



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

**Oversight Committee Meeting
August 17, 2016**

1. Call to Order

A quorum being present, Presiding Officer Geren called the Oversight Committee to order at 9:59 a.m.

2. Roll Call/Excused Absences

Committee Members Present:

Angelos Angelou
Pete Geren
Ned Holmes
Will Montgomery
Amy Mitchell
Cynthia Mulrow, M.D.
Bill Rice, M.D.
Craig Rosenfeld, M.D.

Committee Members Absent:

Donald (Dee) Margo

MOTION:

On a motion made by Dr. Rice and seconded by Mr. Holmes, the Oversight Committee unanimously voted to excuse the absence of Mr. Margo.

3. Adoption of Minutes from the May 18, 2016 and May 19, 2016 Meetings (Tab 1)

MOTION:

On a motion made by Mr. Montgomery and seconded by Ms. Mitchell, the Oversight Committee unanimously voted to approve the minutes of the Oversight Committee meetings held on May 18, 2016, and May 19, 2016.

4. Public Comment

Presiding Officer Geren introduced Mr. Cam Scott, Senior Director of Texas Government Relations for the American Cancer Society Cancer Action Network for public comment. Mr. Scott noted that his agency does not request or receive funds from CPRIT, but sees CPRIT as a partner in the fight against cancer. He introduced the Texas Cancer Partnership, which is a new collaboration of organizations in Texas with the shared goal of ending cancer. In addition to the Cancer Action Network, other founding members of the Texas

Cancer Partnership include the American Lung Association, Susan G. Komen Austin, Leukemia and Lymphoma Society, Livestrong Foundation, and Texas Healthcare and Bioscience Institute.

Mr. Scott testified that the Texas Cancer Partnership recognizes that one of the most significant catalysts for progress against cancer is the decision that Texas lawmakers and Texas voters made in 2007 to invest \$3 billion in cancer research and prevention. With the creation of CPRIT, the state has become a global leader in the effort to eliminate cancer.

He invited interested organizations to collaborate with or become a supporter of this important work and noted that the partnership has created a website at www.TexasCancerPartnership.org. Mr. Scott closed by commending the voluntary service of the Oversight Committee members and recognized the importance of the members' role in safeguarding the integrity and the efficacy of CPRIT on behalf of Texas taxpayers.

Presiding Officer Geren thanked Mr. Scott for his comments and introduced Ari Kahn, Ph.D., Human Translational Genomics Coordinator at the Texas Advanced Computing Center for The University of Texas at Austin. Dr. Kahn commented about CPRIT's process for tracking and aggregating the data collected by our grantees. Dr. Khan stated that determining how all the projects correlate and work together will have a large impact on a cure for cancer. Presiding Officer Geren and Mr. Roberts discussed the programs priorities and various ways CPRIT gathers information from grantees and assess impact. Presiding Officer Geren thanked Mr. Kahn for his comments.

5. Chief Executive Officer Report (Tab 2)

Wayne Roberts, Chief Executive Officer, provided an update on several CPRIT activities.

- **Personnel Update:** Mr. Roberts introduced new employees Dr. Patty Moore, Program Manager for Academic Research; Ralph Azeez, Grant Accountant; and Jodi Garza, Grant Compliance Specialist. The Communications Specialist position closed August 12, 2016.
- **2017 Oversight Committee Program Priorities:** Mr. Roberts explained that major drafting of the priorities took place two years ago. CPRIT has two new chiefs with new ideas, so he encouraged the Oversight Committee subcommittees to take a fresh look at CPRIT Program Priorities.
- **Special Oversight Committee Meeting on September 14, 2016:** Mr. Roberts expects that several grant recommendations for recruits and core facilities extensions will be presented for approval at the September 14th meeting. There also may be several contracts and contract extensions for the Oversight Committee's consideration.
- **New Event Starting In September –** Mr. Roberts has invited Thomas Yankeelov, Ph.D., a CPRIT-funded Established Investigator recruit to The University of Texas at Austin in the Department of Biomedical Engineering, to make a short presentation on his work.

CPRIT will plan for one or two grantees to give short presentations on their work at future Oversight Committee meetings.

- American Cancer Society Cancer Action Network Events: Mr. Roberts reported that CPRIT staff have attended events in Houston and Austin put on by the ACS Cancer Action Network, and plan to attend the Dallas event on August 30, 2016. The events have hosted excellent presentations by Senator Kirk Watson, Representative Kyle Kacal, Representative Sarah Davis and others on the impact of CPRIT awards.
- The Quarterly Report on Grant Funding Available shows \$258,000 will be left for this year's allocation if the recommendations presented today are approved.

6. Chief Scientific Officer Report and Grant Award Recommendations (Tab 3)

Academic Research Activities Update

Dr. Jim Willson, Chief Scientific Officer, reports that Academic Research funding in FY 2016 to date is \$198,549,131, not including August awards. Dr. Willson provided an overview of the FY 2016 Academic Research awards, beginning with the recruitment awards. Fifty-six recruitment nominations were received through May 2016 for three 2016 recruitment RFAs: Established Investigators, Rising Stars, and First-Time, Tenure Track Faculty Members. During the fourth quarter of FY 2016, 15 more Recruitment Awards were received and are currently under review. Some recruitment applications are on today's agenda for consideration. The remaining recruitment awards received during the last quarter of the fiscal year will be recommended in FY 2017 because sufficient funds are not available to support all recommended recruitment awards in FY 2016. If recommended by the Scientific Review Council, the award recommendations will be considered at a special Oversight Committee meeting on September 14, 2016.

Dr. Willson reported that CPRIT released six Requests for Applications (RFAs) in February 2016 resulting in 479 applications submitted for review cycle 17.1. The Program Integration Committee's recommendations for funding will be considered at the November 2016 Oversight Committee meeting.

Dr. Willson also noted for the record that at the May 2016 Oversight Committee meeting, High Impact/High Risk Award RP160834 "Integrated-Cavity-Enhanced Pre-Screening for Lung Cancer," was awarded to Dr. John Bevan at Texas A&M University. Dr. Bevan passed away prior to executing the grant contract. CPRIT has approved the institution's request that the Co-Principal Investigator, Dr. Vladislav Yakovlev, replace Dr. Bevan as Principal Investigator for this award.

Academic Research Proposed Awards

Moving on to the award recommendations, Dr. Willson indicated that there are two Core Facility Support Awards totaling \$10,598,728, six Multi-Investigator Research Awards totaling \$27,702,887, and five First-Time/Tenure Track Faculty Member Awards, each

award for up to \$2,000,000 over four years, which are presented for the Oversight Committee's consideration. He noted that the Program Integration Committee deferred two Core Facilities Services Awards and five Multi-Investigator Awards recommendations in May. On August 2, 2016, the Program Integration Committee considered the deferred awards and recommended all seven applications for Oversight Committee approval.

Dr. Willson reported that 10 of the 12 awards for consideration today address specific priorities identified by the CPRIT Oversight Committee. The Program Integration Committee recommends funding each of the Multi-Investigator Research Awards at 80 percent due to concerns about sufficient funds being available for all the awards.

In response to a question about childhood cancer data collection, Dr. Willson responded that childhood cancers are a rare event. Cases are treated at dedicated children's hospitals throughout Texas that are participating in this resource with the Texas Children's Hospital and Baylor College of Medicine. A patient's parents must agree to participation.

In reference to RP160844, *Center for Innovative Drug Discovery: Enhancement of a Shared Cancer Resource*, Dr. Willson was asked what provisions had been made for sharing information. Dr. Willson stated that assembling the information and resources will be overseen by an executive committee formed by the center to judge which investigators have access to the resource based on scientific merit and interest. Dr. Willson also noted that CPRIT requires that all published material from research grants supported by CPRIT funds be entered into the National Library of Medicine's PubMed Central no later than 12 months after the official date of publication for dissemination. Publications that are submitted to the library have to provide access to the actual data sets.

In reference to RP160771, *The Adolescent and Childhood Cancer Epidemiology and Susceptibility Service*, Dr. Willson was asked what "gene environment interaction" meant. He explained it was the influence environmental factors have on genes—meaning that "inherited" diseases can be modified by environmental conditions in either a protective, neutral, or harmful way. In other words, gene environment interaction is defined as "a different effect of an environmental exposure on disease risk in persons with different genotypes". This effort is to try to obtain this information at the time of diagnosis of a childhood cancer.

Compliance Certification (all awards)

Mr. Vince Burgess, Chief Compliance Officer, presented his certification of the review process for the all proposed grant awards being recommended to the Oversight Committee at this meeting. He stated he had reviewed the compliance pedigrees for the grant applications submitted to CPRIT for the following grant mechanisms:

- Recruitment of First-Time, Tenure-Track Faculty Members Awards
- Core Facility Support Awards
- Multi-Investigator Research Awards

- Competitive Continuation/Expansion – Evidence-Based Cancer Prevention Services
- Evidence-Based Cancer Prevention Services
- Evidence-Based Cancer Prevention Services – Colorectal Cancer Prevention Coalition
- Evidence-Based Cancer Prevention Services – See, Test, and Treat® Program
- Dissemination of CPRIT-Funded Cancer Control Interventions
- Cancer Prevention Promotion and Navigation to Clinical Services

Mr. Burgess stated he was satisfied that the application review process resulting in the grant awards recommended by the Program Integration Committee followed applicable laws and agency administrative rules and certified for the Oversight Committee’s consideration the academic research and prevention award recommendations being presented at this meeting.

Mr. Burgess further noted that the deferred Core Facility Support Awards and Multi-Investigator Research Awards applications were previously certified in May 2016 when applications were first considered by the Program Integration Committee on May 3, 2016. The Program Integration Committee voted in May to defer the seven applications to a later meeting.

Conflict of Interest Notification

Presiding Officer Geren noted for the record that no Oversight Committee members reported conflict of interest with any of the applications being considered for awards at this meeting.

Academic Research Grant Award Recommendations

This list includes applications already approved by the Oversight Committee on May 18, 2016, as well as the seven previously deferred applications that are recommended by the PIC for the August 17, 2016, meeting. The previously deferred applications recommended by the PIC on August 2, 2016, are highlighted in blue and are updated to reflect budget amount changes as approved by the PIC.

App ID	Mechanism	Organization/ Company	Application Title	Budget
RP160805	CFSA	Baylor College of Medicine	Preclinical Candidate Discovery Core	\$5,999,997
RP160813	HIHR	Acelerox	Nanoparticle Prophylaxis for Protection from Chemotherapy Ototoxicity	\$195,665
RP160795	HIHR	Baylor College of Medicine	A “Pap smear” for ovarian cancer	\$200,000
RP160657	CFSA	The University of Texas at Austin	Targeted Therapeutic Drug Discovery & Development Program	\$4,982,636

App ID	Mechanism	Organization/ Company	Application Title	Budget
RP160776	HIHR	The University of Texas at Austin	Rapid Molecular Diagnosis of Lung Cancer Biopsies by Ambient Ionization Mass Spectrometry	\$200,000
RP160884	HIHR	Baylor College of Medicine	RNA processing stress: a new therapeutic entry point in triple-negative breast cancer	\$200,000
RP160847	HIHR	Texas A&M Engineering Experiment Station	A Body Coil for MR Imaging and Spectroscopy of Cancer at 7 Tesla	\$200,000
RP160732	CFSA	The University of Texas Health Science Center at San Antonio	UTHSCSA Cancer Genome Sequencing and Computation Core	\$3,680,756
RP160652	MIRA	The University of Texas M. D. Anderson Cancer Center	Defining and Defeating Mechanistic Subtypes of KRAS-mutant Lung Cancers	\$5,981,040
RP160668*	MIRA	The University of Texas M. D. Anderson Cancer Center	Pathogenesis and Early Progression of Lung Cancer	\$4,606,275
RP160834	HIHR	Texas A&M University	Integrated-cavity-enhanced pre-screening for lung cancer	\$200,000
RP160842	HIHR	Texas A&M University System Health Science Center	Novel roles for NIK in high-grade glioma: regulation of mitochondrial dynamics to control cell migration and invasion	\$200,000
RP160716	CFSA	The University of Texas Health Science Center at San Antonio	Texas Pediatric Patient Derived Xenograft Facility	\$5,079,843
RP160713	HIHR	The University of Texas Southwestern Medical Center	Amino Acid Sensing: Directing Cell Growth through mTORC1	\$198,983
RP160693	MIRA	The University of Texas M. D. Anderson Cancer Center	Acute Myeloid Leukemia in the Immunosuppressed Microenvironment	\$6,000,000

App ID	Mechanism	Organization/ Company	Application Title	Budget
RP160739	HIHR	The University of Texas M. D. Anderson Cancer Center	Targeting Histone Acetylation Readers in MLL- translocated Leukemias	\$200,000
RP160661**	MIRA	The University of Texas Southwestern Medical Center	Towards Carbon Beam Stereotactic Body Radiation Therapy (C-SBRT) for Higher Risk Early Stage Lung Cancer	\$4,103,894
RP160667***	MIRA	The University of Texas M. D. Anderson Cancer Center	DNA-Protein Crosslink Repair Pathways and Cancer Therapy	\$5,101,316
RP160822	HIHR	Texas AgriLife Research	Exploring Geminivirus-encoded suppressor of histone methyltransferases as an anti-cancer drug	\$199,958
RP160866	HIHR	The University of Texas at Dallas	Renal Clearable Nanodelivery System for Triple Negative Breast Cancer Therapy	\$200,000
RP160710	MIRA	The University of Texas M. D. Anderson Cancer Center	A Randomized Clinical Trial Platform with Translational Studies to Overcome Resistance in Triple Negative Breast Cancer	\$5,997,677
RP160806	HIHR	Texas Tech University	Development of high throughput technology to identify drugs for muscle wasting during cancer	\$199,995
RP160674	MIRA	The University of Texas Medical Branch at Galveston	Comparative Effectiveness Research on Cancer in Texas (CERCIT) 2.0	\$6,000,000
RP160827	HIHR	Texas A&M University System Health Science Center	A platform technology for the isolation of anti- cancer monoclonal antibodies from chickens	\$200,000
RP160775	HIHR	The University of Texas Health Science Center at Houston	Becoming fatter to survive: cancer cells increase lipid storage to counter metabolic stress	\$200,000

App ID	Mechanism	Organization/ Company	Application Title	Budget
RP160771****	CFSA	Baylor College of Medicine	The Adolescent and Childhood Cancer Epidemiology and Susceptibility Service (ACCESS) for Texas	\$6,000,000
RP160844*****	CFSA	The University of Texas at San Antonio	Center for Innovative Drug Discovery: Enhancement of a Shared Cancer Resource for South Texas	\$4,598,728
RP160841	HIHR	The University of Texas Health Science Center at San Antonio	Targeting EWS-FLI-1 for degradation	\$200,000
RP160765	HIHR	Texas A&M University System Health Science Center	An unlikely therapeutic target for malignant bone disease: Dkk-1 activates a stress resistance mechanism in bone tumor cells	\$200,000
RP160852	HIHR	Texas State University - San Marcos	Chemo-preventive Approach to Cancer Exploiting a Presumptive Link between Genomic Instability and Structural Stability of non-B DNA Sequences	\$200,000
RP160770	HIHR	The University of Texas at Dallas	Optical opening of blood-brain barrier for brain tumor drug delivery by plasmonic nanobubbles	\$200,000
RP160819	HIHR	Texas AgriLife Research	Quantitative mapping of intracellular protein- protein interactomes in healthy and cancerous cells	\$198,753
RP160704	HIHR	The University of Texas at Austin	High affinity therapeutic mimotope antibodies to the oncogenic Epidermal Growth Factor Receptor	\$200,000
RP160763	HIHR	The University of Texas Health Science Center at Houston	Targeting multiple myeloma stem cell niche	\$200,000

CFSA = Core Facilities Support Awards

HIHR = High-Impact/High-Risk Research Awards

MIRA = Multi-Investigator Research Awards

- * RP160668 - The peer review panel recommended the deletion of Project 4 from the MIRA application. As a result, the funds dedicated to that project were removed from the budget for a revised total of \$5,757,844. The final score was based on revised scope with the deletion of Project 4.
- ** RP160661 - The peer review panel recommended the deletion of Project 3 and Project 4 from the MIRA application. As a result, the funds dedicated to those projects were removed from the budget for a revised total of \$5,129,867. The final score was based on revised scope with the deletion of Projects 3 and 4.
- *** RP160667 - The peer review panel recommended changes to the MIRA application by modifying Project 2 by deleting Aim 3 and reducing the budget by the amount dedicated to that project. Additionally, the panel recommended reducing the budget for Core 1 by 25%. Finally, the panel recommended reducing Core 2 by \$20,000. These changes resulted in a revised budget totaling of \$6,376,645.
- **** RP160771 - The peer review panel recommended the overall budget be reduced to the allowable \$6,000,000 for entire funding period. One required reduction is \$500,000 (\$100,000/year) for pilot projects that were not substantiated. Other reductions can be made based on budget negotiations with CPRIT.
- ***** RP160844 - The peer review panel recommended reducing the personnel budget by 1/3 (\$507,155), removing \$150,000 for pilot projects, and \$100,000 for a software suite. The revised budget total is \$4,598,728. The final score was based on these budget reductions.

Academic Research Recruitment Grant Award Recommendations

App ID	Mech.	Candidate	Organization/Company	Budget Requested
RR160078	RFT	Mazur, Pawel	The University of Texas M.D. Anderson Cancer Center	\$2,000,000
RR160075	RFT	Zang, Cheng-Zhong	The University of Texas Southwestern Medical Center	\$2,000,000
RR160067	RFT	Kapoor, Prabodh	The University of Texas Health Center at Tyler	\$2,000,000
RR160070	RFT	Chaumeil, Myriam	The University of Texas Southwestern Medical Center	\$2,000,000
RR160066	RFT	Nielsen, Alec	Rice University	\$2,000,000

RFT = Recruitment of First-Time, Tenure-Track Faculty Members
 REI = Recruitment of Established Investigators
 RRS = Recruitment of Rising Stars

MOTION:

On a motion made by Mr. Montgomery and seconded by Mr. Holmes, the Oversight Committee unanimously voted to approve the Program Integration Committee's recommendations for the Core Facility Support awards, Multi-Investigator Research awards, and First-Time, Tenure Track recruitment awards.

MOTION:

On a motion made by Mr. Montgomery and seconded by Ms. Mitchell, the Oversight Committee unanimously voted to approve the delegation of contract negotiation authority to the Chief Executive Officer and CPRIT staff, and authorized the Chief Executive Officer to sign the contracts on behalf of CPRIT.

7. Prevention and Communications Officer Report and Grant Award Recommendations (Tab 4)

Prevention Program Activities Update

Dr. Rebecca Garcia, Chief Prevention and Communications Officer, presented the Prevention Program update. She reports that 44 applications were received for FY 2016 Cycle 2; 14 applications are presented for approval today for grant awards. Applications for FY 2017 Cycle 1 are due August 30 and will be presented to the Oversight Committee for consideration in February 2017. Dr. Garcia indicated that the project to list the grants in each of the 254 counties is complete and staff is working on ways to format and display the data. She reported that a complete redesign of the grantee quarterly reports is underway. The revised report will be tested with a few grantees during August, prior to its release.

An Oversight Committee member asked about providing the prevention metrics by legislative district. Mr. Roberts responded that HIPAA privacy regulations prevent CPRIT from accessing data by street address that would be needed in order for CPRIT or the Texas Legislative Council to compile the desired report.

Prevention Program Proposed Grant Awards

Dr. Garcia presented the Prevention Program grant awards totaling \$13,690,454 for Oversight Committee approval. These include:

- 7 Evidence-Based Cancer Prevention Services grants totaling \$9,046,499
- 1 Colorectal Cancer Prevention Coalition grant totaling \$2,100,000
- 1 Competitive Continuation/Expansion for Evidence-Based Cancer Prevention Services grant totaling \$1,496,111
- 1 Cancer Prevention Promotion and Navigation to Clinical Services grant totaling \$399,954
- 2 Dissemination of CPRIT-Funded Cancer Control Interventions grants totaling \$599,766
- 2 Evidence-Based Cancer Prevention Services – See, Test & Treat® Program grants totaling \$48,124

Dr. Garcia reported that all of the recommended grants fulfill at least one Prevention Program priority and several fulfill more than one priority.

Presiding Officer Geren noted that the Prevention Program’s Dissemination grants are an impactful way of sharing effective programs with all parts of the state.

An Oversight Committee member asked if it would be possible to estimate the number of cancers prevented due to the Prevention Program grants, then translate that into lives saved and dollars saved in proportion to the investments made. Dr. Garcia responded that it may be difficult to determine how much of the decline in mortality rates could be attributed to CPRIT’s efforts with the data we currently collect. Staff will look into options. Additional data collection and statistical analysis would likely require contracted expertise.

Compliance Certification

Presiding Officer Geren noted that Mr. Burgess had previously provided the compliance certification for all of the award recommendations for the Academic Research and Prevention programs and reported no compliance issues.

Conflict of Interest Notification

Presiding Officer Geren stated for the record that no Oversight Committee members reported a conflict of interest with any of the applications presented for awards.

Prevention Grant Award Recommendations

App ID	Mech.	Applicant Name	Organization	Total Funding Requested
PP160081	DI	Reitzel, Lorraine R	University of Houston	\$299,981
PP160116	STT	McKernan, Stephen	Lone Star Community Health Center, Inc. dba Lone Star Family Health	\$23,602
PP160079	EBP	Jibaja-Weiss, Maria L	Baylor College of Medicine	\$1,161,015
PP160093	DI	Layeequr Rahman, Rakhshanda	Texas Tech University Health Sciences Center	\$299,785
PP160058	CCE	Berenson, Abbey B	The University of Texas Medical Branch at Galveston	\$1,496,111
PP160075	EBP	Singal, Amit	The University of Texas Southwestern Medical Center	\$1,499,826
PP160110	PN	Ross, Theodora S	The University of Texas Southwestern Medical Center	\$399,954

PP160080	EBP	Morales-Campos, Daisy Y	The University of Texas Health Science Center at San Antonio	\$1,302,955
PP160122	EBP	Rustveld, Luis	Baylor College of Medicine	\$1,477,698
PP160105	STT	Coffey, Donna M	Houston Methodist	\$24,522
PP160121	EBP	Trivedi, Madhukar H	The University of Texas Southwestern Medical Center	\$1,365,226
PP160097	EBP	Rodriguez, Ana M	The University of Texas Medical Branch at Galveston	\$747,727
PP160089	EBP	Mittal, Sahil	Baylor College of Medicine	\$1,492,052
PP160103	CRC	Ross, Theodora S	The University of Texas Southwestern Medical Center	\$2,100,000

PN = Cancer Prevention and Navigation to Clinical Services

CCE = Competitive Continuation/Expansion – Evidence-Based Cancer Prevention Services

DI = Dissemination of CPRIT-Funded Cancer Control Interventions

EBP = Evidence-Based Cancer Prevention Programs

SST – Evidence-Based Cancer Prevention Services – See, Test & Treat® Program

CRC = Colorectal Cancer Coalition

MOTION:

On a motion made by Mr. Holmes and seconded by Mr. Montgomery, the Oversight Committee unanimously voted to approve the Program Integration Committee’s recommendations on 14 Prevention grant awards.

MOTION:

On a motion made by Mr. Montgomery and seconded by Ms. Mitchell, the Oversight Committee unanimously voted to approve the delegation of contract negotiation authority to the Chief Executive Officer and CPRIT staff, and authorized the Chief Executive Officer to sign the contracts on behalf of CPRIT.

8. Chief Product Development Officer Report (Tab 5)

Product Development Activities Update

Mike Lang, Chief Product Development Officer, reported that of the 32 applications submitted for Review Cycle 16.2, thirteen were recommended for the in person Peer Review meeting on May 10-12, 2016. Following the in-person presentations, seven applications were recommended for due diligence review, which will be completed in October 2016. Award recommendations from this cycle will be presented to the Oversight Committee for consideration at the November meeting. Mr. Lang also reported that 19 applications have been received for Review Cycle 17.1. Recommendations from the 17.1 cycle are expected to be presented to the Oversight Committee for consideration at the February 2017 meeting.

Mr. Lang indicated that some clarifying, non-substantive changes to the program priorities have been made as part of the annual review of program priorities.

The honoraria policy is also updated annually and is an item for consideration on today's Oversight Committee agenda. Mr. Lang discussed a change to provide a mechanism to pay reviewers with appropriate expertise for their time reviewing the business plans submitted by Early Translational Research Award (ETRA) grantees.

Mr. Lang reported that a targeted Request for Applications (RFA) focusing on diagnostics is under consideration. When combined with outreach to diagnostic firms and revenue sharing terms tailored to the diagnostic industry, a targeted RFA should increase the number of diagnostic applications for CPRIT awards. CPRIT's Product Development Advisory Committee will be asked to provide input on developing this targeted RFA.

Dr. Rice noted that this targeted RFA has been discussed in the Product Development Research Subcommittee and the subcommittee supports this approach.

An Oversight Committee member asked if molecular testing services in Texas are provided by the universities or if there are private labs in Texas providing these services. Mr. Lang responded that about 800 small start-up companies provide most of these services across the country. Each has a particular molecular test. Tissue samples are sent to these labs for testing, with reports sent to the prescribing physician. Two of these molecular diagnostics companies are CPRIT awardees located in Texas.

In response to a question by an Oversight Committee member, Ms. Doyle explained that input from Oversight Committee members, particularly through the subcommittees, informs the RFAs that are issued by CPRIT. However, the Oversight Committee is not called upon to vote to approve the issuance of new RFAs. Each programmatic subcommittee ensures that the programs are carrying out their program priorities.

Presiding Officer Geren announced that due to time constraints on the Internal Auditor, Mr. Lang's report would be interrupted now to allow the Internal Auditor to present her report.

Agenda Item 13 taken out of order - Internal Auditor Report (Tab 10)

Ms. Alyssa Martin, Internal Auditor, presented information on the status of the following 2016 Internal Audits:

- Commodity and Service Contracts
- Revenue
- Cash Management
- Information Technology Services Follow-up
- Grants Management

Ms. Martin briefly explained the table titled Schedule of Audits, Status, and Findings Summary, compiled at the request of an Oversight Committee member to provide an

overview of all internal audits performed, their findings, and the status of those findings being closed or open.

Presiding Officer Geren stated there were two audit reports included with the Oversight Committee meeting materials supported by a recommendation from the Audit Subcommittee for the Committee's approval:

- Follow-Up Procedures Report Over Prior Year Grant Management Findings; and,
- Internal Audit Report Over Commodity and Service Contracts.

MOTION:

On a motion made by Mr. Angelou and seconded by Mr. Montgomery, the Oversight Committee unanimously voted to approve the Internal Audit Follow-up Procedures Report over Prior Year Grant Management Findings.

MOTION:

On a motion made by Mr. Montgomery and seconded by Dr. Rice, the Oversight Committee unanimously voted to approve the Internal Audit Report over Commodity and Services Contracts.

At 12:28 p.m., Presiding Officer Geren called a 20-minute recess of the Oversight Committee. Business resumed at 12:50 p.m.

Agenda Item 8 Continued: Chief Product Development Officer Report (Tab 5)

Presiding Officer Geren asked Mr. Lang to continue his presentation.

Mr. Lang reported on the implementation of the no-repeat award policy discussed at the May 2016 Oversight Committee meeting. The product development RFAs have been amended to notify applicants that only companies that have not previously received an award are eligible to be considered for a CPRIT award. The purpose is to maximize the number of new novel technologies under development and the number of new startup companies in Texas.

An Oversight Committee member noted that the Product Development Research Subcommittee has discussed the issue and questioned whether establishing a no-repeat award policy may be in conflict with another CPRIT policy to promote the best science.

Another Oversight Committee member stated that he agrees with the no-repeat policy because once a company is relocated to Texas, it should be able to get follow-on funding and it is a better economic development policy to get as many companies to Texas as possible.

Mr. Roberts noted that a final decision on the "no-repeat awards" policy has not been made. He explained that before the no-repeat policy is finalized, it would be appropriate to get input from the Product Development Advisory Committee to help decide if the policy should be permanently implemented.

Mr. Lang reported that he had met with several Texas academic institutions to evaluate interest in collaborating to increase academic commercialization. Such a program would provide resources to Texas research institutions not specifically tied to a single investigator. This could bridge the gap between our Academic Research and Product Development Research Programs. Mr. Lang indicated that he plans to solicit the input of CPRIT's Product Development Advisory Committee and the University Advisory Committee on how best to structure this potential new award mechanism.

An Oversight Committee member questioned whether this was necessary because academic institutions already have technology transfer offices with facilities and large budgets to provide these services. It was the member's view that how an academic commercialization program is funded is a choice the academic institution makes.

Following up on that point, another Oversight Committee member questioned whether CPRIT could add value because these are sophisticated institutions with large budgets. In some cases, business schools associated with the institutions can provide additional expertise in monetizing assets generated by the institutions. This is particularly true for institutions that emphasize entrepreneurship in their undergraduate and graduate programs. The Oversight Committee member asserted that if the institution believes it could make money by putting more resources into that aspect of their operations, the Boards of Regents or the Trustees would allocate resources to do so.

Another Oversight Committee member stated that the technology transfer offices may not have the necessary expertise in bioscience and other areas where it is not easy to form initial companies.

Mr. Lang introduced the topic of monitoring the royalty and equity returns generated by CPRIT's grant awards. CPRIT investments have generated asset holdings with potentially significant monetary value. Most CPRIT investments have royalty-based return. In addition, CPRIT holds equity in three firms. A monitoring process will be required to ensure compliance now that some of the CPRIT awardees are progressing towards revenue generation.

Currently, CPRIT does not have the resources or personnel to implement a long-term monitoring system or to actively manage equity assets. The Texas Treasury Safekeeping Trust Company, which is part of the Comptroller's Office, provides these services for other assets owned by the state. Staff is exploring having the Safekeeping Trust Company monitor and manage assets generated by CPRIT's revenue sharing terms. If the Safekeeping Trust Company is not able to assist CPRIT, a contract with a third party for these services may be needed.

An Oversight Committee member asked about follow-on funding. Mr. Lang explained that the information in the Follow-on Funding Summary was prepared in response to questions raised at the Product Development Research Subcommittee. The "contract amount" column is the amount of the company's CPRIT contract. For some of the projects, all grant funds have been paid out, but that is not true for many on-going projects. Information in the

“Follow-on Funding” column is the funds that these companies have raised from other sources subsequent to the CPRIT award. Mr. Lang explained that the follow-on funding information demonstrates the success our awardees are having at raising capital from other sources after receiving a CPRIT award.

There were no further questions or comments for Mr. Lang.

9. Scientific Research and Prevention Program Committee Appointments (Tab 6)

Mr. Roberts presented the appointments to the Scientific Research, Prevention, and Product Development Peer Review Committees. The presentation included 4 appointments to the Product Development Peer Review panels, one appointment to the Prevention Peer Review panels, and 12 appointments to the Academic Research Peer Review panels.

An Oversight Committee member questioned whether CPRIT would pay for international travel for a proposed reviewer living outside of the country. After confirming with CPRIT’s grant review contractor, Mr. Roberts reported that the appointee in question resides in California.

MOTION:

On a motion made by Mr. Montgomery and seconded by Mr. Holmes, the Oversight Committee unanimously voted to approve the Scientific Research and Prevention Program Committee appointments.

10. FY 2107 Honoraria Policy (Tab 7)

Mr. Roberts presented the FY 2017 honoraria policy for the Oversight Committee’s consideration. He explained that CPRIT’s enabling legislation requires CPRIT’s Chief Executive Officer, in consultation with the Oversight Committee, to adopt a policy regarding honoraria paid by CPRIT for peer review services. The FY 2017 honoraria policy has been revised to reflect the additional time spent by Prevention and Academic Research panel members related to peer review activities.

MOTION:

On a motion made by Dr. Rosenfeld and seconded by Ms. Mitchell, the Oversight Committee unanimously voted to approve the FY 2017 Honoraria Policy.

11. Health & Safety Code Section 102.1062 Waiver (Tab 8)

Mr. Roberts presented his request for Oversight Committee approval of conflict of interest waivers for FY 2017 for Donald Brandy, Dr. Rebecca Garcia, Dr. John Hellerstedt, Amy Mitchell, and Will Montgomery. Information on each waiver request is in the board meeting materials.

MOTION:

On a motion made by Mr. Angelou and seconded by Dr. Rice, the Oversight Committee unanimously voted to approve the proposed Health & Safety Code Section 102.1062 waivers for Donald Brandy, Dr. Rebecca Garcia, Dr. John Hellerstedt, Amy Mitchell, and Will Montgomery.

12. Proposed Amendments to 25 T.A.C. Chapters 701-703 (Tab 9)

Kristen Doyle, Deputy Executive Office and General Counsel, presented changes to CPRIT's administrative rules for Oversight Committee approval for publication in the *Texas Register*. Most of the changes are non-substantive or clarifying. The specific changes for each section are delineated in a table in the committee meeting materials. She stated that proposed changes, including any revisions suggested during the public comment period, will be brought to the Oversight Committee in November for final approval.

Presiding Officer Geren noted that the substantive changes were discussed in detail and recommended for publication by the Board Governance Subcommittee.

MOTION:

On a motion made by Dr. Mulrow and seconded by Mr. Holmes, the Oversight Committee unanimously voted to approve the publication of the proposed changes to Texas Administrative Code 701-703 in the *Texas Register*.

14. Chief Operating Officer Report (Tab 11)

Chief Operating Officer Heidi McConnell presented a report on the following items:

- FY 2016, 3rd Quarter Operating Budget
- FY 2016, 3rd Quarter Performance Measures
- Debt Issuance History
- FY 2018-19 Legislative Appropriations Request

Ms. McConnell noted that with the addition of \$865,235 in revenue sharing payments in July, the cumulative total in revenue sharing payments is now over \$3 million.

In response to an Oversight Committee member question, Ms. McConnell stated that the quarterly report itself was not audited, but the expenditures reported are audited regularly through internal audits. In addition, the agency's financial transactions are reconciled after the end of each fiscal year with the State Comptroller's books and published in the Comprehensive Annual Financial Report (CAFR) for the state. CPRIT's transactions reported in the CAFR are also audited annually in the financial audit.

15. Contract Approvals (Tab 12)

Ms. McConnell presented four FY 2017 service contract renewals for Oversight Committee approval:

- Due Diligence Services with ICON Clinical Research for \$309,000
- Economic Assessment of the Cost of Cancer in Texas with The Perryman Group for \$150,000
- Outside Legal Services with Yudell Isidore for \$200,000
- Strategic Communication Program Services with Hahn Public Communications for \$149,975

In response to an Oversight Committee member question, Ms. McConnell explained that the outside legal counsel performs intellectual property due diligence review of product development grant applications.

MOTION:

On a motion made by Mr. Montgomery and seconded by Ms. Mitchell, the Oversight Committee unanimously voted to approve contracts with ICON Clinical Research, The Perryman Group, Yudell Isidore, and Hahn Public Communications.

16. Subcommittee Business (Tab 13)

Diversity Subcommittee Chair, Dr. Mulrow, presented the Diversity Subcommittee report recommending that the value and necessity of collecting gender, ethnicity, racial and other population metrics be evaluated by the Academic Research, Product Development Research, and Prevention Oversight Committee subcommittees for inclusion in an agency-wide diversity data collection policy developed by the staff based on subcommittee evaluations.

Mr. Roberts explained that this issue has been discussed by each of the programmatic subcommittees. An Oversight Committee member has recommended that the information be encapsulated in an annual report. Mr. Roberts said, with the Oversight Committee approval, the information will be included in CPRIT's existing annual report due each January with the first report appearing in January 2018, which would give each subcommittee a year to identify the data requirement needs.

Mr. Holmes reported that the Board Governance Subcommittee discussed this change and agreed that making the change will strengthen CPRIT's efforts at diversity.

To implement this recommendation, Ms. Doyle recommended adopting proposed amendments to the Prevention, Product Development, Scientific Research, and Audit Subcommittee charters. She explained that the charter amendments were made by moving the language from the Diversity Subcommittee charter into each program subcommittee charter.

MOTION:

On a motion made by Mr. Montgomery and seconded by Mr. Angelou, the Oversight Committee unanimously voted to approve the proposed reassignment of Diversity Subcommittee responsibilities to the Scientific Research, Product Development, Prevention, and Audit subcommittees.

MOTION:

On a motion made by Mr. Angelou and seconded by Ms. Mitchell, the Oversight Committee unanimously voted to approve the proposed amendments to the charters of the Scientific Research, Product Development, Prevention, and Audit subcommittees.

17. Chief Compliance Officer Report (Tab 14)

Mr. Vince Burgess, Chief Compliance Officer, reported that delinquent reports are still on a downward trend and are anticipated to stay below five percent of the over 570 reports due every month. Reviews performed by the Compliance Program staff are a result of CPRIT's annual grant risk assessment process. Grants that are assessed a priority one receive an on-site review. Grants assessed a priority two or three usually receive a desk review.

- Desk Reviews: CPRIT has performed approximately 250 desk reviews this fiscal year, 39 in the past quarter. The data show that of the desk review audits this year, about 54 percent had at least one finding, but grantees have quickly remediated most of those findings. Currently staff is working with just two grantees to remediate findings.
- On-site Reviews: Six reviews were performed this past quarter and staff is working with two grantees to remediate findings. Findings from on-site reviews are typically seen with new product development grants and usually result from incomplete procedures for purchasing, contract monitoring, and debarment checks.
- Single Audit Tracking: There are currently 10 grantees with outstanding audit findings.
- Training and Support: CPRIT staff conducted a grantee training webinar in June 2016 with approximately 140 grantee staff in attendance. Also, CPRIT compliance staff has been invited to present two grantee trainings onsite in August and one more is scheduled at UT Southwestern Medical Center, which will be available for all North Texas grantees. As a result of grantee trainings in March and June, staff developed a Frequently Asked Questions document and posted it on CPRIT's website as a resource for grantees. Additionally, three compliance and ethics training sessions for CPRIT staff were conducted in June 2016.

18. FY 2017 Program Priorities Process (Tab 15)

Dr. Garcia stated this report is informational. It represents the process staff is proposing and the timeline for updating and approving the 2017 Program Priorities. The Oversight Committee will vote on the 2017 priorities in November 2016.

19. Compliance Investigation Pursuant to Health & Safety Code § 102.2631**20. Consultation with General Counsel**

Presiding Officer Geren stated there were no business to discuss for standing Item 19 and Item 20.

21. Future Meeting Dates and Agenda Items

Presiding Officer Geren announced the next Oversight Committee meeting is a special meeting scheduled for September 14, 2016, at 10:00 a.m., location to be determined. He then noted the proposed schedule of 2017 quarterly meetings and subcommittee meetings, for approval by the Oversight Committee.

MOTION:

On a motion made by Mr. Montgomery and seconded by Mr. Angelou, the Oversight Committee unanimously voted to approve the proposed schedule of Oversight Committee meetings and subcommittee meetings for FY 2017.

22. Adjourn

MOTION:

There being no further business, the Oversight Committee unanimously approved a motion to adjourn made by Presiding Officer Geren and seconded by Dr. Rice.

Meeting adjourned at 2:18 p.m.



Signature



Date



Sponsored Programs

August 15, 2016

Ms. Ramona Magid
Senior Program Manager for Prevention
Cancer Prevention & Research
Institute of Texas (CPRIT)

Re: CPRIT grant #PP160023 – Optimizing Colorectal Cancer Screening in East Texas

Dear Ms. Magid

Dr. Edward Sauter has accepted another position outside of Texas and is no longer employed at The University of Texas Health Science Center at Tyler (UTHSCT). UTHSCT leadership recommends that Dr. Paul McGaha replace Dr. Sauter as PI for the grant #PP160023. Paul McGaha, D.O., M.P.H., is currently the Deputy Director of the Northeast Texas Center for Rural Community Health at The University of Texas Health Science Center in Tyler, Texas. In addition, he also serves as the Associate Professor for Community Health and Preventive Medicine.

Prior to assuming this role at UTHSCT, he was the Regional Medical Director for Health Service Regions 4 and 5 (North) of the Texas Department of State Health Services in Tyler for over 19 years.

He received his medical degree from the College of Osteopathic Medicine at Oklahoma State University. He is certified by the American Board of Preventive Medicine in Public Health and General Preventive Medicine. In addition, he holds a Master of Public Health Degree from The University of Texas Health Science Center in Houston. He is also a registered pharmacist.

Since the East Texas area contains a large, diverse, rural population Dr. McGaha is particularly interested in efforts to improve population health in the area.

Additionally, please revise the grant #PP160023 contract start date to August 31, 2016.

Thank you for your help.

Sincerely,

David Anderson
Director, Sponsored Programs

BIOGRAPHICAL SKETCH

Provide the following information for individuals listed on this application and as requested in the RFA. Follow this format for each person.

NAME Paul McGaha, D.O., M.P.H.	ORGANIZATIONAL POSITION TITLE Deputy Director, Northeast Texas Center for Rural Community Health and Associate Professor for Community Health and Preventive Medicine, the University of Texas Health Science Center, Tyler, Texas PROJECT POSITION TITLE Program Director		
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Southwestern Okla. State Univ, Weatherford, OK	B.S.	1977-1980	Pharmacy
College of Osteopathic Medicine, Okla. State Univ., Tulsa, Oklahoma	D.O.	1980-1983	Osteopathic Medicine
School of Public Health, University of Texas Health Science Center, Houston, Texas	M.P.H.	1990-1992	Public Health

A. Positions and Honors. List in chronological order previous positions, concluding with your present position. List any honors. Include present membership on any Federal Government public advisory committee.

Medical Director, U.S. Public Health Service Commissioned Officer, Texhoma Clinic, Texhoma, Oklahoma, 1984-1987, provided primary care in rural clinic setting.

Taylor Emergency Clinic, Tyler, Texas. Staff Physician, 1987-1988, provided urgent clinical care

Greenville Community Health Center, Greenville, Texas. Staff Physician, 1988, part-time clinician for FQHC satellite in rural Texas

Texas Department of Health, Health Service Region 4/5(North), Tyler, Texas. Public Health Physician , 1988-1995, provided primary care and preventive services to women and children in network of 18 clinics in Health Service Region 4/5N, a primarily rural 35 county area in East Texas. Also consulted with different departmental divisions including the Immunization Division, Public Health Nursing, Tuberculosis Management, Social Work and Community Health.

Texas Department of State Health Services, (Name changed from Texas Department of Health in 2003) Health Service Region 4/5 (North), Tyler, Texas. Regional Medical Director, 1995-2016. Directed a comprehensive 35 county regional public health department in Health Service Region 4/5N. Oversaw the provision of essential public health services where no local health department existed. Oversaw all of departmental programmatic activities, including the Immunization Division, Public Health Nursing, Community Health and others. Collaborated with nine Local Health Departments, area hospitals, clinician groups, FQHCs, schools, universities and other stakeholders.

Texas Department of State Health Services, Acting Assistant Commissioner, Regional and Local Health Services Division, June 2012-April, 2013. Directly supervised the Community Preparedness Section and all eight Texas Health Service Regions. Managed effective utilization of staff resources for the Division. Served as a member of the DSHS Health Commissioner’s Direct Reports team. Served concurrently with position listed above.

The University of Texas Health Science Center at Tyler, Deputy Director, Northeast Texas Center for Rural Community Health, Associate Professor for Community Health and Preventive Medicine, April 2015 – Present. Provides leadership and management support to the Center for Rural Community Health. Directs population based activities including 21 Medicaid Transformation Waiver DSRIP projects. Assisting in the development of the School of Rural and Community Health.

Program Director (McGaha, Paul, Kent)

B. Selected peer-reviewed publications, articles, workshop presentations, conference and educational presentations in chronological order (earliest to recent). Do not include publications submitted or in preparation. For publicly available citations, URLs or PMID submission identification numbers may accompany the full reference.

McGaha P. "Public Health Partnerships: Basic to Preparing and Responding to Bioterrorism"

Texas D.O., Vol. LIX, No. 2, February 2002

Abel RL, McGaha P, Young R, et al. "Understanding Differences in Influenza Immunization Rates: A Survey of African-American and Caucasian Medicare Beneficiaries in Texas." J Health Hum Serv Adm. 2003 26(2):174-98

McGaha P. "The Smallpox Response Plan: Implementation in East Texas"

East Texas Medicine. Vol.2 Issue 1, 2004

Investigation of Rabies Infections in Organ Donor and Transplant Recipients--Alabama, Arkansas, Oklahoma, and Texas, 2004. MMWR Morb Mortal Wkly Rep. 2004 Jul 9;53 (26):586-9. (Contributor)

Rural Preparedness Planning Guide, Planning for Population Surge Following Urban Disasters, The Western New York Public Health Alliance Advanced Practice Center, 2008, Contributor.

http://www.norc.org/PDFs/Projects/Emergency%20Preparedness%20Planning/rural_guide_main_and_appendices.pdf

Huff S, McGaha P, et al. "All-Terrain Vehicle Injuries in Texas, Mapping the Path to Intervention with a Geographic Information System", Journal of Agromedicine, 2012 17:51-62

Cegielski J, Griffith D, McGaha P, et al. "Eliminating Tuberculosis One Neighborhood at a Time" Am J Public Health. 2013 Jul;103(7):1292-300

C. Other information considered essential for evaluation of your qualifications.

Certification in Public Health and General Preventive Medicine, American Board of Preventive Medicine, #51165, January 10, 1994. Active Medical License, Texas Medical Board, #G8621. Registered Pharmacist, Texas State Board of Pharmacy, License current but inactive, #24805. Member American College of Preventive Medicine, Texas Medical Association, Texas Osteopathic Medical Association, and Smith County Medical Society

Meningococcal Vaccination Campaign, Medical Consultant and member of Operations Team. Provided meningococcal vaccine in Gregg County and 30 clinics throughout East Texas in response to a Serogroup C meningococcal outbreak. Approximately 36,000 vaccinated in 1994 and 1995. Referenced in JAMA, 1998;279(6):435-439

Directed the East Texas Mammography Screening Project from 1990-1992. This Texas Cancer Council funded project enabled hundreds of rural East Texas women to receive mammography screenings. Master's Thesis devoted to topic at the UT School of Public Health.

Influenza A H1N1 Vaccination Campaign, Medical Director in response to 2009 H1N1 Pandemic. Coordinated the deployment of at least one vaccination clinic in each of the 35 counties so all East Texans could access the vaccine. Activities conducted in conjunction with area Local Health Departments, city and county governments, and health care providers.

Texas Public Health Funding and Policy Committee Member, October, 2011 to April 2015. The Committee established public health policy priorities for this state, and at least annually, made formal recommendations to the Texas Department of State Health Services.

East Texas Medical and Dental Outreach, Medical Director. Outreach provided medical and dental care to hundreds of underinsured or uninsured in the rural community of Van, Texas. Immunizations were also provided. Conducted in partnership with the Texas Department of State Health Services, the University of Texas Health Science Center in Tyler, the University of Texas at Tyler School of Nursing, Tyler Junior College, the Texas A&M/Baylor College of Dentistry, the Northeast Texas Public Health District, and other partners. Event was conducted at Van Junior High School, June 2013, 2014 and 2015



Oversight Committee Meetings and Standing Subcommittee Meetings FY 2017

November 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
10/30	10/31	1 PIC Meeting CPRIT Staff Only	2 Portal Opens	3 Board Governance	4 Diversity	5
6	7 Audit	8 Prevention	9 Sci Research	10 Prod Dev	11 Nominations	12
13	14	15	16 Oversight Committee Meeting	17	18	19

February 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1/29	1/30	1/31 PIC Meeting CPRIT Staff Only	1 Portal Opens	2 Board Governance	3 Diversity	4
5	6 Audit	7 Prevention	8 Sci Research	9 Prod Dev	10 Nominations	11
12	13	14	15 Oversight Committee Meeting	16	17	18

May 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
4/30	1	2 PIC Meeting CPRIT Staff Only	3 Portal Opens	4 Board Governance	5 Diversity	6
7	8 Audit	9 Prevention	10 Sci Research	11 Prod Dev	12 Nominations	13
14	15	16	17 Oversight Committee Meeting	18	19	20

August 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
7/30	7/31	1 PIC Meeting CPRIT Staff Only	2 Portal Opens	3 Board Governance	4 Diversity	5
6	7 Audit	8 Prevention	9 Sci Research	10 Prod Dev	11 Nominations	12
13	14	15	16 Oversight Committee Meeting	17	18	19

Note: Unless the subcommittee members agree to a different time, all subcommittee meetings will begin at 10:00 a.m. with the exception of Diversity and Nominations that will begin at 10:30 a.m. Members of the Audit and Program subcommittees should allocate 1.5 hours for a meeting. All others subcommittee meetings require one hour.



8/3/16

June 30, 2016

LISA

I have reviewed Dr Vladislav's request and the SRC critique of RP160834 -

I recommend the proposed PI change be approved
Jim

Lisa Nelson
Contract Manager
Cancer Prevention & Research
Institute of Texas

RE: Grant RP160834

Dear Ms. Nelson,

This is to request a change in PI for the referenced grant. This grant was awarded to Dr. John Bevan at Texas A&M University. Dr. Bevan passed away earlier this year, and the Co-PI, Dr. Vladislav Yakovlev would like to take on this grant as the Principal Investigator. Attached is Dr. Yakovlev's request to accept the grant.

Thank you for your consideration of this request.

Sincerely,

Janice Blum
Assistant Director, Contracts & Grants

Approved by: Wayne Roberts
Wayne Roberts
CPRIT Chief Executive Officer

Date: August 3, 2016

Approved by: James Willson
James Willson, M.D.
CPRIT Chief Scientific Officer

Date: August 3, 2016

Vladislav V. Yakovlev

Professor

June 14, 2016

To Whom It May Concern:

I am a co-PI on the CPRIT proposal “Integrated-cavity-enhanced pre-screening for lung cancer”, which we submitted together with Dr. John Bevan in October 2015. Unfortunately, Dr. Bevan recently passed away, and I am requesting a take on this two-year project as the Principal Investigator.

The true novelty of the proposed research comes from the integrated cavity enhancement, which my group implemented 2 years ago for a number of spectroscopic techniques, and which we further extended to rotational spectroscopy together with Dr. John Bevan. I am closely familiar with peculiarities of rotational spectroscopy and will be able to continue proposed research.

The proposed research on lung cancer pre-screening is synergetic with other research activities in my research laboratory, which include a recently funded collaborative research with Southwest Research Institute on environmental gas sensing, a continuously funded by the Air Force Research Laboratory efforts to monitor molecular gas distribution, and a recently established partnership with a local start-u company, Lynntech, Inc., to commercialize the system. Altogether, those collaborative activities provide with sufficient expertise, resources and access to facilities and equipment to successfully carry out the proposed research without modification to the specific aims.

As the PI of this project, I will be responsible for measuring the detection limit (defined as a signal to noise ratio of 10 over the acquisition time of 10 minutes) for 10 or more chemical compounds normally found in exhaled breath from prepared calibrated samples. My group will “fingerprint” these chemicals in an appropriate frequency range of the submillimeter. The detection sensitivity with and without the integrated cavity will be determined to validate our hypothesis that the integrated cavity-enhanced detection provides an elegant and efficient way to improve the detection sensitivity. The rotational signatures of critically important molecules will be quantified and catalogued for use as primary standards for unknown concentration measurements. We expect to attain a detection limit of 1 part per trillion, 1 ppt, real time for all chemical compounds identified in previous studies as primary markers for lung cancer in the breath. My group will also measure the broadband rotational spectra of chemical mixtures. We expect to achieve a relative quantified concentration assessment for a mixture of at least 10 chemical compounds. Identification of different biomarkers in a mixture of gases representing breath of lung cancer patients will be achieved by comparing the recorded

5025 ETED

3120 TAMU

College Station, TX 77843-3120

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yakovlev@tam.u.edu

spectrum of the mixture with the spectral database of each individual biomarker molecule selected. Once the frequency regions needed for complete and unequivocal characterization and identification of each biomarker are determined, the spectrometer can then be automated and programmed to scan regions specific to these biomarkers and then the software can quickly and efficiently analyze for their presence in the mixture and their concentration.

Sincerely,

A handwritten signature in black ink, appearing to read 'V. Yakovlev', written in a cursive style.

Vladislav Yakovlev

Principal Investigator: Yakovlev, Vladislav V.

BIOGRAPHICAL SKETCH			
Provide the following information for collaborators listed on this application. Follow this format for each person.			
DO NOT EXCEED TWO PAGES			
NAME Vladislav Yakovlev		POSITION TITLE Professor	
EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education, and include postdoctoral training.</i>)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Moscow State University	BS/MS	1987	Physics/Electrical Engineering
Moscow State University	Ph.D.	1990	Physics/Quantum Electronics
University of California, San Diego	postdoctoral	1992-1996	Chemistry/Biochemistry

A. Positions and Honors. List in chronological order previous positions, concluding with your present position. List any honors. Include present membership on any Federal Government public advisory committee.

Positions:

1990-1991 – Research Scientist, International Laser Center, Moscow State University, Moscow, Russia
 1992 – Engineer, Novatec Laser System, Inc., San Diego, California
 1992-1996 – Postdoctoral Researcher, Department of Chemistry and Biochemistry, University of California, San Diego
 1996-1998 – Assistant Project Scientist, Department of Chemistry and Biochemistry, University of California, San Diego
 1998-2002 – Assistant Professor, Department of Physics, University of Wisconsin – Milwaukee
 2002-2007 – Associate Professor, Department of Physics, University of Wisconsin – Milwaukee
 2005-2006 – Visiting Professor, Department of Physiology, Osaka University, Osaka, Japan
 2007-2011 – Professor, Department of Physics, University of Wisconsin – Milwaukee
 2010- 2012 Visiting Professor, DSI, A*Star, Singapore
 2012 – Professor, Department of Biomedical Engineering, Texas A&M University
 2013 – Professor, Department of Physics and Astronomy, Texas A&M University

Honors:

1984 Khokhov’s Fellowship
 1985 – 1987 Lenin’s Fellowship (the most prestigious Fellowship in the former USSR)
 1990 Moscow State University Young Investigator Award
 1999 Innovative Research Award – Research Corporation
 1999, 2003 Graduate School Research Award – University of Wisconsin – Milwaukee
 2000 NSF CAREER Award
 2003 University of Wisconsin Research Foundation Award
 2007, 2008 ASEE Air Force Fellowship
 2012 OSA Fellow
 2014 SPIE Fellow
 2014 AIMBE Fellow

B. Selected peer-reviewed publications, in chronological order (earliest to recent). Do not include publications submitted or in preparation. For publicly available citations, URLs or PMC submission identification numbers may accompany the full reference.

Principal Investigator: Yakovlev, Vladislav V.

- V. V. Yakovlev, "Advanced instrumentation for nonlinear Raman microscopy", *J. Raman Spectroscopy* 34, #12, 957-964 (2003).
- G. I. Petrov, and V. V. Yakovlev, "Enhancing red-shifted white-light continuum generation in optical fibers for applications in nonlinear Raman microscopy", *Optics Express* 13, #4, 1299-1306 (2005). PMID: 19495003
- G. I. Petrov, V. V. Yakovlev, A. Sokolov, and M. Scully, "Detection of *Bacillus subtilis* spores in water by means of broadband coherent anti-Stokes Raman spectroscopy" *Optics Express* 13, #23, 9537-9542 (2005). PMID: 19503156
- V. Shcheslavskiy, S. Saltiel, D. A. Ivanov, A. A. Ivanov, V. Yu. Petrussevich, G. I. Petrov, and V. V. Yakovlev, "Nonlinear optics of molecular nanostructures in solution: assessment of the size and nonlinear optical properties" *Chemical Physics Letters* 429, #1-3, 294-298 (2006).
- G. I. Petrov, R. Arora, V. V. Yakovlev, X. Wang, A. V. Sokolov, and M. O. Scully, "Comparison of coherent and spontaneous Raman microspectroscopies for noninvasive detection of single bacterial endospores" *Proc. Natl. Acad. Sci. USA* 104, 7776-7779 (2007). PMID: 17483468
- R. Arora, G. I. Petrov, and V. V. Yakovlev, "Analytical application of nonlinear Raman microspectroscopy," *J. Modern Optics* 55, #19-20, 3237-3254 (2008). PMID: 19727338
- V. V. Yakovlev, Ed. *Biochemical Applications of Nonlinear Optical Spectroscopy* CRC, 2009.
- V. V. Yakovlev, G. I. Petrov, H. F. Zhang, G. Noojin, M. D. Denton, R. J. Thomas, and M. O. Scully, "Stimulated Raman Spectroscopy: old physics, new applications", *J. Modern Optics* 56, #18-19, 1970-1973 (2009). PMID: 20354585.
- Saha, A., Yakovlev, V. V. (2009) "Towards a rational drug design: Raman micro-spectroscopy analysis of prostate cancer cells treated with an aqueous extract of *Nerium Oleander*," *J. Raman Spectroscopy* 40, 1459-1460.
- V. V. Yakovlev, G. I. Petrov, G. D. Noojin, C. Harbert, M. Denton, R. Thomas, "Ex-CARS: exotic configuration for coherent anti-Stokes Raman scattering microspectroscopy utilizing two laser sources," *J. Biophotonics* 3, #10-11, 653-659 (2010). PMID: 20635427
- V. V. Yakovlev, H. Zhang, G. Noojin, M. Denton, R. J. Thomas, and M. O. Scully, "Stimulated Raman photoacoustic imaging," *Proc. Natl. Acad. Sci. USA* 107, 10335-10339 (2010). PMID: 21059930
- R. Arora, G. I. Petrov, J. Liu, and V. V. Yakovlev, "Improving sensitivity in CARS microspectroscopy imaging," *J. Biomed. Opt.* 16, 021114 (2011). PMID: 21361677
- R. Arora, G. I. Petrov, and V. V. Yakovlev, "Hyperspectral CARS microscopy imaging through turbid medium," *J. Biomed. Opt.* 16, 021116 (2011). PMID: 21361679
- R. Arora, G. I. Petrov, G. D. Noojin, P. A. Thomas, M. L. Denton, B. A. Rockwell, R. J. Thomas, and V. V. Yakovlev, "Detecting mineral content in turbid medium using nonlinear Raman imaging: feasibility study," *J. Mod. Opt.* 58, #21, 1914-1921 (2011). PMID: 22337734
- Yakovlev, V. V., Dickson, W., Murphy, A., McPhillips, J., Pollard, R. J., Podolskiy, V. A., Zayats, A. V. (2013) "Ultrasensitive non-resonant detection of ultrasound with plasmonic metamaterials," *Advanced Materials* 25(16): 2351-2356. DOI: 10.1002/adma.201300314.
- Petrov, G. I., Zhi, M. C., Wang, D. W., Yakovlev, V. V. (2013) "Nonresonant background suppression in coherent anti-Stokes Raman spectroscopy through cascaded nonlinear optical interactions," *Optics Letters* 38(9): 1551-1553. DOI: 10.1364/OL.38.001551.
- Meng, Z. K., Petrov, G. I., Yakovlev, V. V. (2013) "Continuous-wave stimulated Raman scattering (cwSRS) microscopy," *Applied Physics B* 112(1): 99-103. DOI: 10.1007/s00340-013-5405-6.
- Denton, M. L., Noojin, G. D., Foltz, M. S., Yakovlev, V. V., Estlack, L. E., Thomas, R. J., Rockwell, B. A. (2013) "Hyperthermia sensitizes pigmented cells to laser damage without changing threshold damage temperature," *Journal of Biomedical Optics* 18(11): 110501. DOI: 10.1117/1.JBO.18.11.110501.
- Arora, R., Petrov, G. I., Yakovlev, V. V., Scully, M. O. (2013) "Chemical analysis of molecular species through turbid medium," *Analytical Chemistry* Published online December 31, 2013. DOI: 10.1021/ac4023633.