

Elaine Moran

Acoustical Society of America
Melville, New York 11747



Beverly Wright, Director of the Hugh Knowles Center, presents the Hugh Knowles Prize to Brian C.J. Moore

Brian Moore honored by The Hugh Knowles Center

Brian C. J. Moore was awarded the Hugh Knowles Prize for Distinguished Achievement by The Hugh Knowles Center at Northwestern University on 13 May 2008. Dr. Moore delivered a lecture titled "Processing of temporal fine structure by normal-hearing and hearing-impaired listeners."

The Hugh Knowles Prize for Distinguished Achievement is awarded to individuals who have made outstanding contributions to research or clinical practice in the prevention, diagnosis or treatment of hearing disorders. The Prize included a \$20,000 award.

Dr. Moore was selected as the 2008 winner for his contributions to the understanding of auditory perception in individuals with normal hearing and hearing impairment. His research interests include the perception of sound, mechanisms of normal hearing and hearing impairment, relationship of auditory abilities to speech perception, design of signal processing hearing aids for sensorineural hearing loss, methods for fitting hearing aids to the individual, design and specification of high-fidelity sound-reproducing equipment, and the

perception of music and of musical instruments.

Brian Moore received his B.A. in Natural Sciences in 1968 and his Ph.D. in Psychoacoustics in 1971, both from the University of Cambridge, England. He is currently Professor of Auditory Perception in the University of Cambridge. He has also been a Visiting Professor at Brooklyn College, the City University of New York, and the University of California at Berkeley and was a van Houten Fellow at the Institute for Perception Research, Eindhoven, the Netherlands. Dr. Moore is a Fellow of the Royal Society of London, the Academy of Medical Sciences, the Acoustical Society of America, and an Honorary Fellow of the Belgian Society of Audiology and the British Society of Hearing Aid Audiologists. He is a member of the Experimental Psychology Society (U.K.), the British Society of Audiology, the American Speech-Language Hearing Association, the American Auditory Society, the Acoustical Society of Japan, the Audio Engineering Society, the Association for Research in Otolaryngology and the American Academy of Audiology.

Dr. Moore is President of the Association of Independent Hearing Healthcare Professionals (UK). He has written or edited 14 books and over 440 scientific papers and book chapters. In 2003 he was awarded the Acoustical Society of America Silver Medal in Psychological and Physiological Acoustics. In 2004 he received the first "International Award in Hearing" from the American Academy of Audiology. He has been selected to receive the 2008 "Award of Merit" from the Association for Research in Otolaryngology.

John Makhoul awarded IEEE's highest award in speech

BBN Technologies has announced that Chief Scientist John Makhoul is the recipient of the Institute of



Electrical and Electronics Engineers (IEEE) 2009 James L. Flanagan Speech & Audio Processing award "for pioneering contributions to speech modeling." The award was established in 2002 to recognize outstanding contributions to the advancement of speech and/or audio signal processing and is the IEEE's highest award in speech processing. Dr. Makhoul will accept the award, consisting of a bronze medal, a certificate, and an honorarium, at the IEEE International Conference on Acoustics, Speech, and Signal Processing in Taipei, Taiwan in April 2009.

Dr. Makhoul has been with BBN Technologies since 1970, working on various aspects of speech and language processing, including speech coding, speech synthesis, speech recognition, speaker identification and verification, artificial neural networks, digital signal processing, optical character recognition, language understanding, speech-to-speech translation, and human-machine interaction using voice. In addition, Dr. Makhoul is Adjunct Professor at Northeastern University where he supervises students doing their Ph.D. work at BBN in the area of speech and language processing.

Dr. Makhoul is a Fellow of the

IEEE and the Acoustical Society of America. His 1975 IEEE Proceedings paper on linear prediction was named a "Citation Classic" by the Institute for Scientific Information. His other honors include the IEEE 1978 Senior Award, the 1982 Technical Achievement Award, the 1988 Society Award of the IEEE Signal Processing Society, and the IEEE Third Millennium Medal. Dr. Makhoul has also served as a member of several panels of the National Research Council and has chaired panels in the areas of speech recognition and speech enhancement.

ASA Awards Presented at International Science and Engineering Fair (ISEF)

The Acoustical Society of America (ASA) presented two special awards to two high school students at the 59th Intel International Science and Engineering Fair, held this year at the Georgia World Congress Center, Atlanta, Georgia. The fair has been held since 1950 as a means of encouraging pre-college students to conduct scientific research. It has grown in size and pres-

tige to become the crowning achievement in high school science competitions. Student finalists who compete at the Intel ISEF have gone through a step process to qualify. Students first compete in their school or local science fairs. The winners then go on to participate in regional/or state fairs, until ultimately being chosen to participate in the Intel ISEF. In 2008, 1,557 student finalists from 51 countries competed for nearly \$4 million in scholarships and prizes and the exhibiting projects covered 17 scientific disciplines.

About 1500 professionals from academia, business, government, and industry served as volunteer judges to interview finalists and determine the winners. The Grand Awards from \$500 to \$5000 are given to the best of category and for first, second, third and fourth places in each of 17 categories. Special Awards judges made awards on behalf of each of about 80 professional organizations, including ASA. ASA presented a first place special award of \$1000, in addition the student's school being awarded \$500 and the student's mentor being awarded \$250. A \$500.00 special award was given to the second

place student, in addition the student's school being awarded \$200 and the student's mentor being awarded \$100. Each awardee also received a one-year ASA membership including a one-year subscription to JASA on CD ROM.

The ASA's first prize award went to 16-year-old Lyric Elizabeth Gillett from Cornerstone High Homeschool, Houston, Texas for her physics project entitled "Intensity and Temperature Variance in Sonoluminescence," an excellently presented exhibit on the study of sonoluminescence, a hot topic in the ASA. The purpose of this study was to determine whether variation in water temperature would affect the light intensity produced from sonoluminescent bubble. Her study showed that sonoluminescent intensity decreased as the water temperature increased. The experimental results could be helpful in determining the optimal temperature for sonoluminescence. During the interview, the judges were impressed by her motivation, enthusiasm, and intention of continuing the research on this subject in the future. Our judges were pleased to know, at the time of writing this report, that Lyric has also won two Special Awards (second and third place) from other associations and Grand Awards (fourth place) for her project.

ASA second prize award went to 16-year-old Nicholas Mycroft Christensen from Wetumpka High School, Wetumpka, Alabama and his physics project entitled "Do You 'ear Wha' I 'ear? Redigitizing Voice Signals into Lower Frequencies to Revolutionize Hearing Assistance Technology" which presented an innovative concept and technique that could assist hearing-impaired people to improve their hearing capability. In the study, the .wav files of voices were re-digitized into lower frequencies by a computer program developed by Nicholas himself. The recorded and re-sampled voices were replayed to 120 people with normal and impaired hearing. The test results have showed significantly improved recognition of low-frequency voice files for hearing-impaired people. What a creative and promising technique! One of our judges recommended that the student conduct a comprehensive literature search and



James M. Sabatier, Chair of ASA Judges, with winners of ASA awards at 2008 Intel International Science and Engineering Fair, Lyric Elizabeth Gillett and Nicholas Mycroft Christensen.

seek a patent application. It is worthy to mention that Nicholas has also won Grand Awards (fourth place).

The judging team included James M. Sabatier, Alexander Ekimov, and Zhiqu Lu from the National Center for Physical Acoustics, University of Mississippi. The special awards were presented by James Sabatier on the behalf of ASA (see photo).
James M. Sabatier

Safe-in-Sound award for Excellence and Innovation in Hearing Loss Prevention

Hearing loss is a major health and quality-of-life problem in the United States; hearing loss is the second most self-reported ailment after back problems. One way to tackle this problem is to reward companies that have excellent programs for preventing hearing loss, that recognize that mere compliance with regulations won't prevent hearing loss, but will only document its progression, and that have redirected their programs to promote best practices and strive to eliminate hearing loss from work-related noise exposures.

Toward this end, the National Institute for Occupational Safety and Health (NIOSH), in partnership with the National Hearing Conservation Association (NHCA), has established a new award to be given each year to the companies or organizations that exemplify Excellence in Hearing Loss Prevention. This award is called "Safe in Sound" and will be first presented at the NHCA annual conference during February 2009 in Atlanta, Georgia. One award will be given in each of the following economic sectors: manufacturing, services, and construction. An additional award will be given for an innovation in hearing loss prevention, which could be anything from a new product, training program, software program or other new and effective idea. This award will recognize an organization from any economic sector for their dedication to fostering and implementing new and unique advances in the prevention of hearing loss that other companies or organizations may adopt.

The objectives of these awards are to nationally recognize organizations that document measurable achievements in hearing loss prevention programs, obtain information on their real-world successes, and widely disseminate information on how others can use these successful strategies or benchmark their own programs. A website, www.safeinsound.us, has been established to provide more information on the award and to provide specifics on how to submit nominations/applications. If you know of any organizations with outstanding hearing loss prevention programs or innovative approaches, please encourage them to apply as nominations are now being accepted until September 1, 2008.

2008 Student Design Competition

The 2008 Student Design Competition was judged on July 3 at the Acoustics'08 Paris meeting. Seventeen entries competed for five awards, one First Honors and four Commendations. Participation in the competition represents an enormous amount of effort, and each of the entries demonstrated a high quality of work and understanding of acoustic design. Each of the participants is congratulated on a job well done.



First Honors - \$1,250 award: Kathleen Stetson, Alex Bockman, and Arthur van der Harten, Rensselaer Polytechnic Institute

Commendations - \$700 award, (in no particular order): Stephen Secules, Douglas Malora, Benjamin Markham, Rensselaer Polytechnic Institute

Alicia Wagner, Jonathan Rathsam, University of Nebraska
Pamela Harght, University of Kansas

Antoni Torras Rosell, Elizabet Tiana Roig, David Pelegrín García, Technical University of Denmark

Other submissions (in no particular order):

Onur Atak, Lennart Burenus, Tommy Hedin, Chalmers University of Technology

Liao Chiao-Ling, Julia Winroth, Mikaela Ranweg, Chalmers University of Technology

Yo Fujiso, Ata Can Corakci, Maria Pettersson, Chalmers University of Technology

Sam Gilbert, Cynthia Cheng, Gino Pellicano, Connor Sheehan, Rensselaer Polytechnic Institute

Edmundo Guevara Flores, Gaetano Di Napoli, Roberto Cattaneo, Chalmers University of Technology

Anne Guthrie, Linda Gedemer, Craig Schaefer, Rensselaer Polytechnic Institute

Joakim Häggström, Ingrid Legriffon, Simone Germain, Chalmers University of Technology

Adam Kroll, Jason Tilley, Sami Boulos, Pennsylvania State University

Se Myung Son, Peabody Institute of the Johns Hopkins University

Nathan Pape, University of Hartford

Threcia Robinson, University of Florida

Chang You, Chalmers University of Technology

The distinguished panel of judges included:

Anders Christian Gade (Gade & Mortensen Akustik, Charlottenlund, Denmark)

Adam Foxwell (PMK Consultants, Dallas, Texas)

Ioana Pielanu (Acentech, Cambridge, Massachusetts)

Raf Orłowski (Arup, Cambridge, UK)

Yann Jurkiewicz (Kahle Acoustics, Brussels, Belgium)

The Student Design Competition is made possible by generous support of the Robert Bradford Newman Student Award Fund and the Wenger Foundation. The competition is organized by the Technical Committee on Architectural Acoustics of the Acoustical Society of America. The Organizing Committee of the Acoustics'08 Paris conference is thanked for their support of the competition, specifically Manell Zakharia, Elaine Moran, Charles Schmid, and William Yost. Special assistance was provided by William Hartmann, Bob Coffeen, Lily Wang, Brandon Tinianov, and David T. Bradley.

Byron Harrison

USA Meetings Calendar

2008			
10-14 Nov	156th Meeting of the Acoustical Society of America, Miami, FL [Acoustical Society of America, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502; Tel.: 516-576-2360; Fax: 516-576-2377; Email: asa@aip.org; WWW: http://asa.aip.org].	26-30 October	158th Meeting of the Acoustical Society of America, San Antonio, TX [Acoustical Society of America, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502; Tel.: 516-576-2360; Fax: 516-576-2377; Email: asa@aip.org; WWW: http://asa.aip.org].
27-30 July	Noise-Con 2008, Detroit MI [Institute of Noise Control Engineering-USA, 7150 Winton Drive, Suite 300, Indianapolis, Indiana, 46268; Tel: 317-735-4063; E-mail: ibo@inceusa.org ; WWW: www.inceusa.org/nc08/index.asp].	2010	
12-15 August	2nd Symposium on Acoustic Communication by Animals, Corvallis, OR [http://oregonstate.edu/conferences/animalcommunication2008/index.html]	19-23 May	159th Meeting of the Acoustical Society of America, Baltimore, MD [Acoustical Society of America, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502; Tel.: 516-576-2360; Fax: 516-576-2377; Email: asa@aip.org; WWW: http://asa.aip.org].
8-9 September	1st International. Symposium on Audible Acoustics in Medicine and Physiology, W. Lafayette, IN [https://engineering.purdue.edu/Acoustics/]	15-19 November	2nd Iberoamerican Conference on Acoustics (Joint meeting of the Acoustical Society of America, Mexican Institute of Acoustics, and Iberoamerican Federation on Acoustics), Cancun, Mexico [Acoustical Society of America, Suite 1NO1, 2 Huntington Quadrangle, Melville, NY 11747-4502; Tel.: 516-576-2360; Fax: 516-576-2377; Email: asa@aip.org; WWW: http://asa.aip.org].
2009			
18-22 May	157th Meeting of the Acoustical Society of America, Portland, OR [Acoustical Society of America, Suite 1NO1, 2 Huntington		