Lung cancer continues to be the second-most common cancer diagnosed and the most common cause of cancer death in the United States. The goal of the present study is to explore the role that genetic counselors play in counseling about lung cancer. Specifically, the study sets out to determine whether or not genetic counselors discuss smoking and smoking cessation, annual low-dose computed tomography (if applicable), research studies focusing on lung cancer, and germline genetic testing for lung cancer with their patients. Additionally, the study assesses if and how genetic counselors consider particular features of a patient’s personal and family history to be indicative of a hereditary lung cancer syndrome or predisposition. 405 Board-certified or Board-eligible genetic counselors began the survey, and 316 completed the survey. The majority of counselors ask their patients about tobacco smoking histories, including quantity and duration of time, but the minority of counselors ask their patients about smoking cessation. The majority of counselors do not ask their patients about marijuana smoking history. If a family history of lung cancer is present, the vast majority of counselors answered that they ask about exposures, but few counselors have ever made referrals to or received referrals from pulmonology based on a patient’s personal or family history of lung cancer. The majority of counselors surveyed were not aware of the U.S. Preventive Services Task Force’s recommendation of low-dose computed tomography for high-risk individuals, and some felt that the discussion of this recommendation is not within a genetic counselor’s scope of practice. The majority of counselors have never discussed lung cancer research studies or genetic testing with patients, but some counselors provided information about what they considered or offered their patient.