

BSGE TRAVELLING FELLOWSHIP REPORT

Advanced Observership in Endometriosis Ultrasound with Dr Mathew Leonardi, McMaster University / Hamilton Health Sciences and SUGO, Hamilton, Ontario, Canada

Applicant	Dr Kelly Haldane, ST6, undertaking the Special Interest Training Module (SITM) in Management of Complex Non-Malignant Disease (MCND); North Bristol NHS Foundation Trust
Dates of visit	13–22 July 2026. The visit comprised 6 structured clinical/theatre days; the remaining days were travel days and the intervening weekend.
Host institution	McMaster Children's Hospital / Hamilton Health Sciences, Hamilton, Ontario, Canada, including SUGO (Specialized Ultrasound in Gynecology & Obstetrics)
Supervising clinician	Dr Mathew Leonardi, MD, PhD, FRCSC — Advanced Gynaecological Surgeon and Sonologist; Associate Professor, McMaster University; CEO & Medical Director, SUGO

1. Introduction and Rationale

Transvaginal ultrasound, performed to a systematic, protocol-driven standard, is recognised as a reliable, non-invasive means of diagnosing and mapping both superficial and deep infiltrating endometriosis (DIE), including bowel and ureteric involvement, and underpins ENZIAN staging, the standardised, compartment-based classification now required for all BSGE-accredited endometriosis units.

I am an ST6 trainee at North Bristol NHS Foundation Trust, currently undertaking the Special Interest Training Module (SITM) in Management of Complex Non-Malignant Disease (MCND). Having already completed a fellowship in endometriosis, I sought to advance my skills further at a high-volume, internationally recognised centre of excellence, to improve my diagnostic accuracy in complex and subtle disease and my ability to correlate imaging with surgical findings and structured reporting. I was awarded a BSGE Travelling Fellowship to support an observership with Dr Mathew Leonardi at McMaster Children's Hospital / Hamilton Health Sciences, Hamilton, Ontario, Canada, from 13 to 22 July 2026, of which six days comprised structured clinical and theatre-based observership. This report summarises what I observed and the key learning points I intend to bring back to my practice, my unit in Bristol, and my SITM portfolio.

2. Aims and Objectives

The objectives I set for the visit, as outlined in my original application, were:

- To refine advanced ultrasound techniques for mapping endometriosis, including bowel, ureteric, and extra-pelvic disease.
- To improve diagnostic accuracy and confidence in complex or subtle presentations.
- To develop expertise in structured reporting and direct correlation with surgical findings.
- To understand imaging-led multidisciplinary team management and surgical planning, including the principles of ENZIAN staging.

3. Host Institution and Supervisor

Dr Mathew Leonardi is an advanced gynaecological surgeon and sonologist, Associate Professor at McMaster University, and founder, CEO and Medical Director of SUGO (Specialized Ultrasound in Gynecology & Obstetrics), a dedicated specialist ultrasound clinic operating alongside McMaster University / Hamilton Health

Sciences. He holds a PhD on the role of ultrasound in the diagnosis and surgical management of endometriosis. His practice combines a high-volume, protocolised endometriosis ultrasound service with laparoscopic excisional surgery, allowing direct correlation between pre-operative imaging and operative findings — a model I was particularly keen to observe.

4. Overview of Clinical Exposure

This visit involved six structured clinical days were arranged across two settings: McMaster Children's Hospital and SUGO ultrasound clinic (scanning alongside the Ultrasound Fellow, a Resident on scanning elective, and Dr Aharoni). Across these six days I observed 32 individual ultrasound consultations and two surgical cases, giving broad exposure to the full spectrum of endometriosis presentations, its principal differential diagnoses, and the normal (negative) scan. I also attended a full day of theatre involving two laparoscopic endometriosis excision cases each preceded by a saline-infusion endometriosis scan.

5. Systematic Approach to Scanning

A defining feature of the SUGO approach was the use of a consistent, step-wise scanning protocol for every patient, with extensive use of cine loop capture (rather than isolated static images) throughout. The steps observed were:

1. Cine loop on entry.
2. Uterine measurements, including cervix and endometrial thickness.
3. Sagittal sweep of the uterus, left to right, with and without colour Doppler.
4. Transverse measurements of the uterus.
5. Cine sweep of the uterus, superior to inferior, with and without colour Doppler.
6. Ovarian measurements and assessment of mobility.
7. Cine sweep of the ovaries in transverse and sagittal planes, with and without colour Doppler.
8. Anterior compartment assessment:
 - Anterior sliding sign.
 - Utero-vesical (UV) fold.
 - Bladder.
 - Ureters.
9. Posterior compartment assessment:
 - Posterior sliding sign (assessing for pouch of Douglas (POD) obliteration).
 - Uterosacral ligaments (USLs).
 - Bowel.

6. Service Delivery Model: Broader Observations

Beyond the clinical protocol itself, several observations about how the service was delivered stood out as being of real relevance to how an advanced endometriosis ultrasound service could be structured in Bristol:

- Because every stage of the protocol was captured on extensive cine loop rather than static images, the supervising consultant was able to review each scan electronically to a high standard after the event, even when not physically present for the scan itself, supporting consistent quality assurance across multiple sonographers, fellows and residents.
- This combination of a systematic protocol, comprehensive cine-loop capture, and remote/asynchronous consultant review is, in my view, an important and scalable service delivery model, and one I believe would be genuinely valuable to establish within a dedicated endometriosis ultrasound service in Bristol.

7. Key Learning Points

- A consistent, compartment-based scanning protocol, as above, allows reproducible assessment aligned with ENZIAN principles and should underpin any endometriosis scanning service seeking BSGE accreditation.
- Saline-infusion techniques (SonoPODography) are a valuable adjunct where superficial peritoneal endometriosis (SPE) is suspected but not clearly seen on a standard scan, and were used repeatedly to clarify equivocal findings.
- A broad differential for chronic pelvic pain must be actively maintained: several patients ultimately had adenomyosis, fibroids, pelvic venous disorder, or Post-Ablation Tubal Sterilisation Syndrome rather than endometriosis, and a meaningful minority of endometriosis-protocol scans were entirely normal.
- Direct comparison of pre-operative ultrasound findings with intra-operative laparoscopic findings, in patients scanned and operated on by the same clinician, was the most valuable single element of the visit for building confidence in correlating imaging with surgical findings.
- Scanning technique must be adapted to the individual patient; a full protocol is not always appropriate or tolerable, and communicating the limitations of an incomplete examination clearly is part of good practice.

8. Reflection and Impact on Future Practice

This observership built directly on my existing fellowship training, deepening my understanding of structured, protocol-driven scanning and how high-quality imaging — and the service model around it — can support both diagnostic accuracy and surgical planning. In line with my original application, I intend to apply this learning by enhancing ultrasound pathways for suspected endometriosis within my unit, improving pre-operative staging through more detailed compartment-based documentation, supporting structured reporting aligned with ENZIAN classification, and delivering teaching to trainees and colleagues. I also plan to advocate for wider adoption of comprehensive cine-loop capture to support remote consultant review, and to explore offering patients the option of self-inserting the probe. I will incorporate this experience into my SITM portfolio as evidence of advanced training in endometriosis imaging.

9. Next Steps

I plan to present my experiences at the North Bristol Trust Endometriosis away day in September and propose a structured way to begin to introduce ultrasound with regularity into our clinics. This will include the above as well as looking at changing the clinic template, discussions regarding involvement of sonographers, and how to further develop expertise scanning.

10. Conclusion

This observership provided outstanding exposure to advanced, protocol-driven endometriosis ultrasound and its integration with surgical practice and service delivery, delivered by an internationally recognised expert in the field, and built meaningfully on my existing fellowship training. I would strongly recommend this placement to other trainees with an interest in benign gynaecology and pelvic ultrasound, and I am grateful to the BSGE for supporting this valuable experience.

Kind regards,



Dr. Kelly Haldane

August 27, 2026