

PROMOTION RECOMMENDATION  
The University of Michigan  
College of Pharmacy  
Medical School

Sally K. Guthrie, associate professor of pharmacy, with tenure, College of Pharmacy, and associate professor of psychiatry, without tenure, Medical School, is recommended for promotion to professor of pharmacy, with tenure, College of Pharmacy, and professor of psychiatry, without tenure, Medical School.

Academic Degrees:

Pharm.D. 1979 University of the Pacific, Stockton, California

Professional Record:

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| 1995-present | Associate Professor of Psychiatry (without tenure), University of Michigan  |
| 1993-present | Associate Professor of Pharmacy (with tenure), University of Michigan   |
| 1989-1995    | Assistant Professor of Psychiatry, University of Michigan   |
| 1986-present | Clinical Pharmacist, University of Michigan Health System   |
| 1986-1993    | Assistant Professor of Pharmacy, University of Michigan   |
| 1983-1986    | Staff Fellow, National Institute on Alcoholism and Alcohol Abuse, NIH, Bethesda, MD   |
| 1982-1983    | Assistant Director of Pharmacy, Orange-Chatham Comprehensive Health Services and University of North Carolina School of Pharmacy, Chapel Hill, NC |
| 1981-1982    | Total Parenteral Nutrition Pharmacist, Duke University Medical Center, Durham, NC   |
| 1980-1981    | Staff/Clinical Pharmacist, Duke University Medical Center, Durham, NC   |
| 1979-1980    | Clinical Pharmacy Residency, Duke University Medical Center, Durham, NC   |

Summary of Evaluation:

Teaching: Professor Guthrie is a very enthusiastic and dedicated educator. She participates in both didactic and experiential teaching in the Pharm.D. program and serves as a mentor for pharmacy and psychiatry students, as well as post-degree trainees. She has served as course coordinator for three courses over several years, including the pharmacy student seminar course which requires a substantial time commitment. In addition, Professor Guthrie coordinated two pharmacy courses for nurse practitioner students for many years. Professor Guthrie spends 12-15 weeks each year at her clinical service in adult inpatient psychiatry where she provides Advanced Pharmacy Practice Experiences (APPE) instruction. She has mentored 19 pharmacy students in their Pharm.D. investigations projects since 1993 and trained one specialty resident and one research fellow during that time. Professor Guthrie's didactic teaching is rated very highly by students (above 4.0 on a scale of 5.0), and her APPE evaluations were extremely strong, ranging from 4.58 to 5.0 on a 5.0 scale. Representative student comments include, "Dr. Guthrie is a wonderful, very knowledgeable professor. I really appreciate her energy and enthusiasm for the subject." "Study guides provided have the perfect amount of information." "Dr. Guthrie was a very enthusiastic instructor and she helped lead great discussions. I really enjoyed seeing the different substance abuse policies among the major sports."

Professor Guthrie was instrumental in a previous redesign of the pharmacy curriculum, having served as vice chair and chair of the Curriculum Committee from 2002 through 2005. This was a critical time, as the College of Pharmacy was undergoing accreditation review. In addition, Professor Guthrie devoted some of her time to scholarly investigations of various aspects of our curriculum. This research has led to two submitted manuscripts in educational journals (*Currents in Pharmacy Teaching and Learning* and the *American Journal of Pharmaceutical Education*).

Research: Professor Guthrie is highly regarded as a pioneer and nationally recognized leader in psychiatric pharmacy. Her work was originally focused on the pharmacokinetic studies of psychoactive drugs, and she is widely known for her research related to substance abuse and the use of tobacco. With that research focus, she participated as a co-investigator on a team that received funding from the National Institute of Drug Abuse and resulted in many publications over a long period of time. More recently, she retooled her approach to incorporate the use of functional magnetic resonance imaging (fMRI) to more fully understand the actions of drugs in the brain, which positioned her to gain funding in this area from the National Institute on Drug Abuse (NIDA) as a principal investigator, a rare feat for a Pharm.D. Professor Guthrie's publications appear in important psychiatry journals and are highly cited. She also has nine book chapters, with chapters in the two most commonly used pharmacotherapy text books in pharmacy, namely Applied Therapeutics and Pharmacotherapy Principles and Practice. In acknowledgement of the quality of her scholarship, Professor Guthrie was named a fellow of the American College of Clinical Pharmacy.

Recent and Significant Publications:

Demeter E, Guthrie SK, Taylor SF, Sarter M, Lustig C. Increased distractor vulnerability but preserved vigilance in patients with schizophrenia: evidence from a translational sustained attention task.1,2,4 *Schizophrenia Research*, 2013, 144:136-41. IF: 4.950.

Guthrie SK, Bostwick JR. Anxiety Disorders. Chapter 80. In: Applied Therapeutics, 10<sup>th</sup> edition, Lippincott Williams, Baltimore, 2013 pg 1863-1899.

Xue Y, Morris M, Ni L-S, Guthrie SK, Zubieta J-K, Gonzalez K, McConnell DS, Domino EF. Venous plasma nicotine correlates of hormonal effects of tobacco smoking. *Pharmacol Biochem Behavior*, 2010, 95:209-15. IF: 2.608.

Guthrie SK, Carey TL. Substance-related disorders. In: Pharmacotherapy Principles and Practice, 2nd edition. Eds. MA Chisholm, TL Schwinghammer, BG Wells, JT DiPiro, JM Kolesar, PM Malone. McGraw-Hill, New York, 2010, pg 607-629.

Teter CJ, McCabe SE, Cranford JA, Boyd CJ, Guthrie, SK. Prevalence and motivations for the illicit use of prescription stimulants in an undergraduate student sample. *J Am Coll Health*, 2005;53:253-62. IF: 1.250.

Guthrie SK, Ni L-S, Zubieta Z-K, Teter CJ, Domino EF. Changes in craving for a cigarette and arterial nicotine plasma concentrations in abstinent smokers. *Prog Neuro-Psychopharm Biol Psychiatry*, 2004; 28:617-23. IF: 3.552.

Teter CJ, McCabe SE, Boyd CJ, Guthrie SK. Illicit Methylphenidate use in an undergraduate student sample: prevalence and risk factors. *Pharmacotherapy* 2003, 23:609-17. IF: 2.311.

Domino EF, Minoshimo S, Guthrie S, Ohl L, Ni L, Koeppe RA, Cross DJ, Zubieta JK. Nicotine effects on regional cerebral glucose metabolism in awake resting tobacco smokers. *Neuroscience*, 2000, 101:277-82. IF: 3.122.

Guthrie SK, Zubieta J-K, Ohl L, Ni L, Koeppe R A, Minoshima S, Domino EF. Arterial/venous plasma nicotine concentrations following nicotine nasal spray. *Eur J Clin Pharmacol*, 1999, 55:639-43. IF: 2.7

Service: Professor Guthrie has compiled an impressive record of service to her profession and the university, including the University of Michigan Health System (UMHS). She established herself as a leader among her peers through her work at the national level as one of the first clinical pharmacy specialists in psycho-pharmacology. She was a member of a group who successfully petitioned the Board of Pharmaceutical Specialty to provide board certification for psychiatric pharmacists in the early 1990s and has been board certified since 1997, a year after the first exam was given. She was also instrumental in the establishment of the College of Psychiatric and Neurologic Pharmacists (CPNP) in 1998, which is an organization that is flourishing today with over 1,100 members. Professor Guthrie has served in several leadership roles within the CPNP and maintains membership in that organization, as well as others. Professor Guthrie serves as a reviewer for 11 journals; has been on the editorial board for *Pharmacotherapy* since 2006; and was on the editorial board for the *Annals of Pharmacotherapy* 1987-1994. She has maintained an inpatient clinical service in adult psychiatry at the UMHS since joining the university, devoting 12-15 weeks per year. This is a substantial commitment given the significant demands of maintaining a research program. Professor Guthrie has also supported university initiatives such as the University of Michigan Substance Abuse Research Center, where she has served on the Executive Board and as a member of the Supervisory Committee for the National Institute of Drug Abuse funded training grant. Over the past 20 years, Professor Guthrie has served on numerous committees in the College of Pharmacy and at the university, including membership at the U-M Substance Abuse Research Center and the U-M Tobacco Research Network.

External Reviewers:

Reviewer A: "... Dr. Guthrie has excelled in all areas of her discipline and academic mission....Her publications are in highly substantive journals of high impact and reach....All these accomplishments speak to a national and international level of impact and service."

Reviewer B: "Dr. Guthrie has distinguished herself as a scholar, clinician, and educator and has developed a national reputation as a leader in psychiatric pharmacy....She was a highly visible pioneer in psychiatric pharmacy....She has continued to be a leader in psychiatric pharmacy....She has made excellent contributions to the field via her research....Dr. Guthrie works on some research atypical for a clinician, which shows a depth to her skills as a scholar...I have also been privileged to see the work of those junior scientists she has worked with and helped to flourish....They have become recognized premier scholars in their own sub-specialties."

Reviewer C: "...Dr. Guthrie has established a commendable record of accomplishments in the areas of research, teaching and service. Her fellowship status in the American College of Clinical Pharmacy, election for two terms to the executive board of *Pharmacotherapy* speak to the high regard in which she is held by her peers and national recognition for her work....I would consider her teaching performance as excellent. Dr. Guthrie's service record to the College and profession is outstanding."

Reviewer D: "Dr. Guthrie has a very impressive portfolio of original research, manuscripts, book chapters, abstracts and posters.... when I think about an expert in the area of substance abuse, and specifically nicotine and tobacco research, Sally would be the first person to come to mind....The quality and scholarly impact of her writings is outstanding.... Both of Dr. Guthrie's trainees are very well respected in their own right....She is well recognized at the national/international level for her work in the area of substance abuse. Additionally, she has succeeded in providing outstanding contributions to both teaching and service."

Reviewer E: "Dr. Guthrie is a well-known clinician and researcher in the community of psychiatric pharmacists and more broadly within the field of clinical pharmacy.... she is one of the pioneers of our field. ...it is noteworthy that Dr. Guthrie has developed research expertise in the area of biological psychiatry. Many of the techniques she uses in her studies have taken a lot of effort to learn. I think it is

impressive for a Pharm.D. to have accomplished so much in this area....Sally is among the core of senior psychiatric pharmacy specialists that we have in our field. I'd say she stands very high in that group."

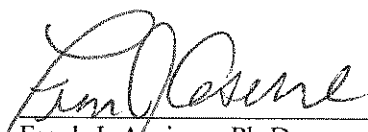
Reviewer F: "Dr. Guthrie has focused her scholarship over the past decade based on her innovative work with brain imaging, and the effects of nicotine on cognition in patients with schizophrenia....She is a recognized expert on substance abuse, particularly nicotine, within the psychiatric pharmacy community....It is apparent that Dr. Guthrie's peers recognize her leadership abilities based on the positions she held over the past 15 years....Dr. Guthrie has made significant contributions in the area of teaching, service, scholarship and research to the profession of psychiatric pharmacy."

Reviewer G: "Sally is publishing in important pharmacy journals....She also published in prestigious and important psychiatric journals....She retooled herself part way through her career towards brain imaging and the effects of psychotropic drugs and substances. The transition was successful as she was able to effectively compete as a PI for NIH money. There are few Pharm.D.'s who serve as PI's on NIH grants and this is an important accomplishment....Dr. Guthrie is recognized as one of the preeminent psychiatric pharmacy researchers in the field of substance abuse....Sally is highly regarded by her peers."

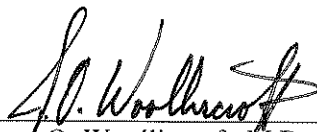
Reviewer H: "Her teaching evaluations are consistently strong, with a variety of excellent comments from students...."

#### Summary of Recommendation

Professor Guthrie is a pioneer and leader in psychiatric pharmacy who has achieved excellence in teaching, research and service. Her commitment and leadership in teaching and service are superb, and her scholarly accomplishments are outstanding. It is with the support of the Executive Committees of the College of Pharmacy and Medical School that we recommend Sally K. Guthrie for promotion to professor of pharmacy, with tenure, College of Pharmacy, and professor of psychiatry, without tenure, Medical School.



Frank J. Ascione, Ph.D.  
Dean, College of Pharmacy



James O. Woolliscroft, M.D.  
Dean, Medical School  
*Lyle C. Roll Professor of Medicine*

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