

Curriculum Vitae

Samuel David

Education

1997 Ph D Chemistry, University of Kentucky, Lexington, KY.

Experience-Teaching

2020-current: Southern Oregon University, Southern Oregon University.

2007-20019: The University of Texas Permian Basin, Odessa, TX; the University of Wisconsin, Oshkosh, WI, Assistant Professor.

Experience-Research

2001- 2005: Postdoctoral Fellow, Yale University and the University of Pennsylvania.

1997- 2001: ALT Technologies, Lexington, KY.

Honors and Awards

Bachelors: Rajis Gold Medal for Chemistry

Masters: Barry T. Asher Chemistry Fellow

Doctorate: R.F. Tuttle Fellow

Professional Membership

American Chemical Society and the American Society for the Advancement of Science

Publications

1. David S.; Shoemaker, M.; Haley B.E. Abnormal Properties of Creatine Kinase in Alzheimer's disease brain: Correlation of Reduced Enzyme Activity and Active Site Photolabeling with Aberrant Cytosol-Membrane Partitioning. *Brain Res. Mol. Brain Res.* **1998**, *54*, 276-287. [10.1016/s0169-328x\(97\)00343-4](https://doi.org/10.1016/s0169-328x(97)00343-4)
2. David, S. and Boyd E. Haley, ATP Nucleotidylation of Creatine Kinase. *Biochemistry*, **1999**, *38* (26), 8492-8500. [10.1021/bi990041b](https://doi.org/10.1021/bi990041b)
3. David S.; Kalb R.G. Serum and Glucocorticoid-Inducible Kinase Can Phosphorylate the Cyclic AMP Response Element Binding Protein, CREB. *FEBS Lett.*, **2005**, *579*, 1534-8. [10.1016/j.febslet.2005.01.040](https://doi.org/10.1016/j.febslet.2005.01.040)
4. David S.; Stegenga S.L.; Hu P.; Xiong G.; Kerr E.; Becker K.; Venkatapathy S.; Warrington J.; Kalb R.G. Expression of Serum- and Glucocorticoid-Inducible Kinase is Regulated in an Experience-Dependent Manner and Can Cause Dendrite Growth. *J.Neurosci.* **2005**, *30*, 7048-53. [10.1523/JNEUROSCI.0006-05.2005](https://doi.org/10.1523/JNEUROSCI.0006-05.2005)
5. Jeong, G.B.; Werner, M.; Gazula, V.R.; Itoh, T.; Roberts, M.; David, S.; Pfister, B.; Cohen, A.; Neve, R.L.; Hollmann, M.; Kalb, R. Bi-Directional Control of Motor Neuron Dendrite Remodeling by the Calcium Permeability of AMPA Receptors. *Mol.Cell.Neurosci.* **2006**, *32*, 299-314. <https://doi.org/10.1016/j.mcn.2006.04.008>
6. Moisllovich, J.; Crocker, A.; Arneja A, David S, Russell D., Kalb R. Protecting Motor Neurons from Toxic Insult by Antagonism of Adenosine A2a and Trk Receptors. *J. Neurosci.* **2006**, *26*, 9250-63. [10.1523/JNEUROSCI.1856-06.2006](https://doi.org/10.1523/JNEUROSCI.1856-06.2006)
7. Seagren, J.;* Radakov, A.;* David S.# The Total Synthesis of (S)-2,4-dihydroxy-1-butyl-(4-hydroxyl)benzoate. *Tetrahedron Letters*, **2009**, *50*, 3827-3828. DOI: [10.1016/j.tetlet.2009.04.016](https://doi.org/10.1016/j.tetlet.2009.04.016)

8. Porter, J.;* Radomski, G.;*Seagren, J.;*Batura, B.;*David, S.# A Novel, Unusual Acid Catalyzed Route to Substituted 1,4-dihydropyridine *via* Double Decarboxylation. *Letts. Org. Chem.*, **2011**, 8(9), 610-613. DOI : [10.2174/157017811799304278](https://doi.org/10.2174/157017811799304278)
9. Aguilar, N.; * Garcia, B.;* Cunningham, M; David, S.# Synthesis of a Parkinson's Disease Treatment Drug, the *R,R*-Tartrate Salt of *R*-Rasagiline: A Three Week Introductory Organic Chemistry Lab Sequence. *J. Chem. Educ.*, **2016**, 93,937–940. DOI: [10.1021/acs.jchemed.5b00357](https://doi.org/10.1021/acs.jchemed.5b00357).
10. Whisenant, J.;* Vinson, D.;* Marco, M.;* Hughes, C.;* David, S.# Novel Synthesis of Anserinones A&B.*Synthetic Communications*, **2017**, 47, 268-272.DOI: [10.1080/00397911.2016.1255755](https://doi.org/10.1080/00397911.2016.1255755)
11. Gandhi, K.; Montoya-Uribe, V.; Martinez, S.; David, S.; Jain, B.; Shim, G.; Li, C.; Jenkins, S.; Nathanielsz, P.; Schlabritz-Lutsevich, N. Ontogeny and programming of the fetal temporal cortical endocannabinoid system by moderate maternal nutrient reduction in baboons (*Papio* spp.). *Physiological Reports*, **2019**, 7(6): e140247.DOI: <https://doi.org/10.14814/phy2.14024>
12. Peng, H.;* Bryan, J.;* Henson, W.;* Zhdankin, V.; Gandhi, K.; David, S.# A New, Milder Hypervalent Iodine Oxidizing Agent: Using μ -oxodiodanyl diacetate, a (diacetoxyiodo) benzene Derivative, in the Synthesis of Quinones. *J. Chem. Educ.* **2019**, 96, 2622–2627. <https://doi.org/10.1021/acs.jchemed.8b00636>
13. Gandhi, K.; Gutierrez, P.; Garza, J.; Wlazlo, T.J.G.; Meiser, R.J.; David, S.; Carrillo, M.; Narasimhan, M.; Galloway, M.; Ventolini, G. Vaginal Lactobacillus species and in Inflammatory biomarkers in pregnancy. *Minerva Ginecologica*, **2020**, 72(5), 299-309. DOI: [10.23736/S0026-4784.20.04566-9](https://doi.org/10.23736/S0026-4784.20.04566-9)
14. Gandhi, K.; Manales, N.J.; Garza, J.; David, S.; Sanchez, A.; Ventolini, G. Lactobacilli and cytokine modifications in menopause and their relation to vulvar and vulvovaginal disorders. *Journal of Menopausal Medicine*. Submitted January 5, **2022**. Manuscript number: JMM- 22-001

Note: *undergraduate student author; #corresponding author

Manuscripts in preparation

1. Samuel David, Jay English, Maira Carrillo, Stacy Martinez, Gary Ventolini and Natalia Schlabritz-Loutsevitch. Cannabinoid-Receptors Mediated Function of Fetal Endothelial Barrier. Manuscript in preparation.
2. Samuel David, etc. “Hauser reaction”. Partial data has been gathered. More data will be gathered in collaboration with other universities.

Poster Presentations

1. David S. and Haley B.E. Effect of 8-Hydroxy Guanosine on Oxidative Damage to Beta tubulin. Presented at the Society for Neuroscience Annual Meeting, New Orleans, LA. August 5th, **1996**. Poster number 24.
2. David S., Kalb R.G. Binding Chemistry of The A2a Receptor and its Activator Molecules. Presented at the American Society for Biochemistry and Molecular Biology, San Diego, CA. April 14th, **2005**.

3. Téh S.L., Kim. S., David, S. Molecular Modeling of Deformylflustrabromine B Analogs. Presented at the Kentucky Academy of Sciences Annual Symposium. Morehead, KY. November 10th, **2006**.
4. Kim S.; Téh, S., David, S. Beta-Amyloid 1-40 Specifically Denatures Creatine Kinase. Presented at the Kentucky Academy of Sciences Annual Symposium. Morehead, KY. November 10th, **2006**.
5. David, S. Presented at the 241st ACS Spring National Meeting, Anaheim, CA. March 27th, **2011** Poster number 85.
6. David, S. Presented at the 42nd Middle Atlantic Regional American Chemical Society Meeting, University of Maryland, MD. May 22nd, **2011**. Poster number 79.
7. David, S. Presented at the 46th Midwest 39th Great Lakes Joint Regional American Chemical Society Meeting. St. Louis, MO. October 21st, **2011**. Poster number 577.
8. Graham Radomski; Jacob Porter; Joel Seagren; Benjamin Batura; Samuel David. A Novel, Unusual Acid Catalyzed Route to Substituted 1,2-Dihydropyridine *via* Double Decarboxylation 11th Annual System Symposium for Undergraduate Research and Creative Activity. University of Wisconsin, Parkside, WI. April 29th, **2011**. Poster number P76.
9. Joel Seagren; Atanas Radkov; Samuel David. Synthesis of (*S*)-2, 4-dihydroxy-1-butyl (4-hydroxyl) Benzoate 11th Annual System Symposium for Undergraduate Research and Creative Activity. University of Wisconsin, Parkside, WI. April 29th, **2011**. Poster # P79.
10. Matthew Knollenberg; Samuel David. Progress Towards a Chiral Synthesis of (*R*)-rasagiline for the Undergraduate Laboratory. Seven Rivers Undergraduate Research Symposium, Viterbo University, La Cross, WI. November 11th, **2011**.
11. Noberto Aguilar, Billy Garcia, Samuel David. Multistep Drug Synthesis in the Sophomore Organic Lab: Synthesizing (*R*)-rasagiline, a Popular Parkinson's drug. Presented by Billy Garcia and Noberto Aguilar at the 249th American Chemical Society Spring National Meeting, Denver, CO. March 22, **2015**. Paper ID number: 2144759
12. Stephanie Franco, Thomas Weathers and Samuel David. A New Undergraduate Lab: Using Hypervalent Iodine to Synthesise Benzoquinone. Presented by Stephanie Franco, UTPB URP Symposium. UTPB, Odessa, TX. April 30, **2015**.
13. Daniel Vincent, Jonathan Whisenant Samuel David. Progress Towards the Synthesis of Anserinones A and B. Presented by Daniel Vincent and Jonathan Whisenant at the 251st American Chemical Society Spring National Meeting, San Diego, CA. March 13-17, **2016**. Paper ID number: 2400251.
14. Jason M Snitker, Milka O Montes, and Samuel S David. An Organic Surface Functionalization Technique for Colloidal Silver Nanoparticles Designed to Inhibit Precipitation Caused by Hydrogen Sulfide Gas. Presented by Jason M Snitker at the 251st American Chemical Society Spring National Meeting, San Diego, CA. March 13-17, **2016**.
15. Alex Yashchenko and Samuel David. SGK Mediates the Relationship Between Cortisol, Cell Survival and Apoptosis. Presented by Alex Yashchenko at the UTPB URP Symposium. UTPB, Odessa, TX. April 30, **2017**.
16. Michael Blanco and Samuel David. Preliminary Reactions in the Total Synthesis of Aspernigrin. Presented by Michael Blanco at the UTPB URP Symposium. UTPB, Odessa, TX. April 30, **2017**.
17. Al-Ahmad Abraham, Samuel David, Maira Carrillo, Jay English, Stacy Martinez, Gary Ventolini and Natalia Schlabritz-Lutsevich. Cannabinoid-Receptor Mediated Regulation of Long-Chain Fatty Acid (LC-PUFA) Transporter (MSFD-2A) in Placental and Blood-Brain

- Barriers. Presented by Jay English. Placental Satellite Meeting | SRI 2018 Annual Meeting, San Diego, March 7-10, **2018**. Paper ID number: T-039.
18. David A. Maldonado, Samuel David. Progress Towards the Total Synthesis of Aspernigrin. Presented by David A. Maldonado, UTPB URP Symposium. UTPB, Odessa, TX. April 20, **2018**.
 19. Abraham Al-Ahmad, Samuel David, Maira Carrillo, Jay English, Stacy Martinez, Gary Ventolini, Natalia Schlabritz-Loutsevitch. Cannabinoid-Receptors Mediated Regulation of Long-Chain Poly-Unsaturated Fatty Acid (LC-PUFA) Transporter (MSFD2A) in Placental and Blood-Brain (BBB) Barriers. **2018/3/1**, *Reproductive Sciences*, Vol. 25, 140A-140A
 20. Maira Carrillo, Marcel Chuecos, Kushal Gandhi, Samuel David, Natalia Schlabritz-Loutsevitch. Label-Free Real Time Detection of Placental Extracellular Vesicles-Breast Cancer Cell Interaction. 6th International Symposium on Metabolic Programming and Microbiome and the 3rd Meeting of Ibero-American DOHaD Chapter. November **2018**.
 21. Jay English, Maira Carrillo, Stacy Martinez, Gary Ventolini, Natalia Schlabritz-Loutsevitch and Samuel David. Cannabinoid-Receptors Mediated Regulation of Long-Chain Poly-Unsaturated Fatty Acid (LC-PUFA) Transporter (MSFD2A) in Placental Barrier. Permian Basin Research Forum **2018**, TTUHSC, Odessa, Texas. Award for the best oral basic science presentation.
 22. Alice Fa, Samuel David, Kushal Gandhi, Kannan Alpadi, Natalia Schlabritz-Loutsevitch. Role of Inhibin, Fibronectin and PAPP-A2 in Preeclampsia. 101st Annual Meeting of the Endocrine Society, 23rd-26th March, 2019, New Orleans, LA. Poster to be submitted on January 10th **2019**.

List of Research Students Mentored

University of Wisconsin Oshkosh: mentored 2-3 students per semester

Notable students:

Graduation Yr.	Name of Student	School Name	Subject Area	Degree Pursued
2009	Atanas Radkov	U of KY, Lexington	Plant Biology	PhD
2011	Bryan Rynearson	U of WI Milwaukee	Medicine	MD
2011	Pete Christensen	U of British Columbia	Material Chem.	PhD
2012	Oliver Muniyadzi	U of KY, Lexington	Organic Synth.	PhD

University of Texas Permian Basin (UTPB):

	Name
Fall 2014	Billy Garcia
Fall 2014	Noberto Aguilar
Spring 2015	Billy Garcia
Spring 2015	Noberto Aguilar
Spring 2015	Stephanie Franco
Spring 2015	Thomas Weathers
Spring 2015	Robin Dassy
Fall 2015	Jon Whisenant
Fall 2015	Daniel Vinson

Fall 2015	Stephanie Franco
Fall 2015	Thomas Weathers
Fall 2015	Benjamin Caswell
Spring 2016	Jon Whisenant
Spring 2016	Daniel Vinson
Spring 2016	Carson Hughes
Spring 2016	April Smith
Spring 2016	Michael Blanco
Fall 2016	Daniel Vinson
Fall 2016	April Smith
Fall 2016	Vanessa Uribe
Fall 2017	Jessica Bryan
Fall 2017	Jay English
Fall 2017	Alex Yashchenko
Summer 2017	Jay English
Summer 2017	Jessica Bryan
Spring 2017	Jeanette Cala
Spring 2017	Jay English
Spring 2017	Michael Blanco
Spring 2018	William Henson
Spring 2018	Gabriella Newton
Spring 2018	David Maldonado
Spring 2018	Ha Youn Peng
Spring 2018	Jay English
Spring 2018	Fnu Alimiran
Spring 2018	Alex Yashchenko
Summer 2018	William Henson
Summer 2018	Jessica Bryan
Summer 2018	Michael Tran
Fall 2018	Roy Williams
Fall 2018	Sunghwan Ko
Fall 2018	Hao Che Peng
Fall 2018	William Henson
Fall 2019	Michael Tran
Spring 2019	James Blackwell
Spring 2020	Victoria Librizzi
Spring 2020	Stephanie Heck
Spring 2020	Brent Jenkins
COVID	COVID
Fall 2021	Grant Leach
Fall 2021	Anthony Swanson
Fall 2021	Ryan Walker
Fall 2021	Alejandro Robles
Spring 2022	Grant Leach
Spring 2022	Anthony Swanson
Spring 2022	Ryan Walker
Spring 2022	Alejandro Robles