Approved by the Academic Policy Council

October 2001

Updated February, 2006

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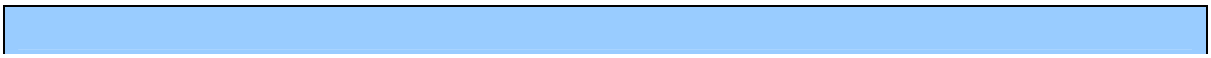
The Morehouse School of Medicine has a unique history. In 1973, Morehouse College received a federal grant to conduct a feasibility study. The study focused on the development of a two-year program to train students for careers as primary care physicians who would work in medically underserved areas. The study revealed the severe shortage of African-American and other minority physicians in the United States, and particularly in Georgia. In addition, the study highlighted a general shortage of physicians for rural areas and the inner cities of the nation. To address the critical health manpower needs of the citizens of Georgia and those who reside in medically underserved areas of the nation, the National Medical Association endorsed the development of a new medical school at Morehouse College. Other organizations, including the Georgia State Medical Association, the Georgia General

Morehouse School of Medicine is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097, 404-679- 4501) to award the degrees, Doctor of Medicine (M.D.), Doctor of Philosophy (Ph.D.) in Biomedical Science, and the Master of Public Health (M.P.H.). The initial class of students in the Ph.D. program entered in July 1992. The first students were enrolled in the Master of Public Health Program in September 1995. The first M.P.H. degree was conferred in May 1997 and the first two Ph.D. degrees were conferred in May 1998.

• M.D.	1985	2005	2012



research program. The appointee also provides technical consultation to research faculty and others in the interpretation and summation of data, and in the development of reports, presentations, and manuscripts associated with research findings.
(See appendix I for a detailed job description).

The academic title, Lecturer, will be used for academically qualified individuals whose responsibilities are limited in scope. Such individuals may provide a series of lectures or render occasional or regular lecture service, but otherwise are not affiliated with the medical school. This is a one-year renewable appointment.

Non-faculty academic personnel are staff employees and not eligible to be members of the faculty assembly. Accordingly, non-faculty academic personnel are subject to all policies and procedures that govern other staff employees except where explicitly noted otherwise. Non-faculty academic personnel receive an annual letter of appointment from the Dean outlining title, salary, reporting structure and other pertinent information germane to the appointment.

Copy of citizenship status (if applicable)

NAME _____ TITLE _____

DEPARTMENT _____

(RP not required for J-1 Applicants)

PERSONNEL ACTION (PA) Form No. _____

Office of International Program Services Checklist (including copy of ALL documents)

Letter of nomination for initial appointment from chairperson to dean

Application for Employment

Copies of highest Graduate Training Certificates or Diploma (English

Compensation for non-faculty academic personnel is comprised of a competitive salary and a generous benefit package that is reviewed on an annual basis. Funding for these positions is

Non-faculty academic personnel are entitled to exercise academic freedom and are expected to publish the results of his or her research or scholarship in the conduct of research and in the

concerning publication. The policy also serves to protect the intellectual property of the faculty.

See Appendix III – Intellectual Property: Copyrights and Royalties.

Non-faculty academic personnel are governed by the same responsible conduct of scholarship and research as other MSM employees. Scientific achievement and progress are bound by the standards of honesty, integrity, objectivity and collegiality. The policy for responsible conduct of scholarship and research addresses safeguarding the research process and the increasing social expectations about the accountability of scientists and their institutions for research supported by public funds.

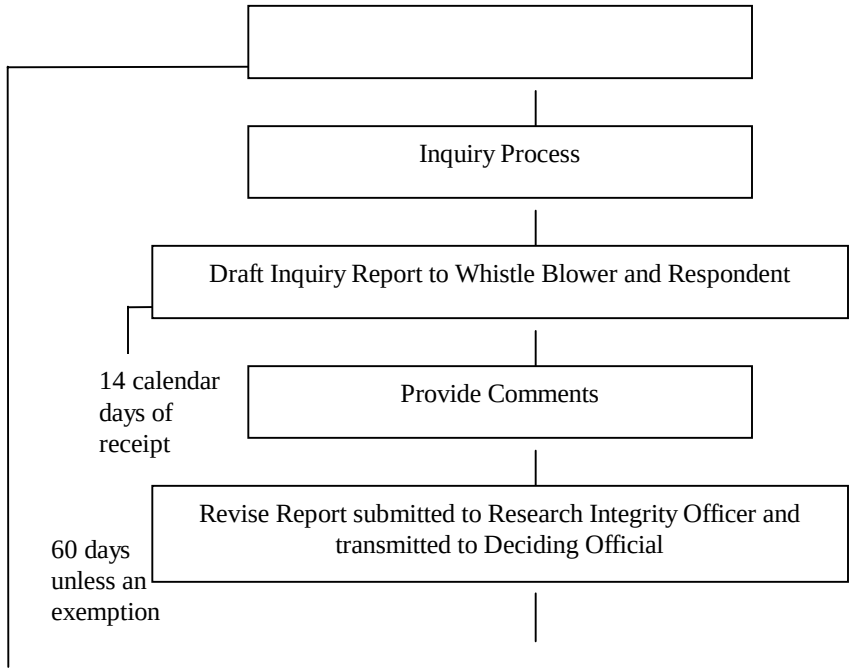
See Appendix VI - Policy for the Responsible Conduct of Scholarship and Research.

Morehouse School of Medicine offers several specific technical or administrative services

Independently undertakes or collaborates in the planning, development, and implementation of a laboratory, clinical, and/or field research study of an advanced nature requiring mastery of a line of research that is unique and/or in particularly high demand within an area of health sciences. Provides leadership in the design and execution of leading research methods, protocols, and procedures that constitute a principal component of an integrated research program. Provides technical consultation to research faculty and others in the interpretation and summation of data, and in the development of reports, presentations, and manuscripts associated with research findings.

1. Independently undertakes or collaborates in the planning, development, and implementation of advanced laboratory, clinical, and/or field research studies.

Doctorate degree in appropriate field with at least 1 to 3 years experience directly related to the duties and responsibilities and ability to function as an independent investigator
Master's degree in appropriate field with at least 5 to 7 years research experience directly related to the duties and responsibilities specified; documented record of scholarly achievement and independent investigations.


Inquiry Process
Draft Inquiry Report to Whistle Blower and Respondent
14 calendar days of receipt
Provide Comments
Revise Report submitted to Research Integrity Officer and transmitted to Deciding Official
60 days unless an exemption

A. General Policy

Morehouse School of Medicine (MSM) is committed to excellence in the discovery and dissemination of knowledge. This requires that faculty and staff adhere to the highest standards of integrity with regards to research. This is important to ensure that the discovery and dissemination of knowledge is done with the highest standards of ethics possible. It is important that we realize that such activities require responsibilities of researchers with regards to work of colleagues, including junior faculty, research associates, staff and students.

Further, Morehouse School of Medicine recognizes that federal regulations include policies and procedures which the institution must follow for dealing with possible misconduct in science. All persons involved in research should recognize the value to the institution of calling its attention to possible research misconduct and the possible lack of integrity involving scholarly endeavors.

collaborators at MSM.

The policy and associated procedures will normally be followed when an allegation of possible misconduct in science is received by an institutional official. Particular circumstances in an individual case may dictate variation from the normal procedure deemed in the best interest of MSM and PHS. Any change from normal procedures also must ensure fair treatment to the subject of the inquiry or investigation. Any significant variation should be reviewed in advance by the Vice President and Associate Dean for Sponsored Research Administration of MSM and approved by the dean.

A. *Allegations* means any written or oral statement or other indication of possible scientific misconduct made to an institutional official.

is set forth at 42 C.F.R. part 50, Subpart A, entitled "Responsibility of PHS Awardee and Applicant Institutions for Dealing With and Reporting Possible Misconduct in Science."

K. *PHS support* means PHS grants, contracts, cooperative agreements or applications thereof.

L. *Research Integrity Officer (Vice President and Associate Dean for Sponsored Research Administration)* means the institutional official responsible for assessing allegations of scientific misconduct and determining when such allegations warrant inquiries and for overseeing inquiries and investigations.

M. *Research record* means any data, document, computer file, computer diskette, or any other written or non-written account or object that reasonably may be expected to provide evidence or information regarding the proposed, conducted, or reported research that constitutes the subject of an allegation of scientific misconduct. A research record includes, but is not limited to, grant or contract applications, whether funded or unfunded; grant or contract progress and other reports; laboratory notebooks; notes; correspondence; videos; photographs; X-ray film; slides; biological materials; computer files and printouts; manuscripts and publications; equipment use logs; laboratory procurement records; animal facility records; human and animal subject protocols; consent forms; medical charts, and patient research files.

N. *Respondent*

A. Research Integrity Officer

The Vice President and Associate Dean for Sponsored Research Administration will

Employees should immediately report any alleged or apparent retaliation to the Research Integrity Officer.

Also the institution will protect the privacy of those who report misconduct in good faith[6] to the maximum extent possible. For example, if the whistleblower requests anonymity, the institution will make an effort to honor the request during the allegation assessment or inquiry within applicable policies and regulations and state and local laws, if any. The whistleblower will be advised that if the matter is referred to an investigation committee and the whistleblower's testimony is required, anonymity may no longer be guaranteed. Institutions are required to undertake

Following the preliminary assessment, if the Research Integrity Officer determines that the allegation provides sufficient information to allow specific follow-up, involves PHS support, and falls under the PHS definition of scientific misconduct, he or she will immediately initiate the inquiry process. In initiating the inquiry, the Research Integrity Officer should identify clearly the original allegation and any related issues that should be evaluated. The purpose of the inquiry is to make a preliminary evaluation of the available evidence and testimony of the respondent, whistleblower, and key witnesses to determine whether there is sufficient evidence of possible scientific misconduct to warrant an investigation. The purpose of the inquiry is to reach a final conclusion about whether misconduct definitely occurred or who was responsible. The findings of the inquiry must be set forth in an inquiry report.

B. Sequestration of the Research Records

After determining that an allegation falls within the definition of misconduct in science and involves PHS funding, the Research Integrity Officer must ensure that all original research records and materials relevant to the allegation are immediately secured. The Research Integrity Officer may consult with ORI for advice and assistance in this regard.

C. Appointment of the Inquiry Committee

The Research Integrity Officer, in consultation with other institutional officials (such as the Dean and Vice President of Academic Affairs, Vice President of Operations and Planning, and Department Chairs) as appropriate, will appoint an inquiry committee and committee chair within ten (10) calendar days of the initiation of the inquiry. The

assessment and states that the purpose of the inquiry is to make a preliminary evaluation of the evidence and testimony of the respondent, whistleblower, and key witnesses to determine whethe.2(m)34.6(i)38(e.2((et)-234.6(i)34.6(i)17.1(i)1i)38(e(m)34(e wh)1

to protect the confidentiality of the draft report.

2. Receipt of Comments

Within fourteen (14) calendar days of their receipt of the draft report, the whistleblower and respondent will provide their comments, if any, to the inquiry committee. Any comments that the whistleblower or respondent submits on the draft report will become part of the final inquiry report and record.[9] Based on the comments, the inquiry committee may revise the report as appropriate.

C. Inquiry Decision and Notification

1. Decisions by Deciding Official

The Research Integrity Officer will transmit the final report and any comments to the Deciding Official, who will make the determination of whether findings from the inquiry provide sufficient evidence of possible scientific misconduct to justify conducting an investigation. The inquiry is completed when the Deciding Official makes the determination, which will be made within sixty (60) calendar days of the first meeting of the inquiry committee. Any extension of the period will be based on good cause and recorded in the inquiry file.[10] Tc0 Tw( )Tbngr-37(i)0.8(r)-44(y)3(file)-33.44(y)3((i)0.8(r)-44(y)e)-33ify co

The Research Integrity Officer will define the subject matter of the investigation in a written charge to the committee that describes the allegations and related issues identified during the inquiry, define scientific misconduct, and identifies the name of the respondent. The charge will state that the committee is to evaluate the evidence and testimony of the respondent, whistleblower, and key witnesses to determine whether, based on a preponderance of the evidence, scientific misconduct occurred and, if so, to what extent, who was responsible, and its seriousness.

During the investigation, if additional information becomes available that substantially changes the subject matter of the investigation or would suggest additional respondents, the committee will notify the Research Integrity Officer, who will determine whether it is n

findings, he or she will decide on the appropriate actions to be taken, after consultation with the Research Integrity Officer. The actions may include:

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who cooperate in good faith with inquiries and investigations of such allegations. Upon completion of an investigation, the Deciding Official will determine, after consulting with the whistleblower, what steps, if any, are needed to restore the position or reputation of the whistleblower. The Research Integrity Officer is responsible for implementing any steps the Deciding Official approves. The Research

NOTES:

1. 42 C.F.R. 50.102.

2. 42 C.F.R. 50.102.

3. 42 C.F.R. 50.102.

4. 42 C.F.R. 50.103(d) (12).

5. 42 C.F.R. 50.103(d) (13).

6. 42 C.F.R. 50.103(d) (2).

7. 42 C.F.R. 50.103(d) (13).

8. 42 C.F.R. 50.103(d) (3).

9. 42 C.F.R. 50.103(d) (1).

10. 42 C.F.R. 50.103(d) (1).

11. 42 C.F.R. 50.103(d) (1).

12. 42 C.F.R. 50.103(d) (8).

13. 42 C.F.R. 50.103(d) (7).

14. 42 C.F.R. 50.103(d) (7).

15. 42 C.F.R. 50.103(d) (7).

16. 42 C.F.R. 50.103(d) (7).

24. 42 C.F.R. 50.104(a)(5).

25. 42 C.F.R. 50.104(a)(3).

26. 42 C.F.R. 50.104(b)(1).

27. 42 C.F.R. 50.104(b(2).

28. 42 C.F.R. 50.104(b)(3)

29. 42 C.F.R. 50.104(b)(4).

30. 42 C.F.R. 50.104(b)(5).

31. 42 C.F.R. 50.103(d)(14).

32. 42 C.F.R. 50.103(d)(14).

33. 42 C.F.R. 50.103(d)(11).

34. 42 C.F.R. 50.103(d)(10).

To set policy regarding copyrights and royalties for all copyrightable material created by Morehouse

tangible form of expression thereby creating Copyrightable Material.

b. “ ”: Material that is subject to U.S. copyright laws, including, but not limited to, literary works, musical works, dramatic works,

1.1. The terms of a sponsored research or other agreement may determine the ownership of all copyrightable material that a person creates in the course of or pursuant to such an agreement. If the agreement does not contain terms relating to the ownership of copyrightable material, the following provisions of this policy will govern ownership of the material.

. Only a commissioned project shall be a “work made for hire”, and accordingly, the School shall own all copyrightable material which a person creates as a

3.1. When Works from School Research, including Instructional Materials and Other

a. Safety. COMPANY/INSTITUTION agrees to use the BIOLOGICAL MATERIALS in a safe

4.02 Termination by COMPANY/INSTITITION. COMPANY/INSTITUTION may terminate this Agreement at any time by providing written notice to Morehouse School Of Medicine at least sixty (60) days before the termination is to take effect.

4.03 Termination by Morehouse School Of Medicine. Should COMPANY/INSTITUTION materially breach this Agreement, Morehouse School Of Medicine may give COMPANY/INSTITUTION written notice of the breach. COMPANY/INSTITUTION shall have thirty (30) days from receipt of the notice to cure the breach. If COMPANY/INSTITUTION does not cure the breach within this period, Morehouse School Of Medicine may terminate this Agreement by giving written notice of its election to do so.

4.04 COMPANY/INSTITUTION's Financial Condition. If COMPANY/INSTITUTION: (a) ceases to carry on its business, (b) becomes "insolvent" (as such term is defined in the United States Bankruptcy Code, as amended from time to time), (c) fails to pay its debts in the ordinary course of business under

5.04 Representation. Morehouse School Of Medicine represents that it owns and has title to the BIOLOGICAL MATERIALS and KNOW-HOW, and that there are no outstanding agreements, assignments, or encumbrances inconsistent with the provisions of this Agreement.

5.05 Nature of the Materials. All BIOLOGICAL MATERIALS provided hereunder should be considered experimental in nature and should be handled by COMPANY/INSTITUTION with appropriate safety precautions as provided in paragraph 2.02(a). However, in cases where a Material Safety Data Sheet is available for the BIOLOGICAL MATERIALS it will be supplied by Morehouse School of Medicine to COMPANY/INSTITUTION and the handling precautions contained therein should be followed.

ARTICLE VI - NOTICES

6.01 Notices. Payments, notices, or other communications required by this Agreement shall be sufficiently made or given if mailed by certified First Class United States mail, postage pre-paid, or by commercial carrier (e.g., Federal Express, Airborne, etc.) when such carrier maintains receipt or record of delivery, addressed to the address stated below, or to the last address specified in writing by the intended recipient.

a. If to Morehouse School Of Medicine:

Sandra Harris-Hooker, Ph.D.
Associate Dean for Research Development
Morehouse School Of Medicine
720 Westview Drive, SW
Atlanta, GA 30310-1495

With copy to:

Scientist
Morehouse School Of Medicine
720 Westview Drive, SW
Atlanta, GA 30310-1495

b. If to COMPANY/INSTITUTION:

NAME
TITLE
ADDRESS
PHONE; FAX

With copy to:

SCIENTIST

ADDRESS
PHONE; FAX

ARTICLE VII - MISCELLANEOUS PROVISIONS

7.01 Non-Use of Names. Except as set forth in paragraph 2.02(g) hereof, COMPANY/INSTITUTION shall

MOREHOUSE SCHOOL OF MEDICINE, INC.	COMPANY/ INSTITUTION
_____	_____
Sandra Harris-Hooker, Ph.D. Associate Dean for Research Development Date:	NAME TITLE Date:
_____	_____
_____	_____
(Provider) Scientist	COMPANY/INSTITUTION (Recipient) Scientist
Date:	Date:
_____	_____

The DEFINITION OF MATERIALS provided by Morehouse School Of Medicine, will be utilized for DETAILS OF USAGE GIVEN BY INVESTIGATOR.

Universities and Health Science Center have established successful cooperative relationships with industry which have been mutually beneficial and which have been helpful to the general society. These relationships have fostered an increase in knowledge, an increase in sabbatical opportunities

Before the Medical School decides to enter into an agreement to participate in a freestanding research

Significant Financial Interest in a private enterprise means holding more than 20% of the equity, options or other types of corporate security. Such interests, if held by a faculty member's immediate family, shall fall within this definition.

Direct and active management obligations include serving as a member of the Board of Directors, Chief Executive Officer, Chief Operating Officer, Director of Research, Treasurer or other senior line management officer.

such research activities performed with the facilities and/or funds of MSM by faculty, staff and students are not intended to be profit making, MSM recognizes that some activities may lead to inventions which should be patented for one or more of the following reasons:

a. to protect the public interest;

b. to comply with the requirements of research grants, awards, and contracts for research;

c. to comply with the requirements agreed upon by MSM and non-research entities;

d. to promote the development of useful apparatus and processes which would not be developed without patent protection;

d. to encourage invention and assure adequate rewards as incentive for the inventor; and

e. to support facilities and programs at MSM for research, education and advance technology by means of income derived from royalties.

2. The MSM Patents policy is intended to be consistent with these principles and philosophy and with the purposes of MSM. It is intended to encourage patenting of potentially valuable inventions made by members of the MSM community while using MSM facilities and/or funds.

3. Ownership of Inventions

a. (Does this date match the initial policy date?) Since April 12, 1973, a condition of appointment or continued employment by or enrollment in the Institution has been the agreement to assign to the Institution all inventions developed with Institution support. Notebooks and other documents pertaining to research activities and all data (including written and computerized material and photographs, etc.) leading to an invention is the property of the Institution and will be retained in the files of the Institution.

4. Administration of Patents

a. The Office for Research Development shall be responsible for providing information and assistance on patent matters to inventors, and for managing the patenting of inventions under this policy after consultation with the inventors.

5. Disclosure Responsibilities of Inventors

a. Every inventor shall promptly disclose to the Office for Research Development as described under "PROCEDURE" all inventions developed with MSM support in order that they may be evaluated as to patentability and commercial and scientific utility, and so that timely

decisions can be made regarding the filing of patent applications thereon.

6. Inventions made Jointly with Outside Inventors

    a. Where an invention covered by this policy has been developed jointly with individuals not covered by this policy, the terms of any contractual agreement previously entered into by MSM with the non-MSM inventors will govern. If no agreement exists or the terms of the existing agreement are not complete, an agreement regarding patent rights and obligations shall be negotiated with the co-inventor(s)'s or the appropriate institution or corporation by the Associate Dean for Research Development.

7. Compliance with Contractual Patent Restrictions

    a. All inventions or disclosures thereof resulting from research performed under grants or contracts entered into by MSM with specific patent restrictions shall be subject in the first instance to the restrictions, but, even when governed by contract or grant, all inventions must be submitted for review and evaluation as provided in paragraph V.A.5. above.

8. Distribution of Patent Income

    a. A portion of patent income shall be paid to the inventor according to the schedule set forth herein.

A. Disclosure of Inventions to the Director of Patents and Licensing

1. Inventors shall submit a full disclosure of any invention to the Associate Dean for Research Development using the Invention Disclosure Form (ATTACHMENT A).

seeks additional support to complete the invention or to enter into a collaborative arrangement to complete the invention. This is imperative in order to ensure confidentiality of the potential invention.

B. Patent Protocol

1. Once disclosure has been made to the Office for Research and Development, the Associate Dean for Research Development shall promptly submit the disclosure to the Intellectual Property Committee for review. When a disclosure containing sufficient technical information to permit an effective patent study has been made, the Associate Dean for Research Development shall notify the inventor in writing, within 90 days, of MSM's intentions with regard to the invention.

2. Options Available to the Institution

MSM may after consultation with the inventor:

a. undertake the timely filing of patent prosecution, development, and marketing of the invention and shall bear all related costs. Any income to be distributed shall be income received, less costs incurred by the Institution in obtaining and protecting the patent rights;

b. seek support for the costs of patent prosecution through a licensing or other agreement. Any income to be distributed shall, in this instance, be income received less costs incurred by the Institution in obtaining and protecting the patent rights;

c. cause the invention to be assigned to a patent management organization. The domestic or foreign patent rights, or both, may be assigned to a patent management organization. Any income to be distributed shall be the income received after the patent management organization has received its portion of the income, less additional costs borne by the Institution;

d. release to the inventor all rights to the invention unless such rights revert to the sponsor of the program or the Federal Government; and

e. the Institution has the obligation to make a good faith effort to commercialize the invention within a reasonable period of time. If, for any reason, the Institution is unwilling or unable to carry out this obligation, the Institution will then offer to release the invention to the inventor(s), as in Option VI.B.2.d., under conditions acceptable to all parties.

3. Continuing Option

a. Notwithstanding any previous decision to support an invention, the Institution may at any time elect to release all rights to the invention to the inventor, as in VI.B.2.d. above.

C. Distribution of Invention Related Income

1. Formula for Distribution of Income

   a. 50% to inventor(s); and

   b. 50% to the Institution. The Institution's distribution shall be divided:

      i. 50% to the Office of the Dean; which shall be distributed at the discretion of the Dean to support the research infrastructure; and

      ii. 50% to the Research Development Fund to help defray the cost of administrating Intellectual Property –related activities (i.e., provisional patents, full patents, legal services, marketing, etc.).

2. Additionally the inventor(s) may at his/her option at the time of the allocation of funds allocate up to 25% of the inventor's distribution under this policy to support his/her own research in his/her department.

3. Where the Institution has released the rights to an invention to the inventor, the inventor shall pay the Institution 10% of any patent income later derived from the invention.

By Direction of the President:

_____

Senior Vice President and Chief Operating Officer

_____

Dean and Senior Vice President for Academic Affairs

Effective _____, 20___ (the “Effective Date”), “Corporation Name” and Morehouse School of Medicine agree as follows:

1. Confidential Information means: (a) any information in written or tangible form of the type described in the List of Definitions at the end of this Agreement, communication to “Corporation Name” by Morehouse School of Medicine, and marked confidential; and (b) information of the type described in the List of Definitions, communicated orally or visually to “Corporation Name” by Morehouse School of Medicine, if it is reduced to writing or tangible form by Morehouse School Of Medicine on or before the date thirty days after the date of such communicati

Please provide as much information as possible on this form. Attempt to answer all of the questions and be as accurate as you can be, providing as much information as you can to answer the question. If you need more space, use separate pages and attach them to this form. Please feel free to use photocopies of lab notebooks (showing dates), data sheets, drawings or any other rough document(s). If you have questions, please contact the MSM Office for Research Development at 404-752-1050.

Name: _____

Address: _____

Phone #: _____ Fax #: _____ E-mail: _____

Date: _____

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a. Please give a complete technical description of the invention and its advantages over what was known previously. If necessary, use drawings, diagrams, pathways, etc.

b. What is the technology that presently exists in the area of this invention? What are the advantages of this technology over existing inventions and practices?

2. To foster responsible research conduct in a period of increasing diversification of funding sources, growing demands on limited research resources, and greater incentives for financial gain in the research environment.

3. To ensure fairness and balance in efforts to establish individual and institutional accountability in scientific research activities.

In concert with these objectives, the institution is obligated to protect and foster the academic freedom and intellectual integrity of all members of the institutions community in the pursuit of knowledge.

2. Questionable Research Practices

Actions that violate traditional values of the research enterprise and that may be detrimental to the research process.

These do not directly damage the integrity of the research process, however, they can erode confidence in the integrity of the research process, violate traditions associated with science, affect scientific conclusions, waste time and resources, and weaken the education of new scientists.

Questionable research practices include:

- Failing to retain significant research data for a reasonable period
- Maintaining inadequate research records
- Conferring authorship for a contribution that is not significantly related to the research reported in the paper
- Refusing to give peers reasonable access to unique material or data
- Using inappropriate statistical analysis to enhance the significance of research findings
- Inadequately supervising research subordinates

3. Other Misconduct

These practices include behavior which is clearly not unique to the conduct of science, i.e. sexual and other forms of harassment of individuals, misuse of funds, vandalism, including tampering with research experiments or instrumentation, and violations of government research regulations, such as those dealing with radioactive materials, recombinant DNA research, and the use of human or animal subjects.

Recommendations

enterprise share responsibility for the integrity of the research process. The following recommendations are aimed at strengthening the research enterprise, as well as clarifying the nature of the responsibilities of scientists, research institutions, and government agencies in this area.

1. Scientists in cooperation with officials of research institutions should accept formal responsibility for ensuring the integrity of the research process. They should foster an

however, MSM has not formulated an "official framework for defining misconduct, nor has it established guidelines to encourage responsible research practices. To be effective, guidelines must be incorporated into the process of research and education and become an operational part of day-to-day activities. It would thus seem appropriate that if such policies should be formulated, they should be under the supervision of those who will be directly affected. We therefore set for the following general principles to provide a common frame of reference. The following guidelines are proposed for defining misconduct.

1. Data Handling

   Data handling refers to the acquisition, management, and storage of research results. Scientific experiments and measurements are typically transformed into research data. Research data are the basis for reporting discoveries and experimental results. When a scientist communicates a set of results and a related piece of theory or interpretation in any form, it is assumed that the research has been conducted as reported. It is a violation of the most fundamental aspect of the scientific research process to set forth measurements that have not, in fact, been performed (fabrication) or to ignore or change relevant data that contradict the reported findings (falsification).

   On occasion what is actually proper research practice may be confused with misconduct in science. Responsible practice requires that scientists disclose the basis for omitting or modifying data in their analysis of research results, especially when such omissions or modifications could alter the interpretation or significance of their work.

   Concerns about misconduct in science have raised questions about the roles of research investigators and of institutions in maintaining and providing access to primary data. Scientists are generally expected to exchange research data as well as unique research materials that are essential to the replication or extension of reported findings. However, it is well recognized that in the academic environment, centralized research records raise complex problems of ownership, control, and assess.

Recommendation in Data Handling

Research data, including the primary experimental results, should be retained for five years. Custody of all original primary laboratory data should be retained by the unit in which they are generated. All data, even from observations and experiments not leading directly to publication, should be treated in a likely manner. Research data should always be immediately available to scientific collaborators and supervisors for review.

C. Communication and Publication

In a publication, all data pertinent to the project should be reported, whether supportive or unsupportive of the thesis or conclusions. Except for review articles, publishing the same material in more than one paper should be avoided.

Plagiarism is using the ideas or words of another person without giving appropriate credit. Plagiarism includes the unacknowledged use of text and ideas from published work, as well as the misuse of privileged information obtained from peer review is not acceptable because the reviewer is in a privileged position.

Peer review is the process by which editors and journals seek to be advised by knowledgeable colleagues about the quality and suitability of a manuscript for publication in a journal. The proliferation of research journals and the rewards associated with publication and obtaining research grants have put substantial stress on the peer review system.

The reviewer has the responsibility for preserving the integrity of the review process. In reviewing a manuscript or a grant proposal, she or he is entrusted with privileged information that is unavailable to anyone outside of the laboratory of the submitting scientists. It is of obvious importance for the reviewer not to make use of information gained in the review for her or his own purposes until it is published or prior to that, only by consent of the author.

Recommendation on Communication and Publication

Authorship of original research reports is an important indicator of accomplishment, priority, and prestige within the scientific community. Authorship practices are guided by disciplinary traditions, customary practices within research groups, and professional and journal standards and policies. A

E. Research Training, Supervision and Mentorship

Recently, the demands of obtaining sufficient resources to maintain a laboratory in the contemporary research environment often separate faculty from their trainees. When laboratory heads fail to participate in the everyday workings of the laboratory, their inattention may harm their trainee's education. In addition, problems arise when faculty members are not directly rewarded for their graduate teaching or training skills. When institutional policies fail to recognize and reward the value of good teaching and mentorship, the pressures to maintain stable funding for research teams in a competitive environment can overwhelm the time allocated to teaching and mentorship by an investigator.

Research supervisors must devote attention to maintaining an atmosphere of open communication and cooperation in their research groups, with opportunity for appropriate participation by and recognition of all parties. Considering human relationships and interactions is an important aspect of good research practice.

Recommendation on Research Training, Supervision and Mentorship

Research mentors, laboratory directors, department heads, and senior faculty are responsible for defining, explaining, exemplifying, and requiring adherence to the value systems of their institutions. A mentor is defined as that person directly responsible for the professional development of a research trainee. Professional development includes both technical training and socialization in basic research practices (i.e. authorship practices and sharing of research data). The mentor has the responsibility to supervise the trainee's progress closely and to interact personally with the trainee on a regular basis in such a way as to make the training experience a meaningful one. The neglect of sound training in a mentor's laboratory will over time compromise the integrity of the research process.

F. Conclusions

The self-regulatory system that characterizes the research process has evolved from a diverse set of principles, traditions, standards, and customs transmitted from senior scientists, research directors, and department chairs to younger scientists by example,

discussion, and informal education. The principles of honesty, collegiality, respect for others, and commitment to dissemination, critical evaluation, and rigorous training are characteristic of all the sciences.

Guidelines for the conduct of research differ from institutional policies that are designed to address misconduct in science, conflict of interest, or that have been formulated in response to regulatory requirements governing research involving human subjects, hazardous

surpluses or deficits. Documentation to support the costs of the service center and records of units of service should also be maintained.

7. Actual costs and revenues should be compared at the end of each fiscal year. Deficits or surpluses should be carried forward as an adjustment to the billing rates of the following year or the next succeeding year. Where feasible, the adjustments may be made by increasing or decreasing the charges made to users for the completed year, rather than through the "carry-forward" adjustment process.

Where a service center provides different types of services to users, separate billing rates should be established for each service that represents a significant activity of the service center. The costs, revenues, surpluses and deficits should also be separately identified for each service. The surplus or deficit related to each service should be carried

External	$ [redacted]
Internal (MSM users)	15[redacted]
Institutional Subsidy	25,[redacted]
Grant Agency Subsidy	45,0[redacted]
Salaries and Wages	$30,000
Fringe Benefits	6,600
Supplies	14,400
Maintenance and Repairs	19,000
Service Contracts	9,000
Telecommunications/Network	1,000
Equipment Depreciation -Non-federal	10,000

(#1 minus #2