BoR funding
- ❖ Realistic plans for sustaining activities over a long term
- ❖ Direction of project activities toward long-term development and stability

Comments:

This is a solid science project that should be sustained by federal funding.

TOTAL SCORE: 71

BASES OF RATING

The narrow focus of this hypothesis-driven research proposal limits infrastructure development beyond the confines of the program described in the proposal and therefore does not match the goals of the P-KSFI program. The panel found the science and hypothesis proposed to be excellent; however, the scope of the project is too narrow for this program. The panel unanimously recommends that the investigators seek funding through NIH opportunities. If additional funding becomes available, the budget should be reduced to $6 million. The institutional match should remain as proposed.

Rank: 7

Post-Katrina Support Fund Initiative (P-KSFI) Primarily Research Subprogram (PRS)
Criteria for Review

Proposal Number	**021PKSFI-R-07 (Material Sciences)**
Proposal Title	**Linking Research Excellence in Polymer Science and Technology to Economic Development and Industry in Louisiana**
Submitting Institution/PI	**Tulane University/Wayne Reed**
Total Amount Requested	**$13,000,000**

1. Scientific Excellence and Innovation in Science and Technology (40%): SCORE: 30

- Scientific merit and significance of proposed work
- Scientific and technological innovation in proposed work
- Existing research strengths and relationship to proposed activities
- Faculty experience and expertise in proposed areas
- Degree to which prior experiences prepare the project team for proposed work

Comments:

- The proposed Center would be populated by a consortium of strong scientists working in the area of polymer research.
- This is a well-crafted proposal that articulates well the research goals and outcomes.
- The faculty has considerable experience in the area of polymer research which prepares them for establishment of this Center.
- The investigators are currently well funded.

2. Multidisciplinary and multi-institutional focus (10%): SCORE: 8

- Nature and depth of partnerships among participating disciplines and campuses
- Breadth of expertise at multiple campuses
- Combination of resources from all partners

Comments:

The project is comprised of scientists from four Louisiana universities with an integrated research approach for the projected Center.

3. Economic Development and Broad Impact (15%): SCORE: 10

- ❖ Present level of activity – patents and licenses; project-related private-sector involvement
- ❖ Potential to advance private-sector commercialization of science and technology
- ❖ Potential to attract and/or build private-sector involvement/investment in project activities
- ❖ Potential to advance job creation and training opportunities

Comments:

- The proposal documents patents, licenses, and private-sector involvement; however, the bulk of the polymer industry in Louisiana appears to be in manufacturing rather than development.
- The investigators indicated that while most of their current involvement is with the polymer industry outside of Louisiana, one goal of this proposal is to refocus this opportunity within Louisiana.

4. Leveraging of Resources (10%): SCORE: 5

- ❖ Degree to which project activities and focus fit institutional priorities
- ❖ Degree to which participating institutions provide necessary support for project activities
- ❖ Non-institutional support garnered for the project or related to project activities

Comments:

- Although both Tulane and LSU-BR pledged new hires in the area of polymer science, the overall institutional match (less than 15% of the funds requested) is inadequate.
- The investigators have been successful in winning a competition for an NSF Integrative Graduate Education and Research Traineeship (IGERT) program.

5. Management Plan and Objectives (10%): SCORE: 3

- ❖ Appropriateness of the level of management and oversight
- ❖ Degree to which external agents, including advisory boards, are involved in management of the project
- ❖ Alignment of objectives with activities
- ❖ Achievability of the objectives
- ❖ Plan for formative and summative assessments

Comments:

- The major weakness of this proposal is the management plan.
- The researchers are strong and qualified for the polymer research proposed and the research goals are laudable; however, the plan is to distribute the bulk of the funds to as-yet-unidentified researchers through an unclear and poorly defined process.
- It is not clear that the investigators are prepared to conduct such a program and/or administer and monitor the grant recipients' progress and productivity.

6. Sustainability (15%): SCORE: 10

- ❖ Institutional and partnership commitments to sustaining project activities beyond BoR funding
- ❖ Realistic plans for sustaining activities over a long term
- ❖ Direction of project activities toward long-term development and stability

Comments:

While the proposed research program appears to be sustainable, it is not clear how the program activities will be sustained.

TOTAL SCORE: 66

BASES OF RATING

While the investigators have strong individual research programs and a strong track record of achievement, the bulk of the funding is requested for distribution to as-yet-unnamed investigators. The lack of clarity for management and monitoring of the funding program relative to guidelines and standards negatively impacted all components of the proposal. This is a correctable management problem. The panel encourages the investigators to refocus the program and resubmit for future competitions. If additional funds should become available, the budget should be reduced from $13 million to $5 million. The request to administer a grants program in which the PIs themselves are also able to compete for funding should be disallowed. The institutional match should remain as proposed.

Rank: 8

Post-Katrina Support Fund Initiative (P-KSFI) Primarily Research Subprogram (PRS)
Criteria for Review

Proposal Number	**029PKSFI-R-07 (Information Technology)**
Proposal Title	**ACINDER: Autonomic Communication and Information Network for Disaster and Emergency Response**
Submitting Institution/PI	**University of LA at Lafayette/Dmitri Perkins**
Total Amount Requested	**$6,554,925**

1. Scientific Excellence and Innovation in Science and Technology (40%): SCORE: 21

- ❖ Scientific merit and significance of proposed work
- ❖ Scientific and technological innovation in proposed work
- ❖ Existing research strengths and relationship to proposed activities
- ❖ Faculty experience and expertise in proposed areas
- ❖ Degree to which prior experiences prepare the project team for proposed work

Comments:

- The faculty members have considerable expertise in this area.
- While the proposal states that the project will "design, implement, rectify and evaluate proposed energy-efficient data transmission schemes," a number of projects have already been accomplished.
- There is no statement as to why the state-of-the-art technology is insufficient.
- The proposal does not make clear what is required to build and put in place the proposed system.
- Implementation using existing sensors is not considered innovative. The sensors project described is not sufficiently innovative to match the goals of this funding program.
- While challenges are described in the proposal, it is not clear how the system proposed will resolve them.

2. Multidisciplinary and multi-institutional focus (10%): SCORE: 6

- ❖ Nature and depth of partnerships among participating disciplines and campuses
- ❖ Breadth of expertise at multiple campuses
- ❖ Combination of resources from all partners

Comments:

- While the proposal is multi-institutional, there is a clear focus on the University of Louisiana at Lafayette.
- The membership of the advisory panel is not defined.

3. Economic Development and Broad Impact (15%): SCORE: 5

- ❖ Present level of activity – patents and licenses; project-related private-sector involvement
- ❖ Potential to advance private-sector commercialization of science and technology
- ❖ Potential to attract and/or build private-sector involvement/investment in project activities
- ❖ Potential to advance job creation and training opportunities

Comments:

The proposal lacks a coherent applications-driven technology transfer plan.

4. Leveraging of Resources (10%): SCORE: 6

- ❖ Degree to which project activities and focus fit institutional priorities
- ❖ Degree to which participating institutions provide necessary support for project activities
- ❖ Non-institutional support garnered for the project or related to project activities

Comments:

- It is unclear how resources would be leveraged other than obtaining future national grants.
- The University of Louisiana at Lafayette provides most of the matching support.
- Some of the investigators are independently funded.

5. Management Plan and Objectives (10%): SCORE: 7

- ❖ Appropriateness of the level of management and oversight
- ❖ Degree to which external agents, including advisory boards, are involved in management of the project
- ❖ Alignment of objectives with activities
- ❖ Achievability of the objectives
- ❖ Plan for formative and summative assessments

Comments:

- The proposal to establish advisory groups is appropriate.
- The relationship between the proposed research activities and the goals of the project are not clear.
- The development plan for a prototype system might depend on the development of new sensors, etc.

6. Sustainability (15%): SCORE: 11

- ❖ Institutional and partnership commitments to sustaining project activities beyond BoR funding
- ❖ Realistic plans for sustaining activities over a long term
- ❖ Direction of project activities toward long-term development and stability

Comments:

There is high potential for sustainability through normal federal granting opportunities.

TOTAL SCORE: 56

BASES OF RATING

The innovation contribution is limited by the use of existing off-the-shelf components. While the need for the system is justified, the plan for development and implementation beyond the small scale is less than clear. Perhaps the project would be more appropriate for SBIR funding. The request for personnel is not justified. If additional funds become available, the budget should be reduced from $6.5 million to $3 million. The institutional match should remain at the level proposed.

Rank: 9

Post-Katrina Support Fund Initiative (P-KSFI) Primarily Research Subprogram (PRS)
Criteria for Review

Proposal Number	**009PKSFI-R-07 (Information Technology)**
Proposal Title	**Resource Development for High Dimensional Biomedical Data with Large Bandwidth Networking, Visualization and Data Fusion to Facilitate Medical Diagnosis and Decision Making**
Submitting Institution/PI	**LSUHSC-New Orleans/Hilary Thompson**
Total Amount Requested	**$2,500,000**

1. Scientific Excellence and Innovation in Science and Technology (40%): SCORE: 20

- ❖ Scientific merit and significance of proposed work
- ❖ Scientific and technological innovation in proposed work
- ❖ Existing research strengths and relationship to proposed activities
- ❖ Faculty experience and expertise in proposed areas
- ❖ Degree to which prior experiences prepare the project team for proposed work

Comments:

- The focus is narrow and the plan is vague, given the objectives of the P-KSFI PRS.
- While the faculty members have both expertise and experience in the identified research area, overall their strengths were not sufficiently compelling.
- Though this is important translational work, the level of innovation was unclear.

2. Multidisciplinary and multi-institutional focus (10%): SCORE: 7

- ❖ Nature and depth of partnerships among participating disciplines and campuses
- ❖ Breadth of expertise at multiple campuses
- ❖ Combination of resources from all partners

Comments:

- The project's multidisciplinary nature is good.

3. Economic Development and Broad Impact (15%): SCORE: 10

- ❖ Present level of activity – patents and licenses; project-related private-sector involvement
- ❖ Potential to advance private-sector commercialization of science and technology
- ❖ Potential to attract and/or build private-sector involvement/investment in project activities
- ❖ Potential to advance job creation and training opportunities

Comments:

There is a great deal of activity in the private sector and academia in pursuit of these applications. It is not clear where this proposal fits in that very competitive environment.

4. Leveraging of Resources (10%): SCORE: 5

Degree to which project activities and focus fit institutional priorities

- ❖ Degree to which participating institutions provide necessary support for project activities
- ❖ Non-institutional support garnered for the project or related to project activities

Comments:

The proposal leverages the resources of LONI and the access grid.

5. Management Plan and Objectives (10%): SCORE: 6

- ❖ Appropriateness of the level of management and oversight
- ❖ Degree to which external agents, including advisory boards, are involved in management of the project
- ❖ Alignment of objectives with activities
- ❖ Achievability of the objectives
- ❖ Plan for formative and summative assessments

Comments:

- The management plan is adequate and the inclusion of an external advisory panel is appropriate.
- A plan for technology transfer is not adequately addressed in the proposal.

6. Sustainability (15%): SCORE: 7

- ❖ Institutional and partnership commitments to sustaining project activities beyond BoR funding
- ❖ Realistic plans for sustaining activities over a long term
- ❖ Direction of project activities toward long-term development and stability

Comments:

There is institutional commitment, but long-term sustainability of the project seems to be dependent on success in garnering future external support.

TOTAL SCORE: 55

BASES OF RATING

This is a solid but not exceptional proposal to do translational research development in an important area of biomedical science. The proposal should be retooled and considered for NEI/NIH funding. If additional funds become available, the budget should be reduced from $2.5 million to $1.25 million. The institutional match should remain at the level proposed.

APPENDIX A

P-KSFI Primarily Research Proposals Received

Listed alphabetically by Institution, PI Last Name

Name	Institution	Department
Bastian , Frank	LSU Agricultural Center	Veterinary Science
001PKSFI-R-07	***Epidemiology of Transmissable Spongiform Encephalopathy in Animals and Man***	
Biological Sciences		
Liu , Zhijun	LSU Agricultural Center	School of Renewable Natural Resources
002PKSFI-R-07	*Bioactive Components and Functional Foods Products*	
Biological Sciences		
Acharya , Sumanta	Louisiana State University	College of Engineering
003PKSFI-R-07	***Computational Science & Technology for the Oil and Gas Industry***	
Information Technology		
Lian , Kun	Louisiana State University	CAMD
004PKSFI-R-07	***Biomass-Based Nanomaterials and Their Utilization***	
Materials Science		
Seidel , Edward	Louisiana State University	Center for Computation and Technology
005PKSFI-R-07	*The LONI Institute: Advancing Biology, Materials, and Computational Sciences for Research, Education, and Economic Development*	
Information Technology		
Voyiadjis , George	Louisiana State University	Civil & Environmental Engineering
006PKSFI-R-07	Nano-Clay Mediated Nanostructures: a Multidisciplinary Study of Materials with Enhanced Strengthening and Sensing Functionalities (NanoC-S^3)	
Materials Science		
Bazan , Nicolas	LSU Health Sciences Center - New Orleans	Neuroscience Center of Excellence
007PKSFI-R-07	*Neuroprotection*	
Biological Sciences		
Ramsay , Alistair	LSU Health Sciences Center - New Orleans	Medicine/Gene Therapy
008PKSFI-R-07	*Center of Excellence for Vaccine Development*	
Biological Sciences		
Thompson , Hilary	LSU Health Sciences Center - New Orleans	Ophthalmology
009PKSFI-R-07	*Resource Development for High Dimensional Biomedical Data with Large Bandwidth Networking, Visualization and Data Fusion to Facilitate Medical Diagnosis and Decision Making*	
Information Technology		

P-KSFI Primarily Research Proposals Received

Listed alphabetically by Institution, PI Last Name

Name	Institution	Department
Pruett , Steve	LSU Health Sciences Center - Shreveport	Cell Biology and Anatomy
010PKSFI-R-07	*Center for Experimental Cancer Therapeutics (CECAT)*	
Biological Sciences		
Phoha , Vir	Louisiana Tech University	Computer Science
011PKSFI-R-07	***Center of Excellence in Integrated Smart Sensor Surveillance System***	
Information Technology		
Varahramyan , Kody	Louisiana Tech University	Institute for Micromanufacturing
012PKSFI-R-07	*Louisiana Integrated Nanomaterials Center (LINC) - From Research and Development to Commercial Technologies Promoting Economic Development*	
Materials Science		
Chesney , Edward	Louisiana Universities Marine Consortium	
013PKSFI-R-07	*Are Louisiana's Shelf Edge Banks the Center of Abundance and Historical Natural Refuge for the Gulf of Mexico's Most Valuable Reef Fish?*	
Biological Sciences		
Shuh , Maureen	Loyola University	Biological Sciences
014PKSFI-R-07	*Structure-Function Investigation of the Human T-cell Leukemia Virus Type 1 (HTLV-1) Oncogenic Protein Tax*	
Biological Sciences		
Norton , Nick	Southeastern Louisiana University	Biological Sciences
015PKSFI-R-07	*Conservation and Sustainablility of Cypress Ecosystems: A Cross-Disciplinary Research Initiative and Information Transfer Action Plan*	
Biological Sciences		
Li , Guoqiang	Southern University	Mechanical Engineering
016PKSFI-R-07	***Smart Nanocomposite for Hydrogen Transportation and Storage***	
Materials Science		
Mbarika , Victor	Southern University	Center for Information Tech and Innovations
017PKSFI-R-07	*Transfer of Health Information Technology to Resource Poor Communities*	
Information Technology		
Owens , John	Southern University	Environmental Toxicology
018PKSFI-R-07	***Center for Environmental Monitoring and Resource Development***	
Biological Sciences		

P-KSFI Primarily Research Proposals Received

Listed alphabetically by Institution, PI Last Name

Name	Institution	Department
Diebold , Ulrike	Tulane University	Physics
019PKSFI-R-07	*Center for Surfaces, Interfaces, and Shapes: Discovering Pathways to Next Generation Materials*	
Materials Science		
Parker , Geoffrey	Tulane University	Freeman School of Business
020PKSFI-R-07	***Gulf Region Energy Planning Initiative (GREPI)***	
Information Technology		
Reed , Wayne	Tulane University	Physics
021PKSFI-R-07	*Linking Research Excellence in Polymer Science and Technology to Economic Development and Industry in Louisiana*	
Materials Science		
Tasker , Jeffrey	Tulane University	Cell & Molecular Biology
022PKSFI-R-07	***Louisiana Consortium for the Study of Stress Disorders***	
Biological Sciences		
Deininger , Prescott	Tulane Health Sciences Center	Epidemiology
023PKSFI-R-07	***Cancer Research and Translation in Southeast Louisiana***	
Biological Sciences		
Miller , Alan	Tulane Health Sciences Center	LSU Health Sciences Center - NO
024PKSFI-R-07	*Clinical and Translational Research Center (CTRC) at the Tulane University and Louisiana State University Health Sciences Centers*	
Biological Sciences		
Navar , L. Gabriel	Tulane Health Sciences Center	Physiology
025PKSFI-R-07	***New Orleans Consortium on Hypertension, Cardiovascular and Renal Pathobiology***	
Biological Sciences		
Prockop , Darwin	Tulane Health Sciences Center	Center for Gene Therapy
026PKSFI-R-07	*World Class Center for Therapies with Adult Stem Cells*	
Biological Sciences		
Kolluru , Ramesh	University of Louisiana at Lafayette	Ctr for Business and Information Technologies
027PKSFI-R-07	*Developing Innovative Technologies for Natural Disaster Lfecycle Management*	
Information Technology		

P-KSFI Primarily Research Proposals Received

Listed alphabetically by Institution, PI Last Name

Name	Institution	Department
Meselhe , Ehab	University of Louisiana at Lafayette	Institute for Coastal Ecology and Engineering
028PKSFI-R-07	*Forcasting Landscape Morphology and Ecology for Coastal Protection and Restoration*	
Biological Sciences		
Perkins , Dmitri	University of Louisiana at Lafayette	Center for Advanced Computer Studies
029PKSFI-R-07	*ACINDER: Autonomic Communication and Information Network for Disaster and Emergency Response*	
Information Technology		
Zappi , Mark	University of Louisiana at Lafayette	College of Engineering
030PKSFI-R-07	*Developing a New Paradigm for Establishing a Competitive Biofuels Industry within Louisiana*	
Biological Sciences		
Kura , Bhaskar	University of New Orleans	Gulf Coast Region Maritime Technology Ctr
031PKSFI-R-07	*Micro and Nanotechnologies to Control Air Pollution: Life Cycle Assessment and Demonstration on Welding Fume Emissions*	
Materials Science		
O'Connor , Charles	University of New Orleans	Advanced Materials Research Institute
032PKSFI-R-07	*A Center for Advanced Materials and Nanotechnology in AMRI at the University of New Orleans*	
Materials Science		