Question:
Eight to 12 months ago, the low NIA payline was causing considerable angst among researchers nationwide looking at an 8% payline. Here in June of 2011 it appears that it has recovered dramatically with early stage PI’s (R01 only) looking at a 16% payline and established PI’s (R01 only) looking at an 11% payline. How did you improve the situation so quickly?

Answer:
Improving our payline was a high priority for the Institute. We communicated to investigators in the field that we were going to be more selective both in the permission to receive applications and in the award of the more expensive ones. And, investigators responded and we saw a decrease in the average cost of applications that we received. This showed us that the scientists understood that if NIA was going to make more rigorous decisions about funding, scientists needed to find more cost-effective ways to finance their research.

We also instituted differential paylines for more and less expensive awards and modified the funding for Institute-established set-asides and priorities. We’ve always had fairly modest set-asides; generally not more than 8 to 9 percent of the Research Project Grant budget that has been set aside for specific initiatives. We reduced this still further in 2010 so we could have more funds available for funding investigator-initiated applications.

Question:
Looking a little further back, questions indicate that sometime late in 2008 or 2009, there was a change in how NIA develops budgets or how they are structured that essentially limited the division-specific budgets. Is this the case and has it resulted in the outcome you were seeking? And, what effect, if any, has this change had on the NIA payline?

Answer:
In previous years, we did have specific budget allocations to separate NIA divisions. We eliminated this practice several years ago, in response to tightening budget trends. As we saw our constant-dollar budget eroding, we didn’t feel it was appropriate to have differential budgets for the divisions. This could have resulted in differential paylines for different components of the Institute and we didn’t think that was in the best interest of aging-specific research overall. So, we established a single payline for all the divisions. This means that the applications to all of the divisions are competing for the same funds in the single payline. We’ve tracked the effect of this change and found that it has not had a significant impact on the balance of awards across programs.
To expand a bit on NIA’s ability to respond quickly to budget issues, we need to answer the question: What had been responsible for the lower payline in years past? It has been suggested by some that the lower payline in 2010 was the result of investments made in prior years for large awards such as clinical trials. However, to clarify the way in which our budgeting works, if, five years ago in 2005, we funded either a number of smaller awards or a large clinical trial, when those awards ended in 2010, we would have in either case an equal amount of funds available for funding in 2010. NIA has flexibility each year to make decisions that best suit the funding circumstance for that year. Clinical trials were funded at a time when the funding picture was different than it is now, but this did not restrict our ability to respond to changes in budget circumstance of this past year.

Question:
If that is the case, as you talk about the changes over a 5-year period, will there be a cyclical effect of the challenges of a lower payline earlier say in 2008 where grants were funded for a 5-year period. Is there a chance that there could be a cyclical effect in 2013 or 2014, we could be up again with something and if that’s the case are there ways to manage that if perhaps it is not the case?

Answer:
We do talk about funding cycles, and it means that if we fund a certain number of grants in any given year, that 5 years later those funds will become available. In other words, what happens 5 years earlier influences what happens 5 years later. We have carefully analyzed these funding cycles. We found that we cannot accurately predict what is going to happen.

This year’s events provide a good illustration. There was a one-percent decrease in the overall NIH budget, including NIA’s. In response, we changed policies which altered the inflationary increases allowed in non-competing awards. Those two factors so dominated others that they dampened what might otherwise have been an uncomplicated funding cycle.

And so, the short answer to your question is that we really cannot predict what will happen with great accuracy 5 years from now. Rather, we have to pay careful attention to the budget prospects for this year even as we wrestle with projections of what might happen in 2012.

Question:
As a professional membership organization in the aging field, GSA is acutely interested in the future of aging research and ensuring the next generation of research leaders is being cultivated. We applaud the steps you have taken to increase the payline for early-stage PIs. Many have expressed concern that the low NIA payline could drive up and coming researchers to other fields. How are NIA paylines comparing to other centers? Do you have a sense as to whether or not the low payline has caused a “flight” to other institutes or centers or caused new researchers to re-think entering the field?
Thank you for posing this important question. This is why we are so grateful to be able to speak to this GSA audience now and to communicate some of the relevant facts. NIA is very concerned that the low 2010 payline, along with rumors and speculation about the 2011 payline, would have misinformed applicants, tempting them to leave the field of aging research. We are very gratified to be able to say that NIA’s payline has in fact improved. Although only a few other NIH Institutes have posted their FY2011 paylines at this point, as far as we can tell, NIA appears to be in much the same situation as these other Institutes. So, there is not a strategic reason for investigators to be leaving the field of aging research. We’ll know better by the end of this year whether last year’s payline resulted in a change in applications. It’s more important for us to be forward looking—to make sure that the GSA membership and the aging research community is well informed and can decide about research applications based on fact. We are particularly determined to maintain a competitive posture so that NIA and aging research don’t lose the benefit of our current and new investigators.

Question:
Many questions are coming in from listeners that suggest there is a perception that funding cuts have impacted their specific areas of research interests more than others, and I believe you indicated earlier that because of the new approach to budget management, everything is sort of together and included in the one budget. Just wanted to clarify, is the pain as it relates to funding for project grants spread evenly across all of the areas/all divisions of funding or are some areas affected more than others?

Answer:
The impact is relatively uniform across programs. We routinely track the way in which applications to each of our program divisions are scored at CSR. We’ve found that they are relatively homogenous and do quite well in peer review. Because we have a single, equivalent payline across all programs and divisions, the consequences of the payline really are uniform across divisions and programs.

Question:
A question has come in specifically asking about key funding priorities for minority aging research and specifically will the RCMARs, the Resource Centers for Minority Aging Research, continue to be funded?

Answer:
Our evaluations of the RCMAR program have consistently reinforced its merits. We intend to continue support of that program now and as competing renewal opportunities appear in the future.

Question:
Now looking to the future, a question has come in about trans-NIH initiatives or NIA initiatives with other organizations. A couple questions here, one is having to do with the
idea of the NIA working with other institutes at NIH on some sort of trans-NIH initiative to help advance aging research. The questions reference a very successful blueprint for research in neuroscience, and the question is: As age is a risk factor for most if not all chronic diseases, is there an opportunity to build stronger bridges to other centers to encourage them to be open to funding aging-related work through their existing programs? Perhaps this approach could have synergistic effects that helps all the Institutes involved and so wondering if this idea worthwhile pursuing? And, from GSA’s perspective, if so, is there anything that GSA or other organizations might be able to do to support the effort?

Answer:
We have had general conversations about an aging initiative, similar to the Neuroscience Blueprint in which many Institutes would participate. There is not, as yet a formal structure.

There are several existing NIH-wide initiatives that NIA is participating in and profiting from. One is the Neuroscience Blueprint. This is a collaborative framework that includes the NIH Office of the Director and the 15 NIH Institutes and Centers that support research on the nervous system. By pooling resources and expertise, the Blueprint identifies cross-cutting areas of research, and confronts challenges too large for any single Institute or Center. The Blueprint makes collaboration a day-to-day part of how the NIH does business in neuroscience, complementing the basic missions of Blueprint partners. During each fiscal year, the partners contribute a small percentage of their funds to a common pool.

Another trans-NIH initiative involves the science of behavior change. The NIH Common Fund launched the Science of Behavior Change program to improve our understanding of human behavior change across a broad range of health-related behaviors. The program is designed to support research that integrates basic and translational science and cuts across the disciplines of cognitive and affective neuroscience, neuroeconomics, behavioral genetics, and behavioral economics. The program will establish the groundwork for a unified science of behavior change that capitalizes on both the emerging basic science and the progress already made in the design of behavioral interventions in specific disease areas.

Another, somewhat related area is the Basic Behavioral and Social Science Opportunity Network, known as OppNet. The goal of OppNet is to expand NIH’s funding of basic behavioral and social sciences research. This is scientific inquiry that explains the mechanisms and processes within and among individuals and groups that influence health-related behaviors. NIA is quite involved in this through our Division of Behavioral and Social Research.

Finally, there is PROMIS—the Patient-Reported Outcomes Measurement Information System. This is an NIH-funded initiative to develop and validate patient-reported outcomes for clinical research and practice. PROMIS seeks to enhance and standardize measurement of several selected reported outcomes.
through both computer adaptive testing and traditional paper and pencil instruments. PROMIS is one of several initiatives funded through the NIH Common Fund and we encourage researchers and clinicians to consider using PROMIS tools in their studies or practices.

Question:
The next question that has come in has to do with payline and other types of non R01 grants and I’m just wondering if you could comment on the K01 grants and other kinds of paylines.

Answer:
Attracting young scientists to the field of aging research is critical to ensuring a vital and dynamic workforce. Young investigators bring fresh ideas to existing research problems, and they pioneer new areas of investigation. NIA is committed to the continued training, career development, and support of young and early-stage investigators and among our key support mechanisms are the K awards.

The NIH has several types of K awards which are designed to serve as research career development awards. They are available for researchers at all stages of their careers and provide varying amounts and types of support. We have both mentored and unmentored awards for researchers in basic and clinical fields.

A particularly interesting mechanism is the K 99 award. This is aimed at postdoctoral trainees and fellows. The purpose is to allow mentoring and research funding to enable rapid transition to independent research with R01 support. This award has two phases: mentored and independent.

It’s important to note that NIA does not calculate percentile scores for training awards, so there is no payline per se for this category. The NIA training awards have, like our other grant programs, been affected by budget constraints. We have fewer dollars for training now than we had in prior years. Nevertheless, we are continuing to fund these crucial training awards.

Question:
As we are trying to look to the future to anticipate next year’s payline, do you have any crystal ball to want to take a guess, based upon your experience or any other data, that might be able to help in estimating what the future payline might be?

Answer:
This is terribly challenging for all of us. Before this year, there had not been an actual decrease in the NIH budget. We, along with all of you, are watching with enormous interest what is happening at the national level in terms of the U.S. economy and budget process. Those questions are so large that it is very difficult for us to estimate paylines. We expect that next year may be another year of constrained resources and expect to use many of the same processes which preserved the payline in 2011. We’ll again be looking carefully at the distribution of
grants and costs. As I mentioned earlier, we are focusing on being flexible rather than trying to predict what our budget will be next year and making any firm estimates of payline.

Question:
In terms of payline, I’d really want to say again how much GSA appreciates the steps you are taking to help improve the payline for new researchers. Do any other centers use this dual payline approach where there’s a differential based upon new researchers versus the established as well as based on funding of less than $500,000 or more than $500,000? Is that common or is that something unique to NIA?

Answer:
The simple answer is that we are not aware of any other Institute that has different paylines based on the cost of an award. Other Institutes have multiple paylines for different mechanisms. However, it’s important to note that many of the Institutes do not award percentile scores to many of their more expensive awards. So, those awards actually are not assigned a percentile and are not factored into a payline. It’s not possible to really know whether a greater constraint is being put on more expensive awards because many Institutes don’t score or publicize a percentile rating for their more expensive awards.

Question:
You talked about payline versus success rate and we certainly understand that payline is more Institute specific. I’m wondering should we be looking more at success rate as a metric? And, if that’s the case, based upon the data you shared, it does look like the success rate overall for NIH sort of stabilized in 2007 or 2008 and NIA’s success rate still seems to be heading in the wrong direction. Do you have any thoughts about that?

Answer:
In general, the success rate will flow with the payline. That was reflected in 2010 when both NIA’s payline and success rate were suffering relative to other NIH Institutes. We now know that in 2011, the payline has corrected itself to be more in line with other Institutes. We predict that this will also be true for the success rate. The success rate is not calculated until after the end of the fiscal year, so we won’t know until sometime in the fall. I expect that, like the payline, the success rate will become closer to the NIH norm.

Question:
One question that has come in indicates that researchers have heard that NIA will not be funding any more behavioral random clinical trials. Is there any truth to that notion?

Answer:
To my knowledge there has been no discussion, much less decision, relating to behavioral and clinical trials. All of our larger research projects and clinical trials—be they medical or behavioral—will be receiving appropriate approval scrutiny. But
no, there is certainly no decision to specifically single out behavioral clinical trials for any special scrutiny or reduction in investment.

**Question:**
You referred in your presentation to “big science” and I’m wondering if you had any thoughts as to how the investment in “big science”, what it is leading to or thoughts for the prospects of having large payoffs down the line?

**Answer:**
“Big science” as defined by budget level is a very heterogeneous research group. For example, people often think of clinical trials as high on the list of “big science.” Clinical trials are conducted when the research opportunities generate the priorities, in terms of public health and scientific opportunity, that merit such an investment. The ability to conduct a clinical trial, while it is a severe tap upon budget, is also a sign of success and maturity in the field.

We will continue to support clinical trials when they are judged meritorious. We now have in place a very rigorous process for prescreening and evaluating clinical trials, prioritizing them in consultation with our advisory council, to make sure that when we do invest in such trials, they are truly of the highest priority.

That’s one category of large science, but there are many others. Some of them are infrastructures for support of large population-based studies, such as the Health and Retirement Survey. These investments provide a dataset that is rich in behavioral, social, biologic, and administrative data that then becomes a resource for use by multiple investigators. “Big science” could also be construed to be the contracts we have to produce aged rodents for use in aging research. Again, this is done to fulfill the needs of investigators who need those animals to carry out their research.

Another example is the area of program project grants. NIA is one of the few Institutes that uses that mechanism and it continues to be a very successful one for us. The awards are expensive, but they contain multiple projects by multiple investigators and they often support pilot projects and serve a training and career development function as well. We look at all of these categories of “big science” with great care because they are large investments, and because of what they represent in terms of benefits to the field and to the public health.

**Question:**
Another future-oriented question that has come in is asking us to try to predict the future, if we can, about some of the global budget caps that are being contemplated as we look out to fiscal year 2012. How do you see these eventually impacting NIA funding?

**Answer:**
As in the response to the 2011 reduction in the NIH budget, the NIH leadership has worked very closely together on solutions that are in the best interest of all the NIH
Institutes and Centers. Although it is not possible to predict the impacts on budgets in future years, we can say that the problems and challenges, along with the solutions, are going to be NIH-wide and in common. At NIA, we will continue to make our own adjustments as they best serve the needs of the Institute, but that will be in combination with some agency-wide adjustments to the budget.

Question:
Are the selection criteria for Beeson K-23 awards more robust than that for "general Ks"?

Answer:
If the question is really whether the same application submitted to the Beeson program or another K program would fare differently, I don’t know. We really don’t have experience across the same application with regard to the review in both venues. I think that the selectivity is very high in all those programs. Although we regard them as important, the success rates are still going to be constrained. I think that the decision about which program should be the target of application really depends upon the stated areas of emphasis in the Beeson program and the degree to which the applications meet those standards.

Question:
You spoke briefly today about the collaboration between the NIA and the Administration on Aging. Would you say a few words about that collaboration?

Answer:
Yes, the collaboration with AoA over the past several months has been reinforced and intensified so that we now have regular leadership meetings with AoA and subgroups that are pursuing several common interests.

Some of the successes currently in place have utilized the ability of AoA and its connection through demonstration projects and delivery of service to translate the outcomes of NIA-supported research. The one example is the REACH program, the NIA-supported research initiative of behavioral interventions to improve the quality of health and life for people who are taking care of individuals with Alzheimer’s disease, as well as for those with Alzheimer’s itself. The results in this study indicated that interventions both improved the mental and physical health and well-being of the care providers as well as delaying the need for institutionalization of the patients with Alzheimer’s disease. The ability to translate this clinical trial result into widespread application within the community has been facilitated enormously through interaction with the AoA which has adopted it in a number of their demonstration projects and centers.

Question:
In regards to training researchers of the future, there seems to be a perception among some that NIA funding for training grants has decreased. Is this perception accurate? What does the future hold for training grants?
Answer:
The investment in training has not decreased. We have been, across all of NIH, facing questions about how to manage training with limited budgets. One priority at NIA and across NIH is, in addition to supporting an adequate number of trainees in a time of budget constraints, the amount of support that trainees receive. There’s been relatively little increase in stipends, making it more and more difficult for trainees to support themselves and therefore to find a sustainable fellowship program. Particularly at a time when an increasing number of such individuals are already having families, we are looking at the ability to increase stipends. We also want to sustain our overall level of training funds so that we can make it livable for people who want to commit themselves to research to make it through these years in training.

Question:
Now, speaking to new researchers, perhaps to those who are trying to decide where to submit their first grant to NIH, and trying to decide between NIA and some other Institute - what would you say to them?

Answer:
I suggest that new researchers understand where their own intellectual and public health passion is. Individuals who are excited by the science and the public health aspects of aging research ought to make NIA the place where they submit their first application. We are going to be doing all that we can to sustain the success rates to make our areas of research as competitive as others.

The other bit of advice I would offer is to take full advantage of the outstanding and committed program staff that we have at NIA. Prospective grantees should contact NIA when they are designing an application for a fellowship, a K award, an RPG, or one of the R awards. It doesn’t matter if you don’t get to the right person to begin with. We will make sure that you are put in contact with the right person. A primary goal of our talented staff is to work with applicants to help them understand the best place for their research to be submitted. There shouldn’t be any misconception: The program staff is very much here to ally itself with and help scientists in support of research. There shouldn’t be any misperception that this is somehow adversarial, that we’re challenging you to come in so that we can critique your applications in a negative way. We are really all on the same side, and anyone who doesn’t take advantage of this is missing a grand opportunity.

Question:
What is paylines or score for P01 at present?

Answer:
P01s do not have a separate payline at NIA. Instead, they are considered with other large applications where the funding line is the 8th percentile. Please see the NIA website for more information on how P01s are percentiled.