# **Jeffrey Daniel Griffitts**

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# Education

Doctorate of Philosophy awarded July 2008 *University of Oklahoma Health Sciences Center, Oklahoma City, OK, USA*Department of Pathology

Bachelor of Science Degree with Honors awarded December 2003

East Central University, Ada, OK, USA

Major: Environmental Health Science

Minor: Chemistry

## **Work Experience**

## Associate Professor – Hungarian University of Agriculture and Life Sciences (MATE)

	2021-Present
Associate Professor - Southern Nazarene University (SNU)	2010-2021
Biology Department Chair – SNU	2016-2021
Director - Quetzal Education Research Center, Costa Rica	2013-2019
Fulbright Scholar – Szent Istvan University; Gödöllő, Hungary	2019 Fall
Adjunct Faculty Oklahoma City Community College	2009-2012
Associate Research Scientist/Post-Doc Oklahoma Medical Research Foundation, Advanced Magnet Resonance Center OK.	2009-2010 , Oklahoma City,

# **Independent Contractor**

2008-2009

Environmental Protection Agency, Groundwater and Ecosystem Restoration Division, Ecosystems and Subsurface Protection Branch, Robert S. Kerr Environmental Research Center, Ada, OK.

### **Peer Reviewed Publications**

Liang, X.; Csenki, Z.; Ivánovics, B.; Bock, I.; Csorbai, B.; Molnár, J.; Vásárhelyi, E.; **Griffitts, J.**; Ferincz, Á.; Urbányi, B.; et al. Biochemical Marker Assessment of Chronic Carbamazepine Exposure at Environmentally Relevant Concentrations in Juvenile Common Carp (Cyprinus carpio). Antioxidants 2022, 11, 1136. https://doi.org/10.3390/antiox11061136

Csenki, Z.; Risa, A.; Sárkány, D.; Garai, E.; Bata-Vidács I.; Baka, E.; Szekeres A.; Varga, M.; Ács, A.; **Griffitts, J.**; Bakos, K.; Bock, I.; Szabó, I.; Kriszt, B.; Urbányi, B.; Kukolya, J. Comparison Evaluation of the Biological Effects of Sterigmatocystin and Aflatoxin B1 Utilizing SOS-Chromotest and a Novel Zebrafish (*Danio rerio*) Embryo Microinjection Method. Toxins 2022, 14, 252. https://doi.org/10.3390/toxins14040252

Bernáth G, Milla S, Várkonyi L, Ledoré Y, **Griffitts JD**, Fontaine P, Urbányi Bé, Bokor Zoltá, The effect of two different experimental rearing temperatures on the quality and the largescale cryopreservation of

Eurasian perch (*Perca fluviatilis*) sperm, Theriogenology (2022), doi: https://doi.org/10.1016/j.theriogenology.2022.03.033.

Istvan Szabo, Jafar Al-Omari, Gabor Soma Szerdahelyi, Milan Farkas, Yazid Al-Omari, Peter Marton Szabo, Rozsa Sebok, **Jeffrey Griffitts**, Balazs Kriszt, and Sandor Soboszlay. In Situ Investigation of Plastic-Associated Bacterial Communities in a Freshwater Lake of Hungary. Water Air Soil Pollution. 2021; 232:493.

Jafar Al-Omari, István Szabó, Gábor Soma Szerdahelyi, Júlia Radó, Edit Kaszab, **Jeffrey Griffitts**, András Táncsics, and Sándor Szoboszlay. *Parvularcula mediterraneaesp*. nov., isolated from floating plastic marine debris collected near to Zakynthos Island, Greece. International Journal of Systematic and Evolutionary Microbiology. 2020; Dec. 9.

**Griffitts J.**, Saunders D., Tesiram Y.A., Reid G., Salih A., Liu S., Lydic T.A., Busik J.V., Kang J.X., and Towner R. The Non-mammalian Fat-1 Gene Prevents Neoplasia when Introduced to a Mouse Hepatocarcinogenesis Model. BBA -Molecular and Cell Biology of Lipids. 2010; 1801: 1133-44.

**Griffitts J.**, Tesiram Y., Reid G.E., Saunders D., Floyd R., and Towner R. In Vivo MRS Assessment of Altered Fatty Acyl Unsaturation in Liver Tumor Formation of a TGF $\alpha$ /c-myc Transgenic Mouse Model. Journal of Lipid Research. 2009 Apr;50(4):611-22.

#### **Research Advising**

## **Undergraduate Research Advisor**

2011-2019

2017-2019 SNU Summer Student Research:

 Fatty acid species identification in transgenic and control mice liver tissue utilizing GC-MS.

2011-2015 Costa Rica Student Research Projects:

- Analysis of Drinking Water Quality for the Community of San Gerardo de Dota, Costa Rica
- Measurement of Abiotic and Biotic Factors Related to Human Impact in the Upper Savegre River Valley, Costa Rica

2012 McNair Student Research:

 Survey of Fatty Acids Associated with Microbial Communities in an Oklahoma Wetland Forest

## **Oral and Poster Presentations**

Tallman R., White E., Bautista A.R., Ngwa-Ngu G., **Griffitts J.** Fatty Acyl Species Profile of a Mouse Hepatocarcinogenesis Model Using ESI-MS. SNU Summer Undergraduate Research Oral Presentation. June 2019.

Snitchler, C and **Griffitts, J**. Identifying Fatty Acid Species in Transgenic Mice Affected by Hepatocellular Carcinoma. NCUR Poster Presentation. (UCO, Edmond, OK; April 4-7, 2018)

Vargas M., **Griffitts J.** Fatty Acid Composition in Control Mouse Liver Tissue. SNU Summer Undergraduate Research Oral Presentation. June 2018.

Shumard A., Kitzel P., **Griffitts J.** Fatty Acyl Species Identification Using GC-MS. SNU Summer Undergraduate Research Oral Presentation. June 2017.

Cox H., **Griffitts J.** Water Quality of the Savegre River: A Longitudinal Study from 2011 to 2014. Honors Thesis Oral Presentation, SNU. May 2015.

Whitehead C., **Griffitts J.** An Observational Study Mapping the Non-Point and Point Sources of Contamination along the Rio Savegre. San Gerardo de Dota, Costa Rica, Oral Presentation. April 2015.

Hornback C.J., **Griffitts J.** An Assessment of Biotic and Abiotic Factors in the Savegre River. San Gerardo de Dota, Costa Rica, Oral Presentation. April 2015.

Rindom R., Garlett M., **Griffitts J.** Savegre River: Human Impact and Water Quality. San Gerardo de Dota, Costa Rica, Oral Presentation. April 2014.

Cox H., **Griffitts J.** Water Quality of the Savegre River. San Gerardo de Dota, Costa Rica, Oral Presentation. April 2013.

Anwanwan D., **Griffitts J.** Measurements of Abiotic and Biotic Factors along the Savegre River in San Gerardo De Dota, Costa Rica. San Gerardo de Dota, Costa Rica, Oral Presentation. April 2013.

Mino L., **Griffitts J.** Microbial Communities Associated with Nitrogen Cycling in an Oklahoma Wetland Forest. SNU Summer Undergraduate Research Oral Presentation. June 2012.

West L., **Griffitts J.** A Study of Measurements of Biotic and Abiotic Factors Related to Human Impact in the Upper Savegre River of Costa Rica. San Gerardo de Dota, Costa Rica, Oral Presentation. April 2012.

**Griffitts J.** Quetzal Education Research Center. OBFS Poster Presentation. (Bodega Bay, CA; September 2011).

Tate R., **Griffitts J.** Measurement of Abiotic and Biotic Factors Related to Human Impact in the Upper Savegre River Valley, Costa Rica. San Gerardo de Dota, Costa Rica, Oral Presentation. April 2011.

Dupree M., **Griffitts J.** Analysis of Drinking Water Quality for the Community of San Gerardo de Dota, Costa Rica. San Gerardo de Dota, Costa Rica, Oral Presentation. April 2011.

Invited guest lecturer for the NIH Bridges to the Baccalaureate Degree grant program. *The Bridges I Have Taken.* McNair Scholars Program ECU, Ada, OK. Oral Presentation. October 2010

**Griffitts J.** and Tesiram Y. Inverse Polarization Imaging of the Bis-Allyl and Vinyl Proton Ratio in Fatty Acyl Species Associated with Hepatocarcinogenesis. ENC Poster Presentation. (Daytona, FL; April 18-23, 2010).

Roberts, M. G., Bart Faulkner, C. Su, **J. Griffitts**, J. Groves, and J. Ferguson. The Effect of pH on Stability and Sorption of *Cryptosporidium parvum* Oocysts by Nanoparticles. Presented at The Soil Science Society of American Annual Meetings, Pittsburg, PA, November 01 -05, 2009.

Invited guest lecturer for the NIH Bridges to the Baccalaureate Degree grant program. *Alterations in fatty acyl species unsaturation during liver cancer formation*. McNair Scholars Program ECU, Ada, OK. Oral Presentation. February 2009

**Griffitts J.**, Saunders D., and Towner R. Effect of the non-mammalian fat-1 gene in a transgenic hepatocarcinogenesis mouse model. American Association for Cancer Research Oral Presentation. (San Diego, CA; April 11-16, 2008).

**Griffitts J.**, Tesiram Y., and Towner R. *In Vivo* Early Detection of Liver Cancer Progression in Mice Using Magnetic Resonance Spectroscopy. Joint Molecular Imaging Conference Poster Presentation (Providence, RI; September 8-11, 2007).

Tesiram Y., Saunders D., **Griffitts J.**, and Towner R. Chemical Shift Imaging and Mapping of Unsaturated Fatty Acid Resonances in Liver Cancer. ISMRM Poster Presentation (Seattle, WA; May 6-12, 2006).

**Griffitts J.**, Gonsoulin M. Effect of Simulated Acid Rain on Soil Microbes. Poster Presentation. CDC Meeting (Atlanta, GA; October 2003).

## **Awards and Honors**

2019 Selected as a Fulbright scholar to Hungary.

2010 Received an honorarium for the NIH Bridges to Baccalaureate Degree presentation at East Central University.

2009 Received an honorarium for the NIH Bridges to Baccalaureate Degree presentation at East Central University.

2008 AACR Student Travel Award Recipient

2007 JMI Conference Student Travel Award Recipient

2007 ISMAR Travel Stipend Awardee (Did not Attend Conference)

2003 CDC Undergraduate Research Selection for Poster Presentation, Atlanta, GA

1997 Eagle Scout, Boy Scouts of America

## **Professional Society Memberships**

American Society for Biochemistry and Molecular Biology Member American Association for the Advancement of Science Member