

Thursday 28 Feb 2019

# OF COURSE, SIZE MATTERS

## Nobody wants a small natural-product drug-discovery library

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*University of Oklahoma, Norman, OK*



Luck, fate, kismet, providence... those are some of the notions that people invoke when they are faced with the daunting challenge of creating new drugs. These different mindsets are based in part on a recurring concern in the field of drug development: where should one start to access the best chemical resources for a fledgling drug discovery campaign? In response to this challenge, our team has focused on the building and applying what has become one of the world's largest collections of fungi and fungal natural products found in an academic setting. Moreover, we have actively shared this resource with drug discovery teams to unearth its promising bioactive components. This presentation will delve into the unique mix of public outreach and scientific collaboration behind the discovery of new and unusual bioactive compounds produced by fungi that originated through our citizen-science-based initiative called the Citizen Science Soil Collection Program ([www.whatsinyourbackyard.org](http://www.whatsinyourbackyard.org)). Many promising bioactive molecules have emerged from this cooperative effort and this talk will highlight several examples that stand out as models that illustrate the value-added benefits stemming from probing natural product libraries. Such research efforts often spur new insights into disease biology, enrich our understanding of nature and chemical ecology, as well as provide novel avenues for natural product application that go beyond immediate goals and expectations.

**6:00-6:30 pm Reception**, Howell Hall Atrium

**6:30-7:15 pm Dinner**, Nigh University Center, Heritage, Room 326

**7:15-8:15 pm Presentation**

**University of Central Oklahoma,**  
Edmond, OK

<http://www.uco.edu/>

### **Menu, Fajita Buffet**

Beef and chicken fajita strips  
tossed in grilled peppers and onions  
beside warm flour tortillas  
Spanish rice and refried beans  
shredded cheddar, sour cream, guacamole,  
shaved lettuce and tomatoes  
cinnamon churros with warm honey

### **Cost**

\$20 members  
\$5 students

### **RSVP Deadline**

Monday, February 26<sup>th</sup>, noon

Contact: Carla Supon

phone: 405-974-5018

email: [csupon@uco.edu](mailto:csupon@uco.edu)



UCO campus map  
with parking code

*Vegetarian option available. Please indicate when you RSVP*

**Directions** Campus map (QR above or see page 2) Paid parking is available in the Visitor Lot, east of the Nigh University Center. See the parking map for instructions and a code to get free parking. The Howell Hall Atrium is on the ground floor between Howell Hall and the Howell Hall Laboratory Annex Building. The Heritage room is on the third floor to the right of the central stairway.

**Speaker Bio Sketch on next page.**

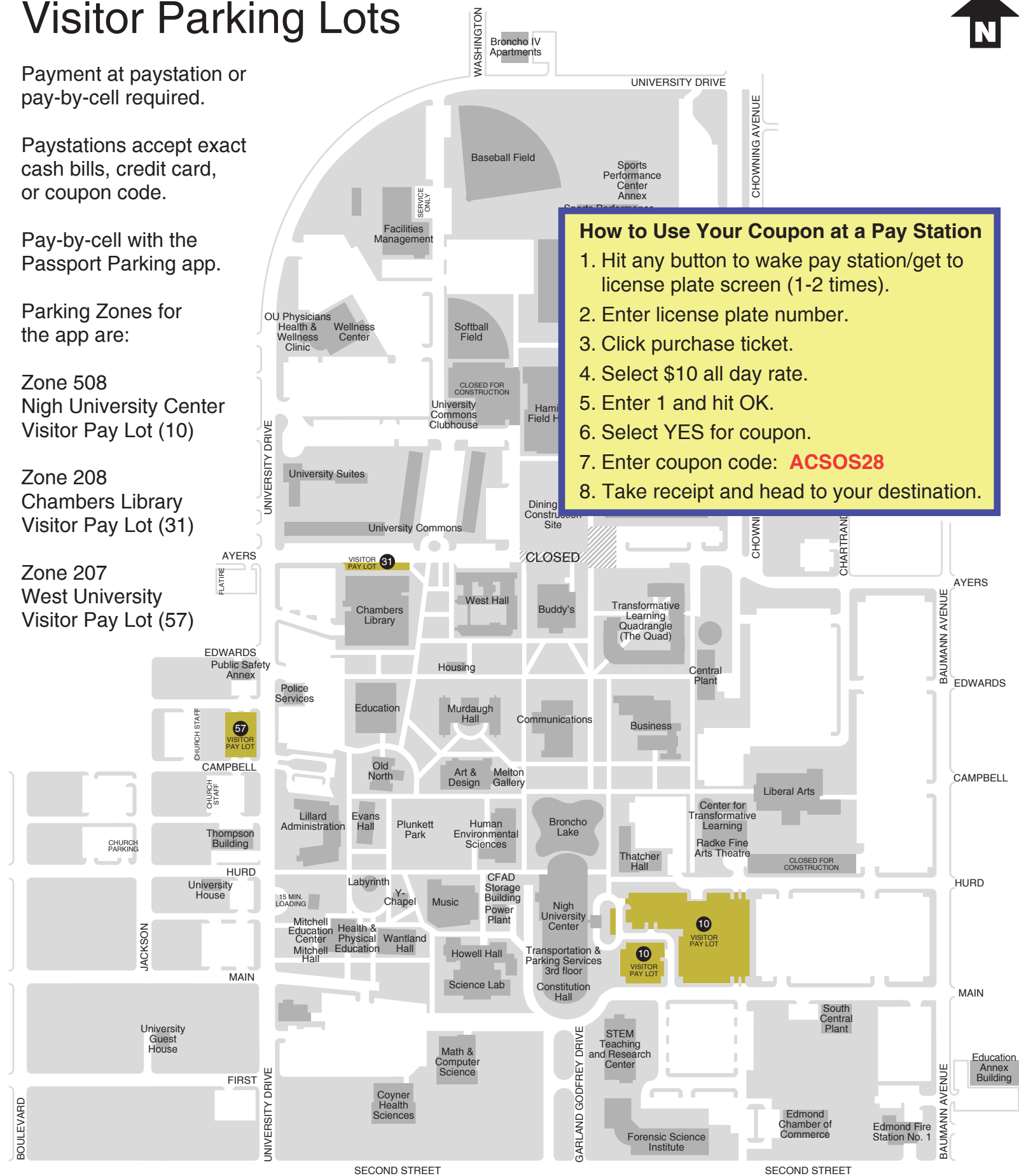
## **Robert H. Cichewicz Biographical Sketch**

Robert has had a long-standing fascination for the chemistry and biology of natural products. These interests were initially cultivated during his childhood and young adult life in rural western Michigan and further refined during his undergraduate experiences in biology (B.S. 1994) and anthropology (B.S. 1994) at Grand Valley State University. Robert went on to the University of Louisiana, Monroe where he obtained his M.S. degree in pharmaceutical sciences (1999) under the guidance of Dr. S. Kouzi in the microbial biotransformation of natural products. Following these studies, Robert joined the plant natural products lab of Dr. M. G. Nair at Michigan State University where he earned his Ph.D. in 2002. Upon moving to the University of California, Santa Cruz, Robert conducted postdoctoral studies in the field of bioactive marine-derived natural products under the mentorship of Dr. P. Crews. In 2005,

Robert began his independent research career by establishing the Natural Products Discovery Group (<http://npdg.ou.edu>) as an Assistant Professor in the Department of Chemistry and Biochemistry at the University of Oklahoma. He was promoted to Associate Professor in 2011 and later named a Regents' Professor in 2012. Also in 2012, Robert was appointed the Director of the University of Oklahoma, Institute for Natural Products Applications and Research Technologies (INPART), which is focused on translating natural products into therapeutic leads to combat cancer, infectious diseases, and other unmet medical needs. In 2014, Robert was promoted to full professor. Robert's research group merges technologies and methods from the chemical, biological, and microbiological sciences for the purpose of discovering new bioactive metabolites from fungi and bacteria.

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6. Select YES for coupon.
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