MINGJI DAI, Ph.D.

Department of Chemistry
Emory University
1515 Dickey Drive
Atlanta, GA 30322

PHONE: (404) 727-4299
TWITTER: @MINGJIDAI
E-MAIL: mingji.dai@emory.edu
WEBSITE: https://dai.emorychem.science

PROFESSIONAL EXPERIENCE

2022-present: **Asa Griggs Candler Professor of Chemistry**, Emory University

2021-2022: **University Faculty Scholar and Showalter Faculty Scholar**, Purdue University
2020-2022: **Professor**, Department of Chemistry and Center for Cancer Research, Purdue University
2018-2020: **Associate Professor**, Department of Chemistry and Center for Cancer Research, Purdue University
2012-2018: **Assistant Professor**, Department of Chemistry and Center for Cancer Research, Purdue University

2019.9-2019.11: **Visiting Professor**, Chemical Biology Department and Chemical Genomics Centre, Max Planck Institute of Molecular Physiology, Dortmund, Germany

2020-2022: **Organic Division Head**, Department of Chemistry, Purdue University
2020-2022: **Equity Advisor**, Department of Chemistry, Purdue University
2019-2022: **Associate Director**, Purdue Drug Discovery Training Program (NIH T32), Purdue University
2020-2022: **Program Co-Leader**, Targets, Structures, and Drugs, Center for Cancer Research, Purdue University

2022-present: Member of the Biological Discovery through Chemical Innovation (BDCI), Emory University
2022-present: Member of Beyond CCHF: The Catalysis Innovation Consortium

2012-2022: Member of the Center for Cancer Research, Purdue University
2013-2022: Member of the Institute for Drug Discovery, Purdue University
2013-2022: Member of the Purdue University Interdisciplinary Life Science Program (PULSe)
2016-2022: Member of the Purdue Institute of Inflammation, Immunology, and Infectious Diseases (PI^{4}D)

EDUCATION AND TRAINING

2009-2012: **Postdoctoral Fellow**, The Broad Institute and Harvard University (with Prof. Stuart Schreiber)
2004-2009: **Ph.D. Student**, Columbia University (with Prof. Samuel J. Danishefsky)
2002-2004: **Research Assistant**, Peking University (with Profs. Jiahua Chen and Zhen Yang)
1998-2002: **B.S.** Peking University (with Profs. Jiahua Chen and Zhen Yang)

TEACHING EXPERIENCE

Purdue University:
CHM 69600 – Advanced Synthesis, Fall of 2021 (4.3/5.0, average student rate).
CHM 26605 – Sophomore Organic Chemistry II, Spring of 2021 (4.3/5.0, average student rate).
CHM 46200 – Intermediate Organic Chemistry, Spring of 2013-2018 (4.9/5.0, average student rate).
CHM 65200 – Synthetic Organic Chemistry, Spring of 2019-2021 (4.3/5.0, average student rate).
CHM 65100 – Advanced Organic Chemistry, Fall of 2013-2017 (4.1/5.0, average student rate).
Graduate Teaching Assistant: 2004-2008, Columbia University

AWARDS AND HONORS

2022: College of Science Research Award, Purdue University
2021: Showalter Faculty Scholar, Purdue University (2021-2026)
2021: Plenary lecturer of the 2021 National Organic Symposium (NOS), La Jolla, California
2021: University Faculty Scholar, Purdue University (2021-2026)
2020: The Arthur Kelly Undergraduate Teaching Award, Purdue University
2019: The Kharasch Mini Symposium Lecturer, University of Chicago
2018: The Amgen Young Investigators' Award
2018: NIH Maximizing Investigators' Research Award (MIRA R35)
2017: The 2017 Chinese-American Chemistry & Chemical Biology Professors Association (CAPA) Distinguished Junior Faculty Award.
2017: The 3rd biannual Meyers Symposium for Organic Chemistry Lecturer, Southern Illinois University
2017: The *ChemComm* Emerging Investigator
2016: Eli Lilly Grantee Award

2016: Young Investigator of the European Chemical Society Organic Division Young Investigator Workshop, Spain
2016: Young Investigator of the 2016 ACS Organic Division Young Academic Investigators Symposium, Philadelphia
2016: NSF CAREER Award
2015: Award speaker at the JOC/OL Lectureship Award Symposium, 250th ACS National Meeting, Boston
2015: The 2015 Organic Letters Outstanding Author of the Year Lectureship Award
2015: ACS PRF Doctoral New Investigator Award
2015: The Thieme Chemistry Journal Award
2015: The Xuetang Lecturer, Tsinghua University, Beijing, China
2013: Ralph W. and Grace M. Showalter Research Trust Award
2013: Ralph E. Powe Junior Faculty Enhancement Award, ORAU
2013: American Cancer Society Junior Investigator Award, Purdue Center for Cancer Research
2009: Dissertation (Ph. D. degree) awarded with distinction, Columbia University
2009: The 2009 Hammett Award for the most out-standing Ph.D. studies, Columbia University
2009: The 2009 Roche Award for Excellence in Organic Chemistry
2008: The Jack Miller Award for excellence in teaching by a graduate student, Columbia University
2007: The Guthikonda Fellowship in Organic Chemistry, Columbia University
2006: The Bristol-Myers Squibb Graduate Fellowship in Synthetic Organic Chemistry
2005: The Sylvia & Victor Fourman Fellowship, Columbia University
2000: The honor of successful participants in the Challenge Cup Contest, Peking University
1999: Outstanding Student, Peking University
1999: The Guangcai Scholarship, Peking University
1998: The Freshman Scholarship, 1998, Peking University
1998: The First Prize in the National Olympic Chemistry Contest Winter Camp, China
1998: Member of the Chinese National Training Camp for the International Chemistry Olympiad
1996 & 1997: The First Prize in the National Olympic Chemistry Contest, China

PUBLICATIONS

86. Xu, B.;† Liu, C.;† Dai, M.;* "Catalysis-Enabled 13-Step Total Synthesis of (-)-Peyssonnoside A" manuscript submitted to *J. Am. Chem. Soc.* (manuscript ID: ja-2022-09910m). (†contributed equally) cancer-related

85. Chen, Z.; Chen, F.; Lee, H. J.; Zhang, M.; Yin, X.; Dai, M.; Cheng, J.-X.* "LIPA-Driven Hydrolysis of Cholesteryl Arachidonate Promotes Cancer Metastasis via NF-κB" manuscript under review for *Advanced Science* (manuscript ID: advs.202201707) cancer-related

84. Dai, J.-J.; Yin, X.; Li, L.; Rivera, M. E.; Wang, Y.-C.;* Dai, M.* "Modular, Three-Different-Component, and Practical Diamination of Allenes" manuscript under review for *Nature Communications* (manuscript ID: NCOMMS-22-27521) cancer-related

83. Asberry, A. M.; Cai, X.; Deng, X.; Liu, S.; Santiago, U.; Sims, H. S.; Liang, W.; Xu, X.; Wan, J.; Jiang, W.; Camacho, C.; Dai, M.;* Hu, C.-D.* "Discovery and biological characterization of PRMT5:MEP50 protein:protein interaction inhibitors" manuscript under review for *J. Med. Chem.* (manuscript ID: jm-2022-01000r.R1) cancer-related

82. Clark, M. G.; Gonzalez, G.; Luo, Y.; Aldana-Mendoza, J.; Carlsen, M. S.; Dai, M.; Zhang, C.* "Real-time precision opto-control of chemical processes in live cells" *Nature Communications* **2022**, *13*, 4343. cancer-related

81. de Andrade Horn, P.; Sims, H. S.; Dai, M.* "Nickel-Catalyzed Tandem Ueno-Stork Cyclization: Stereoselective 1,2-Dicarbofunctionalization of Cyclic Alkenes" *J. Org. Chem.* **2022**, *87*, 8796-8801. cancer-related

80. Peery, R.; Cui, Q.; Kyei-Baffour, K.; Josephraj, S.; Huang, C.; Dong, Z.; Dai, M.;* Zhang, J.-T.* Liu, J.-Y.;* "A novel survivin dimerization inhibitor without a labile hydrazone linker induces spontaneous apoptosis and synergizes with docetaxel in prostate cancer cells" *Bioorg. Med. Chem*. **2022**, *65*, 116761. cancer-related

79. Sims, H. S.; de Andrade Horn, P.; Isshiki, R.; Lim, M.;§ Xu, Y.; Grubbs, R. H.; Dai, M.* "Catalysis-Enabled Concise Total Synthesis of the Tricyclic Prostaglandin D2 Metabolite Methyl Ester." *Angew. Chem. Int. Ed.* **2022**, *61*, e202115633. (§*undergraduate student*) cancer-related
Highlighted by X-MOL.

78. Jiang, B.; Dai, M.* "11-Step and Scalable Total Synthesis of Hamigeran M Enabled by Five C-H Functionalizations." *J. Am. Chem. Soc.* **2021**, *143*, 20084-20089. cancer-related
Highlighted by X-MOL.

Highlighted by ChemBeanGo.
Featured as a Synform story March 18, **2022**, *A56 in Synfacts*

77. Ma, D.;[†] Martin, B. S.;[†] Gallagher S. K.;[§] Saito, T.;[§] Dai, M.* "One-Carbon Insertion and Polarity Inversion Enabled a Pyrrole Strategy to the Total Syntheses of Pyridine-Containing *Lycopodium* Alkaloids: Complanadine A and Lycodine." *J. Am. Chem. Soc.* **2021**, *143*, 16383-16387. ([§]*undergraduate student*;[†]contributed equally) cancer-related
Highlighted by X-MOL.
Highlighted by ChemBeanGo.

76. Wang, Y.-C.;[†] Cui, C.;[†] Dai, M.* "Flow Chemistry-Enabled Divergent and Enantioselective Total Syntheses of Massarinolin A, Purpurolides B, D, E, 2,3-Deoxypurpurolide C, and Structural Revision of Massarinolin A." *Angew. Chem. Int. Ed.* **2021**, *60*, 24828-24832. ([†]contributed equally) cancer-related
Featured as an Inside Cover.
Selected as a Hot Paper by Angewandte Chemie.
Highlighted by WileyChem.
Highlighted by ChemBeanGo.

75. Luo, Y.; Li, L.; Dai, M.* "Complex Natural Products Total Syntheses Facilitated by Palladium-Catalyzed Carbonylative Cyclizations" Invited book chapter for *"The Chemical Transformations of C1 Compounds 2"*, 793-826, Wiley.

74. Pal, R.; Dai, M.; Seleem, M. N.* "High-throughput screening identifies a novel natural product-inspired molecule inhibiting Clostridioides difficile in vitro and in vivo". *Sci. Rep*. **2021**, *11*, 10913.

73. Negi, V.; Yang, J.; Speyer, G.; Pulgarin, A.; Handen, A.; Zhao, J.; Tai, Y. Y.; Tang, Y.; Culley, M. K.; Yu, Q.; Forsythe, P.; Gorelova, A.; Watson, A. M.; Aaraj, Y. A.; Satoh, T.; Sharifi-Sanjani, M.; Rajaratnam, A.; Sembrat, J.; Provencher, S.; Yin, X.; Vargas, S. O.; Rojas, M.; Bonnet, S.; Torrino, S.; Wagner, B. K.; Schreiber, S. L.; Dai, M.; Bertero, T.; Ghouleh, I. A.; Kim, S.; Chan, S. Y.* "Computational repurposing of therapeutic small molecules from cancer to pulmonary hypertension". *Science Advances*, **2021**, 7:eabh3794. cancer-related

72. Cui, C.;[†] Dwyer, B. G.;[†] Liu, C.; Abegg, D.; Cai, Z.; Hoch, D.; Yin, X.; Qiu, N.; Liu, J.; Adibekian, A.;* Dai, M.* "Total Synthesis and Target Identification of the Curcusone Diterpenes ". *J. Am. Chem. Soc.* **2021**, *143*, 4379-4386. ([†]contributed equally) cancer-related
Highlighted by X-MOL.
Reported by Purdue News on April 20, 2021.
Reported by ScienceDaily on April 20, 2021.
Featured in NSF Research News.
This work was also reported or featured in over 30 news/websites in several different languages.

71. Raffa, N.; Won, T. H.; Sukowaty, A.; Candor, K.; Cui, C.; Halder, S.; Dai, M.; Figueroa, J. A.; Schroeder, F. C.; Keller, N. P.* "Dual-purpose isocyanides produced by *Aspergillus fumigatus* contribute to cellular copper sufficiency and exhibit antimicrobial activity" *Proc. Natl. Acad. Sci. USA,* **2021***, 118*, e2015224118.

70. Liang, W.; Cai, X.; Dai, M.* "Cu-Catalyzed Hydroxycyclopropanol Ring-Opening Cyclization to Tetrahydrofurans and Tetrahydropyrans: Short Total Syntheses of Hyperiones" *Chem. Sci.* **2021**, *12*, 1311-1316. cancer-related
Highlighted by X-MOL.
Featured in Org. Chem. Highlights: C-O Ring Construction by Prof. Douglass F. Taber

69. Cai, X.; Liang, W.; Liu, M.;[§] Li, X.;[§] Dai, M.* "Catalytic Hydroxycyclopropanol Ring-Opening Carbonylative Lactonization to Fused Bicyclic Lactones" *J. Am. Chem. Soc.* **2020**, *142*, 13677-13682. ([§]*undergraduate student*) cancer-related
Highlighted by X-MOL.

68. Kyei-Baffour, K.; Davis, D. C.; Boskovic, Z.; Kato, N.;* Dai, M.* "Natural product-inspired aryl isonitriles as a new class of antimalarial compounds against drug resistant parasites" *Bioorg. Med. Chem*. **2020**, *28*, 115678-115681.

67. Yin, X.; Ma, K.; Dong, Y.;[§] Dai, M.* "Pyrrole Strategy to the γ-Lactam-Containing *Stemona* Alkaloids: (±)-Stemoamide, (±)-Tuberostemoamide, and (±)-Sessilifoliamide A" *Org. Lett*. **2020**, *22*, 5001-5004. ([§]*undergraduate student*) cancer-related

66. Peery, R.; Kyei-Baffour, K.; Dong, Z.; de Andrade Horn, P. Dai, M.;* Liu, J.;* Zhang, J.* "Synthesis and Identification of a Novel Lead Targeting Survivin Dimerization for Proteasome-Dependent Degradation" *J. Med. Chem*. **2020**, *63*, 7243-7251. cancer-related

65. Jiang, B.; Dai, M.* "Synthetic Studies towards the Hamigerans with a 6-7-5 Tricyclic Core" *Org. Lett*. **2020**, *22*, 4176-4179. cancer-related

64. Huang, L.; Li, X.; Zhang, W.; Ung, N.; Liu, N.; Yin, X.; Li, Y.; Mcewan, R. E.; Dilkes, B.; Dai, M.; Hicks, G. R.; Raikhel, N. V.; Staiger, C. J. Zhang, C.* "Endosidin20 Targets the Cellulose Synthase Catalytic Domain to Inhibitor Cellulose Biosynthesis" *Plant Cell*, **2020**, *32*, 2141-2157.

63. Oleson, A.; Zhu, T.; Dunn, I.; Bialas, D.; Bai, Y.; Zhang, W.; Dai, M.; Reichman, D.; Tempelaar, R.; Huang, L.; Spano, F.* "Perylene Diimide- Based Hj- and hJ-Aggregates: The Prospect of Exciton Band Shape Engineering in Organic Materials" *J. Phys. Chem. C* **2019**, *123*, 20567-20578.

62. Huang, L.; Li, X.; Li, Y.; Yin, X.; Li, Y.; Wu, B.; Mo, H.; Liao, C.; Mengiste, T.; Guo, W.; Dai, M.; Zhang, C.* "Endosidin2-14 targets the exocyst complex in plants and fungal pathogens to inhibit exocytosis" *Plant Physiology* **2019**,*180*, 1756-1770.

61. Mohammad, H.[†]; Kyei-Baffour, K.[†]; Abutaleb, N. S.; Dai, M.*; Seleem, M.* "An aryl isonitrile compound with an improved physicochemical profile that is effective in two mouse models of multidrug-resistant Staphylococcus aureus infection" *J. Glob. Antimicrob. Resist.* **2019**, *19*, 1-7.

60. Kyei-Baffour, K.;[†] Mohammad, H.;[†] Seleem, M.;* Dai, M.* "Second-generation aryl isonitrile compounds targeting multidrug resistant Staphylococcus aureus" *Bioorg. Med. Chem*. **2019**, *27*, 1845-1854. ([†]*equal contribution*)

59. Luo, Y.; Yin, X.; Dai, M.* "Total Synthesis of *trans*-Resorcylide *via* Macrocyclic Stille Carbonylation" *J. Antibiotics* **2019**, *72*, 482-485. (Invited contribution for a special issue dedicated to Professor Samuel J. Danishefsky) cancer-related

58. Cai, X.; Liang, W.; Dai, M.* "Total Syntheses via Cyclopropanols" *Tetrahedron* **2019**, *75*, 193-208. (Invited by Professor John Wood and Professor Jeremy May for the Special Issue: Recent Applications of Metal Catalysis in Natural Product Synthesis)

57. Ma, K.;[†] Martin, B. S.;[†] Yin, X. L.;[†] Dai, M.* "Natural Product Syntheses via Carbonylative Cyclizations" *Nat. Prod. Rep.* **2019**, *36*, 174-219. ([†]*equal contribution*)
Highlighted by X-MOL.

56. Davis, D. C.;[†] Hoch, D. G.;[†] Wu, L.; Abegg, D.; Martin, B. S.; Zhang, Z.-Y.;* Adibekian, A.;* Dai, M.* "Total Synthesis, Biological Evaluation, and Target Identification of Rare *Abies* Sesquiterpenoids" *J. Am. Chem. Soc.* **2018**, *140*, 17465-17473. ([†]*equal contribution*) cancer-related
Highlighted in: Synfacts **2019**, *15*, 120.
Highlighted in: Science Daily, January 17, 2019 and *Purdue News*, January 22, 2019.

55. Ma, K.;[†] Yin, X.;[†] Dai, M.* "Total Syntheses of Bisdehydroneostemoninine and Bisdehydro-stemoninine via Catalytic Carbonylative Spirolactonization" *Angew. Chem. Ind. Ed.* **2018**, *57*, 15209-15212. ([†]*equal contribution*) cancer-related
Highlighted in: Synfacts **2018**, *14*, 1218.
Highlighted by ChemBeanGo.

54. Cai, X.; Bai, Y.; Dai, M.* "Total Syntheses of Spinosyn A" *Synlett* **2018**, *29*, 2623-2632 (invited *Synlett Account* contribution).

53. Ye, Z.;[†] Cai, X.;[†] Li, J.[§]; Dai, M.* "Catalytic Cyclopropanol Ring Opening for Divergent Syntheses of γ-Butyrolactones and δ-Ketoesters Containing All-Carbon Quaternary Centers" *ACS Catalysis*, **2018**, *8*, 5907-5914. ([†]*equal contribution;* [§]*undergraduate student*) cancer-related
Highlighted by X-MOL.

52. Ye, Z.; Adhikari, S.; Xia, Y.*; Dai, M.* "Expedient Syntheses of *N*-Heterocycles via Intermolecular Amphoteric Diamination of Allenes" *Nature Communications*, **2018**, *9*, 721. cancer-related
Highlighted in: Synfacts **2018**, *9*, 721.
Highlighted by X-MOL.

51. Li, Y.; Yin, X. L.; Dai, M.* "Catalytic Macrolactonizations for Natural Product Synthesis" *Nat. Prod. Rep.* **2017**, *34*, 1185-1192.
Featured as front cover.

50. Li, Y.; Dai, M.* "Total Syntheses of the Reported Structures of Curcusone I and J via Tandem Gold Catalysis" *Angew. Chem. Int. Ed.* **2017**, *56*, 11624. cancer-related
Highlighted in: Synfacts **2017**, *13*, 1121.
Highlighted by X-MOL.

49. Yin, X.; Mohammad, H.; Eldesouky, H. E.; Abdelkhalek, A.; Seleem, M. N.;* Dai, M.* "Rapid Syntheses of Bicyclic Lactones via Palladium-Catalyzed Aminocarbonylative Lactonizations" *Chem. Commun.* **2017**, *53*, 7238-7241 (Invited contribution to the ChemComm Emerging Investigators Issue 2017). cancer-related
Highlighted by X-MOL.

48. Mohammad, H.[†]; Kyei-Baffour, K.[†]; Younis, W.; Davis, D. C.; Eldesouky, H.; Seleem, M. N.;* Dai, M.* "Investigation of Aryl Isonitrile Compounds with Potent, Broad-spectrum Antifungal Activity" *Bioorg. Med. Chem.* **2017**, *25*, 2926-2931. ([†]*Equal contribution;* Invited contribution in honor of Professor Xiaoguang Lei's Tetrahedron Young Investigator Award 2017).

47. Gettys, K. E.; Ye, Z.; Dai, M.* "Recent Advances in Piperazine Synthesis" *Synthesis*, **2017**, *49*, 2589-2604 (Invited review article by Professor Dieter Enders).

46. Bai, Y.; Dexter, D. C.; Dai, M.* "Natural Product Synthesis via Palladium-Catalyzed Carbonylation" *J. Org. Chem.*, **2017**, *82*, 2319-2328 (Invited JOCSynopsis contribution by Professor Dale Poulter).

45. Brust, T. F.; Alongkronrusmee, D.; Soto-Velasquez, M.; Baldwin, T. A.; Ye, Z.; Dai, M.; Dessauer, C. W.; van Rijn, R. M.; Watts, V. J.* "Identification of a selective small molecule inhibitor of type 1 adenylyl cyclase activity with analgesic properties" *Science Signaling*, **2017**, *10*, eaah5381.
Highlighted in Science News Story.

44. Davis, D. C.; Haskins, C. W.; Dai, M.* "Radical Cyclopropanol Ring Opening Initiated Tandem Cyclizations for Efficient Synthesis of Phenanthridines and Oxindoles" *Synlett*, **2017**, *28*, 913-918 (Invited contribution for the special issue dedicated to the EuCheMS Young Investigator Workshop 2016). cancer-related

43. Li, Y.; Wei, M.;[§] Dai, M.* "Gold Catalysis-Facilitated Rapid Synthesis of the Daphnane/Tigliane Tricyclic Core" *Tetrahedron*, **2017**, *73*, 4172-4177 (Invited contribution the "New Advances in Pericyclic Reactions" Symposium-in-Print guest-edited by Prof. Uttam Tambar; [§]*undergraduate student*). cancer-related

42. Dai, M.* "Harnessing Molecular Strain in Organic Synthesis and Related Fields" *Curr. Org. Chem.* **2016**, *20*, 1850-1850 (editorial).

41. Bai, Y.; Shen, X.;[§] Li, Y.; Dai, M.* "Total Synthesis of Spinosyn A via Carbonylative Macrolactonization" *J. Am. Chem. Soc.* **2016**, *138*, 10838-10841 ([§]*undergraduate student*).
Highlighted in: Synfacts **2016**, *12*, 1117.
Highlighted in the Today's Topic of the Agricultural Chemical Society of Japan: 2017, Vol. 55, No. 8, 523-525.

40. Davis, D. C.; Walker, K. L.; Hu, C.; Zare, R. N.; Waymouth, R. M.*; Dai, M.* "Catalytic Carbonylative Spirolactonization of Hydroxycyclopropanols" *J. Am. Chem. Soc.* **2016**, *138*, 10693-10699. cancer-related
Highlighted in Organic Chemistry Portal by Professor Douglass Taber (Apr. 17, 2016).

39. Lin, Z.; Tan, L.; Yang, Y.; Dai, M.; Tureček, F;* Ouyang, Z.;* Xia, Y.* "Gas-Phase Reactions of Cyclopropenylidene with Protonated Alkyl Amines", *Analyst* **2016**, 2412-2417.

38. Ye, Z.; Gettys, K. E.; Dai, M.* "Opportunities and Challenges for Direct C-H Functionalization of Piperazines" *Beilstein J. Org. Chem.* **2016**, *12*, 702-715. (Invited for the Thematic Series "C-H Functionalization/Activation in Organic Synthesis"; Guest Editor: Prof. Richmond Sarpong)

37. Ye, Z.; Gettys, K. E.; Shen, X.;[§] Dai, M.* "Copper-Catalyzed Cyclopropanol Ring-Opening C_{sp3}-C_{sp3} Cross-Coupling Reactions with (Fluoro)Alkyl Halides" *Org. Lett.* **2015**, *17*, 6074-6077. ([§]*undergraduate student*). cancer-related

36. Chou, D. H.; Vetere A.; Choudhary, A.; Scully, S. S.; Tang, A.; Gomez, R.; Schenone, M.; Lundh, M.; Vital, T.; Comer, E.; Faloon, P. W.; Dančík, V.; Ciarlo, C.; Paulk, J.; Dai, M.; Reddy, C.; Donato, N.; Jaffe, J.; Clemons, P. C.; Palmer, M.; Carr, S. J.; Schreiber, S. L.; Wagner, B. K. "Small-Molecule inhibition of JAK-STAT signaling through the deubiquitinase USP9X" *J. Am. Chem. Soc.* **2015**, *137*, 7929-7934. cancer-related

35. Davis, D. C[†]; Mohammad, H.[†]; Younis, W.; Creemer, C. N.;[§] Seleem, M. N.;* Dai, M.* "Discovery and Characterization of Aryl Isonitriles as A New Class of Compounds versus Methicillin- and Vancomycin-resistant *Staphylococcus aureus*" *Eur. J. Med. Chem*. **2015**, *101*, 384-390. ([†]*equal contribution;* [§]undergraduate student).

34. Ye, Z.; Dai, M.* "An Umpolung Strategy for the Synthesis of β-Aminoketones via Copper-Catalyzed Electrophilic Amination of Cyclopropanols" *Org. Lett.* **2015**, *17*, 2190-2193. cancer-related
Highlighted by X-MOL.

33. Li, Y.;[†] Ye, Z.;[†] Bellman, T. M.; Chi, T.;[§] Dai, M.* "Efficient Synthesis of β-CF_3/SCF_3 Substituted Carbonyls via Copper-Catalyzed Electrophilic Ring-Opening Cross-Coupling of Cyclopropanols" *Org. Lett.* **2015**, *17*, 2186-2189. ([†]*equal contribution;* [§]undergraduate student). cancer-related
Highlighted in: Synfacts **2015**, *11*, 677.
Highlighted by X-MOL.

32. Ye, Z.; Brust, T. F.; Watts, V. L.;* Dai, M.* "Palladium-Catalyzed Regio- and Stereoselective γ-Arylation of Tertiary Allylic Amines: Identification of Potent Adenylyl Cyclase Inhibitors" *Org. Lett.* **2015**, *17*, 892-895. cancer-related

31. Bai, Y.; Dai, M.* "Strategies and Methods for the Synthesis of Anti-Cancer Natural Product Neopeltolide and Its Analogs" *Curr. Org. Chem.* **2015**, *19*, 871-885.

30. Lee, H. J.;[†] Zhang, W.;[†§] Zhang, D.; Yang, Y.; Liu, B.; Barker, E.; Buhman, K. K.; Slipchenko, L. V.; Dai, M.*; Cheng, J.-X.* "Assessing cholesterol storage in live cells and C. *elegans* by SRS imaging of phenyl-diyne cholesterol" *Sci. Rep.* **2015**, *5*, 7930 ([†]*equal contribution;* [§]undergraduate student) cancer-related
The phenyl-diyne cholesterol probe developed in this paper has been requested by researchers from Finland, Spain, and United States to study cholesterol function.

29. Dai, M.* Bai, Y.; Dexter, D. C.; "Synthesis of tetrahydropyran- or tetrahydrofuran-containing macrolides by palladium-catalyzed alkoxycarbonylative macrolactonizations" *Synthesis*, **2014**, *46*, A120-A121 (*Synform* 2014/09). cancer-related

28. Yang, Y.;[†] Bai, Y;[†] Sun, S.;[§] Dai, M.* "Biosynthetically Inspired Divergent Approach to Monoterpene Indole Alkaloids: Total Synthesis of Mersicarpine, Leuconodines B and D, Leuconoxine, Melodinine E, Leuconolam, and Rhazinilam" *Org. Lett.* **2014**, *16*, 6216-6219 ([†]*equal contribution;* [§]undergraduate student) cancer-related
The 2015 Organic Letters Outstanding Author of the Year Lectureship Award winning paper.
Top 20 most read article in Organic Letters (Nov. 2014)
Highlighted in: Synfacts **2015**, *11*, 0353.

27. Zhang, W.;[†§] Haskins, C. W.;[†] Yang, Y.; Dai, M.* "Synthesis of Nitriles via Palladium-Catalyzed Water Shuffling From Amides to Acetonitrile" *Org. Biomol. Chem.* **2014**, *12*, 9109-9112. ([†]*equal contribution;* [§]undergraduate student) cancer-related

26. Yang, Y.; Dai, M.* "Total syntheses of lyconadins: finding efficiency and diversity" *Synlett*, **2014**, *25*, 2093-2098 (invited Synpacts contribution).

25. Bai, Y.; Dexter, D. C.; Dai, M.* "Synthesis of tetrahydropyran/tetrahydrofuran-containing macrolides by palladium-catalyzed alkoxycarbonylative macrolactonizations" *Angew. Chem. Int. Ed.*, **2014**, *53*, 6519-6522. cancer-related
Selected as VIP paper by Angewandte Chemie.
Featured as a Synform story **2014**, *A120 in Synfacts.*
Highlighted in Organic Chemistry Portal by Professor Douglass Taber (Oct. 27, 2014).

24. Yang, Y.; Haskins, C. W.; Zhang, W.;[§] Low, P. L.;[§] Dai, M.* "Divergent total syntheses of lyconadins A and C" *Angew. Chem. Int. Ed.*, **2014**, *53*, 3922-3925. ([§]undergraduate student) cancer-related
Highlighted in Organic Chemistry Portal by Professor Douglass Taber (Nov. 24, 2014).
Highlighted in Amphoteros by Professor Andrei Yudin (Mar. 7, 2014)

Before Independent Career:

23. Boskovic, Z. V.; Hussain, M. M.; Adams, D. J.; Dai, M.; Schreiber, S. L. "Synthesis of piperlogs and analysis of their effects on cells" *Tetrahedron*, **2013**, *69*, 7759-7767. cancer-related
Special issue to honor Professor Paul Wender on his receipt of the 2012 Tetrahedron Prize for Creativity in Organic Chemistry.

22. Hartwell, K. A.; Miller, P. G.; Mukherjee, S.; Kahn, A. R.; Stewart, A. L.; Logan, D. J.; Negri, J. M.; Duvet, M.; Järås, M.; Puram, R.; Dancik, V.; Al-Shahrour, F.; Kindler, T.; Tothova, Z.; Chattopadhyay, S.; Hasaka, T.; Narayan, R.; Dai. M.; Huang, C.; Shterental, S.; Chu, L. P.; Haydu J. K.; Shieh, J. H.; Steensma, D. P.; Munoz, B.; Bittker, J.; Shamji, A. F.; Clemons, P.; Tolliday, N. J.; Carpenter, A. E.; Gilliland, D. G.; Stern, A. M.; Moore, M. A. S.; Scadden, D. T.; Schreiber, S. L.; Ebert, B. L.; Golub, T. R. "Niche-based screening identifies small-molecule inhibitors of leukemia stem cells" *Nat. Chem. Bio.* **2013**, *9*, 840-848. cancer-related

21. Dai. M.;* Boskovic, Z. "Ruthenium complex of *N,N',N''*,-trimethyl-1,4,7 triazacyclononane and ruthenium complexes of cis-diaquabis (6,6'-dichloro-2,2'-bipyridine)", first update, *Handbook of Reagents for Organic Synthesis: Catalytic Oxidation Reagents* (Ed. Fuchs, P. L.), Wiley, **2013**, 561-565.

20. Adams, D. J.;† Dai, M.;† Pellegrino, G.; Wagner, B. K.; Stern, A. M.; Shamji, A. F.; Schreiber, S. L. "Synthesis, Cellular Evaluation, and Mechanism of Action of Piperlongumine Analogs" *Proc. Natl. Acad. Sci. USA,* **2012***, 109,* 15115-20. (†*equal contribution*) cancer-related

19. Peng, F.; Dai, M.; Angeles, A. R.; Danishefsky, S. J. "Permuting Diels-Alder and Robinson Annulation Stereopatterns" *Chem. Sci.* **2012**, *3*, 3076-80. cancer-related
The 4th most-Accessed Article: August, 2012.

18. Wang, Z.; Dai, M.; Park, P. K.; Danishefsky, S. J. "Synthetic studies toward (+)-cortistatin A" *Tetrahedron,* **2011**, *67*, 10249-60. cancer-related
Special issue dedicated to Professor Gilbert Stork's 90th birthday.

17. Luo, T.; Dai, M.; Zheng, S-L.; Schreiber, S. L. "Synthesis of α-Pyrones by Gold-Catalyzed Coupling Reactions" *Org. Lett.* **2011**, *13*, 2834-6. cancer-related

16. Hayden, A. E.; DeChancie, J.; George, A. H.; Dai, M.; Yu, M. L.; Danishefsky, S. J.; Houk, K. N "Origins of the Regioselectivities in the Diels−Alder Reactions of Vinylindenes with 1,4-Quinone Monoketal and Acrolein Dienophiles" *J. Org. Chem.* **2009**, *74*, 6770-6. cancer-related

15. Dai, M.; Danishefsky, S. J. "An oxidative dearomatization cyclization model for cortistatin A" *Heterocycles* **2009**, 77, 157. cancer-related
Special issue dedicated to Dr. Keiichiro Fukumoto's 75th birthday.

14. Dai, M.; Krauss, J. I.; Danishefsky, S. J. "Total synthesis of Spirotenuipesines A and B" *J. Org. Chem.* **2008**, *73*, 9576-83. cancer-related
Special issue in the memory of Professor A. I. Meyers.

13. Dai, M.; Wang, Z.; Danishefsky, S. J. "A novel α,β-unsaturated nitrone-aryne [3+2] cycloaddition and its application in the synthesis of the cortistatin core" *Tetrahedron Lett.* **2008**, *49,* 6613-6. cancer-related

12. Dai, M.; Danishefsky, S. J. "A concise synthesis of the cortistatin core" *Tetrahedron lett.* **2008**, *49,* 6610-2. cancer-related

11. Lei, X. G.; Dai, M.; Hua, Z. H.; Danishefsky, S. J. "Biomimetic total synthesis of tricycloillicinone and mechanistic studies toward the rearrangement of prenyl phenyl ethers" *Tetrahedron lett.* **2008**, *49*, 6383-5. cancer-related

10. Li. Z. T.; Gao, Y. X.; Tang, Y. F.; Dai, M.; Wang G. X.; Wang, Z. D.; Yang, Z. "Total synthesis of crisamicin A" *Org. Lett.* **2008**, *10*, 3017-20. cancer-related

9. Dai, M.; Danishefsky, S. J. "The total synthesis of spirotenuipesines A and B" *J. Am. Chem. Soc.* **2007**, *129*, 3498-9.
The 3rd most-Accessed Articles: January-March, 2007; the 6th most-Accessed Articles: 2007; Highlighted by JACS Virtual Issue "The Synthesis of Biologically Active Natural Products" *J. Am. Chem. Soc.* **2008**, *130*, 6654; Highlighted by *Synfacts*, **2007**, *08*, 0783. cancer-related

8. Dai, M.; Sarlah, D.; Yu, M. L.; Danishefsky, S. J.; Jones, G. J.; Houk, K. N. "Highly selective Diels-Alder reactions of directly connected enyne dienophiles" *J. Am. Chem. Soc.* **2007**, *129*, 645-57. cancer-related
Highlighted by *Organic Chemistry Portal* ID: J48-Y2007-0160.

7. Liu, Y. X.; Lu, K.; Dai, M.; Wang, K.; Wu, W. Q.; Chen, J. H.; Quan, J. M.; Yang, Z. "An efficient one-pot asymmetric synthesis of biaryl compounds *via* Diels-Alder/retro-Diels-Alder cascade reactions" *Org. Lett.* **2007**, *9*, 805-8. cancer-related

6. Tang, Y. F.; Zhang, Y. D.; Dai, M.; Luo, T. P.; Deng, L. J.; Chen, J. H.; Yang, Z. "A highly efficient synthesis of the FGH ring of micrandilactone A: Application of thioureas as ligands in the Co-catalyzed Pauson-Khand reaction and Pd-catalyzed carbonylative annulation" *Org. Lett.* **2005**, *7*, 885-8. cancer-related

5. Liang, B.; Dai, M.; Chen. J. H.; Yang, Z. "Copper-free Sonogashira coupling reaction with $PdCl_2$ in water under aerobic conditions" *J. Org. Chem.* **2005**, *70*, 391-3. cancer-related
The 10th most-Accessed Articles: January-March, 2005; the 12th most-Accessed Articles: 2005; Highlighted by *Organic Chemistry Portal* ID: J42-Y2005-090.

4. Xiong, Z.-C.; Wang, N.-D.; Dai, M.; Li, A.; Chen. J. H.; Yang, Z. "Synthesis of novel palladacycles and their application in the Heck and Suzuki reaction under aerobic conditions" *Org. Lett.* **2004**, *6*, 3337-40. cancer-related

3. Dai, M.; Liang, B.; Wang, C. H.; You, Z. J.; Xiang, J.; Dong, G. B.; Chen. J. H.; Yang, Z. "A novel thiourea ligand applied in Heck, Suzuki and Suzuki carbonylative reactions" *Adv. Synth. Catal.* **2004**, *346*, 1669. cancer-related

2. Dai, M.; Liang, B.; Wang, C. H.; Chen. J. H.; Yang, Z. "Synthesis of a novel C_2-symmetric thiourea and its application in the Pd-catalyzed cross-coupling reactions with arenediazonium salts under aerobic conditions" *Org. Lett.* **2004**, *6*, 221-4. cancer-related

1. Dai, M.; Wang, C. H.; Dong, G. B.; Xiang, J.; Luo, T. P.; Liang, B.; Chen. J. H.; Yang, Z. "Development of thiourea-based ligands for the palladium-catalyzed bis(methoxycarbonylation) of terminal olefins" *Eur. J. Org. Chem.* **2003**, 4346. cancer-related

PATENTS

15. "Catalysis-Enabled Concise Total Synthesis of the Tricyclic Prostaglandin D_2 Metabolite Methyl Ester" Dai, M.
US Provisional Application filed (US, 63/285,590).

14. "Survivin-Targeting Antitumor Agents and Uses Thereof" Dai, M.; Liu, J.-Y.; Zhang, J.-T.
US Provisional Application filed (US, 62/985,965; 17/195, 166).

13. "Novel Amination Method for Medicinally Important Compounds" Dai, M.
US Provisional Application filed (US, 63/284,843).

12. "Targeting BRAT1 with Curcusone Diterpenoids and Analogs for Cancer Treatment" Dai, M.; Adibekian, A.; Cai, Z.; Cui, C.; Dwyer, B. G.
PCT/US21/52148 Application filed.

11. "Antimicrobial Treatment" Dai, M.; Seleem, M.; Kyei-Baffour, K.
US Provisional Application filed (US, 62/514,985).

10. "Natural Product Derived Adenylyl Cyclase Inhibitors for Chronic Pain and Opioid Dependence" Watts, V. J.; Dai, M.; van Rijn, R. M.
US Provisional Application filed (US, 62/395,372).

9. "New Methods for Trifluoromethylation and Trifluoromethylthiolation" Dai, M.; Li, Y.; Ye, Z.
US Provisional Application filed (US, 62/146,965).

8. "Novel Sesquiterpenoid Analogs" Dai, M.; Davis, D. C.; Adibekian, A.; Hoch, D.; Zhang, Z.-Y.
PCT WO2020033286A1; February 13, 2020
United States Patent US 20210261565A1; August 26, 2021.

7. "New Methods for 1,4-Diazo N-Heterocycle Synthesis" Dai, M.; Ye, Z.
United States Patent US 10,800,745 B2; October 13, 2020.

6. "Aryl Isonitrile Compounds as A New Class of Potent, Broad-Spectrum Antifungal Compounds" Kyei-Baffour, K.; Seleem, M.; Dai, M.; Mohammad, H. T.
United States Patent US 10,364,224 B2 (Utility Patent); July 30, 2019.
United States Patent US 10,449,174 B2 (CIP Patent); October 22, 2019.

5. "Lactones" Dai, M. J.; Seleem, M.; Yin, X.
United State Patent US 10,087,190 B1 (Utility Patent); October 2, 2018.
United State Patent US 10,138,252 B1 (DIV Patent); November 27, 2018.

4. "Adenylyl Cyclase Inhibitors for Neuropathic and Inflammatory Pain" Dai, M.; Watts, V. J.; Ye, Z.

United States Patent US 10,100,001 B2 (Utility Patent); October 16, 2018.
United States Patent US 10,144,700 (CON Patent); December 4, 2018.

3. "Aryl Isonitriles as A New Class of Antimicrobial Compounds" Seleem, M.; Dai, M.; Davis, D. C.; Mohammad, H. T.
United States Patent US 10,364,224 B2 (Utility Patent); July 30, 2019
United States Patent US 10,449,174 (CIP-Patent); October 22, 2019
United States Patent US 11,091,437 (DIV-Patent); August 17, 2021
United States Patent US 11,098,014 (CON-Patent); August 24, 2021
United States Patent US 11,198,674 (CON-Patent); December 14, 2021

2. "Raman Tags" Cheng, J.-X.; Dai, M.
United States Patent US 9,688,717 B2 (Utility Patent); June 27, 2017.
United States Patent US 10,131,687 B2 (CON Patent); November 20, 2018.

1. "Compounds, Compositions, and Methods for Cancer Therapy" Adams, D. J.; Dai, M.; Schreiber, S. L.; Hussain, M. M.; Boskovic, Z. V.
United States Patent US 9,108,923 B2; August 18, 2015.

SEMINAR AND LECTURE PRESENTATIONS

142. Gilead, MedChem and Process Chemistry, Forster City, CA, Date TBD
141. Biogen, Small Molecule Chemistry Development Group, Cambridge, MA, October 6, 2022
140. The University of North Carolina at Chapel Hill, September 29, 2022
139. The 28th International Society of Heterocyclic Chemistry Congress, Santa Barbara, California, August 28 to September 2, 2022 (Invited Speaker)
138. Pharmaron Vitural Lecture, Pharmaron, August 25, 2022
137. Kumquat Biosciences Inc., June 29, 2022
136. East China Normal University in Shanghai and ACS Shanghai Chapter, June 17, 2022
135. The 2022 Heterocyclic Compounds Gordon Research Conference, Salve Regina University, Newport, RI, June 2022 (Invited Speaker)
134. The 2022 Green Chemistry & Engineering Conference, Hyatt Regency Reston, Virginia, June 6-8, 2022 (Invited Speaker)
133. Yale University, February 8, 2022 (postponed to Fall 2022 for an in-person visit)
132. PACIFICHEM-Recent Trends in Amination Chemistry, December 2021 (Virtual, Invited Speaker)
131. Old Dominion University, Norfolk, Virginia, November 19, 2021 (Virtual)
130. Memorial Sloan Kettering Cancer Center, October 26, 2021
129. Dartmouth College, September 30, 2021
128. UT Southwestern, Harold C. Simmons Comprehensive Cancer Center, September 24, 2021 (Virtual)
127. University of Toledo, Department of Medicine Research Grand Rounds, April 22, 2021 (Virtual)
126. The 2021 National Organic Symposium (NOS), La Jolla, California, 2021 (Plenary Speaker, happened in June 2022)
125. The IUPAC XXIII International Conference on Organic Synthesis (23-ICOS), Shanghai, China, October 18-23, 2020 (Invited Speaker, postponed)
124. The 16th International Symposium for Chinese Organic Chemists and the 13th International Symposium for Chinese Inorganic Chemists, Beijing, China, August 27-30, 2020 (Invited Speaker, postponed)
123. University of Texas – Dallas, February 7, 2020
122. University of Kansas, Department of Medicinal Chemistry, November 21, 2019
121. Max Planck Institute of Colloids and Interfaces, Potsdam, Germany, November 15, 2019
120. 2nd Lecture at Max Planck Institute of Molecular Physiology, Chemical Biology, Dortmund, Germany, Nov. 4, 2019
119. University of Konstanz, Konstanz, Germany, October 30, 2019
118. University of Tübingen, Tübingen, Germany, October 29, 2019
117. University of Stuttgart, Stuttgart, Germany, October 28, 2019
116. 1st Lecture at Max Planck Institute of Molecular Physiology, Chemical Biology, Dortmund, Germany, Oct. 8, 2019
115. Chemical Genomics Centre, Max Planck Institute of Molecular Physiology, Dortmund, Germany, October 1, 2019
114. The 61st Symposium on the Chemistry of Natural Products, Hiroshima, Japan, September 11-13, 2019 (Invited Speaker)
113. Kyoto University, Japan, September 10, 2019
112. Nagoya University, Japan, September 9, 2019
111. The 27th International Society of Heterocyclic Chemistry Congress, Kyoto, Japan, September 2019 (Oral Presentation)

110. RIKEN, Tokyo, Japan, August 30, 2019 (cancelled due to unexpected illness)
109. The Fall 2019 National ACS Meeting in San Diego, California (Invited speaker for the symposium on "Emerging Research in Molecular Synthesis", ACS Division of Inorganic Chemistry).
108. Markovnikov Congress on Organic Chemistry, Kazan, Russia, June 24-28, 2019 (Invited Speaker; Trip cancelled due to visa delay)
107. The 2019 ACS Central Region Meeting (CERM), June 4-8, 2019 (Invited Speaker for the symposium on "Central Nature of Diversity in Organic Chemistry")
106. Tsinghua University, Department of Chemistry, June 3, 2019
105. Southwest Jiaotong University, School of Pharmacy, May 29, 2019
104. Kunming Institute of Botany, Chinese Academy of Sciences, Kunming, China, May 24, 2019
103. Southwest University, School of Pharmacy, Chongqing, China, May 22, 2019
102. Chongqing University, School of Pharmacy, Chongqing, China, May 20, 2019
101. The 1st CAPA Award Symposium, March 30, 2019, Orlando, FL (Invited Award Speaker)
100. The Kharasch Mini Symposium at University of Chicago, February 4, 2019 (Invited Lecturer)
99. Waseda University, Japan, November 23, 2018
98. Keio University, Japan, November 22, 2018
97. University of Tokyo, Japan, November 19, 2018
96. The 8th PSKL Symposium on Chemical Biology & Drug Discovery, the Partner State Key Laboratory of Chirosciences (PSKL) of the Hong Kong Polytechnic University, November 15-16, 2018 (Invited Speaker)
95. WALLA Lecture, the Wabash Area Lifetime Learning Association, Inc., Lafayette, IN, November 6th, 2018
94. The 16th Amgen Young Investigators' Award Symposium, Cambridge, MA, October 18, 2018 (Award Speaker)
93. University of Vienna, Austria, October 3, 2018
92. University of Innsbruck, Austria, October 1, 2018
91. University of Basel, Switzerland, September 27, 2018
90. École Polytechnique Fédérale de Lausanne (EPFL), Switzerland, September 26, 2018
89. University of Fribourg, Switzerland, September 25, 2018
88. The 22nd International Conference on Organic Synthesis (22-ICOS), Florence, Italy, Sept. 16-21, 2018 (Oral Presentation; Trip cancelled due to visa delay).
87. The Inaugural BioHub Chemistry Symposium, Waltham, MA, August 17, 2018 (Invited Speaker)
86. Nankai University, Tianjin, China, May 24, 2018
85. Central China Normal University, Wuhan, China, May 22, 2018
84. The 2018 International Synthetic Biologicals Conference, Tongji Medical School, Wuhan, China, May 20-22, 2018 (Invited Speaker)
83. HitGen, Chengdu, China, May 18, 2018
82. Eli Lilly Grantee Symposium, Indianapolis, March 12, 2018 (Award Speaker)
81. FloHet Conference, Gainesville, Florida, March 4-7, 2018 (Invited Speaker)
80. University of Rhode Island, College of Pharmacy, Kingston, Rhode Island, February 2, 2018
79. University of Delaware, Newark, November 11, 2017
78. Indiana University, Bloomington, November 6, 2017
77. University of Central Florida, Orlando, October 13, 2017
76. University of Florida, Gainesville, October 12, 2017
75. Kansas State University, Manhattan, September 28, 2017
74. University of Illinois Chicago, Chicago, September 19, 2017
73. University of New Mexico, Albuquerque, September 8, 2017
72. Heterocyclic Compounds - Gordon Research Conference, Salve Regina University, Newport, RI, June 2017 (Invited Speaker)
71. Shandong University, Jinan, China, May 31, 2017
70. Ocean University of China, Qingdao, China, May 24, 2017
69. Baylor University, Dallas, May 11, 2017
68. University of Texas Southwestern Medical Center, Dallas, May 10, 2017
67. Northeastern University, Boston, May 3, 2017
66. Brandeis University, Waltham/Boston, May 2, 2017
65. Boston University, Boston, May 1, 2017
64. Vanderbilt University, Nashville, April 24, 2017
63. Southern Illinois University, the 3rd biannual Meyers Symposium for Organic Chemistry, April 22, 2017 (Invited Lecturer)

62. University of Colorado Boulder, Boulder, April 17, 2017
61. Wayne State University, Detroit, March 29, 2017
60. University of Michigan, Ann Arbor, March 28, 2017
59. Dow AgroSciences, the Greater Indianapolis Organic Seminar, Indianapolis, March 20-21, 2017 (Invited Speaker)
58. Columbia University, New York, March 16, 2017
57. Princeton University, Princeton, March 15, 2017
56. Rice University, Houston, March 8, 2017
55. University of Houston, Houston, March 7, 2017
54. The Scripps Research Institute, February 17, 2017
53. University of Illinois Urbana-Champaign, February 9, 2017
52. Ohio State University, January 31, 2017
51. Duke University, Durham, January 24, 2017
50. University of North Carolina, January 23, 2017
49. University of Wisconsin, Madison, January 20, 2017
48. California Institute of Technology, Pasadena, November 17, 2016
47. University of California, Irvine, November 16, 2016
46. University of California, Santa Barbara, October 28, 2016
45. University of California, Los Angeles, October 27, 2016
44. University of California, Berkeley, October 11, 2016
43. University of Pittsburgh, Pittsburgh, October 6, 2016
42. Iowa State University, Ames, September 23, 2016
41. University of Iowa, Iowa City, September 22, 2016
40. The EuCheMS Organic Division Young Investigator Workshop, Spain, September 2016 (Invited Speaker)
39. The Young Academic Investigators Symposium, National ACS Meeting, Philadelphia, August 2016 (Invited Speaker)
38. Eli Lilly, Indianapolis, Indiana, August 16, 2016
37. Medical School of Peking University, Beijing, China, June 2016
36. South University of Science and Technology of China, Shenzhen, China, June 2016
35. The 12th Sino-US Chemistry Professors Conference, Guangzhou, China, June 2016 (Invited Speaker)
34. Sun Yat-Sen University, Guangzhou, China, June 2016
33. Sichuan University, Chengdu, China, June 2016
32. CERM 2016, the 47th Central Regional ACS Meeting, May 2016 (Invited Speaker)
31. College of Veterinary Medicine, Purdue University, March 2016
30. Olivet Nazarene University, Bourbonnais, IL, March 2016
29. Georgia State University, Atlanta, Georgia, March 2016
28. University of Cincinnati, Cincinnati, Ohio, March 2016
27. University of South Florida, Tampa, FL, March 2016
26. IUPUI, Indianapolis, IN, February 2016
25. Center for Cancer Research, Purdue University, January 2016
24. Department of Medicinal Chemistry and Molecular Pharmacology, Purdue Univ., November 2015
23. PACIFICHEM, Honolulu, Hawaii, December 2015 (Invited Speaker)
22. The 2015 Organic Letters Outstanding Author of the Year Lectureship, the fall ACS national meeting, Boston, MA, August 2015 (Award Speaker)
21. Natural Products - Gordon Research Conference, Andover, NH, July 2015 (Invited Speaker)
20. East Lake International Forum, Tongji Medical College, HUST, China, June 2015 (Invited Speaker)
19. Shanghai Institute of Organic Chemistry, CAS, Shanghai, China, June 2015
18. The 11th Sino-US Chemistry Professors Conference, Suzhou, China, June 2015 (Invited Speaker)
17. Tsinghua University, Xuetang Lecture, Beijing, China, June 2015
16. Peking University, College of Chemistry and Molecular Engineering, Beijing, China, June 2015
15. University at Albany-SUNY, Albany, NY, April 2015
14. Hamilton College, Clinton, NY, April 2015
13. The 8th Singapore International Chemistry Conference, Singapore, December 2014 (Invited Speaker)
12. Indiana University School of Medicine, Indianapolis, IN, March 2014
11. The ACS-Student Affiliates at Purdue University, West Lafayette, IN, February 2014
10. Purdue University, Center for Cancer Research, West Lafayette, IN, October 2012
9. Harvard University, the Kishi Group, Cambridge, MA, March, 2011
8. Harvard University, CCB student/postdoc seminar, Cambridge, MA, February, 2011

7. Peking University Shenzhen Graduate School, Shenzhen, China, September, 2010
6. The Hong Kong University of Science and Technology, Hong Kong, China, August 2010
5. The *Roche Symposium: Excellence in Chemistry*, Nutley, New Jersey, June 2009 (Award Speaker)
4. Sloan-Kettering Institute for Cancer Research, New York, November 2008
3. The 2007 Wyeth/Columbia Research Workshop, Columbia University, New York, May 2007
2. 9th Bristol-Meyers Squibb Chemistry Awards Symposium, Lawrenceville, New Jersey, May 2007 (Award Speaker)
1. The 2006 Wyeth/Columbia Research Workshop, Columbia University, New York, May 2006

POSTER PRESENTATIONS

7. OMCOS 20 (the 20th IUPAC International Symposium on Organometallic Chemistry Directed Towards Organic Synthesis), Heidelberg, Germany, July 21-25, 2019
   Dai, M. J.* "The Magic Power of Palladium-Catalyzed Carbonylative Reactions in Total Synthesis of Complex Natural Products."

6. The 7th Yao Yuan Biotech-Pharma Symposium, Chicago, (April 18, 2015)
   Bai, Y.; Yang, Y.; Dai, M. J.;* "New Strategies and Tactics for Efficient and Divergent Synthesis of Bioactive Alkaloids and Macrolides".

5. Gordon Research Conferences – Heterocyclic Compounds, RI (June 16-21, 2013)
   Dai, M. J.;* Yang, Y.; Bai, Y.; Davies, D. C.; Haskins, C. W. "Divergent Synthesis of Biologically Active Heterocyclic Natural Products".

4. Gordon Research Conferences – High Throughput Chemistry & Chemical Biology, NH (June 2-7, 2013)
   Dai, M. J.;* Bai, Y.; Yang, Y.; Davies, D. C.; Haskins, C. W. "Divergent Synthesis of Natural Products with Anticancer and Neurotrophic activity".

3. Gordon Research Conferences – Natural Products, Andover, NH (July 22-27, 2012)
   Dai, M. J.; Adams, D. J.; Pellegrino, G.; Wagner, B. K.; Stern, A. M.; Shamji, A. F.; Schreiber, S. L. "Chemical Synthesis, Cellular Evaluation, and Mechanism-of-Action of Anti-Cancer Piperlongumine Analogs".

2. The 7th Annual Scientific Retreat, Broad Institute, Cambridge, MA (November, 2011)
   Dai, M. J.; Adams, D. J.; Pellegrino, G.; Singleton, C.; Boskovic, Z.; Chen, S.; Sussman, R.; Schreiber, S. L. "Chemical and Biological Studies of Piperlongumine Analogs: Identification of Novel ROS Perturbing Probes and Potent Cancer-Cell-Selective Killing Compounds."

1. Howard Hughes Medical Institute Scientific Meeting: Control of Gene Expression and Metabolism. Janelia Farm Research Campus, Ashburn, VA (June 6-9, 2010)
   Dai, M. J.; Hartwell, K. M.; Miller, P. G.; Chattopadhyay, S.; Stewart, A. L.; Mukherjee, S.; Stern, A.; Carmody, L.; Schoonmaker, J. A.; Duvet, M.; Churchill, M.; Ebert, B. L.; Golub, T. R.; Moore, M. A. S.; Gilliland, D. G.; Scadden, D. T.; Schreiber, S. L. "Targeting Cancer Stem Cells and Identifying Their Dependencies by Parthenolide Inspired Small Molecule Collections via Niche Based Screen"

SERVICE

Department and University Service Activities

Emory University

- **Organic Division Seminar Lead**, Department of Chemistry, Emory University, 2022-present
- **Member of the Graduate Committee**, Department of Chemistry, Emory University, 2022-present
- **Member of the Junior TTF Search Committee**, Department of Chemistry, Emory University, 2022-present
- **BDCI Cornerstone Committee**, Emory University, 2022-present

Purdue University

- **Organic Division Head**, Department of Chemistry, Purdue University, 2020-2022
- **Equity Advisor**, Department of Chemistry, Purdue University, 2020-2022
- **Program Co-Leader**, Purdue University Center for Cancer Research, 2020-2022
- **Associate Director** of the PIDD Training Program (NIH T32), 2019-2022
- University NMR committee, 2021-2022
- Member of the International Graduate Student Recruitment Committee, 2018-2022
- Member of Corporate and Industrial Relations Advisory Committee, 2017-2022
- **Chair**, The Lilly-Brown Lecture, 2021

- Member of the ad hoc search committee for an opportunity hire, 2021
- **Chair**, HC Brown Symposium, 2018
- Internal Advisory Board Member of Purdue Institute for Drug Discovery, 2016-2017
- Member of the Graduate Student Recruitment Committee, 2016-2018
- Member of Organic/Medicinal Chemistry Faculty Recruiting Committee, 2017
- Member of Department Executive Committee, 2015-2017
- Member of Organic Faculty Recruiting Committee, 2012-2013
- Member of Brown Research Award Committee: 2013-2014
- Member of Undergraduate Committee, 2013-2014
- Session Chair, HC Brown Symposium, 2013-2019
- Session Chair, Negishi-Brown Symposium, 2014-2015
- Member of Inorganic Faculty Recruiting Committee, 2014-2015
- Member of Drug Discovery Faculty Recruiting Committee, 2014-2015
- Poster Judge: Purdue Graduate Student Government Spring 2013 Career Fair
  HC Brown Symposium, 2013-2019
  Negishi-Brown Symposium, 2014-2015
- University NMR committee, 2014-2015

External Service Activities

- Editorial Board: Green Synthesis and Catalysis (by Elsevier), 2020-present
- Inaugural Editorial Board of iScience (by Cell Press), 2017-2020
- Guest Editor: Current Organic Chemistry, Thematic Issue "Harnessing Molecular Strain in Organic Synthesis and Related Fields".
- Grant Referee:
  NSF Electronic Proposal Reviewer (2021)
  NIH Ad Hoc Reviewer (2019, 2020, 2022)
  NSF Panel Reviewer (2017, 2018, 2020)
  Purdue University Center for Cancer Research Pilot Grants (2013-)
  Member of the American Cancer Society Institutional Research Grant Review Committee (2015-)
  The American Chemical Society, Petroleum Research Foundation (2015-)
- Conference Chair/Discussion Leader/Presider:
  Session chair: the 8th Singapore International Chemistry Conference, Singapore, December 2014
  Session chair: East Lake International Forum, Tongji Medical College, HUST, China, June 2015
  Session chair: Natural Products - Gordon Research Conference, Andover, NH, July 2015.
  Session chair: ACSCERM2016 – "Organic Synthesis of Bioactive Molecules", May 2016
  ACSCERM2016 – "Organic Chemistry and Catalysis", May 2016
  Symposium presider: National ACS meeting, Philadelphia, "Metal-Mediated Reactions & Synthesis", August 2016
  Session chair: FloHet 2018 at the University of Florida, March 2018
  Symposium presider: The Fall 2019 National ACS Meeting in San Diego, California, August 2019
  Session chair: The 27th International Society of Heterocyclic Chemistry Congress, Kyoto, Japan, September 2019
- Conference Organizer: the ACSCERM2016 meeting (*47th Annual Central Regional Meeting of the ACS,* Cincinnati, May 18-21, 2016) on "Organic Synthesis of Bioactive Molecules"
- Manuscript Referee: Reviewed over 300 manuscripts for about 20 different journals, including *JACS*, *Angew. Chem. Int. Ed.*, *Nat. Commun.*, *ACS Catal.*, *Org. Lett.*, *Chem. Commun.*, *J. Org. Chem.*, *J. Med. Chem.*, *BMC*, *BMCL*, *Tetrahedron*, *Tetrahedron Letters*, etc.
- International Student Representative, 2006-2008, Chemistry Department, Columbia University
- President of Columbia Synthesis Literacy Group, Chemistry Department, Columbia University

OUTREACH ACTIVITIES

- Faculty mentor, Purdue Section's American Chemical Society Project SEED program, 2013-present
- Hosted study tables (non-course related) at the Purdue Black Culture Center, 2013 & 2014
- Spoke at the American Cancer Society Relay for Life of Franklin County, Indiana, 2014
- Provided lecture notes describing stories of natural products and natural product synthesis to share with 22 high school teachers through the program of *Integrating STEM* in the Lafayette School Corporation.
- Presented at the American Chemical Society-Student Affiliates at Purdue University

- Gave a lecture to retired people at the Wabash Area Lifetime Learning Association (WALLA), Inc., Lafayette, IN, 2018
- Volunteered to the Snack and Chat organized by the Purdue Science Student Council, February 2022.

AFFILIATIONS

- American Chemical Society (ACS), 2005-present
- Chinese-American Chemistry & Chemical Biology Professors Association (CAPA), 2015-present
- The International Society of Heterocyclic Chemistry (ISHC), 2019-present
- American Association for the Advancement of Science (AAAS), 2012-present
- The New York Academy of Sciences (NYAS), 2004-2009

EXTERNAL ACTIVITIES

2022-present: Consultant for Mussel Polymers Inc.
2022-present: Consultant for Kumquat Biosciences Inc.

FUNDING

Active Grants

National Science Foundation 5/1/2021 – 4/30/2024
Carbonylation Methodologies and Strategies for Building Complex Chemical Structures
PI, $500,000.00

NIH R35 (R35GM128570) 8/5/2018 – 6/30/2023
Synthesis and Study of Medicinally Important Molecules
PI, $1,909,120.05

NIH R01 (R01GM127656, declined) 9/1/2018 – 6/30/2023
Effective Targeting Survivin Dimerization Interface with Small Molecule Inhibitors
Co-I (PI: Jingyuan Liu at IUPUI), $309,191.00 budgeted for the Dai lab, but the Dai lab has to decline the funding support from this R01 because of the requirements of NIH R35.

Lilly (Eli) and Company 6/1/2018 – 5/31/2023
Lilly Connected Solutions (This is a multi-PI project. The budget is renewed and determined yearly.)
Co-PI, Year 1: $522,239 to my lab for 11/1/2018 – 5/31/2019
Year 2: $442,127 to my lab for 6/1/2019 – 5/31/2020
Year 3: $501,427 to my lab for 6/1/2020 – 5/31/2021
Year 4: $471,711 to my lab for 6/1/2021 – 5/31/2022
Year 5: $275,165 to my lab for 6/1/2022 – 12/31/2022

Lilly (Eli) and Company
The Eli Lilly ACC Grantee Award
PI, $100,000.00 (unrestricted)

National Institutes of Health T32 8/1/2019 – 7/31/2024
Purdue Drug Discovery Training Program
Co-PI (PI: Alexander Wei)

PIDD-PCCR 6/1/2021 – 5/31/2022
Optimization and preclinical evaluation of novel PRMT5/MEP50 interaction inhibitors for treatment-induced neuroendocrine prostate cancer
Co-PI, $50,000.00 (PI: Changdeng Hu; about 40% of the budget goes to the Dai lab)

Purdue University Faculty Scholar and Showalter Faculty Scholar 8/1/2021 – 7/31/2026
PI, $50,000

Pending Grant Applications

NIH 5/15/2021 – 5/14/2026
Dissecting Infection pathways and Identifying Novel Virus Host Receptors and Effectors
Co-PI (PI: Weiguo Anday Tao)

Completed Grants

Purdue Institute of Drug Discovery Programmatic Award 1/1/2019 – 12/31/2021

DNA-encoded, drug-like libraries based on privileged scaffolds generated by novel chemistry
Co-PI, $200,000 (40% of the budget to the Dai lab)

Purdue Institute of Drug Discovery Hit-to-Lead Program 6/1/2019 – 5/31/2021
PI, $50,000

PRF Research Grants, Purdue University 6/1/2020 – 5/31/2021
Diterpene Natural Products and Their Analogs for Tumor-Suppressing Kinase Activation
PI, $19,000

National Science Foundation 4/1/2016 – 3/31/2021
Career: Carbonylation Methodologies and Strategies for Complex Natural Product Synthesis
PI, $650,000.00 ($130,000.00/year)

The Keck Foundation 1/1/2015 – 12/31/2019
Microsecond Time Scale Vibrational Spectral Imaging of Living Systems
Co-PI, Total $1,000,000.00 plus cost share from Purdue University (PI: Ji-Xin Cheng; about $200,000.00 for my part including cost share from Purdue University)

National Science Foundation 7/1/2016 – 12/31/2017
MRI: Acquisition of a Mo Microsource Diffractometer at Purdue University
Amount: $266,356
Senior Personnel

American Chemical Society Petroleum Research Fund 1/1/2015 – 8/31/2017
Catalytic Carbonylative Macrocyclization of Olefins and Cyclopropanes
PI, $110,000

ORAU, The Ralph E. Powe Junior Faculty Enhancement Awards 6/1/2013 – 5/31/2014
Synthesis and Cellular Evaluation of Small Molecules with Neurotrophic Activity
PI, $10,000

PUCCR Phase I Concept Award, Purdue University 1/1/2018 – 12/31/2018
Optimize Survivin PPI Inhibitors as Potential Clinical Therapeutics for Cancer
PI, $15,000

PRF Research Grants, Purdue University 6/1/2016 – 12/31/2018
Target Tumor Suppressor Protein Kinase Cs with Synthetic Natural Product Analogs
PI, $17,215

EVPRP, "the NIH New R01 Program" Purdue University 12/1/2015 – 6/30/2017
Adenylyl Cyclase 1 Inhibitors as Molecular Probes for Treating Chronic Pain
Co-PI, Total $30,000 (PI: Val Watts; $10,000 for my part)

PRF Research Grants, Purdue University 6/1/2015 – 5/31/2016
Synthetic Studies on Neurodegenerative Diseases
PI, $17,795

Ralph W. and Grace M. Showalter Research Trust 7/1/2013 – 6/30/2014
Targeting Cancer with Natural and Synthetic Hydropyran/Hydrofuran-Containing Macrolides
PI, $75,000

American Cancer Society via PUCCR (#IRG-58-006-53) 11/1/2012 – 10/31/2013
Target Cancer Cell Migration by Lactimidomycin and Its Synthetic Analogs
PI, $30,000

PRF Research Grants, Purdue University 6/1/2013 – 5/31/2014
Synthesis of Biologically Active Hydropyran/Hydrofuran-Containing Macrolides
PI, $17,608

PRF Summer Faculty Grants, Purdue University 6/1/2013 – 7/31/2013
Synthesis and Biological Evaluation of Natural Products with Neurotrophic Activity
PI, $8,000

PRF Travel Grants, Purdue University 7/1/2014 – 12/31/2014
PI, $1,000

STUDENT EDUCATION

Current Group Members:

Graduate Students (14):
Yecheng Wang: 2018-2023 (projected)
Pedro de Andrade Horn: 2018-2023 (projected)
Hunter S. Sims: 2018-2023 (projected)
Chang Liu: 2019-2024 (projected)
Mario E. Rivera: 2019-2024 (projected)
Michael Collins: 2020-2025 (projected)
Jacob Hellmig: 2020-2025 (projected)
Yu Nishio: 2020-2022 (master's degree projected)
Josephine E. Bernard: 2021-2026 (projected)
Shilin Wang: 2021-2026 (projected)
Cyrus Gudeman: 2021-2026 (projected)

Current Postdocs (5):
Dr. Lei Li: 07/2019-present
Dr. Donghui Ma: 08/2020-present
Dr. Yanrong Li: 06/2021-present
Dr. Bo Xu: 11/2021-present
Dr. Yuan Jin: 12/2021-present

Undergraduate students (6):
Declan J. Leaird
Jianhan (Johnson) Zhou
Alexandra (Lexi) A. Fresh

Former Group Members:

M.S. and Ph.D. students graduated

M.S. students graduated:

(1). Tabitha M. Bellman, M.S., 07/2015
Thesis Title: Synthesis of 3,3-Difluoro-2-Oxindoles and Larger Sized Rings.
Current Position: Science Teacher at the Lafayette Catholic Schools

Ph.D. students graduated:

(1). Yu Bai, 08/2016 (The HC Brown Graduate Student Research Awardee)
Thesis Title: Efficient Synthesis of Macrolides via Palladium-Catalyzed Carbonylative Macrolactonizations and Divergent Synthesis of Monoterpene Indole Alkaloids.
Current Position: Incyte Inc.
Previous Position: Postdoc with Professor Barry Trost at Stanford University

(2). Dexter Davis, 05/2017 (The HC Brown Graduate Student Research Awardee)
Thesis Title: Catalytic Carbonylations in Total Synthesis and Chemistry and Biology of Aryl Isonitriles
Current Position: Enanta Pharmaceuticals
Previous position: Postdoc with Prof. Craig Lindsley at the Vanderbilt Center for Neuroscience Drug Discovery

(3). Kwaku Kyei-Baffour, 05/2019
Thesis Title: Development of Aryl Isonitriles as Antimicrobial Agents and Total Synthesis of 17-Nor Excelsinidine
Current Position: The Broad Institute
Previous Position: Postdoc with Prof. Craig Lindsley at the Vanderbilt Center for Neuroscience Drug Discovery

(4). Xianglin Yin, 05/2020
Thesis Title: Total Synthesis of *Stemona* Alkaloids via Palladium-Catalyzed Carbonylation
Current Position: Postdoc with Prof. Yan Xia at Stanford University

(5). Brandon S. Martin, 05/2021
Thesis Title: Total Synthesis of Complanadine A
Current Position: Ferring Pharmaceuticals

(6). Xinpei Cai, 08/2021 (The HC Brown Graduate Student Research Awardee)
Thesis Title: Catalytic Hydroxycyclopropanol Ring-opening Carbonylative Lactonization to Fused Bicyclic Lactones and Total Synthesis of Pheleghenrine Alkaloids
Current Position: Postdoc with Prof. Jin-Quan Yu at the Scripps Research Institute

(7). Baiyang Jiang, 05/2022 (The HC Brown Graduate Student Research Awardee)
Thesis Title: Synthetic Studies Towards the Hamigerans with a [6-7-5] Tricyclic Skeleton
Current Position: Postdoc with Prof. Phil Baran at the Scripps Research Institute

(8). Yiyang Luo, 05/2022
Thesis Title: Catalytic Carbonylation for Macrocyclic Ketone and Macrolide Synthesis
Current Position: Jun He Law Offices, Shanghai, China

(9). Weida Liang, 08/2022
Thesis Title: Copper-Catalyzed Hydroxycyclopropanol Ring Opening Chemistry and Total Synthesis of GA_{18}
Current Position: Research Scientist at Kumquat Biosciences

Postdoc Trained:

(1). Dr. Yang Yang, 10/2012-10/2015
Current Position: Full Professor at Huazhong University of Science and Technology

(2). Dr. Zhishi Ye, 8/2013-8/2017
Current Position: Full Professor at Dalian University of Technology

(3). Dr. Yong Li, 2/10/2014-12/2018
Current Position: Research Scientist at Incyte Inc.

(4). Dr. Zhong-Jian Cai, 11/2018-10/2019
Current Position: Full Professor at Soochow University

(5). Dr. Fei Tang, 03/2019-02/2020 (joint postdoc with Professor Casey Krusemark)
Current Position: Scientist at the Australian National University

(6). Dr. Shaoquan Lin, 07/2019-06/2020
Current Position: Research Scientist at LEO Pharma, Denmark

(7). Dr. Cassidy N. Creemer, 08/2020-02/2021 (joint postdoc with Professor Casey Krusemark)
Current Position: Research Scientist at Novosteo Inc.

(8). Dr. Chengsen Cui, 09/2018-08/2021
Current Position: Professor at the Tianjin Institute of Industrial Biotechnology, Chinese Academy of Sciences.

Visiting Scholar Trained:

(1). Dr. Kaiqing Ma, 03/2017-03/2018
Current Position: Associate Professor at Shanxi University

(2). Prof. Dr. Wenjuan Li, 2/2018-2/2019
Current Position: Associate Professor at Nanchang University, China

(3). Prof. Jianjun Dai (09/2018-09/2019)
Current Position: Associate Professor at Hefei University of Technology, China

Undergraduate Student Training:

So far, I have trained over forty-five undergraduate student researchers in my lab. About one third of them have shared authorships in our publications. More than half of them have gone on to graduate study in chemistry at Caltech, UC Berkeley, University of Chicago, UPenn, UT-Austin, Michigan-Ann Arbor, UNC, etc.

COLLABORATIONS

Current Collaborators:

(1). Professor Alexander Adibekian – Scripps Research Institute, Florida

Target identification of covalent anticancer natural products

(2). Professor Changdeng Hu – Purdue University
Targeting PRMT5/MEP50 interaction for developing novel chemotherapeutics

(3). Professor Jian-Ting Zhang and Jing-Yuan Liu – University of Toledo
Targeting survivin dimeric protein-protein interaction for developing novel chemotherapeutics

(4). Professor Zhong-Yin Zhang – Purdue University
Targeting phosphatases especially oncogenic SHP2 with novel covalent libraries

(5). Dr. Benedikt Linder – University Hospital Frankfurt
Evaluation of curcusone D as BRAT1 inhibitor in glioma

(6). Professor Mohamed Seleem – Virginia Tech
Antimicrobial drug discovery

(7). Professor Casey Krusemark – Purdue University
DNA-encoded, drug-like libraries based on privileged scaffolds and novel chemistry

(8). Professor Emily Dykhuizen – Purdue University
Development of inhibitors of BAF chromatin remodeling complexes

(9). Eli Lilly, Professor Pedro Irazoqui (Johns Hopkins University), Professor Amadeu Llebaria (IQAC-CSIC, Spain), et al.
Lilly Connected Solutions

(10). Professor Timothy L. Ratliff – Purdue University
Evaluation of curcusone D as a BRAT1 inhibitor in in vitro and in vivo prostate cancer models

(11). Professor Eric J. Wagner – Wilmot Cancer Institute, University of Rochester School of Medicine and Dentistry
Biological evaluation of curcusone D as a BRAT1 inhibitor

(12). Professor Weixing Zhao –Greehey Children's Cancer Research Institute, UT Health at San Antonio
Biological evaluation of curcusone D as a BRAT1 inhibitor