

GEST is a consortium of scientists and engineers, led by the University of Maryland, Baltimore County (UMBC), to conduct scientific research in Earth and information sciences and related technologies in collaboration with the NASA Goddard Space Flight Center (GSFC). The consortium members of GEST include UMBC, Hampton University, Howard University, Caelum Research Corporation, and Northrop Grumman Corporation.

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Dr. Charles Gatebe and the GLOBE Program

On Earth Day 1995, GLOBE (Global Learning and Observations to Benefit the Environment) began operating as an international hands-on, primary and secondary school-based science and education program. GLOBE's vision is of "a worldwide community of students, teachers, scientists, and citizens working together to better understand, sustain, and improve Earth's environment at local, regional, and global scales." They promote the collaboration of students, teachers, and scientists to investigate the environment and the Earth system.

Through his involvement with GLOBE's Student Climate Research Campaign (SCRC), **Dr. Charles Gatebe** of GSFC's Climate and Radiation Branch is one such scientist selected to support the integration of NASA climate research in community education on climate change. Along with NASA's Dr. Charles Ichoku, he attended a GLOBE meeting this past fall in Boulder, CO to plan GLOBE's SCRC 2011-2013. The SCRC seeks to engage students from around the world to investigate and research their local climate and share their findings globally. The ultimate goal is to help students understand the science of climate and how climate impacts people on Earth.

This summer, Dr. Gatebe is hosting three teachers to expose them to the life of a scientist, help them explore how to integrate NASA Earth science content in K-12 education, and consider what elements to include in a professional development model for enhancing environmental literacy and stewardship, as well as promoting scientific discovery. These educators will then develop a plan for their own possible engagement in designing activities for students to study climate using NASA data and resources.

Charles Gatebe's own educational background began in Central Kenya. In secondary school, he won prizes at Kenya National School Congresses and became involved in wildlife conservation. After receiving his B.S. degree in meteorology, mathematics, and physics from the University of Nairobi, he obtained his M.S. in meteorology. Subsequently, he joined the Kenya Meteorological Department and then the University of Nairobi, where he taught courses in air pollution. In 1999, he earned his Ph.D. in atmospheric sciences from the University of Witwatersrand, South Africa, and joined GSFC as a Resident Research Associate of the Universities Space Research Association (USRA); the very next year, he was awarded the WMO's Young Scientist Award.

Currently, Dr. Gatebe is an Associate Research Scientist with GEST, and he has received NASA Group Achievement Awards in both 2008 and 2009 for participating in the INTEX-B and ARCTAS field experiments, respectively. He has flown on many NASA aircraft missions to validate satellite measurements, including ARCTAS missions (*image, right*). He is the PI of NASA's Cloud Absorption Radiometer (CAR), <http://car.gsfc.nasa.gov/>. For more information on the GLOBE program and the SCRC, please visit <http://www.globe.gov>.



photo courtesy of Dr. Charles Gatebe

HONORS & AWARDS

Out of 153 applications to the Early Career Fellowship (ECF) under NASA ROSES -2008, an elite group of eight Fellows were selected, and GEST is proud to announce that **Timothy Stubbs** (code 695) was one of the eight. He was selected as a Fellow under his parent proposal "Optical Scattering Processes Observed from the Moon: Measurements, Models and Implications". According to his award letter from NASA, he is "one of the rising stars of the planetary science community." NASA's Science Mission Directorate, Planetary Science Division established the ECF to integrate new planetary science researchers into the established research funding programs and provide tools and experience.

Assaf Anyamba (code 614), **Compton Tucker**, **Jennifer Small**, and **Edwin Pak** were the 2010 Co-Recipients of the Federal Laboratory Consortium for Technology Transfer's (FLC) Interagency Partnership Award, one of the FLC's highest honors. This award recognizes the efforts of laboratory employees from at least two different agencies who have collaboratively accomplished outstanding work in the process of transferring a technology. Specifically, according to **J. Scott Dieter**, FLC Chair, and **Lorraine Flanders**, FLC Awards Committee Chair, "This team's development of a highly innovative and effective method to forecast the outbreak of Rift Valley Fever is a truly outstanding example of how a partnership of diverse groups ... can lead to a breakthrough that has a global impact." They were honored at the 2010 FLC Awards Program in Albuquerque, NM this past April.

Suzanne Imber (code 670) was recently awarded the University of Leicester Faculty of Science Ph.D. Prize for 2009, based on her exceptional research contribution to Solar Terrestrial Physics. According to the University of Leicester, "Her research examines how the solar wind imparts energy and momentum to the magnetosphere of the Earth via a process called magnetic reconnection. This theory is responsible not only for the aurora, but also for large space weather events which have a significant impact on near-Earth space." Dr. Imber returned to the University this past May, where she received her medal and certificate, and also presented a lecture to the College of Science and Engineering on "The Northern Lights: Illuminating Near Earth Space".

STAFFING NEWS

GEST has seen its fair share of comings and goings. We've wished a fond adieu to **Eric Brown de Colstoun**, **Myong-In- Lee**, **Will McCarty**, **Stefanie Misztal**, and **Yudong Tian**, as well as **Elena Georgieva**, who has transferred to JCET. Additionally, this past May we were sad to say goodbye to **Grace Roscoe**, longtime Executive Assistant for GEST and JCET, who has moved on to a new venture.

In March 2010, GEST welcomed **Jo Ann Maxim** as our new Staffing Specialist. Jo Ann comes to us from the University of Maryland, College Park, where she was Manager of HR and Payroll for Civil and Environmental Engineering; at GEST, she is assuming the duties of faculty and staff hires, and is learning the ropes when it comes to badging at GSFC. She is presently splitting her time between the GSFC office and the Research Park office.

We've also added many new names to our roster, with the greatest number falling in the Hydrospheric/Biospheric Sciences, code 614: **Robert Bindschadler**, **Ludovic Brucker**, **Katie Collins**, **Gabrielle de Lannoy**, **Matthew Hoffman**, **Sergey Korkin**, and **Michael Studinger**; in GMAO, code 610.1: **Amal El Akkraoui**, **Yoo-Geun Ham**, **Virginie Marchant**, and **Goddard Visiting Fellow De-Zheng Sun**; in Office of Public Affairs and AETD, codes 100-500: **Brooke Harris** and **Jinzheng Peng**; in Mesoscale Atmospheric Processes, code 613.1: **Benjamin Marchant**; in Climate and Radiation, code 613.2: **Falguni Patadia**; and, in the Heliophysics and Solar System Divisions: **Melissa Floyd** (699), **Zhibin Sun** (698), and **Tatsuhiko Yokoyama** (674). Reminder to all of our faculty members: please notify Amy Houghton (amyh@umbc.edu) and Camilla Hyman (hyman1@umbc.edu) if/when your contact information changes.