

PORTFOLIO OF TEACHING, RESEARCH, AND SERVICE ACTIVITIES

The Portfolio should comprise separate sections for the candidate's Teaching, Research, and Service activities (samples attached). It should be used to annotate the candidate's CV by providing additional information about activities beyond what is listed in the CV. For example, the impact of a specific discovery, paper, or educational program can be discussed. Each section should be limited to 2 pages, single spaced and 11 point font, and also include as supplements formal evaluations and letters documenting effectiveness in teaching, research and service, as applicable. Teaching portfolios must include a teaching evaluation instrument devised by the department and approved by the Dean(s) or the attached "Teaching Evaluation" form.

A. TEACHING

Superior and effective teaching is a distinct value for consideration of appointment promotion and/or tenure. All faculty are expected to participate in the educational mission of the SOM in some manner. Student evaluations should be solicited and, where possible, letters of support should also include colleague evaluations of teaching credentials, experience, and scholarly activities.

Specific expectations to be met to achieve Excellence in Teaching include, but are not limited to:

- Leadership or coursemaster in a divisional, departmental, or SOM teaching program. This includes the development of a new course or program, or documented improvement of an existing course or program. Formal evaluations are required.
- Mentoring, including leadership of a dissertation committee, or role as a primary mentor. This should be accompanied by names, dates, and outcome. Testimonial letters from trainees are useful.
- Leadership in curriculum development at the local or national level, including development of objectives, materials and methods of evaluation
- Objective evidence of teaching excellence, such student/resident/fellow evaluations, teaching awards, recognition by faculty, or professional organizations.

The consistent theme for activities that reach "Excellence" in Teaching is leadership and intellectual input. There are many Teaching activities that are valuable and are expected from a faculty member in an academic medical center, but by themselves do not reach the level of excellence.

Examples of activities that are valued, but by themselves do not reach the level of Excellence include:

- Participation as a course lecturer
- Hosting a graduate student on a rotation
- Serving as a poster judge in various UAB educational activities
- Teaching of students, post-graduate students, or residents in the classroom, laboratory, clinical setting, or other specific area of expertise (this includes continuing education)
- Efforts to improve personal teaching skills, with outcome data
- Informal student, resident, or fellow advising and counseling
- Participation in student, resident, or fellow recruiting.
- Serving as a member of education, curriculum, or admissions committees

B. RESEARCH & SCHOLARSHIP

All faculty are expected to engage in scholarly activities to some degree. To that end, scholarly work takes many form including research and other creative activities. A faculty member's effectiveness can be demonstrated by a continuous track record of extramural funding, original peer reviewed publications and invited presentations at other institutions and at national/international meetings. The quality of an individual's scholarly approach, capacity for independent thought, originality, and products of research is best determined by critical review from one's peers.

Several parameters are considered in determining Excellence in Research. These include, but are not limited to:

- Demonstration of a sustained, externally funded and independent research program, with continuity over time and becoming more important for the higher level award (e.g., awarding of Tenure, promotion to Professor). While traditionally the NIH funding was deemed critical, funding obtained from any agency or foundation is recognized.

- Evidence of research productivity is measured by original publications in peer reviewed journals, books/book chapters, electronic media, and by presenting scientific papers, and exhibits at scholarly meetings. There is no absolute benchmark number of manuscripts that are required for promotion and/or tenure, but it would be expected that a productive faculty member would have ~20 when seeking promotion to Associate Professor, ~35-40 for Professor, with consideration taken for the impact level of the journal, and the position of authorship. Authorship on all manuscripts is valued. However, when authorship is not in the first or last position, it is important to discuss the scientific contribution in the research portfolio. It is appreciated that all authors have important contributions to a scientific manuscript, especially those reporting the findings from large clinical trials and other “team science” efforts.
- As applicable, the significance of the faculty member’s research should be described, including:
 - Recognition from peer groups, awards, elected to important offices, appointments to consultative committees, being asked to contribute significant sections to textbooks;
 - The level of innovation;
 - The prospect for future research;
 - Benefits to the Department and/or UAB.
- Development of an objective method of evaluation service in a manner that can be quantified and statistically analyzed.
- Editorial consultation or reviews of scientific books and articles.
- Invited presentations of original scientific data at major national or international meetings, or at major institutions or research organizations.
- Activities that support a strong reputation for the faculty member’s scholarship include, but are not limited to:
 - Membership on a national planning committee, NIH study section, and foundation grant reviewer;
 - Editor of a journal or membership of an editorial board.

Examples of activities that are valued, but by themselves do not reach the level of Excellence include:

- Membership on editorial boards;
- Ad hoc manuscript reviewer;
- Internal (UAB) grant reviewer;
- Small scale publications, such as case reports, or educational materials.

C. SERVICE

Service functions are recognized as positive evidence for appointment, promotion and/or award of tenure provided that this service emanates from the special competence of the individual in an assigned field and is an extension of the individual's role as a scholar-teacher. In addition to service at UAB, participation at the level of the Birmingham community and the State of Alabama, as well as in regional, national, or international groups are also valued.

Excellence in Service is achieved by having a leadership role with a strong intellectual component. Such activities include, but are not limited to:

- Leadership in a professional service organization;
- Leadership in a major UAB educational, clinical, or research committee (local-national);
- Director/Co-Director of a training program (e.g. graduate or residency program);
- Director/Co-Director of a research core facility;
- Participation in committee work;
- Fulfillment of significant administrative duties, which should also include positive outcome measures;
- Leadership in community outreach.

A typical faculty member will have many service activities that do not rise to the level of excellence, but are valued. Participation in such activities falls under the general service category of ‘citizenship’, which indicates a faculty member’s willingness to be a contributor to the overall well-being of the department and/or university.

Examples of activities that are valued, but by themselves do not reach the level of Excellence include, but are not limited to:

- Contributions to the improvement of student and faculty life
- Faculty consultation within or outside UAB
- Organizing department retreats or social events
- Interviewing faculty candidates and meeting with visiting scientists/clinicians
- Judging poster sessions at UAB research events

(Note: many service activities are related to activities in education and/or research, and can be listed in both)

Clinical Service

Excellence in patient care is an integral part of a clinical faculty member's service role and is therefore recognized as a special competence. Excellence in clinical service is judged by several parameters, including but not limited to:

- Patient volume, as compared to local, regional, and national peers;
- Development of a clinical care path or area of specialty. This may be the creation of a new area of clinical service, or the expansion and enhancement of an existing clinical service;
- Creating or expanding a unique or highly specialized clinical service;
- Development of new treatments, surgical procedures, or innovative diagnostic techniques, the results of which are disseminated to the professional community by publication or scientific presentation.

Note: Many clinical services activities can interconnect with educational and research activities as well.

Clinical Service Portfolio

Even within medical genetics there are areas of specialization. My area of expertise is in dysmorphology (which is the study of abnormal form), and syndrome identification. I am a classically trained dysmorphologist, and internationally recognized as an expert in this field. I have written several book chapters and invited reviews on the dysmorphologic assessment, and have given numerous seminars (well over 200) on the subject. This includes several at the Board Review Courses for both the American College of Medical Genetics and Neonatology, as well as many national meetings, including several Otolaryngology society meetings. I have included reprints from two reviews in the Appendix. I have also edited the genetics section of the Cleft and Craniofacial Journal, and serve on the Board of Directors for the Velocardiofacial Syndrome Educational Foundation.

The second area is the incorporation of genetic testing in to new areas of medicine, particularly in otolaryngology and adult cardiology. In this effort I have developed clinical collaborations here at UAB with Otolaryngology and Cardiology. Included in this is the Marfan syndrome clinic, which has grown dramatically since its inception. Taken together, I am the busiest clinician in our department in terms of number of patients seen, despite the fact my clinical FTE is 55%.

Clinical Service Activities

1. Attend on the consultation service (19-26 weeks on-call per year).
There has been a dramatic increase in the number of genetics consults since my arrival in 2003.
2. General Genetics clinics (3 per week).
I have dramatically altered the scheme by which I see patients in general genetics, which resulted in a 147% increase in clinical volume in one year.
3. Attending geneticist, UAB Cleft and Craniofacial Clinics (weekly).
This is one of the biggest cleft clinics in the US, and we have established genetics as a vital part of the effort.
4. Marfan syndrome clinic (2 days per month)
This clinic has grown in 3 years from a 3 patients per month effort to 20+ patients per month, with a 6 month waiting period.
5. Genetics of hearing loss.
While not a separate discrete clinic, I have developed a clinical program for the genetic evaluation and testing for hearing impaired children and adults. Not only has this expanded and enhanced the clinical care for these patients, it has produced substantial research and educational opportunities as well.
6. Supervision of genetic counselors (several per month)
I supervise the genetic counselors in several clinics, including a genetic counseling (prenatal and preconception) and cancer genetics clinics.

Teaching Portfolio

I am active in medical education at all levels, from the preclinical first and second years of medical school through post-graduate (e.g. residency and fellowship) education, and in continuing education for faculty-level physicians. Furthermore, I teach many non-physician students. These include graduate students at various levels of their training (pre- and postdoctoral students), as well as non-MD health care providers, including audiologists, speech and language pathologists, nurses, and genetic counselors. Similarly, my educational activities vary with the type of student and my role. For some, such as the first year medical student course Fundamentals I and the Medical Genetics residency programs, I not only function as a hands-on teacher but I also have designed the curriculum and served as the course or residency director. In other venues, such as grand rounds, clinical conferences, or bedside teaching, I function as a lecturer or discussion leader.

Medical student education.

1. Led the effort to design and implement the “new” curriculum at UABSOM
2. Course master for Genetics in Medicine (MS1 course) 2005-6
3. Co-director for Fundamentals I module 2007-present
4. Director, Adult Genetics (Special Topics class)
5. Lecturer on genetics topics throughout years 1-2
6. Lecturer in MS3 year: Pediatrics and Internal Medicine

Medical Genetics Residents.

Program Director, Medical Genetics Residency Programs

Research Portfolio

My research interests and activities have developed from my experiences in clinical care. During my fellowship in Human Genetics I was involved in molecular genetic research, studies that were aimed at mapping the genes associated with several known genetic disorders. During those two years I had considerable success in my lab work, with several first-author papers in journals such as Nature Genetics and Human Molecular Genetics. However, while I enjoyed my research experience, I realized that I wanted foremost to be a clinician. Furthermore, I also learned during this time that I could not be both a successful laboratory-based researcher and an astute clinician. I therefore chose to focus my research on clinical questions. And while my research activities are diverse in their specific topics, they can be grouped in to several broad categories.

1. Craniofacial genetics and genetic syndromes. One major research interest has been to further classify and delineate genetic disorders. My primary focus has been on craniofacial disorders, including not only genetic syndromes but also specific malformations, such as cleft lip and palate and craniosynostosis. However, I have been involved in a number of clinical studies on other types of genetic disorders in which I have described or further characterized a clinical phenotype.

Currently, I am involved in several craniofacial-related research projects. These are collaborative efforts. For one set I am working with Dr. Jeffrey Murray at the University of Iowa under a P50 grant on which I am a co-PI/subcontractor. The goal of the project is to investigate the genetic and environmental causes of oro-facial clefting. I am involved in identifying and recruiting appropriate participants for his gene discovery studies, as well as carrying out two independent studies. The first seeks to identify the role of known several genes known to be associated with isolated clefting in the occurrence of clefting in genetic syndromes such as velocardiofacial syndrome and Stickler syndrome. The second project is looking at whether the same genes influence the outcome of cleft palate surgery. In another study I am working with our craniofacial team (Drs. John Grant, Peter Ray, and Jeffrey Blount) to track the referral accuracy for children with asymmetric head shape.

2. The use of genetic testing. My interest in this area was also born directly out of clinical experience. As a junior faculty member I recognized that genetic testing was soon to become clinically useful in the evaluation of deaf and hard of hearing individuals. This interest has grown in several separate directions, as I have carried out studies involving genetic testing for deafness, as well as more recent work on genetic testing for adult cardiovascular disease and mental retardation. A common theme has been that the expanding role of genetic testing in clinical practice will provide a challenge to non-genetics healthcare providers, as they are not familiar with the special issues of medical genetics, including the genetics evaluation, genetic counseling, and genetic testing. This has prompted the majority of my work in the last few years, including several grants on which I was the principal investigator.

Several studies will be published in 2007. One was on the interest of African-Americans in genetic testing for deafness, which was funded by an RO3. Another was a study on deafness in cystic fibrosis, which was funded by a cystic fibrosis foundation award.

I am in the midst of studies that are examining several of these interrelated issues. We have recently completed several survey-based studies that investigated how various healthcare providers utilize genetic testing. One, entitled "Pediatric Otolaryngologists' Use of Genetic Testing," will be published in 2007. Another, on how primary care pediatricians in Alabama utilize genetic testing in the evaluation for mental retardation, was recently completed, and a third, on how cardiologists utilize genetic testing in their evaluation of Long QT syndrome, will be completed in 2007. Lastly, I am also engaged in research aimed at improving how we teach medical genetics to medical students. During the 2006 Genetics in Medicine course we piloted a program in which we gave medical students the opportunity to role-play. Students were given a clinical scenario in which they underwent genetic testing, and told to make an appointment with one of the UAB genetic counselors at which time they would be told the test result and receive genetics counseling. Pre- and post-test surveys of this group as well as the students who did not volunteer for the program were done in an effort to gauge how effective this program was in teaching them about the genetic counseling process.