Molecular guided surgery has made significant progress in the past decade, partially evidenced by the number of articles published and presented at scientific congresses. The field has had some successes and some failures, but excitement (and funding opportunities!) remain.

While the bulk of the more than 130 imaging agents historically used in the US were approved in the 1980’s and 1990’s, there has been renewed interest in fluorescent agents from the mid-2000’s onwards. While the reasons for this could stem from the widespread commercialization of magnetic resonance and positron emission tomographic machines in the 1980’s, recent years have witnessed the proliferation of clinically available fluorescent imaging systems – open, laparoscopic, robotic and microscope-based. Unfortunately, this has coincided with a consolidation of private entities performing medical imaging agent research & development, however new mechanisms of government funding have provided reasons for enthusiasm.

This talk will cover recent approvals, clinical studies and issues encountered therein.