ESTABLISHED BY THE HARYANA ACT NO.10 OF 2010 AND UGC RECOGNISED . LOCATED AT GURGAON (MANESAR)

AMITY UNIVERSITY HARYANA

UNIVERSITY RESEARCH POLICIES

Title: AUH University Research

Effective Date: July 2013

Issuing Authority: Pro-Vice-Chancellor & Dean Academics

Responsible Officer(s): Registrar

Purpose of this Policy: The purpose of this policy is to establish consistent guidelines for

Academic Research and Innovation as well as R&D activities in the

University.

S. No.	Description	Page No.
1	1.Introduction	2
2	1.1 Scope/ Applicability of the Policy	2
3	1.2 Policy Statement	2
4	1.3 Rationale	2-4
5	1.4 Research Objectives	4-5
6	1.5 Research Management	5
7	1.5.1The composition of the URC will be as under	5
8	1.5.2The role and function of the URC will be	6
9	2. Overview: Rights & Responsibilities	6-7
10	3. Responsibilities of Researchers	7
11	3.1Responsibilities of Faculty to Both Staff and Students	7
12	3.2Health and Safety	8
13	3.3Consulting by External Academic Staff – Research Personnel	8
14	3.4PI's Responsibilities to Sponsors	8
15	3.5PI's Responsibility for Research Equipment	8
16	3.6. Preparation of Proposals and Application for Extensions or Continuation	9
17	3.7 Utilization Certificates (UCs) and Statement of Salaries under Projects	9
18	4. Application of General Principles & Other Matters	9
19	4.1 Inception, Technical and Invention Reports	9
20	4.2 Patents and Copyrights	10
21	4.3 Application of the General Principles	10
22	4.4 Grievance Procedures	10

23	4.5. The Requirement of Secrecy & Security	11
24	4.6. Confidentiality Clause	11
25	4.7. Use of Private Papers, Documents, Diaries or Analogous Materials	11-12
26	4.8. Review of General Principles	12
27	5 Authorship & Related Issues	12-14
28	6 Research Misconduct	14-15
29	7 Retention of and Access to Research Data	16-17
30	8 Human Subjects and Scientific Research	17-18
31	9 Women as Subjects in Research	18-19
32	10 Animals as Laboratory Subjects	19
33	11 Environmental Health and Safety	19-20
34	12. Export Controls	20
35	13 Degree-Oriented Research	21
36	14 MoUs for Research Collaborations	21
37	15 Financial Responsibilities for Sponsored Research	21

1. Introduction

1.1. Scope/ Applicability of the Policy

This document on AUH Research Policy Guidelines will be applicable to all AUH faculty, staff and students involved in any form of research activity.

1.2. Policy Statement

Amity University Haryana is committed to be a Research and Innovation Driven University. The aim of AUH is to see India become a global knowledge superpower through education, research and innovation. To attain this goal, it is absolutely important to pursue cutting-edge basic, targeted, and applied research in all domains/ faculty of studies in a transparent, responsible and ethical manner for advancement of knowledge and development of novel processes, technologies and products. It is equally important to ensure that the products and outcomes of such research are appropriately disseminated to reach the widest possible audience at both national and global levels. This policy provides a set of guidelines for conduct of research at all levels and is applicable to all full-time, part-time as well as contractual employees of the University and all students, whether full-time or part-time, of the University who may be involved in any form of research activity.

1.3. Rationale

- 1.3.1. In the best traditions of Amity group of universities, Amity University Haryana considers transmission of knowledge and conduct of scholarly inquiry as the central functions of the University that is dedicated to research and innovation. These functions require that the faculty, scholars and students are guaranteed certain degree of freedoms and that they too accept certain obligations and responsibilities, correspondingly.
- 1.3.3. At the outset, it could be broadly stated that AUH policy is to ensure that individual scholars are free to select their broad and narrow disciplines, or inter-disciplinary perspectives to narrow down the subject matter of their research, and to seek support from other schools and institutes in Amity or outside to source for their work. They are also free to form their own opinion, theories, explanations, findings in their research report where they draw certain conclusions.
- 1.3.4. It is important to emphasize that all research reports and publications arising out of AUH research Programme must carry the correct affiliation ('Amity University Haryana') in the credit/address tag lines in the published versions as books, research papers, book chapters, articles, and on-line or off-line reports.

- 1.3.5. However, these findings and conclusions must be open to both internal (through a Research Sub-Committee mechanism) and external scrutiny (by individuals and agencies that assess and evaluate innovations, proposed patents and research). All research reports are also open to criticism as required by the University's Policy on Openness in Research.
- 1.3.6. At the same time, University Research Policy is not to allow use of a research or survey methodology or technique that is in violation of professional ethics pertaining to the health, safety, privacy, and other personal rights of human subjects or to the infliction of injury or pain on animals and living organisms.
- 1.3.7. As an academic institution of distinction, AUH offers an environment that is conducive to research in all fields of knowledge cultivation. However, because of limitations on both infrastructure, funding and manpower requirements, the University cannot support all research demands. The AUH allocates lab, library, design table and drawing and sculpting board spaces and facilities, and other resources such as its own funds to match with that of the funding agencies for research Programmes depending on the merits of the research proposals.
- 1.3.8. The University does not encourage any speculations or discussions on any kind of platform (including social media) concerning the political or moral impropriety or the uses which might be made of its results of research. The university would provide for ain the form of a 'University Research Committee' for discussions of this nature if need arises, and if there arises controversies in this respect.
- 1.3.9. It is also mandatory to ensure that AUH research platforms are not used to argue against the widely acclaimed research positions or against the national policies of India, or against the universally accepted international laws and provisions.
- 1.3.10. The above principles circumscribe the University's role with respect to University-connected research. They are not intended to diminish the individual researcher's personal responsibility to assure that the conduct of research, the sources of funding for the same, and its perceived applications are consistent with the individual researcher's judgment and conscience, and with both established professional ethics and national security and national interest. For example, all research involving genetically modified organisms (GMO)/ living modified organisms (LMO) and recombinant DNA (rDNA) materials shall be conducted in compliance with "Rules for the manufacture, use/import/export and storage of hazardous microorganisms/ genetically engineered organisms or cells, 1989" as notified by the Ministry of Environment and Forests (MoEF) Government of India under the Environment (Protection) Act, 1986,

Recombinant DNA (rDNA) Safety Guidelines,1990 and other guidelines issued by DBT from time to time. Such research will be undertaken with the approval and oversight of the statutory. There are similar guidelines issued by the DST (Department of Science & Technology) and/or Ministry of Electronics and Information Technology, Government of India.

1.4. Research Objectives

AUH also encourages its faculty to serve its research goals through their primary commitment to engaging in teaching, research, industry connect, and other support activities that are consonant with the values of the University. In addition, to further AUH research and collaboration, it also is appropriate and often desirable for faculty members to participate in both government-funded and private activities beyond this campus by engaging in academic and professional activities including public service and consulting that may ultimately benefit the AUH. In fact, all AUH faculty members are expected to undertake research activities in addition to their teaching and administrative responsibilities. All research activities should be undertaken in compliance of the University Research policies. The AUH research objectives are to -

- 1.4.1. Affirm research as an integral activity at the University;
- 1.4.2. Maintain and enhance the quality of research undertaken;
- 1.4.3. Maximize funding support for research through external and internal sources;
- 1.4.4. Create transparent, effective and efficient systems for maximizing research outputs;
- 1.4.5. Integrate research activities undertaken by the undergraduate, post-graduate and doctoral students with the research focus of the University in alignment with the national thrust areas; Create, maintain and enhance infrastructure to enable conduct of state-of the-art research;
- 1.4.6. Provide a framework for conduct of research in a transparent, socially responsible and ethical manner:
- 1.4.7. Ensure a facilitating environment for conduct of high-quality original research by all individuals affiliated with the University and provide continued and effective support for pursuit of research activities;
- 1.4.8. Translate new knowledge, innovations, technologies and tools emerging out of research conducted at Amity into products and processes for commercialization or for societal benefit;
- 1.4.9. Protect Intellectual Property (IP) generated as a result of research conducted at Amity;

- 1.4.10. Integrate research activities undertaken by the students with the research focus of the University;
- 1.4.11. Create a rational, transparent and efficient system for management of all research processes;
- 1.4.12. Encourage and facilitate research collaborations within different Institutes of the University along with reputed Institutes, Universities and Research Organizations both in India and abroad;
- 1.4.13. Ensure effective dissemination of research activities and achievements of the University both internally and externally; and
- 1.4.14. Enhance the research profile of the University by effective dissemination of research activities and achievements of the University at all levels to maximize the impact and recognition of research done at Amity at national and international levels

1.5. Research Management

There will be a two-tier management of all research activities at the University. There will be a **University Research Committee** (URC) that will have an advisory role, and an **Executive Standing Committee** of the URC for regular monitoring of all research activities.

1.5.1. The composition of the URC will be as under:-

The University Research Committee (URC) will be headed by the Dean Academics and will include Twelve (12) leading faculty researchers and administrators from different faculty of the Amity University Haryana and Five (5) eminent experts from outside the University. In the absence of the Dean, Academics, the URC meeting will be chaired by the seniormost of the I twelve members from the AUH. The URC will meet at least once a year (ideally, twice a year) to review research progress, offer critical comments and suggest corrective measures to enhance the research activities of the University. The 'Term' of the URC, once constituted, will be for a period of Three (3) years after which the same members may be continued for another term. The members may be replaced in case of non-availability of existing member(s) for any reason. The five external members will be chosen by the Vice-Chancellor, AUH from a Panel of names as may be suggested by the Pro-Vice-Chancellor & Dean, Academic. The composition of the Executive Standing Committee of the URC will be decided by the Pro-Vice-Chancellor, AUH and Dean, Academics.

1.5.2. The role and function of the URC will be:-

To make recommendations to the academic council on matters related to research promotion and infrastructure.

A comprehensive mapping of the core and ancillary competencies of individual faculty members would be undertaken by the URC along with other soft skills to identify strengths and weaknesses. This will enable identification of research potential maximizing the output from each individual.

While it is expected that the researchers will generate their funds for undertaking the research activities, the University may also support the research activities. The extent of support will be decided based on the potential of research outcome on peer review. It is expected from the researcher to ensure potential benefits to the University.

URC will also facilitate designing of custom-made faculty development Programmes in advanced areas to improve upon the skills of AUH faculty and researchers and help them overcome their weaknesses in order to maximize their contribution to the University.

There could be Domain Specific Research Sub-Committees too for research with the following composition:- Dean of Faculty/ Domain Head as Chair with 2/3 HoIs by rotation as members, 2/3 Senior Professors as members and 2/3 external experts. Such Sub-Committees will also decide on the Long and Short-term Research Strategies in specific areas as well as monitor and review research work.

2. Overview: Rights & Responsibilities

- 2.1. Ideally, there should be no conflict between commitment of faculty and research staff of AUH to the University and other activities in which faculty and research staff members may engage themselves. It is expected that faculty and Project Investigators (PIs) will conduct their affairs so as to avoid or minimize such conflicts of interest, and should there be any actual, potential or perceived conflicts between one's private beliefs and interests and her/his professional obligations to AUH, such matters should be properly and promptly revealed by the Faculty, Staff and PIs to the University administration so as to resolve any issues before engaging in research, development and innovation activities.
- 2.2. AUH Research Policies should be able to help all faculty and researchers in deciding as to what extent their individual and group activities may conflict with the faculty's primary commitment to teaching, research and other responsibilities in the AUH; to educate faculty, research staff and Primary Investigators about situations that generate the potential for conflicts of interest or conflicts of commitment; to clarify expectations about disclosing such interests and activities that might result in conflicts; to identify means to manage, reduce or eliminate such conflicts; and finally to promote the best interests of students and others whose work depends on the direction of our faculty and Investigators.

- 2.3. The general principle in this matter is fairly simple and straightforward. If a faculty member, research staff or Investigator has a query or a question about whether an activity is permitted under the University Research Policy, the faculty member or Investigator should disclose the potential or appearance of conflict to and seek guidance from his or her department chair or Director of School, or Dean of the faculty, or the Office of the Pro-Vice-Chancellor and Dean, Academic.
- 2.4. Individual Institutes and Schools may wish to supplement this policy with policies applicable to their faculty and/or Investigators, because there could be differences in the minute details as per the areas of research. To ensure consistency with the AUH policies, such Institute/School policies must be approved by the Pro-Vice-Chancellor and Dean, Academic.
- 2.5. Faculty members have the right to disseminate the results and findings of their individual or collaborative research without suppression or modification from external sponsors beyond the specific undertakings or provisions that may be written down and agreed upon by the sponsoring agencies, Universities and researchers.
- 2.6. The Faculty and Researchers could also engage in external consulting activities, subject to the University's rules, regulations and limitations. A separate section on Consultancy Policy is included in this document to facilitate this activity. But it is important that faculty adhere to both the spirit and the letter of the policy. Along with these freedoms come corresponding responsibilities.

3. Responsibilities of Researchers

3.1. Responsibilities of Faculty to Both Staff and Students

Faculty members must be aware of their obligations to staff and students working as part of the research team. It is particularly important that at least annually, each faculty member should review intellectual and tangible property rights and responsibilities (for management of data in all media, for proper authorship attribution, etc.), with all members of the group under his or her direction, including staff, students, postdocs, and visiting scholars.

Each member has the right to know who is sponsoring the research and supporting his or her salary or stipend because AUH believes in academic transparency. The University is committed to demonstrate support and appreciation for its research staff. To that end, faculty members are encouraged to provide staff development opportunities (such as FDPs and special Training Courses or Workshops) and, if possible, a mentor relationship for those in their research group.

3.2. Health and Safety

Each faculty member is responsible for advising and helping members of his or her team in appropriate health, insurance and safety procedures that must be taken to work in a particular area of research, and for management of those procedures in his or her office or laboratory, studio or other workplaces.

PIs are directly responsible to assure the periodic inspection of lab facilities, take corrective measures – if required, and to cooperate in any inspections by safety personnel or by external agencies. Faculty members also need to ensure that approved research protocols for the use of human and animal subjects in research are obtained and followed.

3.3. Consulting by External Academic Staff – Research Personnel

The members of the academic staff or research personnel may be allowed to engage in outside consulting activities under conditions outlined in the Clauses under Conflict of Commitment and Interest for Academic Staff and Other Teaching Staff.

3.4. PI's Responsibilities to Sponsors

Although the legal agreement funding a sponsored project is between the sponsor or sponsoring/funding agency and the AUH, the overall responsibility for management of a particular project within funding limitations rests with the PI. Funds must be spent judicially to remain within the restrictions of the contract or grant.

If any overdraft should occur, or change of head is needed, it is the responsibility of the PI to get it approved both by within the administration and also by the sponsoring agencies.

3.5. PI's Responsibility for Research Equipment

The control, upkeep and record-keeping of both AUH-funded and Government-owned equipment is mandatory under the university rules as well as under the externally funded contracts and grants. PIs are responsible for securing necessary approvals for the purchase of the equipment, proper tagging, and maintaining inventory, utilization of equipment and peripherals, and disposal once the equipment becomes either obsolete or dysfunctional and irreparable or is in excess. The Director, Administration may be contacted to seek advice on how to follow these steps.

3.6. Preparation of Proposals and Application for Extensions or Continuation

The cost of proposal preparation activities in support of new directions in research or for continuation of the projects could be charged to existing or sponsored projects. Department Heads or School Directors and Faculty Deans must ensure that some research related funds could be made available to create new proposals. It could perhaps come from the earlier project overheads deducted by the University. The cost of proposal preparation efforts for continuing research is appropriately charged to current projects.

3.7. Utilization Certificates (UCs) and Statement of Salaries under Projects

All funded projects and their costs or accounts must be reviewed and certified by the PI quarterly. It is also the responsibility of each departmental head or Director of Schools/Institutes to see that a system is in place to ensure that the PIs fulfil this requirement for review and certification.

Further, certification of salaries charged to sponsored projects are also to be issued to the staff after ensuring that they correspond to efforts expended on those projects by them.

4. Application of General Principles & Other Matters

4.1. Inception, Technical and Invention Reports

Principal Investigators are responsible for submitting sponsor-required reports through the Office of Research Management and Accounts Officer on a timely basis. Inception being a beginning of an activity, the **Inception Report** required of the PI is often a document that must be prepared at the end of the Inception period defining a project's workplan (plan of operations) for the remainder of its duration. It would include stake-holder assessment, human resource plan and communications plan, all of which are essential to completing the include the project successfully. The PIs may also be required to submit a **Technical Report** (also called a **Scientific Report**) from time to time - that would describe the process, progress, or results of technical or scientific research, including recommendations and conclusions of the research project. Further, purely for patenting purposes, the PIs may have to submit an **Invention Report** that would form the basis of patent application. Some funding agencies also require a six-monthly or annual **Progress Report**. The research staff are expected to submit progress reports bi-annually to the PI anyway.

4.2. Patents and Copyrights

All participating researchers, including postdocs, students, and visiting scholars, must sign the Patent and Copyright Agreement of the AUH before the commencement of any research activities.

4.3. Application of the General Principles

In furtherance of these general principles, the decisions concerning shall be made without regard to a person's political, social, or other views not directly related to academic values or to the assumption of academic responsibilities; without regard to the conduct of a person holding an appointment at AUH in some other capacity, or without regard to an individual's race, ethnic origin, sex, or religion. The authorities will accordingly decide on -

- 1. The search for, and appointment and promotion of, faculty
- 2. The assignment of teaching and other primarily academic responsibilities
- 3. The support and sponsorship of scholarly research
- 4. Any other granting or withholding of benefits or imposition of burdens

4.4. Grievance Procedures

The grievance procedures outlined elsewhere in the University Policy documents will be followed for the research projects as well. The general principle is however very clear: These procedures are designed to assure that decisions by faculty members and administrators comply with the standards of academic freedom granted to all faculty and PIs. These procedures are internal to the University and are aimed at preserving confidentiality and academic integrity while protecting the rights of individual staff. The provisions of engagement in the projects do not create contractual rights subject to review by agencies outside the University. There must be some administrative remedies for faculty or research staff grievances covered by parallel rights established under the laws of the land.

- 1. The rights herein conferred shall be enforceable only by a person who is directly aggrieved and who holds a faculty or research position; no other person or persons could complain on her/his behalf.
- 2. If any faculty member feels aggrieved by a decision that she or he believes to be in violation of this guidelines and rules, he or she may file a grievance pursuant to the Statement on Faculty Grievance Procedures and its attendant standing rules.
- 3. For grievances brought in whole or in part for alleged violation of the Statement on Academic Freedom, the rules and procedures of the Statement on Faculty Grievance Procedures shall be modified as required. For a grievance not arising out of a negative decision on appointment, reappointment or promotion, the grievance and appeal structure shall rest on the authorities of the University.

4.5. The Requirement of Secrecy & Security

4.5.1. A research project or Programme may, at times, require secrecy for various reasons – either because of governmental/funding body restrictions, or because of patent requirements. If any part of the sponsoring or granting documents that establish the project is not freely publishable, or if there is a reasonable basis for expectation that any documents to be generated in the course of the research project will be subjected by an outside sponsor to restrictions on publication, the funding agency or the sponsor can ascertain whether information he or she is entitled to have treated as confidential would be disclosed by publication or not. If access is required in the course of the project to confidential data, it will be up to the Pro-Vice-Chancellor and Dean, Academics to resolve the issue in consultation with the Dean/Director/Head and the PI.

4.5.2. Four principles guide the security practices and guidelines for research computing systems: safety, confidentiality, integrity, and availability. **Safety** is important because it defines what imposed security measures are taken to prevent any unauthorized use or any possible cyber attack by others. Since the speculative and unpolished nature of research systems may result in data breaches more likely, research system safety often involves taking extra measures to reduce, detect, and ameliorate compromises – all of which will be the PI's responsibility. **Confidentiality** is the property that information is not made available or disclosed to unauthorized individuals, entities, or processes. Insufficiently protecting of confidentiality can jeopardize the work and privacy of others. **Integrity** means maintaining and assuring the accuracy and completeness of data over its entire life cycle. Research systems and procedures should be chosen or designed to maintain the integrity of the data they store and to detect modification. **Availability** means that the system and its data can be used and accessed by authorized users when needed..

4.6. Confidentiality Clause

If an external agency – private or governmental, or any outside person or entity/group has made available to the investigator certain confidential information, provision may be made to preserve confidentiality and/or a short delay in the publication of research results during which time the information source may examine the proposed publication in order to assure that the investigator has not disclosed, intentionally or unintentionally, any portion of the confidential information supplied by them.

4.7. Use of Private Papers, Documents, Diaries or Analogous Materials

If, in a research project certain private papers, deeds, documents, daily journals, diaries, emails, personal communications, or blogs and similar materials have been provided to the investigator, provision must be made to preserve the confidentiality of those materials for the purpose of protecting the privacy of the supplier of information or the author, or her/his inheritors.

4.8. Review of General Principles

The General Policies shall be reviewed by the University Research Committee annually based on the experiences gained from the projects and Programme undertaken. A proposal to that effect could be made by the PIs or Institute Directors and Deans in one of its meetings. This meeting and others primarily devoted to considering a revision of research policy shall be announced widely to all faculty by e-mail inviting suggestions on specific issues by the staff of the Pro-Vice-Chancellor and Dean, Academic. Changes, if any, arising out of such meetings will be added by notification and in the newer drafts of the University Research Policy documents.

5. Authorship & Related Issues

- 5.1. In the normal instances, the PI will decide on the sequences of names in any research publication arising out of a project work. The AUH does not want to impose a university guidelines to define "significant intellectual contribution" or impose formal mechanisms for determining authorship. The authorship rights and responsibilities of faculty, staff and students are a matter to be resolved within the group by the PI.
- 5.2. It is realised that as times go by, there will be change of patterns of research lab or research group composition. Under a large lab or facility, where there may be a general head or director(s), there may often exist smaller research clusters that may produce exciting ideas, products, research papers, but may pose a problems for the allocation of credit and responsibility. In some disciplines it is quite customary for graduate students to publish their own research results by themselves, even when their work involves fairly close supervision by a faculty member and in others, the professor's name goes on virtually every paper produced in the laboratory.
- 5.3. At times, increased administrative burdens on the designated principal investigators may also contribute to decreasing time available for active participation in research. In such cases, the PIs, Heads, Directors or Deans are expected to decide on allocation of credit in an ethical manner so as not to make it complex. It is realised that the customs prevailing in different fields may show differences in this respect.
- 5.4. It is not necessary that for each such publication all members of a research lab or research group will be given credit. But giving credit where it is due should be done, even if it is a small point or a personal communication, inwhich case 'Colophon' or a Footnote/Endnote

would suffice. A number of questions about authorship and intellectual "ownership" of the research paper draft may arise as to what level of contribution by different parties to a research enterprise has been which could qualify them for (co) authorship of the final product. What the norm would be for independent or first publication or to the use of data in another publication or project are also important questions. It is also understood that initial assumptions may well change as the course of research progresses. Even at its beginning, it is often difficult to trace the source of the ideas and insights from which a research project originates; it is hard to say what was identifiably generated by one individual and what was "in the air" in the intellectual domain. By the time a project is over, the original conception or the germinal idea may not be central any more. The more interactive the process, the less we can retrospectively divide the work into parts corresponding to particular roles or contributions.

- 5.5. In cases where complaints and disagreements arise between students (postdoctoral, graduate, and undergraduate) and their faculty over credit for work to which both may have contributed, the Deans and Directors concerned may decide at their level. In doubt or dispute, the University Research Committee could provide guidance with respect to credit for scholarly work where several research staff and faculty are involved with or under a PI. This is only when it becomes difficult to determine responsibility of authorship.
- 5.6. The heterogeneity of custom that varies from one discipline to another may sometimes makes it very difficult to decide, in disagreements like the one between S and P, whether we are dealing with professional misconduct (the wrongful appropriation of another's intellectual product) or whether we are in a domain of ethical judgments about the proper allocation of credit between joint researchers - judgments so close that they should be resolved by personal values, etiquette, and generosity, rather than by a faculty disciplinary process. Another aspect of the issue is as to who may publish first, who must consent, what connections with the work need be acknowledged and how - is associated particularly with review articles, books (or chapters of books), or symposium contributions, especially "state of the discipline" pieces. Opportunities to produce more comprehensive works of this kind come mainly to senior scholars. In describing the significant developments in one's field, there is a natural tendency to include work done by oneself and one's students and junior associates. In the usual case, the scope of the topic is broad enough so that including all associates as co-authors is impractical. Where the piece deals with data or results of others that are already published as a paper or dissertation, or have been accepted for publication, employing them with appropriate citation is obviously proper. If the material is yet unpublished but will be issued as a joint work, I think it is generally accepted that any of its prospective co-authors may refer to it, even at length, in a separate work of sole authorship provided that its joint origin is prominently acknowledged and provided that the opportunity for regular scholarly publication is not pre-empted.

- 5.7. It must also be pointed out that there is a tight coupling between authorship and responsibility. If the name of a faculty member has been included on a paper resulting from the relatively independent experiments done by a student or fellow, any error in the data or wrong methodology of data collection or accessing would also be the responsibility of the concerned faculty.
- 5.8. Lastly, multi-investigator research teams differ significantly from the individual faculty/graduate student research teams, and it may also be the case that at times, there is no single person who understands the entire gamut of a given research. The general principle for scholarly manuscripts emanating from multi-investigator research is as follows: First, the Principal investigators and senior faculty have special responsibilities to assure the overall cohesiveness and validity of the concerned draft publication. Secondly, all authors in a group effort have a shared responsibility for the published result and should have the opportunity to review all sample preparation procedures and data, as well as all data acquisition and analysis procedures. Thirdly, each author in a group should have access to the manuscript prior to its being submitted for publication, and should agree to his or her inclusion as a coauthor. All the participants in the Programme should know that the paper is being prepared for publication.

6. Research Misconduct

- 6.1. The provisions under this heading namely, 'Research Misconduct' deals with the procedures to be followed in the event of Allegations, Counter-Allegations, Investigations, and Reporting of any actual or perceived misconduct, for which the required notifications to the funding agencies may also have to be sent. There is no doubt that each member of the University, whether faculty or administrator or research staff, or technical personnel and students, has a responsibility to foster an academic environment conducive to free and fair research. Therefore, research misconduct can be extremely troubling even if it is raised infrequently.
- 6.2. AUH definition of research misconduct, and procedures for investigating and reporting allegations of misconduct, will conform to the regulations of the governmental and other funding agencies which may have some elaborate policies on this subject. These will be applicable to the research proposed as well as to the research conducted or reported at. "Research misconduct" is defined as fabrication (making up data or results, and recording or reporting them), falsification (manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented), or plagiarism (appropriation of another person's ideas, processes, results, or words without giving appropriate credit) in proposing, performing, or reviewing research, or in reporting research results.

- 6.3. If the misconduct is committed intentionally, or knowingly, and if the allegation is proven by the University Research Committee or any of its sub-committees set up to look into such allegations, even instances of failure to supervise adequately, and other lapses from professional conduct or neglect of academic duties could come under its perview. Findings (with respect to research misconduct) of serious academic deficiencies are to be addressed by the concerned Dean, or by the Director, initiating the relevant disciplinary processes, as may be deemed appropriate. A proper inquiry should be held based on preliminary information-gathered and preliminary fact-finding to ascertain the merit of the case.
- 6.4. The outcome of an inquiry is a determination as to whether or not an investigation is to be conducted. Where a formal investigation is warranted, it will be guided by the CCS procedure of the Government of India's Service Manual. The Dean shall inform the funding source(s), see that the proper charge-sheets are issued, obtain preliminary replies, and conduct such inquiries or investigations having taken all reasonable and practical steps to obtain custody of the research records and/or evidence needed to conduct the misconduct proceeding, inventory the records and evidence, and requisition them in an appropriate manner. Before the inquiry begins, the Charged Individual (hereafter "the respondent") shall be informed of the allegations, and be invited to comment on them. Finally, the respondent shall also be provided with a copy of the draft report of the inquiry, and be given an opportunity to comment on the findings for the consideration of those conducting the inquiry. In so doing, best efforts shall be made (where feasible) to protect the confidence of the individual(s) who brought forward the complaint (hereafter "the complainant(s)"). The relevant individuals, including the complainant(s) should be interviewed in the presence of the charged individual by a committee.
- 6.5. Based on the final report consisting of recommendation as to whether or not a full investigation is warranted, is to be submitted by the school dean to the Pro-Vice-Chancellor and Dean, Academic within 60 days of receipt of the allegations. The Faculty/School Deans are advised to review current regulations and requirements, and to consult with the Pro-VC's office who would decide how and when the funding agencies should be involved. The funding agencies will be notified of the outcome of an inquiry involving funds from their agency only if that outcome includes the recommendation to conduct a full investigation.
- 6.6. The funding agencies must be apprised of an interim report until the final report is ready. They may be sent a Special Emergency Notifications, in case it is seen that an immediate health hazard will break out otherwise, or if it is required to protect Governmental or University funds or equipment, or for the sake of integrity of the research, or if there is a suspicion that there may be a possible criminal activity.

7. Retention of and Access to Research Data

- 7.1. It will be ensured by the Deans and the PIs that research data is appropriately recorded, archived for a reasonable period of time, and available for review under the appropriate circumstances as may be decided by the URC. This is because accurate and appropriate records are an essential component of any research project.
- 7.2. Both the University and the PI have responsibilities and rights concerning access to, use of, and maintenance of original research data, except where precluded by the specific terms of sponsorship or other agreements, tangible research property, including the scientific data and other records of research conducted under the auspices of AUH belongs to this University.
- 7.3. The PI is responsible for the maintenance and retention of research data that may be necessary for the reconstruction and evaluation of reported results of research and the events and processes leading to those results. It is the responsibility of the PI to determine what needs to be retained under this policy.
- 7.4. For all projects, the PIs should adopt an orderly system of data organization and should communicate the chosen system to all members of a research group and to the appropriate administrative personnel as a matter of research protocol.
- 7.5. Research data must be archived for a minimum of three years after the final project close-out, with original data retained wherever possible at least in the Cloud Servers. In addition, Data may have to be kept for as long as may be necessary to protect any intellectual property resulting from the work.
- 7.6. To avoid any possible allegations of scientific misconduct or conflict of interest, data must be retained until such issues are fully resolved.
- 7.7. Wherever students are involved, data must be retained at least until the degree is awarded or until it is clear that the students have abandoned the work. Beyond this usual period of retention as specified, the destruction of the research record is at the discretion of the PI and his or her department or laboratory.
- 7.8. Wherever research is funded by an agency outside the AUH which may have or which impose certain specific provision(s) regarding ownership, retention of and access to technical data, the provision(s) of that agreement will supersede this policy. Otherwise, the scientific record for projects conducted at the AUH and/or with University resources are its own resource. Chief Technology Officer Research Computing.
- 7.9. Wherever or whenever necessary, the Pro-Vice-Chancellor and Dean, Academics may direct the PI to assure needed and appropriate access to the data to other faculty members for advanced research.
- 7.10. Further, when individuals involved in research projects at AUH join other universities or institutions, they may be allowed by the PI/Deans concerned to take copies of research data for projects on which they have worked but not necessarily all data or associated records. All such requests have to be approved by the Pro-Vice-Chancellor and Dean, Academics.

7.11. If a PI leaves AUH, and a project is to be moved to another institution as per the agreement with the funding agency, ownership of the data may be transferred with the approval of the Pro-Vice-Chancellor and Dean Academics, based on a written request from and agreement with the PI's new institution that would guarantee acceptance of custody of the data so transferred, and grant access to other AUH faculty in future to the same.

8. Human Subjects and Scientific Research

- 8.1. This section elaborates on the policy to give comprehensive information about the organization and focus of the human subject-based research protection Programme at the AUH. In these matters, the PIs and the University has to comply with the applicable laws of the land. All members of the AUH who may like to be involved in any research—in sciences or social science/humanities involving human subjects must be knowledgeable about these laws and their requirements. The primary responsibility in this respect lies with the PI so that there is an institutional system to protect human subjects.
- 8.2. The URC or the Executive Committee of the URC should perform prospective and continuing review of each research protocol involving human subjects, including an evaluation of its risks and benefits to the human subjects. They must also check on the informed consent document, particularly as to its description of the risks and benefits as well as consider any unanticipated problems, possible non-compliance, and other information and incidents that might affect this research protocol. From time to time, the concerned Deans should also organize training for all investigators, research staff, students in the laws and provisions of use of human subjects in research.
- 8.3. Anyone who knows that, or has reason to believe that human research is being conducted in an unethical manner or not in compliance with the laws must report the matter promptly to the Dean Academics of AUH. Where appropriate, sanctions will be considered and imposed. Non-compliance, protocol deviations, and violations are dealt with by the URC and University administration strictly. These may, in extreme cases, result in administrative, civil, or criminal penalties against the concerned individuals and the organizations, including termination of employment, contract, or other relationships.
- 8.4. There are number of laws governing clinical research in India. These include the following, and AUH would like all PIs to adhere to these laws and regulations:
 - 8.4.1. Drugs and Cosmetics Act 1940
 - 8.4.2. Medical Council of India Act 1956 (amended in 2002)
 - 8.4.3. Central Council for Indian Medicine Act 1970
 - 8.4.4. Guidelines for Exchange of Biological Material (MOH order, 1997)
 - 8.4.5. The Biomedical Research on Human Subjects (regulation, control and safeguards)
 Bill 2005

9. Women as Subjects in Research

- 9.1.1. Historically, there have been concerns about the participation of women with child-bearing potential in research trials due to potential risks of fetal harm should a woman become pregnant. Such apprehension has resulted in guidelines created by different wings of the Government of India dealing with Women and Child Welfare Ministry as well as by the National Women's Commission.
- 9.1.2. Over the past decade, questions have been raised by professional, consumer, and governmental groups about whether clinical treatments are adequately tested in various populations that are the recipients of such therapies. In terms of drug development, the there are now WHO-verified information available pertaining to the safety and effectiveness of drugs for women and subpopulations such as the elderly and diverse racial groups. It detailed procedures to minimize the risks of pregnancy in women participants such as contraceptive counseling, pregnancy tests, timing of short term studies in relation to the menstrual cycle, and the process of informed consent. It also calls for gender analyses with special attention to factors affecting pharmacokinetics, e.g. the role of the menstrual cycle and exogenous hormone therapy in relation to the drug, as well as the influence of the drug on oral contraceptives.
- 9.1.3. It is expected that experimental subjects will be informed about potential risks to their fertility including the development of any abnormalities or abnormalities in function of reproductive organs as a consequence of the proposed study
- 9.1.4. The inclusion of women in behavioral research studies is also important and must be accomplished unless there is a compelling rationale which establishes that inclusion is inappropriate with respect to the health of the subjects or the purpose of the research.
- 9.1.5. The general policy in this respect would be as follows: "No pregnant woman may be involved as a subject in a human clinical research project unless (1) the purpose of the research is to meet the health needs of the mother and the fetus will be placed at risk only to the minimum extent necessary to meet such needs, or (2) the risk to the fetus is minimal. {Research involving the use of pregnant women as subjects} may be conducted only if the mother and father are legally competent and have given their informed consent after having been fully informed regarding possible impact on the fetus, except that the father's informed consent need not be secured if (1) the purpose of the research is to meet the health needs of the mother; (2) his identity or whereabouts cannot reasonably be ascertained; (3) he is not reasonably available; or (4) the pregnancy resulted from rape."
- 9.1.6. In order to make clinical data and reports available to all, an online clinical registry has been initiated by the Indian Council of Medical Research (ICMR) for the registration of any interventional trial to ensure the following goals:
 - Transparency and accountability of clinical research
 - Internal validity of clinical trials
 - To oversee the ethical conduct of clinical trials
 - Reporting of results of clinical trials

- 9.1.7. The clinical trial registry of India (CTRI) is the online registry of prospective clinical trials in India. This is the initiative started by the National Institute of Medical Statistics (NIMS) of the Indian Council of Medical Research and is supported by the Department of Science and Technology (DST) and the World Health Organization (WHO).
- 9.1.8. CTRI will create a database of prospective clinical trials in India after their registration. The data and reports of these clinical trials and their status will be available to the public and professionals free of cost after formal registration on their website. Currently, the registration of clinical trials is only voluntary and not mandatory but AUH would like to encourage all PIs to follow the WHO norm.
- 9.1.9. Pilot Studies and such other Cultural and Sociological Studies such as Oral History data gathering may not undergo such strict compliances but because it is not generally thought to be a systematic investigation designed to contribute to generalizable knowledge beyond the individual being interviewed. However, when using oral history as a technique in human subject research it may require consents and following certain ethical principles.

10. Animals as Laboratory Subjects

- 10.1. Animals are frequently used in both exploratory/curiosity-based studies and in serious academic research, especially in drug testing and for commercial products, although in general, using animals in such experiments is both unethical and unnecessary.
- 10.2. In 2003, the Pharmacy Council of India (PCI) issued a directive to all pharmacy schools in India to use CAL software in place of classroom animal experiments. Further, in 2011, the University Grants Commission issued guidelines to phase out dissection of and experimentation on live animals in zoology and life science courses.
- 10.3. The Ministry of Environment and Forests, Government of India has also come up with "The Prevention of Cruelty to Animals Act, 1960." Animals in laboratories endure lives of deprivation, isolation, stress, trauma and depression even before they are enrolled in any sort of protocol which AUH considers to be wholly undesirable.

11. Environmental Health and Safety

11.1. The University Research Committee on Health and Safety is charged with the responsibility of exercising oversight over all health and safety Programme at the AUH and ensure that adequate health and safety measures have been taken in designing and executing scientific and technological experiments.

- 11.2. If required, URC will also recommend needs, priorities and strategies to promote good health, safety, and environmental practices on campus. The URC will also encourage workshops and awareness Programme to make all concerned understand the value of operational responsibility for health and safety.
- 11.3. Each year, one meeting of the URC could be publicized and open to all members of the University community and its residents to point out any measures that would enhance environmental health and safety of the campus. In particular, nothing should be done which could affect the health and safety of lab personnel, laboratory subjects, employees, students, the general public, and the environment.
- 11.4. This also applies to potential hazards of chemicals to which the students, staff or campus residents and visitors may come in contact in the workplace or laboratory. The URC may also issue a Chemical Hygiene Plan (CHP) for the procedures, equipment, personal protective equipment, and work practices so that the laboratory personnel could be protected from potential health hazards of using certain chemicals and radio-active systems in the laboratory.

12. Export Controls

- 12.1. "Export" here means to send or take controlled tangible items, software, or information out of the country in any manner including in hand luggage, to transfer ownership or control of controlled tangible items, software or information to a foreign person, or to disclose information about controlled items, software or information to a foreign government or foreign person. Such tangible item, software or information being sent or taken out are referred to as Export.
- 12.2. Under this would come "Re-export" too, which will mean an actual shipment or transmission of controlled tangible items, software or information from one foreign country to another foreign country. Also, technically, "Deemed export" is a term used to describe the situation where a foreign national on our campus may be exposed to, or have access in any manner to, an export-controlled item or export-controlled software or information. This is because sharing confidential technical information or software source code with foreign nationals wherever located may not be encouraged.
- 12.3. Our primary concern at the AUH are transactions involving proprietary or confidential export-controlled information provided to AUH Researchers or Research group by third parties, such as corporate vendors, subcontractors, or government collaborators. These may generate disclosure restrictions that may only be acceptable if they fall within the

narrow exceptions provided by the Openness in Research Policy and qualify for treatment under an exemption or license exception (EAR) in the Indian export control regulations.

12.4. In the case of international shipments of tangible items, or the export or deemed export of 3rd party export controlled software code or information to foreign countries or their nationals, AUH and the concerned PI has the responsibility to either to obtain an export license, and show that an exception to export licensing requirements applies in the given case.

13. Degree-Oriented Research

A separate Doctoral Research Policy exists which includes Pre-Doctoral and/or M.Phil Research as well as Post-Doctoral research policies.

14. MoUs for Research Collaborations

A separate Policy Document exists that would cover such MoMs or MoUs which AUH enters into for collaborative research Programme.

15. Financial Responsibilities for Sponsored Research

All PIs should be well-versed in the GFR (General Financial Rules) of the Governt of India offices and the standard financial practices including accounting procedures based on which they would be required to deal with the Finance & Accounts Office of AUH to conduct research work. Wherever excepts are required, specific approval on file/-e-mail must be obtained from the University administration.