



Center For Advanced Fetal Care Newsletter

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Beautifully Unfinished...

...Some of us are blessed with the ability to write about **our own endings**. Others are not. Some of us are blessed with the ability to come full circle. Others are not. Some of us are blessed with the ability to recognize the last phase of our journey through life. Others are not. So much is left beautifully unfinished, unfulfilled and **unvarnished**. For me, this is a very personal issue of the newsletter with the final closure of CFAFC and SANA Medical NGO. As such I dedicate this, my final issue, to all that is beautifully unfinished, be it over or not, in every aspect of our personal and professional lives. I dedicate it to beautiful Lexie Cowger, a dear colleague and beloved friend who was stolen from us mid-sentence. She left behind a hollow circle of dreams, hopes and aspirations, and a gaping hole in our hearts. I dedicate it to all those who toil through life radiating beauty in spite of overwhelming **adversity**. I dedicate it to all the patients whose lives I had the opportunity to touch, and to the unborn fetuses who granted me privileged access into a world of beauty and wonder. And now, as I myself come full circle and embark on the last phase of my journey through life, I return to Gainesville, my home away from home. With that, I leave much that is beautifully unfinished behind me. From now on, I shall look back with **nostalgia** and look forward with hope. My aspiration is that with this last issue, you shall reflect back on your own lives, with their inherent selfsame pain and pleasure, and commit to living them fully before they are **beautifully unfinished**...

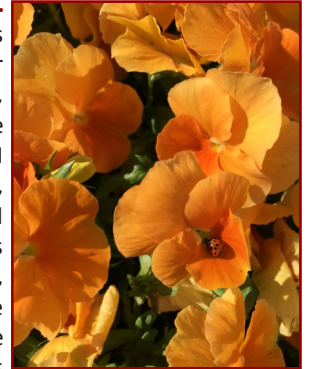


Photo by Lexie Cowger in her Garden

Editor-in-Chief

Reem S. Abu-Rustum, MD
Center For Advanced Fetal Care
rar@cfafc.org

Issue Contributors

Imad Aboujaoude, MD
imadaj22@hotmail.com

Gihad Chalouhi, MD, PhD
gihad.chalouhi@gmail.com

Linda Daou, MD
drlindadaou@gmail.com

Fabricio Da Silva Costa, PhD
fabriciodasilvacosta@monash.edu

Nabil Helou, MD
helounrs@gmail.com

Pete Magnuson
pmagnuson@aium.org

Richard Murray, MD
gatormd93@gmail.com

Lebanon: Site of First ISUOG Basic Training Certificates Ever

It was an historic moment for both **ISUOG Basic Training** (BT) and Lebanon as the **first group of trainees ever** received their ISUOG BT "Certificates of Completion" on 11 May 2018 following a year-long course run by SANA Medical NGO and Aboujaoude Hospital. The 10 junior trainees, in both Ob/Gyn as well as Radiology programs at the Lebanese University and the University of Balamand, underwent theoretical as well as practical training between 29 April 2017 and 28 April 2018. This was via monthly sessions with local instructors (Drs. Imad Aboujaoude, Reem S. Abu-Rustum, Linda Daou and Nabil Helou) as they watched ISUOG BT lectures and discussed them with the instructors highlighting the take home messages. The trainees collected images according to strict criteria and they uploaded them to DropBox for review and commenting on by the faculty. They also spent countless hours in simulation-based training in order to enhance their practical skills.



The Trainees After the Testing

The trainees' knowledge and skills were assessed by Professors Alfred Abuhamad and Katia Bilardo. For the theoretical assessment, they sat for a comprehensive theoretical exam provided by ISUOG BT. Subsequently, their practical skills were assessed. For the obstetrical component, they scanned live patients and they were required to demonstrate the components of the 6-Step Approach and generate key anatomic and biometric planes of the fetus. For the gynecological component, they were assessed by Sharon Abuhamad, RDMS as they carried out gynecologic scans on SANA's SonoSim simulator. In addition, one of the trainees was in Belgium and he carried out live scanning where a colleague was filming him live and the group in Lebanon was watching him via FaceTime. It truly proved to be an incredible experience. The trainees left quite an impression on their assessors with their fund of knowledge and their systematic approach to scanning.



Proudly Displaying the ISUOG Certificates

The trainees received their certificates from Professors Abuhamad and Bilardo during an unforgettable Gala Dinner held as part of Lebanon's First ISUOG-Approved Course "Advances in Ultrasound in Obstetrics and Gynecology". They, in turn, gave Professors Abuhamad and Bilardo tokens of appreciation commemorating this special event. And now, from Lebanon, we all convey our sincerest appreciation to ISUOG and the ISUOG BT Task Force for the comprehensive easy-to implement curriculum.



Thank you Profs. Abuhamad & Bilardo

Our pilot shall now expand to a larger group of trainees in Lebanon with Dr. Gihad Chalouhi replacing Dr. Reem S. Abu-Rustum. For information contact isuog.bt.lebanon@gmail.com. The aspiration is that from the heart of Lebanon, the ripple effect shall propagate across the region, and subsequently the globe, in order to fulfill ISUOG's vision where all women have access to sonographic examinations carried out by skilled sonologists.

Highlights from the AIUM Annual Convention Held 24-29 March 2018 Held at the Hilton Midtown, New York, NY

It proved to be a landmark meeting for the **AIUM** this past March in New York where over 1500 attendees with all backgrounds and from various disciplines gathered for an intense 5 days in NY City with all the excitement and promise that NY has to offer! The **convention** covered 19 different communities of practice and there was much cross-pollination across the disciplines this year with special meet-the-professor sessions, many hands-on learning labs and a unique exhibit with first-hand opportunities to see the latest products. The convention commenced with the yearly SonoSlam with more teams than ever before representing various medical schools who are on the forefront of integrating ultrasound into medical education. There were also 2 obstetrical pre-convention courses: one dedicated to the up and coming role of ultrasound at 11-14 weeks, and the other focusing on the practical approach to the basic obstetric and gynecologic ultrasound. Unique this year was the obstetrical case challenges that were preselected from a pool of submissions. The cases were prepared and presented by residents and fellows and the audience voted in order to select the best case. A text book was awarded to the top case and this year, the awardee was Daniela Pino, a resident at Texas Tech University who chose a book from the exhibit that was awarded to her by Prof. Joan Mastrobattista, chair of the Obstetric Community of Practice. Plans are underway for next year's convention coming to Orlando in April. For more details, visit the **AIUM Website**.



Prof. Mastrobattista and Dr. Pino

Highlights from the ISUOG International Symposium Held 20-22 April 2018 at the Olympic Hotel in Athens, Greece

Each year, **ISUOG** holds its annual **International Symposium (IS)** in April and this year it was held in Athens, Greece. This proved to be one of ISUOG's most successful IS with over 550 delegates from over 70 countries who were present onsite or joined via live-stream. The symposium commenced with an ISUOG Basic Training pre-convention that was live streamed across the globe to 5 satellites. The course covered the basics of scanning, from 4 weeks onwards, with a special focus on fetal biometry and growth, assessing the placenta and fluid, cervical assessment as well as the most commonly encountered anomalies. It commenced and concluded with a pre- and a post-test to gauge the impact that the course had on the trainees. During the opening session, the top submitted abstracts were presented. On the subsequent 2 days, there were two concurrent sessions: an obstetric anomalies course given by leaders in the field and a gynecologic course. The two courses ran in parallel with many live-scan demonstrations using the latest sonographic equipment covering the fetal heart, brain as well as the first trimester anomaly scan. The live-scan demonstrations were a highlight of the symposium and they were delivered to a packed audience. One cannot but comment on the majesty of Athens, the gracious hospitality of the Greek and the all together mesmerizing atmosphere. It truly proved to be a magical few days in Athens under the Grecian Sun! For upcoming ISUOG activities and future ISUOG IS, visit the **ISUOG Website**. In addition, for highlights from the course, watch the **course video**.



Prof. Vrachnis

Highlights from the First ISUOG Approved Course Held in Lebanon 11-12 May 2018 Held at Le Royal Hotel in Dbayeh

It was a dream-come-true to host the first ever **ISUOG-Approved Course in Lebanon** 11-12 May 2018 and it proved to be a most memorable event. **"Advances in Ultrasound in Obstetrics & Gynecology"** was organized by SANA Medical NGO and Aboujaoude Hospital and it was under the patronage of the Lebanese Order of Physicians - Tripoli and in cooperation with LSOG and NSOG. Delegates from all over Lebanon as well as from neighboring Syria, Jordan and as far as the UK gathered in the grand setting of Le Royal Hotel for the course. The reviews were overwhelmingly positive regarding the high level of the scientific sessions and the organization of the event. The event's success is owed to our amazing speakers who took our attendees through a journey of marvel into the world of ultrasound. The course covered all imaginable aspects of Ob/Gyn ultrasound: from the first trimester scan and its role in the era of cfDNA, to the second trimester scan with a special focus on the fetal heart, to the third trimester scan with a focus on growth and a discussion on the management of twins. In addition, an overview of the evaluation of the female pelvis ensued. At the end of the course, delegates were mesmerized as Prof. Abuhamad and Bilardo carried live scan demonstrations utilizing the latest sonographic equipment. The meeting was not only a venue for the exchange of science and education but it was also an avenue for reuniting old friends, establishing new friends and acknowledging the world-class faculty amongst us. This was Prof. Abuhamad's first visit back home in nearly 2 decades, Prof. Bilardo's first visit to Lebanon and Prof. Visser's third. The priceless contributions of Prof. Abuhamad, Bilardo and Visser to global maternal health in general, and to our Lebanon in particular, were recognized during our gala dinner. Shields of honor were presented to them by Dr. Omar Ayyash, President of the Lebanese Order of Physicians - Tripoli, Prof. Antoine Abu Musa, President of the Lebanese Society of Ob/Gyn, in addition to tokens of appreciation from SANA Medical NGO and Aboujaoude Hospital. SANA Medical NGO and Aboujaoude Hospital also presented tokens of appreciation to LOP, LSOG and NSOG and a special token of appreciation was also presented to ISUOG for the incredible support. Finally, commemorating SANA's 7th anniversary on May 19, special recognition to "Friends of SANA" was handed to Prof. Abuhamad and Bilardo, Aboujaoude Hospital and Drs. Daou and Helou. A crowning event during our gala was providing the first ever ISUOG BT certificates to 10 trainees in Lebanon (details can be found on page 1). Indeed our memory is replete with incredible images from a new gold standard in ultrasound courses in Lebanon! We owe it all to our distinguished speakers: Professors Abuhamad, Bilardo and Visser without whom this dream would not have been realized. And now, we hope that this event shall become a yearly tradition where we may all be reunited in the future in our beloved Lebanon...



Professors Abuhamad and Bilardo

SANA's Bittersweet Finale With a Total of 55 Certified Trainees During SANA's 7 Years...

It is with much sadness that **SANA's** journey has to come to an end after 7 amazing years where SANA was able to carry on with its medical and educational missions in Lebanon. Founded in loving memory of **Dr. Sana Elias** in cooperation with ISUOG, and enabled by loyal **supporters** and **volunteers**. SANA's aim was to apply ISUOG **Outreach's** guidelines: from providing free obstetrical care to underserved women in Lebanon, to empowering local health care providers through ultrasound education. With passion and dedication, SANA was able to provide free comprehensive prenatal care, inclusive of obstetrical sonography, to ~2000 women, Lebanese, Palestinian and Syrian refugees, in addition to providing nearly half as many consultations. More importantly, SANA introduced the ISUOG Outreach program and more recently, SANA implemented the first **ISUOG Basic Training "Pilot"** program here in Lebanon (details on page 1). The result has been the certification of 55 trainees in total. This year has been the busiest year with the **largest class** of 14 midwives, graduates of the Lebanese University, certified in April, and the **last group** of 8 midwives at Aboujaoude Hospital certified in June. In total, there were 45 midwives and physicians who were trained in accordance with ISUOG Outreach Guidelines, and 10 Ob/Gyn and Radiology residents who were trained in accordance with ISUOG Basic Training Guidelines and awarded the first ISUOG Basic Training Certificates of Completion in the world! SANA's journey is beautifully unfinished but not quite over yet: SANA's aspiration is that its trainees shall continue on with SANA's mission, spreading their knowledge through teaching sonographic skills to their colleagues and co-workers. In addition, SANA now passes the flame to Drs. Aboujaoude, Chalouhi, Daou and Helou who plan on continuing what SANA started and spreading ISUOG Basic Training all over Lebanon and the region (ISUOG BT Lebanon). May the spirit of Sana in SANA continue on: sustaining, aiding, nurturing and assisting...



LU Midwives



Aboujaoude Midwives

THIS AND THAT

SMFM Abstract Submission



SMFM's pregnancy meeting returns to Las Vegas 11-16 February 2016 with its customary pre-convention advanced courses and cutting-edge scientific research. Abstract submission is now open. For more details on registration and abstract submission, visit the [SMFM Website](#).

Upcoming LSOG



The 22nd Annual International Meeting of the LSOG is planned for 8-10 November 2018. This has become a landmark meeting with over 1500 attendees expected from Lebanon as well as the region. This year's scientific meeting proves to be no less outstanding with the participation of such international experts as Professors Mary D'Alton, Richard Berkowitz, Sean Blackwell, George Saade and Baha Sibai. For details, visit the [LSOG Website](#).

AIUM Abstract Submission



AIUM returns to Orlando for its annual convention which is planned for 6-10 April 2019. Building on the success of the 2018 congress, this year there will be more interactive learning labs and meet-the-professor sessions together with the latest in ultrasound research from 19 disciplines. Stay tuned to the [AIUM Website](#) for abstract submission, course details and registration information in the next few months!

Recommended App



A perplexing issue for patients and physicians alike has always been the safety of over-the-counter medications for use in pregnancy, particularly with the constant addition of new products. However, we now have a most valuable app, "Pregnancy Approved" put forth by Richard Murray, MD (Gator MD Class of 1993) to help determine precisely what to use and what to avoid. CFAFC highly recommends the app which is available via [iTunes](#).

CFAFC News



After 21 years, **CFAFC's** Reem S. Abu-Rustum has come full circle; she is set to leave Lebanon and go back to the University of Florida, her alma mater, where she has accepted the position of Associate Professor in Maternal Fetal Medicine amidst her mentors, dear professors and colleagues. She had the honor of receiving the **AIUM Presidential Award** in March, and in May the **Shield of Honor** from the Lebanese Order of Physicians - Tripoli. She has been reappointed to the **AIUM Annual Convention Committee**. She presided over the ISUOG BT Summit in London in June. She spoke at the **AIUM** in NY in March, the **ISUOG IS** in Athens in April and the **Lebanon Advanced Ultrasound Course** in May. She has two pending publications in print: the first she had the privilege of co-authoring with Prof. Abuhamad that will appear in **BJOG** "Fetal Imaging: Past, Present and Future: A Journey of Marvel"; the second she co-authored with Drs. Ghosn, Helou and Ziade on first trimester MCA and CPR, and is set to appear in the **American Journal of Perinatology**. She leaves Lebanon enriched by beautiful memories albeit with a heavy heart...

Hot-Off-The-Press: Maxillo-Occipital Line

From Ramkrishna et al comes a new publication on a first trimester marker to aid in the prenatal diagnosis of open spina bifida.



Figure 1: Normal Fetus

In their publication in the *Journal of Maternal-Fetal & Neonatal Medicine*, the authors prospectively evaluated a line that is drawn on top of the fetal maxilla to the occipit (MOL), in the midsagittal plane. This was carried out on 100 normal fetuses with a known outcome who presented for a scan at 11-14 weeks, and retrospectively on 14 fetuses with open spina bifida.

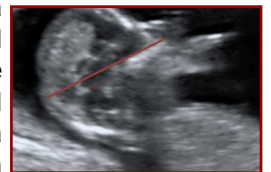


Figure 2: Fetus with Open Spina Bifida

The end point was to assess where the MOL was positioned with respect to the junction of the midbrain and the brainstem (denoted by an * in the figures). In normal fetuses, the MOL was below the junction in all 100 fetuses (Figure 1). In the fetuses with open spina bifida, the MOL was above the junction in all 14 cases (Figure 2).

The authors conclude that the MOL is a simple marker to assess since it can be obtained in the same "totipotential" midsagittal plane in which we assess the NT, NB, maxilla, IT, facial angle and now the MOL among others. Larger studies are needed to determine the false positive and negative rates of the MOL.

As with the introduction of any new marker, sonologists should exercise caution in interpreting their results. In case of any suspicion, the safest management would be to bring the patient back in 1-2 weeks for reassessment and ascertainment.

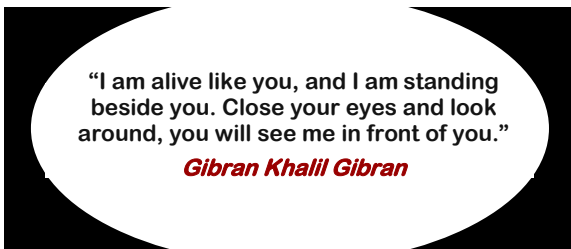
With the addition of yet another screening marker at 11-14 weeks, the value of the first trimester scan continues to mount in the era of cfDNA testing. The 11-14 week anatomic scan is a critical scan at a critical point in time that should not be forsaken...



Center For Advanced Fetal Care

Najah Center 1st Floor
 Aasheer Al Dayeh Street
 Tripoli - Lebanon
 Cell +96170236648

CF AFC expresses its sincerest appreciation to Imad Aboujaoude, Gihad Chalouhi, Linda Daou, Fabricio Da Silva Costa, Nabil Helou, Pete Magnuson and Richard Murray for their contributions to this issue, and to our beloved Lexie Cowger for the inspiration.



As I have journeyed through life, I have been blessed with unconditional love and support that have allowed me to see beauty in everything around me and live in a dream world. I am forever indebted to my parents, Sameer and Lina, my husband Kamil, my children, Maria & Karim, my dedicated staff, Rita and Zeina, Sana's family and SANA's Board. Thank you for having made the impossible possible...
 Reem S. Abu-Rustum

A Tear in the Garden: Tribute to our Dearly Departed Lexie Cowger by Pete Magnuson

Today was supposed to be like any other Monday. It's not.

This week was supposed to be like every other week. It won't be.

This year was supposed to be one of celebrations, excitements, and achievements.

It will be tinged with sorrow.

Today we mourn.

This week we will mourn.

This year we will mourn.

And when we mourn, we will remember. We will remember the way Lexie made us smile and laugh. We will remember the way Lexie cared about us as friends, coworkers, and people. We will remember the way Lexie tucked her hair behind her ears. We will remember that everything is as clear as mud.

And when we remember, we will cry. We will cry for her family. We will cry for her friends. We will cry because we miss her and want her to come walking through the door. We will cry because of the hole that is left in our hearts, in our family, in our lives.

And when we cry, the tears will fall. They will fall on our shirts. They will fall on our desks. They will fall each time we remember.

Some of the tears will fall to the ground. Those are the tears that will feed the grass, the flowers, the trees, and the gardens that Lexie loved. And as those gardens grow, we will see the beauty, the majesty, and the vibrant colors. We will see her and we will smile again.



Lexie's Garden by Lexie



Lexie's Tree at AIUM HQ



In Loving Memory of Lexie



Lexie's Smile

Upcoming Congresses

COURSE TITLE	DATES	LOCATION	WEBSITE ADDRESS
22nd International Conference on Prenatal Diagnosis and Therapy	Jul 8- 11, 2018	Antwerp, Belgium	https://ispdhome.org/ISPD2018
Fetal and Women's Imaging: Advanced Ob-Gyn Ultrasound	Sep 21 - 23, 2018	Seattle, WA	https://www.worldclasscme.com/conferences/fetal-and-womens-imaging-advanced-ob-gyn-ultrasound3/
7th International Conference on Fetal Growth	Oct 1 - 3, 2018	Milan, Italy	http://www.fetalgrowth.org
9th Annual Fetal Echocardiography: Normal and Abnormal Hearts	Oct 11 - 13, 2018	Las Vegas, NV	http://www.edusymp.com/product/details/1092
8th Annual Fetal Echocardiography Symposium at UCLA	Oct 20, 2018	Los Angeles, CA	https://www.cme.ucla.edu/courses/event-description?registration_id=241829
28th World Congress on Ultrasound in Obstetrics and Gynecology	Oct 20 - 24, 2018	Singapore	https://www.isuog.org/events/world-congress.html
3rd Annual Fetal Symposium on the Fetal Brain	Nov 1 - 2, 2018	Washington, DC	http://www.fetalbrainsymposium.com
The 9th Phoenix Fetal Cardiology Symposium	Nov 2 - 8, 2018	Phoenix, AZ	http://www.fetalcardio.com
22nd International Congress of the Lebanese Society of Ob/Gyn	Nov 8 - 10, 2018	Beirut, Lebanon	http://lsog2018.com/lsog.pdf
21st Mid Atlantic Ultrasound Symposium	Nov 16 - 17, 2018	Virginia Beach, VA	https://www.evms.edu/education/cme/