School of Science Town Meeting

Dean Leshin held a School of Science Town Meeting on December 13, 2011. She reviewed the two-day retreat that was held in November and summarized the significant themes that had come out of it. She then presented the key elements of the Performance Plan for Science that she will be presenting to President Jackson and her cabinet next week. She invited comments on the Performance Plan that has been distributed to the faculty.

FACULTY NEWS and NOTES

Laurie Leshin, Dean of Science, Is Involved in Mars Mission

She says “I have been working on MSL (NASA’s official mission name is the “Mars Science Laboratory” or MSL) for about 10 years dating back to the original “Science Definition Team.” I am on the science team for two of Curiosity’s 10 instruments. Both are chemical analysis instruments that will allow us to understand the rock types and the volatile content of these rocks. We are especially excited about measuring water and carbon-bearing compounds – perhaps we will definitively detect organics for the first time on the surface of Mars!”

For details see articles and video below:

http://capitalregion.ynn.com/content/564319/rpi-helps-send--curiosity--to--mars

Susan Gilbert, Biology Department Head and Jim Hendler, Sr. Constellation Professor of Tetherless World Research Constellation are new Fellows of AAAS.

Jim Napolitano, Professor of Physics, Applied Physics and Astronomy, is a new Fellow of APS. Citation: “For contributions to fundamental problems of nature through experiments in nuclear physics” Nominated by: Division of Nuclear Physics
Vincent Meunier, Associate Professor, Kodosky Constellation, is a new Fellows of APS.
Citation: “For advancing the fields of nanoscience and nanotechnology through the application of innovative theory and advanced computation for the understanding of energy flow and storage mechanisms in nanostructured materials including carbons and metal oxides.” Nominated by: Division of Computational Physics

Deborah McGuinness Sr. Constellation Professor of Tetherless World Research Constellation is PI on a new contract for 16.975 million dollars for FUSE – Foresight and Understanding from Scientific Exploitation. McGuinness is joined by Jim Hendler, Sr. Constellation Professor of Tetherless World Research Constellation as co-PI and Joanne Luciano, Research Associate Professor and Peter Fox Professor and Tetherless World Constellation Chair as senior personnel. RPI's portion is just over 2 million dollars.

Deborah McGuinness gave the keynote at the Ontologies Come of Age Workshop co-located with the International Semantic Web Conference. The workshop was named after a paper that McGuinness authored a decade ago foreshadowing the directions for ontologies.
Deborah McGuinness co-chaired the Association for the Advancement of Artificial Intelligence's Fall Symposium Series Meeting on Linked Open Government Data.
Deborah McGuinness presented the Tetherless World's Semantic Water Quality portal at the Environmental Informatics Conference.
Deborah McGuinness co-chaired the Qualcomm Context Awareness Symposium aimed at gaining understanding on next generation context-aware mobile applications.

Jim Hendler Sr. Constellation Professor of Tetherless World Research Constellation, is giving two keynote talks at government meetings in Washington DC this month – the Semantic Technology for Intelligence, Defense and Security meeting (11/16) and Semantic Technologies East (11/30).


Shigeru Imai and Carlos Varela received a $10K AWS in Education Research Grant from Amazon for work "Towards a Cloud Operating System". The grant is in credit for Amazon cloud computing services for two years, 11/4/2011 - 11/3/2013.

Carlos Varela received a French government Centre National de la Recherché Scientifique (CNRS) grant to visit the INRIA/CNRS Informatique, Signaux et Systèmes de Sophia-Antipolis (I3S) lab at the U. Nice Sophia-Antipolis for three months in the summer of 2012.

Linda McGown, William Weightman Walker Professor of Chemistry, has been appointed to the Editorial Board of Journal of Analytica Chimica Acta for a period of three years. Board members are selected based on their scientific knowledge, competence and status (including contributions to the journal) and performance as a reviewer.
Bolek Szymanski, Claire and Roland Schmitt Distinguished Professor of Computer Science, gave a plenary talk at the Unexpected Conference on Sociophysics, Paris, France, November 14, 2011

Gwo-Ching Wang, Professor of Physics, Applied Physics and Astronomy, gave an invited talk entitled “Nano-engineered Thin Films by Physical Vapor Deposition” at the 2011 International Thin Films Conference sponsored by TACT (Taiwan Association for Coating and Thin Film Technology), Kenting, Taiwan, Nov. 20-23, 2011. The conference hosted over 550 international attendees.

Ivar Giaever, Emeritus Professor, was invited to attend Photonics and Optoelectronics Meeting in Wuhan in early November 2011. Prof. Giaever gave a conference plenary presentation on the Opening Day. The 4th International Photonics and Optoelectronics Meetings (POEM 2011) concluded successfully on 5 November, 2011 in Wuhan, China. The event was attended by more than 600 scholars, researchers and participants from 23 countries, who contributed 163 invited presentations, 73 oral talks and 205 posters.

RESEARCH NEWS and NOTES

The oxidation state of Hadean magmas and implications for early Earth’s atmosphere
Dustin Trail, E. Bruce Watson and Nicholas D. Tailby
Volume 480 Number 7375 pp5-144 Volume 480 Number 7375 pp 79-82, December 1, 2011
See Also: News & Views by Scaillet & Gaillard

Xi-Cheng Zhang, Erik Jonsson Professor of Science and Acting Head of Physics, Applied Physics and astronomy reports that we are a finalist for the Prism Award this year for our micro-Z. The finalist announcement is in a few places, including: http://optics.org/news/2/11/13 The winner will be announced at Photonics West 2012 on Jan 25th. NSF IGERT student David Brigada made crucial contribution to the project for Navy. We got the contract, sub-contract Zomega THz for the production.
The Center for Social Cognitive Networks Academic Research Center (SCNARC) received $1.92 of funding for the third year of the program covering October 1, 2011 to September 30, 2012.

2012 Seed Projects:
- “The Asthma Files.” Researchers: Kim Fortun, Mike Fortun, and Peter Fox

STUDENT NEWS and NOTES

Accelerated BS/PhD Program

The following students have joined the Accelerated B.S./Ph.D. Program in Science:

Anthony Bishop/Bioinformatics and Molecular Biology
James Buchwald/Chemistry
Robert Fimognari/Chemistry
Divya Shasta/Biochemistry/Biophysics
Andrew Thompson/Mathematics–Physics (dual major)
Hannah Trasatti/Biochemistry/Biophysics

STAFF NEWS and NOTES

Walter Williams has recently joined the School of Science as Chief Advancement Officer overseeing the School’s fundraising efforts. Prior to coming to Rensselaer, he spent four years in a similar capacity with the Syracuse University School of Architecture. He has also worked in college-based positions at Cornell University and directed the annual fund programs at both Ithaca College and Slippery Rock University. Walter did his undergraduate work at the University of Mississippi and holds a Master of Science degree in communication from Ithaca College.

Timothy J. Walsh, Stockroom Supervisor in the Chemistry and Chemical Biology Department has passed into eternal rest at The Albany Medical Center on Monday, December 12, 2011. Born in Troy he was the son of the late William J. and Tessie Piniaha Walsh. Tim served his country in the US Army from 1969 to 1975. He was employed at RPI in Troy for over 42 years in the Department of Chemistry and Chemical Biology.

This newsletter is prepared monthly during the academic year and distributed to School of Science faculty, staff, students and alumni to highlight accomplishments and events within the school. Please submit news items for the next newsletter to Samuel Wait, Associate Dean Emeritus of Science, at waitsc@rpi.edu