

Dr. John W. Davis: don't be afraid to start over and learn new things

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Editor's note

The 2017 Annual Meeting of China Anti-Cancer Association-Genitourinary Cancer Committee & the 7th Shanghai Genitourinary Oncology International Symposium was held in Shanghai from 9–10 December 2017. The 2-day symposium welcomed esteemed urology experts who gave thought-provoking and informative keynote speeches and lectures. It brought together a pool of renowned specialists from all around the world, allowing a space for the discussion and exchange of innovative ideas.

We were honored to have invited Dr. John Davis from University of Texas MD Anderson Cancer Center to an interview, where we talked about the current challenges that radical prostatectomy is facing, and the future of the field (*Figure 1*). Dr. Davis also talked about the need to move out of one's comfort zone to embrace a new technique or concept that may be better than the one we're used to. His lectures at the conference were titled "Editor's Talk: How do you increase your submission acceptance rates with BJUI?" and "Overcoming the Challenges in Radical Prostatectomy".

Expert's introduction

Dr. Davis is an Associate Professor of Urology at the University of Texas MD Anderson Cancer Center, Houston Texas, USA, where he holds director titles of the Urosurgical Prostate Cancer Program and Urologic Oncology clinics. His clinical interests are in patients with urologic cancers, laparoscopic/robotic surgery, and general urology. Academic interests include quality of life after prostate cancer treatment, outcomes for robotic radical prostatectomy, high risk prostate cancer trials, active surveillance for prostate cancer, and development of robotic surgical techniques for invasive bladder cancer. He has participated as an investigator in several Southwest

Oncology Group and industry sponsored clinical trials.

Dr. Davis is board certified by the American Board of Urology and is a member of various professional organizations including the Society of Urologic Oncology, Endourology Society, Society of Robotic Surgeons, Société Internationale d'Urologie, American Urological Association, and a Fellow of the American College of Surgeons.

His peer-reviewed publication involvement is highlighted by the role of Associate Editor for Urologic Oncology for the *British Journal of Urology International*.

Interview

TAU: *In the treatment of prostate cancer patients, what challenges you have met so far? And how do you cope with them?*

Dr. Davis: While the question talks about treatment, before you get to treatment you have to have a diagnosis. You need to have a patient who understands and is willing to make a decision. Prostate cancer has a huge range of consequences and responses to treatment, and yet patients often assume all cancers are bad and have to be treated aggressively. I would say patient education is probably one of the more challenging areas of what we have to do, because it's very time-consuming—you have to basically start from scratch with each patient and move them along to an understanding of their situation and what they might need to do. You asked about how to cope with them; I have had a lot of success with writing down points at the patient's level, and all my patients get a fairly detailed handout that I update every year as new ideas come in so that we're all on the same page and we can then focus on their problems. Some patients need to be on observation, and some need treatment with one modality, and some others may need to be on combination treatments and/or clinical trial approaches.



Figure 1 Dr. John W. Davis (left), AME Editor Silvia L. Zhou (middle) and AME Editor Cora W. Xu (right).

TAU: What are the main challenges of radical prostatectomy?

Dr. Davis: I'd say bleeding in excess. I trained in the open surgery era in the United States in the 1990s, which was my initial training period transitioning into 2000, when laparoscopy came along and then robotics basically started in 2003 or 2004. So, an open prostatectomy in training had a lot of bleeding issues and quite frankly was hard to see very well unless you were the main surgeon. If you were an assistant, for example, it was really hard to see details of the anatomy. Once you switch to camera-based surgery starting with 2-dimensional laparoscopy, 3-dimensional robotics, obviously now the anatomy is very clear and much less bleeding to interfere with that. I think this is a big issue with the apical anatomy because that's the part that's the furthest tucked away under the pubic bone, the part that you can see very poorly during open surgery. Obviously occasionally in a very thin patient with an open pelvis it's very easy to do, but there are many patients who are very large, obese and have a very narrow pelvis. Once a surgeon has access to anatomy, if you have a pair of good hands you can make the right moves, but you do need to be able to see and access.

TAU: What do you think is the future research direction in the field of radical prostatectomy?

Dr. Davis: An interesting observation is that open prostatectomy was done through a large incision but the space created was in the extraperitoneal part of the pelvis. When we switched to minimally invasive, we actually converted this to a transperitoneal operation, where we increased the amount of space required to get the geometry

of all the minimally invasive touch points into the prostatic field. That's the same for robotics as well. Now you can do an extraperitoneal minimally invasive laparoscopic or robotic prostatectomy, but the geometry is a little tricky to get all those instruments in that space. What's coming soon from surgical equipment companies will be single-port type platforms where a single arm can come in and branch out and have a camera and angulated instruments. This, I think, will allow a fascinating array of approaches, meaning we can perhaps do a prostatectomy through a reduced operative field, either extraperitoneal—we've looked at a cadaver lab doing it transvesical, even transperineal. So, you still have to conform to the principles of what we've learnt over the years of keeping the anatomic planes correct, keeping thermal heat away from the nerve bundles, maximal preservation of the urethra. I think these could all be feasible. Related to one of your other questions, I think erectile dysfunction is still the greatest side effect of radical prostatectomy, so I think some sort of neural protecting agents or other issues that would preserve erectile functions would certainly help. There are certainly some fast-ending concepts in trying to avoid surgical margins either with MRI imaging or the so-called NeuroSAFE approach of doing intraoperative frozen, so ideally, I think we do need additional help to be sure that there's no cancer left behind, reduce the size of the surgical field, yet still be accurate.

TAU: As an outstanding expert in the field, would you like to share your early experience as a urologist with us?

Dr. Davis: Specific to what I touched on earlier, I trained in the end of the open surgical era for prostate surgery. It was clear to me that laparoscopy was coming in the late 1990s, it was just that training was difficult to achieve and the reason why general surgery had a bit of an advantage in minimally invasive surgery is that they had the gall bladder operation, which is a sort of straightforward extirpative-type procedure—you just want to make sure you don't injure the wrong thing, but once the organ's out, you're kind of done. Prostatectomy was very challenging earlier on because although you can get the prostate removed with laparoscopic instruments, suturing with basically chopsticks, as we used to joke, was very difficult, and robotics certainly helped with that. Once I finished formal residency and fellowship training, I actually moved to Germany just to do laparoscopy prostatectomy, 5 days a week for 6 months to achieve that learning curve. Then robotics came, and it was like an instrument upgrade, but the experience of living



Figure 2 Interview with Dr. John W. Davis: don't be afraid to start over and learn new things (1).

Available online: <http://www.asvide.com/article/view/23351>

abroad and watching other people wrestle with these issues and make their own advancement was very transformative for my career earlier on. It's given me the confidence to come here to China many times and go to other countries. The best ideas out there are not always in your backyard or in your own country's institution. I think the more you travel the world and see people work and innovate, that allows you to come back and figure out what the best methods are, and is something you have to do a bit of when you're young.

TAU: Looking into the future, do you have any words for yourself?

Dr. Davis: I think it's all the same concept; don't be afraid to start over. There are many open surgeons in my area who were so comfortable with it that when minimally invasive came along, they were uncomfortable to stop and start over, and I can understand that. At this point of my mid-career I'm very efficient at robotic prostatectomy; it would be hard for me to start over with a brand-new technique. But I think it's important to not be afraid to throw away something you're good at if something better comes along, and it may not be that radical prostatectomy is the permanent solution, there may be advances in ablation therapies and other things that are very different from what we're doing.

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TAU: What is your advice to young surgeons who would like to engage in this field?

Dr. Davis: Try to do rotations abroad and within your own country. Specific to my role in publishing with the *British Journal of Urology International* (BJUI) and I also work a little bit with the American Urological Association (AUA) *Journal of Urology*, and there's increasing priority placed on collaborative research, especially if it's international collaborations, so some of your best efforts to learn and train should also then translate into thinking about how these might be your future research partners. Those type of papers, if you can as a group come up with an exciting hypothesis, pool data, do things perspective, comparative, even randomization if you can pull them off, will change the field moving forward.

TAU: Thank you.

For more details, please check out the interview video below (*Figure 2*).

Acknowledgements

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Footnote

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

References

1. Poon B, Wu MY, Zhou SL. Interview with Dr. John W. Davis: don't be afraid to start over and learn new things. *Asvide* 2018;5:123. Available online: <http://www.asvide.com/article/view/23351>

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