Cross-Industry Organizations

An introduction to the Association of Inhalation Toxicologists (AIT)

Jo Kilgour, PhD
On behalf of the AIT

Aims of the AIT
The Association of Inhalation Toxicologists (AIT) will celebrate its 36th year in 2017 and aims to promote open discussion, exchange of ideas and presentation of high quality scientific research in the field of inhalation toxicology at its annual conference. Attendees come from a variety of backgrounds, including respiratory medicine, contract research organizations, pharmaceutical, agrichemical and chemical industries, regulatory authorities, academia, manufacturing and technology companies, reflecting the diversity of people with a shared interest in the many specialized aspects of inhalation toxicology studies. The AIT is now a premier international association for practicing inhalation toxicologists and those with interest in inhaled toxicology and drug development. It is also seen as an excellent training ground for individuals beginning a career in this field.

A brief history
The AIT was founded in the 1970s by a group of like-minded individuals who recognized the need for a forum to discuss inhalation toxicology and the associated technological challenges. The AIT held its first official conference in 1981. Since then, the number of annual conference delegates has grown from a handful to approximately 100 people on a regular basis.

The AIT has grown in stature and reputation over the years, evolving from its UK roots into a truly international organization, with an organizing committee that includes representatives from the UK, mainland Europe and the US.

In recent years, the AIT has held two joint conferences: one with ISAM (The International Society for Aerosols in Medicine) in 2015 in Princeton, NJ, US and another with BSTP (The British Society of Toxicological Pathology) in 2016 in Cheshire, UK.

Conference subjects are many and varied, reflecting the hot topics of the day and have included inhaled nanotoxicology, lung pathology with inhaled medicines, clinical development, translational models and topics related to the National Centre for the Replacement, Refinement & Reduction of Animals in Research (NC3R). Poster presentations are welcome, especially from junior members, and a prize is usually awarded for the best submission.

Principal activities
Annual conferences and networking: These are the main focus of the AIT committee, which devotes extensive thought and planning to each annual event. The conference location cycles between the UK, US and Europe to facilitate ease of travel for members. The events provide an invaluable opportunity for academics, regulators, industry experts and suppliers of specialist equipment to meet in a convivial atmosphere.

Membership: Society membership is free and extends for a period of three years each time an individual attends a conference and includes access to the members-only area of the AIT website that holds presentations from previous conferences; (www.aitoxicology.org).

Publications: The AIT has published a number of papers, which can be seen on the AIT website. The most influential can also be found in reference lists of most regulatory inhalation toxicology studies conducted today; for example: Alexander DJ et al, 2008: "Association of Inhalation Toxicologists (AIT) working party recommendation for standard delivered dose calculation and expression in non-clinical aerosol inhalation toxicology studies with pharmaceuticals." In addition, the AIT sponsored an industry-wide survey about approaches to early inhaled pharmaceutical development (Mark Price, Simon Moore, Keith Owen, Jo Kilgour and Nicholas Shepherd, “Impact of the method used to calculate the starting dose for the first inhaled in vivo toxicity study in the rat on potential detection of toxicity, Association of Inhalation Toxicologists, Hanover, Germany, November 5-7, 2013). Job postings: The AIT website also has a job postings board, which has proven to be a useful service, enabling employers and recruiters to gain direct access to a pool of specialists.

Future meetings
The 2017 AIT conference will be held during the last week of October in Copenhagen, Denmark. Sessions will address inhaled biologics, minipigs, aerosol characterization, pharmaceutical development for inhaled compounds and an update on the NC3R’s “Inhalation Translation CRACK-IT Challenge.” Please watch for more details and to express interest in presenting, displaying a poster, exhibiting or attending, contact the AIT at: aitannualmeeting@gmail.com.

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