

**CRS Center
for Leadership and Management in the Design and Construction Industry**

1997 Annual Report to the Dean

March 31, 1998

CRS Center Board of Directors

Dr. Robert E. Johnson, AIA, Arch.D., Director
Thomas A. Bullock, FAIA, Representative of the Founders of CRS
John Only Greer, FAIA, Wallie E. Scott Professor
Dr. Walter P. Moore, Jr., P.E., Thomas A. Bullock Chair
Dr. James C. Smith, Head, Department of Construction Science
Dr. Walter V. Wendler, AIA, William M. Peña Professor

Table of Contents

BACKGROUND AND ADMINISTRATIVE STRUCTURE	2
MISSION	2
CONTRIBUTIONS TO TEACHING	2
Required Professional Practice and Management Sequence	3
Interdisciplinary Design Studio	3
Collaborative Design Studio	3
Strategies in Architectural Management Course	4
Guest Lectures	4
Graduate Student Support	4
CONTRIBUTIONS TO KNOWLEDGE GENERATION	4
Archives Activities	4
CRS: Center Research Series	5
Presentations, 1997	5
Reviewed Publications, 1997	6
Sarkis Exhibit	6
Research Development Activities	7
CONTRIBUTIONS TO SERVICE/OUTREACH	7
In Memory of Jonathan King	7
Smith Onboard With CRS	8
Rowlett Lecture Series	8
CRS Squatters Revisited	9
Other Service Activities	9
CONTRIBUTIONS TO FACULTY DEVELOPMENT	10
Faculty Participation	10
Faculty Assistance	10
Leadership Brownbags	11
Ph.D. Scholar in Residence	11
Graduate Assistantships	11
CRS Center Archives Scholar	11
APPENDIX A: 1997 REQUESTS FOR CRS ARCHIVES	13
APPENDIX B: 1998 STRATEGIC PLAN	15
1. Executive Summary	15
2. Detailed Strategic Plan for 1998	16
APPENDIX C: MINUTES OF FACULTY MEETINGS	19
1. CRS Center Faculty Initiative Meeting: November 3, 1997	19
2. CRS Center Meeting on Leadership: December 11, 1997	20
APPENDIX D: CRS CENTER FELLOWS PROGRAM	22
Purpose	22
Goals	22
Appointment Procedures	22
Fellow Responsibilities	22
CRS Center Responsibilities	23

BACKGROUND AND ADMINISTRATIVE STRUCTURE

The CRS Center was established as a University Center at Texas A&M in 1991 by the architectural/engineering firm of CRSS, Inc., and Texas A&M University to focus on issues of leadership and management in the design and construction industry. At the same time, CRSS endowed the Wallie E. Scott and William M. Peña Professorships, respectively held by Professor John Only Greer, FAIA, and Dr. Walter V. Wendler, AIA; and the Thomas A. Bullock Chair, held by Dr. Walter P. Moore, Jr., P.E. Funding for the Center is derived from an annual allocation from the College that consists of \$7,000 and partial funding for a full-time administrative assistant; funding from 50 percent of the endowment of the Bullock, Peña and Scott Professorships; and funding from external research projects.

The Center is administered by a Director, who is assisted by an internal advisory Board of Directors consisting of Dr. Robert E. Johnson, AIA, Director; Thomas A. Bullock, FAIA, Representative of the Founders of CRS; John Only Greer, FAIA, Wallie E. Scott Professor; Dr. Walter P. Moore Jr., P.E., Thomas A. Bullock Chair; Dr. James C. Smith, Head, Department of Construction Science; and Dr. Walter V. Wendler, AIA, William M. Peña Professor. Board meetings are held quarterly with the exception of the summer quarter.

The Center is located on the fourth floor of Building C, Langford Architecture Center, in Room 418. The space in this location provides offices for the director and administrative assistant as well as several open plan work spaces that are available for use by faculty, researchers and Ph.D. students. The CRS Archives, also located in this space, consist of the slides, photographs, video and audio tapes, articles, and business and personal records of the firm, which divested in 1995.

MISSION

The mission of the CRS Center, as defined in the original endowment agreement is:

To lead in improving the quality of business practice and management in the planning, design and construction industry through knowledge-generating and educational activities.

In order to achieve this mission the Center has established three long-term goals:

GOAL 1: To create useful knowledge in innovation, management and leadership;

GOAL 2: To transfer this knowledge to people and organizations in order to create positive change in the industry;

GOAL 3: To integrate this knowledge into the education of the next generation of leaders.

CONTRIBUTIONS TO TEACHING

Center faculty and members actively participate in the various teaching programs of the College. A list of regularly scheduled teaching activities of faculty affiliated with the CRS Center includes:

SPRING 1997

ARCH 489	6 cr	Strategies in Architectural Management	Robert E. Johnson and Jonathan King
ENDS 357	3 cr	Specifications and Conditions	John O. Greer
ARCH 657	3 cr	Professional Practice	John O. Greer

SUMMER 1997

ARCH 405	6 cr	Design Studio	Tom McKittrick and Walter P. Moore
----------	------	---------------	------------------------------------

FALL 1997

ARCH 607	6 cr	Interdisciplinary Design Studio	Tom McKittrick and Walter P. Moore
ARCH 605	6 cr	Collaborative Design Studio	Robert E. Johnson
ENDS 357	3 cr	Specifications and Conditions	John O. Greer
ARCH 657	3 cr	Professional Practice	John O. Greer

Required Professional Practice and Management Sequence

John Greer has continued to do an outstanding job in teaching the required courses in the curriculum associated with architectural practice and management in the business, legal and political environment (ENDS 357 and ARCH 657).

Interdisciplinary Design Studio

In the fall semester, Professors Walter Moore and Tom McKittrick offered an interdisciplinary design studio which incorporates eight architectural students, eight structural engineering graduate students, and three mechanical engineering students. Additional information about this innovative initiative is available in their individual annual reports.

Collaborative Design Studio

This past fall, Robert Johnson collaborated with USAA and HKS to offer a studio that focused on the design of corporate headquarters facilities. The studio began with a short project in collaboration with Charlie Burris of the Arkitex Studio in College Station featuring the design of an architect's workplace. Students later visited USAA in San Antonio for a tour of the firm's headquarters. Throughout the semester, representatives from both USAA and HKS participated in several design reviews and a review of proposed architectural programs, providing the students with the invaluable experience of one-on-one, in-class design critiques from actual field professionals.

Strategies in Architectural Management Course

During the Spring 1997 semester, Robert Johnson and Jonathan King co-taught the spring seminar course “Strategies in Architectural Management” to 24 undergraduate and graduate students using the Harvard Business School case method of teaching. Use of the CRS Archives was incorporated as part of the course, with Jonathan King presenting a test case on the Bell & Howell Schools, fast-track and CRS project delivery at one particular class session. Plans for Spring 1998 are for Johnson to team up with Julius Gribou to teach this course.

Guest Lectures

Robert Johnson guest-lectured for various College of Architecture faculty colleagues in 1997, presenting “Design Teams,” a discussion with Dr. Malcolm Quantrill’s seminar group, in the spring as well as “Ethics in the Design Profession,” a teaching case offered as part of Professor Rodney Hill’s ENDS 101 course, in both the summer and fall.

Graduate Student Support

During 1997, the Center provided support for two Ph.D. students in conjunction with our research for USAA, Inc. The dissertation topics of both students were influenced by this research. One student (Jamal Al-Qawasmi) is now pursuing a dissertation topic on computer-supported collaborative design, while the other (Yunsik Song) is developing a topic associated with the problem of the information necessary for as-built drawings. Professor Mark Clayton is the chair of both of these dissertation committees. Dr. Walter P. Moore has also used funds from the Bullock Chair to support a graduate student who is working with his Center for Building Design and Construction. In addition, Professor John O. Greer supports a graduate student with a nine-month assistantship.

CONTRIBUTIONS TO KNOWLEDGE GENERATION

Archives Activities

An important goal of the CRS Center is to encourage the use of the archives. In order to help measure progress toward this goal, we have begun to compile a list of archive requests (see Appendix A).

1. CRS Center Web Site. With the exception of a few remaining slides to be catalogued, the organization of the Center’s archives was largely completed in 1997. Each element has been assigned a unique identifier within an index for all the major components of the CRS Archives. This information is now accessible through the worldwide web as part of the CRS Center web site: <http://archone.tamu.edu/~crscenter>.
2. CRS Program Archive. This past summer, the CRS Center developed a Program Archive guide which categorizes the 750-plus such documents contained within the CRS Archives by building type. This list was then distributed to all faculty members within the College of Architecture in an effort to further encourage use of the archives by both staff and students. In the future, this list will also be distributed to other schools of architecture throughout the country.

3. CRS Oral History. Jonathan King completed a first draft and the initial editing of the CRS Oral History in 1997. At this point, we have been contacting publishers and are selecting photos and illustrations. We will keep you informed as to the status of the book.

4. Caudill Book. Jay Baker, AIA, and Barrie Scardino, editor of *Cite* magazine, are increasing their efforts on the Caudill Book. This is quite an undertaking but is very worthwhile. An article on the “White House” written by the duo entitled “CRS Serene” appeared in the Spring 1997 issue of *Cite*, copies of which are available through the Center. Both Baker and Scardino continue to visit the Center in order to research potential material for inclusion in the book.

CRS: Center Research Series

As a throwback to the glory days of the CRS “publish or perish” mentality, the CRS Center launched a research report series which showcases current Center publications and research projects. The first two issues, debuted in October, focused on the Center’s research with USAA. In addition to increasing awareness of the Center’s existence and relevance, the collection is intended to serve as a quick reference for all Center research efforts and related publications.

Summary of Current Reports

Al-Qawasmi, J., M. Clayton, R. Johnson and Y. Song, “Collaborative Facility Management Using Intranet Technology,” CRS Center Research Series, October 1997.

Johnson, R. and M. Clayton, “Best Practices of Facility Management Organizations,” CRS Center Research Series, October 1997.

Johnson, R. and M. Clayton, “The Impact of Information Technology on Facility Management Practice: Research Report of a Survey of Fortune 500 Facility Managers,” CRS Center Research Series, January 1997.

Summary of Reports In Progress

Clayton, M., R. Johnson, J. Al-Qawasmi and Y. Song, “Information Content of As-Built Drawings,” CRS Center Research Series, 1998.

Murphy, Michael, “Design Teams and Leadership,” CRS Center Research Series, 1998.

Presentations, 1997

Clayton, Mark, “Information Technology in Facility Management: Adoption and Plans,” Team CAD ‘97, Georgia Tech University, Atlanta, Ga., May 12, 1997.

Clayton, Mark, “Testing CAD Software Prototypes,” Team CAD ‘97, Georgia Tech University, Atlanta, Ga., May 12, 1997.

Johnson, R. and M. Clayton, “The Impact of Information Technology on Facility Management Practice,” Conference presentation, World Workplace ‘97, Dallas, Texas, October 5-7, 1997.

Johnson, Robert, “Research as the Fountain of Ideas: A Case Study of CRS,” Conference presentation, 85th Annual Meeting of the Association of the Collegiate Schools of Architecture (ACSA), Seattle, Wa., March 15-18, 1997.

Moore, Walter P., "Ethics, It Ain't Easy or Simple," Structural Engineering Education Reunion (STEER), University of Texas, Austin, Texas, May 30, 1997.

Reviewed Publications, 1997

Clayton, M., R. Johnson, J. Al-Qawasmi and Y. Song, "A Natural Fit: Intranet-Based Collaboration in Facility Management," Proceedings of the Second International Workshop on CSCW in Design, Bangkok, Thailand, November 1997.

Clayton, Mark, "Design-Process Based Interoperable Software," Proceedings of the ACSA Technology Conference, March 1997.

Clayton, Mark, M. A. Fischer, P. Teicholz and J.C. Kunz, "The Charette Testing Method for CAD Research" in Applied Research in Architecture and Planning, vol 2, R. Hershberger and M. Kihl, eds., Architectural Research Centers Consortium, April 1997.

Johnson, Robert, "Doctoral Education and Its Relationship to the Profession," Conference proceedings, Conference on Doctoral Education in Architectural Schools, Georgia Institute of Technology, Atlanta, Ga., April 24-25, 1997.

Johnson, Robert E. "Research as a Competitive Positioning Strategy: A Case Study of CRS," Conference proceedings, 85th Annual Meeting of the Association of the Collegiate Schools of Architecture (ACSA), Seattle, Wa., March 15-18, 1997.

Johnson, R. and M. Clayton, "The Impact of Information Technology on Design & Construction: The Owner's Perspective," Conference proceedings, Association for Computer Aided Design in Architecture (ACADIA), Cincinnati, Ohio, October 4-5, 1997.

Johnson, R. and M. Clayton, "The Impact of Information Technology on Facility Management Practice," Conference proceedings, World Workplace '97, Dallas, Texas, October 5-7, 1997.

Sarkis Exhibit

Dr. Hashim Sarkis, a professor at Harvard Graduate School of Design, recently sent the CRS Center a copy of his exhibit, "When Schools Were Modern." This presentation, based on his schools research project sponsored in part by a CRS Center Archives Scholar Award, features eight schools, including four by CRS (Industry, Norman, PS219, Belaire). The exhibit encompasses eight themes: roofs, structural systems, school types, classroom types, fallout shelters, demographics, school districts and racial desegregation. The exhibit, which the Center plans to unveil at Texas A&M University as part of the College's spring awards ceremony in May 1998, has been featured at Rice, Harvard and the Graham Foundation, an additional sponsor of Sarkis' research. Sarkis, whose thesis, "Democracy in Architecture," included a chapter on CRS, previously visited the CRS Center in the fall of 1995 to research the firm's early work with schools during the 1950-60 period—specifically, CRS's programming techniques which encouraged user participation.

Research Development Activities

- 1997 Clayton, M., Principal Investigator, and R. Johnson, Co-Principal Investigator, "Information Content of As-Built Drawings," USAA, Inc. (\$10,000)
- 1997 Johnson, R., Principal Investigator, and M. Clayton, Co-Principal Investigator, "Collaborative Facility Management Using Intranet Technology," partnership with USAA, Inc.
- 1997 Johnson, R., Principal Investigator, and M. Clayton, Co-Principal Investigator, "Information Technology: Best Practices of Selected Facility Management Organizations," partnership with USAA, Inc.
- 1996-97 Johnson, R., Principal Investigator, and M. Clayton, Co-Principal Investigator, "The Impact of Information Technology on Facility Management Practice," International Facility Management Institute Foundation and Hayworth Discovery Institute. (\$1,000)

1. Information Technology and Facility Management Practices Survey. Robert Johnson and Mark Clayton collaborated with HOK/Consulting to survey Fortune 500 companies to learn how information technology is affecting their facility management practices. This survey was funded in part by a grant of \$1,000 from the International Facility Management Association (IFMA) Foundation and the Hayworth Discovery Institute.

2. Research Partnerships. During the past year, the CRS Center has focused on getting research sponsorship in the area of facilities management. This emphasis has resulted in the development of several research projects and may hold the potential we have been seeking for further projects in the future. One particularly fruitful relationship has been formed with USAA, Inc., which helped to fund three research projects this past summer and also participated in a design studio during the fall semester. One of these projects, which involved a grant of \$10,000 from USAA, was directed by Assistant Professor Mark J. Clayton. In the future, the Center will continue to discuss relevant research with USAA and other interested organizations.

CONTRIBUTIONS TO SERVICE/OUTREACH

Center faculty have contributed in a variety of ways to the growth of the College and the profession, intermingling the two through leadership in research in the design and construction industry and sponsorship of College activities such as the Rowlett Lecture Series.

In Memory of Jonathan King

After serving the CRS Center and the College of Architecture in various capacities for the past five years, Jonathan King, HAIA, passed away in November 1997 at his home in Houston. A former Center Director, Jonathan was committed to the CRS Center and to students, and it was his wish that we initiate the King Student Research Fund in his memory through the Center. The fund continues to grow, and future plans are to establish a modest endowment to support student research through the Center.

Jonathan began a lifelong career of service to the profession of architecture in 1958 at the Ford Foundation, where he was Vice President and Treasurer of the Educational Facilities Laboratories. In 1970, he left EFL to become Senior Vice President and a partner at CRS in Houston, where he remained for six years. From 1976 to 1983, Jonathan served as a Professor of Architecture and Director of the Architectural Research Laboratory at the University of Michigan. He was later appointed Professor Emeritus of Architecture in 1986. While at Michigan, he authored numerous articles and books, including the seven-volume "Michigan Courthouse Study," which received a research citation from *Progressive Architecture* in 1983. In addition to being published extensively in the United States, his work has appeared in print in both Canada and Great Britain.

In 1992, Jonathan returned to Texas as the Associate Director and, subsequently, the Director of the CRS Center. Formerly, he had taught at Rice and King Saud University and was the Hyde Lecturer and Visiting Critic at the University of Nebraska-Lincoln. He is survived by his wife, Toni, and two sons, Gordon and Nathaniel.

Smith Onboard With CRS

Dr. James C. Smith, Department Head for Construction Science and former CRSer, became the newest member of the CRS Center's Internal Advisory Board of Directors this past spring. Dr. Smith, who serves as the designated representative for the Dean of the College of Architecture, was formally recognized at the board's May 21 meeting at the CRS Center after attending the spring's two previous meetings as a guest of the board.

Rowlett Lecture Series

The John Miles Rowlett Lecture Series was created in 1980 to bring speakers of national and international significance to the schools of architecture at Texas A&M and the University of Texas. The original endowment was established with the Texas Architectural Foundation (TAF) through support from the Founders of CRSS, Inc., of Houston, Texas, and Mrs. Virginia Rowlett. After reviewing proposals by each school for the inaugural lecture, Texas A&M was chosen and subsequently given control over the series by TAF because of its enthusiasm and the quality of the program prepared for this first lecture.

In January 1997, the CRS Center and the College of Architecture hosted the 17th annual Rowlett Lecture, a program featuring SOM, which was honored as the AIA's Architecture Firm of the Year in both 1962 (the inaugural year of the award) and 1996. John Winkler, CEO and Partner, and Marilyn Jordan Taylor, AIA, Partner, served as guest speakers and provided stimulating and knowledgeable discussion regarding the changing nature of practice in SOM—a large, interdisciplinary, international design firm. The lecture enjoyed standing room only success.

In addition, much of the fall was spent organizing the 18th Rowlett Lecture, scheduled for February 10, 1998. Dean Walter V. Wendler was instrumental in establishing contact with the Bush School and Library as well as in the initial stages of helping to define the schedule and presenters. The program, co-sponsored by the Bush School of Government & Public Service and the Bush Library and Museum, will focus on the vision and leadership behind the creation of the George Bush Presidential Library Center. The day-long event will feature speakers from Texas A&M University, the firms of CRS/HOK and Manhattan Construction, and the

Bryan/College Station community. At the conclusion of the symposium, a reception for presenters, faculty and other invited guests will be held in the Library rotunda.

CRS Squatters Revisited

In 1995, the CRS Center assisted Dr. Dale Whittaker, Associate Professor of Agricultural Engineering, with the programming and schematic design of two projects approved for building this past year. Applying the CRS technique of squatters, Jonathan King, former graduate assistant Scott Kyle and former Ph.D. Scholar in Residence Eric Connell worked together with Dr. Whittaker to create two dream projects which have become reality. The first, the Children's Museum of the Brazos Valley, celebrated its grand opening this past fall in downtown Bryan. Groundbreaking ceremonies for the second, the Texas A&M Food Science and Technology Center, located in Research Park off University Drive, are scheduled to take place this year.

Other Service Activities

CRS Center faculty and directors were involved in such a wide variety of professional and academic service activities in 1997 that there is not enough space to write about all of these activities. What follows is a summary of their service records for 1997:

- Professor John Only Greer, FAIA, has continued to serve as the Intern Development Program (IDP) coordinator as well as teach a seminar on architectural intern development for licensing. He also serves on the Texas Board of Architectural Examiners and is the state representative of the National Council of Architectural Registration Boards. Of particular note, Professor Greer was one of two recipients of a Presidential Citation at the annual meeting of the American Institute of Architects “for outstanding contributions to the profession as a dedicated and inspired educator.”
- Dr. Walter P. Moore serves as chairman of the National Research Council Marine Board Committee on the “Assessment of the U.S. Army Corps of Engineers Civil Works R&D Program.” He was also recently appointed to be Chairman of the Board on Infrastructure and the Constructed Environment under the National Research Council. He is also either chairman or member of a variety of committees in ASCE and ACI. This past year, Dr. Moore received an ASCE Honorary Membership and became a Fellow of the American Consulting Engineers Council.
- Dr. James C. Smith has been a valuable addition to the CRS Center Board of Directors. It was Smith’s suggestion that the Rowlett Lecture for 1998 be focused on the design and construction of the George Bush Library and Museum. In addition, Dr. Smith has done an outstanding job as department head of Construction Science and will be helpful as we continue to seek ways to attract the interest of Construction Science faculty.
- Dr. Walter V. Wendler, AIA, was recognized for his outstanding service to both the College and the University by his promotion to Special Assistant to the President last fall. Prior to accepting this new position, he finalized the strategic plan for the College and completed the Romieniec Documentary film. We are grateful that he has agreed to continue to serve on the CRS Center Board of Directors.

CONTRIBUTIONS TO FACULTY DEVELOPMENT

Faculty Participation

During 1997, two meetings were held to both familiarize College faculty with the Center and its purpose and to identify colleagues who are interested in the type of research the Center currently is conducting.

Faculty that have a substantial affiliation with the Center include:

John Only Greer.....Scott Professorship
Walter V. Wendler.....Peña Professorship
Walter P. Moore.....Bullock Chair
Andrew Seidel.....Faculty Fellow
Mark J. Clayton.....Participant in current research

Other faculty that have participated in at least some meetings or have expressed interest in participating with the Center include:

David Ekroth
Charles Graham
Julius Gribou
Toni Hynds
Tom McKittrick
Michael Murphy
Nancy White

Faculty Assistance

1. Assistant Professor Mark J. Clayton. The CRS Center has provided contacts, resources and a supportive research environment to enable Professor Mark J. Clayton to initiate substantive research. In 1997, this effort resulted in a research proposal to USAA Facilities and Services which incorporated matching support from the Center to fund one Ph.D. graduate assistant. This \$10,000 proposal was subsequently funded, and prospects for future funding in this area look promising.

2. Dr. Andrew D. Seidel. The CRS Center is providing assistance to Dr. Andrew D. Seidel in conjunction with his survey and book detailing the architecture profession in the United States. This support has involved funding to help print and distribute a questionnaire as well as staff support to log returned questionnaires and to assist with other issues associated with the project. Along with Martin Symes and Joanna Eley, Seidel previously published a book entitled "Architects and Their Practices: A Changing Profession" which analyzed architects in Great Britain and is a predecessor to his U.S. work which the CRS Center Board voted to support in the spring of 1996. Preliminary postcards were sent to approximately 1,800 architects this past fall, followed by questionnaires in December.

Leadership Brownbags

This past fall, Robert Johnson initiated a brownbag meeting series for those faculty and Ph.D. students within the College who expressed some interest in helping to define and participate in Center activities. These meetings (see minutes in Appendix C) will continue in 1998 with the expectation that at least one activity will result. In addition, the Center also plans to initiate a faculty fellows program in 1998 (see Appendix D).

Ph.D. Scholar in Residence

Marie-Andrée Fournier, CRS Center Ph.D. Scholar in Residence, began conducting research this past year for her dissertation on design of children's emergency hospital care facilities. After wrapping up work this summer on the book "Healthcare Environments for Children and Their Families," which she co-authored along with Dr. Mardelle Shepley, Fournier traveled to Omaha, Neb., where she spent two weeks at Bergan Mercy Medical Center. Fournier has plans for a more extensive, follow-up trip in March 1998. This past spring, Fournier was awarded the Caudill Fellowship for the second consecutive year at the College's annual awards banquet.

The Center's first Ph.D. Scholar in Residence, Eric Connell, is currently an assistant professor of architecture at the University of Oklahoma.

Graduate Assistantships

Yunsik Song and Jamal Al-Qawasmi, who are assisting the Center in its research efforts in collaboration with USAA, replaced graduate assistants Scott Kyle and Rhonda Sharkawy this past summer. Kyle is now employed by former CRSers Sizemore Floyd Architects in Atlanta, Ga., while Sharkawy is a market analyst with Urban Restorations and currently is based in New Orleans.

Summary of CRS Center Graduate Assistants to Date

1992-94, Melissa Saul, Will Vinton Studios, Portland, Oregon
1995-96, John Star Baxter, La Plata Investments, Colorado Springs, Colorado
1995-97, Scott Kyle, Sizemore Floyd Architects, Atlanta, Georgia
1996-97, Rhonda Sharkawy, Urban Restorations, New Orleans, Louisiana
1997, Jamal Al-Qawasmi, Ph.D. Candidate, Texas A&M University
1997-Present, Yunsik Song, Ph.D. Candidate, Texas A&M University

CRS Center Archives Scholar

The CRS Archives Scholar Program, established in 1996, carries a maximum \$2,500 award which is used to reimburse expenses associated with research that utilizes the CRS Center Archives. In March, the board awarded two such stipends, selecting Robert Young and Brian Schermer as its first co-recipients. Young, an assistant professor of architecture at the University of Utah in Salt Lake City, visited the Center in August to collect archival information on team design. Schermer, a Ph.D. student at the University of Michigan, is involved in research on the CRS-designed Chrysler Technology Center and plans to visit the Center this spring. This past fall, the Center again solicited applications for the 1998 CRS Center Archives Scholar Award. Selections are announced in January.

Summary of Archives Scholars to Date

- 1996, Dr. Hashim Sarkis, Adjunct Assistant Professor, Harvard University
- 1997, Robert Young, Assistant Professor of Architecture, University of Utah
- 1997, Brian Schermer, Ph.D. Student in Architecture, University of Michigan
- 1998, Dr. Kent Spreckelmeyer, Professor of Architecture, University of Kansas
- 1998, Dr. Paolo Tombesi, Assistant Professor of Architecture, University of Melbourne

APPENDIX A: 1997 REQUESTS FOR CRS ARCHIVES

<u>Name</u>	<u>Material Requested</u>
Chuck Thomsen, 3D/I	“What Works and What Fails in School Design”
Frank Kelly, PBK Architects	“The Cost of a Schoolhouse”
Brenda Anderson, Arch student	“Probes Investigation 14: A Search for Uniqueness of the Community College”; “The Urban Community College 1969: <i>A study of 25 urban community college systems</i> ”
Barrie Scardino, Editor, CITE	CRS First Year Book; Photos of Larsen, Olin Hall, UPM, Riyadh, Jones Hall, etc.
Alfred Kemper, FAIA	Federal Youth Correctional Institution, Bastrop—slides; articles Gulf Oil Building, Midland—program; IBM Branch Office Building, Houston—slide from Kennon collection, articles
James Murphy	CRS Team (articles: “Prima Donnas,” “Schools By Teamwork,” “CRSDA Design Team, At Age Four...,” etc.)
Robert Young, U. of Utah Faculty & 1997 CRS Archives Scholar	CRS programming, design by team strategies related to adaptively reused buildings (various articles, publications, corporate records, etc.)
Robert Johnson’s F97 Design Studio, Arch Faculty	“Bell Northern Research, Master Plan Development Program,” “Buick, Design Criteria Document Draft Report,” “Chrysler Technology Center, Master Plan Program Draft,” “Enwright Home Office Complex, Schematic Design Program”
Marie Fournier’s F97 Design Studio, Arch PhD student & CRS Center PhD Scholar in Residence	“Problem Seeking,” “The TIBs of Bill Caudill,” “CRS Center Occasional Paper #1: Leadership and Innovation,” “Architecture and You,” “CRS Center Occasional Paper #2: Architectural Education and the Profession”
Sansanee Praditkul, COSC student	Fast-Track Construction Info. (“A Fast Track to Savings in College Building,” “A Fast Track to Project Delivery”)
Catherine Heimsath Waldron	Photos—Clovis Heimsath study tour of Italy, 1958-59
George Mann’s F97 Design Studio,	“Problem Seeking,” “Zuni Comprehensive Community Health Center”

Arch Faculty

Susan Perkins, PhD student “The Urban Community College 1969: *A study of 25 urban community college systems*”

1997 Requests for CRS Archives (Continued)

<u>Name</u>	<u>Material Requested</u>
Robert Johnson’s S97 Seminar Class, Arch Faculty	Bell & Howell Schools info. (integrating articles from the archives into case study on project delivery written by Jonathan King)
Jack Yardley, HKS	Bill Caudill Speeches (requested copies from <i>April 1977-November 1978, January 1979-December 1981</i> volumes)
Duk-Su Kim, PhD student	CRS organization-related materials; Chapters 1, 4, 7, 9, 10-CRS Oral History Book
Chuck Thomsen 3D/I, and John Focke, Ray Bailey Architects	“The Cost of a Schoolhouse,” “A Fast Track to Savings in College Building,” “Cost Control...The School Building,” “New Proposals to Cut School Costs,” “Systems Building Delivers Two Schools in Nine Months,” “SCSD: The Project and the Schools,” “The Trend to School Building Systems, Part 1,” “Why Systems Can’t Miss, Part 2,” “Universal Building Systems Research-CRS,” “Systems Approach to Buildings,” “A Systems Approach to School Building,” “Systems: An Approach to School Construction,” “British Prefabricated School Construction,” “School Costs Cut by New Components”
LA student, Penn State	Basic information on CRS Center (boiler plate, CRS Short Story) and Archives (archives organization chart, Program Archive list); IFMA/Fortune 500 survey; “CRS Center Occasional Paper #1: Leadership and Innovation,” “CRS Center Occasional Paper #2: Architectural Education and the Profession”

APPENDIX B: 1998 STRATEGIC PLAN

1. Executive Summary

MISSION

To lead in improving the quality of business practice and management in the planning, design and construction industry through knowledge-generating and educational activities.

GOALS

GOAL 1: To create useful knowledge in innovation, management, and leadership;

GOAL 2: To transfer this knowledge to people and organizations in order to create positive change in the industry;

GOAL 3: To integrate this knowledge into the education of the next generation of leaders.

OVERVIEW OF PRIMARY STRATEGIES FOR ACHIEVING GOALS

To Achieve Goal 1:

Priority: Do at least 2 funded projects in 1998

1. *Create new knowledge.* Specialize in a focused research area—management of information technology— and do research in this area; investigate “systems building” and leadership.
2. *Developed funded research.* Do funded research projects in our chosen specialized area(s).
3. *Attract scholars and researchers.* Meet with and collaborate with faculty and Ph.D. students who share research interests of the Center; establish CRS Center Fellows program; create activities that will both help accomplish our mission and attract other scholars. Specific programs: Archives Scholar and Ph.D. Scholar in Residence.

To Achieve Goal 2:

Priority: Publish the CRS Oral History

1. *Publish research.* Publish research results in academic (peer reviewed) and professional journals.
2. *Present research.* Present at academic and professional conferences.
3. *Involve prospective users and sponsors.* Develop working partnerships with organizations that share research interests.

To Achieve Goal 3:

Priority: Continue to Foster Professional Collaboration and Faculty Involvement

1. *Develop a practice/management interdisciplinary curriculum.* CRS Center faculty will teach departmental courses; investigate interdisciplinary possibilities.

2. *Integrate knowledge into teaching activities.* Integrate knowledge from research and from the archives into courses.
3. *Assist in the education of professionals.* Sponsor and participate in targeted conferences and serve the needs of professional organizations.

2. Detailed Strategic Plan for 1998

GOAL 1: Create useful knowledge in innovation, management and leadership.

Strategy: Create new knowledge.

1. Focus on the following areas:
 - CRS Oral History Book
 - Information technology and facility management (USAA and others)
 - Systems building and educational facilities
 - Leadership (faculty initiative)
2. Support Ph.D. student during the spring semester (info. content of as-built drawings, USAA-related research). Continue to develop USAA research.
3. Contact potential sponsors for educational facilities (Butler Mfg.).
4. Support faculty interests through visiting lecture series (W.P. Moore; Bilello).

Strategy: Develop research funding.

1. Write publication subvention proposal to Graham Foundation for the Oral History Book (due July 15).
2. Follow up World Workplace presentation to develop other potential research areas.
3. Write proposals to USAA and other sponsors that have been identified.
4. Begin to establish an external advisory committee of “partners.”
5. Investigate research support from metal building mfgs. (Butler Mfg.).
6. Other potential projects:
 - Investigate funding sources for digitizing slide collection.

Strategy: Attract scholars and researchers to the Center.

1. Continue CRS Archives Scholar program. Investigate ways to enhance this program, possibly widening the scope of allowable projects.
2. Continue Ph.D. Scholar in Residence.
3. Present CRS Center to 3rd and 4th year design studios.
4. Initiate a CRS Center Fellows program; have faculty develop program ideas relevant to the Center.

5. Review ad-hoc proposals from faculty/students for possible support.
6. Build research infrastructure (purchase one or two new Pentium II computers).

GOAL 2: To transfer practice/management knowledge to organizations in order to create positive change in the industry.

Strategy: Publish research.

1. Continue to focus on using the summer for doing research and the fall and spring for presenting research.
2. Publish the Rowlett Lecture/Bush Library Symposium proceedings.
3. Update and revise web site as necessary. Begin to use SiteMill (currently using PageMill) to assist in managing the web site.
4. Support Jay Baker and Barrie Scardino in their writing of the Caudill book.
5. Contact A&M Press about the Oral History Book.
6. Other ideas:

Possibly develop a LISTSERV for Caudill's TIBs.

Future project: rework "Research at CRS" paper for publication in a professional journal.

Strategy: Present research.

1. Applied to present USAA research results at World Workplace '98.
2. ACADIA Conference: October 1998.
3. Other opportunities as they present themselves.

Strategy: Involve prospective users of research to identify research projects.

1. Criteria for project selection: There must be a "partner" actively involved in every research activity.
2. Follow up with USAA to define potential future research projects.

GOAL 3: Integrate practice/management knowledge into the education of the next generation of leaders.

Strategy: Develop a practice/management interdisciplinary curriculum.

1. Courses Taught:
 - ENDS 357-Specifications & Conditions
 - ARCH 451-Architectural Management
 - ARCH 657-Professional Practice (Johnson and Gribou)
 - ARCH 605-Design Studio (Johnson)
 - ARCH 605-Interdisciplinary Design Studio (McKittrick and Moore).
2. Independent study courses with Ph.D. students.

Strategy: Integrate knowledge into teaching activities.

1. Integrate archives into both the spring management course and fall design studio.
2. Utilize case on project delivery using the Bell & Howell project in the management course.
3. Guest lecture within the College as requested.
4. Improve archives:
 - Consider integrating FileMaker Pro with web site.
 - Look for a student worker to help with archives and other Center tasks.
5. Thanks to Barbara Anderson for continuing to catalogue new materials.

Strategy: Assist in the education of professionals.

1. Participate in professional organizations (AIA, TSA, NCARB, ACADIA, IFMA).
2. Participate in conferences and workshops.

APPENDIX C: MINUTES OF FACULTY MEETINGS

1. CRS Center Faculty Initiative Meeting: November 3, 1997

Present: Al-Qawasmi, Clayton, Ekroth, Fournier, Graham, McKittrick, Seidel, White

Not present but expressing interest: Hynds, Lindell, Murphy

A brownbag for faculty and Ph.D. students was held on November 3. The purpose of the brownbag was to exchange ideas about what kinds of activities the CRS Center might pursue to help faculty and Ph.D. students develop a College infrastructure for research in the general areas of leadership and management, although we also discussed current CRS Center research projects. Here is a summary of ideas that were developed from this brownbag.

Publication

In order for the Center to achieve its mission, it must publish. Faculty also need to publish their results. Is there a way to collaborate on this activity? Here are some ideas on this subject:

1. Investigate starting a quarterly journal on leadership and management. Alternatively, one might develop a theme issue in other journals.
2. Further experiment with a working paper series of faculty work that would be distributed to other schools of architecture and construction.
3. Continue to develop the web site as an alternate means of publishing and distributing faculty work.
4. Other ideas???

Research

1. Aligning our interests with those of other centers or laboratories could result in an increased ability to initiate larger, more significant research projects. Ekroth suggested a project related to hazards. (Subsequent to our meeting, Lindell indicated an interest in thinking about a proposal to “hurricane-proof” buildings, which is at least partly a management issue.)
2. Leadership. There were a number of faculty who expressed an interest in this issue of leadership. Toni Hynds is developing a new course which will partly address this issue. Tom McKittrick expressed interest in the AIA’s leadership institute. Perhaps we should make this the subject of a future brownbag?
3. Other ideas include: International practice, Negotiation and Ethics/Conflict resolution.

Curriculum

The Center should try to support faculty who are teaching in areas that are related to the Center’s mission. Here are just two potential ideas:

1. Visiting lecturer series. This may not always work since it is often difficult to get people to attend. However, it may be possible to arrange for specific classes to attend specific lectures by

invited people. While students in classes might be the specific, these lectures may be open to the College (and university) so that other students outside of these classes may benefit.

2. Summer continuing education. A summer workshop may be a way to network with potential sponsors as well as identify and explore researchable issues. Possible topics include: uses of information technology in facility management, etc.

3. Other ideas?

Next Steps

I would like your feedback on these ideas. Also, please let me know if you have any additional ideas or if I left anything out. This is an on-going project, and I will add to this list as more ideas are generated. I will be impossible to do everything, but it is my intention to pursue at least one of these activities in 1998. I would also like to continue with periodic brownbag discussions if you feel they would be useful.

Thank you for participating. Based on those who participated or who expressed interest I have developed an email list as a way to informally exchange ideas. If you wish to be deleted from this list, please let me know. Please inform me if you know of anyone who might want to be added.

2. CRS Center Meeting on Leadership: December 11, 1997

At our faculty meeting on December 11, only Andrew Seidel and Nancy White showed up. We developed a preliminary list of possible actions that the CRS Center could help to sponsor this next term and that would benefit groups of faculty/students. These possible actions are listed below. If you are interested, please add to this list by sending me an email. We will hold another meeting after the break to see if there is continued interest.

In addition, it was suggested that we exchange CVs. If you would like to send me your CV, I will have it photocopied and distributed to others on this list.

Brainstormed List of Possible Actions

- Case studies of leadership in architecture.
- Initiate courses on leadership.
- Sponsor an outstanding visiting speaker.
- Theme issue of JAPR on leadership.
- Start a journal on leadership.
- Survey leadership attitudes of architectural students.
- Continuing education courses on leadership.
- Literature on leadership.
- Contact others at TAMU who are interested in leadership.
- Contact Community of Science.
- Discuss one book or chapter each month on leadership.

Identify the top five journal articles/books on leadership.

Discuss research methods on leadership issues.

Discuss types of leadership (teams, organizations, etc.)

Check with Research Foundation on leadership issues.

Leadership and other issues (personality types, people skills, cooperation/competition, ethics, negotiation, power, etc.).

APPENDIX D: CRS CENTER FELLOWS PROGRAM

DRAFT (Revised): March 28, 1998

Purpose

In order for the CRS Center to accomplish its mission, it must build a supportive intellectual environment and research infrastructure for faculty, graduate students and professionals whose interests are compatible with those of the Center. Ideally, the Fellows Program will help build this supportive environment and infrastructure.

Goals

The goals of this Fellows Program are:

- 1. To provide a structure and incentives to encourage more faculty and professionals to become involved with the activities of the CRS Center.*
- 2. To provide a forum so that faculty can influence the direction and programs of the Center in order for the Center to become a more integral part of the College and the University.*

Appointment Procedures

Any faculty member (including visiting and adjunct faculty), researcher or professional may request appointment as a CRS Center Fellow at any time. CRS Center Fellows will be appointed and reviewed by the CRS Center Advisory Board for a maximum term of three years in accordance with College policy and this document.

Any faculty member who is the principal investigator of a research project that is administered through the Center will automatically be eligible to become a CRS Center Fellow, subject to approval from the CRS Center Advisory Board.

Fellow Responsibilities

1. Attend periodic meetings of the CRS Center. General meetings will be held at least once per semester.
2. Forward an annual report of your relevant teaching, research and service activities and accomplishments to the Center's Director so that your contributions to the Center may be incorporated in the Center's annual report to the dean.
3. Work together with other CRS Center Fellows to help create and nurture an intellectual climate that will benefit other faculty and students and further the mission of the Center and the College. This may involve serving on subcommittees that are designed to identify or conduct a specific activity.
4. Teach courses and conduct research and scholarship in areas that are relevant to the mission of the CRS Center. When possible, the Center may provide cost-sharing to encourage the external support of research initiatives which have significant future funding potential.

5. Assist in identifying faculty and professionals outside the College and the University who may add value to the education and research activities of Center faculty.
6. Provide timely input to the CRS Center strategic planning process.
7. Guest lecture in courses conducted by other CRS Center Fellows.

CRS Center Responsibilities

1. Assist Fellows in the preparation of research proposals. To the extent that time permits, the Center staff will be able to provide general copy-editing services and help with preliminary budget preparation prior to assistance from the appropriate TAMU research administration agency. It is the responsibility of faculty fellows to generate research ideas and prepare written drafts of research proposals.
2. Provide space for research and related activities. Requests for space may need to be scheduled and prioritized.
3. Provide a professional office working environment for research and related activities including appropriate research administration services.
4. Provide specialized equipment and computing (hardware and software) resources that may be necessary to support the research endeavors of CRS Center Fellows.
5. Fellows whose externally funded research is conducted through the Center will have input as to how the Center's portion of their indirect cost return is used.
6. The CRS Center has a limited capability to provide resources (such as potential student workers or graduate assistants) to selected research projects. Typically, these resources may be used to help with cost-sharing and the development of partnerships with external sponsors.
7. Make every effort to assist in developing an intellectually interesting environment for faculty and students, to include assistance in visiting lecturers.
8. Write an evaluation letter for each Fellow to their appropriate department head as part of the annual review process.
9. The CRS Center will publish and nationally distribute information about the activities of the Center and its Fellows, to include an annual report, a web-site, CRS Center Research working paper series, etc.
10. Provide business cards when requested by Fellows.