## National Cancer Advisory Board (NCAB) Ad hoc Subcommittee on Facilitation of Industry Interactions Meeting

DoubleTree Hotel Grand Ballroom B 8120 Wisconsin Avenue Bethesda, MD June 27, 2011 1:00 to 4:00 p.m.

## SUMMARY

## Participants:

Subcommittee Members Dr. Bruce Chabner Dr. Anthony Atala Mr. William Goodwin Dr. Waun Ki Hong Dr. Kim Lyerly Dr. Olufunmilayo Olopade Dr. Jennifer Pietenpol Dr. Douglas Lowy (NCI) Mr. Eric Hale (NCI, Executive Secretary)

Other Participants Allison Baer (ASCO) Dr. Marcia R. Cruz-Correa (NCAB) Dr. Kevin J. Cullen (NCAB) Dr. Paulette Gray (NCI) Dr. Judith S. Kaur (NCAB) Dr. Aubrey Miller (NIEHS) Dr. John Potter (DOD) Dr. Jonathan M. Samet (NCAB) Dr. Robert Wiltrout (NCI) Kate Gottfried (Rush University Medical Center) Dr. Michael Burgio (The Scientific Consulting Group, Inc., rapporteur)

Dr. Bruce Chabner welcomed the Subcommittee members and other participants and thanked them for taking the time to consider the important issues facing the National Cancer Institute (NCI) and the Center for Cancer Research (CCR). Attracting and retaining faculty is critical to the mission of the intramural program. Dr. Chabner encouraged all participants to raise issues and ask questions during the discussion.

## NCAB Ad hoc Subcommittee on Facilitation of Industry Interactions—Dr. Robert Wiltrout and Subcommittee Members

Dr. Robert Wiltrout, Director of the CCR, gave a presentation and led a discussion on the challenges the CCR has faced recruiting and retaining senior level clinical and research staff. He began by providing an overview of the CCR. The CCR is an intramural division of the NCI consisting of 30 laboratories, 15 clinical branches, and 4 programs. The CCR's primary activities include basic laboratory and clinical based research and translation with the goal of making high impact discoveries and bringing those discoveries into clinical application. CCR investigators are encouraged to engage in high-risk, cutting edge research projects that are difficult for industry or academia to support. The portfolio of the CCR contains approximately 30 percent basic research, 15 percent HIV/AIDS research, and 55 percent clinical and translational research.

The division includes 251 principal investigators (PIs), which is a decline of approximately 20 percent from 2003 when there were more than 300 PIs. During that period of time, increasing salaries coupled with flat budgets forced CCR to support fewer investigators. Supporting a lesser number of investigators has led to a demographic shift in the age of CCR PIs; currently 40 percent of tenured CCR PIs are over 61 years old. The skewed age demographic among CCR tenured investigators demonstrates a potential that the CCR will lack the senior leadership necessary to carry out its mission in the near future. To address this potential shortfall, the CCR needs the ability to retain mid-career investigators and recruit senior and clinical researchers. Dr. Olufunmilayo Olopade noted there is no retirement requirement at NCI and people are living longer, more productive lives; the skewed age demographics are a reflection of that societal shift. Dr. Chabner agreed and commented that the problem was much worse at CCR than most other academic institutions, where the median age of PIs is 45-50 years old. Dr. Jennifer Pietenpol stated that she also has observed an increase in the median age of tenured PIs at her institution, Vanderbilt University.

Dr. Wiltrout described barriers to retention and recruitment of talented CCR investigators, including:

- Limited ability to offer competitive salaries, especially to clinical researchers.
- Inability for investigators to supplement incomes through outside activities with pharmaceutical and biotech companies.
- Strict financial conflict of interest statutes and policies that limit financial holdings with substantially affected organizations (SAO) and prevent researchers from collecting royalties and licensing fees on patents.

Dr. Wiltrout presented several case studies where one or more of these barriers prevented senior clinical investigators from being recruited into CCR. Several top candidates for clinical branch chiefs cited the inability to earn supplemental income with industry as the reason for not accepting their offers. Candidates for a tenure track positions cited not wanting to divest stocks and limits on financial holdings as reasons for declining their offers. A chief of radiation oncology candidate was hesitant to accept the position because his spouse's investments presented a potential conflict of interest.

Conflict of interest rules also can limit collaborations with industry and force investigators to recuse themselves from working in a particular area of research. Investigators can be prevented from working on any research project that could increase the value of a patent held by a previous employer or have their research limited because of family members who are working in industry. In one example, an NCI investigator's spouse held stock options in a pharmaceutical company and which prevented that investigator from participating in any collaboration with the company, resulted in him not being able access specific agents that were well suited to his research efforts. A recently hired PI has announced his plans to resign because he was unwilling to divest his interest in a royalty sharing agreement with a previous employer on a patent where he is a named inventor. The only other alternative would be for this investigator to recuse himself from any research related to his previous patent.

A participant noted that in highly interactive disciplines, like clinical cancer research, conflicts of interest may be difficult to avoid. Dr. Chabner expressed that, in the current research environment, it may be impossible to conduct the best research without engaging industrial partners. Dr. John Potter agreed with this sentiment and stated that cross fertilization of ideas between public and private institutions is essential. Dr. Potter said that the current bureaucracy surrounding conflict-of-interest issues appear antithetical to this ideal. There was wide agreement among committee members that public-private partnerships in clinical and translational research were desirable and should not be discouraged.

Dr. Wiltrout suggested that to encourage interactions with industry and improve recruitment and retention of intramural staff, the NCI needs to transition to a system where conflicts of interest are managed through disclosure and transparency of potential conflicts instead of strict prohibition. Conflicts could be managed proactively through ethics agreements. Waivers with full disclosure of potential conflicts could be utilized for new recruits when appropriate. Mr. Eric Hale explained that although a waiver system exists, waivers are infrequently sought and rarely granted; in 2010, only a single waiver was granted. Waivers are rarely utilized because they require the involvement of multiple offices, take a long time to process (sometimes years), and are most often not granted. Having a waiver is also a declaration that an investigator has a potential conflict of interest and can lead to their decisions on other matters receiving extra scrutiny. One of the criteria for granting a waiver is that the government must gain a discernible benefit from doing so.

In response to questions from committee members, Dr. Douglas Lowy, Mr. Hale, Dr. Wiltrout, and Dr. Chabner clarified some of NIH's current policies and practices concerning conflicts of interest. Investigators are limited in the value of stock that they can hold from a single company or sector related to their research. They can give talks and consult for companies but cannot receive honorariums or compensation for their consultations. NIH researchers cannot create start-up companies based on their research. Inventors can benefit from patents they obtain while government employees, however the NIH only seeks patents when there is a government interest. Employees can serve on corporate boards as long as they are unpaid and their service on the board does not involve a fiduciary responsibility; they also cannot own stock in that company. Employees can serve as officers of professional organizations but often have to serve as non-voting, non-fiduciary agency representatives. It was noted that companies and

professional organization generally are not interested in having board members who cannot be fully engaged with the goals of the organization.

Dr. Pietenpol expressed the concern that pharmaceutical companies are increasingly funding academic projects in basic and translational research and that these partnerships cannot occur with investigators at the NIH. Dr. Wiltrout responded that collaborative research and development agreements between NCI and companies do exist. NIH employees must follow strict guidelines (e.g., regarding travel, paying for meals, etc.), and academic researchers often have to adhere to similar restrictions in their own institutions. In general, however, it is quicker and easier to set up these agreements in an academic setting than at NIH.

Mr. William Goodwin asked if mechanisms were available to avoid some of these conflicts of interest—for example, by setting up blind trusts. Mr. Hale responded that blind trusts typically require \$1-2 million or more in assets. It also is impractical to have a third party manage patents or small companies. It was suggested that patents could be divested. This may be impractical, however, since the future value of intellectual property is very difficult to estimate.

Investigators who are prominent in their fields are more likely to be inventors, to consult for pharmaceutical and biotechnology companies, and be asked to serve on boards and be officers of professional organizations. These duties help researchers advance their careers and can be beneficial to both the private and academic organizations that they work for. Current conflict-of-interest policies discourage NIH intramural investigators from engaging in these activities, to the detriment of the scientific program. In particular, it is counterproductive to discourage investigators from pursuing research projects in fields where they have intellectual property with a financial interest from their previous employers; their proficiency in those fields is generally the primary reason they were considered for a tenured position.

Dr. Pietenpol suggested that it would be useful to have a standing committee to manage conflict of interest waivers, and Dr. Marcia Cruz-Correa supported that suggestion. This committee could be modeled after institutional review boards and support a streamlined, transparent process for managing conflicts of interest. Dr. Wiltrout and Dr. Chabner suggested that potential conflict-of-interest issues could be managed more efficiently at the division or institute level rather than at the department level.

Dr. Wiltrout presented barriers to intramural staff receiving awards from external organizations. The NIH process for vetting awards is complex and tedious. It often requires awarding organizations and potential award recipients to respond to multiple requests for information. There often are extended delays in review and approval of awards. Examples were presented of awards that were still pending approval after months of review. Dr. Lowy expressed feeling grateful that an award he received had no monetary reward because the vetting process would be easier. This complex review process potentially harms intramural investigators as organizations become reluctant to recognize NCI employees in the future.

Strict and complex travel regulations also were cited as a barrier to industry interactions. Government employees are not allowed to accept a business class ticket unless the travel time is over 14 hours, non-stop. There are strict rules governing the amount of annual leave that can be taken in conjunction with domestic and international trips. When arranging their own travel, intramural investigators are required to use a designated travel agency; the fares quoted by this agency often are significantly more expensive than fares that can be found online and elsewhere.

There was a general consensus among the participants that current policies intended to prevent conflicts of interest are inflexible and pose significant barriers to the recruitment and retention of intramural research staff. They discourage interactions between the public and private sector research communities, which are vital to developing novel clinical interventions.

The Subcommittee recognized that policies governing conflict-of-interest issues are necessary and that potential conflicts of interest need to be managed. These issues are complex because they involve statutes, which can only be changed by congressional action, as well as the interpretation of statutes and policies. Changes in interpretation and policy could, perhaps, be actuated at the institute level. A discussion ensued about what is the NCAB's role in recommending solutions and who within NIH has the power to enact changes. Participants reached consensus that these issues were too complex to address with a single roundtable discussion and that an expert panel should be convened to consider these issues in depth and make recommendations.

The Subcommittee agreed that a statement would be drafted that expresses the Subcommittee's concerns about restrictive conflict-of-interest policies and the opinion that an expert panel should be convened to consider these issues and recommend changes that will facilitate equitable and timely processes for managing conflicts of interest. A draft version of this statement will be distributed to the Subcommittee members for review on the morning of June 28. The resolution would be presented to Dr. Harold Varmus, Director of NCI, during a closed session of the NCAB meeting to ask whether he would be in favor of the NCAB making this statement publicly.

The Subcommittee meeting adjourned at 3:00 p.m.

Dr. Bruce Chabner Chair Date

Mr. Eric Hale Executive Secretary Date