

**99th ANNUAL TECHNICAL MEETING
OKLAHOMA ACADEMY OF SCIENCE
NORTHEASTERN STATE UNIVERSITY-BROKEN ARROW**

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**99th ANNUAL TECHNICAL MEETING
OKLAHOMA ACADEMY OF SCIENCE
NORTHEASTERN STATE UNIVERSITY – BROKEN ARROW**

PROGRAM SUMMARY

Thursday, 4 November 2010

6:30 p.m. Executive Council Dinner and Meeting Bldg. C, Room 230

Friday, 5 November 2010

7:30 a.m. - 10:00 a.m. Registration for Technical Meeting Bldg. G lobby

8:30 a.m. - 11:00 a.m. Concurrent Scientific Paper Sessions Building G

Section A	Biological Sciences – Botany (I)	Room 110
Section A	Biological Sciences – Zoology	Room 112
Section B	Geology	(for section meeting only) Room 220
Section C	Physical Sciences	Room 220
Section D	Social Sciences	Room 126
Section E	Science Education	Room 114
Section F	Geography	Room 124
Section G	Fish and Wildlife Conservation	Room 120
Section H	Microbiology	Room 224
Section I	Engineering Sciences	(for section meeting only) Room 220
Section J	Biochemistry and Biophysics	Room 220
Section K	Microscopy	Room 212
Section L	Mathematics, Computer Science, and Statistics	Room 226
Section M	Environmental Sciences and Planning	Room 210
Section N	Biomedical Sciences	Room 214
	Posters	Lobby
	Ugly Bug Contest	Room 232

PROGRAM SUMMARY
(Cont.)

- | | | |
|-------------------|---|--|
| 11:00 a.m. | Section Meetings
Election of Section Vice-Chair.
[Provide this information to Dr. David Bass at the check-in desk before leaving.] | Presentation Rooms |
| 11:30 a.m. | Academy Business Meeting
All OAS members are encouraged to attend.
Visitors are welcome. | Building G, Room 112 |
| 12:00 - 1:30 p.m. | Academy Luncheon & Plenary Address
Admission by ticket only. | Building A
Banquet Room (2 nd floor) |

Dr. James Tomasek
Dean of Graduate College/Professor of Cell Biology
University of Oklahoma Health Science Center

Stem Cells: The Hope and the Hype

GENERAL INFORMATION

Name Badges: Name badges, provided upon registration, must be worn at all times by all individuals attending Academy sectional programs, business meetings, and luncheon. If your badge is not visible, you may be asked to leave by the persons in charge. Lost badges may be replaced at the registration desk upon verification of your registration documents. **All presenters must register and wear an official name badge.**

Parking: Lots next to Building G are available.

On-site Registration Fees: Members - \$20.00
Non-members - \$25.00
Student members - \$10.00
Student non-members - \$15.00
Luncheon tickets (if available) - \$20.00

2010 and 2011 Dues are Payable: The OAS registration desk will accept dues payments.

Professional - \$30.00
Graduate/Undergraduate Student - \$20.00
Family - \$35.00
Library - \$40.00
Life - \$500.00

Guidelines for Paper Publication: Papers may be published in the *Proceedings of the Oklahoma Academy of Science*, subject to the editorial policies as stated in the most recent issue of the *POAS*, Volume 89, 2009, and the review of the Editorial Board. Abstract publication fee is \$35. *POAS* editor is Kurtis Koll, kurtisk@cameron.edu.

Executive Secretary-Treasurer: Inquiries concerning upcoming OAS activities and membership may be directed to Dr. David Bass, OAS Executive Secretary-Treasurer, Campus Box 90, University of Central Oklahoma, Edmond OK 73034, 405-974-5772, dbass@uco.edu.

Official Meeting Hotels: The designated meeting hotels are the *Holiday Inn Express Hotel* at Bass Pro [2201 Wood Stone Dr., Broken Arrow OK 74012, 918-355-3200, www.hiexpress.com/hotels/us/en/broken-arrow/tulba/hoteldetail] and the *Best Western Kenosha Inn* [1200 E. Lansing St., Broken Arrow OK 74012., 918-251-2795, www.bestwesternoklahoma.com/hotels/best-western-kenosha-inn].

No Smoking: Please, no smoking in any of the buildings on the campus. Also, food and drink are not permitted in any meeting room. Thank you.

Refreshments: Food and drink will be available in the gallery on the south side of Building G during registration and breaks.

Assistance or Information: Look for individuals with OAS badges or host ribbons. These are faculty and staff assigned to assist you.

SPECIAL NOTES

Special thanks are extended to the *site coordinators* **Dr. Erik Terdal** , Associate Professor of Biology, and **Dr. Craig Clifford**, Professor of Biology, at Northeastern State University-Broken Arrow, who coordinated all aspects of the meeting, including room arrangements, multimedia, and the luncheon.

A special thanks is extended to President Don Betz for sponsoring the OAS Executive Council dinner meeting Thursday evening.

Upcoming Meetings:

2011 Oklahoma Junior Academy of Science Meeting, East Central University, March 24-26

2011 Spring Field Meeting, Lake Murray State Park, April 8-10

2011 Fall Field Meeting, Robber's Cave State Park, Sept. 23-25

2011 Annual Technical Meeting, Nov. 4

SECTION A: BIOLOGICAL SCIENCES – BOTANY
Bldg. G, Room 110

Moderator: Brooke Stabler
University of Central Oklahoma

- 9:00 **Biodiversity Inventory of an Urban Wilderness: Oklahoma City University's Gamble-Buchanan Outdoor Lab. Phase I: Floristic and Herpetological Surveys.** A.K. Ryburn, B. Landon, B. Lettenmaier. Oklahoma City University.
- 9:15 **Multilocus Phylogenetics of American *Asclepias* (Apocynaceae).** Mark Fishbein. Oklahoma State University.
- 9:30 Break
- 9:45 ****The Positive Effects of Mowing on Prairie Bryophytes.** Channing Richardson. Oklahoma State University.
- 10:00 **A Floristic Inventory of Six Tracts in the Ozark Plateau National Wildlife Refuge in Adair County, Oklahoma.** Mary E. Gard, Charriss R. H. York, Steve Hensely, Will F. Lowry, Ronald J. Tyrl. Oklahoma State University, Texas A&M University, U.S. Fish and Wildlife Service.
- 10:15 **Flora of Oklahoma Project.** Flora Oklahoma Editorial Committee.
- 11:00 **Section A Business Meeting,** Building G, Room 112
(combined with Zoology)

**Graduate Competition

SECTION A: BIOLOGICAL SCIENCES – BOTANY
(cont.)

Posters

***Essential Genes with Unresolved Cellular Functions in *Arabidopsis thaliana*.** Nicole Bryant, David Meinke. Oklahoma State University.

***Genetic Variability in the Mexican Milkweeds of the *Asclepias pringlei* Complex.** Wyatt V. Sharber, Mark Fishbein. Oklahoma State University

A Phylogeny of *Asclepias* Using ITS Markers. Kevin Kilhoffer. Oklahoma State University.

Development of CosII Markers for Use in Phylogenetic Analysis of *Asclepias*. LaRinda Holland. Oklahoma State University.

***Embryology of *Nuttallanthus texanus* (Scheele) D. S. Sutton (Plantaginaceae).** Walter J. Morris II, Kenia I. Castillo, Rahmona A. Thompson. East Central University.

****Castilleja indivisa* (Engelman) Megasporangium and Embryo Development.** Kenia I. Castillo, Walter J. Morris II, Rene Savage, Rahmona A. Thompson. East Central University.

*Undergraduate Competition

SECTION A: BIOLOGICAL SCIENCES – ZOOLOGY
Bldg. G, Room 112

Moderator: Mark A. Paulissen
Northeastern State University

- 8:45 **The Differential Effect of Tail Autotomy on Sprint Speed and Stride Length Between the Sexes in the Lizard *Uta stansburiana*.** Matthew L. Anderson, Cybil N. Cavalieri, Stanley F. Fox, Felipe Rodriguez-Romero. Oklahoma State University, Universidad Autonoma del Estado de Mexico.
- 9:00 **Refuging Ecology of *Crotaphytus collaris*.** E. Santoyo-Brito, S. Fox. Oklahoma State University.
- 9:15 **Helminth Parasites of the Mediterranean Gecko, *Hemidactylus turcicus* (Lacertilia: Gekkonidae), from Southeastern Texas.** Chris T. McAllister, Charles R. Bursey. Eastern Oklahoma State College. Pennsylvania State University-Shenango Campus.
- 9:30 Break
- 9:45 ****Endocrine and social Effects on Communication Signals in Adult Male Green Anole (*Anolis carolinensis*) Lizards.** D.S. Haines, C.A. Fry, M.B. Lovern. Oklahoma State University.
- 10:00 ****Antipredatory Behaviors in Two Anoline Lizards.** A. Reisch, M.B. Lovern, D.A. Warner. Oklahoma State University.
- 10:15 ****Same Stuff, Different Day: Repeatable Defense Behavior in a Wild Passerine.** J.L. Burtka, J.L. Grindstaff. Oklahoma State University.
- 10:30 ***Why is the Bluebird Blue?** Alesia Hallmark-Sharber, Jay Burtka, Jennifer Grindstaff. Oklahoma State University.
- 10:45 **Phylogeography of the Ozark Logperch (*Percina caprodes fulvitaenia*) in Oklahoma's Red River and Arkansas River Basins.** D.T. Lynch, A.A. Echelle, R.A. Van den Bussche. Oklahoma State University.
- 11:00 **Section A Business Meeting**
(combined with Botany)

*Undergraduate Competition

**Graduate Competition

SECTION A: BIOLOGICAL SCIENCES – ZOOLOGY
(cont.)

Posters

***Comparative Phylogeography of the Deer Mouse and White-Footed Mouse in Oklahoma and Adjacent States.** Tiffany L. Cloud, Kimberly L. Koppari, Michelle L. Haynie, Gregory M. Wilson. University of Central Oklahoma.

***Sexual Dimorphism in the Head Size of the Little Brown Skink, *Scincella lateralis*.** Brian Becker, Mark A Paulissen. Northeastern State University.

***Associative Learning Capabilities in *Sceloporus undulatus*, the Eastern Fence Lizard.** Jordan Johnson, Mark Paulissen. Northeastern State University.

Caged House Sparrow (*Passer domesticus*) Response to Eastern Bluebird (*Sialia sialis*) Nest Defense Behavior. B. S. Hidden, J. L. Burtka, J. L. Grindstaff. Oklahoma State University.

*Undergraduate Competition

SECTION B: GEOLOGY

Section Chair: Kurtis Koll
Cameron University

11:00 **Section B Business Meeting – Bldg. G, Room 220**
 Shared with Physical Sciences, Engineering Sciences, and
 Biochemistry and Biophysics
 You may go to another location, if you wish.

SECTION C: PHYSICAL SCIENCES
Bldg. G, Room 220

(shared with Biochemistry and Biophysics)

Moderator: David Martin
University of Central Oklahoma

- 10:15 **Reexamination of the Acoustic and Optical Attenuation Coefficients in Saltwater Solution.** K. A. Williams, K. R. Thompson. East Central University.
- 10:30 **Energy Quantization as a Fundamental Property of Coupled Oscillator Systems.** W.J. Wilson. University of Central Oklahoma.
- 10:45 **Flows for a Fluid Confined to a Rotating Cavity.** Todor Ivanov, David.L. Martin. University of Central Oklahoma.
- 11:00 **Section C Business Meeting**

SECTION D: SOCIAL SCIENCES
Bldg. G, Room 126

Moderator: Robert Mather
University of Central Oklahoma

- 9:00 ***The Development of an Instrument to Assess Patient’s Attitudes Regarding Health Information Exchange.** Thea Murray, C. M. Hellman, E. Chuck, J. C. Kaufman, M. D. Fox. University of Oklahoma-Tulsa.
- 9:15 ***An Examination of School-Based Nutrition Program in the Prevention and Treatment of Childhood Obesity.** Sara Gower, J.D. Frees, E.M. Muilenburg-Trevino, M. M. Morgan, C. M. Hellman, P. Rask. University of Oklahoma-Tulsa.
- 9:30 Break
- 9:45 **Attachment Styles, Conflict Resolution, and Satisfaction in Romantic Relationships.** Trish Myers, Alicia Limke, Paul C. Jones. Southern Nazarene University, University of Central Oklahoma.
- 10:00 **Dynamical Systems Applied to Psychology.** Ashalee C. Hurst, Robert D. Mather. University of Central Oklahoma.
- 10:15 **Tracking a Toddler’s Eye Movements to Familiar Scenes and Objects II.** Cidnee Ray, Robert D. Mather. University of Central Oklahoma.
- 11:00 **Section D Business Meeting**

Posters

Effect of Power on Moral Thinking Style. Victoria Gaetan, Brittney Becker, University of Central Oklahoma.

“Hitting the Wall” in Rowing. Nicole Gibbon, University of Central Oklahoma.

***The Effect of Frustration on Implicit Self-Esteem.** James Rose, University of Central Oklahoma.

Investigating the Role of Encoding and Retrieval in Source Monitoring Processes. T. W. Hancock , W. Huffman, University of Central Oklahoma.

Evaluative Organization of Self- and Partner Knowledge In Relationships Formed Online, P.B. Mayfield, A. Limke, University of Central Oklahoma

*Undergraduate Competition

**SECTION E: SCIENCE EDUCATION
Bldg. G, Room 114**

**Moderator: Erica Corbett
Southeastern Oklahoma State University**

- 8:30 **Using Projects to Increase Student Learning and Participation in a Lecture-Based Course.** E. A. Bergey. University of Oklahoma.
- 8:45 **Plagiarism: Is It a Growing Problem? What Can We Do?** Erica Corbett. Southeastern Oklahoma State University.
- 9:00 **Improving Oklahoma Science Education by Outsourcing.** Aaron Elmer. Murray State College.
- 9:15 **Laboratory Project to Study Root Foraging Behavior.** Stan Rice. Southeastern Oklahoma State University.
- 9:30 Break
- 9:45 **OK Green Schools: Where STEM Meets EE.** Christina Stallings, Beth Landon, Jyoti Abraham. Oklahoma Forestry Services, Oklahoma City University, Bacone College.
- 10:00 **“Doing Science” as Service/Learning.** Beth Landon. Oklahoma City University.
- 10:15 **Writing Your Research Paper and Getting it Published: A Panel Discussion.** Sheila Strawn. University of Central Oklahoma.
- 11:00 **Section E Business Meeting**

AFTERNOON SESSION

- 2:00 **OJAS Regional Directors Meeting.** Rahmona Thompson.

**SECTION F: GEOGRAPHY
Bldg. G, Room 124**

**Moderator: Brad Watkins
University of Central Oklahoma**

- 9:00 **Barn Types of Southwestern Oklahoma.** Brad A. Bays. Oklahoma State University.
- 9:15 ***Inventory of Vegetation Spectral Properties in the South Bay Salt Ponds: A Database for Enhancing Decision Support and Restoration Mapping.** Kristy Elkins. East Central University.

Illustrated Papers

- 9:30 **Photomap of the National Park System.** Gregory Plumb. East Central University.
- 9:40 ***GIS Compilation of Oklahoma Billboards.** Bartley W. Estes. East Central University.
- 9:50 ***Creating a Geo-relational Database of an Electrical Utility System.** Zach Hooper. East Central University.
- 10:00 ***Utilizing GPS for Data Collection of Low Rent Facilities.** Matt Stephens. East Central University.
- 10:10 ***Student Experiences of a Geospatial Summer Institute.** Amber R. Cannon. East Central University.
- 10:20 ***Web Mapping Oklahoma Earthquakes.** Shannon Williams. East Central University.
- 10:30 *Poster Viewing*
- 11:00 **Section F Business Meeting**

*Undergraduate Competition

SECTION G: FISH AND WILDLIFE CONSERVATION
Bldg. G, Room 120

Moderator: Michael Reiskind
Oklahoma State University

- 9:00 **Characteristics of a Feral Pig Population in the Cross Timbers Ecoregion: An Assessment of Select Habitat Variables on Relative Abundance.** J. M. Howard, K. A. Baum. Oklahoma State University.
- 9:15 **Prevalence of *Dirofilaria immitis* in Coyotes (*Canis latrans*) in Oklahoma and North Texas.** K. Paras, M. H. Reiskind. Oklahoma State University.
- 9:30 ***Biodiversity in the Great Smoky Mountains National Park: Past and Present Measurements.** D. A. Bulger, S. Adhikari, K. Geyer, J. Trask, P. Armsworth, W. Godsoe. Oral Roberts University, Mount Holyoke College, Virginia Tech, University of Tennessee.
- 9:45 **A Survey of Turtles of Eastern Oklahoma: A Long Term Comparison of Population Composition.** Eric Johansen, Stanley F. Fox, David M. Leslie, Jr., Tim Patton. Oklahoma State University, US Geological Survey-OK Cooperative Fish and Wildlife Research Unit, Southeast Oklahoma State University.
- 10:00 **The Effects of Herbicide Application on Bee Communities and Floral Resource Availability within Rangelands.** Kenny Wallen. Oklahoma State University.
- 10:15 Break
- 10:30 **A Wetland Below a Dam Alters the Habitat and Biotic Recovery of a Small Regulated River.** E. A. Bergey, D. Thapunya, P. Chantaramongkol, N. Udong, A. Nakwong, A. Kliaklom, J. T. Cooper. University of Oklahoma, Chiang Mai University (Thailand).
- 10:45 **Section G Business Meeting**

*Undergraduate Competition

SECTION H: MICROBIOLOGY
Bldg. G, Room 224

Moderator: Terry Cluck
East Central University

- 8:30 **Antibiotic Resistance-Conferred Nosocomial Nature of *Serratia marcescens* Due to Increased Use of Antibiotics Since 1920.** D. Afflu, J. Gaikwad. Oral Roberts University.
- 8:45 ***The Population of Oral Roberts University Community Infected with Community Acquired Methicillin Resistant *Staphylococcus aureus* (CA-MRSA).** Philpa Osafo-Ampadu. Oral Roberts University.
- 9:00 ***Antibacterial Activity of Carvacrol Against Select Nosocomial Infection Causing Bacteria.** S. K. V. Guda. Oral Roberts University.
- 9:15 **Incidence of Airborne Fungal Spores Using Two Sampling Methods at Different Times of the Day: 2006 and 2007.** Charlie L. Biles, Rebekah Ritchie, Marcos Souza, Michael Rosson, Terry Cluck. East Central University.
- 9:30 Break
- 9:45 ****Hormetic Effect of Propamocarb on the Radial Growth of *Pythium aphanidermatum* In Vitro.** Francisco Flores, Carla Garzon. Oklahoma State University.
- 10:00 ***Salt Tolerance of *Chaetomium globosum*.** Cody Griffin, Charlie Biles. East Central University.
- 10:15 **Grasshoppers and Plants as a Source of Fungal Isolates.** A. Joy, C. Cox, T. Cluck, C. Biles. East Central University.
- 10:30 **Location Comparison of Fungal Populations in Grasshoppers, Plants, and Air.** C. Baldinger, L. Charqueno, T.Cluck, C. Biles. East Central University.
- 10:45 ***The Overview Study of Enterobacteriaceae Isolation of Grasshopper.** J. Hou, A. Mikell. Oklahoma Christian University.
- 11:00 **Filling Phylogenetic Gaps in Virus Trees.** Ulrich Melcher. Oklahoma State University.
- 11:15 **Section H Business Meeting**

*Undergraduate Competition

**Graduate Competition

SECTION I: ENGINEERING SCIENCES

Section Chair: Alaeddin Abu-Abed
University of Central Oklahoma

11:00 **Section I Business Meeting – Bldg. G, Room 220**
 Shared with Geology, Physical Sciences, and Biochemistry and Biophysics
 You may go to another location, if you wish.

**SECTION J: BIOCHEMISTRY AND BIOPHYSICS
Bldg. G, Room 220**

(shared with Physical Sciences)

**Moderator: Wouter D. Hoff/Charles Crittell
Oklahoma State University/East Central University**

- 9:00 **Seed to Seed Variation in Peanut Fatty Acid Composition.** C. Jerry Bowen, Robin D. Madden, Anita L. Smith, Matthew P. Smith, Hassan A. Melouk, Jack W. Dillwith. Rogers State University, Oklahoma State University.
- 9:15 ***Novel Interactions of the Sumoylation Pathway with Microtubule Associate Proteins.** Jacob Keeling, Rita Miller. Oklahoma State University.
- 9:30 ***Analysis of SNP Mutant Variants on Exon4 Splicing and G6PC2 Production.** N. Conley, D. Baerenwald, R. O'Brien. Vanderbilt University School of Medicine.
- 9:45 **Modulation of Cell Death by Carvacrol on Tumor and Primary Cells.** Joel Gaikwad, Julie Marino, Kent Teague. Oral Roberts University, Oklahoma University College of Medicine.
- 11:00 **Section J Business Meeting**

Poster

Assessment of the GelpIT Approach for Quantitative Proteomics. G. P. Perez. Oklahoma State University.

Demonstrating DNA Barcoding: An Investigation of Mitochondrial Cytochrome *c* Oxidase in Common Oklahoma Arthropods. Eldon Dwayne Goins, Rachel Carter, Brandi Gruenwald, Heather Hayes, Diana Spencer. Tulsa Community College.

Impact of Hsp90 Inhibition by Geldanamycin, on the Proteome of Leukemia Cells. Sudhakar Voruganti, Steve Hartson. Oklahoma State University.

*Undergraduate Competition

SECTION K: MICROSCOPY
Bldg. G, Room 212

Moderator: Scott Russell
University of Oklahoma

- 9:30 *Keynote Address: Microanalysis and the FBI's Amerithrax Investigation of the 2001 Anthrax Attacks.* Paul G. Kotula. Sandia National Laboratories.
- 10:30 Break – *Ugly Bug Judging*
- 10:45 **Sperm Cell Behavior During Pollen Tube Elongation in Arabidopsis thaliana: Transport Maturation and Male Germ Unit Dissociations.** Lili Ge, Xiaoping Gou, Tong Yuan, Greg W. Strout, Jin Nakashima, Elison B. Blancaflor, Hui Qiao Tian, Scott D. Russell. University of Oklahoma.
- 11:00 †**Surface Studies on Modified Poly(ethylene oxide) Polymer Electrolytes Using Atomic Force Microscopy.** Daniel Decker, Dale Teeters. University of Tulsa.
- 11:15 **OMS Business Meeting**

† OMS Timpano Competition

**SECTION L: MATHEMATICS, COMPUTER SCIENCE, AND STATISTICS
Bldg. G, Room 226**

**Moderator: Anita M. Walker
East Central University**

- 9:00 **You Expect Me to Remember THAT???** Anita Walker. East Central University.
- 9:15 **Different Faces of Parallel Programming.** Clay Carley. East Central University.
- 9:30 Break
- 9:45 ***Illusions in Optical Illuminance.** Brad Paddock, Anita Walker. East Central University.
- 10:00 ***Measuring Cardiac Output: The Analysis of Dye Dilution Data.** Whitney McDaniel, Anita M. Walker. East Central University.
- 10:15 ***Linear Algebra and Buffaloes.** Sarah Morris, Anita Walker. East Central University.
- 10:30 ***Program Derivation of Matrix Operations in GF.** Charles Southerland, Anita Walker. East Central University
- 10:45 **Discrete Event Simulation in Perl.** Bill K. Walker. East Central University
- 11:00 **Section L Business Meeting**

*Undergraduate Competition

**SECTION M: ENVIRONMENTAL SCIENCES AND PLANNING
Bldg. G, Room 210**

**Moderator: Daniel McInnes
East Central University**

- 8:30 ***Contrasting Sustainable Landscape Architecture in China.** Chase Lee. Oklahoma State University.
- 8:45 ***Landscape Architecture Beautifies Connecticut Water Treatment Facility.** Christina Bivens. Oklahoma State University.
- 9:00 ***Treating Yourself to Landscape Architecture in New England.** Marti Brand. Oklahoma State University.
- 9:15 ***Catalina Foothills vs. Transformative Water in Landscape Architecture.** James Riter. Oklahoma State University.
- 9:30 ***Comparison of Dilution Media's Enumeration Efficacy and Percent Recovery for Heterotrophic Bacteria in Natural Waters.** C. Love, A. Mikell. Oklahoma Christian University.
- 9:45 ***Seattle Green Factor in Landscape Architecture.** Eric Humphreys. Oklahoma State University.
- 10:00 ***The High Line – Unique Landscape Architecture.** Clark Bockham. Oklahoma State University.
- 10:15 ***Social Philosophy and Urban Planning: The Influence of Thomas More and Philip II.** Steve Eilers. Oklahoma State University.
- 10:30 **Contrasting the Landscapes of Runnymede, England.** C. Leider. Oklahoma State University.
- 10:45 **Biofuels from Algae as a Future Alternative Energy Source.** John Korstad. Oral Roberts University.
- 11:00 ***Host-Specific Sequences Used to Identify Fecal Pollution Sources in Manistee Lake, Kalkaska County, Michigan.** E. Migan-Dassi. Oral Roberts University.
- 11:15 **Section M Business Meeting**

*Undergraduate Competition

SECTION N: BIOMEDICAL SCIENCES
Bldg. G, Room 214

Moderator: Bill Luttrell
Oklahoma Christian University

- 9:00 **Techniques to Express and Purify Insoluble Recombinant Proteins in Prokaryote Expression Systems.** E. L. Blewett. Oklahoma State University Center for Health Sciences.
- 9:15 ***The Effects of a Series of Ketone Compounds on Hepatic Carboxylesterase Activity in Mice.** X. Wang, W. E. Luttrell. Oklahoma Christian University.
- 9:30 Break
- 9:45 ***The Effect of Cinnamaldehyde on Cell Death and Proliferation in HT29 Cells.** K. E. Ahles, J. Gaikwad. Oral Roberts University.
- 10:00 ***Melatonin Affects Growth of Neuronal Processes in Tissue Culture.** S. A. Halsey, K. Bird, S. D. Fields. East Central University.
- 10:15 ***Effect of Cerium Oxide Nanoparticles on the Stress Response MAP Kinase Signal Transduction Pathway in Rat Retinas.** R. Favre, S. Kiosseva, J. F. McGinnis. Dean McGee Eye Institute, University of Oklahoma Health Sciences Center.
- 10:30 ***Developing a Genetic Model of the Human Papillomavirus Using *Drosophila Melanogaster*.** Tamara Hughes, Mino Aketa, William Bright, Courtney Carson, Lindsey Daggs, Kelsey Dozier, Michelle Montague, Abigail Rygg, Joseph Ahlander. Northeastern State University.
- 11:00 **Section N Business Meeting**

Posters

***Comparison of Calculated and Measured Infrared and Raman Frequencies for Carvacrol and Thymol.** Joys Oyedepo. Oral Roberts University.

A Screen for Identifying Melatonin Receptors in *Caenorhabditis elegans*. J. Gates, S. D. Fields. East Central University.

*Undergraduate Competition

James Tomasek
Luncheon Speaker

James Tomasek completed his Bachelor of Science degree at the University of Illinois and his Ph.D. in Biology at the State University of New York in Albany. After a post-doc at Harvard Medical School he took his first faculty position at New York Medical College.

Dr. Tomasek came to Oklahoma as an Associate Professor of Anatomical Sciences at OU-Health Sciences Center in 1988. He currently serves as a David Ross Boyd Professor in the Department of Cell Biology and became Dean of the Graduate School at OUHSC in 2003.

At OUHSC, Dr. Tomasek has been nominated or selected for awards in teaching over a dozen times and was awarded the Stanton L. Young Master Teaching Award in 1994. He has also been a prolific scientist with almost 50 published research articles, about the same number of invited lectures, and a successful well-funded research program in wound healing and elements of cell biology.

OKLAHOMA ACADEMY OF SCIENCE PRESIDENTS

1910	H. L. Lane, OU	1956	A. M. Stebler, OAMC
1911	D. W. Othern, Oklahoma City	1957	D. E. Howell, OAMC
1912	S. W. Reaves, OU	1958	G. J. Goodman, OU
1913	C. W. Shannon, OU	1959	E. Lucas, OU
1914	No meeting	1960	P. E. Smith, OUMS
1915	C. W. Shannon, OU	1961	E. M. Hodnett, OSU
1916	C. N. Gould, OU	1962	H. G. Barclay, TU
1917	L. C. Raiford, ISU	1963	G. A. Moore, OSU
1918	No meeting	1964	A. D. Buck, NOJC
1919	No meeting	1965	J. E. Webster, OSU
1920	M. M. Wickham, Norman	1966	C. R. Williams, PU
1921	A. F. Reiter, PU	1967	C. D. Riggs, OU
1922	J. B. Thoburn, Oklahoma City	1968	E. A. Reynolds, SWSC
1923	R. O. Whitenton, OAMC	1969	L. V. Scott, OUHSC
1924	S. Weidman, OU	1970	C. C. Carpenter, OU
1925	(spring) C. E. Sanborn	1971	P. Buck, TU
1925	(fall) H. L. Dodge, OU	1972	W. A. Carter, ECSU
1926	J. H. Could, OAMC	1973	C. J. Mankin, OU
1927	C. N. Gould, OU	1974	N. N. Durham, OSU
1928	O. M. Smith, OAMC	1975	B. Shirley, TU
1929	A. Richards, OU	1976	G. W. Todd, OSU
1930	L. Long, Ok. City	1977	D. E. Kizer, Noble Foundation
1931	A. O. Weese, OU	1978	G. Odell, OSU
1932	H. Patterson, OAMC	1979	R. Couch, ORU
1933	J. E. Knowles, PU	1980	G. Wolgamott, SWSU
1934	F. G. Brooks, OCU	1981	E. Rice, OU
1935	C. E. Decker, OU	1982	E. Grigsby, NSU
1936	H. J. Harper, OAMC	1983	J. Sokatch, OUHSC
1937	B. D. Barclay, TU	1984	M. Whitmore, OU
1938	C. M. Perry, OU	1985	J. Black, OBU
1939	H. D. Chase, TU	1986	J. Wilhm, OSU
1940	G. L. Cross, OU	1987	M. K. Patterson, Noble Foundation
1941	R. W. Jones, OAMC		
1942	H. I. Featherly, OAMC	1988	M. P. Carpenter, OU
1943	O. F. Evans, OU	1989-1990	K. E. Conway, OSU
1944	V. G. Heller, OAMC	1991-1992	J. K. McPherson, OSU
1945	J. R. Nielsen, OU	1993	J. R. Estes, OU
1946	O. C. Dermer, OAMC	1994-1995	J. D. Tyler, CU
1947	J. T. Self, OU	1996-1997	C. Taylor, SEOSU
1948	L. S. McLeod, TU	1998-1999	R. J. Tyrll, OSU
1949	J. C. Shirley, PU	2000-2001	D. Bass, UCO
1950	H. Taylor, OCW	2002-2003	C. Clifford, NSU
1951	H. W. Larsh, OU	2004-2005	S. Young, SNU
1952	V. B. Monnett, OAMC	2006-2007	S. Barber, OCU
1953	S. P. Massie, LU	2008-2009	U. Melcher, OSU
1954	A. N. Murray, TU	2010-2011	K. Hobson, OU
1955	R. E. Olson, OU		