# Curriculum Vitae *Michael A. Kerr*

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## Curriculum Vitae Michael A. Kerr

A. Contact Information

**Home:** 102 Meadowridge Rd. **Work:** Department of Chemistry

London, ON N6H 5E6 The University of Western Ontario

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**B.** Personal

Born October 6, 1961, Bistroff, Moselle, France

Citizen of Canada

C. Education and Postdoctoral Experience

The Scripps Research Institute (July 1991 - June 1993) - Research Associate

Project Title: The Total Synthesis of Dynemicin A; The Synthesis of Biologically Active Protaxols

Research Advisor: Professor K.C. Nicolaou

University of Hawaii (September 1985 - August 1991) - Ph.D. in Chemistry

Dissertation Title: Part I: The Total Synthesis of Two Human Urinary Metabolites of  $\Delta$ -9-THC. Part II:

The Total Synthesis of (d,l)-Morphine.

Research Advisor: Professor Marcus A. Tius

University of Waterloo (September 1980 - May 1985) - Hons. B.Sc. (Chemistry)

Undergraduate Research Advisor: Professor Victor A. Snieckus

**D.** Employment History

The University of Western Ontario (2005 – Present) - Professor (Chemistry

Research Interests: Novel synthetic methods and application to the synthesis of bioactive molecules.

The University of Western Ontario (2000 – 2005) - Associate Professor (Chemistry)-tenured 2000

**The University of Western Ontario** (1999 – 2000) - Assistant Professor (Chemistry)

Acadia University (1998 - 1999) - Associate Professor (Chemistry) – tenured 1998.

**Acadia University** (1993 - 1998) - Assistant Professor (Chemistry)

Research Interests: Novel synthetic methods and their application to the synthesis of bioactive

molecules.

The Scripps Research Institute (1991 - 1993) - Research Associate

Project: The Total Synthesis of Dynemicin A; The Chemical Synthesis of Biologically Active Protaxols

Research Advisor: Professor K.C. Nicolaou

The University of Hawaii at Manoa (1985 - 1991) - Research Assistant

Project: The Total Synthesis of Morphine Research Advisor: Professor Marcus A. Tius

E. Honors and Awards

Boeringer Ingelheim Lectureship, UQAM (2012)

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Faculty Scholar Award 2008-1010
Annormed Named Lectureship (2007)
Occupational Health and Safety Award for Membership on University HazMat Team 2004
Award for Excellence in Undergraduate Teaching (Nominee) 2004-2005
Premiers Research Excellence Award (2001)
Synlett Editor's Award for Outstanding Faculty (1999)

# F. Research grants and other funding obtained

Start Date	End Date	Principle Investigator	Co-Investigator	<b>Granting Agency</b>	Grant Title	Total Amount
2012	2017	M.A. Kerr	None	NSERC Discovery Grant	The Total Synthesis of Bioactive Molecules and the Methodological Underpinning	\$505,000
2008	2010	M.A. Kerr	None	UWO	Faculty Scholar Award	\$14,000
2007	2012	M.A. Kerr	None	NSERC Discovery Grant	Target and Methods Based Organic Synthesis	\$400,000
2006	2008	M.A. Kerr	None	Merck-Frosst	Unrestricted Grant	\$30,000
2005	2006	M.A. Kerr	None	Boehringer Ingelheim	The Development of a Homo 3+2 Dipolar Cycloaddtion	\$20,000
2005	2006	M.A. Kerr	None	NSERC-CRD grant	The Development of a Homo 3+2 Dipolar Cycloaddtion	\$20,000
2003	2005	M.A. Kerr	None	PRF Grant	The Synthesis of Complex Indoles	\$116,000
2003	2004	M.A. Kerr	None	GlaxoSmithKline	The Synthesis of Complex Indoles	\$15,000
2002	2002	M.A. Kerr	None	QLT Inc Contract	The Diels-Alder reactions of porphyrin compounds	\$15,000
2002	2006	M.A. Kerr	None	NSERC RGPIN	Synthetic Methods and Application to Target- Oriented Chemical Synthesis	\$242,080
2001	N/A	M.A. Kerr	14 others	NSERC – Equip. Grant	Mass Spectrometry Facility Upgrade	\$107,007
2000	2005	M.A. Kerr	None	PREA	Studies Directed Towards the Synthesis of Hapalindole Alkaloids	\$100,000
2000	N/A	M.A. Kerr	None	ADF Grant	Heatable Ultra-High Pressure Chemical Reactor	\$50,289
2000	N/A	M.A. Kerr	None	NSERC – Equip.	HPLC in the Service of	\$58,417
				Grant	Hyperbaric Chemistry	
2000	N/A	M.A. Kerr	None	VP Research Grant	Kugelrohr Microdistillation Oven	\$7,000
2000	N/A	John Corrigan	Michael Kerr, Robert Hudson, Mark Workentin	ADF Grant	GCMS	\$68,000
1999	2001	M.A. Kerr	None	NSERC CRD Grant	Studies Directed Towards the Synthesis of Hapalindole Alkaloids	\$49,200
1999	2001	M.A. Kerr	None	Industrial Grant – MedMira	Studies Directed Towards the Synthesis of Hapalindole Alkaloids	\$50,000
1999	N/A	M.A. Kerr	None	UWO Start-up	None	\$90,000
1999	N/A	Jason Clyburne	Michael Kerr	NSERC – Equip. Grant	Dry Box	\$57,164

1999	2002	Stanley Cameron	Michael Kerr and others	NSERC MFA Grant	Centre for High-Flux X-ray Diffraction	\$90,000
1999	2002	Rod Wasylishen	Michael Kerr and others	NSERC MFA Grant	Atlantic Region Magnetic Resonance Centre	\$75,000
1998	2002	M.A. Kerr	None	NSERC RGPIN	Ultra-High and Ambient Pressure Synthetic Methodology	\$193,116
1996	1998	M.A. Kerr	None	NSERC RGPIN	Ultra-High and Ambient Pressure Synthetic Methodology	\$55,440
1996	1999	Rod Wasylishen	Michael Kerr and others	NSERC Major Facilities Access Grant	Atlantic Region Magnetic Resonance Centre	\$84,000
1995	1996	M.A. Kerr	None	Sepracor	High-Pressure Synthesis	\$15,000
1995	1995	M.A. Kerr	None	Sepracor	Semi-synthesis of Taxol	\$20,000
1994	1996	M.A. Kerr	None	NSERC RGPIN	Ultra-High and Ambient Pressure Synthetic Methodology	\$36,000
1994	N/A	M.A. Kerr	None	NSERC – Equip. Grant	Ultra-High Pressure Chemical Reactor	\$36,147

# **G.** Publications and Patents

Articles in peer-reviewed journals

- 1. Armstrong, E.L.; Grover, H.K.; Kerr, M.A. <u>Scandium Triflate Catalyzed Nucleophilic Additions to Indolylmethyl Meldrum's Acid Derivatives via a Graimne-type Fragmentation: Synthesis of Substituted Indolemethanes.</u> *J. Org. Chem.* **2013**, *in press*.
- 2. Grover, H.K.; Emmett, M.R.; Kerr, M.A. <u>γ-Substituted Butanolides from Cyclopropane</u> Hemimalonates: An Expedient Synthesis of Natural (R)-Dodecan-4-olide *Org. Lett.* **2013**, 15, 4838.
- 3. Humenny, W.J.; Kyriacou, P. Sapeta, K.; Karadeolian, A; Kerr, M.A. <u>Multicomponent Synthesis of Pyrroles from Cyclopropanes: A One-Pot Palladium(0)-Catalyzed Dehydrocarbonylation/</u>
  Dehydration *Angew. Chem. Int. Ed.* **2012**, *51*, 11088.
- 4. Emmett, M.R.; Grover, H.K.; Kerr, M.A. <u>Tandem Ring-Opening/Decarboxylation of Cyclopropane Hemimalonates with Sodium Azide: A Short Route to g-Aminobutyric Acid Esters</u> *J. Org. Chem.* **2012,** 77, 6634.
- 5. Emmett, M.R.; Kerr, M.A. <u>Nucleophilic Opening of Cyclopropane Hemi-malonates Using Internal Brønsted Activation</u> *Org. Lett.* **2011**, *13*, 4180.
- 6. (*Invited Account*) Sapeta, K.; Lebold, T.P.; Kerr, M.A. Synthesis of Highly Substituted Indoles via Diels-Alder/Plieninger Indolization Sequence: Applications in Total Synthesis Synlett **2011**, 1495.
- 7. Grover, H.K.; Lebold, T.P.; Kerr, M.A. <u>Tandem Cyclopropane Ring-Opening/Conia-ene Reactions of 2-Alkynyl Indoles: A [3 + 3] Annulative Route to Tetrahydrocarbazoles</u> *Org. Lett.* **2011**, *13*, 220.
- 8. Johansen, M.B.; Kerr, M.A. <u>Direct Functionalization of Indoles: Copper-Catalyzed Malonyl Carbenoid Insertions.</u> *Org. Lett.* **2010**, *12*, 4956

- 9. Karadeolian, A.; Kerr, M.A. Total Synthesis of (+)-Isatisine A. J. Org. Chem. 2010, 75, 6830.
- 10. Lebold, T.P.; Kerr, M.A. <u>Intramolecular Annulations of Donor-Acceptor Cyclopropanes.</u> *Pure Appl. Chem.* **2010**, 82, 1797.
- 11. Karadeolian, A.; Kerr M.A. <u>Total Synthesis of (+)-Isatisine A.</u> Angew. Chem. Int. Ed. **2010**, 49, 1133.
- 12. Leduc, A.B.; Lebold, T.P.; Kerr, M.A. <u>Synthesis of Tetrahydropyrans from Propargyl Alcohols and 1,1-Cyclopropanediesters: A One-Pot Ring-Opening/Conia-Ene Protocol</u> *J. Org. Chem.* **2009**, *74*, 8414.
- 13. (*Invited Review*) Carson, C.A.; Kerr, M.A. <u>Heterocycles From Cyclopropanes: Applications in Natural Products Synthesis. Chem. Soc. Rev. 2009</u>, 38, 3051.
- 14. Lebold, T.P.; Kerr, M.A. <u>Stereodivergent Synthesis of Fused Bicyclo Pyrazolidines: Access to Pyrazolines and Pyrrolidines Org. Lett.</u> **2009**, *11*, 4354
- 15. Lebold, T.P.; Leduc, A.B.; Kerr, M.A. <u>A Zn(II) Catalyzed Synthesis of Piperidines from Propargyl Amines and Cyclopropanes.</u> *Org. Lett.* **2009**, *11*, 3770.
- 16. Dias, D.A.; Kerr, M.A. <u>Domino Synthesis of Bridged Bicyclic Tetrahydro-1,2-oxazines: Access to Stereodefined 4-Aminocyclohexanols.</u> *Org. Lett.* **2009**, *11*, 3694.
- 17. Sapeta, K.; Kerr, M.A. <u>Synthesis of Cyclohexanes via [3 + 3] Hexannulation of Cyclopropanes and 2-Chloromethyl Allylsilanes.</u> *Org. Lett.* **2009**, *11*, 2081-2084
- 18. Carson, C.A.; Kerr, M.A. <u>Total synthesis of FR901483</u> Org. Lett. **2009**, 11, 777.
- 19. Leduc, A.B.; Kerr, M.A. Total synthesis of allosecurinine Angew. Chem. Int. Ed. 2008, 47, 7945.
- 20. Johansen, M.; Kerr, M.A. Expedient synthesis of pyrrolo[1,2-a]indoles: Preparation of the core of yuremamine *Org. Lett.* **2008**, *10*, 3497.
- 21. Magolan, J; Carson, C.A.; Kerr, M.A. <u>Total synthesis of (+/-)-mersicarpine.</u> *Org. Lett.*, **2008**, *10* 1437.
- 22. Lebold, T.P.; Kerr, M.A. <u>Total synthesis of clausamines A-C and clausevatine D.</u> *Org. Lett.* **2008**, 997.
- 23. Jackson, Stephen K.; Karadeolian, Avedis; Driega, Alex B.; Kerr, Michael A. <u>A stereodivergent methodology for the synthesis of complex homochiral pyrrolidines.</u> *J. Am. Chem. Soc.* **2008**, *130*, 4196.
- 24. Zhu, J.; Lines, B. M.; Ganton, M. D.; Kerr, M. A.; Workentin, M. S. <u>Efficient Synthesis of Isoxazolidine-Tethered Monolayer-Protected Gold Nanoparticles (MPGNs) via 1,3-Dipolar Cycloadditions under High-Pressure Conditions J. Org. Chem 2008</u>, 73. 1099.
- 25. Carson, C.A.; Young, I.S.; Kerr, M.A. <u>The Reaction of Nitrones with Cyclopropanes: A Convenient Preparation of Tetrahydro-1,2-oxazines</u>. *Synthesis* **2008**, *3*, 485.

- 26. Karadeolian, A.; Kerr, M.A. <u>Examination of the homo-[3+2]-dipolar cycloaddition: Mechanistic insight into region-and diastereoselectivity.</u> *J. Org. Chem.* **2007**, *72*, 10251.
- 27. Sapeta, K.; Kerr, M.A. <u>The cycloaddition of nitrones with homochiral cyclopropanes.</u> *J. Org. Chem.* **2007**, *72*, 8597.
- 28. Johansen, M. Leduc, A.B.; Kerr, M.A. <u>A Convenient synthesis of both antipodes of balasubramide</u>. *Synlett* **2007**, 2593.
- 29. Lebold, T.P.; Kerr, M.A. <u>Total Synthesis of Eustifolines A-D and Glycomaurrol via a Divergent Diels-Alder Strategy.</u> *Org. Lett.* **2007**, *9*, 1883.
- 30. Zhu, J.; Ganton, M. D.; Kerr, M. A.; Workentin, M. S. <u>Chemical Modification of Monolayer-Protected Gold Nanoparticles Using Hyperbaric Conditions</u> *J. Am. Chem. Soc.* **2007**, *129*, 4904.
- 31. Jackson, S.D.; Kerr, M.A. <u>Total Synthesis of (+/-)-Herbindole A, (+/-)-Herbindole B and (+/-)-cis-Trikentrin A</u> *J. Org. Chem.* **2007**, 72, 1405.
- 32. Young, I.S.; Kerr, M.A. Total Synthesis of (+)-Nakadomarin A. J. Am. Chem. Soc. 2007, 129. 1465.
- 33. Ganton, M.D.; Kerr, M.A. <u>Aryl Amidation Routes to Dihydropyrrolo[3,2-e]indoles and Pyrrolo[3,2-f]tetrahydroquinolines: The Total Synthesis of the (+/-)-CC-1065 CPI Subunit.</u> *J. Org. Chem.* **2007**, 72, 574.
- 34. Leduc, A.B.; Kerr, M.A. Total Synthesis of Decursivine Eur. J. Org. Chem. 2007, 237.
- 35. Carson, C.A.; Kerr, M.A. <u>Total Synthesis of (+)-Phyllantidine.</u> *Angew. Chem. Int. Ed.* **2006**, 45, 6560.
- 36. Magolan, J.; Kerr, M.A. Expanding the Scope of Mn(OAc)<sub>3</sub>-Mediated Cyclizations: Synthesis of the Tetracyclic Core of Tronocarpine. *Org. Lett.* **2006**, *8*, 4561.
- 37. Zheng, X.; Kerr, M.A. <u>Synthesis and Cross-Coupling Reactions of 7-Azaindoles via a New Donor-Acceptor Cyclopropane</u>. *Org. Lett.* **2006**, 8, 3777.
- 38. England, D.B.; Magolan J.; Kerr, M.A. <u>Synthesis of the Western Hemisphere of the Lolicines and Lolitrems</u> *Org. Lett.* **2006**, *08*, 2209-2212..
- 39. Lebold, T.P.; Carson, C.A.; Kerr, M.A. <u>The Nicholas-type activation of cyclopropanes toward reactions with nitrones in the homo-3+2-dipolar cycloaddition</u>. *Synlett* **2006**, 364-368.
- 40. Wanapun, D.; Van Gorp, K.A.; Mosey, N.J.; Kerr, M.A.; Woo, T.K. <u>The mechanism of 1,3-dipolar cycloaddition reactions of cyclopropanes and nitrones A theoretical study</u> *Can. J. Chem.* **2005**, 83, 1752-1767.
- 41. Ganton, M. D.; Kerr, M. A. <u>A Domino Amidation Route to Indolines and Indoles: Rapid Syntheses</u> of Anhydrolycorinone, Hippadine, Oxoassoanine, and Pratosine *Org. Lett.* **2005**, *7*, 4777.
- 42. Carson, C. A.; Kerr, M. A. <u>Diastereoselective Synthesis of Pyrrolidines via the Yb(OTf)<sub>3</sub> Catalyzed Three-Component Reaction of Aldehydes, Amines, and 1,1-Cyclopropanediesters</u> *J. Org. Chem.* **2005**; 70 8242-8244.

- 43. England, D.B.; Kerr, M.A. <u>Synthesis and cross-coupling reactions of substituted 5-triflyloxyindoles</u> *J. Org. Chem.* **2005**, 70, 6519-6522.
- 44. Young, I.S.; Williams, J.L.; Kerr. M.A. <u>Diastereoselective Synthesis of Pyrrolidines Using a Nitrone/Cyclopropane Cycloaddition: Synthesis of the Core Structure of Nakadomarin A.</u> *Organic Letters* **2005**, 7, 953-955.
- 45. Jackson, S.K., Banfield, S.C.; Kerr, M.A. <u>Total Synthesis of (+/-)-Herbindole B and (+/-)-cis-</u>Trikentrin B. *Organic Letters* **2005**, 7, 1215-1218.
- 46. Ganton, M.D.; Kerr, M.A. A MgI<sub>2</sub> Promoted Homo-3+2-dipolar cycloaddition *J. Org. Chem.* **2004**, 69, 8554-8557
- 47. Banfield, S.C; Kerr, M.A. <u>The Diels-Alder reactions of quinine imine ketals</u> *Can. J. Chem.* **2004**, 82, 131-138.
- 48. Young, I.S.; Kerr, M.A. <u>Three-Component Homo 3+2 Dipolar Cycloaddition</u>. A <u>Diversity Oriented Synthesis of Tetrahydro-1,2-oxazines and FR900482 Skeletal Congeners</u> *Organic Letters*, **2004**, 6, 139-141.
- 49. Kinsman, A.C.; Kerr, M.A. <u>The Total Synthesis of (+)-Hapalindole Q by an Organomediated Diels-Alder Reaction</u> *J. Am. Chem. Soc.* **2003**, 125, 14120.
- 50. Young, I.S.; Kerr, M.A. <u>A Homo 3+2 Dipolar Cycloaddition: The Reaction of Nitrones with Cyclopropanes</u> *Ang. Chem. Int. Ed.* **2003**, 42, 3023.
- 51. Zawada, P.V.; Banfield, S.C.; Kerr, M.A. <u>Diels-Alder Reactions of 4-Alkoxy-4-alkylcyclohexa-2,5-dienimines: Synthesis of 5-Alkylindoles.</u> *Synlett* **2003** 971.
- 52. Gibe, R.; Kerr, M.A. <u>Convenient preparation of indolyl malonates via carbenoid insertion.</u> *J. Org. Chem.* **2002**, 67, 6247-6249.
- 53. England, D.B.; Kerr, M.A. <u>The Reactions of 3-Alkyl Indoles with Cyclopropanes; A Novel Rearrangement Leading to 2,3-Disubstitution</u> *Can. J. Chem.* **2002,** 80, 992-998.
- 54. Banfield, S.C.; Kerr, M.A. <u>The Diels-Alder Reactions of Quinone Imine Ketals; A Versatile Synthesis of Highly Substituted 5-Methoxy Indoles</u> *Organic Letters* **2001**, 3325- 3327.
- 55. Kinsman, A.C.; Kerr. M.A. <u>The Total Synthesis of Hapalindole Q</u> *Organic Letters* **2001**, 3189-3191.
- 56. England, D.B.; Kuss, T.D.O.; Keddy, R.G. Kerr. M.A. <u>Cyclopentannulation of 3-alkylindoles: A</u> synthesis of a tetracyclic subunit of the kopsane alkaloids *J.Org. Chem.* **2001**, 13, 4704-4709.
- 57. Banfield, S.C.; Kerr, M.A. <u>The Diels-Alder Reactions of Quinone Imine Ketals: A Synthesis of the</u> Ergot Skeleton *Synlett* **2001**, 436-438.
- 58. Brown, M.A.; Kerr, M.A. <u>A Convenient Preparation of 4-Iodoindoles from indoles: Application to the chemical synthesis of hapalindole alkaloids</u>. *Tetrahedron Lett.* **2001**, 983-985.

- 59. Kinsman, A.C.; Kerr, M.A. <u>Highly Selective Diels-Alder Reactions of Dienophiles with 1,3-Cyclohexadiene Mediated by Yb(OTf)3·2H2O and Ultra High Pressures</u> *Organic Letters* **2000**, 2, 3517.
- 60. Barrett, I.C.; Kerr, M.A. <u>A "One-Pot" Procedure for the Oxidative Conversion of Alkyl Halides and Tosylates to N,N-Dimethylhydrazones</u> *Synlett* **2000**, 1673.
- 61. Barrett, I.C.; Langille, J.D; Kerr, M.A. <u>The Facile Peparation of Hydrazones by the Treatment of Azides with Hydrazones Catalyzed by FeCl3.6H2O</u> *J. Org. Chem.* **2000**, 65, 6268.
- 62. Kerr, M.A.; Keddy, R.G. <u>The Annulation of 3-Alkylindoles with 1,1-Cyclopropanediesters</u> *Tetrahedron Lett.* **1999**, 5671.
- 63. Barrett, I.C.; Kerr, M.A. <u>The High-Pressure SNAr Reaction of N-p-Fluorobenzyl-2-chlorobenzimidazole with Amines</u>; An Application to the Synthesis of Norastemizole and <u>Analogues</u> *Tetrahedron Lett.* **1999**, 2439.
- 64. Harrington, P.E., Kerr, M.A. <u>The Ultra High Pressure Conjugate Addition of Indoles to Electron</u> <u>Deficient Olefins</u> *Can. J. Chem.* **1998**, 76, 1256.
- 65. Harrington, P.E., Kerr, M.A. <u>The High Pressure Reaction of Cyclopropanes with Indoles Catalyzed by Ytterbium Triflate</u> *Tetrahedron Lett.* **1997**, 5949.
- 66. Miah, M.A.J.; Chaddopadhyay, S.; Tsukazaki, M.; Wicki, M; Nguen, T.; Coelho, A.L.; Kerr, M.; Snieckus, V. Anionic Homologous Fries Rearrangement of O-(2-Methylaryl)Carbamates A Regiospecific Route to Benzo[B]Furan-2(3H)-ones Including an Unnamed Metabolite From Helenium Species Synlett 1997, 839.
- 67. Kerr, M.A.; Harrington, P.E. <u>The Reaction of Indoles with Electron Deficient Olefins Catalyzed by Yb(OTf)<sub>3</sub>'3H<sub>2</sub>O *Synlett* **1996**, 1047.</u>
- 68. Kerr, M.A.; Jarvo, E.R.; Boothroyd, S.R. <u>The High Pressure Diels-Alder Reactions of Quinone-mono-Ketals</u> *Synlett* **1996**, 897.
- 69. Komori, A; Okabe, S.; Suganuma, M.; Kerr, M.A.; Buschpetersen, J.; Oh, L.M.; Zhuo, J.C.; Kannangara, G.S.K.; Zou, X.L.; Tius, M.A.; Fujiki, H. <u>Antitumor-promoting Activity of Canventol and is Synthetic Analogs Through Inhibition of Protein Isoprenylation</u> *Japanese Journal of Cancer Research* **1996**, 87, 875.
- 70. Nicolaou, K.C.; Gross, J.L.; Kerr, M.A.; <u>Synthesis of Novel Heterocycles Related to the Dynemycin A Ring Skeleton</u> *J. Heterocyclic Chem* **1996**, 33, 735.
- 71. Kerr, M.A. <u>The High Pressure Diels-Alder Reactions of an Acylated Quinone Imine Ketal: A 2-Aminobenzyne Equivalent</u> *Synlett* **1995**, 1165-1167.
- 72. Kerr, M.A.; Boothroyd, S.R. <u>A Mild and Efficient Method for the Synthesis of Anilines from</u> Nitroarenes *Tetrahedron Lett.* **1995**, 2411-2414.
- 73. Nicolaou, K.C.; Gross, J.L.; Kerr, M.A.; Lemus, R.H.; Ikeda, K.; Ohe, K. <u>Synthesis of the Anthraquinone Framework of Dynemicin A. Angew. Chem. Int. Ed. Engl.</u> **1994**, 33,781-783.

- 74. Nicolaou, K.C.; Riemer, C.; Kerr, M.A.; Rideout, D. Wrasidlo, W. <u>Design, Synthesis and Biological Activity of Protaxols.</u> *Nature* **1993**, 364, 464-466.
- 75. Tius, M.A.; Kannangara, G.S.K.; Kerr, M.A.; Grace, K.J.S. <u>Halogenated Cannabinoid Synthesis</u>. *Tetrahedron* **1993**, 49, 3291-3304.
- 76. Tius, M.A.; Kerr, M.A. <u>A Novel Approach to the Synthesis of Morphine Alkaloids. The Synthesis of (d,l)-Thebainone-A. J. Am. Chem. Soc.</u> **1992**, 114, 5959-5966.
- 77. Tius, M.A.; Gu, X-.q.; Kerr, M.A. <u>A Convenient Synthesis of (-)-11-Nor-□</u> tetrahydro-cannabinol-9-methanol. *J. Chem.Soc. Chemical Commun.* **1989**, 62-63.
- 78. Tius, M.A.; Kerr, M.A. <u>A Convenient Synthesis of R-(+)-Perrilaldehyde.</u> *Synthetic Commun.* **1988**, 1905-1911.

#### Book Chapters/Monograph Contributions

1. Sapeta, K.; Kerr, M.A. 1H and 2H indazoles Science of Synthesis, 2011, 1, 15

#### **Patents**

- 1. Nicolaou, K.C.; Riemer, C.G.; Kerr. M.A. Water Soluble Taxol Derivatives. U.S. Patent Number 5,817,840.
- 2. Kerr, M.A.; Young, I.S. <u>Synthesis of Tetrahydro-1,2-Oxazines by the Cycloaddition of Nitrones with Cyclopropanes.</u> This application claims the benefit of priority to United States Provisional Patent Application serial number **60/453,819**, filed March 12, 2003.

## **H.** Invited Lectures

- 1. **96<sup>th</sup> CSC Conference and Exibition,** Quebec City, May 26-30, 2013 "Radical and Carbenoid Functionalization of Indoles: Applications to Total Synthesis"
- 2. **2012** Boehringer Ingelheim Lectureship: University of Quebec at Montreal, December 2012 "Total Synthesis of Natural Products Enabled by Donor-Acceptor Cyclopropanes"
- 3. **Chinese University of Science and Technology,** Hefei, China, October 2012 "Total Synthesis of Natural Products Enabled by Donor-Acceptor Cyclopropanes"
- 4. **Fudan University**, Shanghai, China, October 2012 "Total Synthesis of Natural Products Enabled by Donor-Acceptor Cyclopropanes"
- 5. **East China Normal University**, Shanghai, China, October 2012 "Total Synthesis of Natural Products Enabled by Donor-Acceptor Cyclopropanes"
- 6. **International Forum on Homogeneous Catalysis**, Shanghai, China, October 2012 "Recent Advances in the Metal Catalyzed Cycloaddition/Annulation Reactions of Donor-Acceptor Cyclopropanes"
- 7. **University of Toronto (Mississauga)**, September 2012 –" Recent Advances in the Metal Catalyzed Cycloaddition/Annulation Reactions of Donor-Acceptor Cyclopropanes"
- 8. 95th CSC Conference and Exhibition, Calgary, May 26-30, 2012 "Recent Advances in the

- Synthesis of Heterocycles from Cyclopropa
- 9. **MacMaster University,** November 2011 "New Synthetic Methods for the Synthesis of Heterocycles and Carbocycles"
- 10. **Boehringer Ingelheim (Canada Ltd.,** Montreal, November 2011 "New Synthetic Methods for the Synthesis of Heterocycles and Carbocycles"
- 11. **The University of Idaho,** October 2011 "New Synthetic Methods for the Synthesis of Heterocycles and Carbocycles"
- 12. **Washington State University,** October 2011 "New Synthetic Methods for the Synthesis of Heterocycles and Carbocycles"
- 13. **Gordon Research Conference on Heterocyclic Chemistry** June, 2011, Salve Regina University, RI "Total synthesis of heterocyclic natural products enabled by the use of donor-acceptor cyclopropanes"
- 14. **94<sup>th</sup> CSC Conference and Exibition (Kieth Fagnou Memorial Symposium),** Montreal, June 5-9, 2011 "Carbocycles from cyclopropanes: New directions in cyclopropane chemistry"
- 15. **University of York, York, UK,** May 4<sup>th</sup>, 2011 New Synthetic Methodologies for the synthesis of carbocycles and heterocycles"
- 16. **20<sup>th</sup> Lakeland Heterocyclic Symposium,** Grasmere UK, May 5-9, 2011- "The total synthesis of some heterocyclic natural products and their methodological underpinnings"
- 17. **Pacifichem 2010,** Honolulu HI, December 2010 "Cyclopropanes as Vehicles for Natural Products Synthesis"
- 18. **Boehringer Ingelheim (Canada Ltd.,** Montreal, November 2011 "Cyclopropanes as Vehicles for Natural Products Synthesis"
- 19. **Amgen, Thousand Oaks, CA,** July 30, 2010 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 20. **KFOS Symposium University of Ottawa,** May 2010 "Heterocycles from cyclopropanes: Applications to natural products synthesis"
- 21. **Wayne State, University,** November 11, 2009 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 22. **International Congress on Heterocylic Chemistry,** St. John's Nfld., August 2-7 2009 "Heterocycles from cyclopropanes; Enabling methodologies for the total synthesis of alkaloids."
- 23. **CSC 2009 Conference and Exhibition,** Hamilton, May 2009 "Organic Synthesis in Canada, Coast to Coast: Past, Present and Future"
- 24. **Sherbrooke University,** April 2009 "Heterocycles from cyclopropanes; Enabling methodologies for the total synthesis of alkaloids."
- 25. **Universite de Montreal,** April 2009 "Heterocycles from cyclopropanes; Enabling methodologies for the total synthesis of alkaloids."
- 26. **Pfizer Symposium, University of California Irvine,** March 2009 "Heterocycles from cyclopropanes; Enabling methodologies for the total synthesis of alkaloids."
- 27. **Colorodo State University,** February 2009 "Heterocycles from cyclopropanes; Enabling methodologies for the total synthesis of alkaloids."
- 28. Amgen, Cambridge Mass., March 2008 "New Cycloadditions and Their Application to Alkaloid

- Synthesis"
- 29. **University of Alberta,** October 2007 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 30. **University of Saskatchewan,** September 2007 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 31. **Merck Frosst, Montreal,** June 2007 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 32. **Merck, Medicinal Chemistry Division, Rahway, New Jersey** May 2007 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 33. **Anormed Lectureship: University of British Columbia,** January 2007 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 34. **Anormed Lectureship: Simon Fraser University,** January 2007 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 35. **Memorial University of Newfoundland, SOCCER conference,** August 2006 "New cycloaddition reactions and their application to the synthesis of nakadomarin A and phyllantidine"
- 36. **Dalhousie University**, July 2006 "New cycloaddition reactions and their application to the synthesis of nakadomarin A and phyllantidine"
- 37. **3<sup>rd</sup> International Conference on Multicomponent Reactions and Related Processes,** Amsterdam, July 2006 "Donor/acceptor cyclopropanes in multicomponent reactions: Application to the synthesis of nitrogen heterocycles and natural products"
- 38. **University of Ottawa,** November 2005 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 39. **Simon Fraser University**, August 2005 "New ways to make complex indoles: The total syntheses of (+/-)-cis-trikentrin B, (+/-)-herbindole A, and (+/-)-herbindole B."
- 40. **CSC 2005 Conference and Exhibition,** Saskatoon May, 2005 "New Frontiers in Organic Synthesis"
- 41. **University of North Dakota**, March 2005 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 42. **University of Minnesota,** March 2005 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 43. **IRCM/McGill University**, February 2005 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 44. **University of Waterloo**, November 2004 "New ways to make complex indoles: The total syntheses of (+/-)-cis-trikentrin B, (+/-)-herbindole A, and (+/-)-herbindole B."
- 45. Latest Trends in Organic Synthesis Symosium, Brock University, August 2004 "The Development of a Homo 3+2 Dipolar Cycloaddition"
- 46. **Queens University,** March 2004 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 47. **University of Calgary,** February 2004 "New Cycloadditions and Their Application to Alkaloid Synthesis"

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- 48. **Brock University,** February 2004 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 49. **CSC 2003 Conference and Exhibition,** Ottawa August 2003 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 50. **Unversity of Toronto,** June 2003 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 51. **University of Ottawa, Spring Synthesis Day,** May 2003 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 52. **GlaxoSmithKline, RTP,** March 2003 "New Cycloadditions and Their Application to Alkaloid Synthesis"
- 53. **Memorial University**, January 2003 "The Total Synthesis of Hapalindole Alkaloids"
- 54. **Dalhousie University**, September 2002 Invited lecture in a symposium titled "Natural Products, Chirality and Synthesis"
- 55. York University, November 2001: "Indoles: Synthetic Methods and Total Synthesis"
- 56. Sepracor Canada Ltd., November 2001: "Indoles: Synthetic Methods and Total Synthesis"
- 57. **NPS/Allelix**, February, 2001: "Ambient and Hyperbaric Synthetic Methods; Applications to Chemical Synthesis"
- 58. **Sepracor Canada Ltd.,** February 2001: "Ambient and Hyperbaric Synthetic Methods; Applications to Chemical Synthesis"
- 59. **Brantford Chemicals Inc.**, February 2001: "Ambient and Hyperbaric Synthetic Methods; Applications to Chemical Synthesis"
- 60. Wayne State University, November 2000: "Cycloadditions in the Service of Alkaloid Synthesis"
- 61. The University of Toronto, October 2000: "Cycloadditions in the Service of Alkaloid Synthesis"
- 62. Canadian Society for Chemistry Conference, Calgary, Alberta, May 28-31, 2000 Invited lecture for a symposium titled "Stereoselective Synthesis"
- 63. **Organic Chemistry Workshop,** May 26-29, 1998, organized as part of the Canadian Society for Chemistry Conference and Exhibition, June 1-4, 1998, Whistler, B.C.
- 64. Wyeth-Ayerst Research July 1998: "Hyperbarric Synthetic Methods"
- 65. **Bio-Mega/Boehringer-Ingelheim Research Inc.** March 19, 1997: "Novel Ultra High Pressure Synthetic Methodology"
- 66. Canadian Society for Chemistry Conference, St. John's Newfoundland, June 23-27, 1996 Invited lecture for a symposium titled "Frontiers in Heterocyclic Ring Chemistry"
- 67. Canadian Institute for Chemistry tour speaker Memorial University, University of New Brunswick (Fredericton), Universite de Moncton, University of New Brunswick (St. John), March 11-15, 1996.
- 68. **Mount Allison University**, March 23, 1995: "The Chemical Synthesis of Bioactive Marine Alkaloids"
- 69. **Saint Mary's University**, November 10, 1994: "The Chemical Synthesis of Bioactive Marine Alkaloids"
- 70. **Dalhousie University**, November 22, 1993: Analgesics and Anti-cancer Agents"

#### I. Presentations at professional meetings

As presenting author

- 1. **96<sup>th</sup> CSC Conference and Exibition,** Quebec City, May 26-30, 2013 <u>Radical and Carbenoid Functionalization of Indoles: Applications to Total Synthesis</u>
- 2. Kerr M.A. **5th International Forum on Homogenous Catalysis,** Shanghai, China, October 9-12, 2012 Recent Advances in the Metal Catalyzed Cycloaddition/Annulation Reactions of Donor-Acceptor Cyclopropanes
- 3. Kerr M.A. <u>Recent Advances in the Synthesis of Heterocycles from Cyclopropanes</u> **95<sup>th</sup> CSC Conference and Exibition,** Calgary, May 26-30, 2012
- 4. Kerr M.A. <u>Synthesis of Carbocycles from Cyclopropanes: New Directions in Cyclopropane</u> <u>Chemistry</u> **94th CSC Conference and Exhibition,** Montreal, June 2011.
- 5. Kerr M.A. <u>Total synthesis of heterocyclic natural products enabled by the use of donor-acceptor cyclopropanes</u> Gordon Research Conference on Heterocyclic Chemistry June, 2011, Salve Regina University, RI
- 6. Kerr M.A. The total synthesis of some heterocyclic natural products and their methodological underpinnings 20<sup>th</sup> Lakeland Heterocyclic Symposium, Grasmere UK, May 5-9, 2011
- 7. **Kerr M.A.** Cyclopropanes as vehicles for natural products synthesis **Pacifichem 2010**, Honolulu HI, December 2010
- 8. Kerr M.A.; Karadeolian, <u>A. Total Synthesis of (+)-Isatisine A.</u> **93<sup>rd</sup> CSC Conference and Exhibition,** Toronto Ontario, May 2010.
- 9. Kerr M.A. <u>Heterocycles from cyclopropanes; Enabling methodologies for the total synthesis of alkaloids.</u> **International Congress on Heterocylic Chemistry,** St. John's Nfld., August 2-7 2009
- 10. Kerr M.A. **CSC 2009 Conference and Exhibition,** Hamilton, May 2009 "Organic Synthesis in Canada, Coast to Coast: Past, Present and Future"
- 11. Kerr M.A. <u>Heterocycles from cyclopropanes; Enabling methodologies for the total synthesis of alkaloids.</u> **Pfizer Symposium, University of California Irvine,** March 2009
- 12. Kerr, M.A.; Magolan, J; Carson, C.A. <u>Total synthesis of Mersicarpine.</u> Oral presentation at **CSC 2008 Conference and Exhibition,** Edmonton, May 2008.
- 13. **Kerr M.A.** <u>Donor/acceptor cyclopropanes in multicomponent reactions: Application to the synthesis of nitrogen heterocycles and natural products</u> 3<sup>rd</sup> **International Conference on Multicomponent Reactions and Related Processes,** Amsterdam, July 2006
- 14. Kerr, M.A. <u>The Development of a Homo 3+2 Dipolar Cycloaddition and the Application to the Synthesis of Nakadomarin A.</u> **CSC 2005 Conference and Exhibition,** Saskatoon, May 2005.
- 15. Kerr, M.A.; Young, I.S.; Williams, J.L.; Ganton, M.D. <u>The Development of a Homo-3+2-dipolar Cycloaddition and Application to the Synthesis of Nakadomarin A.</u> **Oral Presentation at the 229**<sup>th</sup> **ACS National Meeting**, San Diego, August 2005.
- 16. Kerr, M.A.; Jackson, S.K.; Banfield, S.C. The Total Synthesis of (+/-)-Herbindole B and (+/-)-cis-

- Trikentrin B. Oral Presentation at the 229th ACS National Meeting, San Diego, August 2005.
- 17. Kerr, M.A. <u>The Development of a Homo 3+2 Dipolar Cycloaddition</u> Latest Trends in Organic Synthesis Symosium, Brock University, August 2004
- 18. Kerr, M.A., Young, I.S.; Williams, J.S. <u>The Development of a Homo 3+2 Dipolar Cycloaddition</u> Contributed poster at **Gordon Research Conference on Heterocyclic Chemistry** July 4 9, 2004, Salve Regina University, RI.
- 19. Kerr, M.A. New Cycloadditions and Their Application to Alkaloid Synthesis CSC 2003 Conference and Exhibition, Ottawa August 2003.
- 20. Kerr, M.A. New Cycloadditions and Their Application to Alkaloid Synthesis, University of Ottawa, Spring Synthesis Day, May 2003.
- 21. **Kerr, M.A.**; Invited lecture in a symposium titled "Natural Products, Chirality and Synthesis" **Dalhousie University,** September 2002
- 22. Banfield, S.C.; England, D.B.; Zawada, P.V.; Kerr, M.A. <u>The Diels-Alder Reactions of Quinone Imine Ketals: The Synthesis Highly Substituted Indoles.</u> **Poster Presentation at the Gordon Conference on Heterocyclic Chemistry**, Salve Regina University, Newport, RI, June 7-12, 2002.
- 23. Kerr, M.A.; Brown, M.A.; Kinsman, A.C. <u>Diels-Alder Strategies for the Synthesis of Hapalindole Alkaloids</u> Poster presentation at the **2000 International Chemical Congress of the Pacific Basin Societies**, December 14-19, 2000, Honolulu, Hawaii. Sponsored jointly by the Canadian Society for Chemistry, the Chemical Society of Japan, the American Chemical Society, the New Zealand Institute of Chemistry, and the Royal Australian Chemical Institute.
- 24. Kerr, M.A.; Barrett, I.C.; England, D.B.; Kuss, T.D.O. <u>Annulation of Indoles with Cyclopropanes and Aziridines</u> Poster presentation at the **2000 International Chemical Congress of the Pacific Basin Societies**, December 14-19, 2000, Honolulu, Hawaii. Sponsored jointly by the Canadian Society for Chemistry, the Chemical Society of Japan, the American Chemical Society, the New Zealand Institute of Chemistry, and the Royal Australian Chemical Institute.
- 25. Kerr, M.A., Banfield, S.C., Barrett, I.C., Brown, M.A., Kinsman, A.C., Kuss, T.D.O. <u>Cycloadditions in the Service of Alkaloid Synthesis</u> Invited paper in the symposium Stereoselectivity in Synthesis **Canadian Society for Chemistry Conference and Exhibition**, May 27 - 31, 2000 Calgary, Alberta.
- 26. Kerr, M.A., Barrett, I.C.; Keddy, Ryan G. The Annulation of Indoles with Cyclopropanes and Aziridines Contributed poster at Gordon Research Conference on Heterocyclic Chemistry June 27 July 2, 1999, Salve Regina University, RI.
- 27. Kerr, M.A., Barrett, I.C. <u>The Annulation of Indoles with Strained Rings; An Approach to the Synthesis of Physostigmine and Related Alkaloids</u> Contributed paper at the **Canadian Society for Chemistry Conference and Exhibition**, May 30 June 2, 1999 Toronto, Ontario.
- 28. Kerr, M.A., Keddy, R.G. <u>The Annulation of Indoles with Cyclopropane Diesters: The Preparation of Novel Rigid β-Amino Acids</u> Contributed paper at the **Canadian Society for Chemistry Conference and Exhibition**, June 1-4, 1998, Whistler, British Columbia.
- 29. Kerr, M.A., Harrington, P.E. The Ring Opening of Cyclopropanes with Indoles at Ultra High Pressures: A Convenient Synthesis of 4-Indolyl Carboxylic Acids Contributed paper at the **Canadian Society for Chemistry Conference and Exhibition**, June 1-4, 1997, Windsor, Ontario.
- 30. Kerr, M.A. <u>Synthetic Methodologies Arising from Progress Towards the Total Synthesis of Marine Alkaloids</u> Invited lecture for the symposium on **Frontiers in Heterocyclic Chemistry** at the

- **Canadian Society for Chemistry Conference and Exhibition,** June 23-27, 1996, St. John's Newfoundland.
- 31. Kerr, M.A. and Harrington P. <u>The Development of Novel Synthetic Transformations at Ultra High Pressures and Their Application to the Synthesis of Natural Products</u> Contributed paper at the **1995 International Chemical Congress of the Pacific Basin Societies,** December 17-22, 1995, Honolulu, Hawaii.
- 32. Kerr, M.A. <u>The High Pressure Diels-Alder Reactions of Quinone Imine Ketals.</u> Poster presentation at the **Canadian Society for Chemistry Conference and Exhibition**, May 28 June 1, 1995, Guelph, Ontario.

*By coworkers (\* denotes presenting author)* 

- 1. \*Emmett, M.R.; Kerr, M.A. <u>Progress Towards the Total Synthesis of Actinophyllic Acid</u> **Oral Presentation at the 94<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, Montreal, Ouebec June 2011.
- 2. \*Humenny, W.J.; Kyriacou, P.; Sapeta, K.; Karadeolian, A.; Kerr, M.A. Synthesis of Dihydro-1,2-oxazines via Palladium Catalyzed Oxidative Decarboxylaton Poster Presentation at the 94<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition, Montreal, Quebec June 2011.
- 3. \*Grover, H.K.; Lebold, T.P.; Leduc, A.B.; Kerr, M.A. <u>Tandem Cyclopropane Ring-Opening /Coniaene Reactions</u> Poster Presentation at the 94<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition, Montreal, Quebec June 2011.
- 4. \*Grover, H.K.; Lebold, T.P.; Leduc, A.B.; Kerr, M.A. <u>Tandem Cyclopropane Ring-Opening /Coniaene Reactions: Efficient Route to Heterocyclic Motifs</u> Oral Presentation at the 93<sup>nd</sup> Canadian Society for Chemistry Conference and Exhibition, Toronto, Ontario May 29 June 2, 2010.
- Emmett, M.R.; Sapeta, K.A.; Kerr, M.A. <u>Activation of Cyclopropanes towards Nucleophile Ring Opening Using Internal Bronsted Acids</u> Oral Presentation at the 93<sup>nd</sup> Canadian Society for Chemistry Conference and Exhibition, Toronto, Ontario May 29 June 2, 2010.
- 6. \*Karadeolian, A; Kerr, M.A. <u>Approaches Towards the Total Synthesis of Isatisine A</u> **Poster Presentation at Gordon Research Conference on Heterocyclic Chemistry**, Salve Regina University, RI, June 28 July 3 2009.
- 7. \*Lebold, T.P.; Kerr, M.A. <u>Synthesis of Piperidines from Propargyl Amines and Cyclopropanes</u> **Oral Presentation at the 92<sup>nd</sup> Canadian Society for Chemistry Conference and Exhibition**, Hamilton, Ontario May 30 June 3, 2009.
- 8. \*Sapeta, K.; Kerr, M.A.<u>A Formal [3+3] Annulation of Cyclopropanes Toward Functionalized Exomethylenecyclohexanes: Progress Toward the Total Synthesis of Tronocarpine</u> **Oral Presentation at the 92<sup>nd</sup> Canadian Society for Chemistry Conference and Exhibition**, Hamilton, Ontario May 30 June 3, 2009.
- 9. \*Karadeolian, A; Kerr, M.A. <u>Approaches Towards the Total Synthesis of Isatisine A</u> **Oral Presentation at the 92<sup>nd</sup> Canadian Society for Chemistry Conference and Exhibition**, Hamilton, Ontario May 30 June 3, 2009.
- 10. \*Johansen, M.B.; Kerr, M.A. A <u>Biomimetic Approach to the Indole Alkaloid Arboflorine</u> Oral Presentation at the 92<sup>nd</sup> Canadian Society for Chemistry Conference and Exhibition, Hamilton, Ontario May 30 June 3, 2009.
- 11. \* Carson, C.A.; Kerr. M.A. <u>Total Synthesis of FR901483</u> **Poster Presentation at Gordon Research Conference on Heterocyclic Chemistry**, Salve Regina University, RI June 15-20, 2008.

- 12. \*Leduc, T.P.; Kerr, M.A. <u>Total Synthesis of Allosecurinine</u> **Oral Presentation at the 91**<sup>st</sup> **Canadian Society for Chemistry Conference and Exhibition**, Edmonton, Alberta May 24-28, 2008.
- 13. \*Carson, C.A.; Kerr, M.A. Application of the reaction of imines with cyclopropanes towards the synthesis of FR901483. **Poster Presentation at the 91**<sup>st</sup> **Canadian Society for Chemistry Conference and Exhibition**, Edmonton, Alberta May 24-28, 2008.
- 14. \*Leduc, T.P.; Kerr, M.A. <u>Total Synthesis of (+/-)-Decursivine and Both Antipodes of Balasubramide</u> Oral Presentation at the 90<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition, Winnipeg, Manitoba May 26 May 30, 2007.
- 15. \*Lebold, T.P.; Kerr, M.A. <u>Total Synthesis of Eustifolines A-D and Gycomaural via a Divergent Diels-Alder Strategy</u> **Oral Presentation at the 90<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, Winnipeg, Manitoba May 26 May 30, 2007.
- 16. \*Jackson, S.K.; Karadeolian, A.; Driega, A.B.; Kerr, M.A. <a href="Yb(OTf)3">Yb(OTf)3</a> Catalyzed Intramolecular Cycloadditions of Oxime Ether O-tethered Cyclopropanes: A Stereospecific Synthesis of Enantiopure Tetrasubstituted Pyrrolidines Oral Presentation at the 90<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition, Winnipeg, Manitoba May 26 May 30, 2007.
- 17. \*Magolan, J.; Kerr, M.A. <u>The Application of Mn(OAc)<sub>3</sub> Mediated Cyclizations to the Synthesis of Tronocarpine and Mersicarpine</u> **Oral Presentation at the 90<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, Winnipeg, Manitoba May 26 May 30, 2007.
- 18. \*Ismaili, H.; Zhu, J.; Lines, B.; Ganton, M.D.; Kerr, M.A.; Workentin, M.S. <u>Chemical Modification of Monolayer Protected Nanoparticles (MPNS) Using Dipolar Cycloadditions Under Hyperbaric Conditions</u> Oral Presentation at the 90<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition, Winnipeg, Manitoba May 26 May 30, 2007.
- 19. \* Zhu, J.; Ganton, M.D.; Kerr, M.A.; Workentin, M.S. <u>Chemical Modification of Monolayer Protected Nanoparticles (MPNS) Using Diels-Alder Cycloadditions Under Hyperbaric Conditions</u>

  Oral Presentation at the 90<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition, Winnipeg, Manitoba May 26 May 30, 2007.
- 20. \*Johansen, M.B.; Leduc, A.B.; Kerr, M.A. <u>Total Synthesis of + and Balasubramide</u> **Poster Presentation at the 90<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, Winnipeg, Manitoba May 26 May 30, 2007.
- 21. \*Karadeolian, A.; Kerr, M.A. <u>An Examination of the Homo-3+2-dipolar Cycloaddition: Mechanistic Insightes into Regio- and Diastereoselectivity</u> **Poster Presentation at the 90<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, Winnipeg, Manitoba May 26 May 30, 2007.
- 22. \*Carson C.A.; Kerr, M.A. <u>Total Synthesis of Phyllantidine</u> **Oral Presentation at the 89<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, Halifax, Nova Scotia May 27 May 31, 2006.
- 23. \*Ganton, M.D.; Kerr, M.A. Synthesis of the CPI subunit of CC-1065 Oral Presentation at the 89<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition, Halifax, Nova Scotia May 27 May 31, 2006.
- 24. \*Young, I.S.; Kerr, M.A. <u>A Homo 3+2 Cycloaddition Strategy Towards Nakadomarin A.</u> **Oral Presentation at the 89<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, Halifax, Nova Scotia May 27 May 31, 2006.
- 25. \*Magolan J.; Kerr, M.A. <u>The Application of the Mn (III) Acetate Oxidative Radical Cyclization to</u> the Synthesis of Indole and Pyrrole Containing Natural Products **Poster Presentation at the 89**<sup>th</sup>

- **Canadian Society for Chemistry Conference and Exhibition**, Halifax, Nova Scotia May 27 May 31, 2006.
- 26. \*Lebold, T.P; Kerr, M.A. <u>A Diels-Alder Approach Towards the Clausamines</u> **Poster Presentation at the 89<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, Halifax, Nova Scotia May 27 May 31, 2006.
- 27. \*Young, I.S.; Williams, J.L.; Kerr, M.A. <u>A Homo 3+2 Cycloaddition Strategy Towards</u>

  <u>Nakadomarin A.</u> **Oral Presentation at the Quebec Ontario Minisymposium on Synthetic and Bioorganic Chemistry**, St.Adele, Quebec, November 2005.
- 28. \*England, D.B.; Kerr, M.A. <u>The Synthesis of Tetracyclic Hapalindoles.</u> **Oral Presentation at the 229<sup>th</sup> ACS National Meeting**, San Diego, August 2005.
- 29. \*Banfield, S.C.; Stoffman, E.J.; Kerr, M.A. <u>The Total Synthe sis of cis-Trikentrin B</u> **Oral Presentation at the 87<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, London, Ontario May 29 June 1, 2004.
- 30. \*Young, I.S.; Williams, J.L.; Kerr, M.A. <u>A Homo 3+2 Cycloaddition Strategy Towards</u>

  <u>Nakadomarin A.</u> **Oral Presentation at the 87<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, London, Ontario May 29 June 1, 2004.
- 31. \*Magolan, J; Kerr, M.A. <u>Progress Towards the Total Synthesis of the Teleocidin Alkaloids</u> **Poster Presentation at the 87<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, London, Ontario May 29 June 1, 2004.
- 32. \*Magolan, J; Kerr, M.A. <u>Progress Towards the Total Synthesis of the Teleocidin Alkaloids</u> **Poster Presentation at the 87<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, London, Ontario May 29 June 1, 2004.
- 33. \*Gibe, R.B.; Kerr, M.A. Synthetic Studies Towards Quebrachamine and Aspidospermine Poster Presentation at the 87<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition, London, Ontario May 29 June 1, 2004.
- 34. \*Ganton, M.D.; Kerr, M.A. <u>Studies Towards the Synthesis of the Cyclopropylindoline Moiety of the Duocarmycin Alkaloids</u> **Poster Presentation at the 87<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, London, Ontario May 29 June 1, 2004.
- 35. \*England, D.B.; Kerr, M.A. <u>The Diels-Alder Reactions of Quinone-mono-imines: The Synthesis of Indole Alkaloids</u> **Poster Presentation at the 87<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, London, Ontario May 29 June 1, 2004.
- 36. \*Dreiga, A.B.; Kerr, M.A. <u>The Synthesis of Pyrolizidine Alkaloids via Homo 3+2 Nitrone</u>
  <u>Cycloadditions</u> **Poster Presentation at the 87<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, London, Ontario May 29 June 1, 2004.
- 37. \*Dias, D.A.; Kerr, M.A. <u>An Intramolecular Homo 3+2 Dipolar Cycloaddition: The Reactions of Nitrones with Cyclopropanediesters</u> **Poster Presentation at the 87<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, London, Ontario May 29 June 1, 2004.
- 38. \*Van Gorp, K.A.; Kerr, M.A.; Woo, T.K. <u>The Mechanism of a Novel Homo 3+2 Dipolar Cycloaddition of Nitrones with Cyclopropanes: A Computational Study</u> **Poster Presentation at the 87<sup>th</sup> Canadian Society for Chemistry Conference and Exhibition**, London, Ontario May 29 June 1, 2004.
- 39. \*Lebold, T.P; Kerr, M.A. <u>Expanding the Scope of the Home 3+2 Dipolar</u> **Oral presentation at the 2004 SOUC Conference,** Trent University.

- 40. \*Leduc, A.B.; Kerr, M.A. <u>Probing the Diastereoselectivity of the Home 3+2 Dipolar Cycloaddition of a Nitrone with a 1,1-Disubstituted Cyclopropane</u> **Oral presentation at the 2004 SOUC Conference,** Trent University.
- 41. \*Young, I.S.; Kerr, M.A. <u>A Novel Preparation of 1,2-Ozazines</u> **Poster Presentation at the 86**<sup>th</sup> **Canadian Society for Chemistry Conference,** Ottawa, Ontario August 10-15 2003.
- 42. \* Banfield, S.C.; Kerr, M.A. <u>Total Synthesis of Trikentrins</u> **Poster Presentation at the 86<sup>th</sup>** Canadian Society for Chemistry Conference, Ottawa, Ontario August 10-15 2003.
- 43. \*Ganton, M.D.; Kerr, M.A. Synthesis of DNA-Alkylating Spirocyclopropane Indole Alkaloids

  Poster Presentation at the 86<sup>th</sup> Canadian Society for Chemistry Conference, Ottawa, Ontario August 10-15 2003.
- 44. \* Gibe, R.B.; Kerr, M.A. <u>Progress Towards the Synthesis of Kopsane and Aspidosperma Alkaloids</u> **Poster Presentation at the 86<sup>th</sup> Canadian Society for Chemistry Conference,** Ottawa, Ontario August 10-15 2003.
- 45. \*England, D.B.; Kerr, M.A. An Enyne Metathesis/Diels-Alder Route to the Hapalindole Alkaloids. Oral Presentation at the 86<sup>th</sup> Canadian Society for Chemistry Conference, Ottawa, Ontario August 10-15 2003.
- 46. \*Banfield, S.C.; England, D.B.; Zawada, P.V.; Kerr, M.A. <u>The Diels-Alder Reactions of Quinone Imine Ketals: The Synthesis Highly Substituted Indoles.</u> **Oral Presentation at the ACS National Meeting**, Boston Mass., Aug, 2002.
- 47. \*Banfield, S.C. Kerr, M.A. <u>The Diels-Alder Reactions of Quinone Imine Ketals: The Synthesis of Highly Substituted 5-Methoxyindoles.</u> **Oral Presentation at the 85<sup>nd</sup> Canadian Society for Chemistry Conference,** Vancouver, BC, June 1-5, 2002.
- 48. \*England, D.B; Kerr, M.A. <u>Strategies Towards the Total Synthesis of the Tetracyclic Hapalindoles.</u> **Poster Presentation at the 85<sup>nd</sup> Canadian Society for Chemistry Conference,** Vancouver, BC, June 1-5, 2002.
- 49. \*Zawada, P.V.; Kerr, M.A. <u>Diels-Alder Approach to 5-Alkylindoles.</u> **Poster Presentation at the 85<sup>nd</sup> Canadian Society for Chemistry Conference,** Vancouver, BC, June 1-5, 2002.
- 50. \*Frizzle, M.J.; Kerr, M.A. <u>A Tandem Diels-Alder Approach to the Tetracyclic Hapalindole Alkalolids.</u> **Poster Presentation at the 85<sup>nd</sup> Canadian Society for Chemistry Conference,** Vancouver, BC, June 1-5, 2002.
- 51. \*Gibe, R.B.; Kerr, M.A. <u>Regioselective Carbenoid Insertion: The Reactions of Diazomalonate with Indoles.</u> **Poster Presentation at the 85<sup>nd</sup> Canadian Society for Chemistry Conference,** Vancouver, BC, June 1-5, 2002.
- 52. \*Kinsman, A.C.; Kerr, M.A. <u>Strategies Towards the Enantioselective Synthesis of the Hapalindoles</u> **Poster Presentation at the 85<sup>nd</sup> Canadian Society for Chemistry Conference,** Vancouver, BC, June 1-5, 2002.
- 53. **84<sup>nd</sup> Canadian Society for Chemistry Conference,** Montreal Quebec, May 26 30, 2001: Reactions of Indoles with Cyclopropanes Catalyzed by Ytterbium Triflate Poster presentation by Dyland England
- 54. **84<sup>nd</sup> Canadian Society for Chemistry Conference,** Montreal Quebec, May 26 30, 2001: Reactions Toward the Total Synthesis of N-Methylkopsane Poster presentation by Tim Kuss
- 55. **84<sup>nd</sup> Canadian Society for Chemistry Conference**, Montreal Quebec, May 26 30, 2001: <u>The Diels-Alder Reactions of Quinone Imine Ketals</u> Poster presentation by Scott Banfield

- 56. **84<sup>nd</sup> Canadian Society for Chemistry Conference,** Montreal Quebec, May 26 30, 2001: Toward the Total Synthesis of Hapalindole Q Poster presentation by Dyland England
- 57. **2001 SOUC Conference:** The Reaction of Aldimines with Allylsilanes Oral presentation by Andrew Park
- 58. **2001 SOUC Conference:** Progress Towards the Synthesis of Ergot Alkaloids Oral presentation by Ross MacLean
- 59. **2000 SOUC Conference:** The Annulation of Indoles with Activated Cyclopropanes Oral presentation by Dylan England
- 60. **2000 SOUC Conference:** Chemical Synthesis of Triaminotriazines via the High Pressure SnAr Mechanism Oral presentation by Adrienne Pedrech
- 61. **1998 CIC-APICS Atlantic Student Chemistry Conference** May 13-May: Methods in the Synthesis of Chiral Quinone-mono-ketals. Oral presentation by Michael Nash.
- 62. **1998 CIC-APICS Atlantic Student Chemistry Conference** May 13-May: <u>Annulation reactions providing a novel class of b-amino acids</u>. Oral presentation by Ryan Keddy.
- 63. **1998 CIC-APICS Atlantic Student Chemistry Conference** May 13-May: <u>The High Pressure Reactions of 2-Chlorobenzimidazoles</u>. Poster presentation by Ian Barrett.

# J. Consulting Activity and Contract Work

- 1. **Boehringer Ingelheim, Canada** 2010 2011 Consultant for HIV project
- 2. **Bennett Jones** 2004 consultant on pharmaceutical patent issues.
- 3. **Heenan-Blaikie and Associates** 2003 2004: consultant on pharmaceutical patent issues.
- 4. **QLT Therapeutics** 2002 evaluation of Diels-Alder reactions.
- 5. **Sepracor Canada Inc.** 1995 1999: consultant on synthetic methods
- 6. Wyeth-Ayerst Research July 1998: consulted on the use of hyperbaric methods.

#### **K.** Teaching

Years	Course number	Course title
2012-2013	Chem 9723 (graduate course)	Heterocyclic Chemistry
	Chem 3373 (undergraduate course)	Synthetic and Mechanistic Organic Chemistry
	Chem 2283 (undergraduate course)	Organic Chemistry II: Mechanisms and Reactivity
2011-2012	Chem 9723 (graduate course)	Heterocyclic Chemistry
	Chem 3373 (undergraduate course)	Synthetic and Mechanistic Organic Chemistry
	Chem 2283 (undergraduate course)	Organic Chemistry II: Mechanisms and Reactivity
2010-2011	Chem 3300 (undergraduate course)	Industrial Chemistry
	Chem 3373 (undergraduate course)	Synthetic and Mechanistic Organic Chemistry
	Chem 4473 (undergraduate course)	Modern Chemical Synthesis
2009-2010	Chem 3300 (undergraduate course)	Industrial Chemistry
	Chem 9563 (graduate course)	Synthetic Organic Chemistry
	Chem 4473 (undergraduate course)	Modern Chemical Synthesis
2008-2009	Chem 623q (graduate course)	Modern Synthetic Methods
	Chem 563 (graduate course)	Synthetic Organic Chemistry
	Chem 473 (undergraduate course)	Modern Chemical Synthesis
2007-2008	Chem 623q (graduate course)	Modern Synthetic Methods
	Chem 473 (undergraduate course)	Modern Chemical Synthesis
	Chem 223 (undergraduate course)	Bioorganic Chemistry
2006-2007	Chem 563 (graduate course)	Synthetic Organic Chemistry
	Chem 473 (undergraduate course)	Modern Chemical Synthesis
	Chem 223 (undergraduate course)	Bioorganic Chemistry

2005-2006	Chem 563 (graduate course)	Synthetic Organic Chemistry
	Chem 473 (undergraduate course)	Modern Chemical Synthesis
	Chem 223 (undergraduate course)	Bioorganic Chemistry
2004-2005	Chem 623 (graduate course)	Modern Synthetic Methods
	Chem 473 (undergraduate course)	Modern Chemical Synthesis
	Chem 373 (undergraduate course)	Synthetic and Mechanistic Organic Chemistry
2003-2004	Chem 653 (graduate course)	Organometallics in Organic Chemistry
	Chem378 (undergraduate course)	Polymer Chemistry
	Chem 353 (undergraduate course)	Synthetic and Mechanistic Organic Chemistry
	Chem 223 (undergraduate course)	Bioorganic Chemistry
2002-2003	Chem 653 (graduate course)	Organometallics in Organic Chemistry
	Chem 623q (graduate course)	Modern Synthetic Methods
	Chem 563 (graduate course)	Synthetic Organic Chemistry
	Chem 353 (undergraduate course)	Synthetic and Mechanistic Organic Chemistry
2001-2002	Chem 358 (undergraduate course)	Industrial Chemistry
	Chem 363 (undergraduate course)	Medicinal Chemistry
	Chem 323 (undergraduate course)	General Organic Chemistry
2000-2001	Chem 563 (graduate course)	Synthetic Organic Chemistry
	Chem 358 (undergraduate course)	Industrial Chemistry
	Chem 363 (undergraduate course)	Medicinal Chemistry
2000-2001	Chem 563 (graduate course)	Synthetic Organic Chemistry
	Chem 358 (undergraduate course)	Industrial Chemistry
	Chem 363 (undergraduate course)	Medicinal Chemistry

# **L. Supervision of Students**

# Graduate Students - University of Western Ontario

Name	Years	Degree	Project Title	Present or Subsequent Position
Erin Armstrong	2012-	M.Sc./Ph.D.	Vinyl azides as dipoles	University of Western Ontario - Chemistry
Michelle Flisar	2012-	M.Sc./Ph.D.	The homo-Overman rearrangement	University of Western Ontario - Chemistry
Bryan Landschoot	2012-	M.Sc./Ph.D.	Radical Functionalization of Indoles	University of Western Ontario - Chemistry
Polydoros Kyriacos	2011-	Ph.D.	A novel synthesis of pyrroles	University of Western Ontario - Chemistry
William Hummeny	2010 - 2012	M.Sc.	A novel synthesis of pyrroles	University of Western Ontario - Engineering
Huck Grover	2010 -	Ph.D.	Total synthesis of halichlorine	University of Western Ontario - Chemistry
Michael Emmett	2009 -	Ph.D.	Total synthesis of actinophyllic acid	University of Western Ontario - Chemistry
Katarina Sapeta	2006-	Ph.D.	The mechanism of cyclopropane ring opening reactions	University of Western Ontario - Chemistry
Michael Johansen	2006-2010	Ph.D.	The alkylation indoles with cyclopropanes	Appotex Pharmachem
Avedis Karadeolian	2005 – 2010	Ph.D.	The total synthesis of isatisine A	PDF at UCSB     Dr. Armen Zakarian     Apotex Pharmachem
Cheryl Carson	2004 -2009	Ph.D.	The synthesis of phyllantidine and FR901483	NSERC PDF at Princeton     Dr. Erik Sorensen     Novartis (Boston)

Terry	2004-2010	Ph.D.	The total synthesis of carbazole	NSERC PDF at Berkeley with
Lebold	2004 2000	DI D	natural products	Richmond Sarpong
Andrew	2004-2009	Ph.D.	Total synthesis of decursivine	NSERC PDF at MIT
Leduc	2004 2006	MC	TTI 1 1	Dr. Tim Jamison
Xiaomei Zheng	2004-2006	M.Sc	The development of a new donor acceptor cyclopropane	Amgen, Boston
Stephen	2004 -2009	Ph.D.	The Synthesis of Complex	1.PDF University of Hawaii
Jackson			Indoles	Dr. Marcus Tius
				2. PDF UCSB
				Dr. Tom Pettus
Dwayne Dias	2003 - 2008	Ph.D.	The Intramolecular Homo-3+2-	University of Windsor
			Dipolar Cycloaddition	Teaching Position
Justin	2003-2005	M.Sc.	The Synthesis of Complex	1. Amgen, Boston
Williams			Pyrrolidines	2. Consulting Firm – Oakville
Alex	2002-	Ph.D.	The Total Synthesis of	University of Western Ontario -
Driega			Duocarmycin	Chemistry
Mike Ganton	2002-2007	Ph.D.	The Synthesis of Minor Groove-	1. PDF University of Liverpool
			Binding Agents	Dr. P. Andrew Evans
				2. Patent Office - Ottawa
Jakob	2002-2007	Ph.D.	The Total Synthesis of	1. PDF Griffiths University,
Magolan			Mersicarpine	Australia – Dr. Mark Coster
				2. Assistant Professor
				University of Idaho
Ian	2002-2007	Ph.D.	The Total Synthesis of	1. NSERC PDF The Scripps
Young			Nakadomarin A	Research Institute-
				Dr. Phil Baran
				2. Bristol Myers Squibb
				(NewJersey)
Matt	2001-2003	M.Sc	A Claisen Approach to the	Amgen, Boston
Frizzle			Hapalindoles	now at Alphora
Romelo	2001-2006	Ph.D.	Novel Ring Openings of	1. PDF The Scripps Research
Gibe			Cyclopropanes	Institute Dr.K.C. Nicolaou
				2. Forma Therapeutics
				(Singaore)
Peter	2001-2006	Ph.D.	Synthetic Studies Towards the	Teachers College, Lakehead
Zawada			Penetrem Alkaloids	University
Dylan	2000-2006	Ph.D.	The Total Synthesis of	1. PDF Emory Unversity
England	2000-2000	111.17.	Hapalindoles	Dr. Al Padwa
211514114				2. Millenium Pharma (Boston)
Scott	1999 -2004	Ph.D.	The Diels-Alder Reactions of	1. NSERC PDF Brock
Banfield	2001		Quinoid Monoketals	University
				Dr. Tomas Hudlicky
Ian	1999-2000	M.Sc.	The Reactions of Indoles with	UNB Law School
Barrett			Aziridines	
Aaron	1999 –2003	Ph.D.	The Chemical Synthesis of	Brantford Chemicals
Kinsman			Hapalindole Alkaloids	
	1000 5001	1.60	-	
Timothy	1999-2001	M.Sc.	Towards the Synthesis of	1. Pfizer (Ann Arbor)
Kuss			Kopsane Alkaloids	2. Phenomenex

# Undergraduate students – University of Western Ontario

Name	Years	Present or Subsequent Position (if known)
Anthony Plommer	2012-2013	University of Western Ontario, Chemistry (Kerr Group)
Wendy Au	2011-2012	Unknown
Erin Armstrong	2011-2012	University of Western Ontario, Chemistry (Kerr Group)
Bryan Landschoot	2011-2012	University of Western Ontario, Chemistry(Kerr Group)
Stefi Anthonopali	2010-2011	University of Toronto, Chemistry(grad school)
Baye Galligan	2010-2011	Harvard University, Chemistry(grad school)
Poly Kyriacos	2009-1010	University of Western Ontario, Chemistry (Kerr Group)
Shawn Robinson	2009-1010	University of Western Ontario, Chemistry(grad school)
Sarah Murphy	2009-1010	University of Western Ontario, Chemistry
Michael Emmett	2008-2009	University of Western Ontario, Chemistry (Kerr Group)
Kirstin Tomlin	2007-2008	University of Alberta, Chemistry (grad school)
Ashley Hunt	2007-2008	University of Ottawa, Chemistry (grad school)
Brandon Lines	2006-2007	University of Western Ontario, Chemistry (Workentin Group)
Ryan Latimer	2006-2007	Queens University, Chemistry (grad school)
Katarina Sapeta	2005 - 2006	University of Western Ontario, Chemistry (Kerr Group)
Avedis Karadeolian	2004 - 2005	University of Western Ontario, Chemistry(Kerr Group)
Tim Leroux	2005 - 2005	University of Toronto, Med School
Andrew Leduc	2003-2004	University of Western Ontario, Chemistry (Kerr Group)
Terry Lebold	2003-2004	University of Western Ontario, Chemistry (Kerr Group)
Darryl Dixon	2002-2003	Grad School, University of Hawaii (grad school)
Eli Stoffman	2002-2003	University of Alberta, Chemistry (grad school)
Richard Au	2001-2002	University of Western Ontario, Chemistry (Puddephatt Group)
Emilia Perna	2000-2001	
(co-supervised)	2000-2001	
Ross McLean	2000-2001	University of Ottawa, Chemistry (M.Sc.)
Andrew Park	1999-2000	Medical School
Dylan England	1999-2000	University of Western Ontario, Chemistry (Ph.D)
Adrienne Pedrech	1999-2000	McMaster University, Chemistry (M.Sc.)
Michael McDermott	1999-2000	University of Western Ontario, Teacher's College

# Undergraduate students – Acadia University

Name	Years	Present or Subsequent Position (if known)
Mathew Hopkins	1998–99	University of Calgary (M.Sc.)
Cisco Bee	1998	Universtiy of Hawaii, Chemistry(M.Sc./Ph.D)
Ian Barrett	1997-1999	University of Western Ontario - Chemistry (M.Sc./Ph.D)
Ryan Keddy	1997-1998	North Dakota State University – Chemistry (M.Sc./Ph.D)
Jonathan Langille	1996-1997	Memorial University, Chemistry (M.Sc./Ph.D)
Michael Nash	1997-1998	Memorial University, Medical School
Elizabeth Jarvo	1995-1997	Boston College (Ph.D), Harvard University (PDF)
Paul Harrington	1995-1996	University of Hawaii (Ph.D.) Stanford University (PDF)
Sangeeta Kashyap	1996-1997	Dalhousie Dental School
Selena Boothroyd	1993-1995	University of Utah, Chemistry (Ph.D)
Brian Chauder	1994-1995	Queens University, Chemistry (Ph.D)
Stephanie MacDonald	1994	Dalhousie University, Physiotherapy Programme
Caroline Forsythe	1994	Dalhousie University, Physiotherapy Programme

#### M. Community Service

#### **International Chemistry Community**

2011 – present - Secretary of the International Society for Heterocyclic Chemistry (ISHC)

#### National Chemistry Community

2012 – Mentor at the Workshop for Young Organic Chemists, Banff, Alberta

2012-2014 – Section Chair NSERC Dicovery Grants Selection Committee

2011-2014 – NSERC Dicovery Grants Selection Committee

2010-2011 - NSERC Ad hoc committee member for Research Tools and Infrastructure Grants

#### University Community – The University of Western Ontario

#### Commitees at the University Level

2001-2007 - Hazardous Materials Response Team

## Committees at the Department Level

2012-2013 – Workload Committee

Visiting Speakers Committee

**Outreach Committee** 

2011-2012 - Research Awards Committee

Visiting Speakers Committee

**Outreach Committee** 

2010-2011 - Promotion and Tenure Committee

**Annual Performance Evaluation Committee** 

Chair-Visiting Speakers Committee

Safety Committee

2009-2010 - Promotion and Tenure Committee

**Annual Performance Evaluation Committee** 

Chair-Visiting Speakers Committee

Safety Committee

2008-2009 - Promotion and Tenure Committee

**Annual Performance Evaluation Committee** 

Chair-Visiting Speakers Committee

PMA Evaluation Committee

9658 Reform Committee

2007-2008 - Promotion and Tenure Committee

Undergraduate Education Committee Mass-Spec Operations Committee

**PMA Evaluation Committee** 

2006-2007 - Promotion and Tenure Committee

PMA Evaluation Committee Appointments Committee

2005-2006 – Appointments Committee

**PMA** Evaluation Committee

**Outreach Committee** 

2004-2005 -	Appointments Committee
	Mass Spectrometer-Other

**Outreach Committee** 

2003-2004 - Appointments Committee

Outreach Committee

**Counseling Committee** 

Mass Spectrometer-Other instruments committee

instruments committee

2002-2003 – Appointments Committee

**Outreach Committee** 

**Counseling Committee** 

Mass Spectrometer-Other instruments committee

2001-2002 - Acting Undergraduate Chair

Appointments Committee

**Outreach Committee** 

Chair -Counseling Committee

Mass Spectrometer-Other instruments committee

2000-2001 - Appointments Committee

**Outreach Committee** 

Co-Chair Counseling Committee

Mass Spectrometer-Other instruments committee

1999-2000 - Counselling Committee

# Committees at the Faculty Level

2002-2003- Medical Admissions Committee

2001-2002- Medical Admissions Committee, Educational Planning Committee (EPC)

#### Other Service

2009-2010 - Chemistry "Magic Show" for Frosh Week (4 x ½ hour shows)

Chemistry "Magic Show for Grade 9 class at Oakridge SS.

2008-2009 - Chemistry "Magic Show" for Frosh Week (4 x ½ hour shows)

Hosted and organized half-day tour for Clara Brenton Public School

2007-2008 - Chemistry "Magic Show" for Frosh Week (4 x ½ hour shows)

Hosted and organized half-day tour for Clara Brenton Public School

2006-2007 - Chemistry "Magic Show" for Frosh Week (4 x ½ hour shows)

2005-2006 - Chemistry "Magic Show" for Frosh Week (4 x ½ hour shows)

- 1. Chemistry with a bang show (with John Corrigan)
- 2. Preparation of Graduate School Recruiting CD
- 3. Graduate School Recruiting Trip February 2001

#### University Community – Acadia University

# Duties at the University Level

- 1. Joint Occupational Health and Safety Committee 1996 1999 (secretary)
- 2. Co-op Committee
- 3. Coordinator the Shad-Valley Chemistry Module 1994 and 1995
  - involved the running of four laboratory experiments for four afternoons
- 4. Shad Valley work term supervisor for Judith Nash
- 5. Co-organizer for the Atlantic CIC meeting and exhibition
  - responsible for programming and fund raising

6. Liaison between prospective Acadia students and the University

#### Departmental Committees / Duties

- 1. Faculty Advisor to the Chemistry Club (1993-1994 CIC National award winner)
- 2. National Chemistry Week Coordinator
- 3. Exhibitor for the Huggins High School Science Seminar open house

# Other Service to the University Community

- 1. Meeting with the Nova Scotia Economic Renewal Agency on behalf of the University
- 2. Acadia University delegate to ACOA technology forum Dec 1996

## Sevice to the Academic Community at Large

- 1. NSERC Ad hoc committee member for Research Tools and Infrastructure Grants (2011)
- 2. Chair of Organizing Committee for the Quebec-Ontario Minisymposium in Synthetic and Bioorganic Chemistry (QOMSBOC) conference at Western (2006)
- 3. Chair and Organizer for "Emerging Organic Synthesis Symposium" at the CSC 2004 Conference
- 4. Selection Committee Member for "Boehinger Ingelheim Award for Doctoral Work in Organic Chemistry"
- 5. Chair of the organizing committee for Atlantic Section CIC Conference 1994

#### Service to the Community at Large

- 1. Canvasser for Canadian Cancer Society 2008
- 2. Oakridge Optimist Soccer; Head Coach 2003, Assistant Coach 2002
- 3. Volunteer for "Scientists and Innovators in the Schools" Glooscap Elementary 1996 and 1997
- 4. Judge, Kings County Science Fair
- 5. Coordinator for crystal growing competition for the local high school's participation in National Chemistry Week.
- 6. Member of the Canadian Ski Patrol 1994 1998