# ROBERT BRADFORD NEWSLETTER 08

STUDENT AWARD FUND

# FUND'S 2008 YEAR AT A GLANCE

December 31, 2008 completed another successful year for the Newman Fund. Newman Medals were awarded to six students, bringing the total to 198 medals awarded at nearly 50 schools of architecture, engineering and music throughout the world since the program began in 1985.

Five student teams received Harry Wenger prizes in 2008 for their meritorious design work juried and displayed at the ASA Student Design Competition held at the Acoustics '08 meeting in Paris, FR.

Effective in 2009, the Fund's Advisory Committee has voted to increase stipends for medalist and award recipients to keep up with inflation.

Applications for Schultz Grants to be awarded in 2009 are due by June 30, 2009. Check newmanfund.org for announcements on both these items.

2008 was another stellar year for the Fund. The appreciation of the Advisory Committee is extended to students, teachers, consultants, as well as other professionals and supporters whose extraordinary voluntary efforts make the work of the Fund possible and thoroughly enjoyable. Continuing appreciation is extended to Elaine Moran and her office staff at the Acoustical Society in Melville, NY who help The Fund's operation run so seamlessly.

Mary Shaw Newman Carl Rosenberg Bill Cavanaugh

# 2009 BENEFIT CONCERT SCHEDULED FOR SEPTEMBER 17

The annual Newman Fund Benefit Concert will be held at the Newman residence in Lincoln, MA on Thursday evening, September 17, 2009. The Concert will feature Henry Francis and John Park and promises to be a wonderful evening of music.

Friends of the Fund from near and far are cordially invited. Further details and directions are posted on the ASA Greater Boston Chapter (gbcasa.org).

# SIX NEWMAN MEDALS AWARDED IN 2008

During 2008, six students were awarded Newman Medals. The medalists, their schools and their research thesis or senior projects follow:

### Derek R. Olson

Vassar College

"Fractal Surfaces - Generation and Acoustic Scattering Prediction"

Alicia J. Wagner

University of Nebraska-Lincoln
"Home Office Worker Performance and
Perception as Affected By Residential
Audible Distractions Through Various Wall
Constructions"

#### Benjamin J. Jados

Illinois Institute of Technology
"Acoustic Design of Oceania Opera Center in 2007 Student Design Competition"

### **Katharine Smolley**

Massachussetts Institute of Technology "The IACC Metric"

### Catherine Amanda Moore

Mississippi State University
"A Chapel Based On Sound"

### Pam Harght

University of Kansas
"An Investigation on Classroom Acoustics
for Non-Green and Green Classrooms"

# WENGER CREATES ANECHOIC CHORAL RECORDING CD

In October 2004, the Wenger Corporation recorded the 80-voice Cantorei from St. Olaf College in a large anechoic room. The choir, directed by St. Olaf music professor John Ferguson, sang a variety of works representing different types of choral literature.

The recording, thought to be the first anechoic recording of a large choir, is now available. Please contact Wenger to obtain a copy (Ron.Freiheit@wengercorp.com).



# SPOTLIGHT ON FUND ADVISOR RON FREIHEIT



Ron Freiheit's professional work has focused on applying acoustical expertise and laboratory analysis to real-world challenges faced by musicians and educators at all levels. Ron is very committed to the Fund's ideals and mission.

In 1978, Ron graduated from Southern Polytechnic Institute with a Bachelor of Electrical Engineering Technology. Over the past ten years he has pursued graduate studies in acoustics through Penn State's summer program.

Growing up in the small town of Owatonna, Minnesota, Ron's early interest in music began with piano and guitar lessons. After college he worked as an electrical engineer, designing hand-held automotive diagnostic systems. Ron joined Wenger in 1991 as a product manager responsible for prefabricated sound-isolating practice rooms and acoustical panels.

Wenger's marketing philosophy relies heavily on customer observation. The early roots of Ron's interest in virtual acoustics trace back to college visits he made during 1991-1992. Whether for research, product demos or on-site construction reviews, Ron has visited more than 100 schools during his tenure, ranging from K-12 buildings to some of this country's most prestigious institutions.

After experiencing an active-acoustics demonstration at the AES convention, Ron began discussions with Dr. David Greisinger and Lexicon about applying this technology to sound-isolating practice rooms. The goal was to overcome the acoustical disconnect between small practice rooms and real performance environments. When musicians rehearse in acoustical environments similar to that of their performance environments, it helps them hear how they will really sound and maximizes the value of their practice session.

Wenger's first "virtual" practice room was introduced in 1993, and the product line has evolved since that time. For his work in this area, Ron was awarded a U.S. Patent in 1996.

In 1999, Ron designed and procured the equipment and test procedures for Wenger's acoustics laboratory meant to measure transmission loss. This lab supported a new line of acoustical doors that Ron helped launch in 2001.

Today, along with his primary role overseeing all new product development as Wenger's Director of Design Engineering, Ron continues to provide technical support to Wenger and its customers related to acoustics for music spaces. He also leads technology development specifically focused on acoustics.

On behalf of Wenger, he has lectured about rehearsal and practice room acoustics at state and national music education conventions. Ron has also provided lectures and virtual acoustics demonstrations to local IEEE, ASA and AES chapters. From 1992 to 2000, he participated in summer institutes with David Egan and Bill Cavanaugh sponsored by the Association of Collegiate Schools of Architecture at several colleges throughout the US.

In 2003, Ron spearheaded the creation of an anechoic choral recording to support auralization demonstrations of auditoriums with and without the use of acoustic shells, overhead panels and clouds [see discussion highlighted on the front side and how to obtain a copy of the anechoic choral recording CD].

Before joining Wenger, Ron owned and operated a small sound and lighting company for five years. He later designed and built a 16-track commercial recording studio which continues operation today. As a volunteer, Ron has advised local churches, schools and civic organizations about sound reinforcement and acoustics.

# FEEDBACK FROM NEWMAN MEDALISTS

"Thank you for the medal, the honorarium and the books, which I am already using to prepare for the student design competition. I am extremely excited to begin my professional career in this field."

Jonathan Rathsam University of Nebraska

### **PREVIOUS MEDALISTS**

Two previous Newman Fund Medalists received faculty appointments in 2008.

David Bradley is an Assistant Professor in the Physics and Astronomy Department at Vassar College, where he teaches courses in acoustics and carries out research on scattering. Erica Bowden Ryherd is an Assistant Professor at Georgia Tech in the Mechanical Engineering Department, where she teaches courses in acoustics and noise control.

# 2008 STUDENT DESIGN COMPETITION RESULTS

The 2008 Student Design Competition was judged on July 3 at the Acoustics '08 conference in Paris. Seventeen entries competed for five awards, one First Honors and four Commendations. A distinguished panel of acoustical consultants, architects and educators evaluated each entry and awarded the Commendations.

Participation in the competition is an enormous amount of effort, and each of the entries demonstrated an extraordinarily high quality of student work and understanding of acoustic design. Each of the participants is congratulated on a job well done.

### **FIRST HONOR**

(\$1250 WENGER PRIZE)

# Kathleen Stetson, Alex Bockman, and Arthur van der Harten

Rensselaer Polytechnic Institute Faculty Advisors: Paul Calamia and Ning Xiang

### COMMENDATIONS

(FOUR \$700 WENGER PRIZES)

### Stephen Secules, Douglas Malora, Benjamin Markham

Rensselaer Polytechnic Institute Faculty Advisors: Paul Calamia and Ning Xiang

## Alicia Wagner, Jonathan Rathsam

University of Nebraska Faculty Advisor: Lily Wang

# Pamela Harght and Thomas Wall

Unversity of Kansas Faculty Advisor: Robert Coffeen

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

# 2009 STUDENT DESIGN COMPETITION AT ASA IN PORTLAND, OR MAY 18-22, 2009

The 157th ASA meeting in Portland, OR will host the tenth annual Student Design Competition. The design problem is described on the Newman Fund website (www.newmanfund.org), and in the program for the meeting.

Through the continuing generosity of the Wenger Foundation, there will again be one First Honor Wenger Prize of \$1250, and four Commendation Wenger Prizes of \$700 each, awarded to outstanding student design team posters, selected by a jury of distinguished professionals.

Please contact Bob Coffeen at the University of Kansas (coffeen@ku.edu) for further information and details of the Student Design Competition program.

# ROBERT BRADFORD NEWMAN STUDENT AWARD FUND

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\* Past Newman Medalists

#### **SPONSORS:**

The Technical Committee on Architectural Acoustics (TCAA) of the Acoustical Society of America (ASA)

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