

Alan J. Tackett, Ph.D.

Distinguished Professor of Biochemistry & Molecular Biology
Deputy Director, Winthrop P. Rockefeller Cancer Institute
Scharlau Family Endowed Chair in Cancer Research
Director, NIH-IDeA National Resource for Quantitative Proteomics
Director, NIH Center of Biomedical Research Excellence



CONTACT

University of Arkansas for Medical Sciences
4301 West Markham, Slot 803
Little Rock, AR, 72205
(501) 686-8152
AJTackett@uams.edu

EDUCATION

B.A. in Chemistry (with Distinction) 1998

Hendrix College, Conway, AR
Advisor: Thomas E. Goodwin, Professor
Research: Use of Peptide Nucleic Acid in Probing Helicase Activity

Ph.D. in Biochemistry & Molecular Biology 2002

University of Arkansas for Medical Sciences (UAMS), Little Rock, AR
Advisor: Kevin D. Raney, Professor and Chair
Research: A Mechanistic Investigation of NS3 Encoded by the Hepatitis C Virus

Postdoctoral Training in Proteomics and Epigenetics 2005

The Rockefeller University, New York, NY
Advisor: Brian Chait, Camille and Henry Dreyfus Professor
Research: Analysis of Proteins Involved in Genome Duplication
Funded through NIH Fellowship (F32GM066496)

PROFESSIONAL EXPERIENCE

Faculty Appointments

2023 – present	Distinguished Professor with tenure, University of Arkansas for Medical Sciences Department of Biochemistry & Molecular Biology (primary) Department of Pathology (secondary) Department of Pediatrics (secondary)
2014 – 2023	Professor with tenure, University of Arkansas for Medical Sciences Department of Biochemistry & Molecular Biology (primary) Department of Pathology (secondary) Department of Pediatrics (secondary)
2009 – 2014	Associate Professor, University of Arkansas for Medical Sciences

Department of Biochemistry & Molecular Biology

2005 – 2009 **Assistant Professor, University of Arkansas for Medical Sciences**
Department of Biochemistry & Molecular Biology

Leadership Appointments

2021 – present **Deputy Director, Winthrop P. Rockefeller Cancer Institute**
University of Arkansas for Medical Sciences

2020 – 2021 **Program Co-Leader, Surgical and Translational Research Lane**
Arkansas Children's Research Institute

2019 – 2021 **Associate Director for Basic Science**
Arkansas Children's Research Institute

2019 – 2021 **Associate Director for Basic Research, Winthrop P. Rockefeller Cancer Institute**
University of Arkansas for Medical Sciences

2017 – present **Director, NIH Center for Biomedical Research Excellence (COBRE)**
Arkansas Children's Research Institute

2016 – present **Scharlau Family Endowed Chair in Cancer Research (Inaugural Recipient)**
University of Arkansas for Medical Sciences

2016 – present **Director, NIH IDeA National Resource for Quantitative Proteomics**
University of Arkansas for Medical Sciences

2016 – present **Scientific Director, UAMS Proteomics Core Facility**
University of Arkansas for Medical Sciences

2007 – 2016 **Director, UAMS Proteomics Core Facility**
University of Arkansas for Medical Sciences

Professional Memberships

Member, American Association of Cancer for Cancer Research

Fellow, Arkansas Research Alliance

Member, Southwest Oncology Group (Melanoma Committee)

Member, Winthrop P. Rockefeller Cancer Institute

Member, National Association of IDeA Principal Investigators

GRANTS

Current Funding

Principal Investigator

NIH/NIGMS, P20GM121293, COBRE Center for Translational Pediatric Research (Phase II)

07/20/2022 – 06/30/2027

Total Costs (all years): \$11,542,000

NIH/NIAID, R01AI119380 (Co-PI), Defining the role of post-translational regulation by extracellular proteases in the pathogenesis of Staphylococcus aureus osteomyelitis

10/01/2021 – 09/30/2026

Total Costs (all years): \$2,978,066

NIH/NIGMS, R01GM101040 (Co-PI), Discovery and Characterization of Novel Sepsis Proteome Biomarkers

09/10/2021 – 08/31/2025

Total Costs (all years): \$2,696,625

DoD, OC20051 (Co-PI), Proteogenomic Analysis of Responders versus Nonresponders in a Phase 1 Trial of Th17- Inducing Dendritic Cell Vaccination for Advanced-Stage Ovarian Cancer

07/01/2021 – 06/30/2023 (Currently in NCE)

Total Costs (all years): 394,696

NIH/NIGMS, R24GM137786, IDeA National Resource for Quantitative Proteomics

08/20/2020 – 06/30/2025

Total Costs (all years): \$10,105,169

USDA 20206701730841 (Co-PI), Obesity, Gut Microbiota, and Non-Alcoholic Fatty Liver Protection on Adolescents and Adults by Soy Protein Diet

04/01/2020 – 03/31/2023 (Currently in NCE)

Total Costs (all years): \$1,500,000

NIH/NCI, R01CA236209, Identification of Druggable Targets to Complement Melanoma Immunotherapy

06/15/2019 – 05/31/2024 (Currently in NCE)

Total Costs (all years): \$1,750,222

NIH/NCI R01CA282198 (Co-PI), Melanoma Resistance Evolution Atlas (MREA) for identifying combinatorial targets to prevent and reverse MAPKi resistance

01/03/2024-02/28/2029

Total Costs (all years): \$3,304,165

NIH/NCI R21CA292278 (Co-PI), Leveraging cancer-evolved resistance mechanism to enhance EZH2 activity in adoptive T cells

07/01/2024-06/30/2026

Total Costs (all years): \$420,750 (award in progress)

Co-Investigator

NIH/NHLBI, F30HL165803, Altered miRNA Expression Drives Proliferation of Lymphatic Malformation by Activating Pro-Growth Signaling Cascades (PI: Ravi Sun, UAMS)

08/19/2023 – 07/31/2027

Role: Co-Sponsor

Total Costs (all years): \$181,464

NIH/NCI, R25CA250979, Partnership in Cancer Research (PI: Thomas Kelly, UAMS)

09/01/2020 – 06/31/2025

Role: Co-Investigator, Mentor

Total Costs (all years): \$780,005

NIH/NCRR, P20GM103429, Partnerships for Biomedical Research in Arkansas (INBRE) (PI: Lawrence Cornett, UAMS)
05/01/2008 – 04/30/2025
Role: Co-Investigator, Research Technology Core Director
Total Costs (all years): \$17,962,260

Past Funding

Principal Investigator

NIH/NIGMS, P20GM121293, COBRE Center for Translational Pediatric Research (Phase I)
07/17/2017 – 06/30/2022
Total Costs (all years): \$11,451,150

NIH/NIDA, R21DA041822, Technology for the Identification of Epiproteomes in Tissue Samples
07/01/2016 – 06/30/2019
Total Costs (all years): \$372,500

NIH/NIEHS, R21ES025268, Identifying the Epigenetic Regulation of Arsenic Exposure
04/08/2015 – 03/31/2018
Total Costs (all years): \$372,500

NIH/NCI, R33CA173264, Development of MassSQUIRM to Quantitatively Measure Lysine Methylation
09/01/2013 – 08/31/2015
Total Costs (all years): \$429,762

NIH/NIGMS, R01GM106024 (Co-PI), Using ChAP-MS to Study Macromolecular Chromatin Composition during Transcription
04/01/2013 – 03/31/2017
Total Costs (all years): \$1,190,164

NIH/Roadmap/NIDA, R01DA025755 (Co-PI), Development of Technology for High Resolution Epigenetic Profiling of Chromatin
09/20/2008 – 09/19/2013
Total Costs (all years): \$1,535,804

NIH/NIGMS, F32GM066496, Analysis of Proteins Involved in Genome Duplication
09/01/2002 – 08/31/2005
Total Costs (all years): \$125,496

Co-Investigator

NIH/NICHD, R01HD093461, Control of Pituitary Cell Plasticity Through Regulated mRNA Translation (PI: Angus MacNicol, UAMS)
09/01/2018 – 06/30/2023
Role: Co-Investigator
Total Costs (all years): \$3,127,584

NIH/NIGMS, P20GM125503, COBRE Center for Musculoskeletal Disease Research (PI: Charles O'Brien, UAMS)

02/16/2018 – 01/31/2023

Role: Mentor

Total Costs (all years): \$11,308,771

NIH/NIGMS, R01GM118760, Epigenetic Profiling and Enzymatic Regulation of H3K23me3 During Cellular Differentiation (PI: Sean Taverna, Johns Hopkins University)

03/01/2017 – 01/31/2017

Role: Co-Investigator

Total Costs (all years): \$1,505,937

NIH/NIA, P01AG012411, Early Events in Alzheimer's Pathogenesis (PI: Sue Griffin, UAMS)

10/01/2016 – 05/21/2021

Role: Co-Investigator

Total Costs (all years): \$10,554,383

NIH/NIGMS, R01GM081766, Biochemistry of recombination in Meiosis (PI: Wayne Wahls, UAMS)

06/01/2016 – 05/31/2019

Role: Co-Investigator

Total Costs (All years): \$883,836

NIH/NIGMS, P20GM109005, COBRE Center for Studies of Host Responsiveness to Cancer Therapy (PI: Martin Hauer-Jensen, UAMS)

06/24/2015 – 03/31/2020

Role: Co-Investigator, Mentor

Total Costs (all years): \$10,908,768

NIH/NIDDK, R01DK102206, Lipid Stress and MC4R (PI: Giulia Baldini, UAMS)

09/15/2014 – 08/31/2019

Role: Co-Investigator

Total Costs (all years): \$1,770,824

National Space Biomedical Research Institute (NSBRI), RE03701, Center for Research on Cardiac and Vascular Effects of Space Radiation (PI: Marjan Boerma, UAMS)

07/01/2014 – 06/30/2017

Role: Co-Investigator

NIH/NIEHS, R15ES022781, SIRT3: A key player against PCB-induced mitochondrial injury (PI: Nukhet Aykin-Burns, UAMS)

09/13/2013 – 08/31/2016

Role: Co-Investigator

Total Costs (all years): \$442,500

Biomedical Advanced Research and Development Authority (BARDA), BAA-BARDA-09-34, Advanced Development of SOM230 as a Radiation Mitigator (PI: Martin Hauer-Jensen, UAMS)

Role: Co-Investigator

NIH/NIAMS, R01AR060823, Role of the Leprecan Genes in Skeletal Formation (PI: Roy Morello, UAMS)
10/01/2012 – 09/30/2014

Role: Co-Investigator

Total Costs (all years): \$1,632,296

NIH/NIDDK, R01DK081406, Identification of New Mechanistic Biomarkers of Adverse Responses to Acetaminophen (PI: Laura James, UAMS)

06/15/2009 – 05/31/2014

Role: Co-Investigator

Total Costs (all years): \$1,949,713

NIH/NIGMS, P30GM103450, Center for Protein Structure and Function (PI: Francis Millett, University of Arkansas at Fayetteville)

07/01/2005 – 06/30/2015

Role: Co-Investigator

Total Costs (all years): \$3,204,277

NIH/NIDDK, R01DK080424, Melanocortin-4 Receptor Traffic and Signaling (PI: Giulia Baldini, UAMS)

07/01/2009 – 06/30/2013

Role: Co-Investigator

Total Costs (all years): \$1,287,312

NIH/NCRR, U54RR020839, Networks, Pathways, and Dynamics of Lysine Modification (PI: Jef Boeke, Johns Hopkins University)

08/01/2011 – 07/31/2012

Role: Pilot Project Leader

Total Costs (all years): \$17,490,546

NIH/NIAAA, R01AA016676, Ethanol Teratogenesis and Genomic Imprinting (PI: Thomas Johnson, University of Colorado)

09/30/2006 – 09/30/2009

Role: Co-Investigator

Total Costs (all years): \$2,095,413

PUBLICATIONS

1. Morehead LC, Fil D, Koss B, Heflin B, Garg S, Wallis KF, **Tackett AJ**, Miousse IR. Resveratrol induces major histocompatibility complex class I antigen presentation in a STING-dependent and independent manner in melanoma. *Molecular Immunology*, *accepted*.
2. Zhao S, Lu J, Pan B, Fan H, Byrum SD, Xu C, Kim A, Guo Y, Kanchi KL, Gong W, Sun T, Storey AJ, Burkholder NT, Mackintosh SG, Kuhlert PC, Edmondson RD, Strahl BD, Diao Y, **Tackett AJ**, Raab JR, Cai L, Song J, Wang GG. TNRC18 engages H3K9me3 to mediate silencing of endogenous retrotransposons. *Nature*, *accepted*.

3. Morehead LC, Garg S, Wallis KF, Simoes CC, Siegel ER, **Tackett AJ**, Miousse IR. Increased response to immune checkpoint inhibitors with dietary methionine restriction in colorectal cancer. *Cancers*, *accepted*.
4. Alam J, Huda MN, **Tackett AJ**, Miah S. Oncogenic signaling-mediated regulation of chromatin during tumorigenesis. *Cancer Metastasis Rev.* 2023 June; 41(2):409-425. doi: 10.1007/s10555-023-10104-3. PMID: 37147457; PMCID: PMC10348982.
5. Roy Choudhury S, Heflin B, Taylor E, Koss B, Avaritt, NL, **Tackett AJ**. CRISPR/dCas9-KRAB-mediated suppression of S100b restores p53-mediated apoptosis in melanoma cells. *Cell Methods*, 2023 Mar; 12(5): 730. doi: 10.3390/cells12050730. PMID: 36899866; PMCID: PMC10000373.
6. Lowenthal R, Taylor M, Gidden JA, Heflin B, Lay JO Jr, Avaritt N, **Tackett AJ**, Urbaniak A. The mycelium of the *Trametes versicolor* synn. *Coriolus versicolor* (Turkey tail mushroom) exhibit anti-melanoma activity in vitro. *Biomed Pharmacother.* 2023 May;161:114424. doi: 10.1016/j.biopha.2023.114424. Epub 2023 Feb 22. PMID: 36827712; PMCID: PMC10147383.
7. Kore RA, Jenkins SV, Jamshidi-Parsian A, **Tackett AJ**, Griffin RJ, Ayyadevara S, Mehta JL. Proteomic analysis of transcription factors involved in the alteration of ischemic mouse heart as modulated by MSC exomes. *Biochem Biophys Rep*, 2023 Apr 14; 34:101643. doi: 10.1016/j.bbrep.2023.101463. PMID: 37125076; PMCID: PMC10130341.
8. Morehead LC, Garg S, Wallis KF, Siegel ER, **Tackett AJ**, Miousse IR. Increased response to immune checkpoint inhibitors with dietary methionine restriction. *bioRxiv.* 2023 Apr 6:2023.04.05.535695. doi: 10.1101/2023.04.05.535695. PMID: 37066240; PMCID: PMC10104076.
9. Garg S, Morehead LC, Bird JT, Graw S, Storey AJ, **Tackett AJ**, Edmondson RD, Mackintosh SG, Byrum SD, Miousse IR. Characterization of methionine dependence in melanoma cells. *bioRxiv.* 2023 Apr
10. Roy Choudhury S, Byrum SD, Alkam D, Ashby C, Zhan F, **Tackett AJ**, Van Rhee F. Expression of integrin β -7 is epigenetically enhanced in multiple myeloma subgroups with high-risk cytogenetics. *Clin Epigenetics.* 2023 Feb 4;15(1):18. doi: 10.1186/s13148-023-01433-9. PMID: 36737807; PMCID: PMC9898982.
11. Urbaniak A, Reed MR, Heflin B, Gaydos J, Piña-Oviedo S, Jędrzejczyk M, Klejborowska G, Stępczyńska N, Chambers TC, **Tackett AJ**, Rodriguez A, Huczynski A, Eoff RL, MacNicol AM. Anti-glioblastoma activity of monensin and its analogs in an organoid model of cancer. *Biomed Pharmacother.* 2022 Sep;153:113440. doi: 10.1016/j.biopha.2022.113440. Epub 2022 Jul 20. PMID: 36076555; PMCID: PMC9472755.
12. Li D, Yu X, Kottur J, Gong W, Zhang Z, Storey AJ, Tsai YH, Uryu H, Shen Y, Byrum SD, Edmondson RD, Mackintosh SG, Cai L, Liu Z, Aggarwal AK, **Tackett AJ**, Liu J, Jin J, Wang GG. Discovery of a dual WDR5 and Ikaros PROTAC degrader as an anti-cancer therapeutic. *Oncogene.* 2022 Jun;41(24):3328-3340. doi: 10.1038/s41388-022-02340-8. Epub 2022 May 7. PMID: 35525905; PMCID: PMC9189076.
13. Kore RA, Henson JC, Hamzah RN, Griffin RJ, **Tackett AJ**, Ding Z, Mehta JL. Author Correction: Molecular events in MSC exosome mediated cytoprotection in cardiomyocytes. *Sci Rep.* 2022 May 12;12(1):7874. doi: 10.1038/s41598-022-11690-y. Erratum for: *Sci Rep.* 2019 Dec 17;9(1):19276. PMID: 35551219; PMCID: PMC9098878.
14. Xu C, Meng F, Park KS, Storey AJ, Gong W, Tsai YH, Gibson E, Byrum SD, Li D, Edmondson RD, Mackintosh SG, Vedadi M, Cai L, **Tackett AJ**, Kaniskan HÜ, Jin J, Wang GG. A NSD3-targeted PROTAC suppresses NSD3 and cMyc oncogenic nodes in cancer cells. *Cell Chem Biol.* 2022 Mar 17;29(3):386-397.e9. doi: 10.1016/j.chembiol.2021.08.004. Epub 2021 Aug 31. PMID: 34469831; PMCID: PMC8882712.

15. Paidi SK, Rodriguez Troncoso J, Raj P, Monterroso Diaz P, Ivers JD, Lee DE, Avaritt NL, Gies AJ, Quick CM, Byrum SD, **Tackett AJ**, Rajaram N, Barman I. Raman Spectroscopy and Machine Learning Reveals Early Tumor Microenvironmental Changes Induced by Immunotherapy. *Cancer Res.* 2021 Nov 15;81(22):5745-5755. doi: 10.1158/0008-5472.CAN-21-1438. Epub 2021 Oct 13. PMID: 34645610; PMCID: PMC8841097.
16. Wardell CP, Darrigues E, De Loose A, Lee MP, Gokden M, Makhoul I, **Tackett AJ**, Rodriguez A. Genomic and Transcriptomic Profiling of Brain Metastases. *Cancers (Basel).* 2021 Nov 9;13(22):5598. doi: 10.3390/cancers13225598. PMID: 34830758; PMCID: PMC8615723.
17. Wang Y, Liu S, Yang Z, Algazi AP, Lomeli SH, Wang Y, Othus M, Hong A, Wang X, Randolph CE, Jones AM, Bosenberg MW, Byrum SD, **Tackett AJ**, Lopez H, Yates C, Solit DB, Ribas A, Piva M, Moriceau G, Lo RS. Anti-PD-1/L1 lead-in before MAPK inhibitor combination maximizes antitumor immunity and efficacy. *Cancer Cell.* 2021 Oct 11;39(10):1375-1387.e6. doi: 10.1016/j.ccell.2021.07.023. Epub 2021 Aug 19. PMID: 34416167; PMCID: PMC9126729.
18. Delgado M, Washam CL, Urbaniak A, Heflin B, Storey AJ, Lan RS, Mackintosh SG, **Tackett AJ**, Byrum SD, Chambers TC. Phosphoproteomics Provides Novel Insights into the Response of Primary Acute Lymphoblastic Leukemia Cells to Microtubule Depolymerization in G1 Phase of the Cell Cycle. *ACS Omega.* 2021 Sep 16;6(38):24949-24959. doi: 10.1021/acsomega.1c03936. PMID: 34604676; PMCID: PMC8482483.
19. Jenkins SV, Alimohammadi M, Terry AS, Griffin RJ, **Tackett AJ**, Leung JW, Vang KB, Byrum SD, Dings RPM. Dysbiotic stress increases the sensitivity of the tumor vasculature to radiotherapy and c-Met inhibitors. *Angiogenesis.* 2021 Aug;24(3):597-611. doi: 10.1007/s10456-021-09771-z. Epub 2021 Feb 24. PMID: 33629198; PMCID: PMC8295215.
20. Ahn JH, Davis ES, Daugird TA, Zhao S, Quiroga IY, Uryu H, Li J, Storey AJ, Tsai YH, Keeley DP, Mackintosh SG, Edmondson RD, Byrum SD, Cai L, **Tackett AJ**, Zheng D, Legant WR, Phanstiel DH, Wang GG. Phase separation drives aberrant chromatin looping and cancer development. *Nature.* 2021 Jul;595(7868):591-595. doi: 10.1038/s41586-021-03662-5. Epub 2021 Jun 23. PMID: 34163069; PMCID: PMC8647409.
21. Reed MR, Maddukuri L, Ketkar A, Byrum SD, Zafar MK, Bostian ACL, **Tackett AJ**, Eoff RL. Inhibition of tryptophan 2,3-dioxygenase impairs DNA damage tolerance and repair in glioma cells. *NAR Cancer.* 2021 Apr 9;3(2):zcab014. doi: 10.1093/narcan/zcab014. PMID: 33870196; PMCID: PMC8034706.
22. Xu C, Tsai YH, Galbo PM, Gong W, Storey AJ, Xu Y, Byrum SD, Xu L, Whang YE, Parker JS, Mackintosh SG, Edmondson RD, **Tackett AJ**, Huang J, Zheng D, Earp HS, Wang GG, Cai L. Cistrome analysis of YY1 uncovers a regulatory axis of YY1:BRD2/4-PFKP during tumorigenesis of advanced prostate cancer. *Nucleic Acids Res.* 2021 May 21;49(9):4971-4988. doi: 10.1093/nar/gkab252. PMID: 33849067; PMCID: PMC8136773.
23. Fan H, Guo Y, Tsai YH, Storey AJ, Kim A, Gong W, Edmondson RD, Mackintosh SG, Li H, Byrum SD, **Tackett AJ**, Cai L, Wang GG. A conserved BAH module within mammalian BAHD1 connects H3K27me3 to Polycomb gene silencing. *Nucleic Acids Res.* 2021 May 7;49(8):4441-4455. doi: 10.1093/nar/gkab210. PMID: 33823544; PMCID: PMC8096256.
24. Kore RA, Wang X, Ding Z, Griffin RJ, **Tackett AJ**, Mehta JL. MSC exosome- mediated cardioprotection in ischemic mouse heart comparative proteomics of infarct and peri-infarct areas. *Mol Cell Biochem.* 2021 Apr;476(4):1691-1704. doi: 10.1007/s11010-020-04029-6. Epub 2021 Jan 10. PMID: 33423165; PMCID: PMC8186026.

25. Hong A, Piva M, Liu S, Hugo W, Lomeli SH, Zoete V, Randolph CE, Yang Z, Wang Y, Lee JJ, Lo SJ, Sun L, Vega-Crespo A, Garcia AJ, Shackelford DB, Dubinett SM, Scumpia PO, Byrum SD, **Tackett AJ**, Donahue TR, Michielin O, Holmen SL, Ribas A, Moriceau G, Lo RS. Durable Suppression of Acquired MEK Inhibitor Resistance in Cancer by Sequestering MEK from ERK and Promoting Antitumor T-cell Immunity. *Cancer Discov.* 2021 Mar;11(3):714-735. doi: 10.1158/2159-8290.CD-20-0873. Epub 2020 Dec 14. PMID: 33318037; PMCID: PMC7933113.
26. Li J, Galbo PM Jr, Gong W, Storey AJ, Tsai YH, Yu X, Ahn JH, Guo Y, Mackintosh SG, Edmondson RD, Byrum SD, Farrar JE, He S, Cai L, Jin J, **Tackett AJ**, Zheng D, Wang GG. ZMYND11-MBTD1 induces leukemogenesis through hijacking NuA4/TIP60 acetyltransferase complex and a PWWP-mediated chromatin association mechanism. *Nat Commun.* 2021 Feb 16;12(1):1045. doi: 10.1038/s41467-021-21357-3. PMID: 33594072; PMCID: PMC7886901.
27. Ramirez AM, Beenken KE, Byrum SD, **Tackett AJ**, Shaw LN, Gimza BD, Smeltzer MS. SarA plays a predominant role in controlling the production of extracellular proteases in the diverse clinical isolates of *Staphylococcus aureus* LAC and UAMS-1. *Virulence.* 2020 Dec;11(1):1738-1762. doi: 10.1080/21505594.2020.1855923. PMID: 33258416; PMCID: PMC7738309.
28. Koss B, Shields BD, Taylor EM, Storey AJ, Byrum SD, Gies AJ, Washam CL, Choudhury SR, Hyun Ahn J, Uryu H, Williams JB, Krager KJ, Chiang TC, Mackintosh SG, Edmondson RD, Aykin-Burns N, Gajewski TF, Wang GG, **Tackett AJ**. Epigenetic Control of *Cdkn2a.Arf* Protects Tumor-Infiltrating Lymphocytes from Metabolic Exhaustion. *Cancer Res.* 2020 Nov 1;80(21):4707-4719. doi: 10.1158/0008-5472.CAN-20-0524. Epub 2020 Oct 1. PMID: 33004350; PMCID: PMC7642172.
29. Mao XW, Nishiyama NC, Byrum SD, Stanbouly S, Jones T, Holley J, Sridharan V, Boerma M, **Tackett AJ**, Willey JS, Pecaut MJ, Delp MD. Spaceflight induces oxidative damage to blood-brain barrier integrity in a mouse model. *FASEB J.* 2020 Nov;34(11):15516-15530. doi: 10.1096/fj.202001754R. Epub 2020 Sep 26. PMID: 32981077; PMCID: PMC8191453.
30. Karaduta O, Glazko G, Dvanajscak Z, Arthur J, Mackintosh S, Orr L, Rahmatallah Y, Yeruva L, **Tackett A**, Zybailov B. Resistant starch slows the progression of CKD in the 5/6 nephrectomy mouse model. *Physiol Rep.* 2020 Oct;8(19):e14610. doi: 10.14814/phy2.14610. PMID: 33038060; PMCID: PMC7547583.
31. Taylor EM, Byrum SD, Edmondson JL, Wardell CP, Griffin BG, Shalin SC, Gokden M, Makhoul I, **Tackett AJ**, Rodriguez A. Proteogenomic analysis of melanoma brain metastases from distinct anatomical sites identifies pathways of metastatic progression. *Acta Neuropathol Commun.* 2020 Sep 5;8(1):157. doi: 10.1186/s40478-020-01029-x. PMID: 32891176; PMCID: PMC7487560.
32. Storey AJ, Naceanceno KS, Lan RS, Washam CL, Orr LM, Mackintosh SG, **Tackett AJ**, Edmondson RD, Wang Z, Li HY, Frett B, Kendrick S, Byrum SD. ProteoViz: a tool for the analysis and interactive visualization of phosphoproteomics data. *Mol Omics.* 2020 Aug 1;16(4):316-326. doi: 10.1039/c9mo00149b. Epub 2020 Apr 29. PMID: 32347222; PMCID: PMC7423749.
33. Waldrip ZJ, Jenjaroenpun P, DeYoung O, Nookaew I, Taverna SD, Raney KD, **Tackett AJ**. Genome-wide Cas9 binding specificity in *Saccharomyces cerevisiae*. *PeerJ.* 2020 Jul 29;8:e9442. doi: 10.7717/peerj.9442. PMID: 32821531; PMCID: PMC7395602.
34. Davis LE, Shalin SC, **Tackett AJ**. Utility of histone H3K27me3 and H4K20me as diagnostic indicators of melanoma. *Melanoma Res.* 2020 Apr;30(2):159-165. doi: 10.1097/CMR.0000000000000648. PMID: 32142497; PMCID: PMC7080300.

35. Storey AJ, Hardman RE, Byrum SD, Mackintosh SG, Edmondson RD, Wahls WP, **Tackett AJ**, Lewis JA. Accurate and Sensitive Quantitation of the Dynamic Heat Shock Proteome Using Tandem Mass Tags. *J Proteome Res.* 2020 Mar 6;19(3):1183-1195. doi: 10.1021/acs.jproteome.9b00704. Epub 2020 Feb 19. PMID: 32027144; PMCID: PMC7241437.
36. Trentzsch M, Nyamugenda E, Miles TK, Griffin H, Russell S, Koss B, Cooney KA, Phelan KD, **Tackett AJ**, Iyer S, Boysen G, Baldini G. Delivery of phosphatidylethanolamine blunts stress in hepatoma cells exposed to elevated palmitate by targeting the endoplasmic reticulum. *Cell Death Discov.* 2020 Feb 18;6:8. doi: 10.1038/s41420-020-0241-z. PMID: 32123584; PMCID: PMC7028721.
37. Ramirez AM, Byrum SD, Beenken KE, Washam C, Edmondson RD, Mackintosh SG, Spencer HJ, **Tackett AJ**, Smeltzer MS. Exploiting Correlations between Protein Abundance and the Functional Status of *saeRS* and *sarA* To Identify Virulence Factors of Potential Importance in the Pathogenesis of *Staphylococcus aureus* Osteomyelitis. *ACS Infect Dis.* 2020 Feb 14;6(2):237-249. doi: 10.1021/acsinfecdis.9b00291. Epub 2019 Nov 26. PMID: 31722523; PMCID: PMC7294808.
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147. Morris PD, **Tackett AJ**, Raney KD. Biotin-streptavidin-labeled oligonucleotides as probes of helicase mechanisms. *Methods*. 2001 Feb;23(2):149-59. doi: 10.1006/meth.2000.1116. PMID: 11181034.
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1. Methods and kits for assaying acetyltransferase activity. Inventors: Tackett et al. 11/811,886
2. Methods and kits for distinguishing between specific and non-specific protein associations. Inventors: Chait et al. 11/508,736
3. Methods for quantitative lysine methyltransferase and demethylase measurements. Inventors: Tackett et al., 12/960,486
4. Methods for Isolation and Analysis of a Specific Genomic Locus. Inventors: Tackett, AJ, Byrum, S, Taverna, S., US 9,279,816 B2
5. CRISPR-based Methods for Purification of Chromosome Sections. Inventors: Tackett, AJ & Raney KD, continuation-in-part patent to 62/014,428, disclosed and pending
6. Proteomic and Epigenetic Markers of Responsiveness to Melanoma Immune Checkpoint Inhibitors. Inventors: Bradley Shields, Stephanie Byrum, Sara Shalin, Fade Mahmoud, Alan Tackett. Provisional patent submitted
7. Methods for Predicting Responsiveness of a Cancer to an Immunotherapeutic Agent and Methods of Treating Cancer. Inventors: Stephanie Byrum, Fade Mahmoud, Sara Shalin, Bradley Shields, Alan Tackett, 2017-03 PCT
8. Leveraging Cancer-evolved Resistance Mechanisms to Enhance EZH2 Activity in Adoptive T-cells. Inventors: Megan Reed, Brian Koss, Daniel Fil, Alan Tackett.

STUDY SECTIONS

1. NIH/NCI Program Project (P01) Review, 02/14/2024, SRO Shree Ram Singh
2. NIH/NCI Mechanisms of Cancer Therapeutics-B [MCT-B], ad hoc reviewer, 10/13/2022, SRO Delores Arjona
3. NIH 2022 NIH Director's New Innovator Award Program (DP2), mail reviewer, 12/10/2021, SRO Imoh Okon
4. NIH Review of F09A Fellowships: Oncology study section, ad hoc reviewer, 11/04/2021, SRO Reigh-Yi Lin
5. NIH/NCI Mechanisms of Cancer Therapeutics-1 [MCT-1], ad hoc reviewer, 10/14/2021, SRO Lambratu Rahman Sesay
6. NIH/NCI Mechanisms of Cancer Therapeutics-1 [MCT-1], ad hoc reviewer, 06/10/2021, SRO Lambratu Rahman Sesay
7. NIH/NHLBI Program Project Application P01, ad hoc reviewer, 04/14/2021, SRO Stephanie Johnson Webb
8. NIH/NIGMS Renewal of Centers of Biomedical Research Excellence [COBRE] PAR-19-312, 03/04/2021, SRO Nina Sidorova
9. NIH/NCI Mechanisms of Cancer Therapeutics-1 [MCT-1], ad hoc reviewer, 02/18/2021, SRO Lambratu Rahman Sesay
10. NIH 2021 NIH Director's New Innovator Award Program (DP2), mail reviewer, 12/18/2020, SRO Eugene Carstea
11. NIH/NHLBI Program Project Application P01, ad hoc reviewer, 11/05/2020, SRO Stephanie Johnson Webb
12. NIH/NCI Mechanisms of Cancer Therapeutics-1 [MCT-1], permanent reviewer, 10/15/2020, SRO Lambratu Rahman Sesay
13. NIH/NCI Cancer Immunopathology and Immunotherapy (CII), ad hoc reviewer, 06/17/2020, SRO Denise Shaw
14. NIH/NCI Mechanisms of Cancer Therapeutics-1 [MCT-1], ad hoc reviewer, 02/06/2020, SRO Lambratu Rahman Sesay
15. NIH 2020 NIH Director's New Innovator Award Program (DP2) RFA-RM-19-006, mail reviewer, 12/01/2019, SRO Srikanth Ranganathan

16. NIH/NCI Cancer Immunopathology and Immunotherapy (CII), ad hoc reviewer, 10/21/2019, SRO Denise Shaw
17. NIH/NIGMS Collaborative Program Grant for Multidisciplinary Teams (RM1) PAR-17-340, ad hoc reviewer, 07/18/2019, SRO Thomas Beres
18. NIH/NCI Special Emphasis Panel PAR-18-020 and PAR-18-021, ad hoc reviewer, 07/09/2019, SRO Jun Fang
19. NIH/NCI Mechanisms of Cancer Therapeutics-1 [MCT-1], ad hoc reviewer, 06/04/2019, SRO Lambratu Rahman Sesay
20. NIH/NCI Innovative Molecular and Cellular Analysis Technologies for Basic and Clinical Cancer Research, ad hoc reviewer, 02/14/2019, SRO Jun Fang
21. NIH/NCI Mechanisms of Cancer Therapeutics-1 [MCT-1], ad hoc reviewer, 10/11/2018, SRO Lambratu Sesay
22. NIH/NIGMS Collaborative Program Grant for Multidisciplinary Teams (RM1) PAR-17-340, ad hoc reviewer, 06/19/2018, SRO Thomas Beres
23. NIH/NIGMS Renewal of Centers of Biomedical Research Excellence [COBRE] PAR-16-241 (Chair), 03/09/2018, SRO Nina Sidorova
24. NIH/NIDA Cutting-edge Basic Research Awards, ad hoc reviewer, 11/29/2017, SRO Shang-yi Tsai
25. NIH/NCI Cancer Immunopathology and Immunotherapy (CII) study section, ad hoc reviewer, 10/26/2017, SRO Denise Shaw
26. NIH/NCI Special Emphasis Panel on Emerging Technologies for Cancer Research, ad hoc reviewer, 05/17/2017, SRO Jeff DeClue
27. NIH/NIGMS Intramural NIGMS Postdoctoral Research Associate (PRAT) Program, ad hoc reviewer, 03/22/2017, SRO Robert Horowitz
28. NIH/NIGMS K99/R00 review panel, ad hoc reviewer, 03/17/2017, SRO Tracy Koretsky
29. NIH/NIGMS Special Emphasis Panel on P41 Biomedical Technology Research Resources, ad hoc reviewer, 11/01/2016, SRO Manas Chattopadhyay
30. NIH/NCI Special Emphasis Panel on Emerging Technologies for Cancer Research, ad hoc reviewer, 10/27/2016, SRO Reed Graves
31. NIH/NIDA Systems Biology Approaches in HIV/AIDS and Substance Use (R01), ad hoc reviewer, 07/01/2016, SRO Gerald McLaughlin
32. NIH/NCI Proteome Characterization Centers for Clinical Proteomic Tumor Analysis Consortium, ad hoc reviewer, 06/23/2016, SRO Jeff DeClue
33. NIH/NIGMS Support of Competitive Research (SCORE) Program, ad hoc reviewer, 06/06/2016, SRO Robert Horowitz
34. NIH/NCI Special Emphasis Panel on Advanced Development and Validation of Emerging Molecular Analysis Technologies for Cancer Research CA-15-003, ad hoc reviewer, 03/22/2016, SRO Kenneth L. Bielat
35. NIH/NIDA Phase II Genetics Avenir Review, ad hoc reviewer, 03/10/2016, SRO Hiromi Ono
36. NIH Review of K99 Applications, ad hoc reviewer, 11/17/2015, SRO Lee Slice
37. NIH Review of U01 Applications for RFA-ES-15-001 (Chair), 11/09/2015, SRO Leroy Worth
38. NIH/NIGMS Phase III COBRE, ad hoc reviewer, 10/21/2015, SRO Nina Y. Sidorova
39. NIH/NCI Special Emphasis Panel on Emerging Technologies for Cancer Research CA-10-004, ad hoc reviewer, 08/04/2015, SRO Jeffery DeClue
40. NIH Review of K99 Applications, ad hoc reviewer, 07/14/2015, SRO Lee Slice
41. NIH Review of U01 applications RFA-RM-14-008, ad hoc reviewer, 07/06/2015, SRO David Balasundaram
42. NIH Review of K99 Applications, ad hoc reviewer, 03/11/2015, SRO Lee Slice

43. NIH Review of K99 Applications, ad hoc reviewer, 10/28/2014, SRO Lee Slice
44. NIH Review of K99 Applications, ad hoc reviewer, 07/22/2014, SRO Robert Horowitz
45. NIH/NCI Special Emphasis Panel on Emerging Technologies for Cancer Research CA-10-004, ad hoc reviewer, 07/16/2014, SRO Jeffery DeClue
46. NIH/NIGMS Phase I COBRE, ad hoc reviewer, 07/02/2014, SRO Shinako Takada
47. NIH Program Project: Center for Computational Mass Spectrometry, ad hoc reviewer, 06/27/2014, SRO Raymond Jacobson
48. NIH/NIGMS Phase II COBRE, ad hoc reviewer, 04/11/2014, SRO Lisa Dunbar
49. NIH/NCI Special Emphasis Panel on Emerging Technologies for Cancer Research CA-10-004, ad hoc reviewer, 02/14/2014, SRO Jeffery DeClue
50. NIH/NCI Special Emphasis Panel on Emerging Technologies for Cancer Research CA-10-004, ad hoc reviewer, 11/20/2013, SRO Jeffery DeClue
51. NIH/NIGMS Phase III COBRE (Co-Chair), ad hoc reviewer, 11/06/2013, SRO Lisa Newman
52. NIH/NIDDK special emphasis panel (Chair), 2013/05 ZDK1 GRB-R (M4), ad hoc reviewer, 04/10/2013, SRO Carol Robinson
53. NIH/NIGMS Phase II COBRE, ad hoc reviewer, 03/13/2013, SRO Robert Horowitz
54. NIH/NIGMS Phase III COBRE, ad hoc reviewer, 10/24/2012, SRO Lisa Newman
55. NIH S10 Shared Instrumentation grant PAR-09-028, ad hoc reviewer, 09/06/2012, SRO David Jollie
56. NIH/Common Fund, NIH Director's Transformative Research Awards (R01) RFA-RM-11-006, ad hoc reviewer, 03/21/2012, SRO David Jollie
57. NIH/NCI Special Emphasis Panel on Emerging Technologies for Cancer Research CA-10-003/004/013, ad hoc reviewer, 03/29/2011, SRO Slava Soldatenkov
58. NIH/NIMH Epigenomic Modifications in Neurodevelopment RFA-MH-11-030, ad hoc reviewer, 03/01/2011, SRO David Miller
59. NIH/NCI, ad hoc reviewer, Clinical Proteomic Technologies for Cancer Initiative (CPTC): Proteome Characterization Centers (PCCs) (U24 mechanism, RFA-CA-10-016), 12/13/2010, SRO Adriana Stoica
60. NIH/NIDA Exploring Epigenomic Processes and Non-coding RNAs in HIV/AIDS, DA-10-010 and DA-10-011, ad hoc reviewer, 03/04/2010, SRO Scott Chen
61. NIH/NCI Innovative Molecular Analysis Technologies (IMAT) program CA-09-004/005/006/007, ad hoc reviewer, 02/24/2010, SRO Jeffrey DeClue
62. NIH S10 Shared Instrumentation grant PAR-09-028, ZRG1 BCMB-D(30), ad hoc reviewer, 11/10/2009, SRO David Jollie

MENTORING

Graduate Students

Current Trainees

1. Jacob Edmondson, 2021 – present, M.D./Ph.D. candidate
Target graduation: 2024
2. Sanjay Adhikary, 2024 – present, Ph.D. candidate
Target graduation: 2028

Past Trainees

1. Lauren "Clai" Morehead, Ph.D., 2019 – 2023
Research: "Dietary restriction increases susceptibility of melanoma to immune attack"
Current position: Completing medical school (M3) at UAMS

2. Brian Koss, Ph.D., 2017 – 2020
Research: "Epigenetic control of Cdkn2a.Arfl protects tumor-infiltrating lymphocytes from exhaustion",
Funded by NIH Fellowship (F31CA232464)
Current position: Assistant Professor, UAMS Department of Biochemistry & Molecular Biology,
recipient of NIH DP5 Early Independence Award (DP5OD031863)
3. Erin Taylor, Ph.D., 2016 – 2020
Research: "Immune modulation and response to checkpoint inhibition in metastatic melanoma"
Current position: Industry
4. Bradley Shields, M.D./Ph.D., 2016 – 2018
Research: "E-cadherin enhances immune control of metastatic melanoma"
Current position: Resident Fellow in Dermatology, Pittsburgh Medical Center
5. Lauren Davis, Ph.D., 2014 – 2019
Research: "Histone posttranslational modifications as diagnostic markers for malignant melanoma"
Current position: Medical Writer, Roche Tissues Diagnostics
6. Kirk West, Ph.D., 2014 – 2018
Research: "Arsenic regulation of chromatin dynamics"
Current position: Postdoctoral Fellow, UAMS Winthrop P. Rockefeller Cancer Institute
7. Deepanwita Sengupta, Ph.D., 2012 – 2017
Research: "Investigating EZH2 histone methyltransferase activity in metastatic melanoma"
Current position: Senior Scientist, Pfizer
8. Zachary Waldrip, Ph.D., 2011 – 2017
Research: "Targeted and unbiased approaches to study chromatin regulation"
Current position: Postdoctoral Fellow, UAMS Department of Surgery
9. Matthew Reynolds, M.S., 2010 – 2012
Research: "Epigenetic regulation of melanoma progression by enhancer of Zeste Homolog-2"
Current position: Physician's Assistant
10. Jeffrey Givens, M.S., 2010 – 2013 (non-thesis option)
Current position: Pharmacist, UAMS
11. Nathan Avaritt, Ph.D., 2010 – 2014
Research: "Investigating epigenetic and proteomic alterations in malignant melanoma"
Current position: Assistant Professor, UAMS Department of Biochemistry & Molecular Biology
12. Sherri Smart, M.D./Ph.D., 2007 – 2010
Research: "Analysis of a histone acetyltransferase"
Current position: Physician – Pediatric Hematology/Oncology, Children's Healthcare of Atlanta

Postdoctoral Fellows

Current Trainees

1. Katherine "Katie" Bronson, Ph.D., 2023 - present
2. Megan Reed, Ph.D., 2021 – present

Past Trainees

1. Bradley Shields, M.D./Ph.D., 2019 – 2020
Current position: Resident Fellow in Dermatology, Pittsburgh Medical Center
2. Samrat Roy Choudhury, Ph.D., 2019 – 2020
Current position: Assistant Professor, UAMS Department of Pediatrics
3. Marie Burdine, Ph.D., 2010 – 2016

Current position: Assistant Professor, UAMS Department of Surgery

- Stephanie Byrum, Ph.D., 2009 – 2013
Funded by NIH Fellowship (F32GM093614)
Current position: Associate Professor, UAMS Department of Biochemistry & Molecular Biology
- Angeline Gradolatto, Ph.D., 2006 – 2009
Current position: Researcher, University of Bourgogne
- Lauren Blair, Ph.D., 2008 – 2009
Current position: Medical Science Liaison, AstraZeneca

Junior Faculty

Current Trainees

- Joseph Alge, M.D./Ph.D., Department of Pediatrics, Pediatric Nephrology Division, 2023 – present
- Praveen Juvvadi, Ph.D., Department of Pediatrics, Infectious Disease Division, 2022 – present
- Neha Dole, Ph.D., Department of Physiology & Cell Biology, 2022 – present
- Sayem Miah, Ph.D., Department of Biochemistry & Molecular Biology, 2022 – present, KL2 Awardee
- Joonas Jamsen, Ph.D., Department of Biochemistry & Molecular Biology, 2022 – present
- Mohammad Rahman, Ph.D., Department of Biochemistry & Molecular Biology, 2022 – present
- Elijah Bolin, M.D., Department of Pediatrics, Pediatric Cardiology Division, 2022 – present
- Alicja Urbaniak, Ph.D., Department of Biochemistry & Molecular Biology, 2021 – present, KL2 Awardee
- Michael Bauer, Ph.D., Department of Biomedical Informatics, 2021 – present
- Analiz Rodriguez, M.D./Ph.D., Department of Neurosurgery, 2021 – present
- Adam Wolfe, M.D./Ph.D., Department of Radiation Oncology, 2021 – present, KL2 Awardee
- Jesus Delgado-Calle, Ph.D., Department of Physiology and Cell Biology, 2021 – present
- Graham Strub, M.D./Ph.D., Department of Pediatrics, Otolaryngology Division, 2021 – present
- Umesh Wankade, Ph.D., Department of Pediatrics, Developmental Nutrition Division, 2020 – present
- Jenny Rumpel, M.D., Department of Pediatrics, Neonatology Division, 2020 – present
- Isabelle Racine Miousse, Ph.D., Department of Biochemistry & Molecular Biology, 2019 – present, KL2 Awardee
- Katie Ryan, Ph.D., Department of Biochemistry & Molecular Biology, 2019 – present
- Kimberly Stephens, Ph.D., Department of Pediatrics, 2019 – present, KL2 Awardee

Past Trainees

- Justin Wai Chung Leung, Ph.D., Department of Radiation Oncology, 2019
- Samantha Kendrick, Ph.D., Department of Biochemistry & Molecular Biology, 2018 – 2022
- Marie Burdine, Ph.D., Department of Surgery, 2017 – 2020
- Jason Farrar, M.D., Department of Pediatrics, 2017 – 2019
- Xiawei Ou, Ph.D., Department of Pediatrics, Radiology Division, 2017 – 2019
- Venkat Laxmi Yeruva, Ph.D., Department of Pediatrics, Developmental Nutrition Division, 2017 - 2020
- Boris Zybaylov, Ph.D., Department of Biochemistry & Molecular Biology, 2017 – 2020
- Galina Glazko, Ph.D., Department of Biomedical Informatics, 2016 – 2018
- Yasir Rahmatallah, Ph.D., Department of Biomedical Informatics, 2016 – 2018
- Karen Abbott, Ph.D., Department of Biochemistry & Molecular Biology, 2014 – 2018
- Andrew Schurko, Ph.D., Hendrix College, Department of Chemistry, 2013 – 2015

SCHOLARLY SERVICE

- External Reviewer, Nevada INBRE, (2023)

2. External Reviewer, Vermont INBRE, (2022)
3. External Reviewer, South Carolina INBRE, (2022)
4. Member – External Advisory Committee, Oklahoma INBRE, (2022 – present)
5. Member – External Advisory Committee, COBRE Center for PreClinical Cancer Research, (2021 – present)
6. External Reviewer, Maine INBRE, (2021, 2022)
7. External Reviewer, Delaware INBRE, (2021)
8. External Reviewer, University of Nebraska Medical Mass Spectrometry Core, (2020)
9. External Reviewer, COBRE Nevada Institute of Personalized Medicine, (2019 – present)

UAMS/ACRI INSTITUTIONAL SERVICE

1. UAMS Chair of Medicine Search Committee (2024)
2. UAMS Dean of College of Medicine Search Committee (2023)
3. UAMS Campus Space Committee (2023 – present)
4. UAMS Graduate School Dean Search Committee (2023)
5. UAMS Promotion & Tenure Guidelines Revision Committee (2022 – present)
6. Arkansas Breast Cancer Pilot Program Grant Reviewer (2022 – present)
7. Winthrop P. Rockefeller Cancer Institute Rural Research Award Program Grant Reviewer (2022 – present)
8. Workforce Development Executive Committee (2022 – present)
9. Director of Research Regulatory Affairs Search Committee (2022)
10. College of Medicine Promotion and Tenure Committee (2021 – 2025)
11. Research Misconduct Investigation Committee (2021 – present)
12. Translational Research Institute (ULTR003107) Leadership Council (2021– present)
13. UAMS Promotion & Tenure Committee (2021 – 2023)
14. Department of Pediatrics Search Committee (2021)
15. UAMS – UAF Research Collaborative Committee (2020 – present)
16. Tissue Use Committee (2020 – present)
17. Department of Biochemistry Faculty Search Committee (2020 – 2021)
18. Search Committee for Vice Chancellor for Human Resources (2019 – 2020)
19. Winthrop P. Rockefeller Cancer Institute Retreat Planning Committee (2019 – present)
20. Winthrop P. Rockefeller Cancer Institute Research Space Committee (2019 – 2020)
21. UAMS 2029 Strategies for Success Committee (2018 – present)
22. ACRI Child Health Collaborative: Research Committee (2018 – present)
23. Search Committee for Vice Chancellor for Research (2018 – 2019)
24. Winthrop P. Rockefeller Cancer Institute Cabinet (2018 – present)
25. Search Committee for Winthrop P. Rockefeller Cancer Institute Director (2018 – 2019)
26. iLab Executive Oversight Committee (2017 – 2019)
27. Executive Oversight Committee for Research IT (2017 – present)
28. UAMS Dean’s Distinguished Lecture, Faculty Scholar and Alumnus Selection Committee (2016 – 2019)
29. UAMS College of Medicine Research Council (2015 – present)
30. Translational Research Institute (ULTR003107) Pilot Grant reviewer (2015)
31. Winthrop P. Rockefeller Cancer Institute Internal Advisory Board (2015 – present)
32. COM Clinical Scientist Program Steering Committee (2015 – 2018)
33. Bhuvan Endowment Committee (2014 – present)

34. BINF Admissions Committee (2013 – 2017)
35. Joint UALR/UAMS Bioinformatics Graduate Program (BINF) steering committee, (2013 – 2017)
36. Scientific Misconduct Inquiry Committee (2012)
37. UAMS Personalized Medicine Taskforce (2012)
38. Department of Biochemistry & Molecular Biology Chair of Student Recruitment (2011 – 2012)
39. Director of the Alan D. Elbein Award for Research Excellence (2011)
40. Department of Biochemistry & Molecular Faculty Search Committee (2010)
41. Director of Graduate Education Committee, Department of Biochemistry & Molecular Biology (2009 – 2010)
42. Director of Faculty Seminar Series, Department of Biochemistry & Molecular Biology (2009 – 2010)
43. Interdisciplinary Biomedical Sciences Graduate Program, PhD Admission Committee (2009, 2011)
44. INBRE External Advisory & Steering Committee (2007 – 2009)
45. College of Medicine Admissions Committee, (2007 – 2008)

TEACHING EXPERIENCE

UAMS Graduate School

1. BIOC503V, Biochemistry Seminar, 2009
2. BIOC504V, Biochemical Methods, 2009 – 2016
Course Director, 2009 – 2016
3. BIOC506V, Research in Biochemistry, 2007 – 2017
Course Director, 2013 – 2017
4. BIOC5203, Biological Chemistry II, 2009 – 2011
5. BIOC6021, Biochemistry Research Proposals, 2008 – 2016
Course Director, 2013 – 2016
6. BIOC604V, Topics in Proteomics, 2007 – 2009
Course Director, 2009
7. BIOC700V, Doctoral Dissertation, 2008 – 2016
Course Director, 2013 – 2016
8. INTX5113/5123, Molecular and Translational Toxicology, 2007 – 2011
9. Lecturer, UAMS Initiative for Maximizing Student Diversity (IMAT) Program, Summer Transition Series, 2009 – 2011

UAMS College of Medicine

1. Medical Biochemistry, 2008 – 2011
2. Medical Cell Biology, 2010 – 2011

AWARDS, HONORS AND INVITED POSITIONS

1. National Association of IDeA Principal Investigators, Vice President and President Elect, 2023 – present
2. National Association of IDeA Principal Investigators Executive Committee Member, Southeast Region, 2023
3. External Advisory Committee Member, LSU Center for Preclinical Cancer Research, 2021 – present
4. Research Fellow, Arkansas Research Alliance, 2021 – present
5. External Advisory Committee Member, Oklahoma INBRE (IDeA Network of Biomedical Research Excellence), 2021 – present

6. Invited Chair, Proteomics and Mass Spectrometry Section, Cancer Chemistry Subcommittee, American Association for Cancer Research, 2021 Meeting
7. Investigator of the Year, Arkansas Biosciences Institute, 2018
8. Inaugural Recipient, Scharlau Family Endowed Chair for Cancer Research, 2016
9. Chair of Logistics Committee, Southeast Regional IDeA Meeting, 2013
10. Recipient, UAMS Founders Society Research Award, 2011
11. Co-Chair, Southwest Regional Yeast Meeting, 2010
12. Invited Chair, Proteomics Symposium, American Chemical Society Southwest Regional Meeting, 2008