Teacher Workshop: Understand Your Models – Integrate Computer Science into STE(A)M Lessons

Welcome to our 5th annual lab development workshop! It is all about Integration! 🤝

Program Goals

(1) To bring K-12 math & science teachers, school administrators and SBU faculty together for a discussion on the current status of math and science education at both K-12 and college levels. Any challenges recognized from the discussion can lead to opportunities for networking and new partnerships between K-12 schools and SBU math & science departments and/or between K-12 schools for both short-term and long-term purposes.

(2) To provide a hands-on experience for K-12 math & science teachers to collaborate on lessons for integrating computer software, mathematics modeling into biology topics. Teachers will practice lab activities transferable to their classroom to provoke student interests in the STEM field.

Keynote Speaker:
Kevin D. Watkins, MD, MPH
Public Health Director, Cattaraugus County Health Department
Topic: “Public Health in Education”
University Club, St. Bonaventure University
11am-12pm, July 8

Acknowledgement

We thank the generous support from Cattaraugus County Department of Health, CA-BOCES and Olean School District.
Organizer

Dr. Zhang, Xiao-Ning
Professor of Biology, Director for Biochemistry Program, St. Bonaventure University
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Program Schedule

<table>
<thead>
<tr>
<th>TIME</th>
<th>ACTIVITIES</th>
<th>LOCATION (Building# on map)</th>
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<tr>
<td><strong>July 8th (Monday)</strong></td>
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<tr>
<td>8:30AM – 9AM</td>
<td>Registration &amp; Breakfast</td>
<td>University Club (#18)</td>
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<tr>
<td>9AM – 11AM</td>
<td>Round Table Discussion</td>
<td>University Club (#18)</td>
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<tr>
<td>11AM – 12PM</td>
<td>Keynote Talk Speaker: Dr. Kevin Watkins</td>
<td>University Club (#18)</td>
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<tr>
<td>1PM – 3PM</td>
<td>Data Analytics and Math</td>
<td>Walsh 104 (#27)</td>
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<td><strong>July 9th (Tuesday)</strong></td>
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<tr>
<td>9AM – 12PM</td>
<td>Health Data Analytics</td>
<td>Walsh 104 (#27)</td>
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<td>12PM – 1PM</td>
<td>Lunch Talk Speakers: Dr. Laurie Branch, Dr. Todd Palmer, Reed McElfresh</td>
<td>University Club (#18)</td>
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<td>1PM – 3PM</td>
<td>Health Data Analytics</td>
<td>Walsh 104 (#27)</td>
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<td><strong>July 10th (Wednesday)</strong></td>
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<tr>
<td>9AM – 12PM</td>
<td>Data Visualization</td>
<td>Walsh 104 (#27)</td>
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<td>12PM – 1PM</td>
<td>Lunch &amp; Network</td>
<td>University Club (#18)</td>
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<td>1PM – 3PM</td>
<td>Online Data Analytics</td>
<td>Walsh 104 (#27)</td>
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<td><strong>July 11th (Thursday)</strong></td>
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<td>9AM – 12PM</td>
<td>Group Work</td>
<td>Walsh 104 (#18)</td>
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<td>12PM – 1PM</td>
<td>Lunch &amp; Network</td>
<td>University Club (#18)</td>
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<tr>
<td>1PM – 1:30PM</td>
<td>Group Work</td>
<td>Walsh 104 (#27)</td>
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<tr>
<td>1:30PM – 3PM</td>
<td>Teacher Presentations</td>
<td>Walsh 104 (#27)</td>
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<td><strong>July 16th (Tuesday)</strong></td>
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<tr>
<td>8AM – 3PM</td>
<td>Field Trip (include 1.5hrs bus ride each way)</td>
<td>Roswell Park Cancer Institute</td>
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Participant List

Allegany-Limestone Central School
Cory Pecorella (HS Principal)  
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Olean Central School
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Freeman, Daniel  
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Salamanca City CSD
Brown, Marcy  
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CA-BOCES
Mark Beckwith: Professional Development/Curriculum Coordinator
Clay Nolan: Professional Development/Curriculum Coordinator
Amy Windus: Program Manager for Learning Resources

St. Bonaventure University
Dr. Lisa Buenaventura: Dean, School of Education
Dr. Adam Brown: Professor, School of Education
Dr. Todd Palmer: Chair, Department of Management, School of Business
Dr. Maureen Cox: Chair, Department of Mathematics
Dr. Chris Hill: Associate Professor, Department of Mathematics
Dr. David Levine: Professor, Computer Science Program

SBU Student Helpers

Claire Schaef, Biochemistry major
Michael Makutonin, Computer Science major