FALL 2015 Exploring a STEM Majors & Career Fields

9.10.15 Gustavo A. Ramirez, Ph.D. Candidate, University of Southern California, Marine Biology & Biological Oceanography Department
5:30—7:00 PM, San Jacinto Campus, Room 156

Gustavo A. Ramirez is a Ph.D. candidate in Marine Geomicrobiology and Biological Oceanography at the University of Southern California. Gustavo earned his A.S. in Biological Sciences from Citrus College and his B.S. in Microbiology from the California State Polytechnic University, Pomona. Prior to joining USC, Gustavo worked in the Food Microbiology Industry and, later, was awarded a NASA internship at the Jet Propulsion Laboratory/California Institute of Technology and Planetary Protection Group. Currently, his research interests include elucidating microbe-mineral interactions occurring in the oceanic deep biosphere and developing life-detection methods with applications in extreme environments on Earth and elsewhere in the Solar System.

10.8.15 William K. Hayes, Ph.D. Professor of Biology, Department of Earth and Biological Sciences, Loma Linda University
12:30—2:00 PM, Menifee Valley Campus, Room 927

Deadly or Curative? Amazing Insights on Animal Venoms

Because of their deadly brew of toxins, venomous animals often inspire extreme emotions: fear and loathing in some, and intense fascination in others. Nature’s toolbox has carefully shaped the chemical weaponry of these creatures via countless ongoing experiments to yield an extraordinary diversity of compounds that help them survive. This lecture will highlight research findings on the biological roles of venom, how animals use their venom, and the remarkable ways in which humans relate to—and can even benefit from—these deadly secretions. It will also feature some living venomous creatures.

10.29.15 Ben Orchard, Industrial Automation Application Engineer
5:30—7:00 PM, San Jacinto Campus, Room 156

Prior to moving to America, Ben Orchard was an Automation Engineer at a large regional hospital in Victoria, Australia. He was involved in all aspects of specifying, programming, installing and training staff on the automation system. Every aspect of the hospital was automated, including things like the heating, cooling systems, chillers, boiler control, generators, and water systems. Once moving to California, Ben’s role has pivoted to tapping into that practical experience and he is now an Automation Application Engineer. This role has continued to expand and now includes new product development (R&D), video presenter, in house and customer training, proof of concept code examples and top tier product support. His lecture will be centered on sharing what its like to be an automation engineer, skills required and examples of the diversity of applications that require automation, including the skills necessary to do Home Automation.

12:30—2:00 PM, Menifee Valley Campus, Room 927

The Science of Saving Species—With the exponential growth of the human population, global climate change, habitat fragmentation, and species extinctions, our natural world is seemingly under attack. The need for conservation research has perhaps never been greater. But even with this myriad of conservation crises at hand, there are still plenty of reasons for hope. At the San Diego Zoo Institute for Conservation Research, we are committed to solving critical issues facing endangered species and their habitats and use science to help achieve this goal. She will discuss my current research on California least terns, burrowing owls, and bighorn sheep, as well as my role as a conservation ecologist.

If you would like more information regarding these events please contact us: stem@msjc.edu

Information on Resources and Activities:
www.msjc.edu/stem OR www.facebook.com/mtsanjacintostem

Need a disability-related accommodation to attend an event? Call 951-487-3302 or email ada@msjc.edu at least five days prior to the event.

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