

# ROBERT BRADFORD NEWMAN NEWSLETTER 04

## S T U D E N T A W A R D F U N D

### 2004, ANOTHER SUCCESSFUL YEAR

Appreciation is due to all who have contributed to another successful year for the Newman Fund in 2004. Six Newman Medals were awarded bringing the total medals awarded since the inception of the program to 163. A \$1000 Wenger First Honors Prize and six \$500 Wenger Commendation Prizes were awarded at the 2004 ASA Student Design Competition judged at the 147th Acoustical Society (Seventy-fifth Anniversary) Meeting in New York City in May. James Cowan and Jian Kang, who were awarded Schultz Grants in 2003, made significant progress on their projects during 2004. Both projects are described further in this newsletter and when complete will be available on the Newman Fund website allowing instructors to log on to the website and use these tools to develop courses or study programs in architectural acoustics.

We are saddened to note the passing on December 5, 2004, of our dear friend and colleague Jack Curtis one of the founders of the Newman Fund, who served as editor and graphic designer of the newsletter since its initial issue in 1986. We shall miss him greatly. A short obituary appears in this newsletter based on a more complete obituary prepared by his former colleagues at Bolt Beranek and Newman which will appear in the Journal of the Acoustical Society of America in 2005.

We cannot adequately express our thanks to all the Fund's contributors: professional and corporate sponsors, students and teachers of architectural acoustics courses, Newman medalists, student design competition participants and jurors, Schultz grant winners, our friends, and, of course, the members of the Fund's Advisory Committee and Elaine Moran and the ASA office staff in Melville, NY who make the Fund's programs run so smoothly. Thank you one and all.

Mary Shaw Newman, Carl Rosenberg, Bill Cavanaugh and Lily Wang

### SIX MEDALS AWARDED IN 2004

Six students from five schools each received Newman Medals, a \$200 honorarium and a set of books from the Acoustical Society. Two of the medalists completed their course of study in 2003 but presentation of the awards had been deferred until 2004. The medalists, their schools and their study projects follow:

#### ANDREW CARBALLEIRA (2003)

Berklee College

"Investigation of sound levels in music rehearsal rooms"

#### WILLIAM YODER (2003)

Virginia Tech.

"Simulation of double sloped decays in coupled volumes"

#### PAMELA HARGHT (2004)

Berklee College

"Investigation of sound levels in music rehearsal rooms"

#### DAVID T. BRADLEY (2004)

University of Nebraska

"Design competition submittal / music pavilion for a community orchestra and summer music school"

#### NORMAN H. PHILIPP (2004)

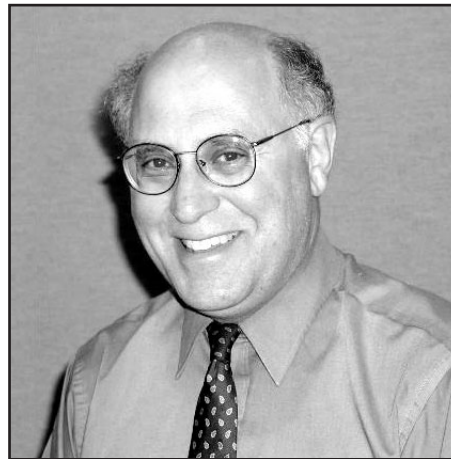
University of Kansas

"Design, construction, calibration and use of omnidirectional dodecahedron loudspeaker assembly."

#### TAMMY DAVIS (2004)

University of Buffalo SUNY

"A recital hall for the city of Buffalo"



### SPOTLIGHT BIOGRAPHY CARL ROSENBERG

Carl graduated college in 1965 and started on the road to his career dream of becoming an architect by attending M.I.T. School of Architecture. His path toward that goal was interrupted by Uncle Sam (Carl was drafted and served in the Army for two years) and by the realization that acoustics, as taught at M.I.T. by Bob Newman, was more of a calling than designing buildings. The course that Bob taught was exciting and compelling, and acoustics drew on Carl's interest in music and building technology. After graduating from M.I.T. in 1971 he joined the staff of Bolt Beranek and

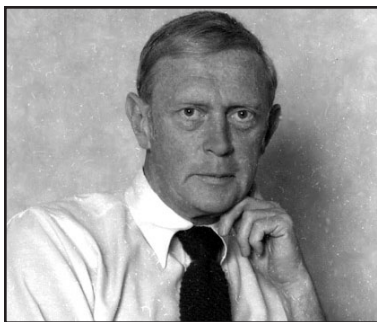
Newman (BBN) in Cambridge, MA. Under guidance from Bob Newman, Jack Curtis, Parker Hirtle, Ted Schultz, Charlie Salter, and many others, Carl had the opportunity to work on a wide variety of projects, from performance spaces, to equipment noise monitoring, community noise problems, room acoustics, and sound isolation issues. The diversity of projects and the support from BBN's outstanding staff made these years a wonderful time of challenges and growth.

Over time Carl assumed increased managerial responsibilities and became the manager for the architectural acoustics group. At the same time BBN grew into a large, publicly-owned company with extensive research and development work for the government (on everything from underwater acoustics to packet-switching technology). In 1989 BBN reformed the Architectural Acoustics and Environmental Technologies division into a separate company, *Acentech*. Two years later Carl and other senior colleagues purchased this company, and Acentech reverted to an employee-owned consulting company, with primary focus on architectural acoustics, sound and audiovisual systems design, and environmental noise control.

In 1978 Ranger Farrell, who had been an innovative consultant at BBN years before, was incapacitated and unable to complete his responsibilities teaching a course in Architectural Acoustics at the Princeton University School of Architecture. The dean of the school asked Bob Newman to help out, and Bob and Carl jointly taught the acoustics course at Princeton for a few years. By 1981 Carl had assumed the primary teaching role, and has taught at Princeton (his undergraduate alma mater), since then. After Bob Newman passed away suddenly in 1983, Carl also filled his mentor's shoes at M.I.T., teaching the same course that had inspired Carl's interest in acoustics 18 years before. For the past several years, Carl has also taught a similar course at Washington University in St. Louis, MO.

The opportunity to teach and accomplish the goals of the Robert Bradford Newman student design award program is a source of great honor and a goal realized for Carl. He has assumed the task of coordinating the submissions and awards of the Theodore J. Schultz teaching awards of the fund.

In 1995 Carl became President of Acentech, and held that post until 2004. He is now a Principal consultant at Acentech, a Fellow of the Acoustical Society of America, and a member of the National Council of Acoustical Consultants. He continues to teach acoustics, and enjoys the vitality and interest and technical skills that students today acquire.



## IN REMEMBRANCE.... JOHN A. CURTIS 1926-2004

We are saddened to report that our colleague Jack Curtis, one of the founders of the Newman Fund Advisory Committee, died unexpectedly on December 5, 2004 at his beachfront home in Sandwich, Massachusetts overlooking Cape Cod Bay.

Jack received his undergraduate degree in architecture, summa cum laude, from Princeton in 1950 and earned an M Arch degree at MIT in 1953 where he was one of Prof. Robert Newman's students in a new course in architectural acoustics. He first joined the consulting staff of Bolt Beranek and Newman (BBN) in 1957 to work with Bob Newman, Bill Cavanaugh and others intending to work there for just six months to learn more about acoustics applications in buildings. Jack's initial tour extended for 29 years until he retired from BBN in 1986 after service as a senior consultant in architectural acoustics and ultimately as Division Director of this activity at BBN in Cambridge. During his long professional career he worked with architects and on projects the world over.

His noteworthy consulting assignments included: the Headquarters Building of the American Institute of Architects in Washington DC (with The Architects Collaborative), the National Technical Institute for the Deaf at the Rochester Institute of Technology (with Hugh Stubbins Associates), the Hynes Auditorium and Convention Center in Boston (with Kallman McKinnell and Wood) and many others. The combination of Jack's special ability to relate and communicate with colleagues, along with his training in architecture, formed the foundation for his extraordinary success as a consultant in architectural acoustics during his three decades at BBN. After his retirement he continued to support education in acoustics and served as a Newman Fund advisor from the outset and as an editor and graphic designer of the annual Fund Newsletter since its first issue in 1986. A more extensive obituary has been prepared by his former colleagues at BBN and Acentech which will appear in a forthcoming issue of the *Journal of the Acoustical Society of America*.

## SCHULTZ GRANT PROJECTS NEARING COMPLETION

There were two Schultz Grants awarded in 2003 that represented the goals of the program to enhance the teaching of architectural acoustics. Both of these outstanding grant applications show the practical and timely integration of computer digital technologies into current teaching practices.

The first grant, Model On-line Basic Course in Architectural Acoustics (awarded to James Cowan

of Acentech), is an extension of ground-breaking developments that Jim did for teaching an on-line class through the Boston Architectural Center. The new course has 8 units of instruction that lead the student through basic principles of acoustics and decibels through noise control fundamentals and practical applications.

The second grant, Computer Tools for Architectural Acoustics Education (awarded to Jian Kang of the School of Architecture at the University of Sheffield, UK), is the development of 5 programs or tools for enhancing the teaching of architectural acoustics using digital computer techniques. The programs cover sound distribution behind an environmental noise barrier, sound distribution in a rectangular street canyon, reverberation time calculations in a rectangular space, absorption of perforated panel absorbers, and digital audio animation for urban soundscape design.

Both of these grants will be available through the Newman Fund website when they are complete. An instructor will be able to log on to the website and use the tools to outline a course or develop a study module.

## 2004 STUDENT DESIGN COMPETITION AWARDS

Complete details on the 2004 competition including photographs of the winning posters are available on the Fund website [www.newmanfund.org]. The design program involved a schematic design for a music pavilion for a community orchestra and summer school. Sixteen submissions representing seven different schools were judged by a distinguished panel of architects and acoustical consultants. The awards were funded by a grant from the Wenger Foundation in memory of the firm's founder, Harry Wenger, who was a longtime supporter of education in music and in architectural acoustics.

### FIRST HONORS [\$1,000 Wenger Prize]

Molly K. Norris, Julie Byrne and Rebecca Simkins  
Rensselaer Polytechnic Institute

**Faculty Advisor:** Prof. Rendell Torres

### COMMENDATIONS [\$500 Wenger Prizes]

Michael Bono and Michael Colburn  
University of Kansas

**Faculty Advisor:** Prof. Robert Coffeen

Erica Bowden and David Bradley  
University of Nebraska

**Faculty Advisor:** Prof. Lily Wang

Kevin Krudwig, Sebastian Otero and Evelyn Way  
Rensselaer Polytechnic Institute

**Faculty Advisor:** Prof. Rendell Torres

Jacob Mueller, Jonah Sacks and Andrew Eckel  
Rensselaer Polytechnic Institute

**Faculty Advisors:** Profs. Rendell Torres and Mendel Kleiner



Michelle Vieagnt  
University of Nebraska  
**Faculty Advisor:** Prof. Lily Wang

The 2005 ASA Student Design Competition will be judged at the 149th Meeting of the Acoustical Society at Vancouver, BC, Canada, May 16-20, 2005. Details on the 2005 Competition are available at the Fund website [www.newmanfund.org]

## ANNUAL BENEFIT CONCERT SCHEDULED

The annual Newman Fund benefit concert will be held at the Newman residence in Lincoln, Massachusetts on an evening in May 2005. Further details will be posted on the fund website [www.newmanfund.org] when arrangements have been completed. As always all friends and supporters of the Newman Student Award Fund are cordially invited.

## ROBERT BRADFORD NEWMAN STUDENT AWARD FUND

### Advisory Committee:

Mary Shaw Newman, Honorary Chair  
William J. Cavanaugh, Co-Chair  
Carl J. Rosenberg, Co-Chair  
Lily M. Wang,\* Secretary

Lincoln B. Berry\*  
Christopher H. Blair  
Richard H. Campbell  
Robert C. Coffeen  
M. David Egan  
Donna Anne Ellis\*

Timothy J. Foulkes  
Ronald R. Freiheit  
J. Christopher Jaffe  
Gary W. Siebein  
Ewart A. Wetherill

\* Past Newman Medalists

### SPONSORS:

**The Technical Committee on Architectural Acoustics of the Acoustical Society of America**

*with the cooperation of:*

Acoustical Society of America:  
Committee on Education in Acoustics  
Committee on Regional Chapters  
Greater Boston Chapter  
Technical Committee on Noise  
Association of Collegiate Schools  
of Architecture  
Boston Architectural Center, School  
of Architecture  
Harvard University, Graduate School of Design  
Institute of Noise Control Engineering  
Massachusetts Institute of Technology,  
School of Architecture and Planning  
National Council of Acoustical  
Consultants  
Rhode Island School of Design, Division  
of Architectural Studies  
Riverbank Acoustical Laboratories  
Shure Incorporated  
Wenger Corporation

### Please address correspondence to:

Newman Student Award Fund / ASA  
2 Huntington Quadrangle, Suite 1N01  
Melville, NY 11747-4502

Tel: 516-576-2360  
Fax: 516-576-2377  
E-Mail: asa@aip.org  
www.newmanfund.org