

LIST OF PUBLICATIONS

B. Mario Pinto
Professor, Chemistry
Simon Fraser University

Publications In Refereed Journals

1. Pinto, B.M., D.M. Vyas, W.A. Szarek (1977). Synthetic Routes to Nucleoside Analogs of N-Substituted 1-Oxa-4-azacyclohexanes and 1-Thia-4-azacyclohexanes. Carbon-13 NMR Spectra of Six-membered, Cyclic Amides, *Can. J. Chem.*, 55: 937-948.
2. Grindley, T.B., B.M. Pinto, W.A. Szarek (1977). Effects of Substitution on Nitrogen on Barriers to Rotation of Cyclic Amides. Part I. Investigation of the Rotational Barrier in 4-Benzoyl-1-thia-4-azacyclohex-2-ene by ^1H dnmr Spectroscopy, *Can. J. Chem.*, 55 949-957.
3. Iwakawa, M., B.M. Pinto, W.A. Szarek (1978). Synthetic Routes to Nucleoside Analogs of N-Substituted Thiazolidines, *Can. J. Chem.*, 56: 326-335.
4. Cameron, T.S., R.E. Cordes, B.M. Pinto, W.A. Szarek (1981). Crystal and Molecular Structure of *cis*, *anti*, *cis*-Tricyclo[6.4.0.0^{2,7}]N,N'-dibenzoyl-3,12-diazadodecan-6,9-dione and *cis*, *anti*, *cis*-Tricyclo[6.4.0.0^{2,7}]-N,N'-dibenzoyl-3,9-diazadodecan-6,12-dione. Photodimers of N-Benzoylazacyclohex-2-ene-4-one, *Can. J. Chem.*, 59: 3136-3140.
5. Szarek, W.A., A.H. Haines, B.M. Pinto, T.B. Grindley (1982). A Highly Stereoselective Intramolecular Aldol Condensation. Part I. NMR Spectroscopic Investigation of the Stereochemistry of the Products Derived from the Reaction of 2,2'-O-Methylene-*bis*-D-glycerose with Base, *Can. J. Chem.*, 60: 390-414.
6. Pinto, B.M., S. Wolfe (1982). Energie des Orbitales et Interactions Orbitales: Effet Anomère de la Nojirimycine, *Tetrahedron Lett.*, 23: 3687-3690.
7. Szarek, W.A., B.M. Pinto, T.B. Grindley (1983). A Highly Stereoselective Intramolecular Aldol condensation. Part II. Synthesis of D, L-Hamamelose from 2,2'-O-Methylene-*bis*-D-glycerose. *Can. J. Chem.*, 61: 461-469.
8. Pinto, B.M., D.R. Bundle (1983). Preparation of Glycoconjugates for Use as Artificial Antigens: A Simplified Procedure. *Carbohydr. Res.*, 124: 313-318.
9. Pinto, B.M., W.A. Szarek, T.B. Grindley (1984). Effects of Substitution on Nitrogen on Barriers to Rotation of amides. Part II. Evaluation of the Importance of Resonance Effects. *Org. Mag. Res.*, 22: 676-692.
10. Arzeno, H., D.H.R. Barton, R.-M. Bergé-Lurion, X. Lusinchi, B.M. Pinto (1984). Dearomatisation of β -Naphthol by Oxidative Nucleophilic Substitution and Oxidative Electrophilic Substitution. *J. Chem. Soc. Perkin Trans. I*, 2069-2076.

11. Barton, D.H.R., R.-M. Bergé-Lurion, X. Lusinchi, B.M. Pinto (1984). Dearomatisation of β -Naphthol by Oxidative Nucleophilic Substitution. An Efficient Two-Step Process. *J. Chem. Soc. Perkin Trans. I*, 2077-2080.
12. Bock, K., M. Meldal, D.R. Bundle, T. Iversen, B.M. Pinto, P.J. Garegg, I. Kvanstrom, T. Norberg, A.A. Lindberg, S.B. Svenson (1984). The Conformation of *Salmonella* O-antigenic Polysaccharides of Serogroup A, B and D₁ Inferred from ¹H and ¹³C Nuclear Magnetic Resonance Spectroscopy. *Carbohydr. Res.*, 130: 35-53.
13. Pinto, B.M., D.R. Bundle (1984). Antigenic Determinant of *Salmonella* Serogroup B. Synthesis of a Trisaccharide Glycoside for Use as an Artificial Antigen. *Carbohydr. Res.*, 133: 333-338.
14. Szarek, W.A., B.M. Pinto, M. Iwakawa (1985). Synthesis and Biological Activity of Nucleoside Analogs Involving Modifications in the Carbohydrate Ring. *Can. J. Chem.*, 63: 2149-2161.
15. Szarek, W.A., B.M. Pinto, M. Iwakawa (1985). Nucleoside Analogs Involving Modifications in the Carbohydrate Ring: Nuclear Magnetic Resonance Spectroscopic Studies. *Can. J. Chem.*, 63: 2162-2168.
16. Pinto, B.M., J. Sandoval-Ramirez, R.D. Sharma (1985). The Anomeric Effect in 2-Arylseleno-1,3-Dithianes. *Tetrahedron Lett.*, 26: 5235-5238.
17. Pinto, B.M., T.B. Grindley, W.A. Szarek (1986). Effects of Substitution on Nitrogen on Barriers to Rotation in Amides. Part III. The Effect of the Variation of Ring Size of Cyclic Substituents. *Magnetic Resonance in Chemistry*, 24: 323-331.
18. Pinto, B.M., J. Sandoval-Ramirez, R.D. Sharma (1986). A Convenient Synthesis of 4,4'-Dimethylaminodiphenyl Diselenide and 4,4'-Dinitrodiphenyl Diselenide. *Synth. Commun.*, 16: 553-557.
19. Pinto, B.M., J. Sandoval-Ramirez, R.D. Sharma, A.C. Willis, F.W.B. Einstein (1986). Synthesis and Conformational Analysis of 2-Arylseleno-1,3-Dithianes. Crystal and Molecular Structure of 2-(4-Methoxyphenylseleno)- and 2-(4-Trifluoromethylphenylseleno)-1,3,-Dithiane. *Can. J. Chem.*, 64: 732-738.
20. Pinto, B.M., D.G. Morissette, D.R. Bundle (1987). Synthesis of Oligosaccharides Corresponding to Biological Repeating Units of *Shigella flexneri* Variant Y Polysaccharide: Part I. Overall Strategy, Synthesis of a Key Trisaccharide Intermediate and the Synthesis of a Pentasaccharide. *J. Chem. Soc. Perkin Trans. I*, 9-14.
21. Pinto, B.M., H.B. Schlegel, S. Wolfe (1987). Bond-Angle Variations in X-C-Y Fragments and their Relationship to the Anomeric Effect, *Can. J. Chem.*, 65: 1658-1662.
22. Reimer, K.B., B.M. Pinto (1988). Synthesis of Oligosaccharides Corresponding to the Antigenic Determinants of the β -Hemolytic *Streptococci* Group A. Part I. Overall

- Strategy and the Synthesis of a Linear Trisaccharide, *J. Chem. Soc. Perkin Trans. I*, 2103-2111.
23. Pinto, B.M., R.J. Batchelor, B.D. Johnston, F.W.B. Einstein, I.D. Gay (1988). Evidence for a Selenium Anomeric Effect? An Unusual Conformation of a Selenium Coronand. *J. Am. Chem. Soc.*, 110: 2990-2991.
 24. Pinto, B.M., B.D. Johnston, J. Sandoval-Ramirez, R.D. Sharma (1988). Systematic Evaluation of the Anomeric Effect in 2-Arylseleno-1,3-Dithianes. Evidence for Stabilizing Orbital Interactions, *J. Org. Chem.*, 53: 3766-3771.
 25. Pinto, B.M., R.Y.N. Leung, R.D. Sharma (1988). Restricted Rotation in Sterically Hindered Dichalcogenides. A Dynamic NMR Study. *Magn. Reson. Chem.*, 26: 729-734.
 26. Pinto, B.M., B.D. Johnston, R.J. Batchelor, J.-H. Gu (1988). The Solution Conformation and Pseudorotational Barriers of 1,3,7,9-Tetraselenacyclododecane and its 5,5,11,11-Tetramethyl Derivative. *J. Chem. Soc. Chem. Commun.*, 1087-1989.
 27. Pinto, B.M., B.D. Johnston, R.J. Batchelor, F.W.B. Einstein, I.D. Gay (1988). Selenium Coronands. A Novel Conformational Pair. *Can. J. Chem.*, 66: 2956-2958.
 28. Pinto, B.M., B.D. Johnston, R. Nagelkerke (1988). Solvent and Temperature Dependence of the Anomeric Effect in 2-(4-Methoxyphenylseleno)-1,3-Dithianes. Dominance of the Orbital Interaction Component. *J. Org. Chem.*, 53: 5668-5672.
 29. Pinto, B.M., B.D. Johnston, R. Nagelkerke (1989). The 3rd Row Anomeric Effect. Conformational Analysis of 2-Phenylthio- and 2-Phenylseleno-1,3-Diselenanes. *Heterocycles (Special issue in honour of Professor Sir Derek H.R. Barton's 70th birthday)*, 28: 389-403.
 30. Pinto, B.M., K.B. Reimer, D.G. Morissette, D.R. Bundle (1989). Synthesis of Oligosaccharides Corresponding to Biological Repeating Units of *Shigella flexneri* Variant Y Polysaccharide: Part II. A Hexasaccharide for Use as a Hapten. *J. Org. Chem.*, 54: 2650-2657.
 31. Batchelor, R.J., F.W.B. Einstein, I.D. Gay, J.-H. Gu, B.D. Johnston, B.M. Pinto (1989). Selenium Coronands. Synthesis and Conformational Analysis. *J. Am. Chem. Soc.*, 111: 6582-6591.
 32. Juaristi, E., E.A. Gonzalez, B.M. Pinto, B.D. Johnston, R. Nagelkerke (1989). The Existence of Second Row Anomeric Interactions. Conformational Analysis of 2-Substituted-5-methyl-5-aza-1,3-Dithiacyclohexanes. *J. Am. Chem. Soc.*, 111: 6745-6749.
 33. Pinto, B.M., B.D. Johnston, R. Nagelkerke, E. Juaristi, E.A. Gonzalez (1989). A DNMR Study of the Nitrogen Lone Pair Orientation in 2-Benzoyl-5-methyl-5-aza-1,3-dithiacyclohexane. *Can. J. Chem.*, 67: 2067-2070.
 34. Pinto, B.M., K.B. Reimer, D.G. Morissette, D.R. Bundle (1990). Oligosaccharides Corresponding to Biological Repeating Units of *Shigella flexneri* Variant Y

- Polysaccharide. Part 3. Synthesis and 2D NMR Analysis of A Heptasaccharide Hapten. *J. Chem. Soc. Perkin Trans. I*, 293-299.
35. Pinto, B.M., K.B. Reimer, D.G. Morissette, D.R. Bundle (1990). Synthesis and 2D NMR Analysis of a Pentasaccharide Glycoside of the Biological Repeating Units of *Shigella flexneri* Variant Y Polysaccharide and the Preparation of a Synthetic Antigen. *Carbohydr. Res.*, 196: 156-166.
 36. Pinto, B.M., M.M.W. Buiting, K.B. Reimer (1990). Use of the SEM Protecting Group in Carbohydrate Chemistry. Fully Functionalized Rhamnose Acceptors and Donors for use in Oligosaccharide Synthesis. *J. Org. Chem.*, 55: 2177-2181.
 37. Batchelor, R.J., F.W.B. Einstein, I.D. Gay, J.-H. Gu, B.M. Pinto, X.M. Zhou (1990). Electron Transfer Reaction of a Selenium Coronand-Copper (II) Complex. Formation of the Stable 1,5,9,13-Tetraselenacyclohexadecane Dication. *J. Am. Chem. Soc.*, 112: 3706-3707.
 38. Andrews, J.S., B.M. Pinto (1990). Oligosaccharides Corresponding to the Antigenic Determinants of the β -Hemolytic *Streptococci* Group A. Part 2. Synthesis and 2D NMR Analysis of a Branched Tetrasaccharide Hapten. *J. Chem. Soc. Perkin Trans. I*, 1785-1792.
 39. Wolfe, S., B.M. Pinto, V. Varma, R.Y.N. Leung (1990). The Perlin Effect: Bond Lengths, Bond Strengths and the Origins of Stereoelectronic Effects Upon One-Bond C-H Coupling Constants. *Can. J. Chem.*, 68: 1051-1062.
 40. Pinto, B.M., K.B. Reimer, A. Tixidre (1991). Synthesis and NMR Analysis of Branched Trisaccharide and Pentasaccharide Haptens of the β -Hemolytic *Streptococci* Group A. and the Preparation of Synthetic Antigens. *Carbohydr. Res.*, 210: 199-219.
 41. Batchelor, R.J., F.W.B. Einstein, I.D. Gay, J.-H. Gu, B.M. Pinto (1991). Synthesis, Solid State ^{77}Se NMR Characterization and Crystal and Molecular Structures of the Adducts of the Selenium Coronand, 1,5,9,13-Tetraselenacyclohexadecane, with Copper (I) Trifluoromethanesulfonate and Mercury (II) Cyanide. *J. Organomet. Chem.*, 411: 147-157.
 42. Mehta, S., B.M. Pinto (1991). Phenylselenoglycosides as Novel, Versatile Glycosyl Donors. Selective Activation over Thioglycosides. *Tetrahedron Letters*, 32:4435-4438.
 43. Reimer, K.B., S.L. Harris, B.M. Pinto, V. Varma (1992). Convergent Synthesis of Higher-Order Oligosaccharides Corresponding to the Cell-Wall Polysaccharide of the β -Hemolytic *Streptococci* Group A. A Branched Hexasaccharide Hapten. *Carbohydr. Res.*, 228: 399-414.
 44. Reimer, K.B., M.A.J. Gidney, D.R. Bundle, B.M. Pinto (1992). Immunochemical Characterization of Polyclonal and Monoclonal *Streptococcus* Group A Antibodies by Chemically Defined Glycoconjugates and Synthetic Oligosaccharides. *Carbohydr. Res.*, 232: 131-142.

45. Mehta, S., B.M. Pinto (1992). Unprecedented Chemical Glycosidation of 5-Thioglucose to Give Disaccharides. *Tetrahedron Lett.*, 33: 7675-7678.
46. Pinto, B.M. (1993). Synthesis and Immunochemistry of Carbohydrate Antigens of the β -Hemolytic *Streptococcus* Group A. *Amer. Chem. Soc. Symp. Ser. 519 on Carbohydrate Antigens*, P.J. Garegg and A.A. Lindberg, Eds., American Chemical Society, Washington, pp 111-131.
47. Mehta, S., B.M. Pinto (1993). Novel Glycosidation Methodology. The Use of Phenylselenoglycosides as Glycosyl Donors and Acceptors in Oligosaccharide Synthesis. *J. Org. Chem.*, 58: 3269-3276.
48. Vyas, M.N., N.K. Vyas, P.J. Meikle, B. Sinnott, B.M. Pinto, D.R. Bundle, F.A. Quijoch (1993). Preliminary Crystallographic Analysis of a Fab Specific for the O-antigen of *Shigella flexneri* Y Cell Surface Lipopolysaccharide With and Without Bound Saccharides. *J. Mol. Biol.*, 231: 133-136.
49. Pinto, B.M., Leung, R.Y.N. (1993). The X-C-Z Anomeric Effect and Y-C-C-Z Gauche Effect (X,Y=O,S, CH₂; Z=O,N). Evaluation of the Orbital Interaction, Electrostatic, and Steric Components. *Amer. Chem. Soc. Symp. Ser. 539 on the Anomeric Effect*, G. Thatcher, Ed. American Chemical Society, Washington, pp 126-155.
50. Marino-Albernas, J.-R., S.L. Harris, V. Varma, B.M. Pinto (1993). Convergent Synthesis of an Elusive Hexasaccharide Corresponding to the Cell-Wall Polysaccharide of the β -Hemolytic *Streptococcus* Group A. *Carbohydr. Res.*, 245: 245-257.
51. Pinto, B.M., S.D. Kahn, J. Korppi-Tommola, R.Y.N. Leung (1994). The Existence of Second, Third, and Fourth Row Anomeric Interactions. An *Ab Initio* Study of HSCH₂SH, HSeCH₂SeH, HSCH₂SeH, HTeCH₂TeH, HSCH₂TeH, and HSeCH₂TeH. *J. Mol. Struct. Theochem*, 303: 163-176.
52. Mehta, S., J.S. Andrews, B.D. Johnston, B.M. Pinto (1994). Novel Heteroanalogues of Methyl Maltoside Containing Sulfur and Selenium as Potential Glycosidase Inhibitors. *J. Am. Chem. Soc.*, 116: 1569-1570.
53. Brodovitch, J.-C., F. Ji, P.W. Percival, A.L. Bischoff, B.M. Pinto, B. Addison-Jones, S. Wlodek (1994). Conformational Studies of Thiyl and Selenenyl Radicals. *Hyperfine Interactions*, 87: 839-845.
54. Mehta, S., K.L. Jordan, U.C. Kreis, T. Weimar, R.J. Batchelor, F.W.B. Einstein, B.M. Pinto (1994). Synthesis of Sulfur Analogues of Methyl and Allyl Kojibiosides and Methyl Isomaltoside and Conformational Analysis of the Kojibiosides. *Tetrahedron Asymmetry*, 5: 2367-2396.
55. Kreis, U.C., V. Varma, B.M. Pinto (1995). Application of 2D NMR Spectroscopy and Molecular Dynamics Simulations to the Conformational Analysis of Oligosaccharides

Corresponding to the Cell-Wall Polysaccharide of *Streptococcus* Group A. *Internat. J. Biol. Macromol.*, 17: 117-130.

56. Andrews, J.S., B.M. Pinto (1995). Synthesis of a Thio Analogue of n-Propyl Kojibioside, a Potential Glucosidase Inhibitor. *Carbohydr. Res.*, 270: 51-62.
57. Cordova-Reyes, I., E. VandenHoven, A. Mohammed, B.M. Pinto (1995). Stepwise Synthesis of Selenium Coronands Containing an Odd Number of Selenium Atoms: 1,5,9-Triselenacyclododecane and 1,5,9,13,17-Pentaselenacycloeicosane. *Can. J. Chem.*, 73: 113-116.
58. Stuike-Prill, R., B.M. Pinto. (1995) Conformational Analysis of Oligosaccharides Corresponding to the Cell-Wall Polysaccharide of *Streptococcus* Group A by Metropolis Monte Carlo Simulations. *Carbohydr. Res.*, 279: 59-73.
59. Mehta, S., J.S. Andrews, B.D. Johnston, K.B. Svensson, B.M. Pinto. (1995) Synthesis and Enzymatic Activity of Novel Glycosidase Inhibitors Containing Sulfur and Selenium. *J. Am. Chem. Soc.*, 117: 9783-9790.
60. Weimar, T., S.L. Harris, J.B. Pitner, K. Bock, B.M. Pinto (1995). Transferred NOE Experiments Show that the Monoclonal Antibody Strep 9 Selects a Local-Minimum Conformation of a *Streptococcus* Group A Trisaccharide Hapten. *Biochemistry*, 34: 13672-13681.
61. Andrews, J.S., T. Weimar, T.P. Frandsen, K.B. Svensson, B.M. Pinto (1995). Novel Disaccharides Containing Sulfur in the Ring and Nitrogen in the Interglycosidic Linkage. Conformation of Methyl 5'-Thio-4-N-maltoside Bound to Glucoamylase and its Activity as a Competitive Inhibitor. *J. Am. Chem. Soc.*, 117: 10799-10804.
62. Weimar, T., B.M. Pinto (1995). The Antibody-bound Conformation of a *Streptococcus* Group A Antigen as Probed by Transferred-NOE Experiments. *J. Molec. Modeling.* 1: 80.
63. Batchelor, R.J., F.W.B. Einstein, I.D. Gay, J. Gu, B.M. Pinto, X. Zhou, (1996). Stereochemical Analysis of Palladium(II) Complexes of the Selenium Coronands, 1,5,9,13-Tetraselenacyclohexadecane and 1,5,9,13,17,21-Hexaselenacyclotetracosane. *Inorg. Chem.*, 35: 3667-3674.
64. Cordova-Reyes, I., H. Hu, J.-H. Gu, E. VandenHoven, A. Mohammed, S. Holdcroft, B.M. Pinto. (1996) Synthesis and Characterization of Polymer-bound Selenium Coronands: Enhancing the Stability of Reactive Dications by Restricting Intermolecular Interactions. *Can. J. Chem.*, 74: 533-543.
65. Diaz-Quijada, G.A., B. M. Pinto, S. Holdcroft (1996). Regiochemical Analysis of Water Soluble Conductive Polymers; Sodium Poly (ω -3-Thienyl) Alkanesulfonates. *Macromolecules*, 29: 5416-5421.
66. Auzanneau, F.-I., F. Forooghian, B.M. Pinto (1996). Efficient, Convergent Synthesis of Oligosaccharide Allyl Glycosides Corresponding to the *Streptococcus* Group A Cell-wall Polysaccharide. *Carbohydr. Res.*, 291: 21-41.

67. Auzanneau, F.-I., B.M. Pinto (1996). Preparation of Antigens and Immunoabsorbents Corresponding to the *Streptococcus* Group A Cell-wall Polysaccharide. *Bioorg. Med. Chem.*, 4: 2003-2010.
68. Peters, T., B.M. Pinto (1996). Structure and Dynamics of Oligosaccharides. NMR and Modeling Studies. *Curr. Opin. Struct. Biol.*, 6: 710-720.
69. Kreis, U.C., V. Varma, B.M. Pinto (1997). Oligosaccharides Corresponding to Biological Repeating Units of *Shigella flexneri* Variant Y Polysaccharide: Part 5. Conformational Analysis of a Heptasaccharide Hapten Utilizing a Combined Molecular Dynamics and NMR Spectroscopic Protocol. *J. Mol. Struct. (Theochem)*, 395-396: 389-409.
70. Harris, S.L., L. Craig, J.S. Mehroke, M. Rashed, M.B. Zwick, K. Kenar, E.J. Toone, N. Greenspan, F.-I. Auzanneau, J.-R. Marino-Albernas, B.M. Pinto, J.K. Scott (1997). Exploring the Basis of Peptide: Carbohydrate Cross-Reactivity: Evidence for Discrimination by Peptides Between Closely Related anti-Carbohydrate Antibodies. *Proc. Natl. Acad. Sci.*, 94: 2454-2459.
71. Andrews, J.S., B.D. Johnston, B.M. Pinto. (1998) Synthesis of a Dithio Analogue of *n*-Propyl Kojibioside as a Potential Glucosidase I Inhibitor. *Carbohydr. Res.*, 310: 27-33.
72. Wu, X., J.R. Marino-Albernas, F.-I. Auzanneau, V. Verez-Bencomo, B.M. Pinto. (1998) Synthesis and NMR Analysis of ¹³C-labeled Oligosaccharides Corresponding to the Major Glycolipid from *Mycobacterium leprae*. *Carbohydr. Res.*, 306: 493-503.
73. Johnston, B.D., B.M. Pinto. (1998) Synthesis of Heteroanalogues of Disaccharides as Potential Inhibitors of the Processing Mannosidase Class I Enzymes. *Carbohydr. Res.*, 310: 17-25.
74. Johnston, B.D., B.M. Pinto. (1998) Synthesis of 1,2- and 1,3-*N*-linked Disaccharides of 5-Thio- α -D-Mannopyranose as Potential Inhibitors of the Processing Mannosidase Class I and Mannosidase II Enzymes. *J. Org. Chem.*, 63: 5797-5800.
75. Mehta, S., B.M. Pinto. (1998) Tris (4-bromophenyl) aminium Hexachloroantimonate-Mediated Glycosylations of Selenoglycosides and Thioglycosides. Evidence for Single Electron Transfer. *Carbohydr. Res.*, 310: 43-51.
76. Auzanneau, F.-I., M.K. Christensen, S.L. Harris, M. Meldal, B.M. Pinto. (1998) Synthesis and Characterization of Polyethylene Glycol Polyacrylamide Copolymer (PEGA) Resins Containing Carbohydrate Ligands. Evaluation as Supports for Affinity Chromatography. *Can. J. Chem.*, 76: 1109-1118.
77. Woranovicz, S.M., B.M. Pinto, P.A.J. Gorin, M. Iacomini. (1999) Novel Structures in Galactoglucomannans of the Lichens *Cladonia substellata* and *Cladonia ibitipocae*: Significance as Chemotypes. *Phytochemistry*, 51: 395-402.

78. Johnston, B.D. and B.M. Pinto (1999) Use of a Phenyl 1-selenogalactofuranoside as a Glycosyl Donor for the Synthesis of Galactofuranosyl - containing Disaccharides. *Carbohydr. Res.*, 315: 356-360.
79. Weimar, T., U.C. Kreis, J.S. Andrews, B.M. Pinto. (1999) Conformational Analysis of Maltoside Heteroanalogues Using High Quality NOE Data and Molecular Mechanics Calculations. Flexibility as a Function of the Interglycosidic Chalcogen Atom. *Carbohydr. Res.*, 315: 222-233.
80. Randell, K.D., T.P. Frandsen, B. Stoffer, B. Svensson, and B.M. Pinto. (1999) Synthesis and Glycosidase Inhibitory Activity of 5-Thioglucofuranosylamines. Molecular Modeling of Complexes with Glucoamylase. *Carbohydr. Res.*, 321: 143-156.
81. Randell, K.D., B.D. Johnston, E.E. Lee, B.M. Pinto. (2000) Synthesis of Oligosaccharide Fragments of the Glycosylinositolphospholipid of *Trypanosoma Cruzi*: A New Selenoglycoside Glycosyl Donor for the Preparation of 4-Thiogalactofuranosyl Analogues. *Tetrahedron: Asymmetry (Special Carbohydrates Issue)*, 11: 207-222.
82. Pitner, J.B., W.F. Beyer, S.L. Harris, J.R. Marino-Albernas, F.-I. Auzanneau, F. Forooghian, T. Venetta, C. Nycz, M.J. Mitchell, B.M. Pinto. (2000) Bivalency and Epitope Specificity of a High Affinity IgG₃ Monoclonal Antibody to the *Streptococcus* Group A Carbohydrate Antigen and Molecular Modeling of a Fv-heptasaccharide Complex. *Carbohydr. Res.*, 324: 17-29.
83. Weimar, T., B. Stoffer, B. Svensson, B.M. Pinto. (2000) Complexes of Glucoamylase with Maltoside Heteroanalogues. Bound Ligand Conformations by use of Transferred NOE NMR Measurements and Molecular Modeling. *Biochemistry*, 39: 300-306.
84. Randell, K.D., B.D. Johnston, D.F. Green, B.M. Pinto. (2000) Is There a Generalized Reverse Anomeric Effect? Substituent and Solvent Effects on the Configurational Equilibria of Neutral and Protonated *N*-(Aryl) Glucofuranosylamines and *N*-(Aryl) 5-Thioglucofuranosylamines. *J. Org. Chem.*, 65: 220-226.
85. Randell, K.D., B.D. Johnston, P. N. Brown, B.M. Pinto. (2000) Synthesis of Galactofuranosyl-Containing Oligosaccharides Corresponding to the Glycosylinositolphospholipid of *Trypanosoma cruzi*. *Carbohydr. Res.*, 325: 253-264.
86. Weimar, T., B.O. Petersen, B. Svensson, B.M. Pinto. (2000) Determination of the Solution Conformation of D-*gluco*-Dihydroacarbose, a High Affinity Inhibitor, Bound to Glucoamylase by Transferred NOE NMR Spectroscopy. *Carbohydr. Res.*, 326: 50-55.
87. Randell, K.D., B.D. Johnston, B.M. Pinto. (2000) Novel 4-Thiogalactofuranosyl-Containing Disaccharides with Nitrogen in the Interglycosidic Linkage. *Carbohydr. Res.*, 326: 145-150.
88. Batchelor, R.J., F.W.B Einstein, I.D. Gay, J-H. Gu, B.M. Pinto, X-M. Zhou. (2000) Redox Chemistry of the Selenium Coronand, 1,5,9,13-Tetraselenacyclohexadecane and a Mechanistic Study of the Electron Transfer Reaction of its Cu(II) Complex. *Can. J. Chem.*, 78: 598-613.

89. Batchelor, R.J., F.W.B Einstein, I.D. Gay, J-H. Gu, S. Mehta, B.M. Pinto, X-M. Zhou. (2000) Synthesis, Characterization, and Redox Behavior of New Selenium Coronands and Cu(I) and Cu(II) Complexes of Selenium Coronands. *Inorg. Chem.*, 39: 2558-2571.
90. Johnston, B.D., B.M. Pinto. (2000). Synthesis of Thio-linked Disaccharides by 1→2 Intramolecular Thioglycosyl Migration: Oxacarbenium Versus Episulfonium - Ion Intermediates. *J. Org. Chem.*, 65: 4607-4617.
91. Svansson, L., B.D. Johnston, J.-H. Gu, B. Patrick, B.M. Pinto. (2000). Synthesis and Conformational Analysis of a Sulfonium-Ion Analogue of the Glycosidase Inhibitor Castanospermine. *J. Am. Chem. Soc.*, 122: 10769-10775.
92. McLeod, R.G., B.D. Johnston, B.M. Pinto. (2000). A Generalized Exo-anomeric Effect. Substituent and Solvent Effects on the Conformational Equilibria of 2-(Arylseleno)cyclohexanones. *Israel J. Chem.* (Special issue to honour the award of the 1999 Wolf Prize to R.U. Lemieux), 40: 307-316.
93. Batchelor, R.J., D.F. Green, B.D. Johnston, B.O. Patrick, B.M. Pinto. (2001). Conformational Preferences in Glycosylamines. Implications for the Exo-anomeric Effect. *Carbohydr. Res.*, 330: 421-426.
94. Ghavami, A., B.D. Johnston, B.M. Pinto (2001). A New Class of Glycosidase Inhibitor: Synthesis of Salacinol and its Stereoisomers. *J. Org. Chem.*, 66: 2312-2317.
95. Ghavami, A., B.D. Johnston, M.T. Jensen, B. Svensson, B.M. Pinto (2001). Synthesis of the Nitrogen Analogues of Salacinol and their Evaluation as Glycosidase Inhibitors. *J. Am. Chem. Soc.*, 123: 6268-6271.
96. Johnston, B.D., D. Indurugalla, B.M. Pinto, A.J. Bennet (2001). The 5-Thioglucopyranosyl Carbenium Ion is a Solvent-Equilibrated Cation. *J. Am. Chem. Soc.*, 123: 12698-12699.
97. Diaz-Quijada, G.A., N. Weinberg, S. Holdcroft, B.M. Pinto (2002). Investigation of Barriers to Conformational Interchange in Oligothiophenes and Oligo(Thienyl)Furans. *J. Phys. Chem. A.*, 106: 1266-1276.
98. Diaz-Quijada, G.A., N. Weinberg, S. Holdcroft, B.M. Pinto (2002). Conformational Analysis of Oligothiophenes and Oligo(Thienyl)Furans by use of a Combined Molecular Dynamics/NMR Spectroscopic Protocol. *J. Phys. Chem. A.*, 106: 1277-1285.
99. Johnson, M.A., A. Rotondo, B.M. Pinto (2002). NMR Studies of the Antibody-bound Conformation of a Carbohydrate-mimetic Peptide. *Biochemistry*, 41: 2149-2157.
100. Johnson, M.A., B.M. Pinto (2002). Molecular Mimicry of Carbohydrates by Peptides. *Aust. J. Chem.* (Special issue for the XXIst Int. Carbohydr. Symp.), 55: 13-25.

101. Johnston, B.D., A. Ghavami, M.T. Jensen, B. Svensson, B.M. Pinto (2002). Synthesis of Selenium Analogues of the Naturally-Occurring Glycosidase Inhibitor Salacinol and their Evaluation as Glycosidase Inhibitors. *J. Am. Chem. Soc.*, 124: 8245-8250.
102. Ghavami, A., B.D. Johnston, M.D. Maddess, S.M. Chinapoo, M.T. Jensen, B. Svensson, B.M. Pinto (2002). Synthesis of 1,4-Anhydro-D-Xylitol Heteroanalogues of the Naturally-Occurring Glycosidase Inhibitor Salacinol and Their Evaluation as Glycosidase Inhibitors. *Can. J. Chem. (Special issue in memory of R.U. Lemieux)*, 80: 937-942.
103. Höög, C., A. Rotondo, B.D. Johnston, B.M. Pinto (2002). Synthesis and Conformational Analysis of a Pentasaccharide Corresponding to the Cell-Wall Polysaccharide of the Group A *Streptococcus*. *Carbohydr. Res. (Special issue in honour of Derek Horton)*, 337: 2023-2036.
104. Vyas, N.K., M.N. Vyas, M.C. Chervenak, M.A. Johnson, B.M. Pinto, D.R. Bundle, F.A. Quiocho (2002). Molecular Recognition of Oligosaccharide Epitopes by a Monoclonal Fab Specific for *Shigella flexneri* Y Lipopolysaccharide: X-Ray Crystal Structures and Thermodynamics. *Biochemistry*, 41: 13575-13586.
105. Johnson, M.A., B.M. Pinto (2002). Saturation Transfer Difference 1D-TOCSY Experiments to Map the Topography of Oligosaccharides Recognized by a Monoclonal Antibody Directed Against the Cell-Wall Polysaccharide of Group A *Streptococcus*. *J. Am. Chem. Soc.*, 124: 15368-15374.
106. Johnson, M.A., A.A. Eniade, B.M. Pinto (2003). Rational Design and Synthesis of Peptide Ligands for an Anti-Carbohydrate Antibody and Their Immunochemical Characterization. *Bioorg. Med. Chem.*, 11: 781-788.
107. Johnson, M.A., C. Höög, B.M. Pinto (2003). A Novel Modeling Protocol for Protein Receptors Guided by Bound-Ligand Conformation. *Biochemistry*, 42: 1842-1853.
108. Johnson, M.A., M.T. Jensen, B. Svensson, B.M. Pinto (2003). Selection of a High-Energy, Bioactive Conformation of a Sulfonium-Ion Glycosidase Inhibitor by the Enzyme Glucoamylase G2. *J. Am. Chem. Soc.*, 125: 5663-5670.
109. Sadalapure, K., A. Ghavami, B.D. Johnston, M. Lobera, B.B. Snider, B.M. Pinto (2003). Improved Syntheses of the Naturally Occurring Glycosidase Inhibitor Salacinol. *Synlett. (Special issue in memory of R.U. Lemieux)*, 1259-1262.
110. Johnson, M.A., M. Jaseja, W. Zou, H.J. Jennings, V. Copié, B.M. Pinto, S.H. Pincus (2003). NMR Studies of Carbohydrates and Carbohydrate-mimetic Peptides Recognized by an Anti-Group B *Streptococcus* Antibody. *J. Biol. Chem.*, 278: 24740-24752.
111. Vyas, N.K., M.N. Vyas, M.C. Chervenak, D.R. Bundle, B.M. Pinto, F.A. Quiocho (2003). Structural Basis of the Nature of Peptide-Carbohydrate Mimicry in Antibody Binding Sites. *Proc. Natl. Acad. Sci.*, 100: 15023-15028.

112. Johnson, M.A., B.M. Pinto (2004). Saturation-transfer Difference NMR Studies for the Epitope Mapping of a Carbohydrate-mimetic Peptide Recognized by an Anti-carbohydrate Antibody. *Bioorg. Med. Chem.*, 12: 295-300.
113. Ghavami, A, J.J. Chen, B.M. Pinto (2004). Synthesis of a Novel Class of Sulfonium Ions as Potential Inhibitors of UDP-Galactopyranose Mutase. *Carbohydr. Res.*, 339: 401-407.
114. Johnson, M. A., B.M. Pinto (2004). NMR Spectroscopic and Molecular Modeling Studies of Protein-Carbohydrate and Protein-Peptide Interactions. *Carbohydr. Res. (Special Issue on Molecular Modeling)*, 339: 907-928. *Top 50 Most Cited Paper Award: 2004–2007 (Elsevier)*.
115. Hossany, R.B., M.A. Johnson, B.M. Pinto (2004). Synthesis and Immunochemical Characterization of Carbohydrate-Mimetic Peptide Based Vaccines. *Bioorg. Med. Chem.* 12: 3743-3754.
116. Veerapen, N., Y. Yuan, D. A. R. Sanders, B.M. Pinto (2004). Synthesis of Novel Ammonium and Selenonium Ions and their Evaluation Inhibitors of UDP-Galactopyranose Mutase. *Carbohydr. Res.* 339: 2205-2217.
117. Szczepina, M.G., B.D. Johnston, Y. Yuan, B. Svensson, B.M. Pinto (2004). Synthesis of Alkylated Deoxynojirimycin and 1,5-Dideoxy-1,5-iminoxylitol Analogues: Polar Side-chain Modification, Sulfonium and Selenonium Heteroatom Variants, Conformational Analysis and Evaluation as Glycosidase Inhibitors *J. Am. Chem. Soc.* 126: 12458-12469.
118. Li, Y.; C.R. Scott, N.A. Chamoles, A. Ghavami, B.M. Pinto, T. Frantisek, M.H. Gelb (2004). Direct Multiplex Assay of Lysosomal Enzymes in Dried Blood Spots for Newborn Screening. *Clin. Chem.* 50: 1785-1796.
119. Liu, H., B.M. Pinto (2005). Improved Synthesis of the Selenium Analogue of the Naturally Occurring Glycosidase Inhibitor Salacinol. *J. Org. Chem.* 70: 753-755.
120. Kuntz, D.A., A. Ghavami, B.D. Johnston, B.M. Pinto, D. R. Rose (2005). Crystallographic Analysis of the Interactions of *Drosophila melanogaster* Golgi Mannosidase II with the Naturally Occurring Glycomimetic Salacinol and its Analogues. *Tetrahedron: Asymmetry. (Special Issue on Carbohydrates)*, 16: 25-32. *"Tetrahedron: Asymmetry Most Cited Paper 2004 - 2007 Award" (Elsevier)*.
121. Kavlekar, L.M.; D.A. Kunz, W. Xin, B.D. Johnston, B. Svensson, D.R. Rose, B.M. Pinto (2005). 5-Thio-D-glycopyranosylamines and their Amidinium Salts as Potential Transition-State Mimics of Glycosyl Hydrolases: Synthesis, Enzyme Inhibitory Activities, X-ray Crystallography, and Molecular Modeling. *Tetrahedron: Asymmetry.* 16: 1035-1046.
122. Wen, X., Y. Yuan, D.A. Kuntz, D.R. Rose, B.M. Pinto (2005). A Combined STD-NMR/Molecular Modeling Protocol for Predicting the Binding Modes of the Glycosidase Inhibitors Kifunensine and Salacinol to Golgi α -Mannosidase II. *Biochemistry* 44: 6729-6737.

123. Chakka, N., B.D. Johnston, B.M. Pinto (2005). Synthesis and Conformational Analysis of Disaccharide Analogues Containing Disulfide and Selenosulfide Functionalities in the Interglycosidic Linkage. *Can. J. Chem.* 83: 929-936.
124. Michon, F., S.L. Moore, J. Kim, M.S. Blake, F. -I. Auzanneau, B.D. Johnston, M.A. Johnson, B.M. Pinto (2005). The Doubly-Branched Hexasaccharide Epitope on the Cell-Wall Polysaccharide of Group A *Streptococcus*. Recognized by Human and Rabbit Antisera. *Infect. Immun.* 73: 6383-6389.
125. Yuan, Y., X. Wen, D.A. R. Sanders, B. M. Pinto (2005). Exploring the Mechanism of Binding of UDP-galactopyranose to UDP-galactopyranose Mutase by STD- NMR Spectroscopy and Molecular Modeling. *Biochemistry* 44: 14080 -14089.
126. Kumar, N.S., B.M. Pinto (2005). Total Synthesis of D-Lyxitol and D-Ribitol Analogues of the Naturally Occurring Glycosidase Inhibitor Salacinol. *Carbohydr. Res.* 340: 2612-2619. (Top 50 most cited article from *Carbohydrate Research*, as published 2005-08.)
127. Veerapen, N., S.A. Taylor, C.J. Walsby, B.M. Pinto (2006). A Mild Pummerer-like Reaction of Carbohydrate-based Selenoethers and Thioethers Involving Linear Ozonide Acetates as Putative Intermediates *J. Am. Chem.Soc.* 128: 227-239.
128. Kumar, N.S., B.M. Pinto (2006). Synthesis and Conformational Analysis of Bicyclic Sulfonium Ions Related to the Glycosidase Inhibitor, Australine. *J. Org. Chem.* 71: 2935-2943. *Cover Issue*.
129. Watts, J.K., K. Sadalapure, N. Choubdar, A.S. Wahba, B.M. Pinto, M.J. Damha (2006). Synthesis and Conformational Analysis of 2'-Fluoro-4'-thio-5-methylarabinouridine (4'S-FMAU). *J. Org. Chem.* 71: 921-925.
130. Rossi, E.J., D.A. Kuntz, L. Sim, D. Hahn, B.D. Johnston, A.Ghavami, M.G. Szczepina, N.S. Kumar, E. E. Sterchi, B.L. Nichols, B. M. Pinto, D.R. Rose (2006). Inhibition of Recombinant Human Maltase Glucoamylase by Salacinol and Derivatives: Implications for the Treatment of Type II Diabetes. *FEBS Journal.* 273: 2673-2683.
131. Liu, H., B.M. Pinto (2006). Synthesis of Zwitterionic Selenonium and Sulfonium Sulfates from D-Mannose as Potential Glycosidase Inhibitors. *Can. J. Chem. (Special Issue for W.A. Szarek)*. 84: 497-505.
132. Trapp, M., J.K. Watts, N. Weinberg, B.M. Pinto (2006). Component Analysis of the X-C-Y Anomeric Effect (X = O, S; Y = F, OMe, NHMe) by DFT Molecular Orbital Calculations and Natural Bond Order Analysis. *Can. J. Chem. (Special Issue for W.A. Szarek)*. 84: 692-701.
133. Trapp, M., J. F. Wojcick, W.W. Zajac, Jr., B.M. Pinto (2006). DFT Molecular Orbital Calculations of the Configurational and Conformational Preferences of 2-Phenylsulfinylcyclohexanones: Evidence for "Exo-Anomeric" Interactions. *Can. J. Chem. (Special Issue for W.A. Szarek)*. 84: 685-691.

134. Johnston, B.D., H.H. Jensen, B.M. Pinto (2006). Synthesis of Sulfonium Sulfate Analogues of Disaccharides and Their Conversion to Chain-extended Homologues of the Naturally Occurring Glycosidase Inhibitor Salacinol. Potential Glycosidase Inhibitors. *J. Org. Chem.* 71: 1111-1118.
135. Borrelli, S., R. B. Hossany, S. Findlay, B.M. Pinto (2006). Immunological Evidence for Peptide-Carbohydrate Mimicry with a Group A *Streptococcus* polysaccharide-mimetic peptide. *Am. J. Immunol.* 2: 73-83.
136. Kumar, N.S., B.M. Pinto (2006). Synthesis of a Sulfonium-Ion Analogue of the Glycosidase Inhibitor, Swainsonine. *J. Org. Chem.* 71: 1262-1264.
137. Liu, H, B.M. Pinto (2006). Design and Synthesis of Selenonium and Sulfonium Ion Analogues of the Naturally-occurring Glucosidase Inhibitor Salacinol. *Can. J. Chem.* (Special Issue for A. Bader). 84: 1351-1362.
138. Liu, H., L. Sim, D.R. Rose, B.M. Pinto (2006). A New Class of Glucosidase Inhibitor: Analogues of the Naturally Occurring Glucosidase Inhibitor Salacinol with Different Ring Heteroatom Substituents and Acyclic Chain Extension. *J. Org. Chem.* 71: 3007-3013.
139. Choubdar, N., B.M. Pinto (2006). Attempted Synthesis of 2-Acetamido and 2-Amino Derivatives of Salacinol. Ring Opening Reactions. *J. Org. Chem.* 71: 4671-4674.
140. Chen, W., D. A. Kuntz, T. Hamlet, L. Sim, D. R. Rose, B. M. Pinto (2006). Synthesis, Enzymatic Activity, and X-ray Crystallography of a Novel Class of Amino Acids: Nitrogen Analogues of Salacinol Containing a Carboxylate Inner Salt. *Bioorg. Med. Chem.* 14 : 8332-8340.
141. Kumar, N.S., B. M. Pinto (2006). Synthesis of Thioswainsonine as a Potential Glycosidase Inhibitor. *Carbohydr. Res.* 341: 1685 -1691.
142. Nasi, R., B. M. Pinto (2006). Synthesis of New Analogues of Salacinol Containing a Pendant Hydroxymethyl Group as Potential Glycosidase Inhibitors. *Carbohydr. Res.* 341: 2305-2311.
143. Gu, G., H. Liu, B. M. Pinto (2006). Facile Synthesis of Sulfonium Ion Derivatives of 1,5-Anhydro-5-thio-L-fucitol as Potential Fucosidase Inhibitors. *Carbohydr. Res.* 341: 2478-2486.
144. Borrelli, S., M.A. Johnson, R. Hossany, B.M. Pinto (2007). Peptide Mimics of Bacterial Polysaccharides: Potential for Discriminating Vaccines. *Amer. Chem. Soc. Symp. Ser.* 989 on Carbohydrate Vaccines. R. Roy, Ed., American Chemical Society, Washington. p 335.
145. Nasi, R., L. Sim, D.R. Rose, B.M. Pinto (2007). New Chain-extended Analogues of Salacinol and Blintol and their Glycosidase Inhibitory Activities. Mapping the Active Site Requirements of Human Maltase Glucoamylase. *J. Org. Chem.* 72: 806-812. (*One of the most cited articles in 2007 in J. Org. Chem.*)

146. Watts, J.K., N. Choubdar, K. Sadalapure, F. Robert, A.S. Wahba, J. Pelletier, B.M. Pinto, M. J. Damha (2007). 2'-Fluoro-4'-thioarabino-modified Oligonucleotides: Conformational Switches Linked to siRNA Activity. *Nucleic. Acids Res.* 35: 1441-1451.
147. Mohan, S., L. Sim, D.R. Rose, B.M. Pinto (2007). Synthesis of S-Alkylated Sulfonium Ions and their Glucosidase Inhibitory Activities Against Recombinant Human Maltase Glucoamylase. *Carbohydr. Res.* 342: 901-912.
148. Nasi, R., L. Sim, D.R. Rose, B.M. Pinto (2007). Synthesis and Glycosidase inhibitory Activities of Chain-modified Analogues of the Glycosidase Inhibitors Salacinol and Blintol. *Carbohydr. Res. Special Issue on Glycomimetics.* 342: 1888-1894.
149. Liu, H., R. Nasi, K. Jayakanthan, L. Sim, H. Heipel, D.R. Rose, B.M. Pinto (2007). New Synthetic Routes to Chain-Extended Selenium, Sulfur, and Nitrogen Analogues of the Naturally-Occurring Glucosidase Inhibitor Salacinol and their Inhibitory Activities Against Recombinant Human Maltase Glucoamylase. *J. Org. Chem.* 72: 6562-6572.
150. Mohan, S., B.M. Pinto (2007). Zwitterionic Glycosidase Inhibitors: Salacinol and Related Analogues. *Carbohydr. Res. Special Issue on Glycomimetics.* 342: 1551-1580.
151. Bhat, R.G., N. S. Kumar, B.M. Pinto (2007). Synthesis of Phosphate Derivatives Related to the Glycosidase Inhibitor Salacinol. *Carbohydr. Res. Special Issue on Glycomimetics.* 342: 1934-1942.
152. Chen, W.W., L. Sim, D. R. Rose, B.M. Pinto (2007). Synthesis of Analogues of Salacinol Containing a Carboxylate Inner Salt and their Inhibitory Activities Against Human Maltase Glucoamylase. *Carbohydr. Res. Special Issue on Glycomimetics.* 342: 1661-1667.
153. Chen, W.W., B.M. Pinto (2007). Synthesis of Aza- and Thia Spiroheterocycles and Attempted Synthesis of Spiro Sulfonium Compounds Related to Salacinol. *Carbohydr. Res.* 342: 2163-2172.
154. Kumar, N., D.A. Kuntz, X. Wen, B.M. Pinto, and D.R. Rose (2008). The Role of Water in Binding of Sulfonium-Ion Analogues of Di-epi-Swainsonine and 8-epi-Lentiginosine by *Drosophila* Golgi α -Mannosidase II. *Proteins: Structure, Function, and Bioinformatics.* 71:1484-1496.
155. Choubdar, N., R.G. Bhat, K.A. Stubbs, S. Yuzwa, B.M. Pinto (2008). Synthesis of 2-Amido, 2-Amino, and 2-Azido Derivatives of the Nitrogen Analogue of the Naturally Occurring Glycosidase Inhibitor Salacinol and Their Inhibitory Activities Against O-GlcNAcase and NagZ Enzymes. *Carbohydr. Res.* 343: 1766-1777.
156. Yuan, Y., D. W. Bleile, X. Wen, D. A. R. Sanders, Itoh, K., H.-w. Liu, B. M. Pinto (2008). Investigation of Binding of UDP-Galf and UDP-[3-F]-Galf to UDP-galactopyranose mutase by STD-NMR Spectroscopy, Molecular Dynamics, and CORCEMA-ST Calculations. *J. Am. Chem. Soc.* 130: 3157-3168.

157. Jayakanthan, K., B.D. Johnston, B.M. Pinto (2008). Stereoselective Synthesis of Novel 4'-Selenonucleosides Using the Pummerer Glycosylation Reaction. *Carbohydr. Res.* 343: 1790-1800.
158. Choubdar, N., L. Sim, D.R. Rose, B.M. Pinto (2008). Synthesis of 2-Deoxy-2-Fluoro and 2-Deoxy-1-Ene- Derivatives of the Naturally Occurring Glycosidase Inhibitor, Salacinol, and Their Inhibitory Activities Against Recombinant Human Maltase Glucoamylase. *Carbohydr. Res.* 343: 951-956.
159. Yao, X., D.W. Bleile, Y. Yuan, J. Chao, K.P. Sarathy, D.A.R. Sanders, B.M. Pinto, M.A. O'Neill (2008). Substrate Regulates Enzyme Dynamics by Bridging Distal Sites: UDP-Galactopyranose Mutase. *Proteins: Structure, Function, and Bioinformatics.* 74: 972-979.
160. Borrelli, S., R.B. Hossany, B.M. Pinto (2008). Immunological Evidence for Peptide-Carbohydrate Mimicry with a *Shigella flexneri* Y Polysaccharide-mimetic Peptide. *Clin. Vaccine Immunol.* 15: 1106-1117.
161. Watts, J.K., B.D. Johnston, A.S. Wahba, B.M. Pinto, M.J. Damha (2008). Synthesis and Biophysical Characterization of Oligonucleotides Containing a 4'-Selenonucleotide. *J. Am. Chem. Soc.* 130: 8578-8579.
162. Nasi, R., B.O. Patrick, L. Sim, D.R. Rose, B.M. Pinto (2008). Studies Directed Towards the Stereochemical Structure Determination of the Naturally Occurring Glucosidase Inhibitor, Kotalanol: Synthesis and Inhibitory Activities against Human Maltase Glucoamylase of Seven-Carbon, Chain-Extended Homologues of Salacinol. *J. Org. Chem.* 73: 6172-6181.
163. Szczepina, M.G., R. B. Zhang, G. C. Completo, T. L. Lowary, B.M. Pinto (2009). STD-NMR Studies Demonstrate that Two Acceptor Substrates for GlfT2, a Bifunctional Galactofuranosyltransferase Required for the Biosynthesis of *Mycobacterium tuberculosis* Arabinogalactan, Compete for the Same Binding Site. *ChemBioChem.* 10: 2052-2059.
164. Hossany, R.B., B.D. Johnston, X. Wen, M.A. Johnson, S. Borrelli, B.M. Pinto (2009). Design, Synthesis, and Immunochemical Characterization of a Chimeric Glycopeptide Corresponding to the *Shigella flexneri* Y O-polysaccharide and its Peptide Mimic MDWNMHAA. *Carbohydr. Res. (Special Issue in honour of Johannes Kamerling).* 344: 1412-1427.
165. Jayakanthan, K., S. Mohan, B.M. Pinto (2009). Structure Proof and Synthesis of Kotalanol and De-O-sulfonated Kotalanol, Glycosidase Inhibitors from an Herbal Remedy for the Treatment of Type-2 Diabetes. *J. Am. Chem. Soc.* 131: 5621-5626.
166. Mohan, S., B.M. Pinto (2009). Sulfonium-ion Glycosidase Inhibitors Isolated from *Salacia* Species Used in Traditional Medicine, and Related Compounds. *Coll. Czech Republic Commun. (Special issue in honour of the 85th birthday of Alfred Bader).* 74: 1117-1136.

167. Szczepina, M.G., D.W. Bleile, J. Müllegger, S.B. Dixit, A. Tehrani, B.M. Pinto (2009). Investigating the Binding of a Carbohydrate-mimetic Peptide to an Anti-carbohydrate Antibody by STD-NMR Intensity-restrained CORCEMA Optimization (SICO). *J. Am. Chem. Soc.* Submitted.
168. Sim, L., K. Jayakanthan, S. Mohan, R. Nasi, B.D. Johnston, B.M. Pinto, D.R. Rose (2009). New Glucosidase Inhibitors from an Ayurvedic Herbal Treatment for Type 2 Diabetes: Structures and Inhibition of Human Intestinal Maltase-Glucoamylase with Compounds from *Salacia reticulata*. *Nature Mol. Struct. Biol.* Submitted. (CIHR)

Provisional Patents

1. Pinto, B.M., B.D. Johnston, and A. Ghavami (2000). A New Class of Glycosidase Inhibitor. US Serial No. 60/174,837; January 6.
2. Pinto, B.M., B.D. Johnston, A. Ghavami, M.G. Szczepina (2003). Glycosidase Inhibitors and Methods of Synthesizing Same. US 60/4820006, June 25.
3. Pinto, B.M., F.-I. Auzanneau (2005). A Synthetic Oligosaccharide-Conjugate Vaccine Against Group A *Streptococcus*. US 60/676955, May 3.
4. Damha, M.J, J.K. Watts, B.M. Pinto (2005). 4'-Thioarabinonucleotide-Containing Oligonucleotides and Uses Thereof. US patent 60/750,838, submitted, December 15.
5. Pinto, B.M., W. Chen, R. Nasi, R. Bhat, N. Kumar, G. Gu, H. Liu (2006). Glycosidase Inhibitors and Methods of Synthesizing Same, US 60/756990, submitted, January 9.
6. Pinto, B.M., R. Nasi (2008). Novel Seven-Carbon Chain-Extended Homologues of the Glycosidase Inhibitor Salacinol and Methods of Synthesizing Same. US 61/039192, filed, March 25.
7. Pinto, B.M., S. Mohan (2008). Compounds and Methods for Treatment of Influenza, US 61/193856, filed December 30.
8. Jayakanthan, K., B.M. Pinto (2009). Novel Seven-Carbon Chain-Extended Homologues of the Glycosidase Inhibitor Salacinol and Method for Synthesizing Same. US 61/146531, filed, January 22.
9. Jayakanthan, K., S. Mohan, B.M. Pinto (2009). Novel Seven-Carbon Chain-Extended Homologues of the Glycosidase Inhibitor Salacinol and Method for Synthesizing Same. 61/150672, filed, February 6.

Patents

1. Pinto, B.M., B.D. Johnston, A. Ghavami. Glycosidase Inhibitors and Methods of Synthesizing Same. US 6,455,573 B1, Filed July 28, 2000. Granted 645573, September 24, 2004. (NSERC Disc)

2. Pinto, B.M., B.D. Johnston, A. Ghavami. Glycosidase Inhibitors and Methods of Synthesizing Same. PCT/CA2001/000010, Filed January 5, 2001. Australia 26591/01; Granted 783127, January 12, 2006. China 01805122.0; Granted ZL01805022.0, October 10, 2007. (NSERC Disc)
3. Pinto, B.M., B.D. Johnston, A. Ghavami, M.G. Szczepina, H. Liu, K. Sadalpure, (2004) Glycosidase Inhibitors and Methods of Synthesizing Same. US and PCT Patents Filed June 25. US Patent Application No. 10/877490. (NSERC Disc)
4. Pinto, B.M., B.D. Johnston, A. Ghavami, M.G. Szczepina, H. Liu, K. Sadalpure, H.H. Jensen, N.S. Kumar, R. Nasi (2006). Glycosidase Inhibitors and Methods of Synthesizing Same. US Patent, 11/368014, filed March 2. (CIHR)
5. Pinto, B.M., W. Chen, R. Nasi, R. Bhat, N. Kumar, S. Mohan, H. Liu (2007). Glycosidase Inhibitors and Methods of Synthesizing Same, US 11/621466, filed, January 9. (CIHR)
6. Damha, M.J, J.K. Watts, B.M. Pinto (2005, 2006). 4'-Thioarabinonucleotide-Containing Oligonucleotides and Uses Thereof. PCT/CA2006/002035, filed, December 14, 2006. PCT/US 60/750,838, filed, December 16, 2005. (NSERC Disc)
7. Pinto, B.M., S. Jayakanthan, S. Mohan, R. Nasi (2009). Methods for Synthesizing Kotalanol and Stereoisomers and Analogues Thereof, and Novel Compounds Produced Thereby, PCT /CA2009/000397, filed, March 25, 2009. (CIHR)

Conference Proceedings

1. Szarek, W.A., D.M. Vyas, M. Iwakawa and B.M. Pinto (1975). Synthesis and Conformational Analysis of Nucleoside Analogs of Heterocycles Containing One and/or Two Heteroatoms, 170th ACS Meeting, Chicago, IL, CEL 5 (August).
2. Szarek, W.A., D.M. Vyas, B.M. Pinto and M. Iwakawa (1976). Synthesis and Conformational Analysis of Carbohydrate Analogs Containing Two Hetero Atoms in the Ring. Centennial ACS Meeting, New York, CARB 36 (April).
3. Szarek, W.A., H.C. Jarrell, K.S. Kim and B.M. Pinto (1979). Syntheses Related to Higher-Carbon Sugars Found in Antibiotics, 62nd Canadian Chemical Conference, Vancouver, B.C., OR-109 (June).
4. Szarek, W.A., D.M. Vyas, B.M. Pinto, M. Iwakawa, C. Depew and L.Y. Chen (1986). New Synthetic Methods in Nucleoside Chemistry, 172nd ACS Meeting, San Francisco, CARB 64 (August).
5. Bundle, D.R. and B.M. Pinto (1984). Synthesis of Oligosaccharides Corresponding to Biological Repeating Units of *Shigella flexneri* Variant Y, XII International Carbohydrate Symposium, Utrecht, The Netherlands, Abstr. A 20#1 (July).

6. Pinto, B.M., R.D. Sharma and J. Sandoval-Ramirez (1985). Systematic Evaluation of the Anomeric Effect in 2-Arylseleno-1,3-Dithianes. Evidence for Stabilizing Orbital Interactions. 68th Canadian Chemical Conference, Kingston, Ontario, Abstr. OR-A4-2 (June).
7. Pinto, B.M., H.B. Schlegel and S. Wolfe (1986). Bond Angle Variations in XCY Fragments and their Relationship to the Anomeric Effect. 69th Canadian Chemical Conference, Saskatoon, Saskatchewan, Abstr. OR-C3-3 (June).
8. Pinto, B.M., J. Sandoval-Ramirez, R.D. Sharma and B.D. Johnston (1987). The Anomeric Effect in 2-Arylseleno-1,3-Dithianes. Study of the Electrostatic and Orbital Interaction Components. 70th Canadian Chemical Conference, Quebec, Quebec, Abstr. ORC-11-F (June).
9. Pinto, B.M., B.D. Johnston, J. Sandoval-Ramirez and R.D. Sharma (1987). The *Endo* and *Exo* Anomeric Effect in 2-Arylseleno-1,3-Dithianes. Substituent and Solvent Effects. 30th National Organic Chemistry Symposium of the American Chemical Society, Vancouver, Canada, Abstr. T-10 (June).
10. Morissette, D.G., B.M. Pinto and D.R. Bundle (1987). Synthesis of Higher-Order Oligosaccharides Corresponding to the Antigenic Determinants of *Shigella flexneri* Variant Y. 70th Canadian Chemical Conference, Quebec, Quebec, Abstr. BIP-4-C (June).
11. Reimer, K.B., A. Tixidre, J.N. Wandu and B.M. Pinto (1987). Synthesis of Oligosaccharides Corresponding to the Antigenic Determinants of β -Hemolytic *Streptococcus* Group A. 70th Canadian Chemical Conference, Quebec, Quebec, Abstr. BIP-5-C (June.)
12. Pinto, B.M., B.D. Johnston and R. Nagelkerke (1988). Conformational Analysis of 2-Substituted-1,3-Dithianes and 1,3-Diselenanes. The 2nd and 3rd Row Anomeric Effect. Third Chemical Congress of North America, Toronto, Ont. Abstr. OR-8 (June).
13. Pinto, B.M., B.D. Johnston, R.J. Batchelor, F.W.B. Einstein and I.D. Gay (1988). Selenium Coronands. A Novel Class of Compounds. Third Chemical Congress of North America, Toronto, Ont. Abstr. OR-16 (June).
14. Pinto, B.M., B.D. Johnston, R.J. Batchelor, F.W.B. Einstein, I.D. Gay and J.-H. Gu (1988). Selenium Coronands. Conformational Analysis. 7th IUPAC Conference on Organic Synthesis, Nancy, France, Abstr. 6-R22 (July).
15. Juaristi, E., E.A. Gonzalez, B.M. Pinto, R. Nagelkerke and B.D. Johnston (1988). Análisis Conformacional de *N*-metil-1,3,5-ditiazinas Con Sustituyentes Polares en C(2). XXIV Congreso Mexicano de Química Pura y Aplicada, Querétaro, Mexico, Abstr. 130 (November).
16. Juaristi, E., E.A. Gonzalez, B.M. Pinto, B.D. Johnston and R. Nagelkerke (1989). The Existence of Second Row Anomeric Interactions. Conformational Analysis of 2-

- Substituted-5-Methyl-5-Aza-1,3-Dithiacyclohexanes. 198th National American Chemical Society Meeting, Miami Beach, Florida, Abstr. ORGN 235 (September).
17. Andrews, J.S. and B.M. Pinto (1989). Synthetic Routes to Higher-Order Oligosaccharides Corresponding to the Cell-Wall Polysaccharide of the β -Hemolytic *Streptococcus* Group A, 72nd Canadian Chemical Conference, Victoria, B.C., Abstr. 512 (June).
 18. Reimer, K.B., B.M. Pinto, D.G. Morissette and D.R. Bundle (1989). Synthesis and 2D NMR Analysis of Hexasaccharide and Heptasaccharide Portions of the *Shigella flexneri* Variant Y Polysaccharide. 72nd Canadian Chemical Conference, Victoria, B.C., Abstr. 514 (June).
 19. Mehta, S., B.M. Pinto (1991). Phenylselenoglycosides as Novel, Versatile Glycosyl Donors. Selective Activation Over Thioglycosides. Fourth Chemical Congress of North America, New York, New York, Abstr. CARB 35 (August).
 20. Andrews, J.S., B.M. Pinto (1992). Synthetic Routes to Sulfur Analogs of Kojibiose and a Related Trisaccharide as Potential Glucosidase Inhibitors. 75th Canadian Chemical Conference, Edmonton, Alberta, Abstr. 528P (June).
 21. Mehta, S., B.M. Pinto (1992). Phenylselenoglycosides as Versatile Reagents in Glycosylations. 75th Canadian Chemical Conference, Edmonton, Alberta, Abstr. 636 (June).
 22. Pinto, B.M., F. Dasgupta (1992). ACS Tutorial. Protecting Group Chemistry in the Synthesis of Simple and Complex Glycosides. 203rd ACS National Meeting, San Francisco, California, (April).
 23. Hu, H., S. Holdcroft, B.M. Pinto (1992). Synthesis and Characterization of Polymer-Bound Selenium Coronands. 75th Canadian Chemical Conference, Edmonton, Alberta, Abstr. 577 (June).
 24. Zhou, X.-M., I.D. Gay, B.M. Pinto (1992). Mechanistic Studies on the Redox Behaviour of a Cu(II) Selenium Coronand Complex. 75th Canadian Chemical Conference, Edmonton, Alberta, Abstr. 599 (June).
 25. Varma, V., B.M. Pinto (1992). Conformational Analysis of Oligosaccharides. 75th Canadian Chemical Conference, Edmonton, Alberta, Abstr. 613 (June).
 26. Marino-Albernas, J., S.L. Harris, B.M. Pinto (1992). Convergent Synthesis of Higher-Order Oligosaccharides Corresponding to the Cell-Wall Polysaccharide of the β -Hemolytic *Streptococci* Group A. 75th Canadian Chemical Conference, Edmonton, Alberta, Abstr. 635 (June).
 27. Racher, K., V. Varma, T.J. Borgford, B.M. Pinto (1992). A ^1H NMR Study of the Preferred Conformation of Isoleucine Bound to Yeast Isoleucyl-t RNA Synthetase. 35th

- Annual Meeting of the Canadian Federation of Biological Societies, Victoria, B.C., Abstr. 434 (June).
28. Varma, V., B.M. Pinto (1992). Molecular Dynamics and NMR Spectroscopic Analysis of the Conformations of Oligosaccharides. Symposium on Conformational Studies of Oligosaccharides, Polysaccharides and Glycoconjugates, Le Croisic, France, Abstr. I-13 (June).
 29. Harris, S.L., K.B. Reimer, M.A.J. Gidney, D.R. Bundle, B.M. Pinto (1992). Immunochemical Characterization of Polyclonal and Monoclonal *Streptococcus* Group A Antibodies by Chemically Defined Glycoconjugates and Synthetic Oligosaccharides. XVIth International Carbohydrate Symposium, Paris, France, Abstr. B038 (July).
 30. Pinto, B.M., J.R. Marino-Albernas, S. Mehta (1992). Selectivity and Efficiency in Glycosylation Reactions. XVIth International Carbohydrate Symposium, Paris, France, Abstr. 163 (July).
 31. Pinto, B.M., R.J. Batchelor, F.W.B. Einstein, I.D. Gay, J. Gu, X. Zhou (1993). The Chemistry of Selenium Coronands and their Metal Complexes, 76th Canadian Society for Chemistry Conference, Sherbrooke, Quebec, Canada, Abstr. 683 (June).
 32. Hu, H., I. Cordova-Reyes, B.M. Pinto, S. Holdcroft (1993). Electrochemistry and Complexation of Polymer-Bound Selenium Coronands. 76th Canadian Society for Chemistry Conference, Sherbrooke, Quebec, Canada, Abstr. 301 (June).
 33. Brodovitch, J.-C., F. Ji, P.W. Percival, A.L. Bischoff, B.M. Pinto, B. Addison-Jones, S. Wlodek (1993). Conformational Studies of Thiyl and Selenenyl Radicals. 6th International Conference on Muon Spin Rotation/Relaxation/Resonance, Maui, Hawaii, Abstr. 4A5 (June).
 34. Weimar, T., U.C. Kreis and B.M. Pinto. Conformational Analysis of Heteroanalogues of Methyl Maltoside and n-Propyl or Allyl Kojibioside. International Symposium on the Conformational Analysis of Carbohydrates and Protein/Carbohydrate Interactions, Val Morin, Canada, July, 1994. Abstr. 39.
 35. Andrews, J.S., S. Mehta, B.D. Johnston and B.M. Pinto. Synthesis of Heteroanalogues of Methyl Maltoside and Allyl or Propyl Kojibioside, Potential Glycosidase Inhibitors. XVIIth International Carbohydrate Symposium, Ottawa, Canada, July, 1994. Abstr. B2.34.
 36. Kreis, U.C., V. Varma and B.M. Pinto. Conformational Analysis of a Heptasaccharide Hapten of *Shigella flexneri* Y O-Antigen Utilizing a Combined Molecular Dynamics and NMR Spectroscopic Approach. International Symposium on the Conformations of Carbohydrates, Ottawa, Canada, July, 1994.
 37. Kreis, U.C., V. Varma, T. Weimar, B.M. Pinto. A Combined NMR Spectroscopic and Molecular Dynamics Protocol for the Conformational Analysis of Subunits of the Cell-

- Wall Polysaccharide Antigen of *Streptococcus* Group A. XVIIth International Carbohydrate Symposium, Ottawa, Canada, July, 1994. Abstr. A2.6.
38. Weimar, T., S.L. Harris, J.B. Pitner, K. Bock, B.M. Pinto. The Conformation of a *Streptococcus* Group A Trisaccharide Bound to a Monoclonal Antibody. XVIIth International Carbohydrate Symposium, Ottawa, Canada, July, 1994. Abstr. A1.13.
 39. Scott, J.K., L. Craig, S.L. Harris and B.M. Pinto. Towards a Vaccine Against Group A *Streptococcus* Based on Peptide Mimics of Carbohydrate Epitopes. XVIIth International Carbohydrate Symposium, Ottawa, Canada, July, 1994. Abstr. C2.27.
 40. Pitner, J.B., B.M. Pinto, S.L. Harris, J.R. Marino-Albernas, W.F. Beyer, Jr., G.P. Vonk, C. Nycz, T. Venetta and D.R. Bundle. Bivalency and Epitope Specificity of a High Affinity IgG3 Monoclonal Antibody to the *Streptococcus* Group A Carbohydrate Antigen. XVIIth International Carbohydrate Symposium, Ottawa, Canada, July, 1994. Abstr. C1.5.
 41. Scott, J.K., L. Craig, S.L. Harris and B.M. Pinto. Towards a Vaccine Against Group A *Streptococcus* Based on Peptide Mimics of Carbohydrate Epitopes. Eighth Symposium of the Protein Society, June, 1994. Abstr. *Prot. Sci.*, **3** (suppl. 1): 114.
 42. Scott, J.K., S.L. Harris, L. Craig, T. John, M. Zwick, M.R. Wessels, J.-R. Marino-Albernas, F.-I. Auzanneau, K. Kenar, E.J. Toone, B.M. Pinto. Mimicry of Carbohydrate Epitopes on Group A *Streptococcus* by Peptides. Evidence for Multiple Cross-reactive Antibodies. Glycotechnology Meeting, San Diego, CA., May, 1995.
 43. Scott, J.K., S.L. Harris, L. Craig, T. John, M. Zwick, M.R. Wessels, J.-R. Marino-Albernas, F.-I. Auzanneau, K. Kenar, E.J. Toone, B.M. Pinto. Mimicry of Carbohydrate Epitopes on Group A *Streptococcus* by Peptides. Evidence for Multiple Cross-reactive Antibodies. Instituto di Richerche di Biologia Molecolare Workshop on Molecular Repertoires and Methods of Selection, Maratea, Italy, May, 1995.
 44. Harris, S.L., J.K. Scott, L. Craig, J.-R. Marino-Albernas, K. Kenar, E.J. Toone, B.M. Pinto. Mimicry of Carbohydrate Epitopes on Group A *Streptococcus* by Peptides. Symposium on Peptidomimetics. 78th Canadian Society for Chemistry Conference, Guelph, Ont., May, 1995. Abstr. 558.
 45. Weimar, T., U.C. Kreis, S.L. Harris, J.S. Andrews, J.B. Pitner, K.B. Svensson, B.M. Pinto. Probing the Conformations of Carbohydrates Bound to Antibodies and Enzymes by Transferred NOE NMR Spectroscopy. 78th Canadian Society for Chemistry Conference, Guelph, Ont., May, 1995. Abstr. 816.
 46. Auzanneau, F.-I., B.M. Pinto. Allyl Glycosides as Useful Intermediates for the Preparation of Haptens, Antigens, and Immunoabsorbents. Gordon Research Conference on Carbohydrates, New Hampshire, June, 1995.

47. Weimar, T., B.M. Pinto. From Transferred NOE Experiments to Bound Ligand Conformations. Problems Along the Way. EUROCARB V; 8th European Carbohydrate Symposium, Seville, Spain, July, 1995.
48. Randell, K.D., B.M. Pinto. Is there a Generalized Reverse Anomeric Effect? Configurational Equilibria of Neutral and Protonated 5-Thioglucosyl Arylamines. 79th Canadian Society for Chemistry Conference, St. Johns, Nfld., June, 1996. Abstr. L13.
49. Auzanneau, F.-I., B.M. Pinto. Preparation of Antigens and Immunoabsorbents Corresponding to the *Streptococcus* Group A Cell-Wall Polysaccharide. XVII International Carbohydrate Symposium, Milan, Italy, July, 1996. Abstr. BO018.
50. Harris, S.L., B.M. Pinto, J.K. Scott. Peptides as Mimics of Carbohydrate Epitopes. XVIII International Carbohydrate Symposium, Milan, Italy, July, 1996. Abstr. CP019.
51. Johnston, B.D., B.M. Pinto. Synthesis of Heteroanalogues of Disaccharides as Potential Inhibitors of the Processing Mannosidases. XVIII International Carbohydrate Symposium, Milan, Italy, July 1996. Abstr. CP036.
52. Brown, P.N., B.M. Pinto. Synthesis of a Trisaccharide Corresponding to the Glycoinositolphospholipid Oligosaccharides of the Protozoan *Trypanosoma cruzi*. 81st Canadian Society for Chemistry Conference, Whistler, B.C., June 1998. Abstr. 280.
53. Pinto, B.M., T. Weimar, B. Stoffer, B. Svensson. Complexes of Glucoamylase with Maltoside Heteroanalogues. Bound Ligand Conformations by use of Transferred NOE NMR Measurements and Molecular Modeling. 81st Canadian Society for Chemistry Conference, Whistler, B.C., June 1998. Abstr. 308.
54. Pinto, B.M., B.D. Johnston. Synthesis of Thio-linked Disaccharides by 1,2-Thio-Glycosyl Migration. 81st Canadian Society for Chemistry Conference, Whistler, B.C., June 1998. Abstr. 309.
55. Randell, K.D., B.M. Pinto, T.P. Frandsen, B. Svensson, B. Stoffer. Synthesis and Glycosidase Inhibitory Activity of 5-Thioglucopyranosylarylamines. Molecular Modeling of Complexes with Glucoamylase. 81st Canadian Society for Chemistry Conference, Whistler, B.C., June 1998. Abstr. 310.
56. Pinto, B.M., T. Weimar, B. Stoffer, B. Svensson. Complexes of Glucoamylase with Maltoside Heteroanalogues. Bound Ligand Conformations by use of Transferred NOE NMR Measurements and Molecular Modeling. Protein Engineering Network of Centres of Excellence Conference. Edmonton, Alberta, June, 1998. Abstr. 39.
57. Pinto, B.M. Exploring the Basis of Peptide Mimicry of Carbohydrates. Protein Engineering Network of Centres of Excellence Conference. Edmonton, Alberta, June 1998.
58. Stoffer, B., T. Weimar, B. Svensson, B.M. Pinto. Complexes of Glucoamylases with Maltoside Heteroanalogues. Molecular Modeling of Bound Ligand Conformations

- Determined by Transferred NOE NMR Measurements. 12th European Symposium on Quantitative Structure - Activity Relationships. Molecular Modeling and Prediction of Bioactivity. Copenhagen, Denmark, August, 1998.
59. Weimar, T., B. Stoffer, B. Svensson, B.M. Pinto. Enzyme - Inhibitor Interactions in a Carbohydrate Processing Enzyme Complex. NMR and Molecular Modeling Investigation of Glucoamylase. XIX International Carbohydrate Symposium, San Diego, USA, August, 1998. Abstr. DO 011.
 60. Pinto, B.M., J.K. Scott, S.L. Harris, M.A. Johnson, D.R. Bundle, M.C. Chervenak, M.N. Vyas, N.K. Vyas, F.A. Quiocho. Exploring the Basis of Peptide Mimicry of Carbohydrates. XIX International Carbohydrate Symposium, San Diego, USA, August, 1998. Abstr. CP 132, CO 019.
 61. Pinto, B.M., J.K. Scott, S.L. Harris, M.A. Johnson, D.R. Bundle, M.C. Chervenak, M.N. Vyas, N.K. Vyas, F.A. Quiocho. Peptide Mimicry of Carbohydrates – Structural or Functional? 82nd Canadian Society for Chemistry Conference and Exhibition, Toronto, Canada, May, 1999. Abstr. 191.
 62. Randell, K.D., B.D. Johnston, P.N. Brown, B.M. Pinto. Synthesis of Galactofuranose-Containing Oligosaccharides and their Heteroanalogues. Gordon Research Conference on Carbohydrates, Tilton, N.H., U.S.A., June, 1999.
 63. Johnson, M.A., B.M. Pinto. Structural Studies of Peptide-Carbohydrate Mimicry Gordon Research Conference on Carbohydrates, Tilton, N.H., U.S.A., June, 1999.
 64. Johnson, M.A., B.M. Pinto. Structural Studies of Peptide-Carbohydrate Mimicry in Antibody-Ligand Systems. 20th International Carbohydrate Symposium, Hamburg, Germany, August, 2000. Abstr. C179.
 65. D. Indurugalla, A.A. Scholte, B.D. Johnston, B.M. Pinto, and A.J. Bennet. Mechanistic Consequences of Ring Oxygen Substitution with a Sulphur Atom in Glycopyranosides. 15th IUPAC Conference on Physical Organic Chemistry, July, 2000. Abstr. P9.
 66. Johnson, M.A., A. Rotondo and B.M. Pinto. NMR Studies of the Antibody-bound Conformation of a Carbohydrate-Mimetic Peptide. Gordon Research Conference on Carbohydrates, New Hampshire, June 2001.
 67. Ghavami, A., B.D. Johnston and B.M. Pinto. Synthesis of a New Class of Glycosidase Inhibitors: Salacinol, its Stereoisomers, and Nitrogen and Selenium Analogues. Gordon Research Conference on Carbohydrates, New Hampshire, June 2001.
 68. Johnson, M.A. and B.M. Pinto. Protein Modelling Guided by Ligand Conformation. Protein Engineering Network of Centres of Excellence Meeting, Alliston, Ontario, June 2001.
 69. Johnson, M.A. and B.M. Pinto. Protein Modelling Guided by Ligand Conformation. 11th European Carbohydrate Symposium, Lisbon, Portugal, September 2001.

70. Pinto, B.M. Lessons from Nature: Peptide and Carbohydrate Mimics. 11th European Carbohydrate Symposium, Lisbon, Portugal, September 2001.
71. Sadalpure K.S. and B.M. Pinto. More Efficient Syntheses of the Glycosidase Inhibitor Salacinol and its N and Se Analogues. 85th Canadian Society for Chemistry Conference and Exhibition, Vancouver, B.C., June 2002. Abstr. 00164.
72. Chakka N.S., B.D. Johnston and B.M. Pinto. Synthesis And Properties Of A New Class Of Carbohydrate Derivatives.. 85th Canadian Society for Chemistry Conference and Exhibition, Vancouver, B.C., June 2002. Abstr. 00131
73. Mehta L.P., B.D. Johnston and B.M. Pinto. Synthesis of 5-Thio Glycosyl Amidines. 85th Canadian Society for Chemistry Conference and Exhibition, Vancouver, B.C., June 2002., Abstr. 00218.
74. Johnson M.A. and B.M. Pinto. NMR Studies of Protein-Ligand Interactions.. 85th Canadian Society for Chemistry Conference and Exhibition, Vancouver, B.C., June 2002. Abstr. 00425.
75. Chen J., A. Ghavami and B.M. Pinto. A Novel Class of Inhibitors of Galactofuranosyltransferases? 85th Canadian Society for Chemistry Conference and Exhibition, Vancouver, B.C., June 2002. Abstr. 00437.
76. Eniade A.A., M.A. Johnson and B.M. Pinto. Rational Design and Synthesis of Peptide Ligands for an Anti-Carbohydrate Antibody. 85th Canadian Society for Chemistry Conference and Exhibition, Vancouver, B.C., June 2002. Abstr. 01282.
77. Ghavami A.G. and B.M. Pinto. Synthesis of a New Class of Glycosidase Inhibitors: Salacinol, its Stereoisomers, and Nitrogen and Selenium Analogues, and Their Evaluation as Glycosidase Inhibitors. 85th Canadian Society for Chemistry Conference and Exhibition, Vancouver, B.C., June 2002. Abstr. 00132.
78. Johnson M.A., C. Hoog and B.M. Pinto. A Novel Modeling Protocol for Protein Receptors Guided by Bound-Ligand Conformation. 85th Canadian Society for Chemistry Conference and Exhibition, Vancouver, B.C., June 2002. Abstr. 00275.
79. Szczepina, M.G., B.D. Johnston, B.M. Pinto. A New Class of Glycosidase Inhibitors? 85th Canadian Society for Chemistry Conference and Exhibition, Vancouver, B.C., June 2002. Abstr. 00275.
80. Bundle, D.R., P. Kitov, R. Alibes, M. Chervenak, R. Gagen, C.-C. Ling, S. MacGavin, B.M. Pinto, M. Warwas, and P. Zhang. The Search for High Avidity Ligands: Constrained Univalent Oligosaccharides and Radially Arranged Multivalent Oligosaccharides. XXIst Int. Carbohydr. Symp., Cairns, Australia, July, 2002. Abstr. PL1.

81. Ghavami, A., B.D. Johnston, M.T. Jensen, B. Svensson, B.M. Pinto. Salacinol, its Stereoisomers, and Nitrogen and Selenium Analogues. XXIst Int. Carbohydr. Symp., Cairns, Australia, July, 2002. Abstr. PP019.
82. Pinto, B.M. Synthesis and Biological Activities of a New Class of Glycosidase Inhibitor. EuroCarb 12, Grenoble, France, July, 2003. Abstr. OC83.
83. Kuntz, D.A., S. Numao, S.G. Withers, A. Ghavami, B.D. Johnston, L. Mehta, B.M. Pinto, D.R. Rose. Exploring the Catalytic Mechanism of Golgi α -Mannosidase II. Canadian Proteomics Initiative Meeting, Vancouver, B.C., May, 2003.
84. Kuntz, D.A., S. Numao, S.G. Withers, A. Ghavami, B.D. Johnston, L. Mehta, B.M. Pinto, D.R. Rose. Exploring the Catalytic Mechanism of Golgi α -Mannosidase II. American Crystallography Association Annual Meeting, Covington, KY, July, 2003.
85. Szczepina, M.G., B.M. Pinto. Six-Membered Ring Heteroanalogues Related to Salacinol as Potential Glycosidase Inhibitors. 87th Canadian Society for Chemistry Conference, London. ON, June, 2004. Abstr. 471.
86. Veerapen, N., B.M. Pinto. Synthesis of a Novel Class of Ammonium and Selenonium Ions as Potential Inhibitors of UDP-Galp Mutase. 87th Canadian Society for Chemistry Conference, London. ON, June, 2004. Abstr. 24.
87. Liu, H., B.M. Pinto. Improved Synthesis of the Selenium Analogue of the Naturally Occurring Glycosidase Inhibitor Salacinol. 87th Canadian Society for Chemistry Conference, London. ON, June, 2004. Abstr. 345.
88. Hossany, R.B., M.A. Johnson, A.A. Eniade, B.M. Pinto. Synthesis and Immunochemical Characterization of Conjugate Vaccines Based on Carbohydrate and Carbohydrate-Mimetic Peptides. 87th Canadian Society for Chemistry Conference and Exhibition, London, ON, Canada, May, 2004. Abstr. 470.
89. Watts, J.K., M.J. Damha, B.M. Pinto, K.S. Sadalapure, N. Choubdar. Sugar Ring Pucker of Modified Trinucleotides. 87th Canadian Society for Chemistry Conference, London. ON, June, 2004. Abstr. 766.
90. Szczepina, M. G., B. M. Pinto. Six-membered Ring Heteroanalogues Related to Salacinol as Potential Glycosidase Inhibitors. 1st Banff Symposium on Organic Chemistry, Banff. AB, November, 2003. Abstr. 35.
91. Choubdar, N., B. M. Pinto. Synthesis of Disaccharides Containing Sulfonium Ions as Potential Glycosidase Inhibitors. 1st Banff Symposium on Organic Chemistry, Banff. AB, November, 2003. Abstr. 2.
92. Chen, W., B. M. Pinto. Synthesis of the Analogues of Salacinol Containing a Carboxylate Inner Salt. 1st Banff Symposium on Organic Chemistry, Banff. AB, November, 2003. Abstr. 46.

93. Kumar, N., B. M. Pinto. A Novel Class of Potential Golgi α -Mannosidase II Inhibitors: Ammonium, Selenonium and Sulfonium Phosphates. 1st Banff Symposium on Organic Chemistry, Banff, AB, November, 2003. Abstr. 21.
94. Zandberg, W.F., B. M. Pinto. Chain-Extended Homologues of Salacinol and Their Heteroanalogues as Potential Glycosidase Inhibitors. 1st Banff Symposium on Organic Chemistry, Banff, AB, November, 2003. Abstr.
95. Veerapen, N., B. M. Pinto. Synthesis of a Novel Class of Ammonium and Selenonium Ions as Potential Inhibitors of UDP-Galp Mutase. 1st Banff Symposium on Organic Chemistry, Banff, AB, November, 2003. Abstr.
96. Kumar, N., B. M. Pinto. Sulfonium Ions as Potential Golgi α -Mannosidase II Inhibitors. 22nd International Carbohydrate Symposium, Glasgow, UK, July, 2004.
97. Yuan, Y. X. Wen, J.N. Watson, A.J. Bennet, B.M. Pinto. Epitope Mapping of 3'-Sialyllactose Bound to a Mutant Sialidase (DgYf₋ from *M. viridifaciens* by Molecular Modeling and STD-TOCSY NMR Spectroscopy. Fourth International Conference on Sialobiology, St. Andrews, UK, July, 2004.
98. Wen, X., Y. Yuan, D.A. Kuntz, D.R. Rose, B.M. Pinto. A Combined STD-NMR/Molecular Modelling Protocol for Predicting the Binding Modes of the Glycosidase Inhibitors Kifunensine and Salacinol to Golgi α -mannosidase II. 2nd Annual Carbohydrate Symposium, AICCS, Lake Louise, AB, April, 2005.
99. Hossany, B.R., B.D. Johnston, X. Wen, B.M. Pinto. Synthesis of a Glycopeptide Mimic Corresponding to the O-polysaccharide Antigen of *Shigella flexneri* Y. 2nd Annual Carbohydrate Symposium, AICCS, Lake Louise, AB, April, 2005.
100. Borrelli, S., S. Findlay, B.R. Hossany, B.M. Pinto. Immunogenicity of a Carbohydrate-mimetic Peptide. 2nd Annual Carbohydrate Symposium, AICCS, Lake Louise, AB, April, 2005.
101. Wen, X., Y. Yuan, D.A. Kuntz, D.R. Rose, B.M. Pinto. A Combined STD-NMR/Molecular Modelling Protocol for Predicting the Binding Modes of the Glycosidase Inhibitors Kifunensine and Salacinol to Golgi α -mannosidase II. 88th Canadian Chemistry Conference and Exhibition, Saskatoon, SK, Canada, May, 2005- POSTER-337VL2.
102. Hossany, B.R., B.D. Johnston, X. Wen, B.M. Pinto. Synthesis of a Glycopeptide Mimic Corresponding to the O-polysaccharide Antigen of *Shigella flexneri* Y. 88th Canadian Chemistry Conference and Exhibition, Saskatoon, SK, Canada, May, 2005- POSTER-18TU48.
103. Borrelli, S., S. Findlay, B.R. Hossany, B.M. Pinto. Immunogenicity of a Carbohydrate-mimetic Peptide. 88th Canadian Chemistry Conference and Exhibition, Saskatoon, SK, Canada, May, 2005- POSTER-NUNF4Z.

104. Kumar N.S., B.M. Pinto. Sulfonium Ions as Potential Golgi α -Mannosidase II Inhibitors. 88th Canadian Chemistry Conference and Exhibition, Saskatoon, SK, Canada, May, 2005- POSTER-ZNQT64.
105. Choubdar, N., B.M. Pinto. Synthesis of 1-*O*-Acetyl-2-substituted-4-thio-arabinofuranose as Precursors of 4'-Thionucleosides and Nucleotides. 88th Canadian Chemistry Conference and Exhibition, Saskatoon, SK, Canada, May, 2005- POSTER-NVJY62.
106. Liu H., B.M. Pinto. Design and Synthesis of Carbohydrate-based Cyclic Sulfates. 88th Canadian Chemistry Conference and Exhibition, Saskatoon, SK, Canada, May, 2005- POSTER-PYJ6PQ.
107. Kumar N.S., B.M. Pinto. Sulfonium Ion Analogues of Swainsonine as Potential Golgi α -Mannosidase II Inhibitors. EuroCarb 13, Bratislava, Slovakia, August, 2005.
108. Watts, J.K., M.L. Trapp, N. Weinberg, B.M. Pinto. Component Analysis of the X-C-Y Anomeric Effect (X = O, S; Y = F, OMe, NHMe) by DFT Molecular Orbital Calculations and Natural Bond Orbital Analysis. 231st ACS National Meeting, Atlanta, GA, March, 2006.
109. Watts, J.K., M.L. Trapp, N. Weinberg, B.M. Pinto. Analyse des composants de l'effet anomère X-C-Y (X = O, S; Y = F, OMe, NHMe) par calculs DFT des orbitales moléculaires et analyses orbitales naturelles (« NBO ») des liens. Congrès de l'Association canadien-français pour l'avancement des sciences, Montreal, Canada, May, 2006.
110. Watts, J.K., M.L. Trapp, N. Weinberg, B.M. Pinto. Component Analysis of the X-C-Y Anomeric Effect (X = O, S; Y = F, OMe, NHMe) by DFT Molecular Orbital Calculations and Natural Bond Orbital Analysis. Canadian Society for Chemistry Conference, Halifax, Canada, May, 2006.
111. Pinto, B.M. STD-NMR/Modeling Protocol for Studying Conformations of Small Molecules Bound to Enzymes. Canadian Society for Chemistry Conference, Symposium on NMR of Biological Molecules, Halifax, Canada, May, 2006.
112. Watts, J.K., M.L. Trapp, N. Weinberg, B.M. Pinto. Component Analysis of the X-C-Y Anomeric Effect (X = O, S; Y = F, OMe, NHMe) by DFT Molecular Orbital Calculations and Natural Bond Orbital Analysis. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
113. Pinto, B.M., J.K. Watts, K. Sadalapure, N. Choubdar, A.S. Wahba, M.J. Damha. Synthesis and Conformational Analysis of 2'-Fluoro-4'-thio-5-methylarabinouridine (4'S-FMAU), and Biological Properties of the Corresponding Oligonucleotides. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
114. Wen, X., Y. Yuan, D.A. Kuntz, D. R. Rose, B.M. Pinto. A Combined STD-NMR/molecular modeling Protocol for Predicting the Binding Modes of the Glycosidase

- Inhibitors Kifunensine and Salacinol to Golgi α -mannosidase II. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
115. Yuan, Y., X. Wen, D.A.R. Sanders. Exploring the Mechanism of Binding of UDP-galactopyranose to UDP-galactopyranose mutase by STD-NMR Spectroscopy and Molecular Modeling. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
 116. Walsby, C.J., N. Veerapen, S.A. Taylor, B.M. Pinto. A Mild Pummerer-like Reaction of Carbohydrate-based Selenoethers and Thioethers Involving Linear Ozonide Acetates as Putative Intermediates. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
 117. Chen, W., B.M. Pinto. Synthesis of a Conformationally Constrained Analogue of Salacinol. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
 118. Borrelli, S., R.B. Hossany, S. Findlay, M.A. Johnson, B.M. Pinto. Immunogenicity of a Group A *Streptococcus* Polysaccharide-mimetic Peptide Conjugate. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
 119. Bhat, R. G., N. S. Kumar, B. M. Pinto. Synthesis of Novel Analogues of the Glycosidase Inhibitor Salacinol Containing a Phosphate Moiety. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
 120. Hossany, R.B., B.D. Johnston, X. Wen, M.A. Johnson, S. Borrelli, B.M. Pinto. Design, Synthesis, and Immunochemical Characterization of a Glycopeptide Chimera Corresponding to the *Shigella flexneri* Y O-Polysaccharide and Its Peptide Mimic MDWNMHAA. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
 121. Kumar, N. S., B. M. Pinto. Synthesis of Sulfonium Ion Analogues of the Glycosidase Inhibitor Swainsonine. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
 122. Nasi, R., L. Sim, D. R. Rose, B. M. Pinto. New Chain-extended Analogues of Salacinol as Potential Glycosidase Inhibitors. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
 123. Mohan, S., B. M. Pinto. Synthesis of *S*-Alkylated Sulfonium-Ions as Potential Glucosidase and Glucosyltransferase Inhibitors. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
 124. Gu, G., B.M. Pinto. Facile Synthesis of Sulfonium Ion Derivatives of 1,5-Anhydro-5-Thio-L-Fucitol as Potential α -L-Fucosidase Inhibitors. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.

125. Szczepina, M.G., N.L. Rose, G.C. Completo, R.B. Zheng, M. M. Palcic, T.L. Lowary, B.M. Pinto. Insight Into The Mode of Action of UDP-Galactofuranosyltransferase. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
126. Choubdar, N., B.M. Pinto. Attempted Synthesis of 2-Acetamido and 2-Amino Derivatives of Salacinol. Ring Opening Reactions and Implications for Irreversible Glycosidase Inhibition. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
127. Bleile, D., B.M. Pinto. Protein Modeling Guided by Bound Ligand Conformation. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
128. Liu, H., B.M. Pinto. Synthesis of Zwitterionic Selenonium and Sulfonium Sulfates as Potential Glycosidase Inhibitors. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
129. O'Neill, M.A., M.G. Szczepina, R.B. Hossany, B.M. Pinto. Conformational Dynamics and Epitopes of Carbohydrate-Mimetic Peptides. XXIIIrd International Carbohydrate Symposium 2006, Whistler, B.C., Canada, July, 2006.
130. Damha, M.J., J.K. Watts, C. G. Peng, S. Isaac, J. Lackey, F. Robert, A. Kalota, K. Sadalapure, N. Choubdar, J. Pelletier, B. M. Pinto, A. M. Gewirtz. Arabinose and Ribose Modified Nucleic Acids as Gene Silencing Agents. Second Annual Meeting of the Oligonucleotide Therapeutics Society. The Rockefeller University, N.Y., USA, Oct. 2006.
131. Mohan, S., D. Bleile, B.M. Pinto. Design and Synthesis of Potential Neuraminidase Inhibitors: Anti-Influenza Agents. Fourth Symposium of the International Consortium on Anti-Virals. Gold Coast, Australia, Sept, 2006.
132. Pinto, B.M. Synthesis and Glycosidase Inhibitory Activity of Zwitterionic Glycosidase Inhibitors. 90th Canadian Society for Chemistry Conference, Symposium on Carbohydrates in Medicine and Drug Discovery, Winnipeg, May, 2007.
133. Pinto, B.M. Investigation of the Mechanism of Binding of UDP, UDP-Galp, UDP-Galf, and UDP-[3-F]Galf to UDP-Galactopyranose Mutase by STD-NMR/Molecular Dynamics Simulation. 90th Canadian Society for Chemistry Conference, Symposium on Latest Trends in Medicinal Chemistry, Drug Discovery and Design, Winnipeg, May, 2007.
134. Szczepina, M.G., T. L. Lowary, B. M. Pinto. STD-NMR Studies of the Binding of Two Trisaccharide Acceptors to UDP-galactofuranosyltransferase. 1st Annual VIVA (VICTORIA VANCOUVER) NMR Symposium, Vancouver, Canada, June, 2007.
135. Szczepina, M.G., B. M. Pinto. Investigating the Binding of a Carbohydrate-mimetic Peptide to an Anti-carbohydrate Antibody by STD-NMR Intensity-restrained CORCEMA Optimization (SICO), 1st Annual VIVA (Victoria Vancouver) NMR Symposium, Vancouver, Canada, June, 2007.

136. Yuan, Y., B.M. Pinto. Investigation of Ligand Binding to UDP-galactopyranose Mutase by STD-NMR Spectroscopy, Molecular Dynamics, and CORCEMA-ST Calculations, 1st Annual VIVA (Victoria Vancouver) NMR Symposium, Vancouver, Canada, June, 2007.
137. Mohan, S., B.M. Pinto. Synthesis of Potential Neuraminidase Inhibitors. Quebec-Ontario Meeting of Structural Biology and Organic Chemistry, Montreal, Canada, November, 2007.
138. Szczepina, M., B.M. Pinto. Investigating the Binding of a Carbohydrate-mimetic Peptide to an Anti-carbohydrate Antibody by STD-NMR Intensity-restrained CORCEMA Optimization (SICO). Frontiers in Biophysics: Forum 2008, Vancouver, Canada, January, 2008.
139. Bleile, D., Y. Yuan, B.M. Pinto. Investigation of Ligand Binding by STD-NMR Spectroscopy, Molecular Dynamics, and CORCEMA-ST Calculations. Frontiers in Biophysics: Forum 2008, Vancouver, Canada, January, 2008.
140. Pinto, B.M., X. Yao, D.W. Bleile, Y. Yuan, J. Chao, K.P. Sarathy, D.A.R. Sanders, M.A. O'Neill. Substrate Regulates Redox-switched Recognition Loop Dynamics in UDP-Galactopyranose Mutase. XXIV International Carbohydrate Symposium, Oslo, Norway, July, 2008.
141. Pinto, B.M., S. Borrelli, R.B. Hossany. Immunological Evidence for Functional vs. Structural Mimicry with a *Shigella flexneri* Y Polysaccharide-mimetic Peptide. XXIV International Carbohydrate Symposium, Oslo, Norway, July, 2008.
142. Choubdar, N., B.M. Pinto. Synthesis of Potential Anti-Diabetes Compounds. CIHR Canadian Student Health Research Forum. Winnipeg, Canada, June, 2008.
143. Mohan, S., B.M. Pinto. Synthesis of Potential Neuraminidase Inhibitors. 91st Canadian Society for Chemistry Conference, Symposium on Carbohydrate Chemistry and Glycobiology, Edmonton, May, 2008. Abstr. 762.
144. Pinto, B.M. New Glycosidase Inhibitors for the Treatment of Type-2 Diabetes from an Ancient Herbal Remedy. 92st Canadian Society for Chemistry Conference, Symposium on Enzymology, Hamilton, May, 2009. Abstr. 663.
145. Kumarasamy, J., S. Mohan, B.M. Pinto. Structure Proof and Synthesis of Kotalanol and De-*O*-sulfonated Kotalanol, Glycosidase Inhibitors Isolated from an Herbal Remedy for the Treatment of Type-2 Diabetes. Symposium on Carbohydrates and Glycobiology, 92st Canadian Society for Chemistry Conference, Symposium on BioOrganic Chemistry, Hamilton, May, 2009. Abstr. 1057.
146. Szczepina, M.G, D.W. Bleile, J. Müllegger, S.B. Dixit, B.M. Pinto Investigation of the Binding of a Carbohydrate-mimetic Peptide to its Complementary Anti-carbohydrate Antibody by STD-NMR Intensity-restrained CORCEMA Optimization (SICO) and Molecular Dynamics Simulation. Symposium on Carbohydrates and Glycobiology, 92st

- Canadian Society for Chemistry Conference, Symposium on BioOrganic Chemistry, Hamilton, May, 2009. Abstr. 663.
147. Mohan, S., B. M. Pinto. Synthesis of Triazole Containing Carbocycles Related to Oseltamivir as Potential Neuraminidase Inhibitors. Symposium on Carbohydrates and Glycobiology, 92st Canadian Society for Chemistry Conference, Symposium on BioOrganic Chemistry, Hamilton, May, 2009. Abstr. 541.
 148. Sim, L., K. Jayakanthan, S. Mohan, R. Nasi, B.D. Johnston, B.M. Pinto, D.R. Rose. Human Intestinal Glucosidase Inhibition by Miglitol and Salacinol Analogues: Activity and Structural Analysis with Human Maltase-Glucoamylase, Gordon Research Conference on Carbohydrates, Tilton, New Hampshire, USA, June, 2009.
 149. Szczepina, M., B.M. Pinto. Investigating the Binding of a Carbohydrate-mimetic Peptide to an Anti-carbohydrate Antibody by Molecular Dynamics. 3rd Annual VIVA NMR Symposium, Burnaby, B.C., Canada, July, 2009.
 150. Sim, L., K. Jayakanthan, S. Mohan, R. Nasi, B.D. Johnston, B.M. Pinto, D.R. Rose. Human Intestinal Glucosidase Inhibition by Miglitol and Salacinol Analogues: Activity and Structural Analysis with Human Maltase-Glucoamylase. American Crystallography Association Conference. Toronto, Canada, July, 2009.

Invited Talks at Conferences

1. Pinto, B.M. (1988). Probing the Anomeric Effect. Symposium on Organic Chemistry of Carbohydrates, Third Chemical Congress of North America, Toronto, Ont. Abstr. CARB-85 (June).
2. Pinto, B.M. (1989). Synthesis of Oligosaccharides Corresponding to the Antigenic Determinants of *Shigella flexneri* Y and the β -Hemolytic *Streptococcus* Group A. Symposium on Synthesis of Complex Carbohydrates for Biological Applications, 197th National American Chemical Society Meeting, Dallas, Texas, Abstr. CARB-12 (April).
3. Pinto, B.M. (1989). Probing the 2nd and 3rd Row Anomeric Effect. Symposium in Honour of the Winner of the Claude S. Hudson Award, 197th National American Chemical Society Meeting, Dallas, Texas, Abstr. CARB-4 (April). Plenary Lecture.
4. Pinto, B.M. (1989). Synthesis and Conformational Analysis of Selenium Coronands: A Novel Class of Compounds. Symposium on Ligand Design and Synthesis, 72nd Canadian Chemical Conference, Victoria, B.C., Abstr. 617 (June).
5. Pinto, B.M. (1990). Synthesis and Conformational Analysis of Oligosaccharides. Sixth New Orleans Carbohydrate Symposium, New Orleans, LA (April). Plenary Lecture
6. Pinto, B.M. (1991). New Synthetic Methods in Oligosaccharide and Organoselenium Chemistry. First Canadian Summer Workshop on Organic Synthesis, Toronto, Ont. (May).

7. Pinto, B.M. (1991). Synthesis, Conformations and Immunochemistry of Oligosaccharides Corresponding to the Cell-Wall Polysaccharide of the β -Hemolytic *Streptococci* Group A. Symposium on Carbohydrate Antigens, Fourth Chemical Congress of North America, New York, NY, Abstr. CARB 57 (August). Plenary Lecture
8. Pinto, B.M., Dasgupta, F. (1992). Protecting Group Chemistry in the Synthesis of Simple and Complex Glycosides, A Tutorial Sponsored by the ACS Division of Carbohydrate Chemistry, 203rd ACS National Meeting, San Francisco, CA (April).
9. Pinto, B.M. (1992). Molecular Relationship Between *Streptococcal* Infection and Acute Rheumatic Carditis, Academy of Medical Sciences - Bahamas, First Annual Conference, Nassau, Bahamas (May). Plenary Lecture
10. Pinto, B.M. (1992). The Use of Conformationally-Defined Synthetic Oligosaccharides and Glycoconjugates for Mapping the Epitopes of *Streptococcus* Group A Antigens, Symposium on Conformational Studies of Oligosaccharides, Polysaccharides and Glycoconjugates, Le Croisic, France, Abstr. VI-1 (June). Plenary Lecture
11. Pinto, B.M., Leung, R.Y.N. (1992). Evaluation of the Orbital Interaction, Electrostatic, and Steric Components of the X-C-Z Anomeric Effect and Y-C-C-Z Gauche Effect (X,Y=O,S, CH₂; Z=O,N), Anomeric Effect Symposium, 204th ACS National Meeting, Washington, D.C., Abstr. CARB 96 (August).
12. Pinto, B.M. (1993). From Streptococcal Infections to Rheumatic Heart Disease, 76th Canadian Society for Chemistry Conference, Merck Frosst Centre for Therapeutic Research Lecture Award Address, Sherbrooke, Quebec, Canada, (June). Abstr. 666. Plenary Lecture
13. Pinto, B.M. (1993). Recent Advances in Glycosidation Methodology, Gordon Research Conference on Carbohydrates, Tilton, New Hampshire, USA (July). Plenary Lecture
14. Pinto, B.M. (1993). Aspects of Conformation in Modern Carbohydrate Chemistry, Symposium in Honour of H.S. Isbell, 205th ACS National Meeting, Chicago, USA (August). Abstr. CARB 36. Plenary Lecture.
15. Pinto, B.M. (1994). The Reverse Anomeric Effect Revisited. 10th New Orleans Carbohydrate Symposium, New Orleans, USA (March).
16. Pinto, B.M., S. Mehta, B.D. Johnston, J.S. Andrews, K.L. Jordan, T. Weimar, U.C. Kreis (1995). Disaccharides Containing Sulfur and Selenium. 209th ACS National Meeting, Anaheim, U.S.A. (April). Abstr. CARB 84.
17. Pinto, B.M. (1997). Exploring the Basis of Peptide-Carbohydrate Cross-Reactivity. Fifth Chemical Congress of North America, Cancun, Mexico (November).
18. Pinto, B.M. (1999). Exploring the Basis of Peptide-Carbohydrate Cross-Reactivity. Gordon Research Conference on Carbohydrates, Tilton, N.H., U.S.A. (June).

19. Pinto, B.M. (2000). Peptide Mimicry of Carbohydrates: Structural or Functional? Meeting on Anti-idiotypes and Mimotopes in Vaccine Development, Vibo Valentia, Italy (May).
20. Pinto, B.M. (2000). Carbohydrates and Carbohydrate Mimics as Therapeutics, Diagnostics, and Vaccines. Fifth Organic Workshop of the Canadian Society for Chemistry, Canmore, Alberta (May).
21. Pinto, B.M. (2000). A New Class of Glycosidase Inhibitor: Synthesis of Salacinol, its Stereoisomers, and Heteroanalogues. 20th International Carbohydrate Symposium, Hamburg, Germany (August). Abstr. B.012.
22. Pinto, B.M. (2000). Nature and Origin of Peptide Mimicry of Carbohydrates. Glycobiology Symposium, Pacificchem 2000 Conference, Honolulu, Hawaii, U.S.A., (December). Abstr. 607.
23. Pinto, B.M. (2001). Lessons from Nature: Peptide and Carbohydrate Mimics. 84th CSC Conference, Montreal, Quebec (May). Abstr. 00310.
24. Pinto, B.M. (2001). Probing the Conformations of Small Ligands Bound to Antibodies and Enzymes by Transferred NOE NMR Spectroscopy. SMASH NMR 2001 Conference, Denver, Colorado, U.S.A. (September).
25. Pinto, B.M. (2002). Mimicking Nature's Interactions for Drug Design. Bernard Belleau Award Lecture. 85th Canadian Society for Chemistry Conference, Vancouver, B.C., (June). Abstr. 37.
26. Pinto, B.M. (2003). A Combined Molecular Modeling/NMR Spectroscopy Protocol for the Study of Ligand Conformations and Protein-ligand Interactions. EuroCarb 12, Symposium on Molecular Modeling of Carbohydrates, Grenoble, France, (July).
27. Pinto, B.M. (2003). Carbohydrate-Mimetics for Drug and Vaccine Design. 39th IUPAC Congress and 86th Conference of the Canadian Society for Chemistry, Ottawa, ON, (August). Abstr. OR.1.012.
28. Pinto, B.M. (2003). Lessons from Nature: Carbohydrate Mimics as Drug and Vaccine Candidates. 10th Congress of the Federation of Asian and Oceanic Biochemists and Molecular Biologists, Symposium on Biological Mimics, Bangalore, India, (December).
29. Pinto, B.M. (2004). Selenium, Glycochemistry, and Glycobiology. IXth International Symposium on the Chemistry of Selenium and Tellurium, Bombay, India, (February).
30. Pinto, B.M. (2004). NMR Methods for Probing Protein-ligand Interactions. 22nd International Carbohydrate Symposium, Glasgow, UK (July).
31. Pinto, B.M. (2005). A Combined STD-NMR Spectroscopy/Molecular Modeling Protocol for Studying Enzyme-Inhibitor Complexes. International Consortium on Antiviral Therapies, Paris, France (March).

32. Pinto, B.M. (2005). Bacterial Polysaccharide Antigens and their Peptide Mimetics: Potential for Discriminating Vaccines. 229th ACS National Meeting, San Diego, CA, USA (March).
33. Pinto, B.M. (2005). A Combined STD-NMR Spectroscopy/Molecular Modeling Protocol for Studying Protein-Ligand Complexes. Canadian Society for Chemistry Conference, Memorial Symposium for R.U. Lemieux, Saskatoon, Canada (May).
34. Pinto, B.M. (2005). Synthesis, Enzyme-Bound conformations, and Biological Activities of Zwitterionic Glycosidase Inhibitors. Gordon Research Conference on Carbohydrates, Tilton, New Hampshire, USA (June).
35. Pinto, B.M. (2005). A Combined STD-NMR Spectroscopy/Molecular Modeling Protocol for Studying Protein-Ligand Complexes. EuroCarb 13, Bratislava, Slovakia (August).
36. Pinto, B.M. (2005). A Combined STD-NMR Spectroscopy/Molecular Modeling Protocol for Studying Protein-Ligand Complexes. Pacificchem 2005, Honolulu, Hawaii (December).
37. Watts, J. K., K. Sadalapure, N. Choubdar, **B.M. Pinto**, M. J. Damha (2006). Synthesis and Conformational Analysis of 2'-Fluoro-5-methyl-4'-thioarabinouridine (4'S-FMAU). 231st ACS National Meeting, Special Symposium in Memory of M. Sundaralingham, Atlanta, GA (March).
38. Pinto, B.M. (2006). Back to my Roots. Drug Candidates Based on an Herbal Remedy for the Treatment of Type 2 Diabetes. Canadian Society for Chemistry Conference, Symposium on Drug Design, Halifax, Canada (May)
39. Pinto, B.M. (2006). STD-NMR/Modeling Protocol for Studying Conformations of Small Molecules Bound to Enzymes. SMASH NMR 2006 International Conference, Burlington, Vermont (September).
40. Pinto, B.M. (2007). Ammonium, Selenonium, and Sulfonium Ions as Glycosidase Inhibitors. 233rd American Chemical Society National Meeting, Chicago, Illinois (March).
41. Pinto, B.M. (2009). Back to my Roots: New Therapeutic Agents for the Treatment of Type-2 Diabetes from an Ancient Herbal Remedy. Carbohydrates as Organic Raw Materials, Lisbon, Portugal (January).
42. Pinto, B.M (2009). Protein-carbohydrate Interactions: Towards Drug Candidates for Treatment of Type 2 Diabetes and Tuberculosis. 44th meeting of the Mexican Chemical Society, Puebla, Mexico (September).
43. Pinto, B.M. (2010). Protein-carbohydrate Interactions: STD-NMR and Molecular Dynamics Studies. Satellite Meeting of the 25th International Carbohydrate Symposium, Taipei, Taiwan (July).

44. Pinto, B.M (2010). New Glycosidase Inhibitors form an Herbal Treatment for Diabetes. 25th International Carbohydrate Symposium, Tokyo, Japan (August).

Invited Book Chapters

1. Pinto, B.M. Amide Nitrogen. In "Acyclic Organonitrogen Stereodynamics," J.B. Lambert, Y. Takeuchi, Eds., VCH Publishers, NY, 1992.
2. Mehta, S., B.M. Pinto. Phenyl Selenoglycosides as Versatile Glycosylating Agents in Oligosaccharide Synthesis and the Chemical Synthesis of Disaccharides Containing Sulfur and Selenium. In "Modern Methods in Carbohydrate Synthesis," S.H. Khan, R.A. O'Neill, Eds., Harwood Academic Publishers, The Netherlands, 1994.
3. Pinto, B.M. The World of Carbohydrates and Associated Natural Products In "Comprehensive Natural Products Chemistry", Vol. 3, B.M. Pinto, Ed., D.H.R. Barton, K. Nakanishi, O. Meth-Cohn, Ser. Eds., Elsevier, U.K., 1999.
4. Johnson, M.A., B.M. Pinto. Structural and Functional Studies of Peptide-Carbohydrate Mimicry. In "Topics in Current Chemistry: Bioactive Conformations II", T. Peters, Ed., Springer-Verlag, Heidelberg, Germany, 2008, Vol. 273, p. 55–116.

Books

1. May, R.G., Oehlschlager, A.C., Pinto, B.M., 1991. A Workbook for Molecular Mechanics Calculations, SFU Publication, Burnaby, B.C., Canada.
2. Pinto, B.M., 1995. Discover Canadian Chemistry. A Magazine for High-School Teachers and Students, CSC Publication.
3. Pinto, B.M., Editor of Volume on "Carbohydrates and their Derivatives Including Cellulose, Tannins and Related Lignins", *Comprehensive Natural Products Chemistry*, Vol. 3, D.H.R. Barton, K. Nakanishi, O. Meth-Cohn, Ser. Eds., Elsevier, U.K., 1999.