

FRIEDMAN FAMILY VISITING PROFESSIONALS PROGRAM

Visit to Virginia Tech: April 6, 2018



This report summarizes the visit of David Cocke from Structural Focus that took place at Virginia Tech on April 6, 2018.

ITINERARY OR AGENDA

Provide the itinerary of the visit. For example:

TIME:	ACTIVITY:
8:30 AM – 11:30 AM	Faculty in the SEM department meet with David Cocke
11:30 AM – 1:15 PM	Lunch with EERI student chapter
1:30 PM - 2:30 PM	Presentation to the Myers-Lawson School of Construction
3:00 PM – 3:45 PM	Tour of Campus with EERI student chapter
4:00 PM – 5:00 PM	Presentation “Real-Life Structural Engineering”
5:00 PM – 5:30 PM	Reception with students and faculty
6:00 PM – 7:00 PM	Dinner

STUDENT CHAPTER VISIT PLANNING COMMITTEE

LEAD ORGANIZER(S):

- Cole Jaconski, President, colej6@vt.edu
- Raul Avellaneda, Vice President, rear93@vt.edu
- Logan Perry, Treasurer, laperry@vt.edu
- Cody Furrow, Secretary, codyf95@vt.edu
- Wendy Reyes, Seismic Design Team Advisor, wendyar@vt.edu
- Dr. Koutromanos, Interim Faculty Advisor, ikoutrom@vt.edu

VISITING PROFESSIONAL LECTURE OVERVIEW

David Cocke was able to give two presentations. One presentation was aimed for an audience in the Myers-Lawson school of construction. The second presentation was given to students in the Civil and Environmental Engineering department. Both presentations were designed to give students insight on real-life experience in the profession of construction or structural engineering.

Lecture Abstract

Successful Project Teammates

There is a wide range of different construction project delivery methods in use today and each has advantages, disadvantages, risks and rewards for each of the team members. In addition to the delivery method used, other project circumstances can lead to success and failure, (which may vary even on the same project depending on the team members' individual perspectives.) Success for one team member may not necessarily mean success for another. But one can certainly argue that the abilities and personalities of the individual team members can significantly affect a project's success. This presentation will provide anecdotal

points that support the hypothesis that individual team members characteristics can lead to both success and failure. After thousands of projects, David has made several relevant observations to be shared through actual project anecdotes that may help future builders, designers and even owners in their careers to become successful and remain satisfied with their work.

Real-Life Structural Engineering

Engineering students learn a lot about analyzing structures, designing systems and connections and other tools to be successful as a practicing engineer in the real world. In real life, engineers have a tremendous impact on our society. The profession plays a major role affecting important issues such as sustainability, public safety, the aesthetics of our built environment, community resilience and recovery from disasters, economic growth, preservation of historic structures and our client's needs for a viable facility. Now, 17 years later, the Structural Focus portfolio includes film studios, performing arts venues, historic landmark buildings, university and labs, and other projects like Red Bull Headquarters, Google and YouTube. In his presentation, David will explain some of the Structural Focus philosophy and strategies, as well as review several case studies including the Annenberg Center for Performing Arts in Beverly Hills, 3Labs, Agensys and the historic Masonic Temple and the Wilshire Boulevard Temple restoration projects. David will also introduce you to their latest work with community resiliency involving post-disaster inspection programs. During this discussion, David hopes to show how a wide diversity of projects can provide engineers with the opportunities to contribute to a better future and how their passion can lead to their success.

Professional Bio

David Cocke, S.E. has been practicing Structural Engineering since 1981. He received his bachelor's from Virginia Tech and his master's from San Jose State University. David founded Structural Focus in 2001 after 20 with a goal to work on the most interesting and meaningful projects in Southern California. He is a registered Structural Engineer in California and several other states, with expertise in seismic evaluation, historic preservation, retrofits and new design.

SUPPLEMENTAL ACTIVITIES

Faculty in the SEM department meet with David Cocke

Dr. Koutromanos helped our chapter organize an activity in which the faculty in the Structural Engineering and Materials department could meet with David Cocke. Faculty took this opportunity to present their research and network.

Lunch with EERI student chapter

The EERI student chapter took David Cocke to eat in Downtown Blacksburg. This opportunity was a great experience for students because Mr. Cocke was able to share his knowledge and insight in the structural engineering field. Mr. Cocke is also a Hokie Alumni so it was interesting to hear how much the Virginia Tech campus has changed since his last visit. The students really enjoyed being able to talk and ask questions to Mr. Cocke during the lunch.

Reception with Students and Faculty

After Mr. Cocke gave his "Real-Life Structural Engineering" presentation, the EERI student chapter held a reception for students and faculty. This activity gave the opportunity for students and faculty to ask more questions they were not able to ask during the presentation. The reception was a great way to wrap up the day before Mr. Cocke left for dinner.

RESULTS, FEEDBACK AND LESSONS LEARNED

Brief description of challenges during the process, general reception of the program and Visiting Professional. Also a description of other topics or disciplines the Student Chapter would like to cover in future visits, and related goals.

- It was a brief challenge to coordinate with the Myer-Lawson school of construction. The itinerary for Mr. Cocke changed a few times as a result.
- Our chapter would like to keep list on successful ways to raise awareness of the guest speaker presentation to all students in the CEE department. We had a great turnout of students and would like to keep increasing attendance.
- The reception after the presentation was perfect way for students to engage with Mr. Cocke. Our chapter would like to continue this activity for all future guest speakers.

ACKNOWLEDGEMENTS

The Virginia Tech 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 would also like to thank Dr. Koutromanos who stepped in this year as our Faculty Advisor and helped us coordinate Mr. Cocke's visit at Virginia Tech.

LIST OF ATTACHMENTS

Included at the end of this report are various attachments to supplement the information included above. A list of the attachments is included below:

- Item 1, i.e. flier for event

2 SEMINARS: Friday, April 6th

1:30 pm Bishop-Favrao 230

4:00 pm Torgersen Hall 3100



Real-Life Structural Engineering (4:00 pm)

Engineering students learn a lot about analyzing structures, designing systems and connections and other tools to be successful as a practicing engineer in the real world. In real life, engineers have a tremendous impact on our society. The profession plays a major role affecting important issues such as sustainability, public safety, the aesthetics of our built environment, community resilience and recovery from disasters, economic growth, preservation of historic structures and our client's needs for a viable facility. Now, 17 years later, the Structural Focus portfolio includes film studios, performing arts venues, historic landmark buildings, university and labs, and other projects like Red Bull Headquarters, Google and YouTube. In his presentation, David will explain some of the Structural Focus philosophy and strategies, as well as review several case studies including the Annenberg Center for Performing Arts in Beverly Hills, 3Labs, Agensys and the historic Masonic Temple and the Wilshire Boulevard Temple restoration projects. David will also introduce you to their latest work with community resiliency involving post-disaster inspection programs. During this discussion, David hopes to show how a wide diversity of projects can provide engineers with the opportunities to contribute to a better future and how their passion can lead to their success.

Successful Project Teammates (1:30 pm)

There is a wide range of different construction project delivery methods in use today and each has advantages, disadvantages, risks and rewards for each of the team members. In addition to the delivery method used, other project circumstances can lead to success and failure, (which may vary even on the same project depending on the team members' individual perspectives.) Success for one team member may not necessarily mean success for another. But one can certainly argue that the abilities and personalities of the individual team members can significantly affect a project's success. This presentation will provide anecdotal points that support the hypothesis that individual team member's characteristics can lead to both success and failure. After thousands of projects, David has made several relevant observations to be shared through actual project anecdotes that may help future builders, designers and even owners in their careers to become successful and remain satisfied with their work.

BIO

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notable projects include the Wallis Annenberg Center for the Performing Arts, Wilshire Boulevard Temple, Red Bull North American Headquarters, John Anson Ford Amphitheatre, DreamWorks Animation Lakeside Annex, Warner Bros. Post-Production Facility, and Sony Pictures Akio Morita building. David has been leading the effort to bring Back to Business (B2B), a Building Occupancy Resumption Program, to Southern California.

