



College of Sciences & Mathematics Newsletter  
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## CoSM Faculty Spotlight Medina-Bolivar Gains Sixth Patent

**Dr. Fabricio Medina-Bolivar**, professor of plant metabolic engineering, has obtained a U.S. patent on “Stilbenoid Prenyltransferases from Plants.” This is the sixth patent Medina-Bolivar has secured for his research on health-related compounds from plants. The [invention](#) describes a procedure to produce prenylated stilbenoids using genetic engineering strategies. These compounds have applications as anticancer, antioxidant and anti-inflammatory agents. Co-inventors are former Ph.D. student **Tianhong Yang** and Dr. Keithanne Mockaitis of Indiana.

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## CoSM Faculty Spotlight

# Boves Identifies Rare Warbler Subspecies

Research by **Dr. Than J. Boves**, associate professor of avian ecology, and **Alex Worm**, a Ph.D. student, has been [published in \*Ornithology\*](#). While studying black-throated green warblers, they collected blood from populations of the bird in multiple states to sequence their DNA; they found the south Atlantic coastal population is genetically unique. The Center for Biological Diversity will petition for this subspecies to be listed under the Endangered Species Act.



## Zhou is Co-Author of Cell Function Research

A research article co-authored by **Dr. Guolei (Jason) Zhou**, professor of cell biology, has been published in the international journal *Cellular Signalling*. Through collaborations with **Dr. Jianfeng Xu**, research professor in agriculture, and **Dr. Jennifer Y. Xie**, NYITCOM, their [study](#) unravels molecular mechanisms underlying the fundamental cell function of CAP1, which also is involved in the invasiveness of human cancers. Seven undergraduate and graduate students are co-authors, including the lead authors.

## CoSM Faculty Spotlight

# Alam Named First Beck Professor in Chemistry

Alumni Charlotte and Buddy Beck have endowed two new professorships at A-State, the university announced recently. Dr. Mohammad Abrar Alam, associate professor of chemistry, was named as the inaugural recipient of the [Beck Professorship in Chemistry](#). The focus of Alam's research group is the development of new antibiotics to treat drug-resistant bacterial infections. He joined A-State's faculty in 2015.



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