

#### Agenda Health and Air Quality Applications Program Review September 18-19, 2018 Burlington, VT

### Tuesday, September 18, 2018 Day 1

# **Room: Juniper Hall/Common**

| 8:30 a.m. – 9:00 a.m.   | Continental Breakfast/Coffee   |
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| 9:00 a.m. – 9:30 a.m.   | Session 1: Welcome and Overview<br>Speaker: John Haynes, Program Manager, Health and Air Quality<br>Applications, NASA Applied Sciences Program, NASA Headquarters |
| 9:30 a.m. – 10:00 a.m.  | <b>State Perspective:</b> David Grass, Environmental Health Surveillance Chief, Vermont Department of Health   |
| 10:00 a.m. – 10:30 a.m. | <b>Partner Address: Centers for Disease Control and Prevention</b><br>Speaker: Heather Strosnider, Environmental Health Tracking Branch                            |
| 10:30 a.m. – 10:45 a.m. | BREAK  |
|                         | Session 2: Community Applications and the NASA Health and Air<br>Quality Applied Sciences Team<br>Moderator: John Haynes   |
| 10:45 a.m. – 11:00 a.m. | <b>Invited Speaker: Open Innovation: An Old New Tool for your Toolbox</b><br>Shobhana Gupta, NASA Community Applications Manager                                   |
| 11:00 a.m. – 11:30 a.m. | Health and Air Quality Applied Sciences Team (HAQAST) Report<br>Speaker: Daegan Miller, PhD, HAQAST Communications Coordinator                                     |
|                         | <b>Session 3: Satellite Projects</b><br>Moderator: Sue Estes, Associate Program Manager, Health and Air<br>Quality Applications                                    |
| 11:30 a.m. – 11:45 p.m. | <b>A.</b> Evaluate and Enhance Suomi NPP Products for Air Quality and<br>Public Health Applications<br>Speaker: Jun Wang, University of Iowa                       |

| 11:45 a.m. – 1:00 p.m. | LUNCH – on your own  |
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|                        | Session 4: Health Applications<br>Moderator: Sue Estes   |
| 1:00 p.m. – 1:15 p.m.  | <b>A.</b> Enhanced Data-driven Decision Support for Highly Invasive Vectors Speaker: Christopher Barker, University of California, Davis   |
| 1:15 p.m. – 1:30 p.m.  | <b>B.</b> An Early Warning System for Vector-Borne Diseases in the Amazon Speaker: William Pan, Duke University  |
| 1:30 p.m. – 1:45 p.m.  | C. An Early Warning System for Human West Nile Virus<br>Speaker: Michael Wimberly, South Dakota State University   |
| 1:45 p.m. – 2:00 p.m.  | <b>D.</b> A Multi-Sensor Remote Sensing Approach to Predict Cholera Speaker: Antarpreet Jutla, West Virginia University  |
| 2:00 p.m. – 2:15 p.m.  | <b>E.</b> Using Remote Sensing and Environmental Data to Quantify Social Vulnerabilities to Heat Stress and Strengthen Environmental Public Health Tracking and Heat Mitigation Efforts Speaker: Tabassum Insaf, New York State Department of Health |
| 2:15 p.m. – 2:30 p.m.  | <b>F.</b> Improved Forecasts of Respiratory Illness Hazard from Gulf of Mexico Red Tide Speaker: Richard Stumpf, NOAA  |
| 2:30 p.m. – 2:45 p.m.  | BREAK  |
|                        | Session 5: Socio-Economic Benefits and Impact to ROSES 13<br>Projects<br>Moderator: Sue Estes  |
| 2:45 p.m. – 3:00 p.m.  | A. Socio-Economic Evaluation of Multi-Sensor Remote Sensing<br>Approach to Predict Cholera<br>Speaker: Sonia Aziz, Moravian College, Pennsylvania  |
| 3:00 p.m. – 3:15 p.m.  | <b>B.</b> Socio-Economic Benefit of "Chemical Data Assimilation and Analog<br>Based Uncertainty Quantification to Improve Decision-Making in Public<br>Health and Air Quality"<br>Speaker: Rajesh Kumar, National Center for Atmospheric Research    |
|                        | <b>Session 6: Air Quality Applications</b><br>Moderator: Ali Omar, Associate Program Manager, Health and Air<br>Quality Applications   |
| 3:15 p.m. – 3:30 p.m.  | A. Improving the Representation of the Physical Atmosphere in Air<br>Quality Decision Support Systems Used for Emissions Control Strategy<br>Development<br>Speaker: Arastoo Pour Biazar, University of Alabama in Huntsville                        |

| 3:30 p.m. – 3:45 p.m. | <ul> <li>B. Chemical Data Assimilation and Analog-Based Uncertainty<br/>Quantification to Improve Decision-Making in Public Health and Air<br/>Quality</li> <li>Speaker: Rajesh Kumar, National Center for Atmospheric Research</li> </ul> |
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| 3:45 p.m. – 4:00 p.m. | <b>C.</b> Downwind of the Flames: Assessing and Predicting Wildfire Smoke<br>Related Morbidity Using Satellites, In-Situ Measurements and Models.<br>Speaker: Jeffrey Pierce, Colorado State University                                    |
|                       | Section 7: GEOSTRESS<br>Moderator: Ali Omar  |
| 4:00 p.m. – 4:30 p.m. | A Thermodynamic Paradigm For Using the Lastest Space-based<br>Geophysical Measurements For Public Health Applications<br>Speaker: Jeff Luvall, NASA MSFC   |
|                       | Section 8: NASA Applied Sciences Communications<br>Moderator: John Haynes  |
| 4:30 p.m. – 5:00 p.m. | <b>Invited Speaker:</b><br>Pamela Bond, NASA Communications Manager, Agency CHIEF  |
| 5:00 p.m.             | Adjourn  |
| 5:30 p.m.             | Reception - Van Ness Room, Hotel Vermont   |

## Wednesday, September 19, 2018 Day 2

### **Room: Juniper Hall/Common**

| 8:30 a.m. – 9:00 a.m.   | Continental Breakfast/Coffee   |
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|                         | Section 9: One Health and VALUABLES Consortium<br>Moderator: John Haynes   |
| 9:00 a.m. – 9:30a.m.    | Invited Speaker: One Health<br>Helena Chapman, NASA AAAS Fellow  |
| 9:30 a.m. – 10:00 a.m.  | <b>Invited Speaker: VALUABLES Consortium</b><br>Speaker: Bethany Mabee, Resources for the Future, Washington, DC |
| 10:00 a.m. – 10:30 a.m. | BREAK  |

|                         | Session 10: NASA Training and Capacity Building Opportunities<br>Moderator: John Haynes   |
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| 10:30 a.m. – 11:00 a.m. | NASA's Training and Capacity Building Opportunities ARSET,<br>DEVELOP, and SERVIR<br>Speaker: Zach Bengtsson, DEVELOP Boston Center Lead                  |
|                         | Session 11: GEO EO4HEALTH Projects<br>Moderator: Helena Chapman   |
| 11:00 a.m. – 11:15 a.m. | A. A Geospatial Surveillance and Response System Resource for Vector<br>Borne Disease in the Americas<br>Speaker: John Malone, Louisiana State University |
| 11:15 a.m. – 11:30 a.m. | <b>B.</b> Environmental Determinants of Enteric Infectious Disease Speaker: Ben Zaitchik, Johns Hopkins University  |
| 11:30 a.m. – 12:00 p.m. | <b>C.</b> Earth Observations for Cholera Prediction<br>Speaker: Antarpreet Jutla, West Virginia University  |
| 12:00 p.m. – 12:15 p.m. | <b>D.</b> Multi-sensor Data for Myanmar Malaria Warning Speaker: Tatiana Loboda, University of Maryland   |
| 12:15 p.m. – 1:15 p.m.  | <b>Town Hall</b><br>Discussion of Future Goals, Partnerships, and Opportunities<br>Speaker: John Haynes   |
| 1:15 p.m.               | Adjourn   |