Science Culture
And
Accountability Plan

Effective: February 1, 2013

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Center Goals

The primary goal of the Center for the Study of Aging and Human Development is to make significant research contributions to the study of aging and to educate future geriatricians. Research conducted by the approximately 130 Duke scientists and scholars from a multitude of disciplines includes multidisciplinary, biologic, clinical, and social and behavioral research. Research is supported by the Center’s Computing and Statistics Lab. The resulting diversity in investigators and research activities necessitates the articulation and implementation of a plan to promote standards for research, including open, honest, and critical research-centered discussions among faculty, staff, trainees, and all others affiliated with Center research.

Forming the basic foundation of the Center’s effort to foster a research environment based on responsibility, integrity, and accountability is our belief that (1) the Center is expected to be accountable to the public and (2) the public will support science only if it can trust the scientists and the institutions that conduct research.

It is therefore incumbent on the Center and its research scholars to develop and implement a plan designed to promote and nurture a research environment that places high value on ethical standards, contributes to professional development, and preserves the confidence of both scholars/investigators and the public in our scientific enterprise.

Basic Plan Components

Specifically, three areas are critical to our efforts to foster a cross-disciplinary research and knowledge-sharing environment able to produce research that is sound and relevant and is the result of our researchers’ responsible conduct:

a) Consistent review and evaluation of the relevance and soundness of basic research questions, hypotheses to be tested, logical consequences to be determined (predictions), methodologies for data collection and testing, and analysis.

b) Clear and periodic expression of expectations regarding research standards to all Principal Investigators with special emphasis on junior investigators; and

c) Definition and promotion of a research environment that fosters open and honest communication among researchers and ensures the highest levels of research integrity.
Strategies

1. **Forums to Encourage Open and Critical Discussion**

The Center employs a multitude of forums and mechanisms to foster discussion of the relevant ethical and professional norms of research and scholarship. The Center follows the institutional non-retaliation/non-retribution policy.

- The Center Director and two Co-Directors are always available for one-on-one conversations with all who may have concerns regarding the conduct of research.
- The Internal Operating Committee of investigators working on the “Pepper Grant”, the Claude D. Pepper Older Americans Independence Center, serve as a valuable forum for investigators to review and openly discuss the quality of data and reliability and validity of data analysis findings.
- Of particular relevance are the biweekly meetings of the Data Integrity Work Group which are conducted solely for the purpose of engaging in open discussion regarding issues of data integrity. Regular presentations by fellows, postdoctoral associates, and faculty of their research work at the postdoctoral seminars, geriatric research conference, and Pepper research conference allow for open discussion of data integrity.
- Monthly Geriatrics Division Research Seminars and Pepper Center Research Seminars offer similar opportunities.
- Monthly meetings between Center-affiliated faculty in mentorship roles and Postdoctoral Associates also serve as a forum to discuss research standards.
- Monthly meetings between Center leadership and Center administration also serve as a forum in which any concerns regarding Center activities may be discussed in an open manner.
- All faculty, trainees, and staff also have the option to report suspected wrongdoings to the Compliance Office or the Integrity Hotline. In addition, investigators also have the option of discussing any concerns with their respective Clinical Research Units (formerly SBRs).

All above referenced forums share a routinely communicated set of expectations that place a high value on research integrity, the responsible conduct of research, the importance of peer review, and the sharing of data and data analysis findings. To encourage constructive critical exchange in these venues, meeting leaders will reiterate that during the meeting and through other venues there are ample opportunities to express concern and engage in meaningful discussion.
2. **Environment to Express Concerns (Junior Faculty)**

Faculty, trainees, and staff are encouraged to approach Center leadership, supervisors, or other parties if they believe that research is not conducted according to the highest levels of professional and ethical standards. This encouragement is especially important for junior faculty who may feel uneasy to report any suspected wrongdoing. The fostering of such an environment is an ongoing effort and we believe the most effective way of creating such an environment is through repetitive messages regarding the importance of critical thinking and accountability, as well as showing willingness and ability to act appropriately if things do go wrong. To this end, the Center will send out periodic messages to faculty, trainees, and staff to provide assurance that the Center embraces high standards for its research and that expressing concerns is a core responsibility of a Center researcher. This message will also be repeated at Center standing meetings and will also be featured on the Center’s website. We expect, however, that verbal direct communication between Center leadership and faculty will be the most effective means of communicating the idea of an open environment to freely express concerns.

3. **Ongoing Dialogue and Communication**

External Controls and Self-Motivation

The Center relies on external control processes to ensure accountability of researchers. As discussed in item 1 above, a multitude of forums is employed to clearly express expectations and provide guidance and education on matters relating to research matters.

However, an effective standard of accountability must rely on more than external controls. The culture of the Center takes on an element of accountability when faculty and staff are self-motivated to contribute to the overall success. Thus, reactive measures have to be accompanied by proactive considerations. The Center’s plan will also promote increased interaction between Center leadership and faculty and staff to repeatedly hear about the Center’s mission and goals and our basic premise fundamental to conducting research: competency in research entails responsible conduct and the capacity for ethical decision making and open communication. This communication will be accomplished via emails to faculty, trainees, and staff, and the use of established meetings (some of which are listed in item 1).

Nonetheless, communication alone is not likely to ensure that an attitude of self-responsibility will flourish, particularly regarding junior faculty. Our two core assumptions are:

(1) Young investigators are most likely to learn self-motivation and self-responsibility from senior investigators who personally exemplify it in their behavior
(2) Young investigators are most likely to learn these traits if their mentors and supervisors require it.

In other words, if senior investigators and Center leadership model self-motivation and self-responsibility and convey their belief that junior investigators are capable of operating self-responsibly and are expected to do so, and if mentors and supervisors deal with them consistently from this perspective, we believe the probability is that junior investigators respond positively and that a culture of self-responsibility can flourish.

This ongoing modeling of behavior and dialogue (the most effective form of which will be verbal direct communication), then, will entail for everyone in the Center to follow in order that their piece of meeting the organizational objective is followed – it is important for all to feel that they own an important piece of the process in order for the Center’s overall goal of excellence in research and teaching to be achieved. This will also be facilitated by communicating to faculty and staff how the Center is doing and the importance of their efforts to Center success so that investigators can function within a culture that sees investigators as fiduciaries – essentially holding the trust – for a defined population of users and beneficiaries of scientific inquiry.

This plan will be subject to annual review and, if necessary, revisions.