FRIEDMAN FAMILY VISITING PROFESIONALS PROGRAM

Visit to Rice University: March 25, 2025

This report summarizes the visit of **David Cocke** from Structural Focus that took place at Rice University on March 25, 2025.

ITINERARY OR AGENDA

The following was the agenda planned for the day:

TIME:	**ACTIVITY:**
9:15 AM – 10:00 AM	Student Chapter President Andres Calvo and member Jainish Patel meets & welcomes Mr. Cocke to campus and Tour of campus
10:00 AM – 10:30 AM	Meeting with Prof. Larissa Novelino
10:30 AM – 10:45 AM	Visit to Ryon structural laboratory and civil engineering building with Raul Rincon
10:45 AM – 11:30 AM	Meeting with Rice EERI Student Chapter
11:30 AM – 11:45 AM	Break
11:45 AM – 1:00 PM	Lunch with Prof. and Department's chair Jamie Padgett, Prof. Kai Gong, Andres Calvo and an undergraduate student interest in the EERI student chapter.
1:00 PM – 1:30 PM	Meeting with Prof. Kalil Erazo
1:30 PM – 2:00 PM	Meeting with Prof. Leonardo Duenas-Osorio
2:00 PM – 2:30 PM	Meeting with Department's chair Prof. Jamie Padgett
2:30 PM – 3:00 PM	Seminar preparation
3:00 PM – 4:00 PM	Lecture: Some Tools for a Resilient Community
4:00 PM – 4:30 PM	Informal meeting with department graduate students (soon to be graduating) for career guidance and members of the Student Chapter at Rice Grads Commons
7:00 PM – 9:00 PM	Dinner with EERI student chapter at a local restaurant

STUDENT CHAPTER VISIT PLANNING COMMITTEE

LEAD ORGANIZER(S):

- Andres Calvo, President, ac228@rice.edu
- Raul Rincon, Vice-president, jr93@rice.edu
- Jainish Patel, treasurer, jp116@rice.edu
- Jamie Padgett, Club sponsor, Stanley C. Moore Professor and Department Chair, jp7@rice.edu
- Caroline Leggett, Department Coordinator, cl185@rice.edu

VISITING PROFESSIONAL LECTURE OVERVIEW

David Cocke's visit was very fruitful to the student chapter, graduate students and those interested in seismic and structural engineering. The presentation was generous in content and promoted different applications earthquake engineering such as post-disaster response, quick damage inspection and community resilience for large structural portfolios. The presentation was dynamic, with plenty of graphic content, personal experiences and field-related information as well as useful by showing real case studies. During the presentation there were several questions. David provides real life experiences to impact communities with seismic engineering and how structural engineering entrepreneurship can help during recovery efforts. The room was attended by several graduate students, undergraduates, faculty members and external visitors.



Additional information such as the specialty seminar flier and David Cocke's campus visit agenda are attached at the end of this report.

Lecture Abstract

Some Tools for a Resilient Community. Creating a resilient community requires consideration of many factors, including the range of potential hazards, and the social and built environment's ability to withstand those hazards. There are social functions and dependencies and the role of the built environment including buildings, transportation, energy, water, wastewater, communication and more. Two building blocks toward a community's successful resilience will be discussed: the concept and practice of functional recovery, and the implementation of an accelerated building reoccupancy(ABR) program. The role of structural engineers in both is critical and these two building blocks will be presented from the viewpoint of an experienced structural engineer. In closing, some career advice will be offered to aspiring professionals as they look toward their own successful careers, followed by questions and answers.

Professional Bio

David W, Cocke, S.E., F.SEAOC, F.SEI, F.ASCE, has been practicing Structural Engineering in California since 1981. He founded Structural Focus in 2001 after 20 years with another firm. David is a licensed structural engineer in California and 15 other states with expertise in seismic evaluation, historic preservation, retrofits and new design. His many years of dedicated service to the engineering community have earned him fellowships in the Structural Engineers Institute, the American Society of Structural Engineers, and the Structural Engineers Association of California. In 2017, David was inducted into Virginia Tech's Charles E. Via Jr. Department of Civil and Environmental Engineering Academy of Distinguished Alumni. He is a past President of the Earthquake Engineering Research Institute (EERI) and of the Structural Engineering Institute of ASCE. David is currently on the NIST Advisory Committee on Earthquake Hazard Reduction, the Board of Directors of the Applied Technology Council and the University of California Seismic Advisory Board and has served as SEAOC-appointed alternate member of the state Historical Building Safety Board for the past 17 years. David has evaluated and designed seismic retrofits and adaptive reuse of hundreds of buildings in his career including the Annenberg Center for Performing Arts in Beverly Hills, Red Bull North American Headquarters, Wilshire Boulevard Temple, Masonic Temple in Glendale, Google Los Angeles, Netflix Egyptian Theater and many more. His list of new construction projects include the Amazon Studios in Culver City, numerous new buildings at Warner Bros. Studios, Sony Pictures and Dreamworks Animation, Specialty Laboratories, Pitzer College, and more

SUPPLEMENTAL ACTIVITES

Graduate student's meeting

The meeting with graduate students from the civil and environmental department was an opportunity for students to solve doubts regarding academic life and professional career after graduation. It was also an opportunity to know how the graduate life was experienced and received some key advises from David. Historical building retrofitting was an important topic where the different backgrounds of the students help to have a very interesting discussion around the pertinence, necessity and impact of seismic retrofit of historical buildings. David also discussed about his personal view of engineering entrepreneurship.

Lunch

During lunch graduate and undergraduate students got the chance to discuss topics of interest with David and faculty members. There was a lot of interest in the role of sustainable and novel materials in structural engineering and construction practices. Having the presence of faculty members that knew David was also appropriate to have deeper discussions of the role of academia and research in engineering in the US and the future of civil engineering considering challenges of today and the near future.

Dinner

The dinner included members of the student chapter where conversations were focused around the challenges, learning and the rewards of being the head of a structural engineering firm. There were anecdotes of being an entrepreneur in engineering and discussions about the skills sougth by firms on graduate students who are interested in industry pathways.

RESULTS, FEEDBACK AND LESSONS LEARNED

The overall visiting was very satisfactory. The EERI Student Chapter at Rice university, while not large, is committed to the dissemination of seismic engineering and the seismic community, with EERI being the foundation of this work. We still want to have more student participation and therefore, these visits represent a unique opportunity to make the student chapter visible.

Some challenges for us still are:

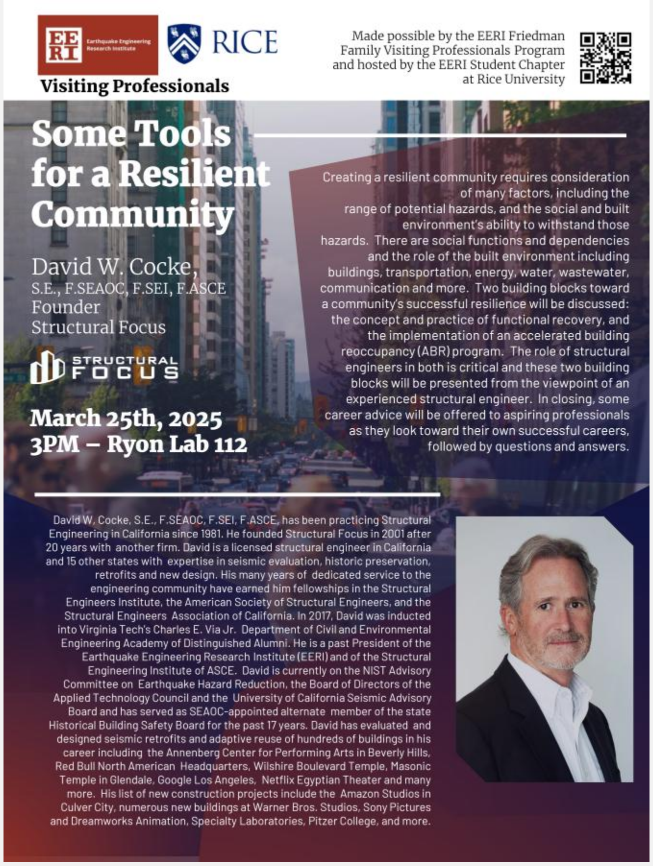
- Consolidate student participation
- Carry out EERI activities and challenges with different students (undergraduate and graduate)
- Disseminate EERI news with greater impact.

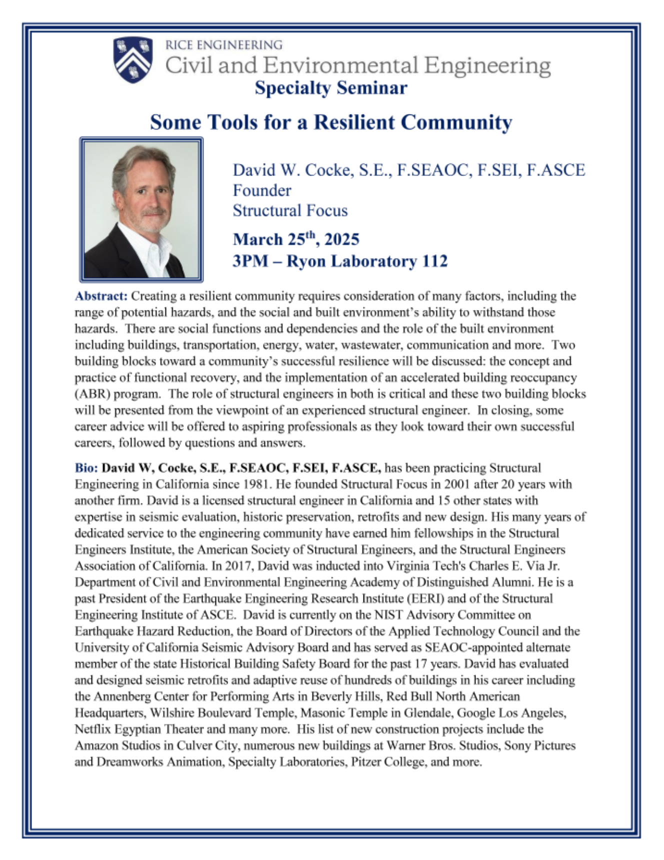
ACKNOWLEDGEMENTS

The Rice University EERI Student Chapter gratefully acknowledges the support of the Friedman Family for sponsoring the travel of David Cocke through their Friedman Family Visiting Professional Program endowment. We also acknowledge the support of the Civil and Environmental Engineering at Rice (staff, faculty members, and students) for their participation in coordination and support of different activities.

LIST OF ATTACHMENTS

- Item 1: EERI Student Chapter Flier that circulates in the undergraduate, graduate and faculty of Civil and Environmental engineering
- Item 2: CEVE department Flier that circulates with all Civil and Environmental community
- Item 3: Detail agenda used to guide David Cocke




RICE ENGINEERING
Civil and Environmental Engineering
Specialty Seminar

Some Tools for a Resilient Community

David W. Cocke, S.E., F.SEAOC, F.SEI, F.ASCE
Founder
Structural Focus

March 25th, 2025
3PM – Ryon Laboratory 112

Abstract: Creating a resilient community requires consideration of many factors, including the range of potential hazards, and the social and built environment's ability to withstand those hazards. There are social functions and dependencies and the role of the built environment including buildings, transportation, energy, water, wastewater, communication and more. Two building blocks toward a community's successful resilience will be discussed: the concept and practice of functional recovery, and the implementation of an accelerated building reoccupancy (ABR) program. The role of structural engineers in both is critical and these two building blocks will be presented from the viewpoint of an experienced structural engineer. In closing, some career advice will be offered to aspiring professionals as they look toward their own successful careers, followed by questions and answers.

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EDIRECTIONS TO CAMPUS

Directions from IAH

From Intercontinental's terminal road, follow signs to US 59 South.

Once on US 59 proceed south approximately 25 miles and exit at Greenbriar.

Turn left under US 59 and follow Greenbriar to the light at Rice Boulevard.

Turn left onto Rice Boulevard. Rice campus entry gates will be on your right.

Turn right into Gate #21 and park in the North Lot.

Use your credit card to enter the lot.

Directions from Hobby

From Hobby's parking area, exit onto Broadway and follow signs to I-45 North.

Take I-45 North approximately 6 miles to US 59 South.

Once on US 59 proceed south approximately 3 miles and exit at Greenbriar. Follow steps 4 and 5 above

Rice University
Department of Civil & Environmental Engineering
6100 Main Street
Houston, TX 77005

713-348-4949

RICE

Department of Civil & Environmental Engineering

SEMINAR

Some Tools for a Resilient Community

David W. Cocke, S.E., F.ASCE, F.SEI, F.SEAOC

Tuesday, March 25th, 2025
3PM
Ryon Laboratory 112

FACULTY

Jamie Padgett, CEE Chair
P:
E:

Pedro Alvarez
P:
E:

Phil Bedient
P:
E:

Daniel Cohan
P:
E:

Reginald DesRoches
P:
E:

Leonardo Duenas-Osorio
P:
E:

Qilin Li
P:
E:

Satish Nagarajaiah
P:
E:

Avantika Gori
P:
E:

Xinwu Qian
P:
E:

Luay Nakhleh, Dean of SoE
P:
E:

Bezawit Getachew
P:
E:

Lauren Stadler
P:
E:

James Doss-Gollin
P:
E:

Pol Spanos
P:
E:

Kalil Erazo Cruz
P:
E:

Mason Tomson
P:
E:

Kai Gong
P:
E:

Larissa Novelino
P:
E:

Menachem Elimelech
P:
E:

PROFESSORS in the PRACTICE

Jim Blackburn
P:
E:

Ed Segner
P:
E:

March 25th	
9:15AM IHG	Pick up from hotel and campus tour by Jainish Patel
10:00AM 488 OES	Meeting with Dr. Larissa Novelino
10:30AM 338 OES	Break/walk to Ryon Lab
10:45AM 203 RYN	Meeting with Rice EERI Student Chapter
11:30AM RYN	Break/Walk to Faculty Club
11:45AM Faculty Club *#1816*	Lunch with Dr. Jamie Padgett and Dr. Kai Gong
1:00PM 216 RYN	Meeting with Dr. Kalil Erazo
1:30PM 212 RYN	Meeting with Dr. Leonardo Duenas-Osorio
2:00PM 208 RYN	Meeting with Dr. Jamie Padgett
2:30PM 203 RYN	Break/Seminar Prep
3:00PM 201 RYN	Seminar
4:00PM RYN	Break
4:15PM RYN 213	Meeting with Dr. Satish Nagarajaiah
4:45PM IHG	Break/Return to hotel
6:00PM *520 Westheimer Rd, Houston, Tx 77006*	Dinner at Traveler's Table with Rice EERI Student Chapter

LOGISTICS

CONTACT:
Andres Calvo:
David Cocke:

SEMINAR SUPPORT:
Caroline Leggett: Cell #
Office # (713) 348-4216

FLIGHTS
(03/24/25) AA 4916
Departure: 2:00pm LAX
Arrival: 7:16pm IAH

HOTEL
InterContinental Houston Medical Center
6750 Main St., Houston, Tx 77030
Check in: 03/24/25
Check out: 03/26/25

Flash drive:
You are welcome to present from a flash drive or laptop.

Primary Audience: Graduate and post-doctoral students and faculty in Civil & Environmental engineering – please tailor presentation to appeal to interests in both focus areas with 40-45 lecture/15 minutes Q/A).

PARKING
Enter campus at Gate #21 off of Rice Blvd, and turn right into the North Lot. Use your credit card to enter. We will provide you with a parking validation.