



VT EPSCoR Annual State Meeting Grant Writing Workshop

JUNE 2 & 3, 2009

CUAHSI HIS Workshop

JUNE 4 & 5, 2009

Sheraton Hotel & Conference Center
Burlington, Vermont





WE INVITE YOU to join us for the 2009 Vermont National Science Foundation Experimental Program to Stimulate Competitive Research (VT NSF EPSCoR) Annual Conference and Grant Writing Workshop. Each year, the VT EPSCoR program hosts a state-wide meeting to highlight our accomplishments and offers a grant writing workshop. We are pleased to welcome **Dr. George Hazelrigg**, Program Director Civil, Mechanical & Manufacturing Innovation (ENG/CMMI), Manufacturing Machines and Equipment (MME) NSF EPSCoR as our keynote presenter for our Annual Grant Writing Workshop on June 2nd.

The content and focus of the annual conferences vary from year to year. This year we will focus on the **Complex Systems Modeling Group (CSYS)**. We are pleased to have members of the CSYS group present their research on the datasets and their novel approaches and findings to problems associated with the Lake Champlain Watershed. **Dr. Mary Watzin**, CSYS group leader and recently appointed Dean of the Rubenstein School of Environmental and Natural Resources (RSENR), will provide opening remarks and an overview of their work followed by group presentations.

After lunch we will hear about the **Streams Project** which begins its second year of data collection of streams throughout Vermont by high school and undergraduate students. This will be followed by a poster session featuring all funded projects.

Finally, we are very pleased to welcome **Dr. Richard Hooper**, Executive Director, CUAHSI, as our keynote speaker. Dr. Hooper starts off the *Introduction to the CUAHSI Hydrologic Information System (HIS) Workshop* led by Tim Whiteaker, Ph.D. on June 4th & 5th. A full workshop agenda follows.

I hope you will take advantage of the information, resources and networking opportunities presented in this format.

Register Today!

P: (802) 656-7931

F: (802) 656-2950

epscor@uvm.edu

web registration:

www.uvm.edu/EPSCoR/

[Annual_Meeting_Registration](#)



Sincerely,

Judith Van Houten, PhD.

State Director, VT EPSCoR

VT EPSCoR Annual State Meeting & Grant Writing Workshop

June 2 & 3, 2009

Sheraton Hotel and Conference Center

Followed by **CUAHSI Workshop – Introduction to the CUAHSI Hydrologic Information System (HIS)**

led by *Tim Whiteaker, Ph.D., June 3 – 5, 2009 at the University of Vermont*

CONFERENCE AGENDA

Tuesday, June 2

Grant Writing Workshop with Dr. George Hazelrigg

- 8:30 – 9:00 a.m.** **Registration & Continental Breakfast**
Diamond Foyer
- 9:00 a.m.** **Welcome & Introductory Remarks**
Emerald Ballroom I & II
Judith Van Houten, Vermont State EPSCoR Director
- 9:05 a.m. – Noon** **“Research Program Development”**
Dr. George Hazelrigg, Program Director Civil, Mechanical & Manufacturing Innovation (ENG/CMMI), Manufacturing Machines & Equipment (MME) NSF EPSCoR
- 10:45 – 11:00 a.m.** **Break**
- 12:00 – 1:00 p.m.** **Lunch**
Emerald Ballroom III
- 1:00 – 2:45 p.m.** **Mock Panel Review Session including Q&A and “Lessons Learned”**
Emerald Ballroom I & II
Panel Chair: **Dr. George Hazelrigg (NSF)**
Panel Members and Format TBA. Sample proposals will be distributed in advance of this session.
- 2:45 – 3:00 p.m.** **Break**
- 3:00 – 4:00 p.m.** **Other Funding Sources**
Hilda Alajajian, Funding Administrator, University of Vermont
Franci Farnsworth, Coordinator of Sponsored Research, Middlebury College

3:00 – 4:00 p.m.

“SBIR SOUP”

Mr. Mark Blanchard, Technology & Commercialization Advisor, VT Small Business Development Center (VtSBDC)

4:00 p.m.

Closing Remarks

Dr. Van Houten

Dinner on your own

Wednesday, June 3, 2009

VT EPSCoR Annual State Meeting and CUHASI Data Workshop

All sessions in Emerald Ballroom III with Poster Session on the Promenade

8:00 – 9:00 a.m.

Registration, Poster Set Up, Continental Breakfast
Diamond Foyer

9:00 a.m.

Welcome

Emerald Ballroom III

Judith Van Houten, Ph.D., State Director, VT EPSCoR

Presentations from CSYS Group: Complex Systems Modeling for Environmental Problem Solving

9:00 – 9:20 a.m.

Science Overview – Progress to date – Next Steps for the final year of funding

Mary Watzin, Ph.D., Dean, Rubenstein School of Environment and Natural Resources

9:20 – 10:00 a.m.

Using genetic programming to evolve population growth models for cyanobacteria

Matt Luck, CSYS Post Doctoral Student

Dr. Maggie Eppstein, CSYS Faculty and Assistant Professor, Department of Computer Science (UVM)

Dr. Josh Bongard, CSYS Faculty and Assistant Professor, Department Computer Science (UVM)

Dr. Mary Watzin, Science Leader and Dean, Rubenstein School of Environmental and Natural Resources

10:00 – 10:30 am

Clustering nutrients and toxic cyanobacteria communities using a modified self-organizing map (SOM)

Andrea Pearce, CSYS Graduate Student

Dr. Donna Rizzo, CSYS Faculty and Assistant Professor – Civil & Environmental Engineering (UVM)

Dr. Lori Stevens, CSYS Faculty and Professor of Biology (UVM)

Dr. Mary Watzin, Science Leader and Dean, Rubenstein School Environment and Natural Resources

10:30 – 10:45 am

Break

10:45 – 11:15 am

A multiscale, multiobjective evolutionary approach for analyzing complex flow and transport in the watershed

Karim Chichakly, CSYS Graduate Student

Dr. Breck Bowden, Science Leader & Professor, Rubenstein School of Environment and Natural Resources

Dr. Maggie Eppstein, CSYS Faculty and Assistant Professor, Department of Computer Science (UVM)

11:15 – 11:45 am

Linking geomorphology, habitats, and biota in streams using artificial neural networks (ANNs)

Bree Mathon, CSYS Graduate Student

Dr. Donna Rizzo, CSYS Faculty and Assistant Professor – Civil & Environmental Engineering (UVM)

Dr. Lori Stevens, CSYS Faculty and Professor of Biology (UVM)

11:45 am – 12:00 pm

Evolving kernels for support vector machines for high dimensional classification

Dr. Josh Bongard, CSYS Faculty and Assistant Professor, Department Computer Science (UVM)

Zhenyu Lu, CSYS Graduate Student

Dr. Mary Watzin, Science Leader and Dean, Rubenstein School Environment and Natural Resources

12:15 – 1:30 p.m.

Lunch

Emerald Ballroom III

1:30 – 2:00 p.m.

Streams Project Progress

KathiJo Jankowski, Streams Project Coordinator

Dr. Declan McCabe, Science Advisor, Assistant Professor, Biology, St. Michael's College

2:00 – 4:00 p.m.

Poster Session with light refreshments

Promenade

4:00 – 5:00 p.m.

Keynote Presentation

Dr. Rick Hooper, Executive Director, CUAHSI

5:30 – 7:30 p.m.

Dinner

Emerging Science episode on CSYS shown during dessert

CUAHSI Workshop

June 3-5, 2009

LIMITED SPACE AVAILABLE – PRE-REGISTRATION REQUIRED

- Space limited to 40 registrants so register early!!
- Must be able to attend entire workshop
- \$100.00 registration fee to hold your space required. Reimbursement will be available upon completion of workshop.
- RSVP with your name, contact information and whether or not you will need hotel accommodations by May 20 to: epscor@uvm.edu

WORKSHOP AGENDA

Wednesday, June 3

- 2:00pm** **VT EPSCoR Annual Meeting Poster Session**
Sheraton Hotel and Conference Center, Promenade
- 4:00pm** **Keynote presentation by Richard Hooper**
*Sheraton Hotel and Conference Center,
Emerald Ballroom III*
- 5:30pm -7:30pm** **Dinner**
*Sheraton Hotel and Conference Center,
Emerald Ballroom III*
-

Thursday, June 4

- 8:30 – 9:30am** **Registration & Continental Breakfast**
UVM, Waterman Memorial Lounge, Room 338
- 9:30 – 9:45am** **Welcome**
Dr. Judith Van Houten, State Director, VT EPSCoR
Dr. Breck Bowden, Science Leader & Professor,
Rubenstein School of Environment and Natural Resources
- 9:45 – 11:00am** **Introduction to the CUAHSI Hydrologic Information System (HIS)**
Dr. Tim Whiteaker, Center for Research in Water Resources, University of Texas at Austin
- 11:00 – 11:20am** **Break**
- 11:20am – 12:30pm** **HIS Central: A catalog of the nation's water data**
Dr. Tim Whiteaker
- 12:30 – 1:30pm** **Lunch and Networking**

1:30 – 3:00pm

How to map Vermont data to the HIS Observations Data Model (ODM)

Waterman Building, Room 427

Dr. Tim Whiteaker

3:00 – 3:20pm

Break

3:20 – 5:00pm

How to load Vermont data into ODM and analyze it

Dr. Tim Whiteaker

Dinner on own

Friday, June 5

8:00 – 8:30am

Continental Breakfast

Waterman Building, Room 427A

8:30 – 10:00am

How to publish and use Vermont Data online with HIS

Waterman Building, Room 427

Dr. Tim Whiteaker

10:00 – 10:20am

Break

10:20 – 11:30am

How to register Vermont data with HIS Central

Dr. Tim Whiteaker

11:30am – 12:30pm

Wrap-up: publication options, discussion and other questions

Dr. Tim Whiteaker

12:30pm

Box lunch

Grant Writing Workshop and Annual State Conference Registration Information

Conference Registration deadline: May 26, 2009

Web registration: http://www.uvm.edu/EPSCoR/Annual_Meeting_Registration/. If you are unable to register electronically, please register by phone, fax or email and provide your name, affiliation and contact information: P: (802) 656-7931, F: (802) 656-2950, E: epscor@uvm.edu

Poster Guidelines: All funded VT EPSCoR awardees are required to present a poster and submit an abstract on their project. Grant Writing Workshop and Annual Meeting attendance is required for current awardees.

Posters: 3x5 poster boards, push pins and easels will be provided by VT EPSCoR. Poster Set-up will begin at 8:00 a.m. on June 3rd.

Abstracts: 1 page maximum length describing your research project. List project title and investigators at the top of the page. Please leave a 1.5" left side page margin for binding purposes. Submit your abstract electronically at http://www.uvm.edu/EPSCoR/Annual_Meeting_Registration/. **Abstract deadline: May 18, 2009**

Hotel Accommodations: Please contact epscor@uvm.edu if you need hotel accommodations.

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Burlington, VT 05405

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