

Interview with Prof. Michael Bouvet: the current status and future of fluorescence imaging

Submitted Apr 02, 2017. Accepted for publication Apr 18, 2017.

doi: 10.21037/atm.2017.04.46

View this article at: <http://dx.doi.org/10.21037/atm.2017.04.46>

On Feb. 18, 2017, the Digestive Disease Institute Week (DDI Week) sponsored by Cleveland Clinic annually successfully ended, after a 5-day scientific and compact agenda. The event took place in Boca Raton, a beautiful city located in Palm Beach County, Florida, USA. With a history of 28-year development, promotion and efforts, it has been a prestigious excellent meeting in digestive disease, enjoying a rather high reputation in China as well. The meeting is dedicated to providing comprehensive in-depth, detailed overview of new, controversial, challenging, and provocative themes, advances, innovations and inspirations in digestive disease.

International meetings are always excellent opportunities for us to meet, communicate and interact with our editorial board members, guest-editors, authors, reviewers, readers, speakers and attendees. During the meeting, we were able to conduct brief interviews with some of the renowned speakers, to share their presentations and perspectives on hot topics in their fields.

Fluorescence guided surgery is one of the highlights and new concepts that the DDI Week focused on. We are honored to have an interview with Prof. Michael Bouvet (*Figure 1*), the director of Endocrine Surgery and co-director of the Gastrointestinal Cancer Unit at UC San Diego Health. As one of the planning committee for the 4th International Congress of Fluorescence Guided Surgery: achievements and future directions of fluorescence guided imaging in surgery. Prof. Bouvet gave an excellent presentation on the topic “Cancer Specific Imaging with Novel Fluorescence Probes”.

During the interview, Prof. Michael Bouvet introduced to us the progress of fluorescence guided surgery (FGS), and shared his perspectives on the application and future of FGS. Similar to standard image-guided surgery, as a medical imaging technique used to detect fluorescently labelled structures during surgery, FGS is targeted to guide the surgical procedure and provide the surgeon of real time visualization of the operation. When compared to other



Figure 1 Michael Bouvet, MD.

medical imaging modalities, FGS is less expensive and superior in terms of resolution and number of molecules detectable.

When asked about the future direction of FGS, Prof. Bouvet thought that its future is really happening today. The surgeons routinely do this procedure for various purposes to make sure the bowel is healthy or safe to continue surgery. Hopefully, it will be applied for any sorts of tumors in the body, but the very problem now is to decide which tumor is the best under this circumstance.

At the end of the interview, he also shared that he firmly believed the fluorescence guided surgery will be popular in China very soon, as it's a progressive country. That's indeed what we expect also in near future.

Let's enjoy the interview video (*Figure 2*).

Interview questions

- (I) Would you like to briefly introduce yourself, including your expertise?
- (II) You gave an excellent presentation on the topic “Cancer Specific Imaging with Novel Fluorescence Probes”. Would you like to summarize some main points?
- (III) How do you see its future directions?



Figure 2 Interview with Prof. Michael Bouvet (1).
Available online: <http://www.asvide.com/articles/1525>

- (IV) Which location of tumor surgery do you prefer when using the fluorescence imaging, all the rectal cancer surgery, or lower rectal cancer? Or will you consider other risk factors, like obesity, malnutrition?
- (V) How is the application of fluorescence imaging in your hospital?
- (VI) Are there any other indications for using fluorescence imaging?

Expert's brief introduction

Michael Bouvet, MD, is a board-certified surgeon who specializes in endocrine surgery and surgical oncology. He is the director of Endocrine Surgery and co-director of the Gastrointestinal Cancer Unit at UC San Diego

Cite this article as: Zhong J, Feng M. Interview with Prof. Michael Bouvet: the current status and future of fluorescence imaging. *Ann Transl Med* 2017;5(10):228. doi: 10.21037/atm.2017.04.46

Health. Dr. Bouvet's expertise includes performing surgery for benign and cancerous thyroid nodules; parathyroidectomy for hyperparathyroidism; whipple procedures (pancreaticoduodenectomy) for pancreatic cancer; minimally invasive robotic-assisted esophagectomy; and laparoscopic adrenal surgery. He also performs surgery for tumors of the parathyroid glands, adrenal glands, liver, esophagus, stomach and pancreas.

As a professor in the Department of Surgery, Dr. Bouvet instructs students, residents and fellows at UC San Diego School of Medicine. His research focuses on fluorescence-guided surgery for gastrointestinal and endocrine tumors.

Acknowledgements

None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

References

- Zhong J, Feng M. Interview with Prof. Michael Bouvet. *Asvide* 2017;4:215. Available online: <http://www.asvide.com/articles/1525>

(Managing Editor: Jessie Zhong; Science Editor: Maxine Feng, ATM, editor@atmjournals.org)