John P. Wolfe University of Michigan Department of Chemistry 930 N. University Ave Ann Arbor, MI 48109 Tel: (734) 763-3432 e-mail: jpwolfe@umich.edu

EDUCATION AND EXPERIENCE

University of Michigan (July 2002–present) Arthur F. Thurnau Professor of Chemistry (July 2015-present) Professor of Chemistry (May 2012–present) Associate Chair for Undergraduate Education (January 2013–present) Associate Professor of Chemistry (August 2008–May 2012) William R. Roush Assistant Professor of Chemistry (September 2006–August 2008) Assistant Professor of Chemistry (July 2002–September 2006)

University of California, Irvine (September 1999–May 2002) NIH NRSA Postdoctoral Fellow (September 1999–May 2002) Overman Group Coordinator (March 2001–May 2002) Research Advisor: Professor Larry E. Overman Research Area: Synthesis of polycyclic guanidine derivatives, studies towards the total synthesis of cylindramide, development of new tandem cation-olefin cyclization/pinacol rearrangement reactions.

Massachusetts Institute of Technology (September 1994–August 1999)

Ph.D. in Organic Chemistry Thesis Title: "Late Transition Metal Catalyzed C–N and C–C Bond Forming Reactions" Graduate Advisor: Professor Stephen L. Buchwald

University of Colorado, Boulder (1988–1994)

B.A. in Chemistry Undergraduate Research Assistant (1993–1994) Research Advisor: Professor Gary A. Molander Research Area: Development of a SmI₂-promoted alternative to the cyanoacetic ester synthesis.

HONORS AND AWARDS (2002–Present)

2015 Arthur F. Thurnau Professorship
2012 John Dewey Award
2012 LSA Excellence in Education Award
2012 Fellow of the American Association for the Advancement of Science
2009 Tetrahedron Most Cited Paper 2006–2009 Award
2009 University of Michigan Chemistry Faculty Teaching Award
2008–2009 GlaxoSmithKline Chemistry Scholar Award
2006 William R. Roush Junior Faculty Development Award
2006 Camille Dreyfus Teacher-Scholar Award
2005 Eli Lilly Grantee Award
2003–2005 3M Untenured Faculty Award
2002 Lilly Unrestricted Research Award
2002 Research Corporation Innovation Award
2002 Dreyfus New Faculty Award

INDEPENDENT PUBLICATIONS (Publications with undergraduate research co-authors are indicated with a * and the names of the undergraduate researchers are italicized in the citations)

University of Michigan

[126] "Pd-Catalyzed Alkene Difunctionalization Reactions of Enolates for the Synthesis of Substituted Bicyclic Cyclopentanes." Evan C. Bornowski, Elsa M. Hinds, Derick R. White, Yusuke Nakamura, John P. Wolfe. *Org. Proc. Res. Dev.* **2019**, *23*, 1610.

• Invited paper.

[125] "Pd-Catalyzed Alkene Difunctionalization Reactions of Malonate Nucleophiles. Synthesis of Substituted Cyclopentanes via Alkene Aryl-Alkylation and Alkenyl-Alkylation" Derick R. White, Elsa M. Hinds, Evan Bornowski, John P. Wolfe. *Org. Lett.* **2019**, *21*, 3813.

*[124] "Stereocontrolled Synthesis of Bicyclic Ureas and Sulfamides via Pd-Catalyzed Alkene Carboamination Reactions" Nicholas R. Babij, Jordan R. Boothe, *Grace M. Mckenna*, *Ryan M. Fornwald*, John P. Wolfe. *Tetrahedron* **2019**, 75, 4228–4243.

• Invited paper.

*[123] "Pd-Catalyzed Alkene Carboheteroarylation Reactions for the Synthesis of 3-Cyclopentylindole Derivatives" Janelle K. Kirsch, *Jenna L. Manske*, John P. Wolfe. *J. Org. Chem.* **2018**, *83*, 13568–13573.

[122] "A Cascade Cross-Metathesis/Aza-Michael Reaction Strategy for the Synthesis of Cyclic and Bicyclic Ureas" Elsa M. Hinds, John P. Wolfe. *J. Org. Chem.* **2018**, *83*, 10668–10676.

[121] "Asymmetric Synthesis of 6-Membered Cyclic Sulfamides via Palladium-Catalyzed Alkene Carboamination Reactions" Zachary J. Garlets, John P. Wolfe, *Synthesis* 2018, 50, 4444–4452.
Invited paper.

[120] "Polar Plunge: Semester-Long Snow Chemistry Research in the General Chemistry Laboratory: N. W. May, S. M. McNamara, S. Wang, K. Kolesar, J. Vernon, J. P. Wolfe, D. Goldberg, K. A. Pratt, *J. Chem. Ed.* **2018**, *95*, 543–552.

[119] "Pd-Catalyzed Alkene Diamination Reactions of Nitrogen Electrophiles. Synthesis of Cyclic Guanidines and Ureas Bearing Dialkylaminomethyl Groups" Luke J. Peterson, Janelle K. Kirsch, John P. Wolfe, *Org. Lett.* **2018**, *20*, 3513–3517.

*[118] "Palladium-Catalyzed Alkene Carboalkoxylation Reactions of Phenols and Alcohols for the Synthesis of Carbocycles" Derick R. White, *Madeline I. Herman*, and John P. Wolfe. *Org. Lett.* **2017**, *19*, 4311.

*[117] "Synthesis of Cyclic Guanidines Bearing *N*-Arylsulfonyl and *N*-Cyano Protecting Groups via Pd-Catalyzed Alkene Carboamination Reactions" Luke J. Peterson, *Jingyi Luo*, and John P. Wolfe. *Org. Lett.* **2017**, *19*, 2817–2820.

[116] "Stereocontrolled Synthesis of Amino-Substituted Carbocycles via Pd-Catalyzed Alkene Carboamination Reactions" Derick R. White and John P. Wolfe *Chem. Eur. J.* **2017**, *23*, 5419–5423.

*[115] "Synthesis of Substituted γ - and δ -Lactams via Pd-Catalyzed Alkene Carboamination Reactions." Jordan R. Boothe, *Yifan Shen*, and John P. Wolfe, *J. Org. Chem.* **2017**, *82*, 2777.

[114] "Synthesis of 2,3-Dihydrobenzofurans via the Palladium Catalyzed Carboalkoxylation of 2-Allylphenols." Johnathon T. Hutt and John P. Wolfe, *Org. Chem. Front.* **2016**, *3*, 1314.

[113] "Synthesis of Cyclic Guanidines via Silver-Catalyzed Intramolecular Alkene Hydroamination Reactions of *N*-Allylguanidines." Zachary J. Garlets, Mattia Silvi, and John P. Wolfe. *Org. Lett.* **2016**, *18*, 2331.

*[112] "Asymmetric Palladium-Catalyzed Alkene Carboamination Reactions for the Synthesis of Cyclic Sulfamides." Zachary J. Garlets, *Kaia R. Parenti*, and John P. Wolfe. *Chem. Eur. J.* **2016**, *22*, 5919–5922.

[111] "Development of Enantioselective Pd-Catalyzed Alkene Carboalkoxylation Reactions for the Synthesis of Tetrahydrofurans" Brett A. Hopkins, Zachary J. Garlets, and John P. Wolfe. *Angew. Chem., Int. Ed.* **2015**, *54*, 13390–13392.

[110] "Asymmetric Pd-Catalyzed Alkene Carboamination Reactions for the Synthesis of 2-Aminoindane Derivatives" Derick R. White, Johnathon T. Hutt, and John P. Wolfe. *J. Am. Chem. Soc.* **2015**, *137*, 11246–11249.

[109] "Aza-Wittig Rearrangements of *N*-Benzyl and *N*-Allyl Glycine Methyl Esters. Discovery of a Surprising Cascade Aza-Wittig Rearrangement/Hydroboration Reaction" Renata K. Everett and John P. Wolfe. *J. Org. Chem.* **2015**, *80*, 9041–9056.

[108] "Pd-Catalyzed Alkene Carboamination Reactions of Electron-Poor Nitrogen Nucleophiles" Luke J. Peterson and John P. Wolfe. *Adv. Synth. Catal.* **2015**, *357*, 2339–2344.

[107] "Synthesis of Polycyclic Nitrogen Heterocycles via Cascade Pd-Catalyzed Alkene Carboamination/Diels-Alder Reactions" Derick R. White and John P. Wolfe. *Org. Lett.* **2015**, *17*, 2378–2381.

[106] "Aza-[1,2]-Wittig Rearrangements of *N*-Benzyl Glycine Methyl Esters. A New Approach to the Synthesis of *N*-Aryl Phenylalanine Derivatives" Renata K. Everett and John P. Wolfe. *Tetrahedron Lett.* **2015**, *56*, 3393–3395.

*[105] "Synthesis of Substituted 2-Aminoimidazoles via Pd-Catalyzed Alkyne Carboamination Reactions. Application to the Synthesis of Preclathridine Natural Products" *Blane P. Zavesky*, Nicholas R. Babij, and John P. Wolfe. *Org. Lett.* **2014**, *16*, 4952–4955.

[104] "Enantioselective Synthesis of Tetrahydroquinolines, Tetrahydroquinoxalines, and Tetrahydroisoquinolines via Pd-Catalyzed Alkene Carboamination" Brett A. Hopkins and John P. Wolfe. *Chem. Sci.* **2014**, *5*, 4840–4844.

*[103] "Stereocontrolled Synthesis of Bicyclic Sulfamides via Pd-Catalyzed Alkene Carboamination Reactions. Control of 1,3-Asymmetric Induction by Manipulating Mechanistic Pathways" Nicholas R. Babij, *Grace. M. McKenna, Ryan M. Fornwald*, and John P. Wolfe. *Org. Lett.* **2014**, *16*, 3412–3415.

*[102] "Influence of Catalyst Structure and Reaction Conditions on *Anti*- vs. *Syn*-Aminopalladation Pathways in Pd-Catalyzed Alkene Carboamination Reactions of *N*-Allyl Sulfamides" *Ryan M. Fornwald*, Jonathan A. Fritz, and John P. Wolfe. *Chem. Eur. J.* **2014**, *20*, 8782–8790

[101] "Synthesis of Substituted Tetrahydroindoloisoquinoline Derivatives via Intramolecular Pd-Catalyzed Alkene Carboamination Reactions" Jeremiah Alicea and John P. Wolfe. J. Org. Chem. **2014**, 79, 4212–4217.

*[100] "Synthesis of Cyclic Guanidines via Pd-Catalyzed Alkene Carboamination" *Blane P. Zavesky*, Nicholas R. Babij, Jonathan A. Fritz, and John P. Wolfe. *Org. Lett.* **2013**, *15*, 5420–5423.

[99] "Synthesis of Substituted 3-Hydroxy-2-Furanone Derivatives via an Unusual Enolate Wittig Rearrangement/Alkylative Cyclization Sequence." Renata K. Everett and John P. Wolfe. *Org. Lett.* **2013**, *15*, 2926–2929.

[98] "Desymmetrization of *meso-2*,5-Diallylpyrrolidinyl Ureas via Asymmetric Pd-Catalyzed Carboamination Reactions. Stereocontrolled Synthesis of Bicyclic Ureas." Nicholas R. Babij and John P. Wolfe. *Angew. Chem. Int. Ed.* **2013**, *52*, 9247–9250.

[97] "Intermolecular Gold(I)-Catalyzed Carboalkoxylation Reactions for the Multicomponent Assembly of β-Alkoxy Ketones." Danielle M. Schultz, Nicholas R. Babij, and John P. Wolfe. *Adv. Synth. Catal.* **2012**, *354*, 3451–3455.

[96] "Synthesis of Enantiomerically Enriched Imidazolidin-2-ones via Asymmetric Pd-Catalyzed Alkene Carboamination Reactions." Brett A. Hopkins and John P. Wolfe *Angew. Chem. Int. Ed.* **2012**, *51*, 9886–9890.

[95] "Asymmetric Total Synthesis of (+)-Merobatzelladine B." Nicholas R. Babij and John P. Wolfe Angew. Chem. Int. Ed. 2012, 51, 4128–4130.

*[94] "Synthesis of Chromans via Pd-Catalyzed Carboetherification Reactions." Amanda F. Ward, *Yan Xu*, and John P. Wolfe. *Chem. Comm.* **2012**, *48*, 609–611.

[93] "Stereoselective Synthesis of Substituted 1,3-Oxazolidines via Pd-Catalyzed Carboamination Reactions of *O*-Vinyl-1,2-Amino Alcohols." Amanda F. Ward and John P. Wolfe. *Org. Lett.* **2011**, *13*, 4728–4731.

[92] "Cascade Intramolecular *N*-Arylation/Intermolecular Carboamination Reactions for the Construction of Tricyclic Heterocycles." Georgia S. Lemen and John P. Wolfe. *Org. Lett.* **2011**, *13*, 3218–3221.

[91] "Intramolecular Alkene Carboamination Reactions for the Synthesis of Enantiomerically Enriched Tropane Derivatives" Danielle M. Schultz and John P. Wolfe. *Org. Lett.* **2011**, *13*, 2962–2965.

*[90] "Enantioconvergent Synthesis of (+)-Aphanorphine via Asymmetric Pd-Catalyzed Alkene Carboamination." Duy N. Mai, *Brandon R. Rosen*, and John P. Wolfe. *Org. Lett.* **2011**, *13*, 2932–2935.

*[89] "Synthesis of Saturated 1,4-Benzodiazepines via Pd-Catalyzed Carboamination Reactions." Joshua D. Neukom, *Alvin S. Aquino*, and John P. Wolfe. *Org. Lett.* **2011**, *13*, 2196–2199.

[88] "Intramolecular Insertion of Alkenes into Pd–N Bonds. Effects of Substrate and Ligand Structure on the Reactivity of (P–P)Pd(Ar)[N(Ar)(CH),CR=CHR'] Complexes." Joshua D. Neukom, Nicholas S. Perch, and John P. Wolfe. *Organometallics* **2011**, *30*, 1269–1277.

[87] "Asymmetric Palladium-Catalyzed Carboamination Reactions for the Synthesis of Enantiomerically Enriched 2-(Arylmethyl) and 2-(Alkenylmethyl)Pyrrolidines." Duy N. Mai and John P. Wolfe. J. Am. Chem. Soc. **2010**, 132, 12157–12159.

[86] "Parallelograms and Ladders: Polymorphic Solid State Structures and Solution Equilibria of Cp*GeCl." Ahleah D. Rohr, Jeff W. Kampf, John P. Wolfe, and Mark M. Banaszak Holl. *Organometallics* **2010**, *29*, 5004–5009.

[85] "Pd-Catalyzed Carboamination of Oxazolidin-2-ones: A Stereoselective Route to *trans*-2,5-Disubstituted Pyrrolidines." Georgia S. Lemen and John P. Wolfe. *Org Lett.* **2010**, *12*, 2322–2325.

[84] "Intramolecular Alkene Aminopalladation Reactions of (dppf)Pd(Ar)[N(Ar)(CH₂),CH=CH₂] Complexes. Insertion of Unactivated Alkenes into Pd–N bonds." Joshua D. Neukom, Nicholas S. Perch, and John P. Wolfe. J. Am. Chem. Soc. **2010**, 132, 6276–6277.

• Highlighted in Chemical and Engineering News 2010, 88 (23), 41.

*[83] "Use of Aryl Chlorides as Electrophiles in Pd-Catalyzed Alkene Difunctionalization Reactions." *Brandon R. Rosen*, Joshua E. Ney, and John P. Wolfe. *J. Org. Chem.* **2010**, *75*, 2756–2759.

[82] "Asymmetric Tandem Wittig Rearrangement/Mannich Reactions." Natalie C. Giampietro and John P. Wolfe. *Angew. Chem. Int. Ed.* **2010**, *49*, 2922–2924.

[81] "Highly Diastereoselective Pd-Catalyzed Carboetherification Reactions of Acyclic Internal Alkenes. Stereoselective Synthesis of Polysubstituted Tetrahydrofurans." Amanda F. Ward and John P. Wolfe. *Org. Lett.* **2010**, *12*, 1268–1271.

• Highlighted in *Synfacts* **2010**, 677.

[80] "Synthesis of Polycyclic Nitrogen Heterocycles via Alkene Aminopalladation/Carbopalladation Cascade Reactions." Danielle M. Schultz and John P. Wolfe. *Org. Lett.* **2010**, *12*, 1028–1031.

[79] "Asymmetric Tandem Wittig Rearrangement/Aldol Reactions." Natalie C. Giampietro, Jeff W. Kampf, and John P. Wolfe. J. Am. Chem. Soc. 2009, 131, 12556–12557.

• Highlighted in Synfacts 2009, 1379.

*[78] "A New Strategy for the Synthesis of Substituted Morpholines." Matthew L. Leathen, *Brandon R. Rosen*, and John P. Wolfe. *J. Org. Chem.* **2009**, *74*, 5107–5110.

[77] "Synthesis of Fused-Ring and Attached-Ring *bis*-Tetrahydrofurans via Pd-Catalyzed Carboetherification."
Amanda F. Ward and John P. Wolfe. *Org. Lett.* 2009, *11*, 2209–2212.
Highlighted in *Synfacts* 2008, 878.

[76] "Palladium-Catalyzed Alkene Carboamination Reactions for the Synthesis of Substituted Piperazines."
Josephine S. Nakhla, Danielle M. Schultz, and John P. Wolfe. *Tetrahedron* 2009, 65, 6549–6570.
Invited paper.

[75] "Influence of Hydroxylamine Conformation on Stereocontrol in Pd-Catalyzed Isoxazolidine-Forming Reactions." Georgia S. Lemen, Natalie C. Giampietro, Michael B. Hay, and John P. Wolfe. J. Org. Chem. 2009, 74, 2533–2540.

[74] "Mild Conditions for Pd-Catalyzed Carboamination of *N*-Protected Hex-4-enylamines and 1-, 3-, and 4-Substituted Pent-4-enylamines. Scope, Limitations, and Mechanism of Pyrrolidine Formation." Myra B. Bertrand, Joshua D. Neukom, and John P. Wolfe. *J. Org. Chem.* **2008**, *73*, 8851–8860.

[73] "Stereoselective Synthesis of *cis*- or *trans*-3,5-Disubstituted Pyrazolidines via Pd-Catalyzed Carboamination Reactions: Use of Allylic Strain to Control Product Stereochemistry Through *N*-Substituent Manipulation." Natalie C. Giampietro and John P. Wolfe. *J. Am. Chem. Soc.* **2008**, *130*, 12907–12911.

[72] "Stereoselective Synthesis of Imidazolidin-2-ones via Pd-Catalyzed Alkene Carboamination. Scope and Limitations." Jonathan A. Fritz and John P. Wolfe. *Tetrahedron* **2008**, *64*, 6838–6852.

Invited paper.

[71] "A Concise Asymmetric Synthesis of *cis*-2,6-Disubstituted *N*-Aryl Piperazines via Pd-Catalyzed Carboamination Reactions." Josephine S. Nakhla and John P. Wolfe. *Org. Lett.* **2007**, *9*, 3279–3282.

[70] "Palladium-Catalyzed Synthesis of Cyclopentane-Fused Benzocyclobutenes via Tandem Directed Carbopalladation/C–H Bond Functionalization." Myra B. Bertrand and John P. Wolfe. *Org. Lett.* **2007**, *9*, 3073–3075.

[69] "Stereoselective Synthesis of Isoxazolidines through Pd-Catalyzed Carboetherification of *N*-Butenylhydroxylamines." Michael B. Hay and John P. Wolfe. *Angew. Chem. Int. Ed.* **2007**, *46*, 6492–6494.

[68] "Mild Conditions for the Synthesis of Functionalized Pyrrolidines via Pd-Catalyzed Carboamination Reactions." Myra B. Bertrand, Matthew L. Leathen, and John P. Wolfe. *Org. Lett.* **2007**, *9*, 457–460.

[67] "Synthesis and Reactivity of Azapalladacyclobutanes." Joshua E. Ney and John P. Wolfe. J. Am. Chem. Soc. 2006, 128, 15415–15422.

[66] "Tandem Wittig Rearrangement/Aldol Reactions for the Synthesis of Glycolate Aldols." Myra B. Bertrand and John P. Wolfe. *Org. Lett.* **2006**, *8*, 4661–4663.

[65] "A New Synthesis of Imidazolidin-2-ones via Pd-Catalyzed Carboamination of N-Allylureas." Jonathan A. Fritz, Josephine S. Nakhla, and John P. Wolfe. *Org. Lett.* **2006**, *8*, 2531–2534.

[64] "A Concise Stereoselective Synthesis of Preussin, 3-epi-Preussin and Analogs." Myra B. Bertrand and John P. Wolfe. *Org. Lett.* **2006**, *8*, 2353–2356.

[63] "Synthesis of Polysubstituted Tetrahydrofurans via Pd-Catalyzed Carboetherification Reactions." Michael B. Hay and John P. Wolfe. *Tetrahedron Lett.* **2006**, *47*, 2793–2796.

[62] "Intramolecular Pd-Catalyzed Carboetherification and Carboamination. Influence of Catalyst Structure on Reaction Mechanism and Product Stereochemistry." Josephine S. Nakhla, Jeff W. Kampf, and John P. Wolfe. J. Am. Chem. Soc. **2006**, *128*, 2893–2901.

[61] "Palladium-Catalyzed Synthesis of 2,1'-Disubstituted Tetrahydrofurans from γ -Hydroxy Internal Alkenes. Evidence for Alkene Insertion into a Pd–O Bond and Stereochemical Scrambling via β -Hydride Elimination." Michael B. Hay and John P. Wolfe. *J. Am. Chem. Soc.* **2005**, *127*, 16468–16476.

[60] "Synthesis of *N*-Aryl-2-allyl Pyrrolidines via Palladium-Catalyzed Carboamination Reactions of γ -(*N*-Arylamino)alkenes with Vinyl Bromides." Joshua E. Ney, Michael B. Hay, Qifei Yang, and John P. Wolfe. *Adv. Synth. Catal.* **2005**, *347*, 1614–1620.

• Invited Paper.

[59] "Palladium-Catalyzed Tandem *N*-Arylation/Carboamination Reactions for the Stereoselective Synthesis of *N*-Aryl-2-Benzyl Pyrrolidines." Qifei Yang, Joshua E. Ney, and John P. Wolfe. *Org. Lett.* **2005**, *7*, 2575–2578.

• Featured in "Some Items of Interest to Process R&D Chemists and Engineers." Org. Proc. Res. Dev. 2005, 9, 376,"

[58] "Selective Synthesis of 5- or 6-Aryl Octahydrocyclopenta[b]pyrroles from a Common Precursor Through Control of Competing Pathways in a Pd-Catalyzed Reaction." Joshua E. Ney and John P. Wolfe. J. Am. Chem. Soc. **2005**, *127*, 8644–8651.

[57] "Stereoselective Synthesis of N-Protected Pyrrolidines via Pd-Catalyzed Reactions of γ -(N-acylamino) and γ -(N-boc-amino)alkenes with Aryl Bromides." Myra B. Bertrand and John P. Wolfe. *Tetrahedron* **2005**, *61*, 6447–6459.

• Invited paper, featured in "Some Items of Interest to Process R&D Chemists and Engineers." Org. Proc. Res. Dev. 2005, 9, 522.

*[56] "Palladium-Catalyzed Synthesis of Tetrahydrofurans from γ–Hydroxy Terminal Alkenes: Scope, Limitations, and Stereoselectivity." Michael B. Hay, *Alison R. Hardin*, and John P. Wolfe. *J. Org. Chem.* **2005**, *70*, 3099–3107.

[55] "Palladium-Catalyzed Synthesis of N-Aryl-2-Benzylindolines via Tandem Arylation of 2-Allylaniline: Control of Selectivity Through *in situ* Catalyst Modification." Ricardo Lira and John P. Wolfe. J. Am. Chem. Soc. **2004**, 126, 13906–13907.

[54] "Palladium-Catalyzed Synthesis of N-Aryl Pyrrolidines from γ -(*N*-Arylamino)Alkenes: Evidence for Chemoselective Alkene Insertion into Pd–N Bonds." Joshua E. Ney and John P. Wolfe. *Angew. Chem. Int. Ed.* **2004**, *43*, 3605–3608.

[53] "Stereoselective Synthesis of Tetrahydrofurans via the Palladium-Catalyzed Reaction of Aryl Bromides with γ -Hydroxy Alkenes. Evidence for an Unusual Intramolecular Olefin Insertion into a Pd(Ar)(OR) Intermediate." John P. Wolfe and Michael A. Rossi. J. Am. Chem. Soc. **2004**, 126, 1620–1621.

[52] "A New, Mild Synthesis of *N*-Sulfonyl Ketimines via the Palladium-Catalyzed Isomerization of Aziridines." John P. Wolfe and Joshua E. Ney. *Org. Lett.* **2003**, *5*, 4607–4610.

INDEPENDENT REVIEWS, BOOKS, AND BOOK CHAPTERS

University of Michigan

Reviews (In Peer Reviewed Journals)

[51] "Pd-Catalyzed C–C, C–N, and C–O Bond-Forming Difunctionalization Reactions of Alkenes Bearing Tethered Aryl/Alkenyl Triflates." Derick R. White, Evan C. Bornowski, John P. Wolfe. *Isr. J. Chem.* 2020, Accepted.
Invited paper.

[50] "Recent Developments in Pd-Catalyzed Alkene Carboheterofunctionalization Reactions." Zachary J. Garlets, Derick R. White, and John P. Wolfe. *Asian J. Org. Chem.* **2017**, *6*, 636–653.

[49] "Intramolecular Alkoxycyanation and Alkoxyacylation Reactions. New Types of Alkene Difunctionalizations for the Construction of Oxygen Heterocycles." John P. Wolfe. *Angew. Chem. Int. Ed.* **2012**, *51*, 10224–10225.

[48] "Catalysis: Disguise Gets a Reaction." Danielle M. Schultz and John P. Wolfe. *Nature* **2012**, *483*, 42–43.

[47] "Recent Progress in Late Transition Metal Catalyzed Alkene Aminoarylation Reactions for the Synthesis of Nitrogen Heterocycles." Danielle M. Schultz and John P. Wolfe. *Synthesis* **2012**, *44*, 351–361.

[46] "Stereoselective Synthesis of Saturated Heterocycles via Pd-Catalyzed Alkene Carboetherification and Carboamination Reactions." John P. Wolfe. *Synlett* **2008**, 2913–2937.

[45] "Palladium-Catalyzed Carboetherification and Carboamination Reactions of γ -Hydroxy- and γ -Aminoalkenes for the Synthesis of Tetrahydrofurans and Pyrrolidines." John P. Wolfe. *Eur. J. Org. Chem.* **2007**, 571–582.

[44] "Recent Advances in the Stereoselective Synthesis of Tetrahydrofurans." John P. Wolfe and Michael B. Hay. *Tetrahedron* **2007**, *63*, 261–290.

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[43] "Recent Developments in Palladium-Catalyzed Heterocycle Synthesis and Functionalization." John P. Wolfe and Jennifer S. Thomas. *Curr. Org. Chem.* **2005**, *9*, 625–655.

Books and Book Chapters

[42] "Synthesis of Heterocycles via Metal-Catalyzed Reactions that Generate One or More Carbon-Heteroatom Bonds" John P. Wolfe, Ed., *Topics in Heterocyclic Chemistry*, Springer: Berlin, Germany; 2013.

[41] "Synthesis of Heterocycles via Metal-Catalyzed Alkene Carboamination or Carboalkoxylation" John P. Wolfe in *Topics in Heterocyclic Chemistry*, Wolfe, J. P., Ed., Springer: Berlin, Germany; 2013, pp 1–38.

[40] "The Wittig Rearrangement" John P. Wolfe in *Comprehensive Organic Synthesis II*, Marek, I.; Molander, G. A.; Knochel, P., Eds.; Elsevier: Oxford, UK. *Accepted for publication*.

[39] "Science of Synthesis. Cross-Coupling and Heck-Type Reactions 2. Carbon–Heteroatom Cross Coupling and C– C Cross Coupling of Acidic C–H Nucleophiles." John P. Wolfe, Ed.; Thieme: Stuttgart, Germany; 2013.

[38] "Bis-[2-(Diphenylphosphino)phenyl]ether, (Dpe-Phos). First Update." John P. Wolfe in *The Electronic Encyclopedia of Reagents for Organic Synthesis*. <u>http://mrw.interscience.wiley.com/eros/</u>. Published online 2011.

[37] "Palladium-Catalyzed sp²C–N Bond Forming Reactions: Recent Developments and Applications." Georgia S. Lemen and John P. Wolfe in *Topics in Organometallic Chemistry*, Taillefer M., Ma, D., Eds.; Springer: Berlin, Germany; 2013, pp 1–53.

[36] "Synthesis of Saturated Five-Membered Nitrogen Heterocycles via Pd-Catalyzed C-N Bond-Forming Reactions." John P. Wolfe, Joshua D. Neukom, and D. Mai in *Transition Metal-Catalyzed Carbon-Heteroatom Bond Formation* Yudin, A., Ed.; Wiley VCH: Weinheim, Germany; 2011, pp 1–34.

[35] "The [1,2]-Wittig Rearrangement." John P. Wolfe and Nicolette J. Guthrie in *Name Reactions for Homologations Part II*; Li, J. J. Ed.; John Wiley and Sons: Hoboken, NJ.; 2009, pp 226–240.

[34] "The Suzuki Reaction." John P. Wolfe and Josephine S. Nakhla in *Name Reactions for Homologations Part I*; Li, J. J. Ed.; John Wiley and Sons: Hoboken, NJ.; 2009, pp 163–184.

[33] "[1,1'-Biphenyl]-2-yldicyclohexylphosphine." Myra B. Bertrand and John P. Wolfe in *The Electronic Encyclopedia of Reagents for Organic Synthesis*. <u>http://mrw.interscience.wiley.com/eros/</u>. Published online 2008.

[32] "Bis-[2-(Diphenylphosphino)phenyl]ether, (Dpe-Phos)." John P. Wolfe in *The Electronic Encyclopedia of Reagents for Organic Synthesis*. <u>http://mrw.interscience.wiley.com/eros/</u>. Published online 2008.

[31] "The Nef Reaction." John P. Wolfe in *Name Reactions in Functional Group Interconversions*; Li, J. J. Ed.; John Wiley and Sons: Hoboken, NJ; 2007, pp 645–652.

[30] "The Shapiro Reaction." John P. Wolfe in *Name Reactions in Functional Group Interconversions*; Li, J. J. Ed.; John Wiley and Sons: Hoboken, NJ; 2007, pp 405–413.

[29] "The Rubottom Oxidation." John P. Wolfe in *Name Reactions in Functional Group Interconversions*; Li, J. J. Ed.; John Wiley and Sons: Hoboken, NJ; 2007, pp 282–290.

[28] "Chapter 1: An Introduction to Palladium Catalysis." John P. Wolfe and Jie Jack Li in *Palladium in Heterocyclic Chemistry*, 2st ed; Li, J. J., Ed.; Elsevier: Oxford; 2007, pp 1–35.

[27] "The Meyers Oxazoline Method." John P. Wolfe in *Name Reactions in Heterocyclic Chemistry*; Li, J. J. Ed.; John Wiley and Sons: Hoboken, NJ.; 2005; pp 237–248.

[26] "The Bischler-Napieralski Reaction." John P. Wolfe in *Name Reactions in Heterocyclic Chemistry*; Li, J. J. Ed.; John Wiley and Sons: Hoboken, NJ; 2005, pp 376–385.

POSTDOCTORAL, GRADUATE, AND UNDERGRADUATE PUBLICATIONS

University of California, Irvine (Postdoctoral Publications)

[25] "New Cationic Olefin Cyclization–Pinacol Reactions. Ring-Expanding Cyclopentane Annulations that Directly Install Useful Functionality in the Cyclopentane Ring." Larry E. Overman and John P. Wolfe. *J. Org. Chem.* **2002**, 67, 6421–6429.

[24] "Synthesis of Polycyclic Guanidines via Cyclocondensation Reactions of *N*-Amidinyl Iminium Ions." Larry E. Overman and John P. Wolfe. *J. Org. Chem.* **2001**, *66*, 3167–3175.

[23] "Synthesis of 3-Acyltetrahydrofurans From Formaldehyde Acetals of Allylic Diols." Catherine M. Gasparski, Paul M. Herrinton, Larry E. Overman, and John P. Wolfe. *Tetrahedron Lett.* **2000**, *41*, 9431–9434.

Massachusetts Institute of Technology (Graduate Publications)

[22] "Palladium-Catalyzed Amination of Aryl Halides and Aryl Triflates: *N*-hexyl-2-methyl-4-methoxyaniline, *N*-methyl-*N*-(4-chlorophenyl)aniline." John P. Wolfe and Stephen L. Buchwald. *Org. Synth.* **2001**, *78*, 23–35.

[21] "Scope and Limitations of the Pd/BINAP Catalyzed Amination of Aryl Bromides." John P. Wolfe and Stephen L. Buchwald. J. Org. Chem. 2000, 65, 1144–1157.

[20] "A Simple, Efficient Catalyst System for the Palladium-Catalyzed Amination of Aryl Chlorides, Bromides, and Triflates." John P. Wolfe, Hiroshi Tomori, Joseph P. Sadighi, Jingjun Yin, and Stephen L. Buchwald. *J. Org. Chem.* **2000**, *65*, 1158–1174.

[19] "Highly Active Palladium Catalysts for Suzuki Coupling Reactions." John P. Wolfe, Robert A. Singer, Bryant H. Yang, and Stephen L Buchwald. J. Am. Chem. Soc. **1999**, 121, 9550–9561.

[18] "A Highly Active Catalyst For the Room-Temperature Catalytic Amination and Suzuki Coupling of Aryl Chlorides." John P. Wolfe and Stephen L. Buchwald. *Angew. Chem. Int. Ed.* **1999**, *38*, 2413–2416.

[17] "Novel Electron-Rich Bulky Phosphine Ligands Facilitate the Palladium-Catalyzed Preparation of Diaryl Ethers." Attila Aranyos, David W. Old, Ayumu Kiyomori, John P. Wolfe, Joseph P. Sadighi, and Stephen L. Buchwald. J. Am. Chem. Soc. **1999**, 121, 4369–4378.

[16] "A Highly Active Catalyst for Palladium-Catalyzed Cross-Coupling Reactions: Room-Temperature Suzuki Couplings and Amination of Unactivated Aryl Chlorides." David W. Old, John P. Wolfe, and Stephen L. Buchwald. *J. Am. Chem. Soc.* **1998**, *120*, 9722–9723.

[15] "The Rational Development of Practical Catalysts for Aromatic Carbon-Nitrogen Bond Formation." John P. Wolfe, Seble Wagaw, Jean-Francois Marcoux, and Stephen L. Buchwald. *Acc. Chem. Res.* **1998**, *31*, 805–818.

[14] "Asymmetric Arylation of Ketone Enolates." Jens Åhman, John P. Wolfe, Malisa V. Troutman, Michael Palucki, and Stephen L. Buchwald. *J. Am. Chem. Soc.* **1998**, *120*, 1918–1919.

[13] "An Ammonia Equivalent for the Palladium-Catalyzed Amination of Aryl Halides and Triflates." John P. Wolfe, Jens Åhman, Joseph P. Sadighi, Robert A. Singer, and Stephen L. Buchwald. *Tetrahedron Lett.* **1997**, *38*, 6367–6370.

[12] "Improved Functional Group Compatibility in the Palladium-Catalyzed Amination of Aryl Bromides." John P. Wolfe and Stephen L. Buchwald. *Tetrahedron Lett.* **1997**, *38*, 6359–6362.

[11] "Room-Temperature Catalytic Amination of Aryl Iodides." John P. Wolfe and Stephen L. Buchwald. J. Org. Chem. 1997, 62, 6066–6068.

[10] "Nickel-Catalyzed Amination of Aryl Chlorides." John P. Wolfe and Stephen L. Buchwald. J. Am. Chem. Soc. **1997**, *119*, 6054–6058.

[9] "Palladium-Catalyzed Intermolecular Carbon-Oxygen Bond Formation: A New Synthesis of Aryl Ethers." Michael Palucki, John P. Wolfe, and Stephen L. Buchwald. *J. Am. Chem. Soc.* **1997**, *119*, 3395–3396.

[8] "Palladium-Catalyzed Amination of Aryl Triflates." John P. Wolfe and Stephen L. Buchwald. J. Org. Chem. 1997, 62, 1264–1267.

[7] "Synthesis of Oxygen Heterocycles via a Palladium-Catalyzed C–O Bond Forming Reaction." Michael Palucki, John P. Wolfe, and Stephen L. Buchwald. *J. Am. Chem. Soc.* **1996**, *118*, 10333–10334.

[6] "An Improved Catalyst System for Aromatic Carbon-Nitrogen Bond Formation: The Possible Involvement of Bis(Phosphine) Palladium Complexes as Key Intermediates." John P. Wolfe, Seble Wagaw, and Stephen L. Buchwald. J. Am. Chem. Soc. **1996**, 118, 7215–7216.

[5] "Intramolecular Palladium-Catalyzed Aryl Amination and Aryl Amidation." John P. Wolfe, Roger A. Rennels, and Stephen L. Buchwald. *Tetrahedron* **1996**, *52*, 7525–7546.

[4] "Palladium-Catalyzed Amination of Aryl Iodides." John P. Wolfe and Stephen L. Buchwald. J. Org. Chem. 1996, 61, 1133–1135.

University of Colorado, Boulder (Undergraduate Publications)

[3] "A New Approach to the Cyanoacetic Ester Synthesis." Gary A. Molander and John P. Wolfe. *J. Brazilian. Chem. Soc.* **1996**, *7*, 335–341.

POSTDOCTORAL REVIEWS

University of California, Irvine

[2] "2-Dicyclohexylphosphino-2'-(*N*,*N*-dimethylamino)biphenyl." John P. Wolfe. Published online (**2002**, Release 2) in *The Electronic Encyclopedia of Reagents for Organic Synthesis*. <u>http://mrw.interscience.wiley.com/eros/</u>

[1] "1-(Di-tert-butylphosphino)biphenyl." John P. Wolfe. Published online (**2002**, Release 2) in *The Electronic Encyclopedia of Reagents for Organic Synthesis*. <u>http://mrw. interscience.wiley.com/eros/</u>

PATENTS

Massachusetts Institute of Technology

[10] "Ligands for Metals and Improved Metal-Catalyzed Processes Based Thereon." Stephen L. Buchwald, David W. Old, John P. Wolfe, Michael Palucki, and Ken Kamikawa. US Patent # 7,560,582 (2009)

[9] "Ligands for Metals and Improved Metal-catalyzed Processes Based Thereon." Stephen L. Buchwald, David W. Old, John P. Wolfe, Michael Palucki, and Ken Kamikawa. US Patent # 7,247,731 (2007)

[8] "Ligands for Metals and Improved Metal-catalyzed Processes Based Thereon." Stephen L. Buchwald, David W. Old, John P. Wolfe, Michael Palucki, and Ken Kamikawa. US Patent # 7,026,498 (2006)

[7] "Ligands for Metals and Improved Metal-catalyzed Processes Based Thereon." Stephen L. Buchwald, David W. Old, John P. Wolfe, Michael Palucki, and Ken Kamikawa. US Patent # 6,946,560 (2006)

[6] "Arylation and Vinylation of Activated Carbon." Stephen L. Buchwald, John P. Wolfe, Jens Ahman, Malisa Troutman, Michael Palucki, Ken Kamikawa, and Andre Chieffi. US Patent # 6,867,310 (2005)

[5] "Ligands for Metals and Improved Metal-Catalyzed Processes Based Thereon." Stephen L. Buchwald, John P. Wolfe, David W. Old, Ken Kamikawa, and Michael Palucki. US Patent # 6,395,916 (2002).

[4] "Arylamine Synthesis." John P. Wolfe, Jens Ahman, Joseph P. Sadighi, Robert A. Singer, and Stephen L. Buchwald. US Patent # 6,323,366 (2001).

[3] "Ligands for Metals and Improved Metal-Catalyzed Processes Based Thereon. "Stephen L. Buchwald, David W. Old, John P. Wolfe, Michael Palucki, and Ken Kamikawa. US Patent # 6,307,087 (2001).

[2] "Synthesis of Aryl Ethers." Stephen L. Buchwald, John P. Wolfe, and Michael Palucki. US Patent # 6,166,226 (2000).

[1] "Synthesis of Aryl Ethers." Stephen L. Buchwald, John P. Wolfe, and Michael Palucki. US Patent # 5,847,166 (1998).

INVITED SEMINARS

[91] IUPUI, Wednesday November 28, 2018

- [90] University of New Mexico, Friday August 24, 2018
- [89] University of Toledo, Wednesday, October 11, 2017
- [88] Gordon Research Conference on Organic Reactions and Processes, Stonehill College, July 23-28, 2017.
- [87] Swarthmore College, Thursday, February 5, 2015.

[86] Bristol Myers Squibb, New Brunswick, NJ, Thursday, October 9, 2014.

[85] Bristol Myers Squibb, Lawrenceville, NJ, Wednesday, October 8, 2014.

[84] Bristol Myers Squibb, Wallingford, CT, Tuesday, October 7, 2014.

[83] University of Toledo, Thursday, April 24, 2014

[82] Indiana University, Monday September 17, 2012.

[81] Gordon Research Conference on Natural Products Chemistry, Proctor Academy, Andover, NH: July 22-27, 2012.

- [80] York University, Tuesday June 12, 2012.
- [79] Illinois State University, Friday, April 27, 2012.
- [78] Northwestern University, Thursday, April 26, 2012.
- [77] Hope College, Friday, November 4, 2011.
- [76] Calvin College, Thursday, November 3, 2011.
- [75] Dow AgroSciences, Monday, September 12, 2011.
- [74] Memorial Sloan Kettering Cancer Center, Tuesday, May 17, 2011.
- [73] University of Toledo, Wednesday, March 30, 2011.
- [72] Organic Synthesis Lecture: Massachusetts Institute of Technology, Thursday, February 10, 2011.
- [71] Eastern Michigan University, Monday, November 8, 2010.
- [70] Gilead Sciences, Inc.: Tuesday, April 27, 2010.
- [69] University of Arkansas: Monday, April 5, 2010.
- [68] GlaxoSmithKline Scholar Symposium, GlaxoSmithKline: Friday, January 29, 2010.

[67] ACS Prospectives Conference on Process Chemistry in the Pharmaceutical Industry, Durham, NC: November 2–4 2009).

- [66] Grand Valley State University: Friday, September 18, 2009.
- [65] University of Montreal: Wednesday, April 29, 2009.
- [64] University of Toronto: Thursday, February 12, 2009.

[63] Milwaukee ACS local section meeting (sponsored by Sigma-Aldrich), Milwaukee, WI: Thursday, October 23, 2008.

- [62] GlaxoSmithKline Scholar Symposium, GlaxoSmithKline: Friday, September 26, 2008.
- [61] Astra Zeneca, Inc., Wilmington, DE: Tuesday, June 17, 2008.
- [60] ACS Central Regional Meeting, Columbus OH: Thursday, June 12, 2008.
- [59] University of Rochester: Friday, April 18, 2008.
- [58] DuPont Agrochemicals, Wilmington DE: Wednesday, April 9, 2008.
- [57] Organic Chemistry Day Symposium, University of Missouri-Columbia: Saturday, April 5, 2008.

- [56] Michigan State University: Wednesday, March 26, 2008.
- [55] Pfizer, Inc., Groton, CT: Thursday, March 20, 2008.
- [54] Eli Lilly Grantee Symposium, Eli Lilly, Indianapolis, IN: Tuesday, March 4, 2008.
- [53] The Scripps Research Institute, La Jolla, CA: Tuesday, February 26, 2008.
- [52] University of Illinois, Chicago: Tuesday, February 12, 2008.
- [51] Hoffman La Roche, Nutley NJ: Thursday, January 24, 2008.
- [50] Amgen Pharmaceuticals, S. San Francisco CA: Wednesday, January 8, 2008.
- [49] Genentech, S. San Francisco CA: Wednesday, November 28, 2007.
- [48] University of California, Berkeley: Tuesday, November 27, 2007.
- [47] Oakland University: Wednesday, November 7, 2007.
- [46] Wayne State University: Wednesday, October 24, 2007.
- [45] Florida State University: Tuesday, October 2, 2007.
- [44] Texas A&M University: Thursday, September 20, 2007.
- [43] Second USA-UK Synthesis Workshop, Clift Hotel, San Francisco, CA: July 30, 2007.
- [42] Gordon Research Conference on Heterocyclic Chemistry, Salve Regina University, Newport, RI: June 26, 2007.
- [41] Johnson & Johnson, La Jolla: Wednesday, May 16, 2007.
- [40] Roche Palo Alto, LLC: Wednesday, May 2, 2007.
- [39] University of Illinois, Urbana-Champaign: Thursday, April 12, 2007.
- [38] University of Vermont: Thursday, March 22, 2007.
- [37] University of Sherbrooke: Wednesday, March 21, 2007.
- [36] University of Delaware: Wednesday, February 28, 2007.
- [35] University of Utah: Thursday, February 22, 2007.
- [34] Brigham Young University: Wednesday, February 21, 2007.
- [33] Bristol Myers Squibb, New Brunswick, NJ: Thursday, February 8, 2007.
- [32] Notre Dame University: Wednesday, January 31, 2007.
- [31] Purdue University: Tuesday, January 30, 2007.
- [30] University of Wisconsin, Madison: Tuesday, December 12, 2006.
- [29] Cornell University: Monday, November 13, 2006.
- [28] University of Waterloo: Tuesday, November 7, 2006.
- [27] University of North Carolina, Chapel Hill: Friday, October 27, 2006.
- [26] Duke University: Thursday, October 26, 2006.
- [25] University of Colorado, Boulder: Tuesday, October 17, 2006.

- [24] Colorado State University: Monday, October 16, 2006.
- [23] University of California, Santa Barbara: Friday, September 29, 2006.
- [22] University of California, Irvine: Thursday, September 28, 2006.
- [21] California Institute of Technology: Wednesday, September 27, 2006.

[20] 2006 Fall ACS National Meeting, Young Investigators Symposium: San Francisco CA, Sunday, September 10, 2006.

- [19] Gordon Research Conference on Heterocyclic Chemistry, Salve Regina University, Newport, RI, July 2, 2006.
- [18] ACS Northwest Regional Meeting, Reno NV: Tuesday, June 27, 2006.
- [17] Bristol Meyers Squibb, Wallingford, CT: Wednesday, June 14, 2006.
- [16] Bristol Meyers Squibb, Hopewell, NJ: Tuesday, June 13, 2006.
- [15] ACS Great Lakes Regional Meeting, Milwaukee, WI: Thursday, June 1, 2006.
- [14] Abbott labs, Chicago, IL: Friday, April 21, 2006.

[13] 2006 Spring ACS National Meeting, Symposium on the 1-2-1 General-Organic-General Curriculum: Atlanta, GA, Tuesday, March 28, 2006.

[12] 2006 Spring ACS National Meeting, ACS Award for Creativity in Organic Synthesis Symposium: Atlanta, GA, Monday, March 27, 2006.

- [11] Pacifichem: December 15, 2005.
- [10] University of Pennsylvania: Monday, November 7, 2005.
- [9] University of Texas, Austin: Friday, September 30, 2005.
- [8] Eli Lilly, Indianapolis, Indiana: Tuesday, June 21, 2005.
- [7] 2005 NSF Workshop on Synthetic Organic Chemistry: June 9–June 13 2005.
- [6] Merck Research Laboratories, West Point, PA, March 8, 2005.
- [5] Merck Process Research and Development, Rahway, NJ, March 7, 2005.
- [4] Amgen Pharmaceuticals, 2004 Young Investigator's Symposium, Thousand Oaks, CA: September 17, 2004.

[3] Organic Reactions and Processes Gordon Research Conference, Roger Williams University, Bristol, RI: July 22, 2004 (Invited Oral Presentation Following Poster Competition).

- [2] 3M Pharmaceuticals, St. Paul, MN: April 9, 2004.
- [1] Grand Valley State University: September 19, 2003.

FUNDING

Current Funding

 [1] "New Methods for the Synthesis of Carbocycles and Heterocycles" Principal Investigator: John P. Wolfe Agency: National Institutes of Health (RO1 GM 124030-01-A1) Funding Period: 8/1/18–4/30/22; \$1,165,540 (total costs)

Previous Funding

- [1] "New Reactions for Heterocycle Synthesis." Principal Investigator: John P. Wolfe Agency: National Institutes of Health (RO1 GM 71650) Funding Period: 4/1/05–3/31/11; \$1,262,250 (total costs)
- [2] "Alkene Insertion into Late Metal-Heteroatom Bonds." Principal Investigator: John P. Wolfe Agency: National Science Foundation (CHE 0705290) Funding Period: 8/15/07–7/31/11; \$342,000 (total costs)
- [3] "New Synthetic Methods Involving Wittig Rearrangement Processes" Principal Investigator: John P. Wolfe Agency: ACS-PRF (48199-AC1) Funding Period: 9/1/08–8/31/11; \$100,000 (total costs)
- [4] Camille Dreyfus Teacher Scholar Award. "New Reactions for the Construction of Biologically Active Molecules and Intermediates of Synthetic Importance." Principal Investigator: John P. Wolfe Agency: Camille and Henry Dreyfus Foundation Funding Period: 6/1/06–5/31/11; \$75,000 (total costs)
- [5] Development of New Methods for Heterocycle Synthesis Principal Investigator: John P. Wolfe Agency: Amgen Funding Period: 12/11/09–1/31/11; \$25,000 (total costs)
- [6] GlaxoSmithKline Chemistry Scholar Award. Principal Investigator: John P. Wolfe Agency: GlaxoSmithKline Funding Period: 1/1/08–12/31/09; \$40,000 (total costs)
- [7] Eli Lilly Grantee Award.
 Principal Investigator: John P. Wolfe
 Agency: Eli Lilly
 Funding Period: 11/1/05–10/31/07; \$100,000 (total costs)
- [8] Camille and Henry Dreyfus Foundation New Faculty Award. "The Development of New Reactions and their Application to the Synthesis of Biologically Active Molecules of Pharmaceutical Interest." Principal Investigator: John P. Wolfe Agency: Camille and Henry Dreyfus Foundation Funding Period: 9/1/02–8/31/07; \$40,000 (total costs)
- [9] "Development of New C–H Bond Functionalization Reactions of Acetals." Principal Investigator: John P. Wolfe Agency: ACS-PRF (41143-G1) Funding Period: 9/1/04–8/31/06; \$35,000 (total costs)
- [10] Research Corporation Innovation Award. "Metal-Catalyzed Insertion of Olefins into Small Heterocycles." Principal Investigator: John P. Wolfe Agency: Research Corporation Funding Period: 12/31/02–12/31/06; \$35,000 (total costs)
- [11] 3M Pharmaceuticals Untenured Faculty Award. Principal Investigator: John P. Wolfe Agency: 3M Funding Period: 10/1/03–9/30/06; \$45,000 (total costs)
- [12] Eli Lilly Unrestricted Research Award: Principal Investigator: John P. Wolfe Agency: Eli Lilly

Wolfe, J. P. CV, February, 2020 Funding Period: 9/1/02–8/31/03; \$20,000 (total costs)

- [13] Amgen Young Investigator Award.
 Principal Investigator: John P. Wolfe
 Agency: Amgen
 Funding Period: 10/1/04–9/30/05; \$25,000 (total costs)
- [14] "Rackham Faculty Allies Grant" (Funding for Departmental Recruiting of Students from Underrepresented Groups)
 Principal Investigator: John P. Wolfe (year 1), Nils Walter (year 2)
 Co-PIs: Bart Bartlett, Anna Mapp, Eitan Geva, Nils Walter
 Agency: Rackham Graduate School, University of Michigan
 Funding Period: 05/01/11-08/31/13; \$75,000 (total costs)
- [15] "Development of New Methods for the Synthesis of Biologically Active Cyclic Guanidines" Principal Investigator: John P. Wolfe Agency: University of Michigan Associate Professor Support Fund Funding Period: 7/1/11–6/30/13; \$25,000 (total costs) plus two Winter terms and two Summer terms of graduate student support.

CURRENT RESEARCH GROUP MEMBERS

Graduate Students

- [1] Janelle Kirsch (5th Year, Candidate): 1/5/16–present
- [2] Evan Bornowski (4st year, candidate): 1/5/17-present
- [3] Gabriel Gonzalez (2nd year, precandidate): 1/9/19-present
- [4] Matthew Culberson (1st year, precandidate): 9/23/19-present
- [5] Alan Wortman (1st year rotation student): 1/6/20-present

Undergraduate Students

- [1] Jenna Manske (Senior): 9/1/17–present
- [2] Mason Faculak (Junior): 9/1/18-present
- [3] Jim Shepich (Junior): 9/1/18-present
- [4] Paige Carpenter (Sophomore): 5/1/19-present
- [5] Kyle Palka (Sophomore): 1/6/20-present