

CROSS-INDUSTRY Organizations

ISAM: A wrap-up of 2013 and a look at future projects

Jim Blanchard

On behalf of the International Society for Aerosols in Medicine (ISAM)



The International Society for Aerosols in Medicine (ISAM) is a non-profit organization whose objectives are to stimulate and advance interdisciplinary cooperation and the exchange of information in all aspects of medical aerosol research, including pulmonary drug delivery and health effects of inhaled aerosols. ISAM sponsors international conferences, publications, study groups and special research projects as well as individual grants and fellowships.

This report wraps up the ISAM 2013 Congress, previews the next ISAM congress (in 2015) and two ISAM-sponsored conferences in 2014, and provides updates on other activities that ISAM has underway.

ISAM 2013 Congress

The highly successful ISAM 2013 Congress was held in April 2013 at the University of North Carolina at Chapel Hill. More than 350 scientists, clinicians and representatives from industry and government attended to discuss their research and pertinent issues. Over 140 abstracts were submitted for poster and oral presentations on topics such as developing delivery devices for infants and children, developing new inhaled biotherapeutics and regulatory issues related to *in vitro/in vivo* assessment. Three symposia/workshops were held on: 1) enhancing accordance between outcomes of laboratory and clinical testing of orally inhaled drug products, 2) developing inhaled nanoparticles as therapeutics and understanding

their potential toxicity and 3) the basic theory and practice of using aerosols for drug delivery.

Many of these presentations are available on the ISAM website. Some will be published in the society's journal, *The Journal of Aerosol Medicine and Pulmonary Drug Delivery*.

The ISAM congress cannot function without the support of corporate sponsors and an able cohort of volunteers including the members of the ISAM 2013 organizing committee: congress President Bill Bennett, Tony Hickey, Kirby Zeman, Jihong Wu, Heather Duckworth, and Terri McGowan.

ISAM 2015 Congress

The next ISAM congress will be in Munich, Germany, May 30-June 3, 2015 under the leadership of congress Presidents Sabine Häussermann and Gerhard Scheuch. Planning for the scientific sessions is already underway. Some of the main topics will be: innovative solutions for respiratory drug delivery and regulatory aspects; unresolved problems with *in vitro/in vivo* correlation of inhaled materials; telehealth and drug delivery; and respiratory biomarkers. A highly motivated scientific board, consisting of scientists and clinicians with outstanding reputations, will support translating topics into successful sessions. Many presentations will be selected from abstracts submitted by ISAM members and attendees so the program will be a mixture of invited speakers and

submitted topics. More information can be found on the congress website, www.isamcongress.com.

AIT/ISAM joint conference: "Inhaled therapies: Bench to bedside"

ISAM is organizing a joint conference with the Association of Inhalation Toxicologists (AIT, www.aitox.org) that will be held in September 2014 in Princeton, New Jersey. Dates are being determined. This conference will cover the steps needed to develop an inhaled drug, including selection of aerosol devices and formulations, non-clinical safety testing, regulatory issues and clinical applications. The ISAM website provides more information.

ISAM/Woolcock Institute joint conference: "Translating advances in understanding lung disease into innovative inhaled therapeutics"

The Woolcock Institute in Sydney, Australia is leading advances in understanding the mechanisms of lung diseases at the cellular level. It also has a long history of treating patients, improving their compliance through education and inhaler use training and research. ISAM and its members at the Woolcock Institute are planning a joint conference focused on "Translating advances in understanding lung disease into innovative inhaled therapeutics." It is

scheduled for September 25-26, 2014 in Sydney, Australia. Please see the ISAM website for more details.

ISAM Textbook of Aerosol Medicine

An exciting new project in development is the “*ISAM Textbook of Aerosol Medicine*,” which will have chapters on a broad range of topics, such as aerosol deposition, devices, formulations and clinical applications of aerosol therapy. Chapters are being written by experts in each field. The book will be web-based to enable continual updating. Rajiv Dhand is the editor and is being supported by eight associate editors. The book is targeted for completion by fall 2014 and will be available to ISAM members via the website.

Training opportunities in aerosol medicine

ISAM recognizes the future of aerosols in medicine relies on developing opportunities for graduate students, postdocs and junior faculty members to network and train in aerosol medicine. ISAM is fortunate to have the Myrna Dolovich Fellowship Fund to support exchanges between aerosol laboratories. Training workshops are also planned.

ISAM membership and networking groups

There are more than 270 ISAM members from 25 countries, representing various disciplines from academia, industry and government connected to aerosols in the lung. Members include physicians, physicists, biologists, pharmacologists, respiratory care practitioners, mathematicians and others. In addition, ISAM has five networking groups to facilitate communication among members with common interests and develop program content for the congresses: 1) Imaging, modeling

and physiology of aerosols in the lung; 2) Regulatory and standardization issues; 3) New devices and emerging therapies; 4) Pediatrics and cystic fibrosis; and 5) Environmental, occupational health and toxicology. ISAM offers joint membership with the European Respiratory Society at a reduced rate and students can also join at a discount. Further information about ISAM, the projects discussed here and membership applications is available at the ISAM website: www.isam.org.

Jim Blanchard is the President of ISAM and Principal Scientist, Preclinical Development, Aradigm Corp., 3929 Point Eden Way, Hayward, CA, 94545, Tel: 510 265-8871, blanchardj@aradigm.com.