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Dear George,

I want to thank you and your staff for arranging a productive external advisory board (EAB) meeting, conducted virtually on September 28. Members of the EAB reviewed your progress in the past year and how you have addressed the critiques from your 2020 Cancer Center Support Grant (CCSG) submission. We want to congratulate you, your leadership team, and the Holden Comprehensive Cancer Center (HCCC) membership on the strong overall progress you have made. We provide specific recommendations for each section presented to the EAB on the following pages.

Sincerely yours,

Stanton L. Gerson, M.D.
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On behalf of EAB members:

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University of Iowa Holden Comprehensive Cancer Center EAB report

Directors Overview, Planning and Evaluation, Developmental Funds

The External Advisory Board (EAB) met on September 28, 2021 to review progress since your renewal site visit in September 2020. First, thank you for your superb update on the University of Iowa Holden Comprehensive Cancer Center's (HCCC) progress over the past year. As many cancer centers have experienced, reviews in this virtual space have been more complex and less satisfying, despite the equal or even greater amount of work to prepare both the application and the site visit. Your score of 28 provides stable funding and places you in the outstanding range of cancer centers. While there are always issues in review, most of them instructive, often scores are not an accurate reflection of the intensity of impact that you were having on your medical center, university, community and state. All of the external advisory committee agree that this is a highly outstanding cancer center with incredible impact in research, clinical practice and population support. You are successfully reducing the burden of cancer in Iowa.

You provided us with details on the accomplishments since review including conscientious response to all aspects of the review elements and concerns raised by reviewers. Some responses are naturally farther along than others, but it is clear that you have thoughtfully considered each critique. One legitimate element of concern was the expectations for NCI designated comprehensive cancer centers that we commonly term "unfunded mandates". In fact, these are incredibly important initiatives typically supported through the institution by a variety of mechanisms but certainly require intense financial and personell support. Such areas include community outreach and engagement, shared resources, use of developmental funds to support new initiatives, and space allocation to the cancer center to further its mission. This is a particular concern in the research environment where cancer center space can be exceptionally important to promote recruitment of valued research colleagues across departments. Further funding for these cancer focus recruitments in basic science departments is also a critical need especially for a small center attempting to develop highly collaborative and interdisciplinary research across departments.

Your leadership of efforts to improve collaborative science and grant applications is one of the major values brought forward by the NCI designation which not only allows you to apply for supplemental grants which you have done successfully, but also to build large multi investigator efforts which was well recognized by review. To continue this effort takes initial start-up funds from the institution, and often requires recruitments to fill in a particular area of interest in need. The cancer strategic investment group seems to be effectively managing these issues and institutional support for this effort will yield important positive return. Likewise, the $2.5M support request you have made for recruitment and infrastructure is quite small given the potential for return on these investments because of the value added by Cancer Center research initiatives.

Metrics provided suggest modest increase in overall funding, significant efforts in new grant awards and applications, high-quality clinical investigator junior faculty recruitment, and an appropriate balance of NCI, other NIH, and non-peer reviewed funding. For a center of this size funding is stable with an upper trajectory with an emphasis on multi investigator efforts. Further investment in recruitment will stabilize the size and depth of each program which is an ongoing concern.

We concur with you that your strategic initiatives are appropriate at the level of the entire center regarding diversity equity and inclusion, particularly in leadership training and career development; interactions with the community can be strengthened through better linkages and community-oriented activities as well as links with your research programs and expansion of interdisciplinary collaborative efforts.

We have observed for many years the slow upward trajectory of the clinical programs and think you now are at the cusp of a major expansion in clinical efforts in cancer that would benefit hospital operations. The quality of your clinical investigators and the impact that you can have, especially through investigator initiated clinical trials is a high priority. It brings value to the community and to the entire state of Iowa by offering innovative therapeutics and first in human studies. All of these are essential to the impact an NCI designated cancer center has on its local region. The plan to recruit 17 additional clinical investigators in Hematology/Oncology is critical but these must be linked to clinical research investigation, and infrastructure that supports such investigation, and to surgical oncology, radiation oncology and imaging activities that promote the best quality cancer care throughout the region. The return on the investment to the institutions should be appreciable and should provide the resources that can also be used to support the breath of clinical investigation from pre-clinical models, use of tissues, data, and outcomes to further assess improvements in cancer care.

Your presentation was followed later in the day by an intense conversation with your institutional leaders. We were delighted to have the set aside time to speak with Suresh Gunasekaran, MBA (Associate Vice President and CEO, University of Iowa Hospitals and Clinics), J. Brooks Jackson, MD, MBA (Vice President for Medical Affairs & Tyrone D. Artz Dean Carver College of Medicine) and Patricia Winokur, MD (Executive Dean, Professor, Internal Medicine – Infectious Disease, UI Carver College of Medicine). As a group we came away impressed with the institution's dedication to the impact of the Holden Comprehensive Cancer Center (HCCC) on University of Iowa hospitals and clinics and the need to provide coordinated support to stabilize the future of the HCCC. Conversations of bringing together all the clinical elements of the cancer service line and under the umbrella of leadership of the Director would represent an incredibly important opportunity to bring added value to the organization through the cancer center. Not only is it likely to increase patient activity, revenue, quality of care, patient satisfaction, and physician satisfaction, but it is also likely to add a halo throughout the state of Iowa as a unique specialized point of care. We suspect that this would also lead to regional expansion of the hospital network for cancer care.

We discussed a variety of models and recognize that each NCI designated cancer center is unique. However, those in a unified structure with authority as per NCI expectations (e.g., Thomas Jefferson's Sidney Kimmel Cancer Center, The Ohio State University Comprehensive Cancer Center, Rutgers Cancer Institute of New Jersey, Duke Cancer Institute) under the FOA for comprehensive cancer centers, and providing for a more flexible environment for funds flow to support overall cancer mission elements are in a stronger position. This is likely to lead to improvements, with benefits extending across all of the cancer related departments including medicine, surgery, OB/GYN, radiology, and pathology. Recognizing that there is important expertise required, reporting relationships can be established that assure a unified approach to cancer care under the Director but with expertise valued across these academic entities. Financing should first and foremost be provided to support the mission critical activities with consensus built for how discretionary funds can be used for recruitments, new research pilots, new initiatives, new shared resources, investigation and particularly support for investigator initiated clinical trials.

We are confident that the leadership will come to consensus within the next 6 to 9 months so that you can move forward under a better and more unified structure to lead the cancer center and sustain its upward trajectory. Having this in place well before your renewal application would enable you to show the value and benefit which likely will lead to an improved score, but more importantly improved impact of the center across the state.

Community Outreach and Engagement

Community Outreach and Engagement (COE) is led by Dr. Elizabeth Chrischillis. Dr. Sarah Nash was recently recruited as a co-leader from the Alaska Native Epidemiology Unit. She brings expertise in epidemiology and surveillance and health inequities, particularly among indigenous and rural populations. The aims of COE are to: 1) assess the cancer burden and

disparities in Iowa; 2) address the cancer burden with research relevant to the underserved; and 3) engage to community to promote evidence-based interventions.

The COE was rated as “Excellent” at the 2020 review. The reviewers cited several strengths including 1) outstanding progress and monitoring the catchment burden by leveraging the CancerMaps initiative; 2) regulation and policy in the areas of population science and rural cancer control; and 3) strong relationship with the Iowa Cancer Consortium. The weaknesses identified in the critique are: 1) lack of clarity about how the Community Advisory Board (CAB) and ICC work together to identify priorities; 2) opportunities for COE to catalyze catchment relevant research in the basic science programs; 3) opportunities to improve efforts to increase under-representation in HCC clinical trials; 4) concern about Dr. Chrischilles being overcommitted (she is AD for Population Science and Department Chair of Epidemiology in the School of Public Health) and 5) the need to track and respond to actual data on metrics to evaluate COE’s success.

Iowa ranks second to Wisconsin for cancer mortality rates in Black Americans. Black Iowans are more likely to die of cancer than Whites and diagnosed with cancer at earlier ages compared to other racial ethnic groups. Given these striking disparities, HCCC has identified this population group as a high priority area. A recently awarded NCI P30 CCSG supplement will help address this need. Additional activities will be developed over the next several years and it will be critical to address unmet cancer-related problems in Blacks in the catchment area through outreach, research and vigorous community dialogue.

The COE office has begun to address the critiques by implementing a seed grant program to stimulate catchment area-relevant basic science research, engaging the CAB to increase minority representation in clinical trials, recruitment of Dr. Nash, and ongoing monitoring of Dr. Chrischillis commitments. All of these changes are viewed as positive, but more developments are needed to sufficiently address the critique. For example, as noted in the future plans, COE will need to take a more active role in working with basic scientists to stimulate catchment area research. The new seed grant program is a positive step but additional strategies to engage with basic science programs are needed. It will be important to demonstrate success, including increased and more strategic catchment relevant research in all the research programs and to be able to demonstrate community informed research that includes bidirectional engagement with targeted communities. To ensure COE’s success, consider recruiting someone that has a peer-reviewed strong record in community-based participatory research. Another positive step is that a catchment area survey is planned; it is recommended that this be done at least every three years.

COE does not appear to be well integrated with the clinical trials office. The future plans include expanding the clinical trials infrastructure for underrepresented minority and rural populations. These plans need more specificity. Obtaining input from the CAB about enrollment of underserved populations and taking an inventory of funded grants will be helpful but additional strategies will be needed. The response that the ICC is “outward focused” and the CAB is inward focused on HCCC research needs more careful attention as the CAB’s role should include input beyond research (e.g., outreach efforts and HCCC’s strategic plan). The EAB advises more vigorous strategic planning over the next year including refinement of the COE aims to better reflect the guidelines and implementation of additional strategies to catalyze catchment relevant research, increase bidirectional community engagement with the basic, clinical and population science programs, and improve integration with the clinical trials office. Moreover, quantifiable metrics to assess progress need to be determined, measured, and evaluated. Lastly, after the new FOA is released some planning as to how to interact with the new DEI component will be needed. Increased institutional support will be critical to ensure the CCSG criteria and catchment needs are being met and the weaknesses mentioned are adequately addressed.

Cancer Genes and Pathways

The Cancer Genes and Pathways (CGP) Program, the primary basic science program of the HCCC, continues to play a central function and drives the mission of the Center. Over the last few years, the program has continued to strengthen its inter-programmatic activities and expanded its activities, thereby fostering more collaborations, attracting new members and expanding into new areas of research. Drs. Dawn Quelle and Michael Tomasson continue to provide strong, effective complementary leadership to the program. At the EAB meeting Dr. Quelle presented a comprehensive current overview of the program, centering on its three main thematic areas, with specific research highlights, viz., on CRISPR enzyme editing, MPNST markers, targets and therapy, and, obesity-associated breast cancer. Finally, a summary of future directions of the program were presented that included expanding the ongoing research on the link between obesity and cancer, further expansion of CGP's animal models of cancer program, and increasing the engagement of relevant entities and programs to enhance CGP's translational activities.

The EAB noted the strengths of the CGP, the many positive developments, especially in the last 3-5 years, and its continued central role in the HCCC. The program was scored "Excellent" in the recent CCSG review, which was an improvement over the previous score and a recognition of the unique strengths of the program and the progress it has made. EAB members felt, however, that this fell short of reflecting the outstanding nature of several components of the program. A lingering issue, and one that had been discussed at previous EAB meetings and also noted in the current CCSG review, is the fact that the specific aims of the CGP, as currently constituted, do not effectively convey the uniqueness of the program, and could create the impression of a lack of a strong focus of the science. This is clearly more a perception than a real weakness of the program. To address this recurring issue, the EAB recommends that the program aims, and, possibly, the title, be reviewed and modified. One possibility is to reduce the three specific aims to two, the first being genetics, epigenetics and genomics, while, the second focuses on mechanisms and pathways. All the current thematic areas of the CGP (genetic tumor models, transcriptional regulation, signaling, microenvironment, obesity & cancer etc.), and, the ongoing research activities and discoveries, will fit under one or the other of these two aims, with appropriate sub-aims, as necessary, to further demonstrate cohesion and synergy. Another lingering concern raised in the review relates to the impact of the program. Since the last review, the impact of the CPG on other HCCC programs and as a driver of translational research in the center has increased significantly and was recognized in the present review. The EAB, thus, felt this concern to be minimal. An increase in the number of program publications in high impact journals could help make the impact of the program's research even more apparent.

Overall, the EAB was impressed with the many positive developments since the last review, notably, the increased cancer focus, the exciting new research discoveries, the increased cancer-related funding, the increased inter-programmatic activities and translational research, and, the several new members who have brought significant added strength, depth and diversity to the program's research. There is a positive trajectory for much of this progress, and with the strong, effective continuing leadership of Drs. Quelle and Tomasson, the program will continue to thrive and to be a critical and essential driver of the mission of the HCCC, and, the success of its programs.

Experimental Therapeutics

The program research themes are:

- Identify potential new cancer targets and discover novel therapeutics approaches.
- Evaluate promising new therapeutic leads.
- Translate innovative and promising agents, combined modalities, and imaging approaches to early phase clinical trials.

The program includes 29 full members and 17 associate members. The program has $2,560,587 peer-reviewed funding as of 7/2021, which is slightly lower than 7/2020 with decline

in NCI peer-reviewed projects, relative stability in other NIH peer-reviewed projects and significant increase in other peer-reviewed projects.

To address the critique regarding programmatic interactions the program leaders started different venues to enhance interaction and foster collaboration and translation and several examples were presented.

With regard to program membership, it is not clear what is required for membership and for clinical researchers it is not clear what are the qualifications for membership.

Dr. Allen presented a summary of clinical trials activity. There is an overall increased number of clinical trials but a significant decrease of the number of subjects consented. The EAB strongly recommends that data presented in slide 7 be modified since showing the number of consented patients is not relevant; rather the number of patients actually registered is the data required. With regard to industry sponsored and cooperative group trials, as the data is shown it implies that the Experimental Therapeutics (ET) members are the actual national PIs of these studies. That is great if that is the case, but if they are the institutional PIs for these studies, then labeling on the slide needs to be corrected.

Overall, the ET team is to be congratulated on their efforts. While developing strengths in not so common tumors is very critical, enhancing the depth of the science/translation and bidirectional collaboration to reflect the top cancers in the catchment area is very critical. On the clinical research front, it is important to expand national collaboration beyond the NCTN to include the ETCTN which allows growth for translational IITs and establishes national visibility and enhances clinical trials collaboration and leadership.

Free Radical Metabolism and Imaging

The EAB reviewed the progress of the Free Radical Metabolism and Imaging (FRMI) program, and particularly focused on the plans for future development and expansion. Our perception is that the translational activity in this basic science program continues to be exemplary. Further, the program has succeeded in the difficult task of moving beyond its initial basic and translational insights, such as, high dose ascorbic acid and radioprotection from mucositis into a second generation of grants and translational programs that build nicely on these initial discoveries. We anticipate further growth in the areas of free radical therapeutics and theragnostics. Further, unlike many basic science programs across many cancer centers, which tackle the same major issues in cancer genomics and oncogenesis, this program stands out for its distinctive approach to the cancer problem. Therefore, it lends a unique strength to the portfolio of the NCI.

The program continues to be ably led by Dr. Doug Spitz, who focuses on the free radical segment of the program, and Dr. Menda, who had lent substantial depth to the imaging elements. Yet it is the seamless marriage of these two major elements in the program through combined initiatives that represents both a striking early success and a promise for the future. The EAB feels that additional recruitment and peer reviewed funding in the imaging elements of the proposal will further strengthen this exceptional program.

The induction of oxidative injury as a therapeutic target for selectively sensitizing cancer cells to therapeutic interventions and the used of agents that scavenge free radicals to protect normal tissues from conventional cytotoxic therapies, along with the more recent efforts to image these processes in vivo are exciting and innovative.

The initiation of research efforts in the relatively new area of flash radiation was considered a positive development, given the uniqueness of this approach to spare normal tissues while enhancing antitumor activity. While these research efforts will be enhanced by the reported acquisition of a flash radiator, and there are many exciting unanswered questions about flash radiation, it was unclear at the presentation as to what specific research directions will be

pursued. The EAB also felt that the recruitment of one or two investigators in the area of flash radiation will ensure its development into a viable productive thematic research area of the program.

In summary, the FRMI program continues to be a flagship program of HCCC. It continues to generate important new concepts that are translated to the clinic, and expand into new exciting areas, such as, flash radiation. The outstanding/exceptional score in the recent CCSG review, notwithstanding, there is every expectation that the program, with its outstanding synergistic leadership, will continue to be exceptional in its role and contribution to the success of the HCCC.

Cancer Epidemiology and Population Science

The CEPS Program has new leadership. Mary Charlton, PhD, replaces Charles Lynch, PhD, who has recently retired, and now leads the program with Richard Hoffman, MD, MPH. Dr. Charlton is very experienced in community-based research and is a great addition to the leadership of the program. The program continues to have 3 themes, etiology, primary and secondary prevention, and health care services, across the lifespan. The program has 37 full members, with 6 new recruits and $4.4 million in direct cost funding – an increase since last year and the site visit and 160 publications were published in the last year. New grants have been funded but NCI funding has declined.

At the last review, the program was rated Excellent to Outstanding. Many strengths were noted and four weaknesses were identified: cancer relevance of NIEHS funding; decrease in funding; expanding grants and publications; and opportunities to translate findings to reduce the cancer burden. Plans are in place to address the last two comments while the first two have been addressed. Recruitment of interventionists and implementation science researchers is an important consideration in order to be successful in translating findings to the catchment area and beyond.

The future directions of the program focus on recruiting, strengthening molecular epidemiology capabilities, enhancing infrastructure, and expanding community-based research. The challenges of the program include: strengthening Aim 1 with Dr. Lynch's retirement; increasing NCI funding; establishing closer collaborations with basic science programs; and recruiting in environmental epidemiology, health equity, and implementation science. Plans for both meeting these challenges and moving forward with future plans should be developed and implemented.

The program is indeed on a great trajectory of growth. Attention to the comments from the review committee and the challenges the program faces will continue to drive this program forward in excellence. Additional attention to addressing cancer disparities in Blacks is needed now that this is a cancer center priority. Further, given the limited concrete examples of bidirectional community engagement, stronger connections with COE are needed.

Shared Resource Management/Shared Resources

Shared Resource Management, led by Drs. Gail Bishop (Associate Director, Basic Science Research) and Elizabeth Chrischilles (Associate Director, Population Science and Community Outreach and Engagement) received a score of excellent in the 2020 CCSG renewal. Dr. Bishop presented an update to the EAB. The shared resources of the HCCC were rated as follows: Biospecimen Procurement and Molecular Epidemiology Resource and Biostatistics were each rated outstanding to exceptional; High Throughput Screening, Radiation Free Radical Research Core, and Viral Vector Core were each rated outstanding; the Population Research Core was rated outstanding to excellent; Flow Cytometry and Genomics were each rated excellent; and the Central Microscopy Research Facility was rated very good. The summary statement noted as a testament to the strength and innovation of the HCCC SRs and its core leadership, three HCCC SR directors have received NCI R50 awards, a User Advisory

Committees guides each SR, and member needs are assessed through annual user surveys. Overall, the shared resources are well positioned to facilitate the research goals of the HCCC.

However, several notable weakness were identified, including: 1) the lack of tracking system across the SRs; 2) the lack of a detailed description about the User Advisory Committees and how they interface with HCCC leadership; 3) a potential issue of inadequate HCCC representation for the jointly managed SRs; 4) the lack of clear plans to give priority access to SRs for cancer center members; 5) the effectiveness of the recently implemented distribution of the Bioinformatics embedded in other SRs was yet to be evaluated; and 6) a question about what authority Drs. Bishop and Chrischilles have to negotiate on behalf of HCCC member needs for jointly-managed SRs.

Improvement plans presented to the EAB focused on four areas: logistics, information, management and bioinformatics. First, improving HCCC SR logistics focused on: a) requiring responses to surveys and requests for feedback as a condition of HCCC membership; b) maintaining accurate and current records of HCCC member usage of each SR; and c) collection of institutional cancer center membership information for external users. Similar to the approach mentioned in the Career Enhancement section, the HCCC plans to take the direct "stick" approach to require members to provide information related to the SRs in a timely manner. Lack of compliance will lead to membership privileges (e.g., SR subsidies, developmental funds, other HCCC-sponsored interactions) being revoked. The EAB cautions that consistent enforcement will be required (i.e., same treatment should be applied to well-funded senior investigators as to junior faculty with little or no extramural funding), and that leadership will end up spending much time policing the members responses. An alternative (and more manual approach) would be for HCCC Administration (or SR Management) to have a dedicated staff member (or members) meet with SR Directors and/or program members to capture this information directly. In addition, helping maintain accurate and current records should be a task that HCCC Administration oversees (and has the dedicated resources with which to oversee).

Second, improving HCCC SR information focused on: a) having necessary information for each SR for the next CCSG renewal; b) better tracking of member usage and maintaining examples of high quality research performed by the SR; c) enhancing value-added benefits offered to HCCC members (e.g., subsidies); and d) identifying a schema for how HCCC members receive priority access to an SR. Each of these elements are key to address and can/should be managed by HCCC Administration with Senior Leadership. Creating a priority access algorithm is important for NCI reviewers to know that the center (which is getting money from the NCI to support the shared resources) is facilitating cancer research. The "prioritization" question mainly arises when an SR does not have adequate capacity to complete the research required in a timely manner. Many centers prioritize usage starting with members that have and will use NCI funding to pay for the service, for example.

Third, improving HCCC SR management focused on: a) establishing an advisory board for each SR that meets regularly; b) including member-users on the board; and c) for jointly-managed SRs, creating a policy that empowers Drs. Bishop and Chrischilles to negotiate on behalf of HCCC members. The EAB finds these plans appropriate and looks forward to hearing progress in subsequent meetings.

Fourth, improving Bioinformatics focused on: a) continuing to champion the need for strong bioinformatics with University and College of Medicine leaders; b) considering the creation of a bioinformatics position dedicated to HCCC members; and c) considering providing subsidies to HCCC members to access services at other institutions. Strong bioinformatics is certainly a key need among cancer center members. The EAB encourages the HCCC leadership to support a dedicated bioinformatician (or more) exclusively for HCCC member usage. Alternatively, while subsidizing members to access bioinformatic services is appropriate and encouraged, doing so at other institutions is less desirable unless the service provided is superior and cost effective.

There was a recommendation by the CCSG reviewers that HCCC members receive priority access to all shared resources. The EAB felt this, in principle, to be a valid request and can be accommodated in a revised set of SR operating procedures. The exact form of the prioritization of access by HCCC members can be structured to ensure that access by other critical non-HCCC users is not compromised.

Clinical Research

The presentation covered CPDM, PRMC, DSM and patient inclusion. At last CCSG renewal CPDM was scored "very good to excellent", DSM "acceptable", PRMS "satisfactory", Inclusion (minority was acceptable, women was unacceptable then revised to acceptable).

These programs have many strengths. However, several weaknesses were identified in regard to accrual. These stem from the discrepancies between areas of scholarly expertise and population-based disease distribution, the limitations imposed as large national trials for common malignancies open and close, and the community referral patterns to the Cancer Center. None of these issues are easily remediated, nor are they unique to the HCCC. However, below are some recommendations:

- To enhance accrual particularly to match the area population it is critical to collaborate with the COE/CEPs program team to address barriers/gaps and enhance access and awareness amongst the population and the physician providers. This will also address several of the recurring themes of the reviewers' critique.
- With regard to women accrual, it will be important to identify what cancers there is room to grow accruals in, and engaging other stake holders including Gynecology Oncology, Surgical Oncology and COE is also critical. The trial activation timelines are efficient.
- We recommend creating a subcommittee of PRC for accrual monitoring that is led by the PRC chair and to have the AD for Clinical research be included with SOPs regarding the accrual monitoring/closure process.

Career Enhancement

Cancer Research Training and Education Coordination (CRTEC), or Career Enhancement, led by Dr. Jon Houtman (Associate Director) and Dr. Greg Thomas (Assistant Director), received a score of outstanding to exceptional in the 2020 CCSG renewal. Dr. Houtman presented an update to the EAB. Notable strengths included: the highly qualified leadership; strong and well planned education programs available for students, researchers, clinicians, staff and community partners; and integrated input from the Community Advisory Board. Opportunities for improvement focused on a lack of past tracking data beyond the past year given the educational nature of the institution, and that new systems have not yet been implemented.

Plans to address the critiques were presented with one year and five year goals. The one year goals included: 1) implementing robust trainee career monitoring; 2) implementing a mechanism to acquire information from PIs; 3) maintaining and expanding the summer research programs; and 4) establishing a strong mechanism for postdoctoral fellow mentoring. The EAB is very interested in the implementation of Monicur, a novel trainee tracking method, and looks forward to hearing progress in subsequent years. If successful, this will not only fully address the summary statement critiques going forward, but many other cancer centers will look to implement to enhance their own center's trainee tracking mechanisms. After many unsuccessful attempts with "carrots", the HCCC plans to take the direct "stick" approach to require members to provide trainee information in a timely manner. Lack of compliance will lead to membership privileges (e.g., SR subsidies, developmental funds, other HCCC-sponsored interactions) being revoked. The EAB cautions that consistent enforcement will be required (i.e., same treatment should be applied to well-funded senior investigators as to junior faculty with little or no extramural funding), and that leadership will end up spending much time policing the members responses. An alternative (and more manual approach) would be for HCCC Administration (or Career Enhancement) to have a dedicated staff member (or members) meet with members to update member CVs and capture this information directly. The EAB also applauds Drs.

Houtman and Lubaroff for plans to resubmit the YES grant and hopes that this highly competitive award will be obtaining the next cycle and for implementing a postdoctoral mentoring program.

The five year goals included: 1) establishing a culture of trainee mentoring at HCCC and across the country; 2) increasing the number of individual fellowship applications and awards; 3) establishing a speaker group for small colleges in Iowa; and 4) developing a cancer biology course for small colleges in Iowa. Dr. Houtman discussed the concept of a single monitoring program at all NCI cancer centers. This is a laudable goal and Dr. Houtman is encouraged to pursue discussions with NCI leaders regarding a unified platform. Benefits include consistency and accuracy of information, and other similar platforms (e.g., CTRP) exist. The only EAB concern is whether a consistent platform maintained by the NCI would turn into an “unfunded mandate” that could negatively impact centers with limited funding. Other future goals noted are well thought out and will help the HCCC and The University of Iowa be identified as the hub of training/career enhancement development in the state.