

Research Planning Committee (RPC) Meeting
Wednesday, October 27, 2021
2:30 p.m.
Zoom Video Conference
Minutes

Members Present:

Adriana Montaña, Ph.D., ex officio non-voting
Ajay Jain, M.D., Ph.D., ex officio
Angel Baldan, Ph.D., ex officio (as designated for Enrico Di Cera)
Daniel Hoft, M.D., Ph.D.
David Ford, Ph.D., chairperson
Gary Albers, M.D., ex officio
Jeffrey Scherrer, Ph.D. (as designated for Kim Schiel)
John Tavis, Ph.D.
John Walker, Ph.D.
Oleg Kisselev, Ph.D., ex officio non-voting
Ratna Ray, Ph.D.
Richard DiPaolo, Ph.D., ex officio
Willis Samson, Ph.D.

Members Not Present:

Daniela Salvemini, Ph.D., ex officio
Enrico Di Cera, M.D., ex officio
John Long, D.V.M., ex officio non-voting
Ken Olliff, D.Min., MBA, ex officio non-voting
Kim Schiel, M.D., ex officio
Noah Hillman, M.D.
Ravi Nayak, M.D., ex officio
Tammy Burton, CPA, ex officio non-voting

Guests:

Dagmar Ralphs (as designated for Tammy Burton)
Jasmin Patel (as designated for Ken Olliff)
Sandra Cornell
Stephanie Decker

- 1. The Minutes of the September 22, 2021 meeting were approved with a correction to Dr. Angel Baldan's credentials.**
- 2. Sr. Vice Dean for Research Update – Adriana Montano**

Dr. Adriana Montaña, Interim Sr. Associate Dean for Research, reported on two topics. The first was that she and Dr. Oleg Kisselev have been meeting with the chairs of clinical departments. So far, they've met with ten individuals – all positive experiences. The plan is to finish those discussions this week, document their comments, suggestions, and challenges. Those findings should be ready to share in the November meeting.

Dr. Ford asked for a preliminary summary.

- Dr. Montano stated that more mentorship is needed for some groups. Some chairs were very appreciative of the dialogue since there had not been a one-on-one line of communication between the School of Medicine (SOM), the Office of the Vice President for Research (OVPR) and the clinical chairs.
- Some of the challenges have been related to delays from the Institutional Review Board (IRB), the clinical trials office, and Conflict of Interest. The OVPR is working to address those issues. Predictions will be made to show how much money is being lost because of the delays versus the cost-savings if the delays were fixed.
- The overall idea is to have a plan in place with justification so that leadership understands the needs faced by clinical chairs and their departments conducting research.

Dr. Montano's second topic for discussion, which included PPT slides, was to seek approval from the RPC for the Grant Incubator.

Key features include:

- Four-month duration
- Pilot program rollout Q4 -2021, first set of participants Q1 – 2022
- Pilot with ten individuals; after completion of the pilot, cohorts of 3-4 individuals
- Endpoint is the submission of a major external grant proposal at the end of the incubator timeline

Dr. Montano confirmed that the program was for both clinical studies and basic science projects in response to Dr. Jain's inquiry. Dr. Jain also asked if currently funded PIs are excluded from this program. She stated that the program is catered to those who need urgent funding, but the future goal is to create a pipeline so that everyone can benefit.

There was an active back-and-forth discussion about the details of the Incubator:

Dr. Hoft: Is there any requirement for protected time during the four months of investigation?

Dr. Montano: "No, because the investigator will benefit from other people's work. They will work with the AHEAD Institute or revise the grant. Otherwise, everything else will be done as a group effort."

Dr. Tavis: Is there any type of incentivization of the faculty to spend their time helping other people?

Dr. Montano: For every three applications that a PI reviews, they will get a free grant-writing service which is worth about \$3,000.

Dr. Ray: Is this for new grants or re-submissions?

Dr. Montano: Initially we thought this was only for re-submissions but realized flexibility is needed. So, we're looking at new submissions as well as re-submissions. Recommendation to the program could come from different sources: a recommendation or a self-nomination; the senior vice dean for research, an RPC member, a department chair, and faculty colleagues may nominate a faculty member.

Dr. Ford suggested to Dr. Montano that she form a timeline to help everyone better understand the process.

- Dr. Jain wondered if there will be a problem identifying reviewers for the grant applications. Can we create an NIH-like study section where a monetary payment is

- involved rather than \$3,000 in grant-review service? This would be a bigger motivation and might be more successful in getting a good pool of reviewers.
- Dr. Montano stated this type of incentive would have to be requested from the Dean.
 - Dr. Tavis commented that another permutation on that would be to put it into the indirect cost recovery column for the grants and that would get around the tax and salaries issues.
 - Dr. Jain further asked if there would be a triage mechanism or would it be handled by the number of applications received, assuming some are triage applications and others are at the fundable score of 20 to 25? All applications will have to be reviewed and thinking about the triage process might be necessary.
 - Dr. Hoft commented that choosing the right individuals maximizes the success of the program. If people can simply self-nominate, then there really is no selection process. On the other hand, if the Chair is advocating for them, there would be protected time for them to work on this. If they self-nominate, the Chair should back them up.
 - Dr. Jain questioned the process of having an endorsement by the department Chair, stating that it added another layer of bureaucracy and created a possible selection bias.
 - Dr. Scherrer stated that the idea of being endorsed by the Chair helps because he has seen Chairs who have not supported research once they realize it is going to take time away from clinical obligations.
 - Dr. Jain supported comments from both Drs. Hoft and Scherrer by stating that the grant evaluation process might not be as strong within clinical departments compared to basic science departments. To avoid bureaucracy, he suggested that clinical departments be allowed to self-nominate.
 - Dr. Ray suggested that if the applicant can provide a few names of potential reviewers, then someone can contact them to see if they have the time to review the grant. So, getting the best reviewers is important rather than deciding who is endorsing the applicant.
 - Dr. Albers agreed that active support from the Chair for the endeavor would be beneficial.
 - Dr. Jain commented that a supporting letter from the Chair addressing concerns about not having enough time to do the research along with other departmental support may have more merit than triaging those applications through the clinical chairs.
 - Dr. Ford asked Dr. Montano if she has talked to faculty members who were excited to review the grants. Ten grants will require at least twenty reviewers unless some review more than one. She stated that a faculty member suggested getting reviewers from outside SLU, which she thought was a good idea.
 - Dr. Scherrer commented that you don't have to have someone with current RO1 funding to be a good reviewer. We can get a larger pool of reviewers if we include people with past funding or substantial activity as a co-investigator. The pool needs to be broadened. Dr. Ford agreed.

Many questioned the necessity of the Statistical Review module.

- Dr. Montano stated that study sections review statistical analysis much more now than before, and it would improve the application.
- Dr. Tavis commented that many grants, including his, do not require complex statistics.
- Dr. DiPaolo reiterated that not everyone will need to use this tool and, thus, will be unable to justify it as a budget line item.

- Dr. Montano stated that the service is \$150/hour (free if you're in the Incubator). For example, if you have a 5-year grant and need four hours per year, this is a very small amount of money that can help the AHEAD Institute.
- Dr. Scherrer mentioned that power analysis is a tool the AHEAD Institute provides, and she could incorporate that into her flow diagram. In addition, he agreed that most methods only require paired t-tests, and it would be a waste of time to go down this route.
- Dr. Albers asked about the appropriateness of the RPC determining if the Statistical Review would be advised or warranted.
- Dr. Ford felt there was enough expertise in the RPC to find merit in Dr. Albers' comment. He suggested that the applicant could make a statement within the application pertaining to the level of statistical analysis needed for the grant.
- Dr. Jain stated these services would be very helpful with research applications that involve meta-genomics and other bioinformatics studies.
- Dr. Ray stated that the Statistical Review should not be a criterion for the proposal but should be left to the discretion of the PI.
- Dr. Kisselev stated that for the applications that have already gone through the NIH review, it would be great to have the NIH panel comments. If there are any specific requests to include statistics or improve the statistic support, that would immediately set off tickets to go to the AHEAD Institute.

Dr. Scherrer voiced his concerns about clinical faculty who have not had much mentorship or a record of publications. He suggested there should be a way to triage them when we know they really belong to a K program or something similar.

- Dr. Montano stated that the PI's who have been identified within clinical departments currently have publications, labs, and research experience. They are not beginners.

3. X-Ray 320 Irradiator Replacement

Dr. Richard DiPaolo stated that SLU purchased an x-ray machine in 2007 that was used to irradiate biological samples – anything from cancer cells to mice for bone marrow transplants. It is used by multiple PI's in many different departments to irradiate cells in animals.

- The machine has been working great and it's easy to use. There's no problem with it now.
- The company contacted him and said the generator that produces the x-rays was made by General Electric and is no longer being made. So, it will no longer be serviced. That means that if this machine were to malfunction, there would be no irradiator here at the School of Medicine, which would interfere with the research activities for a lot of people.
- There are newer models made by the same company that do very similar things to what we have now. The base price without discounts is \$173,000.
- The machine is used an average of twice a week, and this can vary between labs. The turnaround time if this machine were to go down would be a guesstimate of one to two months.
- Since most use the machine for only about 15-20 minutes, there isn't enough justification for having two.
- The MMI Dept. has paid for the preventive maintenance service on it for the past 13 years, which was last done in March 2021.
- Dr. Ray asked about bioluminescence.

- Dr. DiPaolo stated that the basic model quoted at the non-discounted price of \$173K does not perform bioluminescence but has an add-on for another \$90,000.
- Dr. Baldan asked if there is a big difference in price with cesium-137 since we want a new irradiator.
- DiPaolo stated there is so much regulatory paperwork in background checks that no one would go back to a cesium irradiator. People are actively getting rid of them.
- Dr. Ford suggested we should put this as a high-level priority when we're talking about capital equipment.
- Dr. DiPaolo stated that his request is that we put this on a capital request list so that people know it needs to be replaced at some point and then somehow the RPC designates it as a high-priority replacement piece of equipment. And if this thing goes down, at least we're prepared. It won't be a surprise that this is a critical piece of expensive equipment that needs to be replaced.
- Dr. Hoft mentioned that he is an advocate because he uses it. He uses it to irradiate antigen-presenting cells when they're trying to generate long-term T-cell lines or clones. He asked what other people are using it for and how many other departments are represented.
- DiPaolo stated it has been regularly used by labs in five different departments within the last year. They're using it to irradiate antigen-presenting cells, tumor cells. It's critical for bone marrow transplants, which several labs are doing. Some have done targeted radiation of tumors.
- Dr. Ford proposed that Rich write a letter stating the need, including the multiple departments that use it. Then, the RPC signs off on it and it's sent to the Dean and Tammy Burton as a high-priority item for capital equipment. He thought that Rich should express to them that five departments are going to be impacted if this goes down. He later asked the RPC if there was a discussion regarding that proposal.
- Dr. Hoft agreed it was a good idea.
- Dr. Ford asked to move it to a vote by the raising of hands. He concluded that the RPC would move forward with it.

Action Item: DiPaolo writes letter to be endorsed by the RPC and sent to the Dean and Tammy Burton concerning the x-ray 320 irradiator.

4. Genomics/Bioinformatics Capability Expansion

- Dr. DiPaolo brought this issue to the Dean's attention. She told him to put together a business plan. He brought it to the RPC to get their thoughts.
- Genomics research is expanding at a very high rate. SLU is making big major steps in terms of technological advances.
- The issue is we have one person in the Genomics Core, Michelle Pherson, who is outstanding, has many tasks and is over-worked.
- At least 6 or 7 RO1's have gone out in the last 6 to 12 months that included some sort of advanced transcriptomics. We won't have the manpower to get the work done once people start receiving their grant money.
- Most agree there is a need to expand the number of people in the core by at least one in the immediate future, including Dr. Maureen Donlin who is the head of the Genomics Core. She helped prepare the job description and salary range based on skill level. Support and perhaps an endorsement from the RPC to expand the Genomics Core is needed.

- Dr. Tavis disclosed that Dr. Maureen Donlin is his wife and noted that the Core has had to turn away work because of the lack of manpower.
- DiPaolo stated the business plan for hiring a new person might have to be supported by interested parties and/or the Dean. Then, as these grants come in, we make sure that all grants that include transcriptomics/genomics and are going to use the Core have that written into the grant.
- Dr. Baldan stated that 50% of Michelle's salary comes from the Dean. The other 50% is recovered from work she does and Biochem [department] picks up the rest. He also mentioned the Ion Torrent is at the end of its life.
- Dr. Hoft supported this idea. His group is trying to recruit a computational biologist to help support systems vax analogy and build a team to be supportive of a lot more here. Having a vibrant Core that has the technical people who can generate the data is critical to be able to utilize, optimally, the computational biology skills of the people they're looking to recruit.
- Dr. Ford suggested to Rich that maybe the RPC should come back to this after he developed a business plan for the Dean.
- Dr. DiPaolo stated that work is being sent to GTAC, so the Ion Torrent replacement isn't critical right now for work being done by some labs. This isn't something his lab personally needs, but the SLU research community needs it, and it is needed for recruitment purposes.
- Dr. Tavis said Maureen looked at purchasing an Illumina system and the numbers just didn't work to justify buying more hardware. The need is more skilled labor in both the library preps and in the data analysis downstream.
- Dr. Montano stated that the Dean and the OVPR are aware of this problem and are receptive to it. If the RPC puts together a list of the needs, like how many users will take advantage of this, this will be a realistic approach for them to approve or make sure things move forward.
- Dr. Baldan suggested using a letter originally written by Michelle Pherson and the Biochemistry Department Instrumentation Committee that justified the need and the purpose of the Genomics Core as a template for the letter from the RPC.

Action Item: DiPaolo, Baldan and perhaps Michelle Pherson will work on this letter and/or business plan to prepare for review by the RPC. The RPC will vote on it and send it through the appropriate channels (the Dean and Tammy Burton) if it passes.

5. OVPR Update – Research Innovation Fund – Jasmin Patel

Ms Patel discussed the new seed grant pilot program run by the OVPR. The grants are \$50,000. The goal is to identify high potential research innovations and technologies that can accelerate the timeline to commercialization. These are primarily translational type projects that are in a research advancement stage or start-up formation stage. The initial \$300,00 in funding for this program was provided by the Research Institute (a Seinefeld gift) with the goal to raise additional philanthropic funding over time.

- Process steps – written applications, coaching, pitch presentations, awards (5 full grants, 2 partial grants).
- Awardees: R. Di Paolo, T. Ahn, A. Montano, S. Zustiak, V. Sagan, H. Lohse-Busch, J. Tavis
- Lessons Learned: start-up formation grants require additional internal organization to formalize; develop a more formal program for coaching and judging; external expertise is essential

- No update about the next round of potential participants; will get more feedback from current participants before launching next group

Feedback from a few participants in the program:

- Dr. Montano said the coaching was instrumental and helpful to the process.
- Dr. DiPaolo said the experts were great at advising scientists with little licensing or commercial experience. The bluntness of the coaching sessions was educational.
- Dr. Tavis said the coaching was helpful. He also cautioned about the opportunity cost of a large, faculty-driven process. There was a significant time commitment that should be taken into consideration.

Ms Patel assured everyone that all comments would be taken into consideration and used constructively to improve the process.

6. Old Business – Dave Ford

- First topic: Equipment List. Dr. Ford contacted everyone that still needs to provide their equipment list for the Dean.
- Second topic: The Research Opportunity Fund. It is still administered by the Biochemistry Dept and is at \$66K or \$67K.
- Perhaps the RPC can consider using the funds for this extra person for the Genomics Core. May need to talk with Ken Oliff to see if this use fulfills the innovative nature of the Research Institute.
- Dr. DiPaolo stated that an investigator approached him with an idea for a piece of equipment for multiple labs that could be used for purifying proteins – column-based pure HPLC, but it has multiple detectors and a bit fancier than what's normally used. It's about \$60K, and a donor agreed to pay half the cost. He considered this a possible use for the Research Opportunity Fund as long as it's available to whomever wanted to use it.
- Dr. Ford stated that protein purification doesn't sound like something that's cutting edge and innovative. It sounds more like a departmental capital equipment need.
- Dr. Kisselev stated the importance of going back to Ken and determining the original use for the fund. He thought it was meant to support junior faculty who bring research that currently does not exist at the SOM - broadening the base of junior scientists to participate in the research process.
- Dr. Tavis stated he was on the committee that approved the money and didn't recall the junior faculty component ever being discussed. The source of the funds did not have that restriction attached.
- Dr. Kisselev stated that once the purpose of the fund has been clarified, it might be helpful to look at the quality of the applicants. If the quality of the applications is not high enough, then he thinks it actually would be a good idea to repurpose that money and use for the Genomics Core.
- Dr. Ford agreed that using the fund for the Core person would support an innovative process and refuel the research engine.
- Dr. Tavis asked if the future use of the Research Opportunity Fund could be placed on the agenda for next month.

7. New Business – Group Discussion

- Dr. Scherrer wanted to know if the RPC was the appropriate committee to discuss the long-term struggles he and others have had engaging SSM Health to be a research partner.

- Dr. Ford stated that Oleg has been handling this, but it would be interesting to hear his comments.
- Dr. Kisselev stated that this remains an issue which is being approached from two directions: one, looking at pilot studies run with SSM to figure out where the wrinkles are like what Jeff mentioned. The second - there is a broader understanding by SSM on the importance of research in general. What [Dean] Chris Jacobs tells us is that there are on-going discussions with some of these groups in SSM on how to broaden our relationships. We're encouraged to wait and let the process work through. If we try to push it by creating another group, I think it will be more of a distraction.
- Dr. Scherrer admitted that SSM isn't research-adverse. They just haven't chosen to do research with us. They're working with a scientific commercial group down in Oklahoma who does a variety of research for them. They have another group in Wisconsin.
- Dr. Kisselev pointed out that there have been recent changes in SSM leadership. The CEO of SSM, George Danica, is much more open to discussing research. There have been some meetings as recently as last week to look at the front door consent and the language that needs to be in place to allow sound research. So, things are moving forward but probably not as fast as we would like.
- Dr. Ford surmised that perhaps a higher level of negotiations is needed, and it sounds like Chris is working on that.

There being no further business, the meeting was adjourned at 4:18 p.m.

Respectfully submitted,
Sandra Cornell
SOM Research Planning & Operations Manager