EFSUMB Newsletter meets ICUS -The International Contrast Ultrasound Society

New International Contrast Ultrasound Society (ICUS) founding member and Co-President, Dr. Steven Feinstein, interviewed by Professor Michael Bachmann Nielsen December 2008.

Steven Feinstein is a cardiologist specializing in prevention and noninvasive diagnosis of cardiovascular abnormalities. He also serves as director of the echocardiography laboratory at Rush University Medical Center in Chicago. Dr. Feinstein has worked in the contrast-enhanced ultrasound (CEUS) field for approximately 26 years and developed the first two FDA-approved ultrasound contrast agents, Albunex and Optison. He currently coordinates international research teams using CEUS to investigate vessel wall biology and identify early CV disease using surrogate markers of atherosclerosis, including myocardial perfusion, carotid IMT, and neovascularization (intra-plaque and adventitial vasa vasorum).

The idea behind ICUS

The International Contrast Ultrasound Society (ICUS; www.icus-society.org) is the only international multi-disciplinary medical society that is exclusively focused on the use of CEUS to improve patient care worldwide. "ICUS brings together physicians, scientists, and other ultrasound imaging professionals from around the world, representing such diverse specialties as cardiology, radiology, vascular imaging, gastro-intestinal imaging, oncology, OB-GYN, hepatology, etc. ICUS members are committed to working together across geographical and medical boundaries in order to help expand CEUS applications and improve the diagnoses of diverse clinical abnormalities. The organization also intends to be a strong, scientifically-principled voice for the field."

Advantages of CEUS - safety, accuracy, lower cost

"ICUS members are committed to the expansion of CEUS because contrast-enhanced ultrasound often provides a safer, more accurate, and more cost efficient diagnostic exam than other imaging systems. In particular, ultrasound contrast agents do not have the side effects associated with cumulative radiation, radionuclides or iodinated X-ray contrast agents. By enhancing ultrasound images, CEUS often helps pinpoint medical abnormalities with greater accuracy and with superior spatial and temporal resolution. CEUS also helps some patients avoid unnecessary, potentially riskier downstream testing. "

FDA restrictions created the need for ICUS

"The need for ICUS was first recognized last fall (2007), in the wake of the FDA's decision to impose new restrictions on the use of CEUS agents. Those new restrictions were largely reversed a few months later, in large part due to the emergence of a multi-specialty international grassroots movement that collaborated with industry and other professional societies. This collaboration produced powerful new safety data that were persuasive to the FDA and resulted in the reversal of most of the new restrictions."

"Soon, it became clear that the CEUS field needed a strong and focused voice and to compliment the efforts of existing organizations worldwide. The grassroots movement grew into ICUS, and in a few short months the organization has garnered members in 25 countries worldwide and established its own newsletter and website (www.ICUS-Society.com), which foster communication about CEUS across continents and professional disciplines."

ICUS meetings and educational/regulatory outreach

ICUS is organizing an international congress in Chicago October 21-23, 2009 (www.bubbleconference.com), and is developing plans to help educate regulatory officials, payors, the public and colleagues regarding the clinical value and benefits of using CEUS to improve the diagnostic accuracy across varied medical specialties.

The first ICUS international congress will correspond with the 24th Annual Advances in Ultrasound-ICUS meeting. The ICUS organization was launched in September at the 23rd Annual Advances in Ultrasound meeting.

Members of ICUS Executive Board are pictured just after the organization's launch. Top row: Brian Fowlkes, Fuminori Moriyasu, Maria Cristina Chammas, Stephanie Wilson, Petros Nihoyannopoulos, Michael Main. Bottom Row: Lennard Greenbaum, Paul Grayburn, David Cosgrove, Steven Feinstein, Barry Goldberg. Not pictured: Kurt Jaeger, Shintaro Beppu, Mark Monaghan, Wilson Mathias,

ICUS also would like to arrange a session during the WFUBM meeting in Sydney in 2009 devoted to the new organization's mission and advances in the field.

International guidelines

EFSUMB has published its recommendations for the use of ultrasound contrast agents, can we expect the same from ICUS? "Yes, as one of our first initiatives we plan to prepare a guideline that focuses on quality assurance and accreditation issues for physicians and sonographers in echocardiography laboratories, with a specific focus on the appropriate use of ultrasound contrast agents for cardiac chamber enhancement.

Contrast agents in the US

Optison and Definity have been approved in the United States for use in cardiac indications since 1997 and 2001, respectively. Other contrast agents are undergoing clinical trials aimed at gaining FDA approval for other clinical indications (e.g., SonoVue/Bracco, and Imagify/Acusphere).

Relation to other societies

"Although ICUS is an independent organization, it seeks collaborative and liaison relationships with other medical societies, WFUBM included."

No fee for ICUS membership or newsletter

ICUS membership is free, and its newsletter and informational updates are distributed to members via email at no cost. Anyone with an interest in the contrast-enhanced ultrasound field may join the new organization by visiting the ICUS website (www.ICUS-society.org) and signing up for membership.

Volunteer board, pro bono assistance from law firm

ICUS is run by an all-volunteer board of directors, committees and liaisons with other professional societies. They include the world's experts in the field of contrast-enhanced ultrasound, and represent diverse medical specialties and geographic regions. (Their names follow at the end of this article.)

In addition, ICUS receives pro bono (i.e., free) assistance from the law firm of Sonnenschein Nath & Rosenthal LLP, an international firm with offices in numerous cities throughout the United States and Europe. Through its pro bono program, Sonnenschein contributes attorney and staff time and other firm resources to select organizations that serve the public interest. Sonnenschein added ICUS to its list of pro bono clients in 2008 and the law firm's strategic communications group now produces the ICUS newsletter, website, and a weekly email blast with CEUS news summaries. Other Sonnenschein attorneys and staff members also assist ICUS with public policy, regulatory strategies, health care issues, communications, and corporate and organizational matters, and recently hosted the first ICUS industry roundtable in the firm's Sears Tower/Chicago offices.

Founding sponsorships, volunteers sought

ICUS plans to solicit founding sponsorships and financial support from industry to assist with operational costs and the cost of sponsoring the annual ICUS international congress ("www.bubbleconference.com"). ICUS also welcomes volunteers for its committees and liaison positions. To contribute or volunteer, please contact the ICUS Co-Presidents (stevebfeinstein@aol.com; barry.goldberg@jefferson.edu).

ICUS Officers and Directors

- Co-Presidents: Steven Feinstein, Chicago (US), Barry Goldberg, Philadelphia (US)
- Vice Presidents: Kurt Jaeger, Basel (Switzerland), Petros Nihoyannopoulos, London (UK) Stephanie Wilson, Calgary (Canada)
- Secretary: Lennard Greenbaum, Oviedo, FL (US),
- Treasurer: Michael Main, Kansas City (US)
- Directors: Shintaro Beppu, Osaka (Japan), Cristina Chammas, Sao Paolo (Brazil), David Cosgrove, London (UK), Brian Fowlkes, Ann Arbor, MI (US), Paul Grayburn, Dallas (US), Wilson Mathias, Jr., Sao Paolo (Brazil), Mark Monaghan, London (UK), Fuminori Moriyasu, Tokyo (Japan)

The annual ICUS "bubble conference" in Chicago offers numerous opportunities to exchange information, test ideas, build collaborations and socialize. The 2008 conference also provided opportunities to celebrate the launch of ICUS. Pictured here are ICUS members Petros Nihoyannopoulos (London), David Cosgrove (London), Lennard Greenbaum (Florida), Steven Feinstein (Chicago), and Francesco Pizzuto (Rome)