

Updated June 24, 2009

DESCRIPTION OF RESIDENT OPPORTUNITIES FOR TEACHING AND RESEARCH:

Resident as Teaching Program: Beginning in the 2009-2010 academic year, an introductory program to acquaint residents with general principles of teaching will be required for all first years. Additionally, an optional multi-year program that explores and refines these skills further will be offered to upper level residents with a certificate will be issued at graduation.

Medical Student Teaching Assignments: The pathology residents play an integral part in the laboratory teaching sessions of the pathology course for the second year medical students. Ideally, the residents attend the didactic lectures given in the medical school course pertinent to the laboratories that they will supervise. Multi-media resources include laser disk programs and interactive software. Each resident will receive a manual or handouts for the course as appropriate.

The teaching sessions are from 8 a.m. to 12 noon. The lectures are in the Communicore building, C1-15; and the laboratories are on the ground floor of the Communicore building in the MDLs.

The following guidelines should be followed:

1. Approximately one week before the session is to begin; the resident is to notify the faculty member responsible for the laboratory that the resident will serve as a laboratory assistant. The resident should inquire as to what special preparation is required for the laboratory.
2. Changes in the resident rotations are not acceptable. This is disruptive to the continuity of teaching. If there is a problem with the assignments, the resident is to consult with the Chief Resident as soon as possible.
3. Before the session begins, it is imperative that the resident read the entire section in the course manual and review the study slides and microfiche and / or laser disk material. Study sets and projectors can be checked out from learning resources on the ground floor of the Communicore, CG-35.
4. The residents should try to attend all lectures in that section.
5. Professionalism is important (and, not coincidentally, one of the Core Competencies). Residents are to be prompt, well dressed, enthusiastic, helpful, and friendly as well as being medically accurate.
6. The attending and the two lab assistants (residents) will cover the MDLs where the laboratory is to be held. The laboratory exercises are usually self study and question and answer periods.
7. It will be helpful to the attending if the resident keeps a list of commonly asked questions or poorly understood concepts.
8. While residents do not evaluate students during the laboratory sessions, if the resident recognizes that a particular student is having difficulty mastering the information, the student's name should be brought forward to the course director.

Resident Instruction of Junior Pathology Residents and Residents from Other Services:

Senior residents are expected to participate in the training of more junior residents and residents from other services through example (e.g., gross dissection), instruction (e.g., at the microscope), and the provision of teaching conferences. This is intrinsic to the role of the pathologist as an educator which is very important in the resident's future career either in private practice or academics.

Resident Research Opportunities: By its nature, pathology is both a clinical science and a basic science. Pathology contributes many technical and diagnostic advances to medicine through the application of basic science to clinical problems. Residents may elect to use some or all of their elective time in pursuit of research. To satisfy the requirements of the ABP, if all 5 of

the four-week elective blocks are taken as research, 3 blocks should be taken in AP research and 2 blocks should be taken in CP research. Research covering a wide range of fundamental and clinical studies relating to the etiology, pathogenesis, prevention, treatment, and cure of disease is possible. Residents are urged to submit their research for presentation at national meetings.

If residents elect to pursue research rotations, it is the responsibility of their faculty research mentor to provide training in the methods of research to include:

1. Formulating a hypothesis and research plan.
2. Basic Medline searching and keeping a laboratory notebook.
3. Introduction to scientific methods including quantitative cytology and molecular pathology.
4. Data analysis and statistics.
5. Scientific writing and presentations.
6. Ethics in science and medicine.

The Department has major research programs in autoimmune diabetes, genetics of autoimmune diseases (type I diabetes, autoimmune polyglandular syndromes and SLE), transplantation, basic immunology,, leukemia and lymphoma flow cytometry, solid tumor flow cytometry and DNA ploidy, image analysis, pathology of prosthetic breast implants, and urolithiasis. Graduate degrees are offered by the Department at the Ph.D. level. As part of the State-supported Interdisciplinary Center for Biotechnology Research (ICBR), the Department operates the institutional Monoclonal Antibody Core Laboratory and Flow Cytometry Core Laboratory.

Policy on Protected Resident Research Time

Objective:

1. Provide residents with quality time in a flexible manner that allows for academic productivity

Rules:

1. Residents who are actively participating in a specific research project will be allowed 10 days working days of protected time that can be devoted to their research.
2. Protected time can not be used during VA rotations.
3. Residents are required to be present within the Shands/UF hospital system during the protected time. Exceptions to this rule must be granted by the Residency Training Committee in advance.
4. The Residency Training Committee must be notified of the research project via outline format, abstract, or IRB proposal prior to utilization of protected time.
5. The Residency Training Committee must provide approval of the project prior to utilization of protected time.
6. A 'research request form' (see Page 2) must be completed for each block of requested time prior to the date requested off by the resident.
7. The attending or attendings on service with the resident on the day or days of requested time must sign the form
8. Robin Foss or whoever is managing the gross room for the days that are requested must sign the form if the resident is on a surgical pathology service.
9. The faculty member with whom the resident is conducting the research must sign the form
10. Approval must be granted by the chief resident and program director for each block of time requested. Residents may be denied the request if scheduling or work related conflicts exist.
11. Unutilized research days do not transfer to the next academic year.

Evaluation:

The Residency Training Committee will review this policy at the end of each academic year. The RTC has the right to remove this resident privilege if there are any incidences of misuse or abuse.

Selecting a Faculty Sponsor:

The Director of the Residency Training Program will assist the resident in selecting a faculty sponsor based on the residents' interests. Together with the faculty sponsor, the resident will prepare a well-developed and clearly defined proposal which will then be executed under the guidance of the faculty mentor. This proposal must include: the title, name of the faculty sponsor and resident, hypothesis, specific aims, background/review of the literature, methods and materials, and statistical plan for data analysis. This proposal should be between 5 and 10 single-sided, single-spaced pages in length.

Funding of Projects:

Funds for resident research may come from: (1) Faculty Research grants, (2) Extramural sources supporting resident research and (3) The Department of Pathology Research Fund that is directed by William Clapp, M.D. (see below). The Director of the Residency Training Program and the resident's faculty research sponsor will assist the resident in finding funding from one of these sources.

Department of Pathology Research Fund/Clinical Research Committee: The Department provides research starter funds available to faculty and residents. These mini-grants can total as much as \$2000 per project per year. These monies can be used by residents to develop anatomic or clinical pathology research studies. Larger grant requests will also be considered that would require more faculty involvement and a longer term of research. The Department provides \$80,000 per year for intradepartmental grants. One half of this money comes from Shands Hospital while one half of the money comes from the Chair's fund. Requests for funding should be made to William Clapp, M.D. The proposal should include:

- 1) Resident name and faculty mentor name
- 2) Title of proposal
- 3) Hypothesis to be tested
- 4) Specific aims
- 5) Background/review of the literature
- 6) Methods and materials (include statistical considerations)
- 7) Budget for the project (usually: \$2000 maximum/year)

Goals of a Research Rotation:

1. To design an experiment and collect data to answer from specifically stated hypotheses.
2. To analyze data and express the results in terms of statistically significant effects according to the stated hypotheses.
3. To present and defend the results at the annual Residents' Day (each resident is required to make at least two research or non-research presentations during their residency period).
4. To publish results in a peer reviewed journal.

Publication and Presentations at Outside Meetings:

Material for outside presentation at meetings or publication by house officers and students should be discussed with the Director of the Residency Training Program, Chair of the Department, or the heads of the specific division before definite commitments are made. If case material from either surgical or autopsy files are to be used for publication, as a report from this department alone, or in conjunction with another department, its use must be approved by a senior faculty member. As well, manuscripts must be submitted for prior faculty review and approval prior to submission to an editorial board. This is equally true for galley proofs and proofs of illustrations in a report accepted for publication. Under no circumstances should a paper be submitted without such approval. The identity of any patients used in publications will be masked.

Because presentations at meetings involve cost for travel, etc., any abstract being submitted for presentation must be specifically discussed with the division head and/or Residency Training Program Director, before a formal commitment will be made by the department to pay for the travel costs, if the abstract is accepted.

References

1. W. Strunk and E.B. White: The Elements of Style (3rd. Ed.). (A must for all, \$1.95)
2. Woodford, F.P.: Scientific Writing for Graduate Students. Rockefeller University Press, New York 1958.

Residents' Research Day

Every spring, Residents' Research Day is held. A visiting professor is invited to present unusual, interesting, and instructive cases to the residents on Friday morning or afternoon preceding the Saturday research presentations. As well, the visiting professor presents a seminar to the faculty and residents on the Saturday Residents' Research Day Program. Saturday evening, the faculty, residents, and alumni hold a dinner to celebrate the residents and faculty. Certificates are presented to residents leaving or completing the program.

All residents will present on two occasions during their residency at Residents' Research Day. The presentation can be on a research topic, a clinical case, a review of the literature, or any other academic/scholarly topic. All fellows must present at Residents' Day, and it must be a hypothesis-driven project.

Residents' presentations must be reviewed and approved by the RTC. This process should begin no later than the summer or fall of the year preceding the scheduled Residents' Research Day presentation. By November 1, the resident is to submit to the RTC a summary of their planned or ongoing research activities. This summary should include the following elements:

- Title
- Names, degrees and institutions of all investigators
- Background: A statement of the problem
- Hypothesis
- Methods and materials
- Expected method(s) of data analysis
- Preliminary data (if available)
- Conclusions (if available)

This RTC review encourages the resident to begin their research projects long before the Spring research day. Abstracts must be submitted no later than February 15 of the year of the scheduled Residents' Research Day presentation. Ultimately, residents and fellows are very strongly encouraged to publish their work in a peer-reviewed journal.

Note: All research undertaken by residents and fellows must be IRB approved. If animals are involved, IACUC approval is also required. Other approvals (Radiation, biohazard, recombinant DNA, etc) may also be required. Patient research (exempt or not) involving VA facilities, patients or staff, etc, may require SCI (Subcommittee for Clinical Investigation) approval at the VA in addition to UF or other IRB approval.