



**Virginia Academy of Science Fall Undergraduate Research Meeting
Saturday, October 29, 2016
Virginia Union University
Claude G. Perkins Living & Learning Center
Richmond, VA**

SCHEDULE OF EVENTS

9:00 - 9:50

**Check In (Atrium)
Poster Set-up and Meet and Greet (Conference Room Two)**

During this time period, all meeting attendees should check in at the Check In and Registration Area.

Following Check In student applicants for the Undergraduate Research Grants should set up their posters on their assigned poster boards.

Coffee, tea and other beverages will be available for all meeting registrants in the Atrium.

9:15 - 9:45

Judges Meeting (Conference Room Three)

During this time period the judges will meet with the VAS President-Elect and review the criteria for judging the proposals and posters as well as the procedure for selecting the grant recipients.

9:50 - 10:00

**Welcome, Opening Remarks and Instructions
(Conference Rooms One Two)**

Robert Atkinson, Dept. of Organismal & Environmental Biology,
Christopher Newport University, VAS President-Elect and Fall
Undergraduate Research Meeting Coordinator

10:00 - 12:30

Evaluation of Posters (Conference Room Two)

During this time period, each poster will be evaluated by a team of judges. The judges will meet with the grant applicants and the applicants should be prepared to give a very brief summary (no more than 5 minutes) of the proposed research and then respond to questions from the judges.

12:00 - 1:30

Lunch Break

Lunch and beverages will be available for all meeting registrants in the Atrium (seating available in Conference Room One).

12:30 - 2:45

Judges Lunch and Meeting (Conference Room Three)

During this time period the judges will select the recipients of the 2016-2017 VAS Undergraduate Research Grant Awards.

1:30 - 1:45

Welcome to Virginia Union University (Conference Room One)

Zakir Hossain, Vice-President of Academic Affairs, Virginia Union University

Latrell Green, Dean of the School of Mathematics, Science and Technology, Virginia Union University

1:45 - 2:45

Invited Speaker (Conference Room One)

David S. Torain II, Dept. of Mathematics, Montgomery College (MD)

***Topic:* Using Torain's Equations as a Predictable Model in the Sciences**

Torain's equations are essentially a set of parametric non-linear differential equations that use an analytical tool as a mathematical model. These equations offer a global science view that computer calculations cannot provide. Since only numerical methods have been previously developed in the sciences to investigate this problem, this research proposes a new analytical approach. This approach is based on the notion that when one of the sixteen parameters of Torain's equations is sent to infinity, the general solution, involving the remaining fifteen parameters can be expressed in terms of elementary functions. This is made possible because, in this limit besides the time invariance group, an exact invariance-scaling group exists. This approach uses the science field to study the resulting mathematical model.

2:50 - 3:15

Announcement of Grant Recipients (Conference Room One)

Deborah Neely-Fisher, Reynolds Community College, VAS President

3:15 - 3:30

2016-2017 Undergraduate Grant Recipients Assemble for Photographs (Conference Rooms One & Two)

3:15 - 3:45

Poster Removal (Conference Room One)

Check Out and Departure (Atrium)

During this time period student applicants for the Undergraduate Research Grants should remove their posters from their assigned poster boards and leave the poster board and binder clips on the table for subsequent pickup.

Also, during this time period, all meeting attendees should check out by returning their name tag holders at the Check In and Registration Area.