



CURRENT POSTGRADUATE STUDENT

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NAME	Qize	
PROGRAM	PhD in Surgery	
DATE OF REGISTRATION	1 August 2019	
SUPERVISOR	Professor Calvin SH NG	
FIELD OF RESEARCH / INTENDED THESIS TITLE	Lung cancer	
KEYWORDS FOR RESEARCH	Microwave ablation, Radiofrequency ablation, NSCLC	
RESEARCH STUDY:		
<p>Lung cancer is a type of malignant tumor characterized as uncontrolled cell growth in lung tissue. Worldwide in 2012, 1.8 million people were diagnosed as lung cancer and 1.6 million of them end in death, which makes it the most common cause of cancer-related death in men and second most common in women after breast cancer. Categorized by the histological characteristics of the cancer cells, lung cancer can be divided into small cell lung cancer (SCLC) and non-small-cell lung cancer (NSCLC), among which nearly 80% are NSCLCs. Surgery is a regular treatment for most cases of NSCLCs; however, thermal ablation is considered as a safe, cost-effective and minimally invasive treatment choice for patients with early-stage NSCLC and those that do not apply to surgery. Despite the dominance of radiofrequency ablation (RFA) as an ablation technique on lung cancer treatment, an increasing number of studies show that microwave ablation (MWA) has several technical advantages over RFA and cryoablation. However, there is lacking knowledge on the mechanism of MWA and the biological change of the cancer cells after the procedure. The goal of our project is to investigate the mechanism of thermal ablation treatment for lung cancer.</p>		
CONFERENCE TITLE / ABSTRACT / POSTER:		
<p>Qize Yuan, Meghana Tallam, Meg Greer, Matthew W. Kay. CUBIC as an Alternative “Clearing” Method for Creating Hydrogel-Based Structure in Organs [abstract]. In: GW Research Day; 2019 April 9-10; Washington D.C.</p> <p>Qize Yuan, Reeven Nathan. A cable-driven locomotor system for people with motor functional disability. In: Poster Session, Rehabilitation Institute of Chicago. 2012 August; Chicago IL.</p>		