Associate Professor Narrative Statement Example I — "The Educator-Researcher"

Primary Area of Distinction: **Education** Secondary Area of Distinction: **Investigation** A candidate who devotes a majority of effort to or who has major achievements in education with some

effort (and achievements) in investigation.

Expected Achievements:

- Established level in Education
- Entry to Established level in Investigation
- Entry level in Academic Service

J.J. SAMPLE, MD

Assistant Professor, Department of Neuroscience

Education is my passion. Although I continue to conduct research in neuroscience, my primary goal is to educate and advise graduate students in their career and professional development. As an educator, I seek to advance the communication, teamwork and inter-professional skills needed daily in research. As a scientist trained in developmental psychology, neuroscience, and education, I integrate each of those perspectives to enhance our programs in research education and training. I seek promotion to Associate Professor based on my achievements in my primary Area of Distinction in Education, in my secondary Area of Distinction in Investigation, and in Academic Service.

Area of Distinction in Education

I was recruited to UMMS eight years ago with the expectation that I would contribute both to research and the development of the Neuroscience Graduate Program. My postdoctoral training was supported by a NIH Institutional Research Career and Academic Development Award (IRACDA), which provided education and mentoring in the broader aspects of an academic research career, particularly in enhancing teaching skills. Through that program, I discovered that I had interest, passion and skills as an educator and looked for opportunities to conduct both education and research. The position here at UMMS is ideal: I devote 50% effort conducting research with Dr. Jones, supported by her grants, and 50% effort as Associate Director of the Neuroscience Program, supported by the department.

My goal as Associate Director is provide the resources and support for our graduate students to ensure their career success. The outcome for the department is to increase the competitiveness of the program and hence the quality of students we recruit. We have focused particularly on recruiting and retaining underrepresented minority (URM) students. I have designed, implemented, and evaluated several interrelated programs to achieve these goals and outcomes.

My first step was to review the needs of the students for success as research scientists and to develop a course—Professional Skills-1—that covers the "non-scientific" aspects of research: including setting career goals, mentoring, inter-personal communication, handling conflict and managing stress, writing papers, presenting posters, and understanding the research enterprise. All neuroscience students are required to take the course in their first year and it has become popular with students from other programs, such that the course is filled each year. I developed a second course for second year students—Professional Skills-2—that focuses on grant writing and prepares them for their Qualifying Exam. I have presented both courses at the Society for Neuroscience meeting and as a result was invited to participate in a workshop on professional development at the AAMC Group on Research, Education and Training (GREAT) annual meeting. Others have expressed interest in the courses and I have disseminated course materials to over 15 institutions and graduate programs across the country. Our efforts to recruit and retain URM graduate students is supported in part by a NIH Neuroscience Development for Advancing the Careers of a Diverse Research Workforce R25 Award from NINDS, for which I am the P.I. This award supports three activities: an enhanced summer undergraduate research program for URM students; a focus on mentoring and mentor-training for our faculty; and an extension of the professional skills courses to meet the needs of URM students. With the support of this award and the concerted efforts of our faculty, this year 22% of our students are URM, the highest of any program at UMMS.

I have also been engaged in the renewal of our department's training grant, which focuses on neuromodulation. I direct the educational component of the grant and revised it extensively for the successful renewal.

As a result of developing the professional skills courses, I became interested in the competencies necessary for success in research and this area has become the focus of my personal scholarship. Unlike medical education, little thought has been applied to the competencies for graduate education. We conducted workshops at GREAT meetings on this topic and engaged in a Delphi process with our colleagues to develop a consensus set of competencies for graduate education. The competency framework was recently published (Sample et al, 2016) and I have received several invitations to present at other institutions. I am continuing the work by creating educational modules and assessments for each of the competencies to disseminate nationally through GREAT.

Area of Distinction in Investigation

My graduate training was in neurophysiology and I conduct research on synaptic transmission, particularly on the function of dopamine neuromodulation in mechanisms of reward and addiction. Dr. Jones has developed a rat model for opioid addiction to test for agents that may inhibit addictive behavior. I have completed several projects to investigate the modification of synaptic transmission in this model, reported in several papers, including one first author publication (Sample et al 2014). Recently, we have identified a novel dopamine antagonist that appears to modify addictive behaviors and described the mechanism of its action (Sample et al 2017). We have received a NIH R21 award, for which I am co-PI with Dr. Jones, to continue these studies.

Academic Service

In addition to serving as Associate Director of the Neuroscience Program, I serve on the oversight committee for the Program, and on the Graduate Recruitment and Admissions Committee as the representative for Neuroscience. Outside UMMS I serve on the Education Committee for the Society for Neuroscience and was invited to serve on the Program Planning Committee for the next GREAT annual conference. I have also served as an *ad hoc* reviewer for NIH R25 applications.

Summary

Biomedical research is facing workforce challenges, both in the preparation and education of students and in the populations of students that are recruited into training programs. I feel that I have been able to provide solutions to these challenges for the Neuroscience Program that provide an example for graduate education at UMMS, and possibly a national model. I look forward to continuing this work.