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EDUCATION AND EXPERIENCE

- 2013-present:** Dartmouth College, New Hampshire Professor of Chemistry
- 2013-present:** Dartmouth Hitchcock Medical Center, Member of the Molecular Therapeutics Program and Investigator at the Norris Cotton Cancer Center
- 2013-present:** Dartmouth College, Professor
- 2008-2013:** The Scripps Research Institute, Associate Professor with Tenure
- 2003-2008** Yale University, Assistant Professor
- 2001-2003** Harvard University, Postdoctoral Fellow
- 1996-2001** University of Michigan, Ph.D.
- 1992-1996** Ramapo College, B.S. Chemistry
- Postdoctoral Mentor:** Professor Stuart L. Schreiber
- Doctoral Mentor:** Professor William R. Roush

AWARDS AND HONORS

- 2013** Endowed Chair: New Hampshire Professor of Chemistry at Dartmouth College
- 2013** Warner Lambert Lecturer, Wayne State University
- 2013** Lilly Lecturer, Harvard University
- 2008** Visions in Chemistry Award – Sanofi Aventis
- 2008** Grandpierre Lecturer, Columbia University
- 2007** Boehringer Ingelheim New Investigator Award
- 2007** University of Michigan Kasimir Fajans Award in Chemistry
- 2007** Lilly Distinguished Lecturer, Colorado State University
- 2006** Lilly Grantee Award
- 2006** American Cancer Society Research Scholar Award
- 2006** Yale University Junior Faculty Fellowship in the Natural Sciences
- 2005** Beckman Young Investigator Award
- 2003** Lilly New Faculty Award
- 2002** Pfizer Fellow of the Natural Products Gordon Research Conference
- 2001-2003** Postdoctoral Fellow of the Helen Hay Whitney Foundation

2001	NIH Postdoctoral Fellowship (declined)
2000-2001	Rackham Predoctoral Fellow (University of Michigan)
1999-2000	American Chemical Society Division of Organic Chemistry Fellow
1999	Roche Award for Excellence in Organic Chemistry
1996	American Institute of Chemists Award
1996	American Chemical Society Award

PUBLICATIONS

- (73) **G. C. Micalizio**, H. Mizoguchi “The Development of Alkoxide-Directed Metallacycle-Mediated Annulative Cross-Coupling Chemistry” *invited Review* in an issue dedicated to Professors Stuart L. Schreiber and K. C. Nicolaou for their receipt of the Wolf Prize – *Isr. J. Chem.* **2016**, *accepted*.
- (72) H. Mizoguchi, **G. C. Micalizio** “Convergent Synthesis of Angularly Substituted *Trans*-Decalins by a Metallacycle-mediated Cross-Coupling Reaction Cascade” *Angew. Chem. Int. Ed.* **2016**, *accepted*.
- (71) N. F. O’Rourke, M. J. Kier, **G. C. Micalizio** “Metallacycle-mediated Cross-Coupling in Natural Product Synthesis” *invited Report* – *Tetrahedron*, **2016**, *accepted*.
- (70) J. S. Cassidy, H. Mizoguchi, **G. C. Micalizio** “Acceleration of Metallacycle-mediated Alkyne–Alkyne Cross-coupling with TMSCl” *Tetrahedron Lett.* **2016**, *57*, 3848-3850.
- (69) C. Aquino, S. N. Greszler, **G. C. Micalizio** “Access to the Cortistatin Pentacyclic Core by Alkoxide-Directed Metallacycle-Mediated Annulative Cross-Coupling” *Org. Lett.* **2016**, *18*, 2624-2627.
- (68) N. F. O’Rourke, **G. C. Micalizio** “Cyclopropenes in Metallacycle-Mediated Cross-Coupling with Alkynes: Convergent synthesis of highly substituted vinylcyclopropanes” *Org. Lett.* **2016**, *18*, 1250-1253.
- Selected by the Editorial Board to be featured in *Synfacts*: **2016**, *12*(05): 0521 (DOI: 10.1055/s-0035-1561993).
- (67) X. Cheng, **G. C. Micalizio** “Synthesis of Neurotrophic Seco-prezizaane Sesquiterpenes (*1R,10S*)-2-oxo-3,4-dehydroneomajucin, (*2S*)-hydroxy-3,4-dehydroneomajucin, and (–)-jiadifenin” *J. Am. Chem. Soc.* **2016**, *138*, 1150-1153.
- Featured - *J. Am. Chem. Soc. Spotlight*: <http://pubs.acs.org/doi/pdf/10.1021/jacs.6b00793>.
 - Selected by the Editorial Board to be featured in *Synfacts*: **2016**, *12*(04): 0336 (DOI: 10.1055/s-0035-1561830).
- (66) H. Mizoguchi, **G. C. Micalizio** “Synthesis of Highly Functionalized Decalins via Metallacycle-Mediated Cross-Coupling” *J. Am. Chem. Soc.* **2015**, *137*, 6624-6628.

- (65) **G. C. Micalizio**, S. Hale “Reaction Design, Discovery, and Development as a Foundation to Function-Oriented Synthesis” *Acc. Chem. Res. (invited)*, **2015**, *48*, 663-673.
- (64) *Invited Article in Honor of the Memory of Professor Harry Wasserman:*
 W. S. Kim, C. Aquino, Mizoguchi, H.; **G. C. Micalizio** “LiOO*t*-Bu as a Terminal Oxidant in a Titanium-Mediated [2+2+2] Reaction Cascade” *Symposium-in-Print (invited)*, *Tetrahedron Lett.* **2015**, *56*, 3557-3559.
- (63) X. Cheng, **G. C. Micalizio** “An Annulation Reaction for the Synthesis of Cross-Conjugated Triene-containing Hydroindanes from Acyclic Precursors” *Org. Lett.* **2014**, *16*, 5144-5147.
 • Selected by the Editorial Board to be featured in *Synfacts*: **2015**, *11*(01): 0071 (DOI: 10.1055/s-0034-1379649).
- (62) V. Jeso, C. Aquino, X. Cheng, H. Mizoguchi, M. Nakashige, **G. C. Micalizio**, “Direct Synthesis of Angularly Substituted *Trans*-fused Hydroindanes by Convergent Coupling of Acyclic Precursors” *J. Am. Chem. Soc.* **2014**, *136*, 8209-8212.
 • Highlighted as a JACS Spotlight: *J. Am. Chem. Soc.* **2014**, *136*, 8837-8838.
- (61) *Invited review: Comprehensive Organic Synthesis II*
G. C. Micalizio “Early Transition Metal-Mediated Reductive Coupling Reactions” In: *Comprehensive Organic Synthesis*, 2nd edition; Gary A. Molander and Paul Knochel (eds.), Oxford: Elsevier; **2014**; Vol. 5; pp. 1660-1737.
- (60) X. Li, V. Jeso, S. Heyward, G. S. Walker, R. Sharma, **G. C. Micalizio**, M. D. Cameron, “Characterization of T-5 N-oxide Formation as the First Highly Selective Measure of CYP3A5 Activity” *Drug Metabolism and Disposition*, **2014**, *42*, 334-342.
- (59) D. P. Canterbury, O. Kubo, K. N. Scott, J. L. Cleveland, **G. C. Micalizio**, “Synthesis of C11-Desmethoxy Soraphen A_{1a}: A natural product analog that inhibits acetyl-CoA carboxylase” *ACS Med. Chem. Lett.* **2013**, *4*, 1244-1248.
- (58) D. Yang, **G. C. Micalizio**, “Stereochemical Lability of Azatitanacyclopropanes and an Efficient Dynamic Kinetic Resolution in Reductive Cross-Coupling Reactions with Allylic Alcohols” *Chem. Commun.* **2013**, *49*, 8857-8859.
- (57) V. Jeso, S. Iqbal, P. Hernandez, M. D. Cameron, H. Park, P. V. LoGrasso, **G. C. Micalizio** “Synthesis of Benzoquinone Ansamycin-Inspired Macrocyclic Lactams from Shikimic Acid” *Angew. Chem. Int. Ed.* **2013**, *52*, 4800-4804.
- (56) V. Jeso, C. Yang, M. D. Cameron, J. L. Cleveland, **G. C. Micalizio** “Synthesis and Structure–Activity Relationships of Lehuamide B – A Marine-derived Natural Product with Potent Anti-Multiple Myeloma Activity” *ACS Chemical Biology*, **2013**, *8*, 1241-1252.
- (55) V. Jeso, **G. C. Micalizio** “Relay catalysis at a boron centre” *Nature (News and Views)* **2013**, *494*, 179-181.

- (54) M. Sarkar, B. D. Pascal, C. Steckler, C. Aquino, **G. C. Micalizio**, T. Kodadek, M. J. Chalmers “Decoding Split-and-Pool Combinatorial Libraries with Electron Transfer Dissociation Tandem Mass Spectrometry” *J. Am. Soc. Mass Spec.* **2013**, *24*, 1026-1036.
- (53) O. Kubo, D. P. Canterbury, **G. C. Micalizio** “Synthesis of the C1-C26 Hexacyclic Subunit of Pectenotoxin 2” *Org. Lett.* **2012**, *14*, 5748-5751.
- (52) D. Yang, **G. C. Micalizio** “Synthesis of Alkaloid (–)-205B via Stereoselective Reductive Cross-Coupling and Intramolecular [3+2] Cycloaddition” *J. Am. Chem. Soc.* **2012**, *134*, 15237-15240.
- Highlighted in ACS-Organic Chemistry Highlights (April 29, 2013; <http://www.organic-chemistry.org>).
 - Selected by the Editorial Board to be featured in *Synfacts*: **2012**, *8*(12): 1281 (DOI: 10.1055/s-0032-1317548).
- (51) P. S. Diez, **G. C. Micalizio** “Convergent Synthesis of Deoxypropionates” *Angew. Chem. Int. Ed.* **2012**, *51*, 5152-5156.
- Highlighted in ACS-Organic Chemistry Highlights (February 25, 2013; <http://www.organic-chemistry.org>).
- (50) S. Greszler, H. A. Reichard, **G. C. Micalizio**, “Asymmetric Synthesis of Dihydroindanes by Convergent Alkoxide-Directed Metallacycle-Mediated Bond Formation” *J. Am. Chem. Soc.* **2012**, *134*, 2766-2774.
- (49) M. Z. Chen, **G. C. Micalizio** “Three-Component Coupling Sequence for the Regiospecific Synthesis of Substituted Pyridines” *J. Am. Chem. Soc.* **2012**, *134*, 1352-1356.
- Highlighted in ACS-Organic Chemistry Highlights (October 15, 2012; <http://www.organic-chemistry.org>).
 - Selected by the Editorial Board to be featured in *Synfacts*: **2012**, *8*(03): 0253 (DOI: 10.1055/s-0031-1290283).
 - Highlighted in ChemistryViews: http://www.chemistryviews.org/details/news/1425891/New_Route_to_Pyridines.html
- (48) C. Aquino, M. Sarkar, M. J. Chalmers, K. Mendez, T. Kodadek, **G. C. Micalizio** “A Biomimetic Polyketide-Inspired Approach to Small Molecule Ligand Discovery” *Nature Chem.* **2012**, *4*, 99-104.
- Highlighted in *Nature Chemistry* as a News & Views article: J. Aubé, “Small-molecule libraries: Naturally inspired oligomers” *Nature Chem.* **2012**, *4*, 71-72.
 - Highlighted in SciBX **4**(48): “High throughput identification of chiral oligomers of pentenoic amides (COPAs) as protein ligands” doi: 10.1038/scibx.2011.1362.
 - Selected and Highlighted by the Faculty of 1000 (F1000).
 - Highlighted in Chemical & Engineering News – “A Look Back”, December 23, 2013, pg 32-35.
- (47) *Invited review: Science of Synthesis – Knowledge Updates 2012/4*

G. C. Micalizio "Titanium-Mediated Reductive Cross-Coupling (Intermolecular Metallacycle-Mediated C–C Bond Formation)" *Science of Synthesis*, **2012**, 33-97.

(46) D. Yang, **G. C. Micalizio**, "Convergent and Stereodivergent Synthesis of Complex 1-Aza-7-Oxabicyclo[2.2.1]heptanes" *J. Am. Chem. Soc.* **2011**, *133*, 9216-9219.

(45) M. A. Tarselli, K. M. Raehal, A. K. Brasher, C. Groer, M. D. Cameron, L. M. Bohn, **G. C. Micalizio**, "Synthesis of Conolidine, a Potent Non-Opioid Analgesic for Tonic and Persistent Pain" *Nature Chem.* **2011**, *3*, 449-453.

- Highlighted in *Nature* (News & Views): S. E. Reisman, "New Lead for Pain Treatment" *Nature* **2011**, *473*, 458-459.

- Recognized as a Top 10 Science Business Story for 2011 – Science Business: <http://sciencebusiness.technewslit.com/?p=7618> (ranked #2).

(44) V. Jeso, L. Cherry, T. K. Macklin, S. C. Pan, P. V. LoGrasso, **G. C. Micalizio** "Convergent Synthesis and Discovery of a Natural Product-Inspired Paralog-Selective Hsp90 Inhibitor" *Org. Lett.* **2011**, *13*, 5108-5111.

(43) D. P. Canterbury, **G. C. Micalizio**, "Convergent Route to the CDEF Tetracycle of Pectenotoxin-2" *Org. Lett.* **2011**, *13*, 2384-2387.

(42) Invited Perspective Article:

H. A. Reichard, **G. C. Micalizio**, "Metallacycle-Mediated Cross-Coupling with Substituted and Electronically Unactivated Alkenes" *Chem. Sci.* **2011**, *2*, 573-589.

(41) Invited Article in Honor of Professor Harry Wasserman:

D. Yang, J. K. Belardi, **G. C. Micalizio**, "Generation of quaternary centers by reductive cross-coupling: shifting of regioselectivity in a subset of allylic alcohol-based coupling reactions" *Tetrahedron Lett.* **2011**, *52*, 2144-2147.

(40) M. Z. Chen, M. McLaughlin, M. Takahashi, M. A. Tarselli, D. Yang, S. Umemura, **G. C. Micalizio**, "Preparation of Stereodefined Homoallylic Amines from the Reductive Cross-Coupling of Allylic Alcohols with Imines" *J. Org. Chem.* **2010**, *75*, 8048-8059.

(39) V. Jeso, **G. C. Micalizio**, "Total Synthesis of Lehualide B by Allylic Alcohol–Alkyne Reductive Cross-Coupling" *J. Am. Chem. Soc.* **2010**, *132*, 11422-11424.

- Highlighted in ACS-Organic Chemistry Highlights (May 30, 2011; <http://www.organic-chemistry.org>).

(38) P. S. Diez, **G. C. Micalizio**, "Chemoselective Reductive Cross-Coupling of 1,5-Diene-3-ols with Alkynes: A Facile Entry to Stereodefined Skipped Trienes" *J. Am. Chem. Soc.* **2010**, *132*, 9576-9578.

- Highlighted in ACS-Organic Chemistry Highlights (May 30, 2011; <http://www.organic-chemistry.org>).

- (37) D. P. Canterbury, **G. C. Micalizio**, "Polyketide Assembly by Alkene–Alkyne Reductive Cross-Coupling: Spiroketal Through the Union of Homoallylic Alcohols" *J. Am. Chem. Soc.* **2010**, *132*, 7602-7604.
- Highlighted in ACS-Organic Chemistry Highlights (November 29, 2010; <http://www.organic-chemistry.org>).
- (36) T. K. Macklin, **G. C. Micalizio**, "Convergent and Stereospecific Synthesis of Skipped Polyenes and Polyunsaturated Fatty Acids" *Nature Chem.* **2010**, *2*, 638-643.
- Highlighted in Chemical & Engineering News Concentrates, May 31, **2010**, pg 51.
- (35) M. Takahashi, **G. C. Micalizio**, "Concerning the Potential Reversibility of Carbometalation in Akoxide-directed Ti(O*i*-Pr)₄-mediated Reductive Cross-Coupling of Homoallylic Alcohols with Aromatic Imines" *Chem. Commun.* **2010**, *46*, 3336-3338.
- (34) *Invited Article in Honor of Professor Brian Stoltz (Tetrahedron Young Investigator Award):*
- A. U. Barlan, **G. C. Micalizio**, "The Regio- and Stereochemical Course of Reductive Cross-Coupling Reactions Between 1,3-Disubstituted Allenes and Vinylsilanes: Synthesis of *Z*-Dienes" *Tetrahedron*, **2010**, *66*, 4775-4783.
- (33) H. A. Reichard, M. McLaughlin, M. Z. Chen, **G. C. Micalizio**, "Regioselective Reductive Cross-Coupling Reactions of Unsymmetrical Alkynes" *Eur. J. Org. Chem.* **2010**, 391-409.
- (32) D. Yang, **G. G. Micalizio**, "A Convergent Stereoselective Synthesis of Quinolizidines and Indolizidines: Chemoselective Coupling of 2-Hydroxymethyl Substituted Allylic Silanes with Imines" *J. Am. Chem. Soc.* **2009**, *131*, 17548-17549.
- Selected by the Editorial Board to be featured in *Synfacts*: **2010**(02): 0205 (DOI: 10.1055/s-0029-1219211).
- (31) S. Umemura, M. McLaughlin, **G. C. Micalizio**, "Convergent Synthesis of Stereodefined Exo-alkylidene- γ -Lactams from β -Halo Allylic Alcohols" *Org. Lett.* **2009**, *11*, 5402-5405.
- (30) M. Z. Chen, **G. C. Micalizio**, "A Two-Step, Three-Component Coupling Process for the Synthesis of Highly Substituted Piperidines: Exploring the Utility of a Unique Regioselective Cross-Coupling Reaction of Conjugated Alkynes" *Org. Lett.* **2009**, *11*, 4982-4985.
- (29) M. A. Tarselli, **G. C. Micalizio**, "Aliphatic Imines in Titanium-Mediated Reductive Cross-Coupling: Unique Reactivity of Ti(O*i*-Pr)₄/*n*-BuLi" *Org. Lett.* **2009**, *11*, 4596-4599.
- Selected by the Editorial Board to be featured in *Synfacts*: **2010**(01): 0083 (DOI: 10.1055/s-0029-1218435).
- (28) *Featured Article – Journal of Organic Chemistry:*
- L. J. Perez, H. L. Shimp, **G. C. Micalizio**, "Stereoselective Synthesis of Trisubstituted (*E,E*)-1,3-Dienes by the Site-Selective Reductive Cross-Coupling of Internal Alkynes with Terminal Alkynes: A New Fragment Coupling Reaction for Natural Product Synthesis" *J. Org. Chem.*

2009, 74, 7211-7219.

- (27) H. L. Shimp, **G. C. Micalizio**, "A Formal Total Synthesis of Dictyostatin" *Tetrahedron*, **2009**, 65, 5908-5915.
- (26) M. Takahashi, M. McLaughlin, **G. C. Micalizio**, "Complex Allylation by the Direct Cross-Coupling of Imines with Unactivated Allylic Alcohols" *Angew. Chem. Int. Ed.* **2009**, 48, 3648-3652.
- Selected by the Editorial Board to be featured in *Synfacts*: **2009**(07): 0750 (DOI: 10.1055/s-0029-1217281).
- (25) T. K. Macklin, **G. C. Micalizio**, "Total Synthesis and Structure Elucidation of (+)-Phorbacin C" *J. Am. Chem. Soc.* **2009**, 131, 1392-1393.
- Highlighted in ACS-Organic Chemistry Highlights (January 13, 2009; <http://www.organicchemistry.org>).
 - Selected by the Editorial Board to be featured in *Synfacts*: **2009**(08): 0826 (DOI: 10.1055/s-0029-1217577).
- (24) J. K. Belardi, **G. C. Micalizio**, "Conversion of Allylic Alcohols to Stereodefined Trisubstituted Alkenes: A Complementary Process to the Claisen Rearrangement" *J. Am. Chem. Soc.* **2008**, 130, 16870-16872.
- Highlighted in ACS-Organic Chemistry Highlights (June 8, 2009).
 - Selected by the Editorial Board to be featured in *Synfacts*: **2009**(03): 0312 (DOI: 10.1055/s-0028-1087706).
- (23) H. A. Reichard, J. C. Rieger, **G. C. Micalizio**, "Total Synthesis of Callystatin A by Titanium-mediated Reductive Alkyne–Alkyne Cross-Coupling" *Angew. Chem. Int. Ed.* **2008**, 47, 7837-7840.
- Selected by the Editorial Board to be featured in *Synfacts*: **2009**(04): 0355 (DOI: 10.1055/s-0028-1088082).
- (22) J. K. Belardi, **G. C. Micalizio**, "Total Synthesis of Macbecin I" *Angew. Chem. Int. Ed.* **2008**, 47, 4005-4008.
- Selected by the Editorial Board to be featured in *Synfacts*: **2008**(11): 1131 (DOI: 10.1055/s-0028-1083421).
- (21) *Invited Article in Honor of Professor John Hartwig (Tetrahedron Young Investigator Award):*
- H. L. Shimp, A. Hare, M. McLaughlin, **G. C. Micalizio**, "Allene-alkyne cross-coupling for stereoselective synthesis of substituted 1,4-dienes and cross-conjugated trienes" *Tetrahedron*, **2008**, 64, 3437-3445 and 6831-6837.
- (20) *Cluster Article Invited by Professor Hisashi Yamamoto:*
- M. McLaughlin, H. L. Shimp, R. Navarro, **G. C. Micalizio** "Regio- and Stereoselective Direct

Cross-Coupling of Imines with Allenic Alcohols” *Synlett*, **2008**, 735-738.

(19) Feature Article Invited by Professor Dr. Dieter Enders:

L. Perez, **G. C. Micalizio** “Titanium-Mediated Fragment Union Processes in Complex Molecule Synthesis: Development of a Branched Reaction Pathway of High Step Economy for the Synthesis of Complex and Diverse Polyketides” *Synthesis*, **2008**, 627-648.

(18) F. Kolundzic, **G. C. Micalizio**, “Synthesis of Substituted 1,4-Dienes by Direct Alkylation of Allylic Alcohols” *J. Am. Chem. Soc.* **2007**, *129*, 15112-15113.

- Selected by the Editorial Board to be featured in *Synfacts*: **2008**(03): 0301 (DOI: 10.1055/s-2008-1042735).

(17) M. Takahashi, **G. C. Micalizio**, “Regio- and Stereoselective Cross Coupling of Substituted Olefins and Imines. A Convergent Stereoselective Synthesis of Saturated 1,5-Aminoalcohols and Substituted Piperidines” *J. Am. Chem. Soc.* **2007**, *129*, 7514-7516.

- Highlighted in ACS-Organic Chemistry Highlights (November 12, 2007; <http://www.organic-chemistry.org>).
- Selected by the Editorial Board to be featured in *Synfacts*: **2007**(09): 0951 (DOI: 10.1055/s-2007-968847).

(16) H. L. Shimp, **G. C. Micalizio**, “An Alkoxide-Directed Alkyne–Allene Cross-Coupling for Stereoselective Synthesis of 1,4-Dienes” *Chem. Commun.* **2007**, 4531-4533.

(15) M. McLaughlin, M. Takahashi, **G. C. Micalizio**, “An Alkoxide Directed Intermolecular [2+2+1] Annulation: A Three-Component Coupling Reaction for the Synthesis of Tetrasubstituted α,β -Unsaturated γ -Lactams” *Angew. Chem. Int. Ed.* **2007**, *46*, 3912-3914.

(14) H. A. Reichard, **G. C. Micalizio**, “A Site- and Stereoselective Intermolecular Alkene–Alkyne Coupling Process” *Angew. Chem. Int. Ed.* **2007**, *46*, 1440-1443.

(13) J. K. Belardi, **G. C. Micalizio**, “Studies on the Syntheses of Benzoquinone Ansamycin Antibiotics. Syntheses of the C(5)-C(15) Subunits of Macbecin I, Geldanamycin and Herbimycin A” *Org. Lett.* **2006**, *8*, 2409-2412.

- Highlighted in ACS-Organic Chemistry Highlights (February 26, 2007).

(12) A. B. Bahadoor, **G. C. Micalizio**, “Studies in Macrolide Antibiotic Synthesis: The Role of Tethered Alkoxides in Titanium Alkoxide-mediated Regioselective Reductive Coupling Reactions” *Org. Lett.* **2006**, *8*, 1181-1184.

(11) J. Ryan and **G. C. Micalizio**, “An Alkoxide-directed Carbometalation of Internal Alkynes” *J. Am. Chem. Soc.* **2006**, *128*, 2764-2765.

- Selected by the Editorial Board to be featured in *Synfacts*: **2006**(05): 0491 (DOI: 10.1055/s-2006-934422).

- (10) H. L. Shimp and **G. C. Micalizio**, "Group 4 Metals in Polyketide Synthesis: A Convergent Strategy for the Synthesis of Polypropionate-Derived (*E,E*)-Trisubstituted 1,3-Dienes" *Org. Lett.* **2005**, 7, 5111-5114.
- (9) A. B. Bahadoor, A. Flyer, **G. C. Micalizio**, "A Pentenyl Dianion-based Strategy for Convergent Synthesis of Ene-1,5-diols" *J. Am. Chem. Soc.* **2005**, 127, 3694-3695.

Publications as a Graduate Student and Postdoctoral Fellow:

- (8) J.-N. Heo, **G. C. Micalizio**, W. R. Roush, "Enantio- and Diastereoselective Synthesis of Cyclic β -Hydroxy Allylsilanes via Sequential Aldehyde γ -Silylallylboration and Ring Closing Metathesis Reactions" *Org. Lett.* **2003**, 5, 1693.
- (7) **G. C. Micalizio** and S. L. Schreiber, "An Alkynylboronic Ester Annulation: Development of Synthetic Methods For Application to Diversity-Oriented Organic Synthesis" *Angew. Chem. Int. Ed.* **2002**, 41, 3272.
- (6) **G. C. Micalizio** and S. L. Schreiber, "A Boronic Ester Annulation Strategy for Diversity-Oriented Organic Synthesis" *Angew. Chem. Int. Ed.* **2002**, 41, 152.
- (5) **G. C. Micalizio** and W. R. Roush, "Studies on the Synthesis of Pectenotoxin II: Synthesis of a C(11)-C(26) Fragment Precursor via [3+2]-Annulation Reactions of Chiral Allylsilanes" *Org. Lett.* **2001**, 3, 1949.
- (4) W. R. Roush, A. N. Pinchuk, **G. C. Micalizio**, "[*(E)*- γ -(Dimethylphenylsilyl)-allyl]diisopinocampheylborane: a highly enantioselective reagent for the synthesis of *anti*- β -hydroxy-allylsilanes" *Tetrahedron Lett.* **2000**, 41, 9413.
- (3) **G. C. Micalizio**, W. R. Roush, and A. N. Pinchuk, "Synthesis of the C(29)-C(45) E-F Bis-Pyran Subunit of Spongistatin 1 (Altohyrtin A)" *J. Org. Chem.* **2000**, 65, 8730.
- (2) **G. C. Micalizio** and W. R. Roush, "A Three-Component Coupling Strategy for Tetrahydrofuran Synthesis: Application of the Diisopropyl Tartrate Modified (*E*)- γ -Dimethylphenylsilylallylboronate as an α,γ -Allyl Dianion Equivalent" *Org. Lett.* **2000**, 2, 461.
- (1) **G. C. Micalizio** and W. R. Roush, "Towards the Synthesis of Spongistatin 1: Diastereoselective Synthesis of the C(36)-C(45) Subunit" *Tetrahedron Lett.* **1999**, 40, 3351.

PATENT APPLICATIONS FILED:

- (1) 61/426,023 – filed 12/22/10: Synthesis of Conolidine and Discovery of a Potent Non-Opioid Analgesic for Pain, Int. Appl. (2012), WO 2012088402 A1 20120628.
- (2) 61/531,810 – filed 9/7/11: Chiral Compounds of Varying Conformational Rigidity and Methods of Synthesis PCT, Int. Appl. (2013), WO 2013036753 A1 20130314.

INVITED PRESENTATIONS

- 1) June 1999 Hoffman-La Roche – Nutley, NJ (Excellence in Organic Chemistry –

- Mini Symposium)
- 2) June 2001 37th National Organic Symposium – Bozeman, MT
 - 3) July 2002 51st Natural Products Gordon Research Conference – Tilton, NH
 - 4) September 2002 ACS ProSpectives Conference–Combinatorial Chemistry – Leesburg, VA
 - 5) January 2003 Merck Research Laboratories – West Point, PA
 - 6) June 2005 Crompton Corporation – ACS– local section – Middlebury, CT
 - 7) August 2005 Beckman Young Investigator Symposium – Irvine, CA
 - 8) May 2006 Brown University – Providence, RI
 - 9) May 2006 Bayer Pharmaceuticals – West Haven, CT
 - 10) June 2006 Eli Lilly Pharmaceuticals – Indianapolis, IN
 - 11) June 2006 Gordon Research Conference: *Stereochemistry* – Newport, RI
 - 12) July 2006 Gordon Research Conference: *Heterocycles* – Newport, RI
 - 13) July 2006 Easai Research Institute – Andover, MA
 - 14) July 2006 Gordon Research Conference: *Natural Products* – Tilton, NH
 - 15) August 2006 Beckman Young Investigator Symposium – Irvine, CA
 - 16) September 2006 Connecticut College – New London, CT
 - 17) September 2006 University of Connecticut – Storres, CT
 - 18) October 2006 University of Michigan – Ann Arbor, MI
 - 19) October 2006 Wayne State University – Detroit, MI
 - 20) October 2006 Wesleyan University – Middletown, CT
 - 21) October 2006 Monmouth University – West Long Branch, NJ
 - 22) February 2007 Bristol Myers-Squibb – Wallingford, CT
 - 23) May 2007 University of Delaware – Newark, DE
 - 24) May 2007 Scripps Research Institute – Jupiter, FL
 - 25) June 2007 NSF Workshop on Organic Synthesis – Estes Park, CO
 - 26) August 2007 Boehringer Ingelheim – Ridgefield, CT
 - 27) August 2007 American Chemical Society, Young Investigator Symposium – Boston, MA
 - 28) September 2007 The Scripps Research Institute – La Jolla, CA
 - 29) September 2007 Ohio State University – Columbus, OH
 - 30) October 2007 University of Utah – Salt Lake City, UT
 - 31) October 2007 Memorial Sloan-Kettering Cancer Center – New York, NY
 - 32) October 2007 Florida State University – Tallahassee, FL
 - 33) October 2007 CalTech – Pasadena, CA
 - 34) November 2007 University at Buffalo – SUNY – Buffalo, NY
 - 35) November 2007 UT Southwestern – Dallas, TX
 - 36) December 2007 Merck – Rahway, NJ
 - 37) February 2008 Amgen – Cambridge, MA
 - 38) February 2008 Schering-Plough – NJ
 - 39) March 2008 Cornell University – Ithaca, NY
 - 40) March 2008 University of Illinois – Urbana, IL
 - 41) April 2008 University of Rochester – Rochester, NY
 - 42) April 2008 Pfizer – Groton, CT
 - 43) April 2008 University of Colorado – Boulder, CO
 - 44) May 2008 Bristol Myers-Squibb – Princeton, NJ
 - 45) May 2008 Merck – West Point, PA
 - 46) July 2008 Gordon Research Conference – Stereochemistry – Newport, RI
 - 47) October 2008 Georgia Tech – Atlanta, GA
 - 48) April 2009 Northwestern University – Evanston, IL
 - 49) June 2009 Johnson & Johnson – SanDiego, CA
 - 50) June 2009 Roche – Nutley, NJ
 - 51) October 2009 University of Miami – Coral Gables, FL
 - 52) December 2009 Florida Atlantic University – Boca Raton, FL

- 53) January 2010 The University of Pennsylvania – Philadelphia, PA (student invited speaker)
 54) September 2010 Emory University – Atlanta, GA
 55) September 2010 University of South Florida – Tampa, FL
 56) February 2011 Boston University – Boston, MA
 57) May 2011 Florida American Chemical Society Meeting – Innisbrook, FL
 58) June 2011 Amgen – Thousand Oaks, CA
 59) June 2011 University of California, Santa Barbara – Santa Barbara, CA
 60) March 2012 Florida State University – Tallahassee, FL
 61) March 2012 FAMU – Tallahassee, FL
 62) April 2012 Brigham Young University – Provo, UT
 63) April 2012 Rutgers University – New Brunswick, NJ
 64) May 2012 The Scripps Research Institute – La Jolla, CA
 65) July 2012 Gordon Research Conference – Natural Products – Andover, NH
 66) October 2012 Dartmouth College – Hanover, NH
 67) October 2012 University of Houston – Houston, TX
 68) November 2012 University of Florida – Gainesville, FL
 69) November 2012 Dartmouth College – Hanover, NH
 70) March 2013 AbbVie Pharmaceuticals – Chicago, IL
 71) June 2013 Gordon Research Conference – Heterocycles – Newport, RI
 72) September 2013 DuPont – Newark, DE
 73) October 2013 Loyola University – Chicago, IL
 74) October 2013 University of Illinois at Chicago – Chicago, IL
 75) November 2013 Virginia Tech, Highlands in Chemistry Seminar – Blacksburg, VA
 76) June 2014 GlaxoSmithKline Pharmaceuticals – Waltham, MA
 77) October 2015 Fairfield University – Fairfield, CT
 78) December 2015 Binghamton University (SUNY) – Binghamton, NY
 79) February 2016 The Ohio State University – Columbus, OH
 80) March 2016 University of Louisville – Louisville, KY
 81) December 2016 University of California, Merced – Merced, CA

Named Lectureships and Symposia:

- 1) January 2007 Connecticut Organic Chemistry Symposium – New Haven, CT
 2) March 2007 Ziegler Symposium, Yale University – New Haven, CT
 3) September 2007 Lilly Distinguished Lecturer, Colorado State University – Ft. Collins, CO
 4) March 2008 Lilly Grantee Symposium, Eli Lilly – Indianapolis, IN
 5) April 2008 Grandpierre Lecturer, Columbia University – New York, NY
 6) May 2008 Visions in Chemistry Symposium, Sanofi-Aventis – Bridgewater, NJ
 7) October 2008 Pfizer Symposium, University of Toronto – Toronto, ON Canada
 8) October 2008 Fajans Award Colloquium, University of Michigan – Ann Arbor, MI
 9) April 2010 “Organic Chemistry Day” Symposium, University of Missouri – Columbia, MO
 10) March 2013 Warner Lambert Lecturer, Wayne State University – Detroit, MI
 11) April 2013 Lilly Lecturer, Harvard University – Cambridge, MA
 12) July 2014 Keynote Speaker – 26th International Conference on Organometallic Chemistry
 Sapporo, Japan
 13) July 2014 “Organometallics: A Key for Innovation in Organic Synthesis” Symposium at
 Okayama University, Okayama, Japan
 14) May 2016 (cancelled) University of the Basque Country – Workshop on Asymmetric Synthesis
 and Catalysis – Bilbao, Spain (*rescheduled for future conference*)
 15) August 2016 Enabling Technology for Reactions and Processes – Telluride Science
 Research Center, Telluride, CO

TEACHING

Fall 2003	Chemistry 423/523	"Synthetic Methods in Organic Chemistry" (Yale)
Fall 2004	Chemistry 423/523	"Synthetic Methods in Organic Chemistry" (Yale)
Spring 2005	Chemistry 125	"Freshman Organic Chemistry" (Yale)
Fall 2005	Chemistry 423/523	"Synthetic Methods in Organic Chemistry" (Yale)
Spring 2006	Chemistry 221	"The Organic Chemistry of Life Processes" (Yale)
Fall 2006	Chemistry 423/523	"Synthetic Methods in Organic Chemistry" (Yale)
Spring 2007	Chemistry 221	"The Organic Chemistry of Life Processes" (Yale)
Fall 2008	Chemistry 227	"Comprehensive Organic Chemistry II" (Yale)
Fall 2009	Chemistry	"Modern Organic Synthesis" (TSRI, with Dale Boger)
Fall 2010	Chemistry	"Modern Organic Synthesis" (TSRI, with Dale Boger)
Fall 2011	Chemistry	"Modern Organic Synthesis" (TSRI, with Dale Boger)
Fall 2013	Chemistry 103	"Special Topics: Organic Synthesis" (Dartmouth)
Winter 2014	Chemistry 58	"Honors Organic Chemistry" (Dartmouth)
Spring 2014	Chemistry 262	"Seminar in Organic Chemistry" (Dartmouth)
Winter 2015	Chemistry 103	"Special Topics in Organic Synthesis" (Dartmouth)
Winter 2015	Chemistry 262	"Seminar in Organic Chemistry" (Dartmouth)
Spring 2015	Chemistry 58	"Honors Organic Chemistry" (Dartmouth)
Fall 2015	Chemistry 152	"Advanced Organic Synthesis and Mechanism"
Fall 2015	Chemistry 262	"Seminar in Organic Chemistry"
Winter 2016	Chemistry 157	"Natural Product Synthesis"
Spring 2016	Chemistry 58	"Honors Organic Chemistry"

COMMITTEES AND SERVICE

2003-2007	Graduate Student Admissions Committee (Yale)
2003-2007	Instrument Committee (Yale)
2004-2007	Safety Committee (Yale)
2005-2007	Chairman of the Connecticut Organic Chemistry Symposium Committee (Yale)
2005-2006	Junior Faculty Search Committee (Yale)
2005-2008	Co-director of the Center for Genomics and Proteomics (Yale)
2005-2007	Organic Seminar Series Coordinator (Yale)
2008	NIH Study Section – SBCA: ad hoc member
2008-2013	Graduate Student Admissions Committee (TSRI)
2010-2013	Florida Theme Committee (TSRI)
2013-2014	Faculty Search Committee (Dartmouth College)
2013-2014	Chairman of the Safety Committee - Chair (Dartmouth College)
2013-present	Chairman of the Space Allocation Committee (Dartmouth College)
2014-present	Freshman advising (Dartmouth College)
2014-2015	Graduate Student Admissions Committee (Dartmouth College)
2014	NIH Study Section – SBCB: ad hoc member
2014	NSF Review Panel
2015	NSF Review Panel (CAREER panel)
2015-2016	Committee on the Faculty (Dartmouth College)
2016-present	Committee on the Faculty Procurement Task Force
2016	NIH Study Section – ZRG1 BCMB-T: ad hoc member (July)

Reviewing activities:

Journal of the American Chemical Society, Organic Letters
 The Journal of Organic Chemistry
 Angewandte Chemie
 Nature Chemistry
 Nature
 Science
 Chemistry a European Journal
 European Journal of Organic Chemistry
 Tetrahedron
 Tetrahedron Letters

RESEARCH GROUP MEMBERSGraduate Students: (current)

- | | |
|------------------------|--|
| (1) James Cassidy | B.S. South Dakota State University |
| (2) Jonathan Iaconelli | B.S. Emory University |
| (3) Wan Shin Kim | B.S. and M.S. California State University, Fullerton |
| (4) Matthew Kier | B.S. Goucher College, M.S. UC-Irvine |
| (5) Robert Leon | B.S. Boston College |

Postdoctoral Students: (current)

- | | |
|----------------------|---|
| (1) Haruki Mizoguchi | Ph.D. 2013 Hokkaido University (Japan)
(Mentor: Professor Hideaki Oikawa and Professor Hiroki Oguri) |
| (2) Natasha O'Rourke | Ph.D. 2014 University of Victoria (Canada)
(Mentor: Jeremy E. Wulff) |

Undergraduate Students: (current)

- | | |
|--------------------|-------------------------|
| (1) Cannon Wille | Dartmouth College ('17) |
| (2) Christine Park | Dartmouth College ('17) |
| (3) Ethan Isaacson | Dartmouth College ('18) |

Former Graduate Students:

- | | |
|----------------------------|---|
| (1) Adilah Bahadoor, Ph.D. | Ph.D. 2007: Yale University
2005-2006: Novartis Graduate Student Fellow
2006-2007: Pfizer Graduate Student Fellow
2007 – present: Infinity Pharmaceuticals |
| (2) Justin Belardi, Ph.D. | Ph.D. 2009: Yale University |

- 2009-2012: Merck Research Laboratories
2012 – present: Knopp Biosciences
- (3) Ming Chen, Ph.D. Ph.D. 2012: The Scripps Research Institute
2012-2014: NIH Postdoctoral Fellow at the University of Pennsylvania with Professor Amos Smith
2014-current: Pfizer Inc.
- (4) Sarah Hale B.A. Colgate University
- (5) Richard Hughes, M.S. M.S. 2008: Yale University
2008 – present: Novartis
- (6) Laszlo Hunyadi, M.S. M.S. 2006: Yale University
2006-2007: Research Associate, Rib-X Pharmaceuticals
DVM 2011: College of Veterinary Medicine at Cornell University
2011-2015: Resident equine medicine – UC Davis
2015-present: Equine Veterinarian in Weatherford, TX
- (7) Ken-Shing Law, M.S. M.S. 2006: Yale University
- (8) Martin McLaughlin, Ph.D. Ph.D. 2010: Yale University
2010-2012: NIH Postdoctoral Fellow with Professor Erick Carreira (ETH)
Currently: BASF (Germany)
- (9) Lark Perez, Ph.D. Ph.D. 2008: Yale University
2006-2007: Novartis Graduate Student Fellow
2008-2012: Postdoctoral study with Professor Semmelhack at Princeton University
2012 – present: Assistant Professor Rowan University
- (10) Holly Reichard, Ph.D. Ph.D. 2010: Yale University
2010-2012: Envoy Pharmaceuticals
2012 – present: Takeda Pharmaceuticals
- (11) Jude Rieger, M.S. M.S. 2007: Yale University
2007 – present: Fairfield, CT – High school teacher
- (12) Maria Ruggiero, M.S. M.S. 2006: Yale University
2006 – present: Fairfield, CT – High school teacher
- (13) Jamie Ryan, M.S. M.S. 2006: Yale University
2010 – present: Unilever HPC
- (14) Heidi Shimp, Ph.D. Ph.D. 2008: Yale University
2006-2007: Bristol Myers-Squibb Graduate Student Fellow
2008 – present: Bristol Myers-Squibb
- (15) Masayuki Takahashi, Ph.D. Ph.D. 2010: Yale University

2010-2012: NIH Postdoctoral Fellow with Professor William R. Roush (TSRI)
 2012 – present: Otsuka Pharmaceuticals

Former Postdoctoral Associates:

- (1) Claudio Aquino 2009-2016
 Ph.D. 2008 Università Degli Studi Di Napoli Federico II
 (Mentor: Professor Ettore Novellino)
 2016-present: DiCE Pharmaceuticals
- (2) Allan Barlan, Ph.D. 2008-2009
 Ph.D. 2008: University of Chicago
 (Mentor: Professor Hisashi Yamamoto)
 2010 – present: Defense Intelligence Agency
- (3) Daniel Canterbury, Ph.D. 2010-2013
 Ph.D. 2008: University of Rochester
 (Mentor: Professor Alison Frontier)
 2013 – present: Pfizer Inc.
- (4) Xiayun Cheng, Ph.D. 2013-2015
 Ph.D. 2013 University of Vermont
 (Mentor: Professor Stephen P. Waters)
 2015 – present Pfizer Inc.
- (5) Stephen Greszler, Ph.D. 2010-2012
 Ph.D. 2010: University of North Carolina
 (Mentor: Professor Jeffrey Johnson)
 2012 – present: AbbVie
- (6) Valer Jeso, Ph.D. 2010-2014
 Ph.D. 2009: The Scripps Research Institute
 (Mentor: Professor K. C. Nicolaou)
 2014-present GlaxoSmithKline
- (7) Ozora Kubo, Ph.D. 2011-2013
 Ph.D. 2011 JSPS-sponsored postdoctoral fellow
 Osaka University
 (Mentor: Professor Hiromichi Fujioka)
 2013 – present: Rohto Pharmaceuticals
- (8) Todd Macklin, Ph.D. 2007-2010
 Ph.D. 2007: Queens University
 (Mentor: Professor Victor Snieckus)
 2010-2012: Envoy Pharmaceuticals
 2012-2014: Takeda Pharmaceuticals
- (9) Subhas Chandra Pan, Ph.D. 2010-2011
 Ph.D. 2008: Max-Planck-Institut Für Kohlenforschung, Mülheim an
 der Ruhr
 (Mentor: Professor Benjamin List)

2008-2009: Postdoctoral at Harvard University with Professor E.J. Corey)
 2011 – present: Assistant Professor IIT – Guwahati

(10) Matthew Scheideman, Ph.D.

2005-2007
 Ph.D. 2005: University of Michigan
 (Mentor: Professor Edwin Vedejs)
 2005-2007: Rudolph Anderson Postdoctoral Fellow
 2007-2013: Rib-X Pharmaceuticals
 2013 – present: Otsuka Pharmaceuticals

(11) Rosa Taboada, Ph.D.

2004-2005
 Ph.D. 2004: University of Connecticut
 (Mentor: Professor Amy Howell)
 2004-2005: Rudolph Anderson Postdoctoral Fellow

(12) Michael Tarselli, Ph.D.

2009-2010
 Ph.D. 2009: University of North Carolina
 (Mentor: Professor Michael Gagné)
 2011-2014: Principal Scientist at Biomedisyn
 2014 – present: Novartis – Information Technology

(13) Emily Tarsis, Ph.D.

2011-2012
 Ph.D. 2011: Duke University (Mentor: Professor Don Coltart)
 2012 – 2014: Assistant Professor Nova Southeastern University – Boca Raton, FL
 2015 – present: Lecturer in Chemistry, Connecticut College

(14) Dexi Yang, Ph.D.

2009-2014
 Ph.D. 2008: The Ohio State University
 (Mentor: Professor David J. Hart)
 2014-current Merck Research Laboratories

Former Undergraduate Students:

(1) Alec Flyer, Ph.D.

2003-2004
 B.S. 2004 Yale University
 Ph.D. 2009 Department of Chemistry and Chemical Biology,
 Harvard University (Mentor: Andrew G. Myers)
 2009 – present: Research Scientist at Novartis

(2) Brian Trantow, Ph.D.

2006-2007 Pfizer Undergraduate Summer Fellowship (2006)
 B.S. 2007 Yale University
 Ph.D. 2013 Chemistry, Stanford University
 (Mentor: Paul A. Wender)
 2013 – present: Putnam Associates, Inc. (Life Sciences Consultant)

(3) Raul Navarro, Ph.D.

2006-2008
 B.S. 2008: Yale University
 2006: STARS Undergraduate Summer Fellowship
 Ph.D. 2013 California Institute of Technology

(Mentor: Sarah Reisman)
2013 – present: Postdoctoral Fellow, Stanford University
(Mentor: Professor Tom Wandless)

From Dartmouth:

(1) Daniel Malinowski Dartmouth College ('15)
(2) David Clossey Dartmouth College ('16) – currently attending Harvard Medical School
(3) Taylor Watson Dartmouth College ('16)
(4) Yu Zhu (Emma) Mei Dartmouth College ('17)

ACADEMIC MENTORS:

Postdoctoral Mentor: Stuart L. Schreiber
 Morris Loeb Professor
 Department of Chemistry and Chemical Biology
 Harvard University

 The Broad Institute
 7 Cambridge Center
 Cambridge, MA 02142

 Phone: (617) 714-7080
 e-mail: stuart_schreiber@harvard.edu

Graduate Mentor: William R. Roush
 Professor of Chemistry
 Executive Director of Medicinal Chemistry
 Associate Dean, Kellogg School of Science and Technology

 The Scripps Research Institute, Florida
 130 Scripps Way #3A2
 Jupiter, FL 33458

 Phone: (561) 228-2450
 e-mail: roush@scripps.edu