## **EAUN Fellowship at MSK**

## Insights from the Department of Nursing Research Memorial Sloan Kettering Cancer Center



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The EAUN offers every year a one to two-week fellowship to its members. With the overarching goal to foster the highest standard of urological nursing care throughout Europe, nursing research activities becomes mandatory to improve the level of evidence-based care.

This year, the Aarhus University Hospital (represented by Bente Thoft Jensen) received the fellowship award and visited the Office of Nursing Research at Memorial Sloan Kettering Cancer Center (MSK) in New York from 2 to 16 April this year. For years, the Aarhus University Hospital, EAUN and MSK have been cooperating through educational initiatives, research, publications, and contributions to scientific meetings of the EAUN. The scope of this fellowship was to observe and identify possibilities to further engage in research projects between/within our institutions and the EAUN.

The goal at MSK is to provide state-of-the-art cancer treatment and care. Moreover, MSK seeks to improve the lives of cancer patients through dynamic partnerships with the patients and their local care providers. Besides providing patients with the best possible cancer care, the Memorial Hospital maintains an extensive research programme that focus on basic laboratory research, and translational research that bridges discoveries made in the laboratory and those made in the clinic.

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To provide the best care, MSK has reinforced the focus on nursing research and the Director of Nursing Research, Dr. Margaret Barton-Burke, past chair of the ONS, has been leading the Office of Nursing Research since 2016. When Dr. Barton-Burke took office, the number of nursing research activities at MSK have grown tremendously and her research team now consists of five junior and senior researchers and administrative co-workers supported by different service departments including the Department of Clinical Research Administration and support service. A new trend is also seen with several PhD and master students from the states of New Jersey and New York affiliating with the research team.

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The two-week programme was carefully set up in cooperation with Dr. Margaret Barton-Burke and her staff. During the planning phase, it was possible to arrange specific meetings in those clinics, which had the highest interest in potential partnership in upcoming research protocols. The actual programme was divided into two tracks; workshop with nurses and nurses leaders engaged within research in clinical practice and conditions for research on administrative and educational level at MSK.

### **Workshop activities**

During the workshops, at the Rockefeller Institute, I met with the local group of CNSs and NPs from different cancer specialties and discussed the "life of nursing research" in clinical practice. Another interesting topic was how we define and differentiate between developments and research in nursing. What are the educational needs and minimum set of

institutional requirements to make a nursing research programme a success? Clearly, we face the same kind of challenges in the clinic and organisational spheres despite the differences between our healthcare systems. Among the participants in the workshops was CNS Nora Love, well-known for several outstanding lectures at the EAUN meetings, EAUN-speaker Mallory Bowker, Department of Surgery and Nurse Leader Beau Amaya, Outpatient Genitourinary Services, who welcomed further initiatives to improve evidence-based care in urology.

Following the research track, I met with the group of experts facilitating sexual health in females care after major cancer surgery. My special thanks to Dr. Jeanne Carter, Head of the Female Sexual Medicine & Women's Health programs, Gynecology Service, Department of Surgery, and Dr. Shari Goldfarb, MD, Department of Medicine. They both assisted with experiences, discussions and considerations on how we can join forces and possibly improve awareness on sexual aspects in survivorship care in females undergoing major abdominal cancer surgery. NP and PhD student Lisa Mill added to the information regarding barriers in female sexuality issues during the past 20 years, and noted how the public awareness in this field still lacks professional interest.



Director of Nursing Research, Dr. Margaret Barton-Burke and her staff



Nurse Forum at MSK April 2018

Participating in the IRB-meeting was encouraging, particularly the issues on nursing care and patient perspective, which are highly recognised and pivotal in any research protocol at MSK. Moreover, the actual numbers of nursing-based research protocols are significantly increasing along with the growing acknowledgement of the importance of our contribution to research in patient care.

Finally, I lectured at the Nurse Forum at MSK to present results of earlier shared research projects. I expressed my appreciation for the continued interest and support of the Office of Nursing Research, MSK to cooperate with the EAUN and Aarhus University Hospital. Special thanks to Dr. Guido Dalbagni, Department of Surgery (MSK), Dr. Jørgen B. Jensen (AUH) and Director of Nursing Research, Dr. Margaret Barton-Burke and her staff who all have been very supportive of this "journey" in the last couples of vears.



The European Association of Urology (EAU) and the Society of Urologic Oncology (SUO) are pleased to announce a new scholar exchange programme. The two associations may send one of their members for a two-week scholarship at a department of choice following the other association's Annual Meeting. With the 2018 programme, the EAU provides a great opportunity for one selected European onco-urologist to attend a two-week scholarship in the USA!

### The Scholarship

In 2018, the visit will start with attendance of the 19th Annual Meeting of the SUO, held in Phoenix AZ on 28-30 November 2018. Preferably, the applicant will have submitted an abstract to the congress to encourage scientific exchange. The departmental exchange will take place directly following the Annual Meeting.

All meeting registration fees will be waived and travel and accommodation will be covered by the EAU and SUO.

Don't miss out on this unique opportunity and apply now! Deadline: 1 August 2018

### Information and application forms

For all further information and application forms please visit www.uroweb.org, and select 'our partners' at the bottom of the page, and select EAU-SUO. Or contact the EAU Central Office, a.terberg@uroweb.org.





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# Using cannabis in prostate cancer patients

## Although popular using cannabis oil to 'cure' prostate cancer remains unfounded



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In our hospital's daily practice we notice the popular use of cannabis oil in prostate cancer (PCa) patients. As a nursing specialist for urology, I have even met patients who are so convinced of the curative benefits of cannabis oil in treating prostate cancer that they replace standard treatment with the use of cannabis oil.

These patients include those who have localized prostate cancer where active surveillance is followed, those with biochemical recurrence after treatment, and patients with metastatic PCa. I have always wondered whether cannabis oil could indeed be a cure for prostate cancer. Unfortunately, I do not see in practice the desired beneficial effect and the PSA values continue to rise. To find some answers, I did a search in scientific literature.

Cannabis, a very easy plant to grow, has been used for centuries for its medicinal properties. The oldest known document about cannabis use originates from the Chinese emperor Shen Nung in 2727 B.C.. It suggested that cannabis has a neuron-protective effect. The Egyptians used cannabis to treat glaucoma and as an anti-inflammatory agent (inflammation of the eyes, fever). Cannabis was even used in obstetrics (mixed with honey) and the mixture was applied in the vagina to "cool" the uterus. In the Old Testament, there is also an account of God instructing Moses to make a holy anointing olive oil-based "Kaneh Bosm."



Cannabis contains more than 400 chemical components 80 of which contain cannabinoid components and 200 non-cannabinoids components. For medical purposes, cannabinoid substances such as THC (Delta-9-tertrahydrocannabinol), CBD (cannabidiol) and non-cannabinoid substances such as terpenoids and flavonoids are relevant.

Medicinal cannabis must be distinguished from recreational cannabis which is used to achieve a psychotomimetic state of 'high'. Cannabis strains used for recreational purposes contain a higher THC and lower CBD ratio than cannabis for medicinal use. Usually two cannabis plants are used: cannabis sativa which has a higher THC concentration and cannabis indica which has a higher CBD concentrate. The flavonoids are known for their antioxidant and anti-inflammatory effects. The terpenoids are resins (oil) with a strong odour.

In the 1990s, the endocannabinoid system (ESC) of the body was discovered by Raphael Mechoulam, an Israeli professor of medical chemistry. The endocannabinoid system, a central regulatory system, is the body's largest receptor system and is important to maintain the homeostasis of the body.

Human beings produce their own cannabinoids (endocannabinoids) according to need and are not stored in the body. Like endorphins, the human body produces endocannabinoids in response to activities such as physical exercise (the high of runners might be due to endocannabinoids, not endorphins!).

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Cannabinoid receptor type 1 (CB1) is mainly found in the brain, and also in the lungs, the reproductive organs, etc. Cannabinoid receptor type 2 (CB2) is usually located in the immune system and in the bones. THC mainly works on CB1 receptors, CBD on CB2 receptors.



In vitro studies with THC have shown that cannabinoids affect migration, angiogenesis and apoptosis (programmed cell death) of cancer cells, but each type of cancer appears to respond differently to the effect of exogenous cannabinoids. Many types of cancer cells have a higher concentration of CB1 and CB2 receptors.

#### Use of cannabis in cancer

- Pain: Cannabinoids have been used for centuries to lessen pain. Historical texts and old pharmacopoeia noted the use of cannabis for menstrual cramps, pain during childbirth, and headaches. Studies have shown that the cannabinoids have no effect on acute pain and post- operative pain. Two placebo-controlled studies with a cannabis extract showed modest benefits when using cannabinoids in addition to opioids and other adjuvant pain-killers in cancer patients with chronic pain. However, the effect of cannabinoids in chronic neuropathic pain was clearly demonstrated in 29 randomized studies.
- Nausea and vomiting: An initial study in 1975 showed a beneficial effect of THC on nausea induced by chemotherapy. Subsequently, two systematic reviews showed benefits of cannabinoids in nausea and vomiting due to chemotherapy, but most studies were observational or uncontrolled.
- Stimulation of appetite: Cannabinoids seem to have only a modest effect in cancer patients with cachexia. More promising results were seen in studies in the population without cancer.
- Pre-clinical studies (in vitro = cells in laboratory and in vivo = in mouse model) have shown the antiproliferative, anti-metastatic, anti-angiogenic and pro-apoptotic effects of cannabinoids in various malignancies (lung, glioma, thyroid, lymphoma, skin, pancreas, endometrium, breast and prostate). Even if an identified substance in vitro / in vivo appears to have a beneficial effect on a disease, it is important to realise that only one in 5,000-500,000 substances obtain a registration and becomes available to the patient (after 10-16 years of different study phases). Cannabis has never been clinically studied as a treatment for malignancy.

On the Internet, patients can get a lot of information about the curative effect of cannabis oil on prostate cancer but this information extrapolate the results of pre-clinical work to possible effects in people without any factual evidence. I often see patients in the doctor's office showing me a website where it has been proven that cannabis oil can cure prostate cancer, which is obviously their own interpretation. In my view this can be a misleading message even though the website does not explicitly provide false information. The website [See figure below] shows information which is based on a study published in the British Journal of Cancer. This is correct, but the website "neglects" to mention that this is a publication of an in vitro study. The patient might not even know what an in vitro study is and is not aware that there are no studies on humans yet to prove this.

A challenge for the caregiver can be that the patient is convinced that we as healthcare practitioners work together with the pharmacists, and that we do not wish to carry out clinical trials (unfortunately I hear that very often). We can hardly persuade patients that this is not true.



It is also important that we inform the patient about the possible interactions of cannabis oil with certain regular medications such as Coumarin (this blood thinner interacts with cannabis oil, leading to an increase of the INR and a greater risk of bleeding!).

There are different types of cannabis oil available, such as CBD and THC oils with different concentrations which makes it difficult for patients to make a choice.

### **Conclusions:**

- There is no proof of cannabis oil as cure for prostate cancer;
- It is important not to be prejudiced or judgmental against patients who use cannabis oil;
- Listening to the patient's view can be helpful since the patient often confides to the nurse rather than to their physicians;
- Avoid persuading patients not to use cannabis oil, but try to convince them of the need to follow a regular treatment combined with cannabis oil; and
- Consider adverse interactions between cannabis oil and certain medications and inform your patient about these.

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# **EAUN supports urology nursing in China and Hong Kong**

Four more collaborative training centres for exemplary nursing care opened in 2018



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The EAUN has built good links with China and Hong Kong over a number of years and this year the EAUN was invited again to collaborate with the Chinese **Urological Association of Nursing (CUAN) and Urology** Nurses Association of Hong Kong (UNAHK) to run five joint conferences and workshops across Hong Kong.

Previous years have covered prostate cancer but this year the requested focus was on bladder cancer. Two board members Paula Allchorne (EAUN Chair Elect and Nurse representative of the Action on Bladder Cancer Charity) and Lawrence Drudge-Coates (EAUN Past Chair) were chosen as expert EAUN speakers to join an experienced CUAN and Hong Kong Team to teach on innovations and exemplary nursing care in this important area. With this aim, the EAUN, CUAN and UNAHK team jointly designed and implemented an educational programme for the urology nurses in Hong Kong, Guangzhou, Hefei, Beijing, and Tianjin over a nine-day period. China, with its geographical size, required a schedule that was intensive with short stops and long hops (journeys) to the five centres to reach the maximum number of nurses in this short timeline.

Paula and Lawrence delivered state-of-the-art lectures on the UK experience regarding the diagnostic pathway and bladder cancer management, which included nurse-led diagnostic and follow-up clinics and the

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management of intravesical treatments. The EAUN lectures in Hong Kong and China (Guangzhou, Hefei, Beijing, Tianjin), were attended by 1048 local delegates, but this year the organisers used cuttingedge technology to reach out to thousands of other nurses who were not able to make the long trips to these cities. This had a large impact, the lectures were podcasted in real time and 56,000 nurses and doctors registered online to watch it live. An amazing number, which would take most lecturers their whole career (or a lifetime) to reach, but China does have a very large population and a large number of urology nurses who are interested in education!

"... the lectures were podcasted in real time and 56,000 nurses and doctors registered online to watch it live."

Paula and Lawrence also ran four workshops (Hong Kong, Guangzhou, Hefei and Tianjin) on the safe administration of intravesical treatments, closed systems and safe handling of any spillage; these were hands-on workshops where 418 nurses attended. They also ran sessions on flexible cystoscopies, handling of the equipment, anatomy and pathology. The sessions were interactive and the delegates



Interactive workshop in Tianjin being podcasted



Nurses on the ward in Guangzhou

feedback was extremely positive, from the podcasts alone there were over 2,400 responses from the participants.

Besides the lecture tours and workshops, the EAUN/ CUAN/UNAHK collaboration is keen to develop a lasting legacy in China and Hong Kong to facilitate urology nursing and have set up a number of Nursing **Education Centres throughout China. This elegant** model has been producing great benefit by locally enhancing the care that patients receive. On this trip four training centres were officially opened in Beijing, Hefei, Tianjin and Guangzhou besides those opened in previous years in Hong Kong and Hangzhou. These new



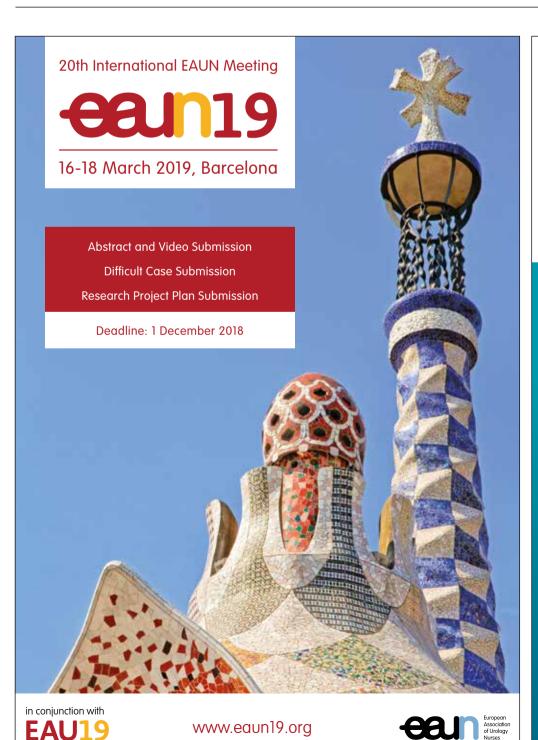
Opening of Tianjin training centre

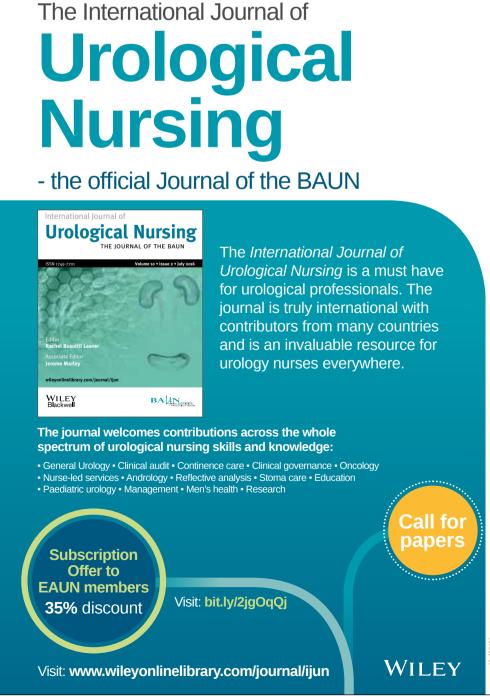
centres further demonstrate the strong connections between Europe, Hong Kong and China and their shared enthusiasm for high-quality education. At the opening, Paula gave five inaugural speeches at each centre on behalf of Susanne Vahr Lauridsen (Chair of the EAUN), highlighting the importance of the global work going on and, in particular, the guidelines that the EAUN have developed for Europe that are now being used internationally.

The schedule for this work has been impressive and the impact of this collaboration reflects well on all the three societies (EAUN, CUAN & UNAHK). Importantly, it shows that the aims and aspirations of the EAUN synchronise well with other National Nursing Societies as they provide nurses with the tools, platform and framework to deliver high standards of care. The EAUN is justly proud of the fact that it produces evidence-based guidelines that are being used globally and it provides standards for training and practice, for European urological nurses, that can be a guide for other countries. The EAUN has grown into an organisation that is keen to work with other countries to nurture nursing excellence in urology to improve the care patients receive worldwide. This trip reached an incredible number of nurses in such a short time and the organisation for next year has already begun.



Small group photo in Beijing





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