Kevin P Madauss

Director of Trust in Science

Trust in Science, Oncology R&D

1250 S Collegeville Rd, UP4400, Collegeville PA, 19426

Email kevin.p.madauss@gsk.com

+1 919 924 6436

I am a protein crystallographer that joined GlaxoSmithKline in 2001. I have experience as an independent scientist and team leader in early discovery in the platforms for the first 13 years of my career. I joined the Trust in Science initiative as a secondee in 2012 and then through the R&D SWITCH program in 2014. I have lead teams of internal and external scientists in executing high risk biology in a pre C2T stage in immunology, synthetic lethality, and immuno oncology for the past 5 years. I have early Drug Discovery expertise through Candidate Selection. I excel in communicating across locations, languages and cultures while bringing energy and enthusiasm to scientific discussions.

Relevant Work History

1991-1995: United States Air Force

1995-1998: Eastern Kentucky University: BS in biology with a minor in Chemistry

1998-2001: University of Kentucky Medical School Department of Biochemistry with The David Rodger's Lab-Research Analyst and lab manager.

2001-2013: GSK Structural Biology Department of Chemical Sciences. RTP, NC

2013-2019- Programme Manager –Trust in Science department of Alternative Discovery and Development in GSK R&D.

2019-2021 Director, Trust in Science, Global Health R&D, GSK

2021- Director of Trust in Science Oncology R&D, GSK

Experience

In my career, I have worked on projects from a wide variety of protein classes including enzymes and kinases, with a focus on the nuclear receptor family, in particular in the Progesterone (PR), Glucocorticoid (GR), Farsenoid X Receptors (FXR), and Histone Deacetylases (HDACs). Through Trust in

Science I have worked in immunology, immuno oncology, and synthetic lethality with the major contribution to the oncology portfolio in the form of an (NK therapy). Exploring novel biology while searching for a medicine is a 20 year passion.

As a Director of Trust in Science, I work with internal scientific teams to form a co funded call for proposals with the scientific agencies within the countries that we operate. We select the projects with internal alignment and work with external PIs to drive the science to provide value. 91 publications through Trust in Science projects with 17 projects maintaining relations ships after the Trust in Science projects are completed with one asset in the portfolio.

Career Highlights.

30 peer reviewed publications; h-index 18, !10-index 25

2036 citations (by google scholar)

42 crystal structures deposited in the RCSB (public database), over 300 crystal structures solved and deposited in the GSK Structural Database.

19 GSK research reward and recognition awards (17 bronze, 1 silver and 1 gold), as well as 2 Exceptional Science Awards.

2013 R&D SWITCH program

2019: Appointed to the President of R&D's Talent Team representing Global Health R&D

I am a native English speaker with functional Spanish and beginning Portuguese

30 Publications

Restoration of antitumor immunity through anti-MICA antibodies elicited with a chimeric protein.

Torres N, Regge MV, Secchiari F, Friedrich AD, Spallanzani RG, Raffo Iraolagoitia XL, Núñez SY, Sierra JM, Ziblat A, Santilli MC, Gilio N, Almada E, Lauche C, Pardo R, Domaica CI, Fuertes MB, **Madauss KP**, Hance KW, Gloger IS, Zylberman V, Goldbaum FA, Zwirner NW. J Immunother Cancer. 2020 Jun;8(1):e000233. doi: 10.1136/jitc-2019-000233. Epub 2020 Jun 8

PolPolo-like Kinase 1 Inhibition as a Therapeutic Approach to Selectively Target BRCA1-Deficient Cancer Cells by Synthetic Lethality Induction.

Carbajosa S, Pansa MF, Paviolo NS, Castellaro AM, Andino DL, Nigra AD, García IA, Racca AC, Rodriguez-Berdini L, Angiolini V, Guantay L, Villafañez F, Federico MB, Rodríguez-Baili

MC, Caputto BL, Drewes G, Madauss KP, Gloger I, Fernandez E, Gil GA, Bocco JL, Gottifredi V, Soria G.

Clin Cancer Res. 2019 Jul 1;25(13):4049-4062. doi: 10.1158/1078-0432.CCR-18-3516. Epub 2019 Mar 19.

AKT inhibition impairs PCNA ubiquitylation and triggers synthetic lethality in homologous recombination-deficient cells submitted to replication stress.

Villafañez F, García IA, Carbajosa S, Pansa MF, Mansilla S, Llorens MC, Angiolini V, Guantay L, Jacobs H, Madauss KP, Gloger I, Gottifredi V, Bocco JL, Soria G.

Oncogene. 2019 May;38(22):4310-4324. doi: 10.1038/s41388-019-0724-7. Epub 2019 Jan 31.

Aberrant O-glycosylation modulates aggressiveness in neuroblastoma.

Cuello HA, Segatori VI, Albertó M, Gulino CA, Aschero R, Camarero S, Mutti LG, Madauss K, Alonso DF, Lubieniecki F, Gabri MR.

Oncotarget. 2018 Sep 25;9(75):34176-34188. doi: 10.18632/oncotarget.26169. eCollection 2018 Sep 25.

Author Correction: Novel scaffolds for inhibition of Cruzipain identified from high-throughput screening of anti-kinetoplastid chemical boxes.

Salas-Sarduy E, Landaburu LU, Karpiak J, Madauss KP, Cazzulo JJ, Agüero F, Alvarez VE.

Sci Rep. 2018 Jun 4;8(1):8743. doi: 10.1038/s41598-018-26961-w.

Novel scaffolds for inhibition of Cruzipain identified from high-throughput screening of anti-kinetoplastid chemical boxes.

Salas-Sarduy E, Landaburu LU, Karpiak J, Madauss KP, Cazzulo JJ, Agüero F, Alvarez VE.

Sci Rep. 2017 Sep 21;7(1):12073. doi: 10.1038/s41598-017-12170-4. Erratum in: Sci Rep. 2018 Jun 4;8(1):8743.

o-like Kinase 1 Inhibition as a Therapeutic Approach to Selectively Target BRCA1-Deficient Cancer Cells by Synthetic Lethality Induction.

Carbajosa S, Pansa MF, Paviolo NS, Castellaro AM, Andino DL, Nigra AD, García IA, Racca AC, Rodriguez-Berdini L, Angiolini V, Guantay L, Villafañez F, Federico MB, Rodríguez-Baili MC, Caputto BL, Drewes G, Madauss KP, Gloger I, Fernandez E, Gil GA, Bocco JL, Gottifredi V, Soria G.

Clin Cancer Res. 2019 Jul 1;25(13):4049-4062. doi: 10.1158/1078-0432.CCR-18-3516. Epub 2019 Mar 19.

AKT inhibition impairs PCNA ubiquitylation and triggers synthetic lethality in homologous recombination-deficient cells submitted to replication stress.

Villafañez F, García IA, Carbajosa S, Pansa MF, Mansilla S, Llorens MC, Angiolini V, Guantay L, Jacobs H, Madauss KP, Gloger I, Gottifredi V, Bocco JL, Soria G.

Oncogene. 2019 May;38(22):4310-4324. doi: 10.1038/s41388-019-0724-7. Epub 2019 Jan 31.

Aberrant O-glycosylation modulates aggressiveness in neuroblastoma.

Cuello HA, Segatori VI, Albertó M, Gulino CA, Aschero R, Camarero S, Mutti LG, **Madauss K**, Alonso DF, Lubieniecki F, Gabri MR.

Oncotarget. 2018 Sep 25;9(75):34176-34188. doi: 10.18632/oncotarget.26169. eCollection 2018 Sep 25.

Author Correction: Novel scaffolds for inhibition of Cruzipain identified from high-throughput screening of anti-kinetoplastid chemical boxes.

Salas-Sarduy E, Landaburu LU, Karpiak J, Madauss KP, Cazzulo JJ, Agüero F, Alvarez VE.

Sci Rep. 2018 Jun 4;8(1):8743. doi: 10.1038/s41598-018-26961-w.

Novel scaffolds for inhibition of Cruzipain identified from high-throughput screening of anti-kinetoplastid chemical boxes.

Salas-Sarduy E, Landaburu LU, Karpiak J, Madauss KP, Cazzulo JJ, Agüero F, Alvarez VE.

Sci Rep. 2017 Sep 21;7(1):12073. doi: 10.1038/s41598-017-12170-4. Erratum in: Sci Rep. 2018 Jun 4;8(1):8743.

Selective class IIa histone deacetylase inhibition via a nonchelating zinc-binding group.

Lobera M, Madauss KP, Pohlhaus DT, Wright QG, Trocha M, Schmidt DR, Baloglu E, Trump RP, Head MS, Hofmann GA, Murray-Thompson M, Schwartz B, Chakravorty S, Wu Z, Mander PK, Kruidenier L, Reid RA, Burkhart W, Turunen BJ, Rong JX, Wagner C, Moyer MB, Wells C, Hong X, Moore JT, Williams JD, Soler D, Ghosh S, Nolan MA.

Nat Chem Biol. 2013 May;9(5):319-25. doi: 10.1038/nchembio.1223. Epub 2013 Mar 24

Conformationally constrained farnesoid X receptor (FXR) agonists: alternative replacements of the stilbene.

Akwabi-Ameyaw A, Caravella JA, Chen L, Creech KL, Deaton DN, Madauss KP, Marr HB, Miller AB, Navas F 3rd, Parks DJ, Spearing PK, Todd D, Williams SP, Wisely GB.

Bioorg Med Chem Lett. 2011 Oct 15;21(20):6154-60. Epub 2011 Aug 11.

Conformationally constrained farnesoid X receptor (FXR) agonists: heteroaryl replacements of the naphthalene.

Bass JY, Caravella JA, Chen L, Creech KL, Deaton DN, Madauss KP, Marr HB, McFadyen RB, Miller AB, Mills WY, Navas F 3rd, Parks DJ, Smalley TL Jr, Spearing PK, Todd D, Williams SP, Wisely GB.

Bioorg Med Chem Lett. 2011 Feb 15;21(4):1206-13. Epub 2010 Dec 23.

Improving the developability profile of pyrrolidine progesterone receptor partial agonists.

Kallander LS, Washburn DG, Hoang TH, Frazee JS, Stoy P, Johnson L, Lu Q, Hammond M, Barton LS, Patterson JR, Azzarano LM, Nagilla R, Madauss KP, Williams SP, Stewart EL, Duraiswami C, Grygielko ET, Xu X, Laping NJ, Bray JD, Thompson SK.

Bioorg Med Chem Lett. 2010 Jan 1;20(1):371-4. Epub 2009 Oct 25.

Design and x-ray crystal structures of high-potency nonsteroidal glucocorticoid agonists exploiting a novel binding site on the receptor.

Biggadike K, Bledsoe RK, Coe DM, Cooper TW, House D, Iannone MA, Macdonald SJ, Madauss KP, McLay IM, Shipley TJ, Taylor SJ, Tran TB, Uings IJ, Weller V, Williams SP.

Proc Natl Acad Sci U S A. 2009 Oct 27;106(43):18114-9. Epub 2009 Oct 12.

2-Amino-9-aryl-3-cyano-4-methyl-7-oxo-6,7,8,9-tetrahydropyrido[2',3':4,5]thieno[2,3-b]pyridine derivatives as selective progesterone receptor agonists.

Wang Y, Duraiswami C, Madauss KP, Tran TB, Williams SP, Deng SJ, Graybill TL, Hammond M, Jones DG, Grygielko ET, Bray JD, Thompson SK.

Bioorg Med Chem Lett. 2009 Sep 1;19(17):4916-9. Epub 2009 Jul 23.

Discovery of orally active, pyrrolidinone-based progesterone receptor partial agonists.

Washburn DG, Hoang TH, Frazee JS, Johnson L, Hammond M, Manns S, Madauss KP, Williams SP, Duraiswami C, Tran TB, Stewart EL, Grygielko ET, Glace LE, Trizna W, Nagilla R, Bray JD, Thompson SK.

Bioorg Med Chem Lett. 2009 Aug 15;19(16):4664-8. Epub 2009 Jun 25.

Rational design of orally-active, pyrrolidine-based progesterone receptor partial agonists.

Thompson SK, Washburn DG, Frazee JS, Madauss KP, Hoang TH, Lapinski L, Grygielko ET, Glace LE, Trizna W, Williams SP, Duraiswami C, Bray JD, Laping NJ.

Bioorg Med Chem Lett. 2009 Aug 15;19(16):4777-80. Epub 2009 Jun 17.

FXR agonist activity of conformationally constrained analogs of GW 4064.

Akwabi-Ameyaw A, Bass JY, Caldwell RD, Caravella JA, Chen L, Creech KL, Deaton DN, Madauss KP, Marr HB, McFadyen RB, Miller AB, Navas F 3rd, Parks DJ, Spearing PK, Todd D, Williams SP, Bruce Wisely G.

Bioorg Med Chem Lett. 2009 Aug 15;19(16):4733-9. Epub 2009 Jun 21.

Substituted isoxazole analogs of farnesoid X receptor (FXR) agonist GW4064.

Bass JY, Caldwell RD, Caravella JA, Chen L, Creech KL, Deaton DN, Madauss KP, Marr HB, McFadyen RB, Miller AB, Parks DJ, Todd D, Williams SP, Wisely GB.

Bioorg Med Chem Lett. 2009 Jun 1;19(11):2969-73. Epub 2009 Apr 18.

The human ACC2 CT-domain C-terminus is required for full functionality and has a novel twist.

Madauss KP, Burkhart WA, Consler TG, Cowan DJ, Gottschalk WK, Miller AB, Short SA, Tran TB, Williams SP.

Acta Crystallogr D Biol Crystallogr. 2009 May;65(Pt 5):449-61. Epub 2009 Apr 18.

The first X-ray crystal structure of the glucocorticoid receptor bound to a non-steroidal agonist.

Madauss KP, Bledsoe RK, Mclay I, Stewart EL, Uings IJ, Weingarten G, Williams SP.

Bioorg Med Chem Lett. 2008 Dec 1;18(23):6097-9. Epub 2008 Oct 8.

Conformationally constrained farnesoid X receptor (FXR) agonists: Naphthoic acid-based analogs of GW 4064.

Akwabi-Ameyaw A, Bass JY, Caldwell RD, Caravella JA, Chen L, Creech KL, Deaton DN, Jones SA, Kaldor I, Liu Y, Madauss KP, Marr HB, McFadyen RB, Miller AB, Iii FN, Parks DJ, Spearing PK, Todd D, Williams SP, Wisely GB.

Bioorg Med Chem Lett. 2008 Aug 1;18(15):4339-43. Epub 2008 Jun 28.

Pyrrolidinyl pyridone and pyrazinone analogues as potent inhibitors of prolyl oligopeptidase (POP).

Haffner CD, Diaz CJ, Miller AB, Reid RA, Madauss KP, Hassell A, Hanlon MH, Porter DJ, Becherer JD, Carter LH.

Bioorg Med Chem Lett. 2008 Aug 1;18(15):4360-3. Epub 2008 Jun 24.

A structural and in vitro characterization of asoprisnil: a selective progesterone receptor modulator.

Madauss KP, Grygielko ET, Deng SJ, Sulpizio AC, Stanley TB, Wu C, Short SA, Thompson SK, Stewart EL, Laping NJ, Williams SP, Bray JD.

Mol Endocrinol. 2007 May;21(5):1066-81. Epub 2007 Mar 13.

Crystallization of protein-ligand complexes.

Hassell AM, An G, Bledsoe RK, Bynum JM, Carter HL 3rd, Deng SJ, Gampe RT, Grisard TE, Madauss KP, Nolte RT, Rocque WJ, Wang L, Weaver KL, Williams SP, Wisely GB, Xu R, Shewchuk LM.

Acta Crystallogr D Biol Crystallogr. 2007 Jan;63(Pt 1):72-9. Epub 2006 Dec 13. Review.

The evolution of progesterone receptor ligands.

Madauss KP, Stewart EL, Williams SP.

Med Res Rev. 2007 May;27(3):374-400. Review.

A ligand-mediated hydrogen bond network required for the activation of the mineralocorticoid receptor.

Bledsoe RK, Madauss KP, Holt JA, Apolito CJ, Lambert MH, Pearce KH, Stanley TB, Stewart EL, Trump RP, Willson TM, Williams SP.

J Biol Chem. 2005 Sep 2;280(35):31283-93. Epub 2005 Jun 20.

Discovery of non-steroidal mifepristone mimetics: pyrazoline-based PR antagonists.

Jones DG, Liang X, Stewart EL, Noe RA, Kallander LS, Madauss KP, Williams SP, Thompson SK, Gray DW, Hoekstra WJ.

Bioorg Med Chem Lett. 2005 Jul 1;15(13):3203-6.

Structural analyses reveal phosphatidyl inositols as ligands for the NR5 orphan receptors SF-1 and LRH-1.

Krylova IN, Sablin EP, Moore J, Xu RX, Waitt GM, MacKay JA, Juzumiene D, Bynum JM, **Madauss K**, Montana V, Lebedeva L, Suzawa M, Williams JD, Williams SP, Guy RK, Thornton JW, Fletterick RJ, Willson TM, Ingraham HA.

Cell. 2005 Feb 11;120(3):343-55.

Generation and characterization of human steroidogenic factor 1 LBD crystals with and without bound cofactor peptide.

Madauss K, Juzumiene D, Waitt G, Williams J, Williams S.

Endocr Res. 2004 Nov;30(4):775-85.

Progesterone receptor ligand binding pocket flexibility: crystal structures of the norethindrone and mometasone furoate complexes.

Madauss KP, Deng SJ, Austin RJ, Lambert MH, McLay I, Pritchard J, Short SA, Stewart EL, Uings IJ, Williams SP.

J Med Chem. 2004 Jun 17;47(13):3381-7.

Structure of neurolysin reveals a deep channel that limits substrate access.

Brown CK, Madauss K, Lian W, Beck MR, Tolbert WD, Rodgers DW.

Proc Natl Acad Sci U S A. 2001 Mar 13;98(6):3127-32. Epub 2001 Mar 6.

Crystallization and preliminary analysis of neurolysin.

Lian W, Chen G, Wu D, Brown CK, Madauss K, Hersh LB, Rodgers DW.

Acta Crystallogr D Biol Crystallogr. 2000 Dec;56(Pt 12):1644-6.