

Publication List:

1. Rishton GM, **Look GC**, Ni ZJ, Zhang J, Wang Y, Huang Y, Wu X, Izzo NJ, LaBarbera KM, Limegrover CS, Rehak C, Yurko R, Catalano SM. Discovery of Investigational Drug CT1812, an Antagonist of the Sigma-2 Receptor Complex for Alzheimer's Disease. *ACS Med Chem Lett.* 2021 Sep 9;12(9):1389-1395. doi: 10.1021/acsmchemlett.1c00048. eCollection 2021 Sep 9. PubMed PMID: 34531947; PubMed Central PMCID: PMC8436239.
2. Izzo NJ, Yuede CM, LaBarbera KM, Limegrover CS, Rehak C, Yurko R, Waybright L, **Look G**, Rishton G, Safferstein H, Hamby ME, Williams C, Sadlek K, Edwards HM, Davis CS, Grundman M, Schneider LS, DeKosky ST, Chelsky D, Pike I, Henstridge C, Blennow K, Zetterberg H, LeVine H 3rd, Spires-Jones TL, Cirrito JR, Catalano SM. Preclinical and clinical biomarker studies of CT1812: A novel approach to Alzheimer's disease modification. *Alzheimers Dement.* 2021 Aug;17(8):1365-1382. doi: 10.1002/alz.12302. Epub 2021 Feb 8. PubMed PMID: 33559354; PubMed Central PMCID: PMC8349378.
3. Limegrover CS, Yurko R, Izzo NJ, LaBarbera KM, Rehak C, **Look G**, Rishton G, Safferstein H, Catalano SM. Sigma-2 receptor antagonists rescue neuronal dysfunction induced by Parkinson's patient brain-derived α -synuclein. *J Neurosci Res.* 2021 Apr;99(4):1161-1176. doi: 10.1002/jnr.24782. Epub 2021 Jan 22. PubMed PMID: 33480104; PubMed Central PMCID: PMC7986605.
4. Izzo NJ, Staniszewski A, To L, Fa M, Teich AF, Saeed F, Wostein H, Walko T 3rd, Vaswani A, Wardius M, Syed Z, Ravenscroft J, Mozzoni K, Silky C, Rehak C, Yurko R, Finn P, **Look G**, Rishton G, Safferstein H, Miller M, Johanson C, Stopa E, Windisch M, Hutter-Paier B, Shamloo M, Arancio O, LeVine H 3rd, Catalano SM. Alzheimer's therapeutics targeting amyloid beta 1-42 oligomers I: Abeta 42 oligomer binding to specific neuronal receptors is displaced by drug candidates that improve cognitive deficits. *PLoS One.* 2014;9(11):e111898. doi: 10.1371/journal.pone.0111898. eCollection 2014. PubMed PMID: 25390368; PubMed Central PMCID: PMC4229098.
5. Izzo NJ, Xu J, Zeng C, Kirk MJ, Mozzoni K, Silky C, Rehak C, Yurko R, **Look G**, Rishton G, Safferstein H, Cruchaga C, Goate A, Cahill MA, Arancio O, Mach RH, Craven R, Head E, LeVine H 3rd, Spires-Jones TL, Catalano SM. Alzheimer's therapeutics targeting amyloid beta 1-42 oligomers II: Sigma-2/PGRMC1 receptors mediate Abeta 42 oligomer binding and synaptotoxicity. *PLoS One.* 2014;9(11):e111899. doi: 10.1371/journal.pone.0111899. eCollection 2014. PubMed PMID: 25390692; PubMed Central PMCID: PMC4229119.
6. **Look GC**, Jerecic J, Cherbavaz DB, Pray TR, Breach JC, Crosier WJ, Igoudin L, Hironaka CM, Lowe RM, McEntee M, Ruslim-Litrus L, Wu HM, Zhang S, Catalano SM, Goure WF, Summa D, Krafft GA. Discovery of ADDL--targeting small molecule drugs for Alzheimer's disease. *Curr Alzheimer Res.* 2007 Dec;4(5):562-7. doi: 10.2174/156720507783018271. Review. PubMed PMID: 18220523.
7. **Look GC**, Vacin C, Dias TM, Ho S, Tran TH, Lee LL, Wiesner C, Fang F, Marra A, Westmacott D, Hromockyj AE, Murphy MM, Schullek JR. The discovery of biaryl acids and amides exhibiting antibacterial activity against Gram-positive bacteria. *Bioorg Med Chem Lett.* 2004 Mar 22;14(6):1423-6. doi: 10.1016/j.bmcl.2004.01.026. PubMed PMID: 15006375.
8. Silen JL, Lu AT, Solas DW, Gore MA, MacLean D, Shah NH, Coffin JM, Bhinderwala NS, Wang Y, Tsutsui KT, **Look GC**, Campbell DA, Hale RL, Navre M, DeLuca-Flaherty CR. Screening for novel antimicrobials from encoded combinatorial libraries by using a two-dimensional agar format. *Antimicrob Agents Chemother.* 1998 Jun;42(6):1447-53. doi: 10.1128/AAC.42.6.1447. PubMed PMID: 9624492; PubMed Central PMCID: PMC105620.
9. Fitch WL, **Look GC**, Detre G. Analytical Issues in Combinatorial Drug Discovery. In: Gordon EM, Kerwin Jr JF, editors. *Combinatorial Chemistry and Molecular Diversity* 1 ed. New York, NY: Wiley; 1998. p.349-368. 544p.

10. Szardenings AK, Burkoth TS, **Look GC**, Campbell DA. A Reductive Alkylation Procedure Applicable to Both Solution- and Solid-Phase Syntheses of Secondary Amines. *J Org Chem*. 1996 Sep 20;61(19):6720-6722. doi: 10.1021/jo960124n. PubMed PMID: 11667547.
11. **Look GC**, Schullek JR, Holmes CP, Chinn JP, Gordon EM, Gallop MA. The Identification of Cyclooxygenase-1 Inhibitors from 4-Thiazolidinone Combinatorial Libraries. *Bioorganic & Medicinal Chemistry Letters*. 1996; 6(6):707. doi: 10.1016/0960-894X(96)00097-2.
12. Gordon EM, Gallop MA, Campbell D, Holmes C, Bermak J, **Look G**, Murphy M, Needels M, Jacobs J, Sugarman J, Chinn J, Ruhland-Fritsch B, Jones D. Combinatorial organic synthesis: applications to drug discovery. *European Journal of Medicinal Chemistry*. 1995; 30:337s.
13. **Look GC**, Murphy MM, Campbell DA, Gallop MA. Trimethylorthoformate: A Mild and Effective Dehydrating Reagent for Solution and Solid Phase Imine Formation. *Tetrahedron letters*. 1995; 36:2937.
14. Holmes CP, Chinn JP, **Look GC**, Gordon EM, Gallop MA. Strategies for Combinatorial Synthesis: Solution and Polymer-Supported Synthesis of 4-Thiazolidinones and 4-Metathiazolidinones Derived from Amino Acids. *J Org Chem*. 1995; 50:7328.
15. **Look GC**, Holmes CP, Chinn JP. Methods for Combinatorial Synthesis: The Use of Fast ¹³C NMR Analysis for Solid Phase Reaction Monitoring. *J Org Chem*. 1994; 59:7588.
16. Ichikawa Y, **Look GC**, Shen GJ, Sears P, Wang P, Wong CH. Recent Developments in Enzymatic Synthesis of Oligosaccharides and Glycopeptides. *Frontiers in Biomedicine and Biotechnology*. 1993; 1:2.
17. Heerding DA, Hong CY, Kado N, **Look GC**, Overman LE. Simple Method for Controlling Stereoselection in Mannich Cyclization Reactions of Aldehydes. *J Org Chem*. 1993; 58:6948.
18. **Look GC**, Ichikawa Y, Shen GJ, Cheng PW, Wong CH. A Combined Chemical and Enzymatic Strategy for the Construction of Carbohydrate-Containing Antigen Core Units. *J Org Chem*. 1993; 58:4326.
19. **Look GC**, Fotsch CH, Wong CH. Enzyme-Catalyzed Organic Synthesis: Practical Routes to Aza Sugars and their Analogs for Use as Glycoprocessing Inhibitors. *Accounts of Chemical Research*. 1993; 26:182.
20. Ichikawa Y, **Look GC**, Wong CH. Enzyme-catalyzed oligosaccharide synthesis. *Anal Biochem*. 1992 May 1;202(2):215-38. doi: 10.1016/0003-2697(92)90099-s. Review. PubMed PMID: 1519746.
21. **Look GC**, Wong CH. A Facile Enzymatic Synthesis of GalBeta1,3Glucal: A Key Intermediate for the Synthesis of Lea and Sialyl Lea. *Tetrahedron Letters*. 1992; 33:4253.
22. Wong CH, Ichikawa Y, Kajimoto T, Liu KC, Dumas DP, Lin YC, **Look GC**. Chemical-Enzymatic Synthesis of Carbohydrates. *NATO ASI Series, Series C: Mathematical and Physical Sciences*. 1992; 381:35.
23. Ichikawa Y, **Look GC**, Wong CH., Kajimoto, T. Synthesis of oligosaccharides using glycosyltransferases. *Journal of Synthetic Organic Chemistry, Japan*. 1992 May 1;50(5):441-50.
24. Ichikawa, Y; **Look GC**.; Wong, CH Enzymatic Oligosaccharide Synthesis. *Glycotechnology* Ogawa, T.; Nagai, T., eds. 1992, p. 495.
25. Fu H, Kondo H, Ichikawa Y, **Look GC**, Wong CH. Chloroperoxidase-Catalyzed Asymmetric Synthesis: Enantioselective Reactions of Chiral Hydroperoxides with Sulfides and Bromohydroxylation of Glycals. *J Org Chem*. 1992; 57:7265.

26. Wong CH, Krach T, Gautheron-Le Navor C, Ichikawa Y, **Look GC**, Gaeta F, Thompson DD, Nicolaou KC. A New Approach to the Synthesis of Novel Oligosaccharides Based on Glycosyltransferases: .Beta.1,4-Galactosyltransferase. *Tetrahedron letters*. 1991; 32:4867.
27. Wong CH, Ichikawa Y, Krach T, Gautheron-Le Navor C, Dumas DP, **Look GC**. Probing Acceptor Specificity of .Beta.1,4-Galactosyltransferase for the Enzymatic Synthesis of Novel Oligosaccharides. *J Am Chem Soc*. 1991; 113:8137.
28. Fu H, **Look GC**, Zhang W, Jacobsen EN, Wong CH. Mechanistic Study of a Synthetically Useful Monooxygenase Model Using the Hypersensitive Probe Trans-2-Phenyl-1-Vinylcyclopropane. *J Org Chem*. 1991; 56:6497.
29. Blumenkopf TA, **Look GC**, Overman LE. Formation of Delta4-Oxocenes from Lewis Acid Promoted Cyclizations of 5-Hexenyl Acetals. Evidence for a Concerted Ene Cyclization Mechanism. *J Am Chem Soc*. 1990; 112:4399.
30. Blumenkopf TA, Bratz M, Castaneda A, **Look GC**, Overman LE, Rodriguez D, Thompson AS. Preparation of Eight-Membered Cyclic Ethers by Lewis Acid-Promoted Acetal-Alkene Cyclizations. *J Am Chem Soc*. 1990; 112:4386.
31. Waterman KC, Speer DV, Steitwieser Jr A, **Look GC**, Nguyen KO, Stack JG. Pyridinium Carbons: Perpyridinium Derivatives of Cyclopropene and Allyl Anion. *J Org Chem*. 1988; 53:583.
32. Dauben WG, Gerdes JM, **Look GC**. Organic Reactions at High Pressure. The Effect of Pressure Change Upon Reaction Rates of Bimolecular Processes. *Synthesis*. 1986; :532.
33. Dauben WG, Gerdes JM, **Look GC**. Organic Reactions at High Pressure. Conversion of Cyclic Alkanones and Enones to 1,3-Dioxolanes. *J Org Chem*. 1986; 51:4964.

Patents:

1. "Compositions for treating neurodegenerative diseases" Rishton GM, **Look GC**, Catalano SM. U.S. Patent No. 11,214,540. (2022)
2. "Isoindoline compositions and methods for treating neurodegenerative disease" Rishton GM, Catalano SM, **Look GC**. U.S. Patent No. 10,611,728. (2020)
3. "Isoindoline compositions and methods for treating neurodegenerative disease" Rishton G, Catalano SM, **Look GC**. U.S. Patent No. 10,207,991 (2019)
4. "Isoindoline compositions and methods for treating neurodegenerative disease" Rishton G, Catalano SM, **Look GC**. U.S. Patent No. 9,796,672. (2017)
5. "Ubiquitin Ligase Inhibitors" Ramesh, Usha V.; **Look, Gary Charles**; Singh, Rajinder; Issakani, Sarkiz D. U.S. Patent No. 7,915,293 (2011)
6. "Topoisomerase Inhibitors" Murphy, Martin A.; Schullek, John Robert; Ward, John S.; **Look, Gary C.**; Siesel, Brian. U.S. Patent No. 7,683,097 (2010)
7. "Rhodanine compositions for use as antiviral agents" Singh, Rajinder; Ramesh, Usha; Issakani, Sarkiz D.; **Look, Gary Charles** U.S. Patent No. 7,566,732.
8. "Collagenase-1 and stromelysin-1 inhibitors, pharmaceutical compositions comprising same and methods of their use" Campbell, David; **Look, Gary C.**; Szardenings, Anna Katrin; Patel, Dinesh V. U.S. Patent No. 6,271,232.

9. "Inhibitors of metalloproteases pharmaceutical compositions comprising same and methods of their use" Campbell, David; **Look, Gary C.**; Szardenings, Anna Katrin; Patel, Dinesh V. U.S. Patent No. 5,990,112.
10. "Preparation of mercaptomethyl diketopiperazines as collagenase-1 and stromelysin-1 inhibitors" Campbell, David; **Look, Gary C.**; Szardenings, Anna Katrin; Patel, Dinesh V. U.S. Patent No. 5,932,579.
11. "Enzymatic process for producing a galactosyl- β -1,3-glycal disaccharide using β -galactosidase" Wong, Chi Huey; **Look, Gary C.** U.S. Patent No. 5,403,726 (1995)

Posters and Presentations:

1. "Synthesis of tetrahydroquinoline derivatives on solid support using an intramolecular Diels-Alder reaction" Wang, X. M.; Lee, L. L.; Look, G. C.; Murphy, M. M. 221st National American Chemical Society Meeting, San Diego, CA, April 2001. Paper ORGN 83.
2. "Formation of soluble amine libraries via a Mannich / Hofmann elimination strategy" Tam, J. W.; Ward, J. S.; Tran, T. H.; Siesel, B. A.; Look, G. C.; Murphy, M. M. 220th National American Chemical Society Meeting, Washington, D. C., August 2000. Paper ORGN 229.
3. "Studies toward the synthesis of a linked pharmacophore library using S_NAr " Chinn, J. P.; Jose, A. S.; Look, G. C.; Murphy, M. M. 219th National American Chemical Society Meeting, San Francisco, California, March 2000. Paper ORGN 165.
4. "Combinatorial Chemistry: A New Tool for Drug Discovery" Look, G. C. University of California, Irvine, September 1995. (Lecture)
5. "A Facile Method for the Solution Phase and Solid-Supported Formation of Imines" Look, G. C.; Murphy, M. M.; Gallop, M. A. 34th National Organic Symposium, Williamsburg, Virginia, June 1995.
6. "Fast ^{13}C NMR Spectroscopy: A Tool for Combinatorial Organic Synthesis" Murphy, M. M.; Holmes, C. P.; Look, G. C. 2nd Annual Conference on Chemical and Biomolecular Diversity, San Diego, California, December 1994.
7. "Chemo-Enzymatic Approaches to Complex Oligosaccharides" Look, G. C.; Ichikawa, Y.; Wong, C. H. 204th National American Chemical Society Meeting, Washington D.C., August 1992. Paper CARB 109. (Lecture)
8. "Acetal-Initiated Cyclizations: Mechanistic Studies of Eight-Membered Ring Formation" Look, G. C.; Overman, L. E. Pacific Conference on Chemistry and Spectroscopy, Pasadena, California, October 1989. Paper 110. (Lecture)
9. "The Use of High Pressure in Synthetic Organic Chemistry" Look, G. C.; Dauben, W. G. 3rd Annual Joel H. Hildebrand Undergraduate Research Symposium, Berkeley, California, April 1985. (Lecture)
10. "Organometallic Chemistry of Pentakis-1,1,2,3,3-*N,N,N,N,N*-(dimethylaminopyridinium)-allyl tetrachloride" Look, G. C.; Streitwieser, A., Jr. 2nd Annual Joel H. Hildebrand Undergraduate Research Symposium, Berkeley, California, April 1984. (Lecture)