Clarification on Assessing Overall Impact/ Priority Score for CCSG Applications:

Effective with applications submitted January 25, 2009, the peer review scoring system for Cancer Center Support Grants will be consistent with new NIH policy, utilizing a broader range of merit descriptors and a 9-point rating scale, plus 'Not Recommended for Further Consideration' (For more details, see references below).

Prior to the site visit, assigned reviewers will submit to the SRO their criterion scores for the overall application on the five standard NIH review criteria: Significance; Investigator(s); Innovation; Approach; and Environment, which includes review criteria formerly used for the overall application (see below, 'Reviewing Science in the CCSG'). These scores will be included in the Draft Site Visit Report and Summary Statement under the heading, Overall Impact, but in keeping with NIH policy, will not be discussed as part of the review process.

Site visit reviewers will consider each of the CCSG Guidelines review criteria, per component, in the determination of scientific and technical merit. They will provide an *adjectival* merit descriptor for each component, using the 9 - point scale (1 = exceptional - 9 = poor), plus 'Not Recommended for Further Consideration.'

The NIH enhanced peer review policy also requires an overall impact priority score to reflect assessment of the likelihood for the CCSG to exert a sustained and powerful influence on the cancer research fields highlighted in the Center's application. As part of the evaluation and written critique on the overall impact of the Center, reviewers will discuss and describe the extent to which the overall application meets the five standard review criteria: Significance; Investigator(s); Innovation; Approach; and Environment, which includes review criteria formerly used for the overall application (see below, ' Reviewing Science in the CCSG'). The five standard review criteria will be evaluated for the application as a whole, along with additional review criteria specific to CCSG applications. (In the Overall Critique, under a subheading, Overall Impact, the Chairperson will provide a summary that includes an evaluation of the Essential Characteristics and specific overall impact review criteria that address these criteria.) When evaluating the overall application, site visit reviewers will provide an *adjectival* merit descriptor and NCI Subcommittee A (parent committee) members will provide a *numerical* score for the overall impact/priority score.

In their evaluation of the overall application, site visit reviewers and parent committee members will use the criteria below in assessing overall impact/priority score of the cancer center, which is an evaluation of:

- Overall quality of the cancer-relevant science
- Overall strength of the other components of the application
- Extent of value added by the CCSG to the Center

In assessing overall impact/priority score, reviewers should consider, where relevant, the excerpt that follows from the CCSG Guidelines, "Reviewing Science in the CCSG." *The term 'Center' as used below should be evaluated in the context of CCSG requirements, i.e., assessment of overall impact/priority score and 'value-added' should focus on the contributions of the CCSG to the Center's organization, strategic planning, and scientific accomplishments.*

Criteria for Peer Review of CCSG Applications:

Reviewing Science in the CCSG:

Science, not process, is the focus of the review. Even when process is to be specifically evaluated, such as with planning and evaluation or the ways in which flexible funds are utilized, the criteria for success are the scientific judgment behind, or consequences of, particular actions or decisions. In a CCSG review, assessment of scientific quality differs importantly from the familiar peer review of individual grants. It is not the role of peer review to re-examine individual projects that have already received fundable priority scores. Rather scientific review of a CCSG should seek to address these major issues:

- **Significance.** Does the project address an important problem or a critical barrier to progress in the field? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field? What is the overall quality of the cancer-relevant science in the center? What has the center contributed to the development of more effective prevention, diagnosis, and treatment for cancer (where appropriate)?
  (Note: in the context of a P30 Cancer Center Support Grant review, the term 'project' refers to the Center application and 'project aims' refers to the Center's strategic goals.)
- **Investigator(s).** Are the PD/PIs, collaborators, and other researchers well suited to the project? If Early Stage Investigators or New Investigators, or in the early stages of independent careers, do they have appropriate experience and training? If established, have they demonstrated an ongoing record of accomplishments that have advanced their field(s)? If the project is collaborative or multi-PD/PI, do the investigators have complementary and integrated expertise; are their leadership approach, governance and organizational structure appropriate for the project?
- **Innovation.** Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?

Reviewing Science in the CCSG:

- **Approach.** Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Are potential problems, alternative strategies, and benchmarks for success presented? If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed? If the project involves clinical research, are the plans for 1) protection of human subjects from research risks, and 2) inclusion of minorities and members of both sexes/genders, as well as the inclusion of children, justified in terms of the scientific goals and research strategy proposed? Does the cancer center add value over and above the separately funded research efforts themselves? Have thoughtful, coherent scientific Programs been assembled and Program members selected to maximize the cancer-related interactive science in the parent institution as a whole? How do the different cancer-related scientific themes in the parent institution fit together in the center? What is the overall strength of the other components of the application?
- **Environment.** Will the scientific environment in which the work will be done contribute to the probability of success? Are the institutional support, equipment and other physical resources available to the investigators adequate for the project proposed? Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements? What impact has the center itself had (or is likely to have) on the quality of the science, the productivity of the scientists, and the transdisciplinary activities of the institution relating to cancer? Have the choices for center membership made by its leaders resulted in a group of excellent cancer-focused scientists who are also committed to productive interactions with one another? What is the extent of value added by the CCSG to the Center?

Ultimately, the application should reflect how the CCSG has influenced Center accomplishments, i.e., if the Center would have reported similar achievements without the benefit of the CCSG, the 'value-added' would be minimal and should be reflected in the overall impact/priority score, along with an assessment of the likelihood for the CCSG to exert a sustained and powerful influence on the cancer research fields highlighted in the Centers' application. The numerical overall impact/priority score for the application will be determined by calculating the mean score from all eligible reviewers at the parent committee meeting, and multiplying the average by 10; this overall score, ranging from 10 – 90, will be reported on the summary statement.

Additional information on the NIH Enhancing Peer Review effort may be found at http://enhancing-peer-review.nih.gov/.