DEPARTMENT OF OPHTHALMOLOGY

MENTORING AND FACULTY DEVELOPMENT PLAN

2015

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FACULTY DEVELOPMENT PLAN

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I. Department Mentorship/Faculty Development Goals

The Department of Ophthalmology recognizes that opportunities for mentoring, professional and personal development are critical to the successful recruitment and retention of the highest quality faculty.

The goal of the department of ophthalmology is for all faculty members in our department to achieve their full individual potential as faculty members of the Medical University of South Carolina and to be rewarded for that achievement. Since the University is a place where everyone is learning, it is vital that each member of the faculty see tangible evidence of continued professional growth, whether it be in the easily measured domains of writing papers for publication, writing and receiving grants, or preparing and presenting lectures for students and trainees of our colleges, or in the less easily measured aspects such as teaching students, residents and fellows, mentoring young investigators and junior faculty, or developing clinical expertise in a specialized area of clinical medicine. It is incumbent on faculty members, their mentors, department chairs, and the university leadership to see that tangible progress is being achieved on a professional level, and that progress is being documented appropriately. This mentoring plan is designed to assist in this process.

A Mentorship and Faculty Development Committee composed of the Chairman of the Department, the Mentorship Champion and the Tenure and Promotions Committee will be formed and charged with ensuring the successful implementation. The details of the Mentorship and Faculty Development Committee are outlined below.

II. Mentorship/Faculty Development Committee

Current Members:

- Chairman of the Department

- Champion of the process, who will be appointed by the Chair from the members of the Tenure and Promotions Committee. Champion will be part of a University Mentor Leadership Council that meets at least quarterly to troubleshoot ways to enhance mentoring in the University

- Faculty who have achieved the rank of Professor with tenure in our department

The roles of the Mentorship and Faculty Development Committee include the following:

- Monitor, review and modify the Mentorship and Faculty Development Committee plan on an as-needed basis and at least *annually*.

- Advise the mentee on the appropriateness of the designated tenure track. http://academicdepartments.musc.edu/com1/faculty/index.htm

- Assist the mentee in selection of mentor(s) and ensure that the mentor(s) match the junior

faculty members' academic, clinical, and/or research interests. In the case of a new hire, the committee will assign an interim mentor.

- Assist the mentee in professional goal development that includes the areas of clinical practice, teaching, and research.

- Evaluate mentee progress toward established goals on an annual basis (APPENDIX A).

- Provide timely feedback to the mentee so that he/she can align activities in ways that will increase the likelihood of future success.

- Share consensus evaluation of mentee's progress toward goals with the Chair for review and consideration during the mentee's annual review.

- Serve as liaison between the mentee and Chair regarding mentee progress.

- Interact and participate with other groups on campus (e.g., Faculty Senate, University Leadership Council, Women's Scholars Group) to share Mentorship and Faculty Development Committee initiatives and issues.

III.   Candidates for Mentorship (Mentees)

The Department of Ophthalmology   recognizes that the annual evaluation meeting or even periodic meetings with the Departmental Chair are insufficient for supporting successful professional development in the unique area of interest of the junior faculty member on a timely basis. Junior faculty members are therefore required to seek and identify a senior faculty member to serve as primary mentor. The primary mentor will assist the mentee in the selection of additional mentors, if necessary, depending on the unique interests of the mentee, and may include interdisciplinary senior members from other departments.

All Assistant and Associate Professors will be required to participate in the mentorship/faculty development plan. The mentee will:

- Review and demonstrate knowledge of the mentoring plan containing specific goals as measured by successful completion of Mentorship and Faculty Development Committee objectives.

- Select one interested senior (associate or full professor) faculty member from the Department with whom they will establish a mentoring relationship; this faculty member should be above their academic level. If the faculty member feels that there is no suitable mentor within the department, they should inform the chair and select a mentor from outside the department but within the University; however they should also have a departmental mentor

- Present the selected mentor(s) to the Mentorship and Faculty Development Committee for

discussion and approval within 3 months of date of hire

- Request a change of mentor if desired, and document the rationale for the change to the Mentorship and Faculty Development Committee

- Establish 1, 3, and 5 year professional development goals in collaboration with mentor(s)

- Maintain a Mentorship and Faculty Development Committee portfolio. The components of the portfolio include:

  - The Mentorship and Faculty Development Committee plan and evaluation report (APPENDIX A)
  - An updated MUSC formatted CV
  - A record of written correspondence that attest to the clinical, educational, and research endeavors of the mentee
  - All departmental, College of Medicine and institutional policies that pertain to promotion and tenure
  - Mentor/mentee relationship evaluation report (APPENDIX B)

- Participate in the evaluation of the Mentorship and Faculty Development Committee plan (APPENDIX C)

IV. Role of Mentor

The selected mentor, if he/she agrees to serve, will be evaluated on the basis of their performance as mentor during the *annual* performance evaluation with the departmental Chair. He/she will complete the following:

- Provide expert guidance in the development of target areas of professional focus including clinical, teaching, and research content.

- Establish 1, 3, and 5 year professional development goals in collaboration with mentee.

- Advise mentee in strategizing and seeking opportunities for intra- and extramural funding.

- Advise mentee with manuscript preparations and publications.

- Serve as a sounding board for mentee's research ideas and share experiences on how to handle difficult situations that may arise in the academic life. The mentor shall take great care not to push the mentee into a scientific direction that might be beneficial to the mentor but rather to aid the mentee in becoming an independent clinician, educator, and/or researcher.

- Familiarize junior faculty with the promotion process at MUSC and update junior faculty with any changes in MUSC policy.

- Advise junior faculty in the development of a system to document teaching accomplishments, scholarly work, and service to the Department, University, and community, and other activities that will be useful at the time of promotion or tenure consideration.

- Meet with their assigned junior faculty members at least quarterly to set goals and review progress towards meeting promotion/tenure goals.

- Maintain documentation of the progress of each mentee and report on progress (APPENDIX A) of junior faculty in meeting the goals for promotion and tenure to the Mentorship and Faculty Development Committee.

- Participate in the annual evaluation of the Mentorship and Faculty Development Committee plan (APPENDIX C).

V.   Annual Evaluation

Annual, formal Mentorship and Faculty Development Committee plan reviews are conducted between the mentee and the Mentorship and Faculty Development Committee in the months of May and June. The Mentee submits the following portfolio 30 days prior to the review to the Mentorship and Faculty Development Committee Chair:

- Designated Promotion Track
- MUSC Formatted Curriculum Vitae (updated no later than January 15)
  https://fair.musc.edu/default.aspx
- Promotion and Tenure Checklist
  http://academicdepartments.musc.edu/com1/faculty/index.htm
- Mentee Mentorship/Faculty Development Plan and Evaluation Report (APPENDIX A)
- Mentor/Mentee Relationship Evaluation (APPENDIX B, parts 1 and 2)

The committee will meet and assess the progress of the mentee and reconcile their plan with the College Promotion and Tenure Criteria. Any deficiency or barriers to progress will be identified. The Committee's assessment of the mentee's progress will be presented verbally to the mentee during the annual Mentorship and Faculty Development Committee review. The Committee will also submit a written assessment to the Department Chair for consideration and discussion with the mentee during the annual performance evaluation.

Although the annual performance evaluation conducted for all faculty members by the Department Chair will include all aspects of faculty performance, the Department Chair will also consider the mentee's progress towards faculty development and promotion. The chair will carefully consider the evaluation of the mentee performed by the Mentorship and Faculty Development Committee in his/her assessment. The Chair will review and offer input into the mentee's portfolio to ensure that areas of concentration facilitate the mentee's successful Mentorship and Faculty Development Committee

development and departmental strategic plan. The Chair may also suggest and facilitate a change of mentor(s) if the relationship is not deemed beneficial for either participant.

VI.   Outcome Measures for the Mentorship and Faculty Development Committee Program Success

Departmental Outcome Measures for Mentorship Success:

- Surveys of faculty on their satisfaction with the plan and their job overall

- Attrition of faculty within the department

- Percentage of eligible faculty promoted within a 5 year period

- Number of faculty promoted ahead of schedule (generally 6 years in grade)

- Total funding from all mentored activities

- Total number of publications overseen by mentors

- Honors and awards by faculty

- Successful recruitment of faculty candidates

Mentee Outcomes Measures for Mentorship and Faculty Development Committee Program Success:

- Achievement of Short and Long Term Goals (APPENDIX A)

- Positive Responses or Positive Modifications in Mentorship and Faculty Development (APPEDIX B)

- Maintenance of Comprehensive, MUSC Formatted vitae and NIH Biosketch

Research related metrics:

- Number of grants submitted by mentee under the mentor's guidance

- Number of these grants funded

- Number of original publications under the mentor's guidance

- Importance of original publications under the mentor's guidance (e.g., journal quality, impact factor, editorial written on paper)

- Career development progress of mentee while guided by the mentor, e.g., presentation of research at national / international meetings, invited

- Presentations at meetings or other universities, election to study sections or specialty societies, promotion of mentee

- Research awards of mentee under the mentor's guidance

Teaching related metrics:

- Evaluation of teaching performance by residents and / or medical and graduate students in the department as well as outside of the department.

- Teaching accomplishments of mentee under mentor's guidance, e.g., formal courses taught, course materials developed, innovative teaching methods developed

- Number of these grants funded

- Career development progress of mentee while guided by the mentor, e.g., presentations at national / international meetings, invited presentations at meetings or other universities, membership on education committees in or outside of the institution, promotion of mentee

- Honors and awards for teaching to the mentee under the mentor's guidance

- Number of educational publications under the mentor's guidance

- Importance of educational publications under the mentor's guidance (e.g., journal quality, impact factor, editorial written on paper)

- Number of educational grants submitted by mentee under the mentor's guidance

Clinically-related metrics:

- Number of presentations at institutional, national, or international meetings by trainees (students, residents, and fellows) or junior clinical faculty under the mentor's guidance

- Number of publications by trainees (students, residents, and fellows) or junior clinical faculty under the mentor's guidance

- Innovative clinical care developed by junior faculty under mentor's guidance

- Career development progress of trainees and junior clinical faculty while guided by the mentor, e.g., graduation from clinical training program

- Honors and awards for clinical care to the junior faculty member under the mentor's guidance

VII.   Description of Promotion and Tenure Process within the Department

Each College at MUSC has different tracks and ranks and a process for documenting faculty progress through promotion. The Departmental Promotion and Tenure Process are provided as APPENDIX D and Faculty Promotion Matrix is also provided as APPENDIX E. The various ranks in our Department and College and the description of how the Department's Promotion and Academic Committee operators can be found in the links below with guidelines for achieving them.

Faculty affairs website:

http://academicdepartments.musc.edu/com1/faculty/index.htm

College of Medicine website:

http://www.musc.edu/com

VIII.   Resources Available for Faculty Development

Resources are required for optimal faculty development and may be found in the department, at the institutional level, and at the state or national level. The Institutional, State and National Resources for Supporting Faculty are provided as APPENDIX F. The Department of Ophthalmology may provide the following:

- Clinical support (nurses, physician assistants)
- Research support (postdoctoral fellows, research assistants, student stipends)
- Enrollment in Master of Science in Clinical Research (MSCR)
- Start-up package (supplies, travel, equipment)
- Protected time for research
- Clinical trials administrative support
- Part-time administrative assistant
- Part-time grants manager
- Professional development account (for meeting travel, other)
- Professional dues
- Academic accounts

APPENDIX A. Mentee Mentorship/Faculty Development Plan and Evaluation Report (To be filled out by mentee and mentor together, and reviewed annually by the department Chair).

Faculty Name: _____

Mentor Name: _____

Date of Hire: _____   Date of Evaluation: _____

List of Goals (Faculty development game plan)

Short-term goals (1 year from hire, in priority order)

a) _____

b) _____

c) _____

d) _____

e) _____

Medium term goals (3 years from hire, in priority order)

a) _____

b) _____

c) _____

d) _____

Long term goals (5+ years from hire, in priority order)

a) _____

b) _____

c) _____

d) _____

List obstacles to obtaining Goals (if applicable):

1.

2.

3.

List resources to overcome obstacles (if applicable):

1.

2.

3.

Changes to previous list of goals (and reason for modification):

1.

2.

3.

APPENDIX B. Mentor/Mentee relationship evaluation

      Part 1: To be completed by Mentee

Mentee: _____   Mentor: _____

ITEM	Excellent		Fair	Poor	
1. The mentor is available on a regular basis and approachable.	1	2	3	4	5
2. The mentor helps define goals	1	2	3	4	5
3. The mentor has respect for the mentee	1	2	3	4	5
4. The mentee has respect for the mentor	1	2	3	4	5
5. The mentor is an appropriate role model for the mentee	1	2	3	4	5
6. The mentor has a good understanding of the challenges presented to the mentee.	1	2	3	4	5
7. The mentor has been helpful in guiding the mentee through the challenges presented	1	2	3	4	5
8. The mentor provides both support and constructive criticism of the mentee.	1	2	3	4	5
9. The mentee Maintains a portfolio of publications, lectures, clinical development, faculty/university service for periodic review with mentor(s) and annual review with chair	1	2	3	4	5

APPENDIX B. Mentor/Mentee relationship evaluation

　　　　Part 2: To be completed by Mentor

Mentee: _____   Mentor: _____

ITEM	Excellent		Fair	Poor	
1. The mentee is available on a regular basis and approachable.	1	2	3	4	5
2. The mentee has developed a reasonable set of goals	1	2	3	4	5
3. The mentor has respect for the mentee	1	2	3	4	5
4. The mentee has respect for the mentor	1	2	3	4	5
5. The mentee exhibits understanding of the requirements, policies, and procedures for promotion and tenure	1	2	3	4	5
6. The mentee has a good understanding of the challenges presented to the mentee.	1	2	3	4	5
7. The mentee has developed established relationship(s) with a mentor(s) in the areas of teaching, research, clinical service, and faculty development	1	2	3	4	5
8. The mentee takes criticism/suggestions from the mentor and reacts appropriately	1	2	3	4	5

APPENDIX C. Department Evaluation of Mentorship/Faculty Development Plan

The primary goal of the Mentorship and Faculty Development Committee plan is to promote faculty development by establishing mentor/mentee relationships between senior and junior faculty. Assessment of success of the Mentorship and Faculty Development Committee plan in attaining this goal is performed *annually* within the department. The success of the Mentorship and Faculty Development Committee plan will be determined based on the following criteria:

Departmental growth and productivity

Departmental growth and productivity is necessary to support and cultivate faculty development. The following parameters should be considered representative of faculty development:

- Clinical scope and diversity of practice within the department

- Abundance of research publications and grants

- Faculty involvement in teaching activities throughout the university

- Departmental contribution to community education and service

- Administrative involvement of faculty within the university

- Growth and stability of departmental financial resources

- Faculty involvement in local, regional, and national academic and professional societies

- Local, regional, and national recognition of faculty and departmental excellence

Faculty understanding of policies regarding advancement, promotion and tenure

- All faculty members should be able to demonstrate awareness and understanding of the departmental and university requirements for advancement, promotion and tenure

- Departmental and university requirements for advancement, promotion and tenure should be distributed to and reviewed with all faculty annually

Faculty success in attaining goals outlined in 1, 3, 5 year professional development goals

- Successful faculty development should result in achievement of short and long-term goals

- Practicality of professional development goals shall be representative of effectiveness of faculty mentorship

- Departmental provision of adequate "start-up" resources to junior faculty should be

reviewed annually

Integration of faculty goals into departmental long-term growth plan

The departmental growth plan should include achievement of faculty professional development goals to maximize faculty satisfaction and departmental productivity

Faculty satisfaction

- Overall faculty satisfaction, ability to retain new faculty, and ability to successfully recruit new faculty

- Successful recruitment of top quality residents

Collaboration between junior and senior faculty

Successful mentorship should result in collaboration between junior and senior faculty in developing new clinical and research initiatives for the department

APPENDIX D. Departmental Promotion and Tenure Process

The COM offers faculty appointments in multiple tracks based upon the faculty member's area of academic interest and career goals. The various tracks are listed below.

Regular Faculty Tracks within the Department of Ophthalmology (tenure track)

Academic Investigator

Productive high quality basic biomedical research is of paramount importance in this track. The quality of research and productivity are judged by multiple criteria, including the candidate's role in well-focused, significant research as a participant, project initiator or leader, as well as publication of results in peer-reviewed journals and presentation of peer-reviewed research talks. There should be evidence of the candidate's ability to prepare research protocols that receive high ratings from national funding agencies. The candidate should demonstrate a consistent record of funding. Most faculty assigned to this track have a primary commitment to basic biomedical research.

Academic Investigator/Educator

Productive high quality basic biomedical research is of paramount importance in this track. The quality of research and productivity are judged by multiple criteria, including the candidate's role in well-focused, significant research as a participant, project initiator or leader, as well as publication of results in peer-reviewed journals and presentation of peer-reviewed research talks. There should be evidence of the candidate's ability to prepare research protocols that receive high ratings from national funding agencies. The candidate should demonstrate a

consistent record of funding. Most faculty assigned to this have a primary commitment to basic biomedical research. When most of a faculty member's effort is devoted to teaching, and an unusual level of excellence has been demonstrated, or the teaching fulfills a particularly important need for the department and/or college, promotion should be under the Academic Investigator/Educator track.

Academic Clinician

These faculty members are clinical scholars and scientists. This track is designed to recognize clinical faculty who have a strong commitment to research (basic biomedical, translational clinical, educational, health services). Research and teaching are of paramount importance in this track. Involvement in patient care is expected, but is not necessarily the primary obligation and should not override the faculty commitment to research and teaching.

Clinician Educator

This track recognizes the clinician who carries a heavy clinical load and is actively involved both in undergraduate and graduate medical education. These faculty also may participate in research but this is not required for advancement. The clinician educator has major commitments to patient care and teaching.

Modified Faculty Tracks within the Department (non-tenure track)

Research Faculty

Production of high quality basic biomedical research is the essence of this track. There will be few or no job obligations other than doing research. The privilege of concentrating entirely on research is viewed as a major attraction of this track.

Clinical Faculty

Implicit in the designation is the recognition that contributions relate to those educational activities immediately relevant to the patient, often in a private practice setting, and on a limited or part-time basis. The Clinical Faculty Track recognizes community physicians who support the programs and missions of the College of Medicine.

Criteria for Research Faculty—Modified Faculty Track

Research Instructor:

- Completion of educational requirements necessary to enter a career oriented to research.

- Aptitude for a research career based upon recommendations of mentors.

- Demonstrated interest in fundamental research.

- Embarking on a career with a goal of gaining experience necessary to function as a research team member and independently as an investigator.

- Demonstrated experience with publications and presentations related to research.

- Developing experience with preparation of research protocols and grant applications.

Research Assistant Professor:

- Clear commitment to and potential for an academic career leading to independent laboratory or clinical research.

- Commitment to excellence as a researcher.

- Developing capabilities as an investigator with contributions as first or senior author on refereed publications.

- Establishing recognition through candidacy or membership in appropriate professional and scientific organizations.

- Developing skills necessary for preparation of applications for local/regional and national grants.

- Receipt or active pursuit of grant support.

Research Associate Professor:

- Service as assistant professor with a record of achievement.

- Publication based on original investigation in refereed journals with high citation rates.

- Senior author with contributions of major ideas or innovations.

- Peer-reviewed, external research support from national sources as a principal or co-principal investigator.

- Presentations of peer-reviewed papers at national/international meetings.

- Leadership of research team or team component.

- Acquisition of sufficient experience and independence to contribute with major impact in the planning/development of research projects.

- Peer recognition for research activities including invitations to present work at other

universities, workshops and scientific conferences.

- Election to scientific organizations in discipline.

Research Professor:

- Service as Associate Professor with major accomplishments in basic biomedical research.

- Distinguished career exemplifying scholarship, excellence and productivity in research.

- Sustained publication as senior author in major peer-reviewed journals with high citation rates.

- Key individual in direction and development of research program and in research team development.

- Key individual in acquisition of long-term research funding.

- National recognition for accomplishments in his/her discipline.

- Continuing growth and development, dedication to scholarship and service, commitment to furthering knowledge through research and as a mentor.

- Service on national committees, study sections, and editorial boards.

- National recognition in his/her field as evidenced by election to prestigious professional societies, service as an officer in national or international organizations, awards, prizes and other notable academic achievements.

Criteria for Clinical Faculty—Modified Faculty Track

Instructor:
- Usual entry level from training program
- Eligible for certification from board of specialty

Assistant Professor:

- Previous appointment as Assistant Professor at another institution or
- Evidence of growth and maturation as Instructor for at least one year
- Board certification in specialty

Associate Professor:

- Previous appointment as Associate Professor at another institution, or

- Evidence of growth and maturation as Assistant Professor for at least three years, and at least one of the following:
  - Significant teaching effort, such as
    - Presentation of lectures and conferences, and
    - Service as attending or preceptor for at least one month each year
  - Evidence of further significant scholarly endeavors, such as
    - Development of teaching materials and programs
    - Publication of scientific articles
    - Election to exclusive or honorary professional societies, or
    - Receipt of extramural research funds, or
  - Other meritorious service to the education program, such as
    - Leadership positions in local or state professional societies, or
    - Involvement in significant community activities

Professor:

- Previous appointment as Professor at another institution, or
- Evidence of exceptional maturity as Associate Professor for at least three years, and at least two of the following:
  - Extraordinary teaching skill in endeavors, such as
    - Presentation of lectures and conferences, and
    - Service as an attending or preceptor for at least two months each year
  - Evidence of extraordinary scholarly accomplishments, such as
    - Development of superior teaching materials and programs,
    - Publication of numerous scientific articles and chapters,
    - Presentation at state and national professional societies, or
    - Regular receipt of extramural research funds, or
  - Other unusual meritorious service to the program, such as
    - Leadership positions in state or national professional societies, or
    - Leadership positions in important community organizations

APPENDIX E: Promotion Matrix

R=Required   S=Suggested

COM FACULTY RANKS CRITERIA				
Under exceptional circumstances, promotions may be recommended when the candidate does not meet all of the basic criteria. These will be unusual cases.				
Professor	**Academic Inv**	**Academic Inv/Ed**	**Academic CI**	**Clinician Ed**
Continues to meet all the criteria for Associate Professor with major accomplishments in research, teaching, and/or clinical service	R	R	R	R
Distinguished career exemplifying scholarship. Excellence & productivity in research, outstanding success as a teacher, and/or outstanding service contributions are required.	R	R	R	R
Principal investigator on significant research grants	R	S	S	
Co-investigator on research grants.		R	R	
Direct involvement in research.	R	R	R	R
Key individual in training of students and/or post-graduates.	R	R	R	R
Serves as Course Director for one or more major courses		R		
Continues to carry a heavy clinical or teaching load		R		R
Continued publication of reviews, chapters, textbooks, peer reviewed papers, and/or innovative teaching materials (new curricula, educational programs, syllabi, video materials, computer programs, etc.) that influence the science and practice of medicine at the regional & national levels	R	R	R	R
Continued publication of important and original clinical and/or laboratory investigations with significant authorship.	R		R	
Publications with significant authorship since promotion to Associate Professor (line 1), and in total (line 2)	≥10 ≥30		≥10 ≥30	
Publications with authorship since promotion to Associate Professor (line 1), and in total (line 2)		≥5 ≥10		≥5 ≥10
National recognition, as evidenced by election to generalist or specialty societies, service on national committees, study sections, editorial boards, visiting professorships and/or invitations to speak in CME courses.	R	R	R	R
Leadership roles in appropriate department, hospital and college		R	R	R

Associate Professor	**Academic Inv**	**Academic Inv/Ed**	**Academic CI**	**Clinician Ed**
Continues to meet all the criteria for Assistant Professor with a record of achievement in research, teaching, and/or clinical service	R	R	R	R
Record of excellence in high quality patient care, teaching and/or research	R	R	R	R
Established independent investigator with major impact in planning/development of research project	R		R	
Principal investigator on significant research grants	R		S	
Co-investigator on research grants.		R	R	
Local, regional or national grant support for independent		S		S

COM FACULTY RANKS CRITERIA				
research or development of teaching methods, or health care delivery methods, or clinical care systems				
Peer recognition for research activities including invitations to present work at other universities, workshops and scientific conferences.	R		R	
Direct involvement in research.	R	R	R	R
Organization of clinical services to provide a setting for medical education and a data base for clinical research.				R
Active in training of students and/or post-graduates.	R	R	R	R
Involved in teaching activities, including formal lectures, grand rounds, and/or continuing medical education.		R		R
Serves as Course Director for one or more major professional courses		S		
Important contributor to course development or course direction.		R		S
Superior evaluations of teaching by students, residents, peers, course directors, dept. chairs.	S	R	S	R
Nominated for or recipient of teaching awards.		S		S
Presentations at national/international meetings.	R	R	R	R
Continued publication of reviews, chapters, textbooks, peer reviewed papers, and/or innovative teaching materials (new curricula, educational programs, syllabi, video materials, computer programs, etc.) that influence the science and practice of medicine at the regional & national levels	R	R	R	R
Continued publication of important and original clinical and/or laboratory investigations with significant authorship.	R	R	R	
Total publications with significant authorship since last promotion	≥10		≥10	
Total publications with authorship since last promotion		≥5		≥5
Development of new teaching materials, such as curricula, educational programs, textbooks, syllabi, computer programs and video tapes.		R		R
Established reputation inside and outside local institution as an authority in a clinical specialty or for leadership in primary care			S	R
Contributions to committees at department, college, university, community, state, regional, national and international levels	R Univ Level	R Univ Level	R State Level	R State Level
Leadership role in department and hospital as a section or division head, or program director			S	S
Active involvement in local and national professional organizations	R	R	R	R
Organization of clinical services to provide a setting for medical education and a data base for clinical research				R
Election to scientific organizations in discipline.	S	S	S	S

Assistant Professor	Academic Inv	Academic Inv/Ed	Academic CI	Clinician Ed
Clear commitment to an academic career in research, teaching and/or clinical care.	R	R	R	R
Commitment to and potential for performing independent laboratory and/or clinical research.	R	R	R	

Receipt, active pursuit or development of the skills necessary to apply for local, regional and national grants.	R	R	R	
Developing skills for directing or contributing to publications related to research, teaching and/or clinical	R	R	R	R

COM FACULTY RANKS CRITERIA				
care.				
Active in training of students and/or post-graduates.	R	R	R	R
Strong interest in teaching		S		
Contributions as first author on refereed publications.	R	R	S	
Contributions as author on refereed publications.			R	S
Capable of managing most clinical problems in the appropriate discipline, but may seek assistance from senior faculty when dealing with complex problems.			R	R
Carry a heavy clinical load				R
Establishing recognition through candidacy or membership in appropriate professional and scientific organizations.	R	R	R	R

Instructor	Academic Inv	Academic Inv/Ed	Academic CI	Clinician Ed
Completion of educational requirements necessary to enter a career in academic research, teaching and/or clinical care.	R	R	R	R
Aptitude for an academic career based upon recommendations of mentors.	R	R	R	R
Career goal to function independently in an academic environment as an investigator, teacher, and/or clinician.	R	R	R	R
Developing experience with preparation of research protocols and grant applications.	R	R	R	
Demonstrated interest in teaching.	R	R	R	R
Early experience with preparation of publications and presentations related to research.	R	R	R	
Fulfilled educational requirements for certification by appropriate specialty board.			R	R
Demonstrated interest in high quality clinical care.				R

Appendix F. Institutional, State and National Resources for Supporting

Faculty Development at MUSC

It is also important for all faculty to be aware of two important faculty groups on campus that serve important organizational, support and advocacy roles for faculty:

The Faculty Senate is the representative body of the Medical University of South Carolina faculty (http://academicDepartments.musc.edu/faculty_senate). The Senate's recommendations reflect and advocate the faculty's collective interests to further the university's mission. The mission of the MUSC Faculty Senate is to represent the views, needs, and interests of faculty in the educational, research, and service programs of the university. One of the important roles of the Faculty Senate is arranging the New Faculty Orientation Program. This is a biannual event that includes a general welcome from key leaders at MUSC and breakout sessions detailing clinical, research, and teaching resources specific to MUSC. The Faculty Senate also provides Town Hall Meetings and Workshops several times a year to update the faculty on University Initiatives, Tenure and Promotion, and other relevant topics.

The Women Scholars Initiative (WSI) is a joint initiative of the Office of Academic Affairs and the Office of the President with a long-term goal of promoting careers of women faculty. This organization provides a monthly workshop series (recent topics include promotion and tenure, work/life balance, contract negotiation, financial planning, and establishing good mentoring relationships). Other events sponsored by the WSI include the annual Eminent Scholar Seminar and Award, which brings an eminent scientist to MUSC to talk about his/her work and visit with MUSC faculty members. Past Eminent Scholars include members of the National Academy of Sciences and the Howard Hughes Medical Institute. WSI sponsors the John R. Raymond Fellowship, an annual award made to a junior faculty member to be used towards building collaboration with a renowned expert (male or female) in her field. WSI also sponsors a number of peer mentoring events and roundtables. WSI events are open to all MUSC faculty. Learn more at http://academicDepartments.musc.edu/womenscholars/index.htm.

Institutional Resources

Research Support

There are a number of institutional resources that support clinical, translational, and basic science research. These are listed on the MUSC Research and Discovery website (http://research.musc.edu/index.html).

> *Some of these resources are described below:*
>
> The South Carolina Translational Research (SCTR) Institute. The recently NIH funded MUSC Clinical Translational Science Award (CTSA) that is called the South Carolina Translational Research (SCTR) Institute (http://sctr.musc.edu/) provides research support to investigators across campus. Within SCTR is the SUCCESS Center which provides research navigation support such as collaborator and mentor matching and links to institutional cores and programs. Additionally, the SUCCESS center (https://sctr.musc.edu/index.php/programs/success-center)

provides consultation for regulatory submissions and study subject recruitment, lists studies on clinical trials registry, and helps with grant budget development. At SCTR there is a toolkit that can help the most inexperienced investigator navigate the process required to get clinical trials underway and much more. MAP-R is a web portal that identifies approvals needed for all types of grant submissions. To find a wealth of information and pertinent advice about research at MUSC, visit https://sctrweb2.musc.edu/research_toolkit.

Funding Opportunities are available through the KL2 and Pilot Project Program of SCTR and the University Research Committee.

https://sctr.musc.edu/index.php/education/k12

https://sctr.musc.edu/index.php/programs/pilot-projects

http://research.musc.edu/urc/home.htm

SCTR Vouchers can be requested for up to $1,000 for research services and supplies per approved protocol every six months. Investigators are limited to two active vouchers in any one six month period as long as they are for two different protocols. For more information please visit https://sctr.musc.edu/index.php/voucher

If you think that applying for a SCTR Voucher could be beneficial to your research study, please visit http://sctr.musc.edu and fill out a Service Request Form. The SUCCESS Center staff reviews all voucher requests and a decision of award is made within two business days of application.

The Office of Research Development (ORD) (http://research.musc.edu/ord/index.html), which is funded through the Vice President for Academic Affairs & Provost's Office, focuses on program and proposal development, identifies funding opportunities, develops proposal concepts, networks faculty members with complementary interests, provides grant-writing consultation and workshops, offers pre-submission critiques, compiles institutional data, and prepares competitive proposals for research resources and research training. New faculty and trainees are encouraged to visit the office in 101 Basic Science Bldg. to meet the ORD staff and learn about networking opportunities. The following are among the services offered by the Office of Research Development:

Research Project Grant (RPG) Retreats are held approximately 3 times / yr. These interactive half- day sessions give individual investigators the opportunity to gain constructive criticism on a specific research concept or proposal. Researchers at any phase of career development are encouraged to present or attend.

ORD Alerts mailing list is a service for MUSC faculty and trainees to receive research news and funding opportunities by email (http://research.musc.edu/ordalerts.html)

Community of Science (COS) is an external web-based system, offered as an institutional subscription service, that provides a range of services including searchable databases for

funding opportunities and expertise, as well as a personalized workbench from which to access and manage COS services.

Institutional "Boilerplate" is a compilation of information about MUSC, its components and programs, primarily used to assist MUSC faculty, staff, and trainees in preparing institutional resources and environment sections for research grant and contract proposals.

Grantsmanship Workshops are held twice per year. Led by an external consultant, the workshop content focuses on the NIH organization, peer review system, grantsmanship tips, and the ABCs of an R01 or other NIH grant application. Individual and team consultations are also offered. The workshops and consultation opportunities are an institutional research support service, provided at no charge to investigators or programs.

MyPeerReview is an internal, on-line searchable database of information about MUSC faculty service on review panels and study sections for the NIH and other federal and non-federal sponsors, as well as journals for which MUSC faculty members have served or currently serve as an ad hoc reviewer, member, editorial board, etc.

Grant Writing Help is provided by:

- The Office of Scientific Editing and Publications (OSEP) which provides support to augment manuscript and grant writing skills for MUSC faculty, trainees, and staff http://research.musc.edu/APR/OSEP.html

- Through the SUCCESS center https://sctr.musc.edu/index.php/programs/success-center

Grant Administrative Support

The Office of Research and Sponsored Programs (ORSP) and Office of Grants and Contracts Accounting (OGCA) provide the fundamental support need to obtain and manage sponsor-supported research funding. In addition to individual support, their websites provide important information regarding basic information needed for submission, and management of grants and contracts.

Office of Research and Sponsored Programs: http://research.musc.edu/orsp/index.html

Office of Grants and Contracts Accounting: http://academicDepartments.musc.edu/vpfa/finance/gca/index.htm

Some Specific Resources for Clinical and Translational Research:

Clinical & Translational Research Center (CTRC). The primary purpose of the CTRC is to support clinical and translational research projects within the institution and SCTR affiliate members as well as pilot studies that may lead to future NIH or other sources of peer-reviewed

clinical/translational research grant support. The specialized staff of the CTRC consist of research nurses, laboratory personnel, nutritionists, IT specialists, and professional/administrative personnel. A core laboratory, fully-equipped outpatient clinic, dental suite, and imaging suite comprise the highly-technical physical facilities that are on hand to support your research. https://sctr.musc.edu/index.php/programs/clinical-a-translational-research-center

Biostatistics Consultation through the SCTR Biostatistics & Epidemiology Program. Services offered are:

- Biostatistical Education: Consultation and assistance in understanding one or more biostatistical concepts
- Methodology/Study Design: Guidance with selecting an appropriate study design or developing a statistical analysis plan
- Power Analysis / Sample Size Calculation: Assistance with determining the statistical power or sample size required for a proposed study
- Data Analysis: Assistance with analyzing data collected for a research study
- Other: (e.g. help with presentations, manuscripts, etc.)

These services are offered for several different settings:

- Assistance Preparing Grants (Federal, Foundation, Other)
- Assistance Preparing CTRC Protocols
- Assistance with Current CTRC Funded Project
- Unfunded Research Project (e.g. Abstract/Manuscript Preparation)

Links to these services are: http://sctr.musc.edu/index.php/programs/biostats
And: http://sctrweb2.musc.edu/research_toolkit/preaward/grantproposal/statistic

Master of Science in Clinical Research Program (MSCR) degree is offered by MUSC. This program teaches core competencies in clinical research methods, fosters development of a sustainable research focus, and provides the participant with the skills to compete for extramural support. https://sctr.musc.edu/index.php/education/mscr-masters-of-science-in-clinical-research

Society of Clinical Research and Translational Early Scientists (SOCRATES) provides a forum for junior faculty to present their research projects in front of peers, senior researchers and statisticians, foster collaboration across multiple subspecialties at MUSC, and trouble shoot about ways to improve mentoring across campus https://sctr.musc.edu/index.php/programs/teach/133

Some Specific Resources for Basic Science Research:

Research Support

http://research.musc.edu/researchresources.html

Shared Core Facilities. A number of core facilities are available to support basic research (see information of each of these facilities in Research Shared Facilities on this website). In addition, an annual exposition of these facilities that enables meetings with core personnel occurs in the Fall each year.

College of Graduate Studies (CGS) Office of Postdoctoral Affairs. In addition to providing useful information regarding practical aspects of hiring and mentoring postdoctoral scientists, the office also offers services to enable recruitment of postdoctoral scientists.

Responsible Conduct of Research (RCR)

CGS RCR Retreat resources. All MUSC postdocs participate in a mandatory 2-day retreat focused on career development, conflict resolution, and compliance issues related to the responsible research practices. All lectures and handouts are available on the CGS website. (http://www.musc.edu/grad/postdoc/rcr.html)

The HHS Office of Research Integrity website has a wealth of educational resources on RCR practices with case scenarios, videos and tutorials for all stages of research professionals (http://ori.dhhs.gov)

Personnel/Trainees Relationships

College of Graduate Studies (http://www.musc.edu/grad/)

- Graduate Faculty Resources – application for appointment to graduate faculty and conflict of interest forms.
- Mentoring Compact – AAMC recommendations for mentoring graduate students and postdocs (http://www.aamc.org/research/postdoccompact).
- Graduate Council Minutes – record of monthly meetings and policy discussions.
- Graduate Faculty Research – web-based database of faculty research interests to aid students looking for potential mentors.
- Training Grants – listing of MUSC training grants and career development programs for graduate students and postdocs.
- Student Handbook – specifics of graduate programs, resources, dissertation requirement, and CGS policies.
- Summer Research Programs for Undergraduates and Health Professional Students. These programs provide students the opportunity of a 10-week long internship with MUSC faculty. (http://www.musc.edu/grad/summer/index.html)

Howard Hughes Medical Institute

- "Lab Management: Making the Right Moves" is an essential resource for postdocs and faculty, available free on-line.

(http://www.hhmi.org/resources/labmanagement/moves.html)

- "Entering Mentoring" provides guidance in mentoring individuals with diverse learning and personality styles.
  (http://www.hhmi.org/catalog/main?action=product&itemId=272)

Human Resources Career Development Courses and Seminars. MUSC HR provides a variety of professional development workshops and seminars to facilitate more effective lab management and hiring practices. (http://academicDepartments.musc.edu/vpfa/hrm/training/trainingpage)

International Scientific Presenters Toastmasters. This club provides a supportive environment for learning how to give effective scientific presentations, and benefit from constructive feedback of peers and faculty sponsors.(http://scientific.freetoasthost.us)

CGS725 Teaching Techniques. This course is offered every Fall and Spring semester and is open to all students and postdocs. Contact the College of Graduate Studies office for registration information (weised@musc.edu)

Networking Opportunities

The B & BS club provides an informal forum for faculty, postdoctoral and graduate students to present their research ideas, grant proposals or research problems to a mixed audience that can provide useful feedback and often potential collaborations or exchange of reagents. (halushpv@musc.edu)

MUSC Core Facilities "Octoberfest" Reception. This is an annual event for core facility directors to highlight the services available.

Research INKlings is a monthly on-line newsletter of recent events of interest to MUSC researchers. (http://research.musc.edu/inklings.html)

SACNAS promotes a diverse research academy by providing workshops and networking opportunities that encourage Chicano/Hispanic and Native American students and postdocs to pursue and persist in STEM fields. This is also an excellent recruitment resource. (http://www.sacnas.org/)

ABRCMS is an annual conference that brings underrepresented minority students and postdocs together to present their research in an environment that encourages their development into future STEM faculty. This is also an excellent recruitment venue. (http://www.abrcms.org/index.html)

www.MinorityPostdoc.org hosts a variety of career development resources for postdocs, including job listings and articles, with an emphasis on minority scholars.

Resources for Education

Types of Educational Technology

Tegrity is a lecture capture service that lets faculty automatically capture every class –on and off campus – for later review by every student, anytime, anywhere. http://tegrity.musc.edu

Adobe Connect is Web conferencing software that securely shares presentations and multimedia from a desktop computer, supporting feedback from hundreds of participants — all using a web browser and the Adobe Flash® Player runtime. http://connect.musc.edu

Education Technology Services (ETS) Provides support in the areas of digital imaging, audio visual support in centrally scheduled classrooms and distance education technologies, and video production.

The Apple Tree Society exists to foster dialogue and activity related to the scholarship of health professions teaching through campus and national partnerships. http://www2.edserv.musc.edu/appletree/

Copyright Toolkit - Understanding and complying with the laws governing the use of copyrighted materials is daunting. The information on this site is directed at teaching faculty, students, scientific writers, researchers, and others at MUSC who use copyrighted works. It includes Copyright @ MUSC: Policies, Forms, & Resources, forms, and information about Coursepacks, Plagiarism and How to Cite Sources, releases, Images and text, and print and digital/online resources. Many of the links lead to the excellent copyright Websites of other universities. http://copyright.library.musc.edu/page.php?id=1314

Creating Collaborative Care/Inter-professional Education - Creating Collaborative Care (C3) is a Quality Enhancement Plan (QEP) for the Medical University of South Carolina that focuses on inter-professional education. http://academicDepartments.musc.edu/c3/

Faculty teaching awards (College and University) - In recognition of faculty accomplishments the individual colleges, as well as the university, present annual awards in teaching, research, and service. These awards are very competitive underscoring the excellence of the faculty with respect to their achievements. The awards are sponsored by various groups. The university annual awards include: Developing Scholar Awards, Outstanding Clinician Awards, Teaching Excellence Awards (Developing Teacher, Educator-Lecturer, and Educator-Mentor), and Distinguished Faculty Service Awards

Library resources - http://www.library.musc.edu/

- Computer labs – 4 computer labs are available for use by faculty for their classes. The labs host an average of 25 iMac computers that support the use of both Windows and Macintosh operating systems
- Learning Commons – An initiative of the MUSC library currently under development designed to provide spaces for study and socialization and access to the latest technologies for teaching and learning.
- Center for Academic and Research Computing – Works with faculty and staff across the

campus to design, develop and support interactive instructional programs.

- Journals the library currently provides access to approximately 17,498 e-journals and 34 current print-only subscriptions http://muscls.musc.edu/

Center for Academic Excellence - The CAE is dedicated to improving learning and teaching on campus. Health care providers must learn and re-learn in order to adapt their practices to the latest advances in biomedical science. They also must collaborate with colleagues across professions to provide quality care and conduct groundbreaking research. That's why the CAE provides collaborative learning groups; and the effectiveness of these groups is why a majority of MUSC students choose to participate—in addition to their scheduled class time. Another vital part of the work of the CAE is teaching the material and the strategies necessary for success on national and state licensing board/certifying exams. Under the tutelage of CAE faculty and their fellow students, students approach these rigorous exams with confidence and exceed national performance averages. http://www.musc.edu/cae/

The Writing Center - The Writing Center faculty members teach students to communicate effectively with their professors, their fellow students, and their patients. http://www.musc.edu/writingcenter/

Enrollment Services - Enrollment Services oversees student admissions, records and financial aid. http://www.musc.edu/em

State or National Resources

Funding Agencies

By going to the MUSC Research and Discovery website (http://research.musc.edu/researchresources.html) and clicking on Funding Opportunities under the Office of Research Development, information on the following opportunities is available:

- Funding alerts
- Federal and state funding opportunities
- Sponsor opportunities (Corporate and Foundations)
- New Investigator Funding Opportunities http://research.musc.edu/newinv_fund.html
- Postdoctoral Funding Opportunities
- Limited Submissions Competitions Opportunities

Associations

Association of American Medical Colleges (AAMC). The AAMC represents all 133 accredited U.S. medical schools; approximately 400 major teaching hospitals and health systems, including 68 Department of Veterans Affairs medical centers; and nearly 90 academic and scientific societies. Through these institutions and organizations, the AAMC represents 125,000 faculty members,

75,000 medical students, and 106,000 resident physicians. Through its many programs and services, the AAMC strengthens the world's most advanced medical care by supporting the entire spectrum of education, research, and patient care activities conducted by member institutions. http://www.aamc.org/

Association of Women in Science (AWIS) is a national advocacy organization championing the interests of women in science across all disciplines and employment sectors. By breaking down barriers and creating opportunities, AWIS strives to ensure that women in these fields can achieve their full potential. http://www.awis.org/

National Postdoctoral Association. The NPA provides many resources useful for enriching the research environment, managing a research lab, and expectations of mentors and trainees. MUSC is an affiliate institution which provides membership to all faculty, postdocs, and students. http://www.nationalpostdoc.org/

FACULTY TRACK GUIDANCE

ACADEMIC CLINICIAN
GOAL: establish a nationally recognized clinical practice along with solid research; strive to become an funded researcher of a basic or focused clinical area. National presentations and peer-reviewed publications are important in this track. Become an opinion leader in your subspecialty.

Instructor
Usually fellowship. For research, work on projects with mentor and begin to select one or two main research areas.

Assistant Professor
Establish <u>practice.</u>

<u>Develop an area of research (clinical or basic research is required in this track. Clinicians that are mostly in a teaching role without significant research should be in the Clinician Educator track):</u> Decide or narrow-down the areas of research that will be your ultimate focus. Areas worked during fellowship are a good start but do not limit yourself to those areas necessarily. Consider a mentored-scientist award application. The Masters in Clinical Research curriculum would be useful in this track and can be accomplished with as little as 2 afternoons a week protected. If an R01 is the goal, begin collaboration with basic scientists from the beginning and make sure that any protected time you have for research continues to be protected. If multi-center clinical trials and corporate funded trials are the emphasis, develop a track-record of involvement early. Participation as a PI in small corporate multi-center trials helps to make your competitive when larger trials come along. Join a writing committee early on.

Also, create a story that will be appealing to your grateful patients. Know what you need money for. Grateful patients will ask what you need help with on the research front. What areas of innovation or investigation do you need funding for? Have a story to tell – the grateful patients will want it to be planned and ongoing. Gifts of 5K to 500K are common when you have a plan to be a regional or national leader in a niche area.

<u>Teaching:</u> Ensure **solid teaching** effort from early on (**1st year plan**). Get slots for resident education in **Clinic, OR and lectures.** Good evaluations by residents are needed but while teaching lead in the Clinician Educator track, it is secondary to Research, Presentations and Publications in this track.

<u>Publications:</u> If fresh from fellowship, complete one or two publications with fellowship mentor (**1st year**) – these are usually projects started during fellowship. In the Academic Clinician track, peer-reviewed publications are expected each year and need to be more substantive than small case series or book chapters.

<u>Decide on mechanism for ongoing publications</u> – what kind of publications (**by 3rd year**), e.g., basic research, prospective and retrospective clinical reviews, etc. Need some quality publications, not necessarily senior authorship but move on beyond in year 2 away from just co-authoring with fellowship mentor. Some continuation of publishing with fellowship mentor is helpful but establishing your own name and reputation is paramount in this track.

<u>Service (3rd year):</u> Join COM and/or University committees. Get involved in State and National specialty societies and their committees – this will help with name recognition.

Get podium presentations at national meetings. Invitations to participate in workshops and instructional courses at National society meetings are also important for name recognition, will help with external letters for promotion to Associate.

<u>Building reputation:</u> Need to be known on the National stage (presentations, service are venues). Ask your mentor to nominate/recommend you as a grand rounds speaker (can start with SE regional university programs). A phone call from your mentor to a faculty member at a regional department will often prompt an invitation. If you are impressive, they will tell other programs to invite you. Aim initially for 1 or 2 of

these per year. National exposure is important for name recognition, communicating with referral doctors, and getting referrals – this feeds into the development of the practice.

Professional development: Travel allowance. Additional assistance for people who compete successfully for podium or poster presentations

5th year: prepare for promotion, **fulfill the matrix criteria**.

Tenure will follow a consistent, solid track record (showing long term value to the University)

Associate Professor

For promotion to Professor, continue and **fulfill the matrix** criteria.

Need to be known for some niche within subspecialty – established as an expert and among the group of opinion leaders for this niche – even tabloids like Ocular Surgery News, Ophthalmology Times, EyeNet help here. Ask to be interviewed on the trends of evolving care – good for name recognition. Grant funding is important at this stage for this track. For those who carry a large clinical load, multicenter clinical trial funding can suffice if there is a clear trend toward leadership positions and if writing committee assignments are becoming more common. Investigator-initiated studies should also be ongoing.

CLINICIAN EDUCATOR
GOAL: establish a nationally recognized practice along with solid teaching; strive to become an opinion leader in your subspecialty.

Instructor
Usually fellowship. For research, work on projects with mentor

Assistant Professor
Establish practice
Teaching: Ensure **solid teaching** effort from early on (**1st year plan**). Get slots for resident education in **Clinic, OR and lectures.** Important for good evaluations by residents
Publications: If fresh from fellowship, complete one or two publications with fellowship mentor (**1st year**) – these are usually projects started during fellowship.
Decide on mechanism for ongoing publications – what kind of publications (**by 3rd year**), e.g., research, educational reviews, etc. Need some quality publications, not necessarily senior authorship but not all can be with fellowship mentor.
Case studies cannot be published in decent journals; need case series. Join multicenter clinical trials when possible and volunteer for at least one writing committee when results of the trial are released.
Book chapters are look at favorably at this stage but peer reviewed papers are still needed.
Service (**3rd year**): Join COM and/or University committees. Get involved in State and National specialty societies and their committees – this will help with name recognition.
Get presentations in workshops, instructional courses at National society meetings, posters at National specialty societies are relatively easy to compete for – important for name recognition, will help with external letters for promotion to Associate.
Building reputation: Need to be known on the National stage (presentations, service are venues). Ask your mentor to nominate/recommend you as a grand rounds speaker (can start with SE regional university programs). A phone call from your mentor to a faculty member at a regional department will often prompt an invitation. If you are impressive, they will tell other programs to invite you. Aim initially for 1 or 2 of these per year. National exposure is important for name recognition, communicating with referral doctors, and getting referrals – this feeds into the development of the practice.
Fleshing out an area of research (if so decided): Create a story, a narrative for research area – needs coaching. An organized narrative framework will help with publishing and with donors. Grateful patients will ask what you need help with on the research front. What areas of innovation or review do you need funding for? Have a story to tell – the grateful patients will want it to be planned and ongoing. Gifts of 5K to 50K are common when you have clinical projects ongoing. One idea (Ed's) is to create a fund for each specialty (organized around narratives).
Professional development: Travel allowance. Additional assistance for people who compete successfully for podium or poster presentations
5th year: prepare for promotion, **fulfill the matrix criteria**.

Tenure will follow a consistent, solid track record (showing long term value to the University)

Associate Professor
For promotion to Professor, continue and **fulfill the matrix** criteria.
Need to be known for some niche within subspecialty – established as an expert and among the group of opinion leaders for this niche – even tabloids like Ocular Surgery News, Ophthalmology Times, EyeNet help here. Ask to be interviewed on the trends of evolving care – good for name recognition. Ask to be on the writing committee of the AAO Basic and Clinical Science Course booklets or AAO Preferred Practice Pattern updates.)
Have mentor nominate you as an oral examiner for the American Board of Ophthalmology. The ABO is always looking for new young academic examiners and they mentor you through the first few times. Only a weekend a year commitment is needed. This is an excellent way to give back and get name recognition.

ACADEMIC INVESTIGATOR
GOAL: establish an independent, funded, and nationally/internationally recognized research program

Instructor
Research: Establish research program under the direction of a mentor
Publications: Maintain publishing at least 2 papers/yr on average, at least one of which as first author
Funding: Seek extramural funding, particularly starter grants, training funds and foundation funding.
Presentations: Attend at least one national meeting per year and first author a presentation.
Departmental/university activities: Attend seminars, grand rounds both in and outside the department; present in journal club. Join graduate faculty as an associate member.

Assistant Professor
The goal is to establish independence, as evidenced by independent extramural funding and senior author publications in strong journals without mentor's name.

Establish a lab: Hire a tech, arrange for equipment use or purchase, and obtain supplies.
Funding sources for lab operation:
Mentor (this entails lack of independence)
Intramural funding (usually small)
Departmental start-up
Extramural funding – goal to have this by end of 2nd year with a requirement by end of 3rd year.
Publications: Maintain publishing at least 2 papers/yr on average, at least one of which as senior author; these should be in peer-reviewed journals. By the 5th year, publish as senior author without mentor in strong journals.
Lab growth: Add students/post-docs as funding allows.
Presentations: Attend at least one professional meeting/year and present as first author.
Build national reputation: Seek opportunities to review for journals and contribute to non-peer-reviewed publications (book chapters, etc.); participate in national organizations; get invitations for presentations.
University service: Join the graduate faculty (as a full member after obtaining sufficient extramural funding). Participate in departmental activities. By 3rd year, serve on departmental committees. By 5th year, seek teaching opportunities; serve on university committees.

Associate Professor
Maintain established laboratory
Maintain funding; seek to establish second grant or industry support
Mentor students and postdoctoral fellows
Serve on Graduate faculty as a full member
Participate in university teaching and committees
Review for journals and funding groups
Present research at national meetings and as an invited speaker both at meetings and in university/industry settings
Work toward fulfilling matrix criteria for Professor

Tenure will follow a consistent, solid track record (showing long term value to the University)

Professor (expectations)
Assume some administrative duties (chair of committees, service on search committees, etc.)
Maintain funded laboratory and publication at strong rate
Mentor students, fellows and faculty
Establish national profile by service on review panels, editorial boards, committees and as officer in national organizations.