

**PUBLICATIONS, BOOKS & PATENTS****PETER WIPF****RESEARCH PUBLICATIONS**

460. "Synthesis and Biological Evaluation of 3-Aminoisoquinoline-1(2H)-one Based Inhibitors of the Dual-Specificity Phosphatase Cdc25B." Rosenker, K. M. G.; Paquette, W. D.; Johnston, P. A.; Sharlow, E. R.; Vogt, A.; Bakan, A.; Lazo, J. S.; Wipf, P. *Bioorg. Med. Chem. Lett.* **2015**, *in press*.
459. "The Combination of Thioxodihydroquinazolinones and Platinum Drugs Reverses Platinum Resistance in Tumor Cells by Inducing Mitochondrial Apoptosis Independent of Bax and Bak." Qian, W.; Salamoun, J.; Wang, J.; Roginskaya, V.; Van Houten, B.; Wipf, P. *Bioorg. Med. Chem. Lett.* **2015**, *25*, 856-863.
458. "Antioxidant Approaches to Management of Ionizing Irradiation Injury." Greenberger, J.; Kagan, V.; Bayir, H.; Wipf, P.; Epperly, M. *Antioxidants* **2015**, *4*(1), 82-101.
457. "The Cytotoxic Effects Of Regorafenib in Combination with Protein Kinase D Inhibition in Human Colorectal Cancer Cells." Wei, N.; Chu, E.; Wu, S.-Y.; Wipf, P.; Schmitz John, C. *Oncotarget* **2014**, *in press*.
456. "Synaptic Pathophysiology and Treatment of Lambert-Eaton Myasthenic Syndrome." Tarr, T.; Wipf, P.; Meriney, S. *Mol. Neurobiol.* **2014**, *1*-8.
455. "Synthesis of Anti-inflammatory  $\alpha$ -and  $\beta$ -Linked Acetamidopyranosides as Inhibitors of Toll-like Receptor 4 (TLR4)." Wipf, P.; Eyer, B. R.; Yamaguchi, Y.; Zhang, F.; Neal, M. D.; Sodhi, C. P.; Good, M.; Branca, M.; Prindle Jr, T.; Lu, P.; Brodsky, J. L.; Hackam, D. J. *Tetrahedron Lett.* **2014**, *in press*.
454. "Deciphering of Mitochondrial Cardiolipin Oxidative Signaling in Cerebral Ischemia-Reperfusion." Ji, J.; Baart, S.; Vikulina, A. S.; Clark, R. S. B.; Anthonymuthu, T. S.; Tyurin, V. A.; Du, L.; St Croix, C. M.; Tyurina, Y. Y.; Lewis, J.; Skoda, E. M.; Kline, A. E.; Kochanek, P. M.; Wipf, P.; Kagan, V. E.; Bayir, H. *J. Cereb. Blood Flow Metab.* **2015**, *35*, 319-328.
453. "Synthesis and Structure-Activity Relationships of Small Molecule Inhibitors of the Simian Virus 40 T Antigen Oncoprotein, an Anti-Polyomaviral Target." Ireland, A. W.; Gobillot, T. A.; Gupta, T.; Seguin, S. P.; Liang, M.; Resnick, L.; Goldberg, M. T.; Manos-Turvey, A.; Pipas, J. M.; Wipf, P.; Brodsky, J. L. *Bioorg. Med. Chem.* **2014**, *22*, 6490-6502.
452. "2-Guanidinoquinazolines as New Inhibitors of the Stat3 Pathway." Laporte, M. G.; Da Paz Lima, D. J.; Zhang, F.; Sen, M.; Grandis, J. R.; Camarco, D.; Hua, Y.; Johnston, P. A.; Lazo, J. S.; Resnick, L. O.; Wipf, P.; Huryn, D. M., *Bioorg. Med. Chem. Lett.* **2014**, *24*, 5081-5085.
451. "Mitochondria-Targeted ROS Scavenger Improves Post-Ischemic Recovery of Cardiac Function and Attenuates Mitochondrial Abnormalities in Aged Rats." Escobales, N.; Nunez, R. E.; Jang, S.; Parodi-Rullan, R.; Ayala-Pena, S.; Sacher, J. R.; Skoda, E. M.; Wipf, P.; Frontera, W.; Javadov, S. *J. Mol. Cell. Cardiol.* **2014**, *77*, 136-146.
450. "Improved Hematopoiesis in GS-Nitroxide (JP4-039)-Treated Mouse Long-Term Bone Marrow Cultures and Radioresistance of Derived Bone Marrow Stromal Cell Lines." Shinde, A.; Epperly, M. W.; Cao, S. N.; Holt, D.; Goff, J.; Shields, D.; Franicola, D.; Wipf, P.; Wang, H.; Greenberger, J. S. *In Vivo* **2014**, *28*, 699-708.
449. "Synthesis of Phosphaguanidines by Hydrophosphination of Carbodiimides with Phosphine Boranes." Busacca, C. A.; Milligan, J. A.; Rattanangkool, E.; Ramavarapu, C.;

- Chen, A.; Saha, A. K.; Li, Z.; Lee, H.; Geib, S. J.; Wang, G.; Senanayake, C. H.; Wipf, P. *J. Org. Chem.* **2014**, 79(20), 9878-9887.
448. "Complete Reversal of Lambert-Eaton Myasthenic Syndrome Synaptic Impairment by the Combined Use of a K<sup>+</sup> Channel Blocker and a Ca<sup>2+</sup> Channel Agonist." Tarr, T. B.; Lacomis, D.; Reddel, S. W.; Liang, M.; Valdomir, G.; Frasso, M.; Wipf, P.; Meriney, S. D. *J. Physiol.* **2014**, 592(16), 3687-3696.
447. "An Uncharged Oxetanyl Sulfoxide as a Covalent Modifier for Improving Aqueous Solubility." Skoda, E. M.; Sacher, J. R.; Kazancioglu, M. Z.; Saha, J.; Wipf, P. *ACS Med. Chem. Lett.* **2014**, 5(8), 900-904.
446. "Effects of the Bifunctional Sulfoxide MMS350, a Radiation Mitigator, on Hematopoiesis in Long-term Bone Marrow Cultures and on Radioresistance of Marrow Stromal Cell Lines." Shinde, A.; Epperly, M. W.; Cao, S.; Franicola, D.; Shields, D.; Wang, H.; Wipf, P.; Sprachman, M. M.; Greenberger, J. S. *In Vivo* **2014**, 28, 457-465.
445. "Esophageal Radioprotection by Swallowed JP4-039/F15 in Thoracic-Irradiated Mice with Transgenic Lung Tumors." Epperly, M. W.; Goff, J. P.; Franicola, D.; Wang, H.; Wipf, P.; Li, S.; Greenberger, J. S. *In Vivo* **2014**, 28, 435-440.
444. "Amelioration of Radiation-Induced Oral Cavity Mucositis and Distant Bone Marrow Suppression in Fanconi Anemia Fancd2(-/-) (FVB/N) Mice by Intraoral GS-Nitroxide JP4-039." Berhane, H.; Shinde, A.; Kalash, R.; Xu, K.; Epperly, M. W.; Goff, J.; Franicola, D.; Zhang, X.; Dixon, T.; Shields, D.; Wang, H.; Wipf, P.; Li, S.; Gao, X.; Greenberger, J. S. *Radiat. Res.* **2014**, 182, 35-49.
443. "Photochemical Flow Reactions." Schuster, E. M.; Wipf, P. *Isr. J. Chem.* **2014**, 54, 361-370.
442. "Special Issue: Flow Chemistry." Schuster, E. M.; Wipf, P. *Isr. J. Chem.* **2014**, 54, 340.
441. "The Hsp70 Modulator MAL3-101 Inhibits Merkel Cell Carcinoma." Adam, C.; Baeurle, A.; Brodskly, J. L.; Wipf, P.; Schrama, D.; Becker, J. C.; Houben, R. *PLoS ONE* **2014** 9(4), e92041.
440. "Synthesis of Heterocyclic Triads by Pd-Catalyzed Cross-Couplings and Evaluation of their Cell-Specific Toxicity Profile." Salamoun, J.; Anderson, S.; Burnett, J. C.; Gussio, R.; Wipf, P. *Org. Lett.* **2014**, 16(7), 2034-2037.
439. "Protein Kinase D as a Potential Chemotherapeutic Target for Colorectal Cancer." Wei, N.; Chu, E.; Wipf, P.; Schmitz, J. C. *Mol. Cancer Ther.* **2014**, 13(5), 1130-1141.
438. "Investigational Inhibitors of PTP4A3 Phosphatase as Antineoplastic Agents." Sharlow, E. R.; Wipf, P.; Mcqueeny, K. E.; Bakan, A.; Lazo, J. S. *Expert Opin. Investig. Drugs* **2014**, 23, 1-13.
437. "Can Radiosensitivity Associated with Defects in DNA Repair be Overcome by Mitochondrial-Targeted Antioxidant Radioprotectors." Greenberger J. S.; Berhane, H.; Shinde, A.; Han R. B.; Bernard, M.; Epperly M. W.; Wipf, P.; Skoda E. M. *Front. Oncol.* **2014**, 4, 24 (1-8).
436. "The Impact of Ionizing Radiation on Placental Trophoblasts." Kanter, D. J.; O'Brien, M. B.; Shi, X. H.; Chu, T.; Mishima, T.; Beriwal, S.; Epperly, M. W.; Wipf, P.; Greenberger, J. S.; Sadovsky, Y. *Placenta* **2014**, 35, 85-91.
435. "Growth Arrest by the Antitumor Steroidal Lactone Withaferin A in Human Breast Cancer Cells is Associated With Down-Regulation and Covalent Binding at Cysteine 303 of β-Tubulin." Antony, M. L.; Lee, J.; Hahm, E.-R.; Kim, S.-H.; Marcus, A. I.; Kumari, V.; Ji, X.; Yang, Z.; Vowell, C. L.; Wipf, P.; Uechi, G. T.; Yates, N. A.; Romero, G.; Sarkar, S. N.; Singh, S. V. *J. Biol. Chem.* **2014**, 289, 1852-1865.

434. "Radiologic Differences Between Bone Marrow Stromal and Hematopoietic Progenitor Cell Lines from Fanconi Anemia (Fancd2<sup>-/-</sup>) Mice." Berhane, H.; Epperly, M. W.; Goff, J.; Kalash, R.; Cao, S.; Franicola, D.; Zhang, X.; Shields, D.; Houghton, F.; Wang, H.; Wipf, P.; Parmar, K.; Greenberger, J. S. *Radiat. Res.* **2014**, 181(1), 76-89.
433. "Imidazolium Compounds are Active Against All Stages of *Trypanosoma Cruzi*." Faral-Tello, P.; Liang, M.; Mahler, G.; Wipf, P.; Robello, C. *Int. J. Antimicr. Agents* **2014**, 43(3), 262-268.
432. "Natural Product Chemistry and Anticancer Drug Discovery, 2<sup>nd</sup> Edition." Huryn, D. M.; Wipf, P. In "Cancer Drug Design and Discovery", Neidle, S., Ed.; Academic Press, **2014**, Part II, Chapter 3, pp 91-120.
431. "A New Synthesis of 4,5,6,7-Tetrahydropyrazolo[1,5-cl]pyrimidines by a Retromannich Cascade Rearrangement." Colombo, R.; Jeon, K.-O.; Huryn, D. M.; LaPorte, M. G.; Wipf, P. *Austr. J. Chem.* **2014**, 67(3), 420-425.
430. "Amelioration of Radiation-Induced Pulmonary Fibrosis by a Water-Soluble Bifunctional Sulfoxide Radiation Mitigator (MMS350)." Kalash, R.; Epperly, M. W.; Goff, J.; Dixon, T.; Sprachman, M. M.; Zhang, X.; Shields, D.; Cao, S.; Franicola, D.; Wipf, P.; Berhane, H.; Wang, H.; Au, J.; Greenberger, J. S. *Radiat. Res.* **2013**, 180(5), 474-490.
429. "Pharmacological Profiling of Phosphoinositide-3-kinase Inhibitors as Mitigators of Ionizing Radiation-Induced Cell Death." Lazo, J. S.; Sharlow, E. R.; Epperly, M. W.; Lira, A.; Leimgruber, S.; Skoda, E. M.; Wipf, P.; Greenberger, J. S. *J. Pharmacol. Exp. Ther.* **2013**, 347(3), 669-680.
428. "Evaluation of Potential Ionizing Irradiation Protectors and Mitigators using Clonogenic Survival of Human Umbilical Cord Blood Hematopoietic Progenitor Cells." Goff, J. P.; Shields, D. S.; Wang, H.; Skoda, E. M.; Sprachman, M. M.; Wipf, P.; Garapati, V. K.; Atkinson, J.; London, B.; Lazo, J. S.; Kagan, V.; Epperly, M. W.; Greenberger, J. S. *Exp. Hematol.* **2013**, 41(11), 957-966.
427. "New Pyrazolopyrimidine Inhibitors of Protein Kinase D as Potent Anticancer Agents for Prostate Cancer Cells." Tandon, M.; Johnson, J.; Li, Z.; Xu, S.; Wipf, P.; Wang, Q. J. *PLoS One* **2013**, 8, e75601.
426. "Pharmacological Mitigation of Tissue Damage during Brain Microdialysis." Nesbitt, K. M.; Jaquins-Gerstl, A.; Skoda, E. M.; Wipf, P.; Michael, A. C. *Anal. Chem.* **2013**, 85, 8173-8179.
425. "Chrysophaeintins are Competitive Inhibitors of Ftsz and Inhibit Z-Ring Formation in Live Bacteria." Keffer, J. L.; Huecas, S.; Hammill, J. T.; Wipf, P.; Andreu, J. M.; Bewley, C. A. *Bioorg. Med. Chem.* **2013**, 21, 5673-5678.
424. "Evaluation of a Novel Calcium Channel Agonist for Therapeutic Potential in Lambert-Eaton Myasthenic Syndrome." Meriney, S. D.; Tarr, T. B.; Malik, W.; Liang, M.; Valdomir, G.; Frasso, M.; Lacomis, D.; Reddel, S.; Gacia-Ocano, A.; Wipf, P. *J. Neurosci.* **2013**, 33(25), 10559-10567.
423. "Domino Reactions in Library Synthesis." LaPorte, M. G.; Goodell, J. R.; Tsegay, S.; Wipf, P.; In "Diversity-Oriented Synthesis: Basics and Applications in Organic Synthesis, Drug Discovery, and Chemical Biology" (Editor: Trabocchi, A.); Wiley Interscience, **2013**, Chapter 5, pp 135-176.

422. "Synthesis of Analogs of the Radiation Mitigator JP4-039 and Visualization of BODIPY Derivatives in Mitochondria." Frantz, M.-C.; Skoda, E. M.; Sacher, J. R.; Epperly, M. W.; Goff, J. P.; Greenberger, J. S.; Wipf, P. *Org. Biomol. Chem.* **2013**, *11*, 4147-4153.
421. "Bridged Tetrahydroisoquinolines as Selective NADPH Oxidase 2 (Nox2) Inhibitors." Cifuentes-Pagano, E.; Saha, J.; Csanyi, G.; Al Ghouleh, I.; Sahoo, S.; Rodriguez, A.; Wipf, P.; Pagano, P. J.; Skoda, E. M. *MedChemComm* **2013**, *4*(7), 1085-1092.
420. "Discovery and Validation of a New Class of Small Molecule Toll Like Receptor 4 (TLR4) Inhibitors." Neal, M. D.; Jia, H.; Eyer, B.; Good, M.; Guerriero, C. J.; Sodhi, C. P.; Afrazi, A.; Prindle, T.; Ma, C.; Branca, M.; Ozolek, J.; Brodsky, J. L.; Wipf, P.; Hackam, D. J. *PLoS One* **2013**, *8*(6), e657879.
419. "Contributions of Academic Labs to the Discovery and Development of Chemical Biology Tools." Huryn, D. M.; Resnick, L. O.; Wipf, P. *J. Med. Chem.* **2013**, *56*(18), 7161-7176.
418. "Condensation Reactions of Guanidines with Bis-Electrophiles: Formation of Highly Nitrogenous Heterocycles." Arnold, D. M.; LaPorte, M. G.; Anderson, S. M.; Wipf, P. *Tetrahedron* (Symposium-in-Print No. xxx Honoring Prof. Paul Wender) **2013**, *69*(36), 7719-7731.
417. "Chemical Induction of Hsp70 Reduces  $\alpha$ -Synuclein Aggregation in Neuroglioma Cells." Kilpatrick, K.; Novoa, J. A.; Hancock, T.; Guerriero, C. J.; Wipf, P.; Brodsky, J. L.; Segatori, L. *ACS Chem. Biol.* **2013**, *8*(7), 1460-1468.
416. "Effects of Thoracic Irradiation on Pulmonary Endothelial Compared to Alveolar Type-II Cells in Fibrosis-Prone C57BL/6NTac Mice." Kalash, R.; Berhane, H.; Goff, J.; Houghton, F.; Epperly, M. W.; Dixon, T.; Zhang, X.; Sprachman, M. M.; Wipf, P.; Franicola, D.; Wang, H.; Greenberger, J. S. *In Vivo* **2013**, *27*, 291-297.
415. "Stochastic Voyages into Uncharted Chemical Space Produce a Representative Library of All Possible Drug-like Compounds." Virshup, A. M.; Contreras-García, J.; Wipf, P.; Yang, W.; Beratan, D. N. *J. Am. Chem. Soc.* **2013**, *135*, 7296-7303.
414. "[2,3]-Sigmatropic Rearrangements of 2-Phosphineborane 2-Propen-1-ols: Rapid Access to Enantioenriched Diphosphine Monoxide Derivatives." Busacca, C. A.; Qu, B.; Farber, E.; Haddad, N.; Gret, N.; Saha, A. K.; Eriksson, M. C.; Wu, J.-P.; Fandrick, K. R.; Han, S.; Grinberg, N.; Ma, S.; Lee, H.; Li, Z.; Spinelli, M.; Gold, A.; Wang, Z.; Wang, G.; Wipf, P.; Senanayake, C. H. *Org. Lett.* **2013**, *15*(5), 1136-1139.
413. "Hydrophosphination of Propargylic Alcohols and Amines with Phosphine Boranes." Busacca, C. A.; Qu, B.; Farber, E.; Haddad, N.; Gret, N.; Saha, A. K.; Eriksson, M. C.; Wu, J.-P.; Fandrick, K. R.; Han, S.; Grinberg, N.; Ma, S.; Lee, H.; Li, Z.; Spinelli, M.; Gold, A.; Wang, G.; Wipf, P.; Senanayake, C. H. *Org. Lett.* **2013**, *15*(5), 1132-1135.
412. "Influence of Base and Structure in the Reversible Covalent Conjugate Addition of Thiol to Polycyclic Enone Scaffolds." Rosenker, C. J.; Krenske, E. H.; Houk, K. N.; Wipf, P. *Org. Lett.* **2013**, *15*(5), 1076-1079.
411. "TargetHunter: An In Silico Target Identification Tool for Predicting Therapeutic Potential of Small Organic Molecules Based on Chemogenomic Database." Wang, L.; Ma, C.; Wipf, P.; Liu, H.; Su, W.; Xie, X.-Q. *AAPS J.* **2013**, *15*(2), 395-406.

410. "Mitochondrial-derived Reactive Oxygen Species (ROS) Play a Causal Role in Aging-related Intervertebral Disc Degeneration." Nasto, L. A.; Robinson, A. R.; Ngo, K.; Clausen, C. L.; Dong, Q.; St. Croix, C.; Sowa, G.; Pola, E.; Robbins, P. D.; Kang, J.; Niedernhofer, L. J.; Wipf, P.; Vo, M. V. *J. Orthopaed. Res.* **2013**, *31*(7), 1150-1157.
409. "Cycloadditions in Heterocycle and Alkaloid Synthesis." Wipf, P.; Fang, Z.; Ferrié, L.; Ueda, M.; Walczak, M. A. A.; Yan, Y.; Yang, M. *Pure Appl. Chem.* **2013**, *85*(6), 1079-1087.
408. "Nanoassembly of Surfactants with Interfacial Drug-Interactive Motifs as Tailor-Designed Drug Carriers." Gao, X.; Huang, Y.; Makhov, A. M.; Epperly, M.; Lu, J.; Grab, S.; Zhang, P.; Rohan, L.; Xie, X.-Q.; Wipf, P.; Greenberger, J.; Li, S. *Mol. Pharm.* **2013**, *10*, 187-198.
407. "5-Hydroxyindoles by Intramolecular Alkynol-Furan Diels-Alder Cycloaddition." LaPorte, M.; Hong, K. B.; Xu, J.; Wipf, P. *J. Org. Chem.* (Prof. Robert E. Ireland Memorial Issue) **2013**, *78*(1), 167-174.
406. "Memory of Chirality in Rebound Cyclizations of  $\alpha$ -Amide Radicals." Sasmal, A.; Taniguchi, T.; Wipf, P.; Curran, D. P. *Can. J. Chem.* (Prof. Derrick Clive Special Issue) **2013**, *91*(1), 1-5.
405. "In Vitro Cytotoxicity, Pharmacokinetics, Tissue Distribution, and Metabolism of Small-Molecule Protein Kinase D Inhibitors, kb-nb142-70 and kb-nb165-09, in Mice Bearing Human Cancer Xenografts." Guo, J.; Clausen D. M.; Beumer J. H.; Parise R. A.; Egorin M. J.; Bravo-Altamirano, K.; Wipf, P.; Sharlow E. R.; Wang Q. J.; Eiseman J. L. *Cancer Chemother. Pharmacol.* **2013**, *71*(2), 331-344.
404. "New Calcium Channel Agonists as Potential Therapeutics in Lambert-Eaton Myasthenic Syndrome and other Neuromuscular Diseases." Tarr, T. B.; Valdomir, G.; Liang, M.; Wipf, P.; Meriney, S. D. *Ann. N. Y. Acad. Sci.* **2012**, *1275*(1), 85-91.
403. "Synthesis and Biological Evaluation of a Selective N- and P/Q-Type Calcium Channel Agonist." Liang, M.; Tarr, T. B.; Bravo-Altamirano, K.; Valdomir, G.; Rensch, G.; Swanson, L.; DeStefino, N. R.; Mazzarisi, C. M.; Olszewski, R. A.; Wilson, G. M.; Meriney, S. D.; Wipf, P. *ACS Med. Chem. Lett.* **2012**, *3*(12), 985-990.
402. "A Targeted Library Screen Reveals a New Inhibitor Scaffold for Protein Kinase D." Tandon, M.; Wang, L.; Xu, Q.; Xie, X.; Wipf, P.; Wang, Q. J., *PLoS One* **2012**, *7*(9), e44653.
401. "Targeting of XJB-5-131 to Mitochondria Suppresses Oxidative DNA Damage and Motor Decline in a Mouse Model of Huntington's Disease." Xun, Z.; Rivera-Sanchez, S.; Ayala-Peña, S.; Lim, J.; Budworth, H.; Skoda, E. M.; Robbins, P. D.; Niedernhofer, L. J.; Wipf, P.; McMurray, C. T. *Cell Rep.* **2012**, *2*(5), 1137-1142.
400. "Global Lipidomics Identifies Cardiolipin Oxidation as a Mitochondrial Target for Redox Therapy of Acute Brain Injury." Ji, J.; Kline, A. E.; Amoscato, A.; Arias, A. S.; Sparvero, L. J.; Tyurin, V. A.; Tyrina, Y. Y.; Fink, B.; Cheng, J. P.; Alexander, H.; Clark, R. S. B.; Kochanek, P. M.; Wipf, P.; Kagan, V. E.; Bayir, H. *Nat. Neurosci.* **2012**, *15*(10), 1407-1413.
399. "Structural Basis of Functional Group Activation by Sulfotransferases in Complex Metabolic Pathways." McCarthy, J. G.; Eisman, E. B.; Kulkarni, S.; Gerwick, L.; Gerwick, W. H.; Wipf, P.; Sherman, D. H.; Smith, J. L. *ACS Chem. Biol.* **2012**, *7* (12), 1994-2003.

398. "Lipophilicity Screening of Novel Drug-Like Compounds and Comparison to cLog P." Lu, D.; Chambers, P.; Wipf, P.; Xie, X.-Q.; Englert, D.; Weber, S. *J. Chromatogr. A* **2012**, 1258, 161-167.
397. "Synthesis of a Library of Tricyclic Azepinoisoindolinones." Miller, B.; Mao, S.; Rosenker, K. M. G.; Pierce, J. G.; Wipf, P. *Beilstein J. Org. Chem.* (Special Issue on Recent Developments in Chemical Diversity) **2012**, 8, 1091-1097.
396. "Diversity-Oriented Synthesis of Peptidomimetics: How and Why." Wipf, P. *DOS* **2012**, 6-10.
395. "A Screen for Modulators of Large T Antigen's ATPase Activity Uncovers Novel Inhibitors of Simian Virus 40 and BK Virus Replication." Seguin, S. P.; Ireland, A. W.; Miyata, Y.; Wipf, P.; Pipas, J. M.; Gestwicki, J. E.; Brodsky, J. L. *Antivir. Res.* **2012**, 96, 70-81.
394. "Geographic Variability and Anti-Staphylococcal Activity of the Chrysphaentins and Their Synthetic Fragments." Keffer, J. L.; Hammill, J. T.; Lloyd, J. R.; Plaza, A.; Wipf, P.; Bewley, C. A. *Mar. Drugs* **2012**, 10(5), 1103-1125.
393. "A Bifunctional Dimethylsulfoxide Substitute Enhances the Aqueous Solubility of Small Organic Molecules." Sprachman, M. M.; Wipf, P. *ASSAY Drug Dev. Technol.* **2012**, 10(3), 269-277.
392. "Strategies for Discovery of Small Molecule Radiation Protectors and Radiation Mitigators." Greenberger, J. S.; Clump, D.; Kagan, V.; Bayir, H.; Lazo, J. S.; Wipf, P.; Li, S.; Gao, X.; Epperly, M. W. *Front. Oncol.* **2012**, 1, Article 59, 1-12.
391. "Synthesis of 1,2,4-Triazines and the Triazinoisoquinolinedione DEF Ring System of Noelaquinone." Cao, L.; Maciejewski, J. P.; Elzner, S.; Amantini, D.; Wipf, P. *Org. Biomol. Chem.* (Special 10 Year Anniversary Issue), **2012**, 10, 5811-5814.
390. "Selenosemicbazones as Potent Cruzipain Inhibitors and Their Antiparasitic Properties against *Trypanosoma cruzi*." Pizzo, C.; Faral-Tello, P.; Salinas, G.; Flo, M.; Robello, C.; Wipf, P.; Mahler, S. G. *MedChemComm* **2012**, 3, 362-368.
389. "Allylic Amines as Key Building Blocks in the Synthesis of (E)-Alkene Peptide Isosteres." Skoda, E. M.; Davis, G. C.; Wipf, P. *Org. Proc. Res. Dev.* **2012**, 16(1), 26-34.
388. "Linear and Nonlinear Support Vector Machine for the Classification of Human 5-HT1a Ligand Functionality." Wang, L.; Ma, C.; Wipf, P.; Xie, X.-Q. *Mol. Informatics* **2012**, 31, 85-95.
387. "Genetically Encoded Redox Sensor Identifies the Role of ROS in Degenerative and Mitochondrial Disease Pathogenesis." Liu, Z.; Celotto, A. M.; Romero, G.; Wipf, P.; Palladino, M. J. *Neurobiol. Dis.* **2012**, 45(1), 362-368.
386. "Amelioration of Radiation Esophagitis by Orally Administered p53/mdm2/mdm4 Inhibitor (BEB55) or GS-Nitroxide." Kim, H.; Bernard, M. E.; Epperly, M. W.; Shen, H.; Amoscato, A.; Dixon, T. M.; Doemling, A. S.; Li, S.; Gao, X.; Wipf, P.; Wang, H.; Zhang, X.; Kagan, V. E.; Greenberger, J. S. *In Vivo* **2011**, 25, 841-848.
385. "Discovery of Diverse Small Molecule Chemotypes with Cell-Based PKD1 Inhibitory Activity." Sharlow, E. R.; Mustata Wilson, G.; Close, D.; Leimgruber, S.; Tandon, M.; Reed, R. B.; Shun, T. Y.; Wang, Q. J.; Wipf, P.; Lazo, J. S. *PLoS One* **2011**, 6, e25134.

384. "GS-Nitroxide (JP4-039) Mediated Radioprotection of Human Fanconi Anemia Cell Lines." Bernard, M. E.; Kim, H.; Epperly, M. W.; Franicola, D.; Zhang, X.; Houghton, F.; Shields, D.; Wang, H.; Bakkenist, C. J.; Frantz, M.-C.; Forbeck, E. M.; Goff, J. P.; Wipf, P.; Berhane, H.; Greenberger, J. S. *Radiat. Res.* **2011**, 176(5), 603-612.
383. "Structure-Activity Relationships of 4-Position Diamine Quinoline Methanols as Intermittent Preventative Treatment (IPT) against *Plasmodium Falciparum*." Milner, E.; Gardner, S.; Moon, J.; Grauer, K.; Auschwitz, J.; Bathurst, I.; Caridha, D.; Gerena, L.; Gettayacamin, M.; Johnson, J.; Kozar, M.; Lee, P.; Leed, S.; Li, Q.; Mccalmont, W.; Melendez, V.; Roncal, N.; Sciotti, R.; Smith, B.; Sousa, J.; Tungtaeng, A.; Wipf, P.; Dow, G. J. *Med. Chem.* **2011**, 54, 6277-6285.
382. "Total Synthesis of (-)-CP<sub>2</sub>-Disorazole C<sub>1</sub>." Hopkins, C. D.; Schmitz, J. C.; Chu, E.; Wipf, P. *Org. Lett.* **2011**, 13(15), 4088-4091.
381. "Anti-Myeloma Effects of the Heat Shock Protein 70 Molecular Chaperone Inhibitor MAL3-101." Braunstein, M. J.; Scott, S. S.; Coplan, J. D.; Scott, C. M.; Behrman, S.; Walter, P.; Wipf, P.; Chrico, W. J.; Joseph, D.; Brodsky, J. L.; Batuman, O. J. *Oncol.* **2011**, 232037.
380. "Synthesis and Ring-Chain-Ring Tautomerism of Bisoxazolidines, Thiazolidinyloxazolidines and Spirothiazolidines." Saiz, C.; Wipf, P.; Mahler, S. G. J. *Org. Chem.* **2011**, 76(14), 5738-5746.
379. "Total Synthesis of ( $\pm$ )-Cycloclavine and ( $\pm$ )-5-*epi*-Cycloclavine." Petronijevic, F. R.; Wipf, P. *J. Am. Chem. Soc.* **2011**, 133(20), 7704-7707.
378. "Radiobiologic Effects of GS-Nitroxide (JP4-039) on the Hematopoietic Syndrome." Goff, J. P.; Epperly, M. W.; Dixon, T.; Wang, H.; Franicola, D.; Shields, D.; Wipf, P.; Li, S.; Gao, X.; Greenberger, J. S. *In Vivo* **2011**, 25(3), 315-323.
377. "Diversity-Oriented Synthesis of a Library of Substituted Tetrahydropyrones using Oxidative Carbon-Hydrogen Bond Activation and Click Chemistry." Zaware, N.; LaPorte, M. G.; Farid, R.; Liu, L.; Wipf, P.; Floreancig, P. F. *Molecules* (Special Issue on Diversity Oriented Synthesis), **2011**, 16(5), 3648-3662.
376. "Design, Synthesis, and Biological Evaluation of PKD Inhibitors." George, K. M.; Frantz, M.-C.; Bravo-Altamirano, K.; Lavalle, C. R.; Tandon, M.; Leimgruber, S.; Sharlow, E. R.; Lazo, J. S.; Wang, Q. J.; Wipf, P. *Pharmaceutics* **2011**, 3, 186-228.
375. "Homoallylic Amines by Reductive Inter- and Intramolecular Coupling of Allenes and Nitriles." Manojlovic, M. D.; Wipf, P. *Beilstein J. Org. Chem.* (Special Issue on Allene Chemistry), **2011**, 7, 824-830.
374. "Total Synthesis of (-)-Sessilifoliamide C and (-)-8-*epi*-Stemoamide." Hoye, A. T.; Wipf, P. *Org. Lett.* **2011**, 13(10), 2634-2637.
373. "Large-Scale Asymmetric Synthesis of the Bioprotective Agent JP4-039 and Analogs." Frantz, M.-C.; Pierce, J. G; Pierce, J. M.; Kangying, L.; Qingwei, Q.; Johnson, M.; Wipf, P. *Org. Lett.* **2011**, 13(9), 2318-2321.
372. "Residue Preference Mapping of Ligand Fragments in the Protein Data Bank." Wang, L.; Xie, Z.; Wipf, P.; Xie, X.-Q. *J. Chem. Inf. Model.* **2011**, 51(4), 807-815.
371. "Terminal Alkene Formation by the Thioesterase of Curacin A Biosynthesis: Structure of a Decarboxylating Thioesterase." Gehret, J.; Gu, L.; Gerwick, W. H.; Wipf, P.; Sherman, D. H.; Smith, J. L. *J. Biol. Chem.* **2011**, 286, 14445-14454.

370. "Chemical Methodology as a Source of Small Molecule Checkpoint Inhibitors and Hsp70 Modulators." Huryn, D. M.; Brodsky, J. L.; Brummond, K. M.; Chambers, P. G.; Eyre, B.; Ireland, A. W.; Kawasumi, M.; LaPorte, M. G.; Lloyd, K.; Manteau, B.; Nghiem, P.; Quade, B.; Seguin, S. P.; Wipf, P. *Proc. Natl. Acad. Sci. USA* **2011**, *108*(17), 6757-6762.
369. "Two Strategies for the Development of Mitochondrial-Targeted Small Molecule Radiation Damage Mitigators." Rwigema, J.-C.; Beck, B.; Wang, W.; Dömling, A.; Epperly, M. W.; Shields, D.; Franicola, D.; Dixon, T.; Frantz, M.-C.; Wipf, P.; Tyurina, Y.; Kagan, V.; Wang, H.; Greenberger, J. S. *Int. J. Radiat. Oncol. Biol. Phys.* **2011**, *80*(3), 860-868.
368. "*Plasmodium falciparum* Encodes a Single Cytosolic Type I Hsp40 that Functionally Interacts with Hsp70 and is Upregulated by Heat Shock." Botha, M.; Chiang, A. N.; Needham, P. G.; Stephens, L. L.; Hoppe, H. C.; Külzer, S.; Przyborski, J. M.; Lingelbach, K.; Wipf, P.; Brodsky, J. L.; Shonhai, A.; Blatch, G. L. *Cell Stress Chaperon.* **2011**, *16*, 389-401.
367. "Synthesis of 2-Hydrazolyl-4-thiazolidinones based on Multicomponent Reactions and Biological Evaluation against *Trypanosoma Cruzi*." Pizzo, C.; Saiz, C.; Talevi, A.; Gavernet, L.; Palestro, P.; Bellera, C.; Blanch, L. B.; Benítez, D.; Cazzulo, J. J.; Chidichimo, A.; Wipf, P.; Mahler, S. G. *Chem. Biol. Drug Des.* **2011**, *77*, 166-172.
366. "Synthesis and Structure-Activity Relationships of Benzothienothiazepinone Inhibitors of Protein Kinase D." Bravo-Altamirano, K.; George, K. M.; Frantz, M.-C.; Lavalle, C. R.; Tandon, M.; Leimgruber, S.; Sharlow, E. R.; Lazo, J. S.; Wang, Q.; Wipf, P. *J. ACS Med. Chem. Lett.* **2011**, *2*(2), 154-159.
365. "Titanocene(III)-Catalyzed Conversion of *N*-(Epoxyalkyl)anilines into Indolines." Maciejewski, J. P.; Wipf, P. *Arkivoc* (Special Issue Honoring H. Heimgartner), **2011**, *vi*, 92-119.
364. "Professor Heinz Heimgartner: A Tribute." Neier, R.; Wipf, P. *Arkivoc* (Special Issue Honoring H. Heimgartner), **2011**, *vi*, 1-9.
363. "Intraesophageal Administration of GS-Nitroxide (JP4-039) Protects Against Ionizing Irradiation-Induced Esophagitis." Epperly, M. W.; Goff, J. P.; Li, S.; Gao, X.; Wipf, P.; Dixon, T.; Wang, H.; Franicola, D.; Shen, H.; Rwigema, J.-C. M.; Kagan, V.; Bernard, M.; Greenberger, J. S. *In Vivo* **2010**, *24*(6), 811-820.
362. "Protein Kinase D as a Potential New Target for Cancer Therapy." Lavalle, C. R.; George, K. M.; Sharlow, E. R.; Lazo, J. S.; Wipf, P.; Wang, Q. *J. Biochim. Biophys. Acta (BBA) Rev. Cancer* **2010**, *1806*, 183-192.
361. "General Solution to the Synthesis of *N*-Substituted 1,2,3-Triazoles." Wang, X.; Zhang, L.; Krishnamurthy, D.; Senanayake, C. H.; Wipf, P. *Org. Lett.* **2010**, *12*(20), 4632-4635.
360. "Synthesis of an 8-Pentafluorosulfanyl Analog of the Antimalarial Agent Mefloquine." Mo, T.; Mi, X.; Dow, G. S.; Milner, E. E.; Wipf, P. *Tetrahedron Lett.* **2010**, *51*, 5137-5140.
359. "Small Molecule GS-Nitroxide Ameliorates Ionizing Irradiation-Induced Delay in Bone Wound Healing in a Novel Murine Model." Gokhale, A.; Rwigema, J.-C.; Epperly, M. W.; Glowacki, J.; Wang, H.; Wipf, P.; Goff, J. P.; Dixon, T.; Patrene, K.; Greenberger, J. S. *In Vivo* **2010**, *24*(4), 377-386.

358. "Iterative Structure-Based Peptide-Like Inhibitor Design Against the Botulinum Neurotoxin Serotype A." Zuniga, J. E.; Hammill, J. T.; Drory, O.; Nuss, J. E.; Burnett, J. C.; Gussio, R.; Wipf, P.; Bavari, S.; Brunger, A. T. *PLoS One* **2010**, 5, e11378.
357. "Oxidative Lipidomics of Hyperoxic Acute Lung Injury: Mass Spectrometric Characterization of Cardiolipin and Phosphatidylserine Peroxidation." Tyurina, Y. Y.; Tyurin, V. A.; Kaynar, A. M.; Kapralova, V. I.; Wasserloos, K.; Li, J.; Mosher, M.; Wright, L.; Wipf, P.; Watkins, S.; Pitt, B. R.; Kagan, V. E. *Am. J. Physiol.* **2010**, 299, L73-L85.
356. "Pharmacophore Refinement Guides the Rational Design of Nanomolar-Range Inhibitors of the Botulinum Neurotoxin Serotype A Metalloprotease." Nuss, J. E.; Dong, Y.; Wanner, L.; Ruthel, G.; Wipf, P.; Gussio, R.; Vennerstrom, J.; Bavari, S.; Burnett, J. *ACS Med. Chem. Lett.* **2010**, 1(7), 301-305.
355. "Binding of a Small Molecule at a Protein-Protein Interface Regulates the Chaperone Activity of Hsp70-Hsp40." Wisen, S.; Bertelsen, E. B.; Thompson, A. D.; Patury, S.; Ung, P.; Chang, L.; Evans, C. G.; Walter, G. M.; Wipf, P.; Carlson, H. A.; Brodsky, J. L.; Zuiderweg, E. R. P.; Gestwicki, J. E. *ACS Chem. Biol.* **2010**, 5(6), 611-622.
354. "Studies Toward a Library of Tetrahydrofurans: Click and MCR Products of Mono- and Bis-Tetrahydrofurans." Mishra, K. M.; Wipf, P.; Sinha, C. S. *J. Comb. Chem.* **2010**, 12(5), 609-612.
353. "Novel Protein Kinase D Inhibitors Cause Potent Arrest in Prostate Cancer Cell Growth and Motility." LaValle, C. R.; Bravo-Altamirano, K.; Giridhar, K. V.; Chen, J.; Sharlow, E.; Lazo, J. S.; Wipf, P.; Wang, Q. J. *BMC Chem. Biol.* **2010**, 10(5), 1-16.
352. "Synthesis and Chemical Diversity Analysis of Bicyclo[3.3.1]non-3-en-2-ones." Hammill, J. T.; Contreras-García, J.; Virshup, A. M.; Beratan, D.; Yang, W.; Wipf, P. *Tetrahedron* (Symposium-in-Print No. xxx on Hypervalent Iodine Chemistry – Recent Advances and Applications) **2010**, 66(31), 5852-5862.
351. "Anti-Malarial Activity of a Non-Piperidine Library of Next-Generation Quinoline Methanols." Milner, E.; McCalmont, W.; Bhonsle, J.; Caridha, D.; Cobar, J.; Gardner, S.; Gerena, L.; Goodine, D.; Lanteri, C.; Melendez, V.; Roncal, N. E.; Sousa, J.; Wipf, P.; Dow, G. S. *Malaria J.* **2010**, 9, 51.
350. "Mitochondria as a Target in Treatment." Frantz, M.-C.; Wipf, P. *Environ. Mol. Mutagen.* **2010**, 51(5), 462-475.
349. "Profiling the NIH Small Molecule Repository for Compounds That Generate H<sub>2</sub>O<sub>2</sub> by Redox Cycling in Reducing Environments." Soares, K. M.; Blackmon, N.; Shun, T. Y.; Shinde, S. N.; Takyi, H. K.; Wipf, P.; Lazo, J. S.; Johnston, P. A. *Assay Drug Dev. Technol.* **2010**, 8(2), 152-174.
348. "Identifying a Resistance Determinant for the Antimitotic Natural Products Disorazole C1 and A1." Lazo, J. S.; Reese, C. E.; Vogt, A.; Vollmer, L. L.; Kitchens, C. A.; Gunther, E.; Graham, T. H.; Hopkins, C. D.; Wipf, P. *J. Pharm. Exp. Ther.* **2010**, 332, 906-911.
347. "Mitotic Slippage in Non-cancer Cells Induced by a Microtubule Disruptor, Disorazole C<sub>1</sub>." Xu, F. L.; Rbaibi, Y.; Kiselyov, K.; Lazo, J. S.; Wipf, P.; Saunders, W. S. *BMC Chemical Biology* **2010**, 10(1), 1-10.

346. "Structure-Activity Relationships amongst 4-Position Quinoline Methanol Antimalarials that Inhibit the Growth of Drug Sensitive and Resistant Strains of *Plasmodium Falciparum*." Milner, E.; McCalmont, W.; Bhonsle, J.; Caridha, D.; Carroll, D. W.; Gardner, S.; Gerena, L.; Gettayacamin, M.; Lanteri, C.; Luong, T.; Melendez, V.; Moon, J. K.; Roncal, N. E.; Sousa, J. C.; Tangteung, A.; Wipf, P.; Dow, G. S. *Bioorg. Med. Chem. Lett.* **2010**, 20(4), 1347-1351.
345. "Regioselective Palladium-Catalyzed Cross-Coupling Reactions of 2,4,7-Trichloroquinazoline." Wipf, P.; George, K. M. *Synlett* (Special Issue Honoring G. Pattenden) **2010**, 644-648.
344. "Screening of Antimicrobial Agents for In Vitro Radiation Protection and Mitigation Capacity, Including those Used in Supportive Care Regimens for Bone Marrow Transplant Recipients." Epperly, M. W.; Franicola, D.; Shields, D.; Rwigema, J.-C.; Zhang, X.; McBride, W.; Georges, G.; Wipf, P.; Greenberger, J. S. *In Vivo* **2010**, 24(1), 9-19.
343. "Transmetalation Reactions Producing Organocopper Compounds." Rosenker, C. J.; Wipf, P. In "Patai Series: The Chemistry of Functional Groups. The Chemistry of Organocopper Compounds", Rappoport, Z.; Marek, I., Eds.; Wiley Interscience, **2010**, Part 1, Chapter 10, pp 443-525.
342. "Peptide-Like Molecules (PLMs): A Journey from Peptide Bond Isosteres to Gramicidin S Mimetics and Mitochondrial Targeting Agents." Wipf, P.; Xiao, J.; Stephenson, C. R. *J. Chimia* **2009**, 63(11), 764-775.
341. "Phosphatases as Targets for Cancer Treatment." Lazo, J. S.; Wipf, P. *Curr. Op. Invest. Drugs* **2009**, 10(12), 1297-1304.
340. "Mitochondrial Targeting of Electron Scavenging Antioxidants: Regulation of Selective Oxidation vs Random Chain Reactions." Kagan, V. E.; Wipf, P.; Stoyanovsky, D.; Greenberger, J. S.; Borisenko, G.; Belikova, N. A.; Yanamala, N.; Samhan Arias, A. K.; Tungekar, M. A.; Jiang, J.; Tyurina, Y. Y.; Ji, J.; Klein-Seetharaman, J.; Pitt, B. R.; Shvedova, A. A.; Bayir, H. *Adv. Drug Deliv. Rev.* **2009**, 61, 1375-1385.
339. "A Case Study from the Chemistry Core of the Pittsburgh Molecular Library Screening Center: The Polo-like Kinase Polo-Box Domain (Plk1-PBD)." Wipf, P.; Arnold, D.; Carter, K.; Dong, S.; Johnson, P. A.; Sharlow, E.; Lazo, J. S.; Huryn, D. H. *Curr. Top. Med. Chem.* **2009**, 9(13), 1194-1205.
338. "Identification of Potent Chemotypes Targeting *Leishmania major* Using a High-Throughput, Low-Stringency, Computationally Enhanced, Small Molecule Screen." Sharlow, E. R.; Close, D.; Shun, T.; Leimgruber, S.; Reed, R.; Mustata, G.; Wipf, P.; Johnson, J.; O'Neil, M.; Grögl, M.; Magill, A. J.; Lazo, J. S. *PLoS Negl. Trop. Dis.* **2009**, 3(11), e540.
337. "Polyketide Decarboxylative Chain Termination Preceded by O-Sulfonation in Curacin A Biosynthesis." Gu, L.; Wang, B.; Kulkarni, A.; Gehret, J.; Lloyd, K.; Gerwick, L.; Gerwick, W. H.; Wipf, P.; Hakansson, K.; Smith, J. L.; Sherman, D. H. *J. Am. Chem. Soc.* **2009**, 131(44), 16033-16035.
336. "Synthesis and Evaluation of Anthelmintic and Cytotoxic Properties of [2,5']bis-1,3-Azole Analogs of Bengazoles." Scarone, L.; Fajardo, J.; Saldana, J.; Dominguez, L.;

- Esposito, P.; Demastteis, S.; Wipf, P.; Manta, E.; Serra, G. *Lett. Drug Design Disc.* **2009**, 6, 413-419.
335. "The Mitochondria-Targeted Nitroxide JP4-039 Augments Potentially Lethal Irradiation Damage Repair." Rajagopalan, M. S.; Gupta, K.; Epperly, M. W.; Franicola, D.; Zhang, X.; Wang, H.; Zhao, H.; Tyurin, V. A.; Pierce, J. G.; Kagan, V. E.; Wipf, P.; Kanai, A. J.; Greenberger, J. S. *In Vivo* **2009**, 23, 717-726.
334. "Synthesis of Pyrrolo[1,3]diazepines by a Dipolar Cycloaddition – retro-Mannich Domino Reaction." Liang, M.; Saiz, C.; Pizzo, C.; Wipf, P. *Tetrahedron Lett.* **2009**, 50(49), 6810-6813.
333. "Reversible Thiazolidine Exchange: A New Reaction Suitable for Dynamic Combinatorial Chemistry." Saiz, C.; Wipf, P.; Manta, E.; Mahler, G. *Org. Lett.* **2009**, 11(15), 3170-3173.
332. "Synthesis and Biological Evaluation of the First Pentafluorosulfanyl Analogs of Mefloquine." Wipf, P.; Mo, T.; Geib, S. J.; Caridha, D.; Dow, G. S.; Gerena, L.; Roncal, N.; Milner, E. E. *Org. Biomol. Chem.* **2009**, 7, 4163-4165.
331. "Evaluating  $\beta$ -Turn Mimics as  $\beta$ -Sheet Folding Nucleators." Fuller, A. A.; Du, D.; Liu, F.; Davoren, J. E.; Bhabha, G.; Kroon, G.; Case, D. A.; Dyson, H. J.; Powers, E. T.; Wipf, P.; Gruebele, M.; Kelly, J. W. *Proc. Natl. Acad. Sci. USA* **2009**, 106(27), 11067-11072.
330. "Optical Signatures of Molecular Dissymmetry: Combining Theory with Experiments to Address Stereochemical Puzzles." Mukhopadhyay, P.; Wipf, P.; Beratan, D. N. *Acc. Chem. Res.* **2009**, 42(6), 809-819.
329. "Fluorous Parallel Synthesis of a Piperazinedione-Fused Tricyclic Compound Library." Werner, S.; Nielsen, S.; Wipf, P.; Turner, D.; Chambers, P.; Geib, S.; Curran, D. P.; Zhang, W. *J. Comb. Chem.* **2009**, 11(3), 452-459.
328. "Biphenyl C-Cyclopropylalkylamides: New Scaffolds for Targeting Estrogen Receptor  $\beta$ ." Sarachine, M. J.; Janjic, J. M.; Wipf, P.; Day, B. W. *Bioorg. Med. Chem. Lett.* **2009**, 19(9), 2404-2408.
327. "Metamorphic Enzyme Assembly in Polyketide Diversification." Gu, L.; Wang, B.; Kulkarni, A.; Geders, T. W.; Grindberg, R. V.; Gerwick, L.; Hakansson, K.; Wipf, P.; Smith, J. L.; Gerwick, W. H.; Sherman, D. H. *Nature* **2009**, 459(7247), 731-735.
326. "Nanoparticles in Cellular Drug Delivery." Faraji, A. H.; Wipf, P. *Bioorg. Med. Chem.* **2009**, 17, 2950-2962.
325. "Cytochrome C/Cardiolipin Relations in Mitochondria: a Kiss of Death." Kagan, V. E.; Bayir, H.; Belikova, N. A.; Kapralov, A.; Tyurina, Y. Y.; Tyurin, V. A.; Jiang, J.; Stoyanovsky, D.; Wipf, P.; Kochanek, P. M.; Borisenko, G. G.; Greenberger, J. S.; Shvedova, A. A.; Borisenko, G. *Mol. Free Rad. Biol. Med.* **2009**, 46, 1439-1453.
324. "Post-Translational Import of Protein into the Endoplasmic Reticulum of a Trypanosome: An *in vitro* System for Discovery of Anti-trypanosomal Chemical Entities." Patham, B.; Duffy, J.; Lane, A.; Davis, R. C.; Wipf, P.; Fewell, S. W.; Brodsky, J. L.; Mensa-Wilmot, K. *Biochem. J.* **2009**, 419, 507-517.
323. "Isolation, Biology and Chemistry of the Disorazoles: New Anti-Cancer Macrodiolides." Hopkins, C. D.; Wipf, P. *Nat. Prod. Rep.* **2009**, 26(5), 585-601.

322. "Cdc25B Dual Specificity Phosphatase Inhibitors Identified in a High-Throughput Screen of the NIH Compound Library." Johnston, P. A.; Foster, C. A.; Tierno, M. B.; Shun, T. Y.; Shinde, S. N.; Paquette, W. D.; Brummond, K. M.; Wipf, P.; Lazo, J. S. *Assay Drug Dev. Technol.* **2009**, 7(3), 250-265.
321. "Select Pyrimidinones Inhibit the Propagation of the Malarial Parasite, *Plasmodium Falciparum*." Chiang, A. N.; Valderramos, J.-C.; Balachandran, R.; Chovatiya, R. J.; Mead, B. P.; Schneider, C. X; Bell, S. L.; Klein, M. G.; Huryn, D. M.; Chen, X. S.; Day, B. W.; Fidock, D. A.; Wipf, P.; Brodsky, J. L. *Bioorg. Med. Chem.* **2009**, 17, 1527-1533.
320. "Pharmacophore-Guided Lead Optimization: the Rational Design of a Non-Zinc Coordinating, Sub-Micromolar Inhibitor of the Botulinum Neurotoxin Serotype A Metalloprotease." Burnett, J. C.; Wang, C.; Nuss, J. E.; Nguyen, T., L.; Hermone, A. R.; Schmidt, J. J.; Gussio, R.; Wipf, P.; Bavari, S. *Bioorg. Med. Chem. Lett.* **2009**, 19(19), 5811-5813.
319. "Inhibition of Simian Virus 40 Replication by Targeting the Molecular Chaperone Function and ATPase Activity of T Antigen." Wright, C. M.; Seguin, S. P.; Fewell, S. W.; Zhang, H.; Ishwad, C.; Vats, A.; Lingwood, C. A.; Wipf, P.; Fanning, E.; Pipas, J. M.; Brodsky, J. L. *Virus Res.* **2009**, 141, 71-80.
318. "Synthesis and Biological Evaluation of Inhibitors of Botulinum Neurotoxin Metalloprotease." Wang, C.; Widom, J.; Petronijevic, F.; Burnett, J. C.; Nuss, J. E.; Bavari, S.; Gussio, R.; Wipf, P. *Heterocycles* (Special Issue Honoring J. Daly), **2009**, 79(1), 487-520.
317. "An ESR Analysis of the Mechanism of Pericyclic Reactions of Bicyclobutanes." Walczak, M. A. A.; Shin, B.; Wipf, P.; Saxena, S. *Org. Biomol. Chem.* **2009**, 7(11), 2363-2366.
316. "Microtubule Binding and Disruption and Induction of Premature Senescence by Disorazole C<sub>1</sub>." Tierno, M. B.; Kitchens, C. A.; Petrik, B.; Graham, T. H.; Wipf, P.; Xu, F.; Saunders, W.; Raccor, B. S.; Balachandran, R.; Day, B. W.; Stout, J. R.; Walczak, C. E.; Ducruet, A. P.; Reese, C. E.; Lazo, J. S. *J. Pharm. Exp. Ther.* **2009**, 328(3), 715-722.
315. "Microwave-Assisted Tandem Reactions for the Synthesis of 2-Hydrazoyl-4-thiazolidinones." Saiz, C.; Pizzo, C.; Manta, E.; Wipf, P.; Mahler, G. *Tetrahedron Lett.* **2009**, 50(8), 901-904.
314. "Peroxisome Proliferator-Activated Receptor  $\gamma$  Agonist Pioglitazone Prevents the Hyperglycemia caused by Phosphatidylinositol 3-Kinase Pathway Inhibition by PX-866 without Affecting Antitumor Activity." Ihle, N. T.; Lemos, R.; Schwartz, D.; Oh, J.; Halter, R. J.; Wipf, P.; Kirkpatrick, L.; Powis, G. *Mol. Cancer Ther.* **2009**, 8(1), 94-100.
313. "Mutations in the Phosphatidylinositol-3-kinase Pathway Predict for Antitumor Activity of the Inhibitor PX-866 whereas Oncogenic Ras is a Dominant Predictor for Resistance." Ihle, N. T.; Lemos, R.; Wipf, P.; Yacoub, A.; Mitchell, C.; Siwak, D.; Mills, G. B.; Dent, P.; Kirkpatrick, D. L.; Powis, G. *Cancer Res.* **2009**, 69, 143-150.
312. "Mitochondria-Targeted Disruptors and Inhibitors of Cytochrome c/Cardiolipin Peroxidase Complexes: A New Strategy in Anti-apoptotic Drug Discovery." Kagan, V. E.; Bayir, A.; Bayir, H.; Stoyanovsky, D.; Borisenko, G. G.; Tyurina, Y. Y.; Wipf, P.; Atkinson, J.; Greenberger, J. S.; Chapkin, R. S.; Belikova, N. A. *Mol. Nutr. Food Res.* **2009**, 53, 104-114.

311. "A Microwave Assisted Intramolecular-Furan-Diels-Alder Approach to 4-Substituted Indoles." Petronijevic, F.; Timmons, C.; Cuzzupe, A.; Wipf, P. *Chem. Commun.* 2009, (1), 104-106.
310. "Triple Hybrids of Steroids, Spiroketals, and Oligopeptides as New Biomolecular Chimeras." Banerjee, A.; Sergienko, E.; Vasile, S.; Gupta, V.; Vuori, K.; Wipf, P. *Org. Lett.* 2009, 11(1), 65-68.
308. "A Practical Procedure for Carbonyl  $\alpha$ -Oxidation: Synthesis of (2-Benzoyloxy)-1,4-cyclohexanedione Mono-ethylene Ketal." Jones, T. C.; Tomkinson, N. C. O.; Patil, K.; Wipf, P. *Org. Synth. Collect. Vol.* 2009, 11, 70-76.
307. "Practical Synthesis of Novel Chiral Allenamides: (R)-4-Phenyl-3-(1,2-propadienyl)oxazolidin-2-one." Xiong, H.; Tracey, M. R.; Grebe, T.; Mulder, J. A.; Hsung, R. P.; Wipf, P.; Smotryski, J. *Org. Synth. Collect. Vol.* 2009, 11, 726-732.
306. "Thionation: GlcNAc-thiazoline triacetate {(3a*R*,5*R*,6*S*,7*R*,7a*R*)-5-aAcetoxymethyl-6,7-diacetoxy-2-methyl-5,6,7,7a-tetrahydro-3aH-pyrano[3,2-d]thiazole}." Knapp, S.; Huhn, R. A.; Amorelli, B.; Englund, E. E.; Wipf, P. *Org. Synth. Collect. Vol.* 2009, 11, 787-793.
305. "Electrophilic Cyclization with *N*-Iodosuccinimide: Preparation of 5-(4-Bromophenyl)-3-iodo-2-(4-methylphenyl)furan." Sniady, A.; Morreale, M. S.; Dembinski, R.; Timmons, C.; Wipf, P. *Org. Synth. Collect. Vol.* 2009, 11, 794-801.
304. "Synthesis of  $\alpha$ -Halo Ethers from Symmetric Acetals and *in situ* Methoxymethylation of an Alcohol." Berliner, M.; Belecki, K.; Paquette, W. D.; Wipf, P. *Org. Synth. Collect. Vol.* 2009, 11, 934-941.
303. "Preparation of a Non-Symmetrical Imidazolium Salt: 1-Adamantyl-3-mesityl-4,5-dimethylimidazolium Tetrafluoroborate." Fürstner, A.; Alcarazo, M.; Cesar, V.; Krause, H.; Hopkins, C.; Wipf, P. *Org. Synth.* 2008, 85, 34-44.
302. "Synthesis of Aminoarenethiolato-Copper(I) Complexes." Sperotto, E.; Van Klink, G. P. M.; Van Koten, G.; Bravo-Altamirano, K.; Wipf, P. *Org. Synth.* 2008, 85, 209-218.
301. "High-Yielding, Large-Scale Synthesis of *N*-Protected- $\beta$ -Aminonitriles: *Tert*-Butyl (1*R*)-2-Cyano-1-phenylethylcarbamate." Mosa, F.; Thirsk, C.; Vaultier, M.; Maw, G.; Whiting, A.; Lettan, R. B., II; Wipf, P. *Org. Synth.* 2008, 85, 219-230.
300. "Is Cdc25 a Druggable Target?" Lazo, J. S.; Wipf, P. *Anti-Cancer Agents Med. Chem.* 2008, 8(8), 837-842.
299. "Three-Dimensional Database Mining Identifies a Unique Chemotype that Unites Structurally Diverse Botulinum Neurotoxin Serotype A Inhibitors in a Three-Zone Pharmacophore." Hermone, A. R.; Burnett, J. C.; Nuss, J. E.; Tressler, L. E.; Nguyen, T. L.; Solaja, B. A.; Vennerstrom, J. L.; Schmidt, J. J.; Wipf, P.; Bavari, S.; Gussio, R. *ChemMedChem* 2008, 3(12), 1905-1912.
298. "Potent and Selective Disruption of Protein Kinase D Functionality by a Benzoxoloazepinolone." Sharlow, E. R.; Giridhar, K. V.; LaValle, C. R.; Chen, J.; Leimgruber, S.; Barrett, R.; Bravo-Altamirano, K.; Wipf, P.; Lazo, J. S.; Wang, Q. *J. J. Biol. Chem.* 2008, 283(48), 33516-33526.
297. "DFT Calculation of  $^{13}\text{C}$  NMR Shifts of Phenanthrenoid Alkaloids: Reinvestigation of the Structure of Samoquasine A." Timmons, C.; Wipf, P. *J. Org. Chem.* 2008, 73(22), 9168-9170.

296. "Titanocene(III)-Catalyzed Formation of Indolines and Azaindolines." Wipf, P.; Maciejewski, J. P. *Org. Lett.* 2008, 10(19), 4383-4386.
295. "A Precursor Specific Role for Hsp40/Hsc70 during Tail-Anchored Protein Integration at the Endoplasmatic Reticulum." Rabu, C.; Wipf, P.; Brodsky, J. L.; High, S. *J. Biol. Chem.* 2008, 283(41), 27504-27513.
294. "Formal Alder-Ene Reaction of a Bicyclo[1.1.0]butane in the Synthesis of the Tricyclic Quaternary Ammonium Core of Daphniglaucin." Ueda, M.; Walczak, M. A. A.; Wipf, P. *Tetrahedron Lett.* 2008, 49, 5986-5989.
293. "Synthesis of Hydroxylated Bicyclic Amino Acids from L-Tyrosine: Octahydro-1*H*-indole Carboxylates." Pierce, J. G.; Kasi, D.; Fushimi, M.; Cuzzupe, A.; Wipf, P. *J. Org. Chem.* 2008, 73(19), 7807-7810.
292. "Toward a Molecular Understanding of the Interaction of Dual Specificity Phosphatases with Substrates: Insights from Structure-Based Modeling and High Throughput Screening." Bakan, A.; Lazo, J. S.; Wipf, P.; Brummond, K. M.; Bahar, I. *Curr. Med. Chem.* 2008, 15, 2536-2544.
291. "Development of a 384-well Colorimetric Assay to Quantify Hydrogen Peroxide Generated by the Redox Cycling of Compounds in the Presence of Reducing Agents." Johnston, P. A.; Soares, K. M.; Shinde, S. N.; Foster, C. A.; Shun, T. Y.; Takyi, H. K.; Wipf, P.; Lazo, J. S. *Assay Drug Dev. Technol.* 2008, 6(4), 505-518.
290. "Computational Design, Synthesis and Biological Evaluation of *para*-Quinone-Based Inhibitors for Redox Regulation of the Dual-Specificity Phosphatase Cdc25B." Keinan, S.; Paquette, W. D.; Skoko, J. J.; Beratan, D. N.; Yang, W.; Shinde, S.; Johnston, P. A.; Lazo, J. S.; Wipf, P. *Org. Biomol. Chem.* 2008, 6, 3256-3263.
289. "Sixteen Semesters of Chemistry at the University of Zürich: A Retrospective on a Formative Time." Wipf, P. *Chimia* 2008, 62(3), 150-151.
288. "Rhodium(I)-Catalyzed Cycloisomerizations of Bicyclobutanes." Walczak, M. A. A.; Wipf, P. *J. Am. Chem. Soc.* 2008, 130(22), 6924-6925.
287. "A Cell-Active Inhibitor of Mitogen-Activated Protein Kinase Phosphatases Restores Paclitaxel-Induced Apoptosis in Dexamethasone-Protected Cancer Cells." Vogt, A.; McDonald, P. R.; Tamewitz, A.; Sikorski, R. P.; Wipf, P.; Skoko, J. J.; Lazo, J. S. *Mol. Cancer Ther.* 2008, 7(2), 330-340.
286. "A Mitochondria-Targeted Nitroxide/Hemigramicidin S Conjugate Protects Mouse Embryonic Cells Against Gamma Irradiation." Jiang, J.; Belikova, N.; Hoye, A. T.; Zhao, Q.; Epperly, M. W.; Greenberger, J. S.; Wipf, P.; Kagan, V. E. *Int. J. Radiat. Oncol. Biol. Phys.* 2008, 70(3), 816-825.
285. "An Experimental Survey of the Transition between Two-State and Downhill Protein Folding Scenarios." Feng, L.; Du, D.; Fuller, A. A.; Davoren, J. E.; Wipf, P.; Kelly, J. W.; Gruebele, M. *Proc. Natl. Acad. Sci. USA* 2008, 105(7), 2369-2374.
284. "Tubulin-Perturbing Naphthoquinone Spiroketals." Balachandran, R.; Hopkins, T. D.; Thomas, C. A.; Wipf, P.; Day, B. W. *Chem. Biol. Drug Design* 2008, 71(2), 117-124.
283. "Exploring the Optical Activity Tensor by Anisotropic Rayleigh Optical Activity Scattering." Zuber, G.; Wipf, P.; Beratan, D. N. *ChemPhysChem* 2008, 9(2), 265-271.

282. "Pyrimidinone-Peptoid Hybrid Molecules with Distinct Effects on Molecular Chaperone Function and Breast Cancer Cell Proliferation." Wright, C. M.; Chovatiya, R. J.; Jameson, N. E.; Turner, D. M.; Zhu, G.; Werner, S.; Huryn, D. M.; Pipas, J. M.; Day, B. W.; Wipf, P.; Brodsky, J. L. *Bioorg. Med. Chem.* **2008**, *16*, 3291-3301.
281. "Targeting Mitochondria." Hoye, A. T.; Davoren, J.; Wipf, P.; Fink, M. P.; Kagan, V. E. *Acc. Chem. Res.* **2008**, *41*(1), 87-97.
280. "Chiral Ligand Optimization in the Asymmetric Zirconium-Zinc Transmetalation Aldehyde Addition Reaction." Wipf, P.; Jayasuriya, N. *Chirality* (Special Issue Honoring N. Berova), **2008**, *20*(1), 425-430.
279. "Natural Product Chemistry and Anticancer Drug Discovery." Huryn, D. M.; Wipf, P. In "Cancer Drug Design and Discovery", Neidle, S., Ed.; Academic Press, **2008**, Part II, Chapter 5, pp 107-130.
278. "Pharmacology and Antitumor Activity of a Quinolinedione Cdc25 Phosphatase Inhibitor DA3003-1 (NSC 663284)." Guo, J.; Parise R. A.; Joseph, E.; Lan, J.; Pan, S.-S.; Joo, B.; Egorin M. J.; Wipf, P.; Lazo J. S.; Eiseman J. L. *Anticancer Res.* **2007**, *27*, 3067-3073.
277. "Mitochondrially-Targeted Drugs for the Prevention of Radiation Cystitis." Zabbarova, I.; Wipf, P.; Epperly, M.; McCarthy, C.; Ikeda, Y.; Hagedorn, N.; Birder, L.; Fry, C.; DeGroat, W.; Kanai, A. *Neurourology Urodynamics* **2007**, *26*, 668-669.
276. "Contribution of a Solute's Chiral Solvent Imprint to Optical Rotation." Mukhopadhyay, P.; Zuber, Wipf, P.; Beratan, D. N. *Angew. Chem., Int. Ed.* **2007**, *46*(34), 6450-6452.
275. "Structure-Activity and High-Content Imaging Analyses of Novel Tubulysins." Wang, Z.; McPherson, P. A.; Raccor, B. S.; Balachandran, R.; Zhu, G.; Day, B. W.; Vogt, A.; Wipf, P. *Chem. Biol. Drug Design* **2007**, *70*(2), 75-86.
274. "Synthesis of (+/-)-thio-Halenaquinone by Iterative Metalations of Thiophene." Wakefield, B.; Halter, R. J.; Wipf, P. *Org. Lett.* **2007**, *9*(16), 3121-3124.
273. "Selective Compounds Define Hsp90 as a Major Inhibitor of Apoptosis in Small Cell Lung Cancer." Rodina, A.; Vilenchik, M.; Moulick, K.; Aguirre, J.; Kim, J.; Chiang, A.; Litz, J.; Clement, C. C.; She, Y.; Wipf, P.; Massague, J.; Jiang, X.; Brodsky, J. L.; Krystal, G. W.; Chiosis, G. *Nature Chem. Biol.* **2007**, *3*(8), 498-507.
272. "Hemigramicidin-TEMPO Conjugates: Novel Mitochondria-targeted Anti-oxidants." Fink, M. P.; Macias, C. A.; Xiao, J.; Tyurina, Y. Y.; Jiang, J.; Belikova, N.; Delude, R. L.; Greenberger, J. S.; Kagan, V. E.; Wipf, P. *Biochem. Pharmacol.* **2007**, *74*(6), 801-809.
271. "Synthesis of Functionalized Isoindolinones: Addition of *In Situ* Generated Organoalanes to Acyliminium Ions." Pierce, J. G.; Waller, D. L.; Wipf, P. *J. Organomet. Chem.* (Special Issue on "Insertion Chemistry of the Metal-Carbon Bond" Honoring G. Erker), **2007**, *692*, 4618-4629.
270. "Development and Implementation of a 384-well Homogeneous Fluorescence Intensity HTS Assay to Identify MKP-1 Dual Specificity Protein Phosphatase Inhibitors." Johnston, P. A.; Foster, C.; Shun, T. Y.; Skoko, J.; Shinde, S.; Wipf, P.; Lazo, J. S. *Assay Drug Dev. Technol.* **2007**, *5*(3), 319-332.

269. "Origins of the High 14-Helix Propensity of Cyclohexyl-Rigidified Residues in  $\beta$ -Peptides." Lee, M.; Raguse, T. L.; Schinner, M.; Pomerantz, W. C.; Wang, X.; Wipf, P.; Gellman, S. H. *Org. Lett.* 2007, 9(9), 1801-1804.
268. "Total Synthesis of N<sup>14</sup>-Desacetoxytubulysin H." Wipf, P.; Wang, Z. *Org. Lett.* 2007, 9(8), 1605-1607.
267. "Hemigramicidin-TEMPO Conjugates: Novel Mitochondria-targeted Anti-oxidants." Fink, M. P.; Macias, C. A.; Xiao, J.; Tyurina, Y. Y.; Delude, R. L.; Greenberger, J. S.; Kagan, V. E.; Wipf, P. *Crit. Care Med.* 2007, 35(9Suppl), S461-S467.
266. "Catalytic Asymmetric Aziridination of Imines." Wipf, P.; Lyon, M. A. *Arkivoc* (Special Issue Honoring M. M. Joullié), 2007, xii, 91-98.
265. "Synthesis and Biological Activity of a Focused Library of Mitogen-activated Protein Kinase Phosphatase Inhibitors." Arnold, D. M.; Foster, C.; Huryn, D. M.; Lazo, J. S.; Johnston, P. A.; Wipf, P. *Chem. Biol. Drug Design* 2007, 69(1), 23-30.
264. "New Opportunities for Pregnan X Receptor (PXR) Targeting in Drug Development. Lessons from Enantio- and Species-Specific PXR Ligands Identified from A Discovery Library of Amino Acid Analogues." Wipf, P.; Gong, H.; Janjic, J. M.; Li, S.; Day, B. W.; Xie, W. *Mini-Rev. Med. Chem.* 2007, 7(6), 617-625.
263. "Treatment with a Novel Hemigramicidin-TEMPO Conjugate Prolongs Survival in a Rat Model of Lethal Hemorrhagic Shock." Macias, C. A.; Chiao, J. W.; Xiao, J.; Arora, D. S.; Tyurina, Y. Y.; Delude, R. L.; Wipf, P.; Kagan, V. E.; Fink, M. P. *Ann. Surg.* 2007, 245(2), 305-314.
262. "From Natural Products to Biological Tools." Wipf, P.; Graham, T. H.; Xiao, J. *Pure Appl. Chem.* 2007, 79(4), 753-761.
261. "Mitochondrial Targeting of Radioprotectants Using Peptidyl Conjugates." Kanai, A.; Zabbarova, I.; Amoscato, A.; Epperly, M.; Xiao, J.; Wipf, P. *Org. Biomol. Chem.* 2007, 5(2), 307-309.
260. "Inhibition of Metalloprotease Botulinum Serotype A: From a Pseudo-Peptide Binding Mode to a Small Molecule that is Active in Primary Neurons." Burnett, J. C.; Ruthel, G.; Stegmann, C. M.; Panchal, R. G.; Nguyen, T. L.; Hermone, A. R.; Stafford, R. G.; Lane, D. J.; Kenny, T. A.; McGrath, C. F.; Wipf, P.; Stahl, A. M.; Schmidt, J. J.; Gussio, R.; Brunger, A. T.; Bavari, S. *J. Biol. Chem.* 2007, 282(7), 5004-5014.
259. "Structural Requirements for Optimized Delivery, Inhibition of Oxidative Stress and Anti-apoptotic Activity of Targeted Nitroxides." Jiang, J.; Kurnikov, I.; Belikova, N. A.; Xiao, J.; Zhao, Q.; Amoscato, A. A.; Braslau, R.; Studer, A.; Fink, M. P.; Greenberger, J. S.; Wipf, P.; Kagan, V. E. *J. Pharm. Exp. Ther.* 2007, 320(3), 1050-1060.
258. "Spiroketals via Oxidative Rearrangement of Enol Ethers." Waller, D. L.; Stephenson, C. R. J.; Wipf, P. *Org. Biomol. Chem.* 2007, 5, 58-60.
257. "HPLC Determinations of Enantiomeric Ratios." Wipf, P.; Werner, S.; Twining, L. A.; Kendall, C. *Chirality* 2007, 19, 5-9.
256. "Independent Mechanistic Inhibition of Cdc25 Phosphatases by a Natural Product Caulibugulone." Brisson, M.; Foster, C.; Wipf, P.; Joo, B.; Tomko, R. J.; Nguyen, T.; Lazo, J. S. *Mol. Pharm.* 2007, 71(1), 184-192.

255. "Solvent Effects on Optical Rotation: A Case Study of Methyloxirane in Water." Mukhopadhyay, P.; Zuber, G.; Goldsmith, M.-R.; Wipf, P.; Beratan, D. N. *ChemPhysChem* 2006, 7, 2483-2486.
254. "Synthesis of 2-Chloroacrolein Diethyl Acetal (2-Chloroprop-2-enal, Diethyl Acetal)." Kvernenes, O. H.; Sydnes, L. K.; Arnold, D. M.; Wipf, P. *Org. Synth.* 2006, 83, 184-192; *Org. Synth. Collect. Vol.* 2009, 11, 586-593.
253. "Synthesis of (-)-(S,S)-Bis(4-isopropyloxazoline)[4S,4S')-2,2'-(propane-2,2-diyl)bis(4-isopropyl-4,5-dihydrooxazole)]." Evans, D. A.; Woerpel, K. A.; Nosse, B.; Schall, A.; Shinde, Y.; Jezek, E.; Haque, M. M.; Chhor, R. B.; Reiser, O.; Wipf, P.; Jayasuriya, N. *Org. Synth.* 2006, 83, 97-102; *Org. Synth. Collect. Vol.* 2009, 11, 821-825.
252. "Synthesis of 6,9,12,15,18-Pentamethyl-1,6,9,12,15,18-hexahydro(C<sub>60</sub>-Ih)[5,6]fullerene." Matsuo, Y.; Muramatsu, A.; Tahara, K.; Koide, M.; Nakamura, E.; Wipf, P.; Waller, D. L. *Org. Synth.* 2006, 83, 80-87; *Org. Synth. Collect. Vol.* 2009, 11, 319-326.
251. "Trisubstituted (E)-Alkene Dipeptide Isosteres as  $\beta$ -Turn Promoters in the Gramicidin S Cyclodecapeptide Scaffold." Xiao, J.; Weisblum, B.; Wipf, P. *Org. Lett.* 2006, 8(21), 4731-4734.
250. "Expedient Synthesis of the  $\alpha$ -C-Glycoside Analogue of the Immunostimulant Galactosylceramide (KRN7000)." Wipf, P.; Pierce, J. G. *Org. Lett.* 2006, 8(15), 3375-3378.
249. "A Focused Library of Tetrahydropyrimidinone Amides via a Tandem Biginelli-Ugi Multi-Component Process." Werner, S.; Turner, D. M.; Lyon, M. A.; Huryn, D. M.; Wipf, P. *Synlett* (Special Issue on Cascade Reactions) 2006, (14), 2334-2338.
248. "Synthesis and Ag(I) Complexation Studies of Tethered Westiellamide." Wipf, P.; Wang, C. *Org. Lett.* 2006, 8 (11); 2381-2384.
247. "Novel Benzofuran Inhibitors of Human Mitogen-activated Protein Kinase Phosphatase-1." Lazo, J. S.; Nunes, R.; Skoko, J. J.; Queiroz de Oliveira, P. E.; Vogt, A.; Wipf, P. *Bioorg. Med. Chem.* 2006, 14 (16), 5643-5650.
246. "Synthesis of the 3-Aza-[7]-paracyclophane Core of Haouamine A and B." Wipf, P.; Furegati, M. *Org. Lett.* 2006, 8(9); 1901-1904.
245. "Pericyclic Cascade Reactions of C-Bicyclo[1.1.0]butylbenzylamines." Wipf, P.; Walczak, M. A. A. *Angew. Chem. Int. Ed.* 2006, 45, 4172-4175.
244. "Use of Transcriptional Synergy to Augment Sensitivity of a Splicing Reporter Assay." Levinson, N.; Hinman, R.; Patil, A.; Stephenson, C. R. J.; Werner, S.; Woo, G. H. C.; Xiao, J.; Wipf, P.; Lynch, K. W. *RNA* 2006, 12, 925-930.
243. " $\pi$ -Allyl Palladium Approach Toward the Diazabicyclo[3.2.1]octane Core of the Naphthyridinomycin Alkaloids." Woo, G. H. C.; Kim, S.-H.; Wipf, P. *Tetrahedron* (Symposium-in-Print No. 125 on New Applications of Metal Catalyzed Reactions in Natural Product Synthesis) 2006, 62(45), 10507-10517.
242. "Biological Evaluation of Newly Synthesized Quinoline-5,8-quinones as Cdc25B Inhibitors." Cossy, J.; Belotti, D.; Brisson, M.; Skoko, J. J.; Wipf, P.; Lazo, J. S. *Bioorg. Med. Chem.* (Special Issue Honoring B. Giese) 2006, 14 (18), 6283-6287.
241. "Molecular Pharmacology and Antitumor Activity of Palmarumycin Based Inhibitors of Thioredoxin Reductase." Powis, G.; Wipf, P.; Lynch, S. M.; Birmingham, A.; Kirkpatrick, D. L. *Mol. Cancer Therap.* 2006, 5 (3), 630-636.

240. "One-Pot Synthesis of  $\beta$ -Hydroxy-1,3-dienes Via Allyltriphenylphosphonium Isomerization under Mild Conditions." Sellanes, D.; Scarone, L.; Manta, E.; Wipf, P.; Serra, G. *Lett. Org. Chem.* 2006, 3(4), 309-312.
239. "A Screening Method for Chiral Selectors That Does Not Require Covalent Attachment." Chen, Z.; Yang, Y.; Werner, S.; Wipf, P.; Weber, S. G. *J. Am. Chem. Soc.* 2006, 128 (7), 2208-2209.
238. "Toward the Total Synthesis of Lophotoxin: New Methodologies and Synthetic Strategies." Wipf, P.; Grenon, M. *Can. J. Chem.* (Special Issue Honoring A. Bader) 2006, 84(10), 1226-1241.
237. "Synthesis and Evaluation of Anthelmintic and Cytotoxic Properties of Bis-1,3-Azole Analogs of Natural Products." Sellanes, D.; Scarone, L.; Mahler, G.; Manta, E.; Baz, A.; Dematteis, S.; Saldana, J.; Dominguez, L.; Wipf, P.; Serra, G. *Lett. Drug Design Disc.* 2006, 3 (1), 35-43.
236. "Cellular Analysis of Disorazole C<sub>1</sub> and Structure-Activity Relationship of Analogs of the Natural Product." Wipf, P.; Graham, T. H.; Vogt, A.; Sikorski, R.; Ducruet, A. P.; Lazo, J. S. *Chem. Biol. Drug Design* 2006, 67 (1), 66-73.
235. "The Chiroptical Signature from Achiral Metal Clusters Induced by Dissymmetric Adsorbates." Goldsmith, M.-R.; George, C. B.; Zuber, G.; Naaman, R.; Waldeck, D. H.; Wipf, P.; Beratan, D. N. *Phys. Chem. Chem. Phys.* 2006, 8 (1), 63-67.
234. "Chlorobis(cyclopentadienyl)hydrido zirconium." Takahashi, T.; Suzuki, N.; Jayasuriya, N.; Wipf, P. *Electronic Encyclopedia of Reagents for Organic Synthesis (eEROS)* 2006. Online link: <http://www.mrw.interscience.wiley.com/eros/articles/rc074/abstract-fs.html>.
233. "Systematic Assignment of the Configuration of Flexible Natural Products by Spectroscopic & Computational Methods: The Bistramide C Analysis." Zuber, G.; Goldsmith, M.-R.; Hopkins, T. D.; Beratan, D. N.; Wipf, P. *Org. Lett.* 2005, 7 (23), 5269-5272.
232. "Metathesis Reactions of Pyrazolotriazinones Generate Dynamic Combinatorial Libraries." Wipf, P.; Mahler, S. G.; Okumura, K. *Org. Lett.* 2005, 7, 4483-4486.
231. "Synthesis and Biological Activity of Prodrug Inhibitors of the Thioredoxin - Thioredoxin Reductase System." Wipf, P.; Lynch, S. M.; Powis, G.; Birmingham, A.; Englund, E. E. *Org. Biomol. Chem.* 2005, 3, 3880-3882.
230. "Redox Regulation of Cdc25B by Cell Active Quinolinediones." Brisson, M.; Nguyen, T.; Wipf, P.; Joo, B.; Day, B. W.; Skoko, J. S.; Schreiber, E. M.; Foster, C.; Bansal, P.; Lazo, J. S. *Mol. Pharm.* 2005, 68 (6), 1810-1820.
229. "Catalytic Reduction of Amides to Amines with Hydrosilanes Using a Triruthenium Carbonyl Cluster as the Catalyst." Motoyama, Y.; Itonaga, C.; Ishida, T.; Takasaki, M.; Nagashima, H.; Pierce, J. G.; Wipf, P. *Org. Synth.* 2005, 82, 188-195; *Org. Synth. Collect. Vol. 2009*, 11, 1-8.
228. "(2S)-(-)-3-Exo-(morpholino)isoborneol [(-)-MIB]." Chen, Y. K.; Jeon, S.-J.; Walsh, P. J.; Nugent, W. A.; Kendall, C.; Wipf, P. *Org. Synth.* 2005, 82, 87-92; *Org. Synth. Collect. Vol. 2009*, 11, 702-707.
227. "Preparation of 4-Acetylamino-2,2,6,6-tetramethylpiperidine-1-oxoammonium Tetrafluoroborate, and the Oxidation of Geraniol to Geranial." Bobbitt, J. M.; Merbouh,

- N.; Wipf, P.; Amantini, D. *Org. Synth.* **2005**, *82*, 80-86; *Org. Synth. Collect. Vol.* **2009**, *11*, 93-99.
226. "D-Ribonolactone and 2,3-Isopropylidene-(D-ribonolactone)." Williams, J. D.; Kamath, V. P.; Morris, P. E.; Townsend, L. B.; Cuzzupe, A.; Wipf, P. *Org. Synth.* **2005**, *82*, 75-79; *Org. Synth. Collect. Vol.* **2009**, *11*, 88-92.
225. "Lipase-Catalyzed Resolution of 4-Trimethylsilyl-3-butyn-2-ol and Conversion of the (R)-Enantiomer to (R)-3-Butyn-2-yl Mesylate and (P)-1-Tributylstannyl-1,2-butadiene." Marshall, J. A.; Chobanian, H.; Wipf, P.; Pierce, J. *Org. Synth.* **2005**, *82*, 43-54; *Org. Synth. Collect. Vol.* **2009**, *11*, 1056-1067.
224. "Preparation of Optically Active (R,R)-Hydrobenzoin from Benzoin or Benzil." Ikariya, T.; Hashiguchi, S.; Murata, K.; Noyori, R.; Wipf, P.; Amantini, D. *Org. Synth.* **2005**, *82*, 10-17; *Org. Synth. Collect. Vol.* **2009**, *11*, 17-24.
223. "Endo Entry to the Nortricycl-Norbornenyl Cation System: Stereochemistry in the Fragmentation of *endo*-5-Norbornenyl-2-oxychlorocarbene." Moss, R. A.; Fu, X.; Sauers, R.; Wipf, P. *J. Org. Chem.* **2005**, *70* (21), 8454-8460.
222. "The Phosphoinositide-3-kinase Inhibitor PX-866 Overcomes Resistance to the EGFR Inhibitor Gefitinib in A-549 Human Non Small Lell Lung Cancer Xenografts." Ihle, N. T.; Paine-Murrieta, G.; Berggren, M. I.; Baker, A.; Tate, W. R.; Wipf, P.; Abraham, R. T.; Kirkpatrick, D. L.; Powis, G. *Mol. Cancer Therap.* **2005**, *4* (9), 1349-1357.
221. "A Common Pharmacophore for a Diverse Set of Colchicine Binding Site Inhibitors Using a Structure-Based Approach." Nguyen, T. L.; McGrath, C.; Hermone, A. R.; Burnett, J. C.; Zaharevitz, D. W.; Day, B. W.; Wipf, P.; Hamel, E.; Gussio, R. *J. Med. Chem.* **2005**, *48*, 6107-6116.
220. "Transition Metal Mediated Cascade Reactions: The Water Accelerated Carboalumination-Claisen Rearrangement-Carbonyl Addition Reaction." Wipf, P.; Waller, D. L.; Reeves, J. T. *J. Org. Chem.* **2005**, *70*, 8096-8102.
219. "Mitochondrial Targeting of Selective Electron Scavengers: Synthesis and Biological Analysis of Hemigramicidin-TEMPO Conjugates." Wipf, P.; Xiao, J.; Jiang, J.; Belikova, N. A.; Tyurin, V. A.; Fink, M. P.; Kagan, V. E. *J. Am. Chem. Soc.* **2005**, *127*, 12460-12461.
218. "Synthesis of Homoallylic Amines by Hydrozirconation–Imine Addition of Allenes." Wipf, P.; Pierce, J. G. *Org. Lett.* **2005**, *7*, 3537-3540.
217. "Microwave Promoted Oxazole Synthesis: Cyclocondensation Cascade of Oximes and Acyl Chlorides." Wipf, P.; Fletcher, J. M.; Scarone, L. *Tetrahedron Lett.* **2005**, *46* (33), 5463-5466.
216. "A Pregnane X Receptor Agonist with Unique Species-Dependent Stereoselectivity and its Implications in Drug Development." Mu, Y.; Stephenson, C. R. J.; Kendall, C.; Saini, S. P. S.; Toma, D.; Ren, S.; Cai, H.; Strom, S. C.; Day, B. W.; Wipf, P.; Xie, W. *Mol. Pharmacol.* **2005**, *68*, 403-413.
215. "Application of Divergent Multi-Component Reactions in the Synthesis of a Library of Peptidomimetics Based on  $\gamma$ -Amino- $\alpha,\beta$ -Cyclopropyl Acids." Wipf, P.; Werner, S.; Woo, G. H. C.; Stephenson, C. R. J.; Walczak, M. A. A.; Coleman, C. M.; Twining, L. A. *Tetrahedron* (Symposium-in-Print No. 114 on Multicomponent Reactions) **2005**, *61* (48), 11488-11500.

214. "Imine Additions of Internal Alkynes for the Synthesis of Trisubstituted (*E*)-Alkene and Cyclopropane Peptide Isosteres." Wipf, P.; Xiao, J.; Geib, S. J. *Adv. Synth. Catal.* (Special Issue on C-C Bond Formation) **2005**, *347*, 1605-1613.
213. "Total Synthesis and Structure Validation of (+)-Bistramide C." Wipf, P.; Hopkins, T. D. *Chem. Commun.* **2005**, 3421-3423.
212. "Chemistry and Biology of Wortmannin." Wipf, P.; Halter, R. J. *Org. Biomol. Chem.* **2005**, *3*, 2053-2061.
211. "The Fragmentation of *exo*-5-Norbornenyl-2-oxychlorocarbene: Stereochemistry and Mechanism." Fu, X.; Moss, R. A.; Sauers, R. R.; Wipf, P. *Tetrahedron Lett.* **2005**, *46*, 4265-4268.
210. "Assignment of the Absolute Configuration of [n]-Ladderanes by TD-DFT Optical Rotation Calculations." Zuber, G.; Goldsmith, M.-R.; Beratan, D. N.; Wipf, P. *Chirality* **2005**, *17*, 507-510.
209. "The Stereochemistry of Oxachlorocarbene S<sub>N</sub>i Reactions." Moss, R. A.; Fu, X.; Tian, J.; Sauers, R.; Wipf, P. *Org. Lett.* **2005**, *7*, 1371-1374.
208. "Electrostatic vs Steric Effects in Peptidomimicry. Synthesis and Secondary Structure Analysis of Gramicidin S Analogs with (*E*)-Alkene Peptide Isosteres." Xiao, J.; Weisblum, B.; Wipf, P. *J. Am. Chem. Soc.* **2005**, *127*, 5742-5743.
207. "Three-Component Synthesis of  $\alpha,\beta$ -Cyclopropyl- $\gamma$ -Amino Acids." Wipf, P.; Stephenson, C. R. J. *Org. Lett.* **2005**, *7*, 1137-1140.
206. "Towards Raman Optical Activity Calculations of Large Molecules." Zuber, G.; Wipf, P.; Beratan, D. N. *ChemPhysChem* **2005**, *6*, 595-597.
205. "Microwave-Assisted "Libraries from Libraries" Approach toward the Synthesis of Allyl- and C-Cyclopropylalkylamides." Wipf, P.; Coleman, C. M.; Janjic, J. M.; Iyer, P. S.; Fodor, M. D.; Shafer, Y. A.; Stephenson, C. R. J.; Kendall, C.; Day, B. W. *J. Comb. Chem.* **2005**, *7*, 322-330.
204. "Silver(I)-Catalyzed Addition of Zirconocenes to Glycal Epoxides. A New Synthesis of  $\alpha$ -C-Glycosides." Wipf, P.; Pierce, J. G.; Zhuang, N. *Org. Lett.* **2005**, *7*, 483-485.
203. "Convergent Approach to (*E*)-Alkene and Cyclopropane Peptide Isosteres." Wipf, P.; Xiao, J. *Org. Lett.* **2005**, *7*, 103-106.
202. "Dual Specificity Protein Phosphatases: Therapeutic Targets for Cancer and Alzheimer's Disease." Ducruet, A. P.; Vogt, A. Wipf, P.; Lazo, J. S. *Annu. Rev. Pharmacol. Toxicol.* **2005**, *45*, 725-750.
201. "Synthesis and Hetero-Michael Addition Reactions of 2-Alkynyl Oxazoles and Oxazolines." Wipf, P.; Graham, T. H. *Org. Biomol. Chem.* **2005**, *3*, 31-35.
200. "Asymmetric Total Syntheses of Tuberostemonine, Didehydrotuberostemonine and 13-Epituberostemonine." Wipf, P.; Rector, S. R. *J. Am. Chem. Soc.* **2005**, *127*, 225-235.
199. "New Antiestrogens from a Library Screen of Homoallylic Amines, Allylic Amines, and C-Cyclopropylalkylamines." Janjic, J. M.; Mu, Y.; Kendall, C.; Stephenson, C. R. J.; Balachandran, R.; Raccor, B. S.; Lu, Y.; Zhu, G.; Xie, W.; Wipf, P.; Day, B. W. *Bioorg. Med. Chem.* **2005**, *13*, 157-164.
198. "Total Synthesis of (-)-Disorazole C<sub>1</sub>." Wipf, P.; Graham, T. H. *J. Am. Chem. Soc.* **2004**, *126*, 15346-15347.

197. "Oxidative Spiroacetalizations and Spirolactonizations of Arenes." Rodriguez, S.; Wipf, P. *Synthesis* 2004, (17), 2767-2783.
196. "Small Molecule Modulators of Endogenous and Co-Chaperone-Stimulated Hsp70 ATPase Activity." Fewell, S. W.; Smith, C. M.; Lyon, M. A.; Dumitrescu, T. P.; Wipf, P.; Day, B. W.; Brodsky, J. L. *J. Biol. Chem.* 2004, 279, 51131-51140.
195. "Synthesis of the Tubuvaline-Tubuphenylalanine (Tuv-Tup) Fragment of Tubulysin." Wipf, P.; Takada, T.; Rishel, M. *J. Org. Lett.* 2004, 6, 4057-4060.
194. "Induction of Cdc25B Expression by Epidermal Growth Factor and Transforming Growth Factor- $\alpha$ ." Oguri, T.; Nemoto, K.; Bansal, P.; Wipf, P.; Lazo, J. S. *Biochem. Pharmacol.* 2004, 68, 2221-2227.
193. "A Practical Method for Oxazole Synthesis by Cycloisomerization of Propargyl Amides." Wipf, P.; Aoyama, Y.; Benedum, T. E. *Org. Lett.* 2004, 6, 3593-3595.
192. "Diversity-Oriented Synthesis of Azaspirocycles." Wipf, P.; Stephenson, C. R. J.; Walczak, M. A. A. *Org. Lett.* 2004, 6, 3009-3012.
191. "Synthesis and Biological Evaluation of Caulibugulones A-E." Wipf, P.; Joo, B; Nguyen, T.; Lazo, J. S. *Org. Biomol. Chem.* 2004, 2, 2173-2174.
190. "Synthesis and Biological Evaluation of Synthetic Viridins Derived from C(20)-Heteroalkylation of the Steroidal PI-3-Kinase Inhibitor Wortmannin." Wipf, P.; Minion, D. J.; Halter, R. J.; Berggren, M. I.; Ho, C. B.; Chiang, G. G.; Kirkpatrick, L.; Abraham, R.; Powis, G. *Org. Biomol. Chem.* 2004, 2, 1911-1920.
189. "Discovery and Characterization of Novel Small Molecule Inhibitors of Human Cdc25B Dual Specificity Phosphatase." Brisson, M.; Nguyen, T.; Vogt, A.; Yalovich, J.; Giorgianni, A.; Tobi, D.; Bahar, I.; Stephenson, C. R. J.; Wipf, P.; Lazo, J. S. *Mol. Pharm.* 2004, 66, 824-833.
188. "Molecular Pharmacology and Antitumor Activity of PX-866, a Novel Inhibitor of Phosphatidylinositol-3-kinase Signaling." Ihle, N. T.; Williams, R.; Chow, S.; Chew, W.; Paine-Murrieta, G.; Minion, D. J.; Halter, R. J.; Wipf, P.; Abraham, R.; Kirkpatrick, L.; Powis, G. *Mol. Cancer Therap.* 2004, 3, 763-772.
187. "Use of Deoxo-Fluor for Double Cyclization to Bis-Thiazolines. Limitations of this Agent for the Synthesis of Oxazolines." Scarone, L.; Sellanes, D.; Manta, E.; Wipf, P.; Serra, G. *Heterocycles* 2004, 63(4), 773-778.
186. "Chemistry and Biology of Curacin A." Wipf, P.; Day, B. W.; Reeves, J. T. *Current Pharm. Design* 2004, 10, 1417-1437.
185. "Natural Product Based Inhibitors of the Thioredoxin – Thioredoxin Reductase System." Wipf, P.; Lynch, S. M.; Birmingham, A.; Tamayo, G.; Jimenez, A.; Campos, N.; Powis, G. *Org. Biomol. Chem.* 2004, 2, 1651-1658.
184. "Microwave-Assisted Synthesis of Allylic Amines: Considerable Rate Acceleration in the Hydrozirconation-Transmetalation-Aldimine Addition Sequence." Wipf, P.; Janjic, J.; Stephenson, C. R. J. *Org. Biomol. Chem.* 2004, 2, 443-445.
183. "Scavenger Strategies in Organic Synthesis – Part II." Wipf, P.; Coleman, C. M. *Drug Discovery World* 2004, Spring issue, 65-71.
182. "Scavenger Strategies in Organic Synthesis – Part I." Wipf, P.; Coleman, C. M. *Drug Discovery World* 2004, Winter issue, 62-73.

181. "NAD(P)H:quinone Oxidoreductase-1 (NQO1)-Dependent and -Independent Cytotoxicity of Potent Quinone Cdc25 Phosphatase Inhibitors." Han, Y.; Shen, H.; Carr, B. I.; Wipf, P.; Lazo, J. S.; Pan, S. *J. Pharm. Exp. Ther.* **2004**, *309*, 64-70.
180. "Hydrozirconation and Its Applications." Wipf, P.; Kendall, C., In *Topics in Organometallic Chemistry. Metallocenes in Regio- and Stereoselective Synthesis* (Takahashi, T., Ed.), Springer Verlag: Heidelberg; Vol. 8, Chapter 1, p. 1-25; 2004.
179. "Selective Carbon-Carbon Bond Formations with Alkenylzirconocenes." Wipf, P.; Nunes, R. L. *Tetrahedron* (Symposium-in-Print No. 102 on Recent Advances in the Chemistry of Zirconocenes) **2004**, *60*, 1269-1279.
178. "Recent Advances in the Chemistry of Zirconocenes." Suzuki, K.; Wipf, P. *Tetrahedron* (Symposium-in-Print No. 102 on Recent Advances in the Chemistry of Zirconocenes) **2004**, *60*, 1267.
177. "Optical Rotation of Non-Covalent Aggregates." Goldsmith, M.-R.; Jayasuriya, N.; Beratan, D. N.; Wipf, P. *J. Am. Chem. Soc.* **2003**, *125*, 15696-15697.
176. "Transition Metal Mediated Cascade Reactions: C,C-Dicyclopropylmethylamines by Way of Double C,C- $\sigma$ -Bond Insertion into Bicyclobutanes." Wipf, P.; Stephenson, C. R. J.; Okumura, K. *J. Am. Chem. Soc.* **2003**, *125*, 14694-14695.
175. "Photoactivated Tungsten Hexacarbonyl-Catalyzed Conversion of Alkynols to Glycals." Wipf, P.; Graham, T. H. *J. Org. Chem.* **2003**, *68*, 8798-8807.
174. "Investigation of Ligand Loading and Asymmetric Amplification in CHAOx-Catalyzed Diethylzinc Additions." Wipf, P.; Pierce, J.; Wang, X. *Tetrahedron:Asymmetry* (Special Issue on Asymmetric Syntheses on a Process Scale) **2003**, *14*, 3605-3611.
173. "Cell-Active Dual Specificity Phosphatase Inhibitors Identified by High-Content Screening." Vogt, A.; Cooley, K. A.; Brisson, M.; Tarpley, M. G.; Wipf, P.; Lazo, J. S. *Chem. Biol.* **2003**, *10*, 733-742.
172. "Small Molecule Regulation of Phosphatase-Dependent Cell Signaling Pathways." Lazo, J. S.; Wipf, P. *Oncology Res.* **2003**, *13*, 347-352.
171. "Dimethylzinc-Mediated Addition of Alkenylzirconocenes to  $\alpha$ -Keto and  $\alpha$ -Imino Esters." Wipf, P.; Stephenson, C. R. *J. Org. Lett.* **2003**, *5*, 2449-2452.
170. "Structure Reassignment of the Fungal Metabolite TAEMC161 as the Phytotoxin Viridiol." Wipf, P.; Kerekes, A. D. *J. Nat. Prod.* **2003**, *66*, 716-718.
169. "Synthesis of Highly Oxygenated Dinaphthyl Ethers via S<sub>N</sub>Ar Reactions Promoted by Barton's Base." Wipf, P.; Lynch, S. M. *Org. Lett.* **2003**, *5*, 1155-1158.
168. "Dialkylzinc-Mediated Additions of Alkenylzirconocenes to Aldimines. New Methodologies for Allylic Amine and C-Cyclopropylalkylamine Syntheses." Wipf, P.; Kendall, C.; Stephenson, C. R. *J. Am. Chem. Soc.* **2003**, *125*, 761-768.
167. "On the Role of Chiral Catalysts in the Alkenyl Zirconocene/Zinc Addition to Aldehydes: A Study of Ligand Loading and Asymmetric Amplification." Wipf, P.; Jayasuriya, N.; Ribe, S. *Chirality* **2003**, *15*, 208-212.
166. "Total Synthesis of (-)-Tuberostemonine." Wipf, P.; Rector, S. R.; Takahashi, H. *J. Am. Chem. Soc.* **2002**, *124*, 14848-14849.
165. "Synthesis of Peptides Based on Aromatic Heterocycles." Miller, C. P.; Wipf, P., In *Synthesis of Peptides and Peptidomimetics* (Goodman, M.; Felix, A.; Moroder, L.; Toniolo,

- C., Eds.), *Houben-Weyl Methods of Organic Chemistry*, Thieme: New York, 2002; Vol. E22c, Chapter 11.2, pp 663-693.
164. "A Formal Total Synthesis of Leucascandrolide A." Wipf, P.; Reeves, J. T. *Chem. Commun.* 2002, 2066-2067.
163. "Parallel Synthesis of Oxazolines and Thiazolines by Tandem Condensation-Cyclodehydration of Carboxylic Acids with Amino Alcohols and Amino Thiols." Wipf, P.; Wang, X. *J. Comb. Chem.* 2002, 4, 656-660.
162. "Water-Accelerated Organometallic Chemistry: Alkyne Carboalumination - Sulfinimine Addition and Asymmetric Synthesis of Allylic Amines." Wipf, P.; Nunes, R. L.; Ribe, S. *Helv. Chim. Acta* (Special Issue Honoring D. Seebach) 2002, 85, 3478-3488.
161. "Dual Specificity Phosphatases as Targets for Antineoplastic Agents." Lyon, M. A.; Ducruet, A. P.; Wipf, P.; Lazo, J. S. *Nature Rev. Drug Discovery* 2002, 1, 961-976.
160. "Microbial and Chemical Transformation Studies of the Bioactive Marine Sesquiterpenes S-(+)-Curcuphenol and -Curcudiol Isolated from a Deep Reef Collection of the Jamaican Sponge *Didiscus oxeata*." El Sayed, K. A.; Yousaf, M.; Hamann, M. T.; Avery, M. A.; Kelly, M.; Wipf, P. *J. Nat. Prod.* 2002, 65, 1547-1553.
159. "Separation of Cdc25 Dual Specificity Phosphatase Inhibition and DNA Cleaving Activities in a Focused Library of Analogs of the Antitumor Antibiotic Dnacin." Wipf, P.; Hopkins, C. R.; Phillips, E. O.; Lazo, J. S. *Tetrahedron* (Special Issue Honoring Y. Kishi), 2002, 58, 6367-6372.
158. "Synthesis of the C(1)-C(18) Segment of Lophotoxin and Pukalide. Control of 2-Alkenylfuran (E/Z)-Configuration." Wipf, P.; Soth, M. *J. Org. Lett.* 2002, 4, 1787-1790.
157. "Novel Applications of Alkenyl Zirconocenes." Wipf, P.; Kendall, C. *Chem. Eur. J.* 2002, 8, 1778-1784.
156. "Synthetic Aspects of Combinatorial Chemistry." Wipf, P. *Pharm. News*, 2002, 9, 157-169.
155. "The Antisignaling Agent SC- $\alpha\alpha\delta 9$  is a Structurally Unique Phospholipid Analog with Phospholipase C Inhibitory Activity." Vogt, A.; Pestell, K. E.; Day, B. W.; Lazo, J. S.; Wipf, P. *Mol. Cancer Ther.* 2002, 1, 885-892.
154. "Water-Accelerated Claisen Rearrangements." Rodriguez, S.; Wipf, P. *Adv. Synth. Catal.* 2002, 344, 434-440.
153. "Synthesis and Biological Evaluation of Structurally Highly Modified Analogs of the Antimitotic Natural Product Curacin A." Wipf, P.; Reeves, J. T.; Balachandran, R.; Day, B. W. *J. Med. Chem.* 2002, 45, 1901-1917.
152. "A New Ligand Scaffold for Catalytic Asymmetric Alkylzinc Additions to Aldehydes." Wipf, P.; Wang, X. *Org. Lett.* 2002, 4, 1197-1200.
151. "Identification of a Potent and Selective Pharmacophore for Cdc25 Dual Specificity Phosphatase Inhibitors." Lazo, J. S.; Nemoto, K.; Pestell, K. E.; Cooley, K.; Southwick, E. C.; Mitchell, D. A.; Furey, W.; Gussio, R.; Zaharevitz, D. W.; Joo, B.; Wipf, P. *Mol. Pharm.* 2002, 61, 720-728.
150. "Total Synthesis of a Stereoisomer of Bistramide C and Assignment of Configuration of the Natural Product." Wipf, P.; Uto, Y.; Yoshimura, S. *Chem. Eur. J.* 2002, 8, 1670-1681.

149. "Optical Activity: From Structure-Function to Structure Prediction." Beratan, D. N.; Kondru, R. K.; Wipf, P. In "Chirality: Physical Chemistry" (Hicks, J. M., Ed.), ACS Symposium Series 810, Washington, DC., 2002; pp. 104-118.
148. "Glycosylation via  $\text{Cp}_2\text{ZrCl}_2/\text{AgClO}_4$ -Mediated Activation of Anomeric Sulfoxides." Wipf, P.; Reeves, J. T. *J. Org. Chem.* 2001, 66, 7910-7914.
147. "Discovery and Biological Evaluation of a New Family of Potent Inhibitors of the Dual Specificity Protein Phosphatase Cdc25." Lazo, J. S.; Aslan, D. C.; Southwick, E. C.; Cooley, K. A.; Ducruet, A. P.; Joo, B.; Vogt, A.; Wipf, P. *J. Med. Chem.* 2001, 44, 4042-4049.
146. "Determining Absolute Configuration in Flexible Molecules: A Case Study." Specht, K. M.; Nam, J.; Ho, D. M.; Berova, N.; Kondru, R. K.; Beratan, D. N.; Wipf, P.; Pascal, R. A.; Kahne, D. *J. Am. Chem. Soc.* 2001, 123, 8961-8966.
145. "Tandem Zirconocene Homologation – Aldimine Addition." Wipf, P.; Kendall, C. *Org. Lett.* 2001, 3, 2773-2776.
144. "New Inhibitors of the Thioredoxin – Thioredoxin Reductase System Based on a Naphthoquinone Spiroketal Natural Product Lead." Wipf, P.; Hopkins, T. D.; Jung, J.-K.; Rodriguez, S.; Birmingham, A.; Southwick, E. C.; Lazo, J. S.; Powis, G. *Bioorg. Med. Chem. Lett.* 2001, 11, 2637-2641.
143. "Three-Component Aldimine Addition – Cyclopropanation. An Efficient New Methodology for Amino Cyclopropane Synthesis." Wipf, P.; Kendall, C.; Stephenson, C. R. J. *J. Am. Chem. Soc.* 2001, 123, 5122-5123.
142. "Water-Accelerated Tandem Claisen Rearrangement – Catalytic Asymmetric Carboalumination." Wipf, P.; Ribe, S. *Org. Lett.* 2001, 3, 1503-1505.
141. "Synthetic Studies Toward Diazonamide A. A Novel Approach for Polyoxazole Synthesis." Wipf, P.; Methot, J.-L. *Org. Lett.* 2001, 3, 1261-1264.
140. "Synthesis of the  $\text{C}_{1'}\text{-}\text{C}_{11'}$  Segment of Leucascandrolide A." Wipf, P.; Graham, T. H. *J. Org. Chem.* 2001, 66, 3242-3245.
139. "Enantioselective Synthesis of the AB-Ring System of the Antitumor Antibiotic Tetrazomine." Wipf, P.; Hopkins, C. R. J. *Org. Chem.* 2001, 66, 3133-3139.
138. "Water-Accelerated Organic Transformations." Ribe, S.; Wipf, P. *Chem. Commun.* 2001, 299-307.
137. "Sulfonated Aminothiazoles as New Small Molecule Inhibitors of Protein Phosphatases." Wipf, P.; Aslan, D. C.; Southwick, E. C.; Lazo, J. S. *Bioorg. Med. Chem. Lett.*, 2001, 11, 313-317.
136. "Synthesis of Bicyclic Ortho Esters by Epoxy Ester Rearrangements and Study of Their Ring Opening Reactions." Wipf, P.; Aslan, D. K. *J. Org. Chem.* 2001, 66, 337-343.
135. "LC-NMR and LC-MS: Analysis of Six-Compound Mixtures of Analogs of the Antimitotic Marine Natural Product Curacin A." Wipf, P.; Reeves, J. T.; Wilkinson, P. S. *Bruker Report* 2001, 149, 22-24.
134. "Antimitotic Actions of a Novel Palmarumycin Analog." Lazo, J. S.; Tamura, K.; Vogt, A.; Jung, J.-K.; Rodríguez, S.; Balachandran, R.; Day, B. W.; Wipf, P. *J. Pharm. Exp. Ther.* 2001, 296, 364-371.
133. "New Peroxylactones from the Jamaican Sponge *Plakinastrella onkodes*, with Inhibitory Activity against the AIDS Opportunistic Parasitic Infection *Toxoplasma*

- gondii.*" Perry, T. L.; Dickerson, A.; Khan, A. A.; Kondru, R. K.; Beratan, B. N.; Wipf, P.; Kelly, M.; Hamann, M. T. *Tetrahedron* **2001**, *57*, 1483-1487.
132. "Synthesis and Biological Evaluation of Deoxypreussomerin A and Palmarumycin CP<sub>1</sub> and Related Naphthoquinone Spiroketals." Wipf, P.; Jung, J.-K.; Rodríguez, S.; Lazo, J. S. *Tetrahedron* **2001**, *57*, 283-296.
131. "Small Molecule Inhibitors of Dual Specificity Protein Phosphatases." Pestell, K. E.; Ducruet, A. P.; Wipf, P.; Lazo, J. S. *Oncogene* **2000**, *19*, 6607-6612.
130. "Total Synthesis and Stereochemical Revision of (+)-Aeruginosin 298-A." Wipf, P.; Methot, J.-L. *Org. Lett.* **2000**, *2*, 4213-4216.
129. "Diels-Alder Approaches to Ring-Functionalized Cyclic  $\beta$ -Amino Acids." Wipf, P.; Wang, X. *Tetrahedron Lett.* **2000**, *41*, 8747-8751.
128. "Solubilized Zirconocene Dihydride as a Promotor of Alkene Coupling Reactions." Wipf, P.; Wang, X. *Tetrahedron Lett.* **2000**, *41*, 8237-8241.
127. "Synthesis and Biological Evaluation of a Focused Mixture Library of Analogues of the Antimitotic Marine Natural Product Curacin A." Wipf, P.; Reeves, J. T.; Balachandran, R.; Giuliano, K. A.; Hamel, E.; Day, B. W. *J. Am. Chem. Soc.* **2000**, *122*, 9391-9395.
126. "Formal Total Synthesis of (+)-Diepoxin  $\sigma$ ." Wipf, P.; Jung, J.-K. *J. Org. Chem.* **2000**, *65*, 6319-6337.
125. "Synthesis of Cyclopeptide Alkaloids by Cyclooligomerization of Dipeptidyl Oxazolines." Wipf, P.; Miller, C. P.; Grant, C. M. *Tetrahedron* **2000**, *56*, 9143-9150.
124. "Water/MAO Acceleration of the Zirconocene-Catalyzed Asymmetric Methylalumination of  $\alpha$ -Olefins." Wipf, P.; Ribe, S. *Org. Lett.* **2000**, *2*, 1713-1716.
123. "Radical Cleavage of a  $\beta$ -Hydroxy Azide: A Reversal of Regioselectivity in the Oxidative Fragmentation of Hydroindoles." Wipf, P.; Mareska, D. A. *Tetrahedron Lett.* **2000**, *41*, 4723-4727.
122. "Chiral Action at a Distance: Remote Substituent Effects on the Optical Activity of Calyculins A and B." Kondru, R. K.; Beratan, D. N.; Friestad, G. K.; Smith, A. B.; Wipf, P. *Org. Lett.* **2000**, *2*, 1509-1512.
121. "Synthesis of Functionalized Oxazolines and Oxazoles with DAST and Deoxo-Fluor." Phillips, A. J.; Uto, Y.; Wipf, P.; Reno, M. J.; Williams, D. R. *Org. Lett.* **2000**, *2*, 1165-1168.
120. "Identification of New Cdc25 Dual Specificity Phosphatase Inhibitors in a Targeted Small Molecule Array." Ducruet, A. P.; Rice, R. L.; Tamura, K.; Yokokawa, F.; Yokokawa, S.; Wipf, P.; Lazo, J. S. *Bioorg. Med. Chem.* **2000**, *8*, 1451-1466.
119. "Combinatorial Chemistry and Contemporary Pharmacology." Lazo, J. S.; Wipf, P. *J. Pharm. Exp. Ther.* **2000**, *293*, 705-709.
118. "Optical Rotation Computation, Total Synthesis and Stereochemistry Assignment of the Marine Natural Product Pitiamide A." Ribe, S.; Kondru, R. K.; Beratan, D. N.; Wipf, P. *J. Am. Chem. Soc.* **2000**, *122*, 4608-4617.
117. "*In vivo* Antitumor Activity and Induction of Insulin-like Growth Factor-1 Resistant Apoptosis by SC- $\alpha\alpha\delta 9$ ." Vogt, A.; Wang, A. S.; Johnson, C. S.; Fabisiak, J. P.; Wipf, P.; Lazo, J. S. *J. Pharm. Exp. Ther.* **2000**, *292*, 530-537.

116. "Total Synthesis and Revision of Stereochemistry of the Marine Metabolite Trunkamide A." Wipf, P.; Uto, Y. *J. Org. Chem.* **2000**, *65*, 1037-1049.
115. "Synthesis and Biological Evaluation of a Targeted Library of Protein Phosphatase Inhibitors." Wipf, P.; Luci, D. K.; Aslan, D. C.; Southwick, E.; Lazo, J. S. *Biotechnol. Bioeng. (Comb. Chem.)* **2000**, *71*, 58-70.
114. "Determination of the Absolute Configuration of 1,3,5,7-Tetramethyl-1,3-dihydroindol-2-one by Optical Rotation Computation." Kondru, R. K.; Chen, C. H.-T.; Curran, D. P.; Beratan, D. N.; Wipf, P. *Tetrahedron: Asymmetry* **1999**, *10*, 4143-4150.
113. "Silver(I)-Catalyzed Addition of Zirconocenes to Epoxy Esters: A New Entry to 1,4-Dicarbonyl Compounds and Pyridazinones." Wipf, P.; Methot, J.-L. *Org. Lett.* **1999**, *1*, 1253-1255.
112. "Efficient Synthesis of 1,4-Dihydro-2H-Isoquinoline-3,5,8-Triones via Cyclobutene Ring Expansion." Wipf, P.; Hopkins, C. R. *J. Org. Chem.* **1999**, *64*, 6881-6887.
111. "Synthesis and Applications of Fluorous Silyl Protective Groups with Improved Acid Stability." Röver, S.; Wipf, P. *Tetrahedron Lett.* **1999**, *40*, 5667.
110. "Total Synthesis of the Putative Structure of the Marine Metabolite Trunkamide A." Wipf, P.; Uto, Y. *Tetrahedron Lett.* **1999**, *40*, 5165.
109. "Synthesis and Applications of a Highly Fluorous Alkoxy Ethyl Ether Protective Group." Wipf, P.; Reeves, J. T. *Tetrahedron Lett.* **1999**, *40*, 5139.
108. "Synthesis and Applications of a Fluorous THP Protective Group." Wipf, P.; Reeves, J. T. *Tetrahedron Lett.* **1999**, *40*, 4649.
107. "Enantioselective Synthesis and Photoracemization Studies of (+)-2-Cyclopropyl-7,8-dimethoxy-2H-chromene-5-carboxylic Acid Methyl Ester, an Advanced Intermediate of a Dihydrofolate Reductase Inhibitor." Wipf, P.; Weiner, W. S. *J. Org. Chem.* **1999**, *64*, 5321-5324.
106. "Dual G1 and G2/M Phase Inhibition by SC- $\alpha\alpha\delta 9$ , a Combinatorially Derived Cdc25 Phosphatase Inhibitor." Tamura, K.; Rice, R. L.; Wipf, P.; Lazo, J. S. *Oncogene* **1999**, *18*, 6989-6996.
105. "Structural and Conformational Dependence of Optical Rotation Angles." Kondru, R. K.; Wipf, P.; Beratan, D. N. *J. Phys. Chem.* **1999**, *103*, 6603-6611.
104. "Total Synthesis of ( $\pm$ )-Nisamycin." Wipf, P.; Coish, P. D. G. *J. Org. Chem.* **1999**, *64*, 5053-5061.
103. "Synthetic Applications of Ortho Esters." Wipf, P.; Tsuchimoto, T.; Takahashi, H. *Pure Appl. Chem.* **1999**, *71*, 415-421.
102. "Formation of Nine-Membered Lactams by Oxidative Fragmentation of 4-Hydroxyhydroindoles: A Biomimetic Approach Toward the Tuberostemonone Ring System?" Wipf, P.; Li, W. *J. Org. Chem.* **1999**, *64*, 4576-4577.
101. "Nucleophilic Additions to 4,4-disubstituted 2,5-Cyclohexadienones: Can Dipole-Effects Control Facial Selectivity?" Wipf, P.; Jung, J.-K. *Chem. Rev.* **1999**, *99*, 1469-1480.
100. "Total Synthesis of the Spiroketal Naphthoquinone ( $\pm$ )-Diepoxin  $\sigma$ ." Wipf, P.; Jung, J.-K. *J. Org. Chem.* **1999**, *64*, 1092.
99. "(E)-Alkene Peptide Bond Isosteres by Cuprate Opening of Vinyl Aziridines." Henninger, T.; Wipf, P. In "Methods in Molecular Medicine v. 23: Peptidomimetics

- Protocols", (Kazmierski, W. M., Ed.), Humana Press, Totowa, NJ, 1999; Chapter 8, p. 125-136.
- 98. "Atomic Contributions to the Optical Rotation Angle as a Quantitative Probe of Molecular Chirality." Kondru, R. K.; Wipf, P.; Beratan, D. N. *Science* **1998**, 282, 2247.
  - 97. "A General Strategy For Five-Membered Heterocycle Synthesis by Cycloelimination of Alkynyl Ketones, Amides, and Thioamides." Wipf, P.; Rahman, L. T.; Rector, S. R. *J. Org. Chem.* **1998**, 63, 7132.
  - 96. "Zirconocene-Zinc Transmetalation and In Situ Catalytic Asymmetric Addition to Aldehydes." Wipf, P.; Ribe, S. *J. Org. Chem.* **1998**, 63, 6454.
  - 95. "Methyl- and Trifluoromethyl Alkene Peptide Isosteres: Synthesis and Evaluation of their Potential as  $\beta$ -Turn Promoters and Peptide Mimetics." Wipf, P.; Henninger, T. C.; Geib, S. *J. Org. Chem.* **1998**, 63, 6088.
  - 94. "Disruption of IGF-1 Signaling and Downregulation of Cdc2 by SC- $\alpha\alpha\delta 9$ , a Novel Small Molecule Antisignaling Agent Identified in a Targeted Array Library." Vogt, A.; Rice, R. R.; Settineri, C. E.; Yokokawa, F.; Yokokawa, S.; Wipf, P.; Lazo, J. S. *J. Pharmacol. Exp. Ther.* **1998**, 287, 806.
  - 93. "Total Synthesis of Palmarumycin CP<sub>1</sub> and ( $\pm$ )-Deoxypreussomerin A." Wipf, P.; Jung, J.-K. *J. Org. Chem.* **1998**, 63, 3530.
  - 92. "Synthesis of Oxazines and Thiazines by Cyclodehydration of Hydroxy Amides and Thioamides." Wipf, P.; Hayes, G. B. *Tetrahedron* **1998**, 54, 6987.
  - 91. "Synthetic Studies Toward Diazonamide A. Preparation of the Benzofuranone-Indolyloxazole Fragment." Wipf, P.; Yokokawa, F. *Tetrahedron Lett.* **1998**, 39, 2223.
  - 90. "Thiophilic Ring-Opening and Rearrangement Reactions of Epoxyketone Natural Products." Wipf, P.; Jeger, P.; Kim, Y. *Bioorg. Med. Chem. Lett.* **1998**, 8, 351.
  - 89. "Theory Assisted Determination of Absolute Stereochemistry for Complex Natural Products via Computation of Molar Rotation Angles." Kondru, R. K.; Wipf, P.; Beratan, D. N. *J. Am. Chem. Soc.* **1998**, 120, 2204.
  - 88. "Kinetic vs. Thermodynamic Control in Hydrozirconation Reactions." Wipf, P.; Takahashi, H.; Zhuang, N. *Pure Appl. Chem.* **1998**, 70, 1077.
  - 87. "Conformational Studies and Structure-Activity Analysis of Lissoclinamide 7 and Related Cyclopeptide Alkaloids." Wipf, P.; Fritch, P. C.; Geib, S. J.; Sefler, A. M. *J. Am. Chem. Soc.* **1998**, 120, 4105.
  - 86. "Synthesis and Structure-Activity Studies of Lissoclinium Peptide Alkaloids." Wipf, P. In "Alkaloids: Chemical and Biological Perspectives", (Pelletier, S. W., Ed.), Pergamon, New York, 1998; Chapter 3, p. 187-228.
  - 85. "Organozirconocene-Mediated Polyene Synthesis: Preparation of Asukamycin and Manumycin A Side Chains." Wipf, P.; Coish, P. D. G. *Tetrahedron Lett.* **1997**, 38, 5073-6.
  - 84. "Synthetic and Model Computational Studies of Molar Rotation Additivity for Interacting Chiral Centers. A Reinvestigation of van't Hoff's Principle." Kondru, R. K.; Lim, S.; Wipf, P.; Beratan, D. N. *Chirality* (Special Issue Honoring K. Nakanishi) **1997**, 9, 469-77.
  - 83. "A Targeted Library of Small Molecule, Tyrosine and Dual Specificity Phosphatase Inhibitors Derived from a Rational Core Design and Random Side Chain Variation."

- Rice, R. L.; Rusnak, J. M.; Yokokawa, F.; Yokokawa, S.; Messner, D. J.; Boynton, A. L.; Wipf, P.; Lazo, J. S. *Biochemistry* **1997**, *36*, 15965-74.
82. "Long-Range Electrostatic Effects in Synthesis. Dipole-Controlled Nucleophilic Addition to a Naphthoquinone Acetal in Model Studies toward Diepoxin  $\sigma$ ." Wipf, P.; Jung, J.-K. *Angew. Chem. Int. Ed. Engl.* **1997**, *36*, 764-7; *Angew. Chem.* **1997**, *109*, 785-8.
81. "Fluorous Synthesis: Fluorous Protocols for the Biginelli and Ugi Multi-Component Condensations." Studer, A.; Jeger, P.; Wipf, P.; Curran, D. P. *J. Org. Chem.* **1997**, *62*, 2917-24.
80. "2-Trimethylsilylethanesulfonyl Chloride (SES-Cl)." Weinreb, S. M.; Chase, C. E.; Wipf, P.; Venkatraman, S. *Org. Synth.* **1998**, *75*, 161.
79. "Synthetic Applications of Organozirconocenes." Wipf, P.; Xu, W.; Takahashi, H.; Jahn, H.; Coish, P. D. G. *Pure Appl. Chem.* **1997**, *69*, 639.
78. "Zirconocene-Catalyzed Epoxy Ester - Ortho Ester Rearrangement: A New Method For the Protection of Polyfunctionalized Carboxylic Acids and the Asymmetric Synthesis of Ortho Esters." Wipf, P.; Xu, W.; Kim, H.; Takahashi, H. *Tetrahedron* **1997**, *53*, 16575-96.
77. "Solid-Phase Synthesis of Peptide Mimetics with (E)-Alkene Amide Bond Replacements Derived from Alkenyl Aziridines." Wipf, P.; Henninger, T. *J. Org. Chem.* **1997**, *62*, 1586.
76. "From Aziridines to Oxazolines and Thiazolines: The Heterocyclic Route to Thiangazole." Wipf, P.; Venkatraman, S. *Synlett* **1997**, 1-10.
75. "Combinatorial Synthesis and Biological Evaluation of a Library of Small-Molecule Ser/Thr-Protein Phosphatase Inhibitors." Wipf, P.; Cunningham, A.; Rice, R. L.; Lazo, J. *Bioorg. Med. Chem.* **1997**, *5*, 165.
74. "Fluorous Synthesis: A Fluorous-Phase Strategy for Improving Separation Efficiency in Organic Synthesis." Studer, A.; Hadida, S.; Ferritto, R.; Kim, S.-Y.; Jeger, P.; Wipf, P.; Curran, D. P. *Science* **1997**, *275*, 823-826.
73. "Allylic Alcohols by Alkene Transfer from Zirconium to Zinc: Synthesis of 1-(Tert-Butyl-diphenyl-silyloxy)-dec-3-en-5-ol." Wipf, P.; Xu, W. *Org. Synth.* **1997**, *74*, 205-11.
72. "Copper(I)-Catalyzed Asymmetric Conjugate Addition of Organozirconocenes to N-Acyl Oxazolidinones." Wipf, P.; Takahashi, H. *J. Chem. Soc. Chem. Commun.* **1996**, 2675-6.
71. "Total Synthesis and Assignment of Configuration of Lissoclinamide 7." Wipf, P.; Fritch, P. C. *J. Am. Chem. Soc.* **1996**, *118*, 12358-67.
70. "A New Thiazole Synthesis by Cyclocondensation of Thioamides and Alkynyl(Aryl)Iodonium Reagents." Wipf, P.; Venkatraman, S. *J. Org. Chem.* **1996**, *61*, 8004.
69. "Total Synthesis of the Antimitotic Marine Natural Product (+)-Curacin A." Wipf, P.; Xu, W. *J. Org. Chem.* **1996**, *61*, 6556.
68. "Synthetic Applications of Organochlorozirconocene Complexes." Wipf, P.; Jahn, H. *Tetrahedron* **1996**, *52*, 12853-12910.
67. "Total Synthesis of (-)-Muscoride A." Wipf, P.; Venkatraman, S. *J. Org. Chem.* **1996**, *61*, 6517.
66. "An Improved Protocol for Azole Synthesis with PEG-Supported Burgess Reagent." Wipf, P.; Venkatraman, S. *Tetrahedron Lett.* **1996**, *37*, 4659.

65. "Studies Toward the Synthesis of *Stemona* Alkaloids; A Short Synthesis of the Tricyclic Core of Tuberostemonines." Goldstein, D. M.; Wipf, P. *Tetrahedron Lett.* **1996**, 37, 739-742.
64. "Synthesis of Chemoreversible Prodrugs of Ara-C with Variable Time-Release Profiles. Biological Evaluation of their Apoptotic Activity." Wipf, P.; Li, W.; Adeyey, C. M.; Rusnak, J. M.; Lazo, J. *Bioorg. Med. Chem.* **1996**, 4, 1585-96.
63. "Total Synthesis and Structural Studies of the Antiviral Marine Natural Product Hennoxazole A." Wipf, P.; Lim, S. *Chimia* **1996**, 50, 157.
62. "Cytotoxicity and Apoptosis in Human Breast Carcinoma Cells Induced by Calyculin A and Combinatorially-Derived Analogs." Rice, R. L.; Wipf, P.; Cunningham, A.; Lazo, J. S. *Proc. Amer. Assoc. Cancer Res.* **1996**, 37, 2896.
61. "1-Methoxy-1-(trimethylsilyloxy)propene." Wipf, P.; Wright, D.; McMills, M. C. *Encyclopedia of Reagents for Organic Synthesis (EROS)* **1995**, 3402-3405 (vol. 5).
60. "Synthesis of (-)-LL-C10037 $\alpha$  and Related Manumycin-Type Epoxyquinols." Wipf, P.; Kim, Y.; Jahn, H. *Synthesis* **1995**, 1549.
59. "A Solid Phase Protocol of the Biginelli Dihydropyrimidine Synthesis Suitable for Combinatorial Chemistry." Wipf, P.; Cunningham, A. *Tetrahedron Lett.* **1995**, 36, 7819.
58. "Asymmetric Total Synthesis of the *Stemona* Alkaloid (-)-Stenine." Wipf, P.; Kim, Y.; Goldstein, D. M. *J. Am. Chem. Soc.* **1995**, 117, 11106-11112.
57. "Synthetic Studies of Biologically Active Marine Cyclopeptides." Wipf, P. *Chem. Rev.* **1995**, 95, 2115.
56. "Total Synthesis of (-)-Thiangazole and Structurally Related Polyazoles." Wipf, P.; Venkatraman, S. *J. Org. Chem.* **1995**, 60, 7224.
55. "Thiolysis of Oxazolines: A New, Selective Method for the Direct Conversion of Peptide Oxazolines into Thiazolines." Wipf, P.; Venkatraman, S.; Fritch, P. C.; Miller, C. P. *Tetrahedron Lett.* **1995**, 36, 6395.
54. "A New Synthesis of  $\alpha$ -Methylserine by Nucleophilic Ring-Opening of N-Sulfonyl Aziridines." Wipf, P.; Venkatraman, S.; Miller, C. P. *Tetrahedron Lett.* **1995**, 36, 3639.
53. "Total Synthesis of the Enantiomer of the Antiviral Marine Natural Product Hennoxazole A." Wipf, P.; Lim, S. *J. Am. Chem. Soc.* **1995**, 117, 558.
52. "Zirconocene-Catalyzed Cationic Diels-Alder Reactions." Wipf, P.; Xu, W. *Tetrahedron* **1995**, 51, 4551-4562.
51. " $\pi$ -Facial Selectivity in Nucleophilic Additions to 4,4-Disubstituted Dienones - Experimental Support for Electrostatic Control." Wipf, P.; Kim, Y. *J. Am. Chem. Soc.* **1994**, 116, 11678.
50. "Synthesis of Peptide Thiazolines from  $\beta$ -Hydroxythioamides. An Investigation of Racemization in Cyclodehydration Protocols." Wipf, P.; Fritch, P. C. *Tetrahedron Lett.* **1994**, 35, 5397.
49. " $S_N2'$ -Reactions of Peptide Aziridines. A Cuprate Based Approach to (*E*)-Alkene Isosteres." Wipf, P.; Fritch, P. C. *J. Org. Chem.* **1994**, 59, 4875.
48. "Preparation of Allylic Alcohols by Alkene Transfer from Zirconium to Zinc." Wipf, P.; Xu, W. *Tetrahedron Lett.* **1994**, 35, 5197.

47. "Synthesis of the Antitumor Antibiotic LL-C10037 $\alpha$ ." Wipf, P.; Kim, Y. *J. Org. Chem.* **1994**, 59, 3518.
46. "Metal Complexes of Marine Peptide Metabolites. A Novel Ag<sub>4</sub> Cluster." Wipf, P.; Venkatraman, S.; Miller, C. P.; Geib, S. J. *Angew. Chem. Int. Ed. Engl.* **1994**, 33, 1516; *Angew. Chem.* **1994**, 106, 1554.
45. "Prodrugs of Ara-C." Wipf, P.; Li, W. *Drugs of the Future* **1994**, 19, 49.
44. "Copper-Catalyzed Conjugate Additions of Organozirconocenes. Synthetic and Mechanistic Studies." Wipf, P.; Xu, W.; Smitrovich, J. H.; Venanzi, L. M.; Lehmann, R. *Tetrahedron* **1994**, 50, 1935.
43. "Total Synthesis and Structure Assignment of the Antitumor Antibiotic Aranorosin." Wipf, P.; Kim, Y.; Fritch, P. C. *J. Org. Chem.* **1993**, 58, 7195.
42. "Addition of Organochromium Reagents to Aldehydes, Ketones, and Enones: A Low-Temperature Version of the Nozaki-Hiyama Reaction." Wipf, P.; Lim, S. *J. Chem. Soc., Chem. Commun.* **1993**, 1654.
41. "Synthesis and Reactivity of Dioxycarbenium Ions from Epoxy Esters and Cationic Zirconium Complexes." Wipf, P.; Xu, W. *J. Org. Chem.* **1993**, 58, 5880-5882.
40. "Total Synthesis of Cyclotheonamide A." Wipf, P.; Kim, H. *J. Org. Chem.* **1993**, 58, 5592.
39. "A New Synthesis of Highly Functionalized Oxazoles." Wipf, P.; Miller, C. P. *J. Org. Chem.* **1993**, 58, 3604.
38. "Transmetalation Reactions of Organosamarium Reagents. Chlorosilane-Accelerated Copper-Catalyzed Conjugate Additions." Wipf, P.; Venkatraman, S. *J. Org. Chem.* **1993**, 58, 3455.
37. "Rapid Carboalumination of Alkynes in the Presence of Water." Wipf, P.; Lim, S. *Angew. Chem. Int. Ed. Engl.* **1993**, 32, 1068; *Angew. Chem.* **1993**, 105, 1095.
36. "Stereoselective Synthesis of the Functionalized Spirocyclic Core of Aranorosin." Wipf, P.; Kim, Y. *J. Org. Chem.* **1993**, 58, 1649; *J. Org. Chem.* **1993**, 58, 4774.
35. "Stereospecific Synthesis of Peptides Analogs with *allo*-Threonine and D-*allo*-Threonine Residues." Wipf, P.; Miller, C. P. *J. Org. Chem.* **1993**, 58, 1575.
34. "Transmetalation Reactions in Organocupper Chemistry." Wipf, P. *Synthesis* **1993**, 537-557.
33. "Organozirconocenes in Organic Synthesis: Tandem Epoxide Rearrangement - Carbonyl Addition." Wipf, P.; Xu, W. *J. Org. Chem.* **1993**, 58, 825-826.
32. "Total Synthesis of Westiellamide." Wipf, P.; Miller, C. P. *J. Am. Chem. Soc.* **1992**, 114, 10975.
31. "An Investigation of the Mitsunobu Reaction in the Preparation of Peptide Oxazolines, Thiazolines, and Aziridines." Wipf, P.; Miller, C. P. *Tetrahedron Lett.* **1992**, 33, 6267.
30. "Transmetalation Reactions of Organozirconocenes: A General, Selective, and Facile Synthesis of Ketones from Acid Chlorides." Wipf, P.; Xu, W. *Synlett* **1992**, 718.
29. "Studies on the Synthesis of *Stemona* Alkaloids; Stereoselective Preparation of the Hydroindole Ring System by Oxidative Cyclization of Tyrosine." Wipf, P.; Kim, Y. *Tetrahedron Lett.* **1992**, 33, 5477.

28. "An Approach Toward the Total Synthesis of Cyclotheonamides; Preparation of a C(1) to N(14) Segment." Wipf, P.; Kim, H.-Y. *Tetrahedron Lett.* **1992**, 33, 4275.
27. "Transmetalation Reactions of Alkenylalanes: Copper-Catalyzed Conjugate Addition to Enones." Wipf, P.; Smitrovich, J. H.; Moon, C.-W. *J. Org. Chem.* **1992**, 57, 3178."
26. "Conjugate Addition Reactions of Organosamarium Species via *in situ* Transmetalation to Cu(I) Salts." Totleben, M. J.; Curran, D. P.; Wipf, P. *J. Org. Chem.* **1992**, 57, 1740.
25. "A Short, Stereospecific Synthesis of Dihydrooxazoles from Serine and Threonine Derivatives." Wipf, P.; Miller, C. P. *Tetrahedron Lett.* **1992**, 33, 907.
24. "Claisen Rearrangements." Wipf, P., in 'Comprehensive Organic Synthesis', (Trost, B. M., Fleming, I.; Eds.), Pergamon Press, Oxford 1991; Vol. 5 (Paquette, L. A.; Ed.), Chapter 7.2.
23. "Synthesis of Chemoreversible Prodrugs of Ara-C." Wipf, P.; Li, W.; Sekhar, V. *Biomed. Chem. Lett.* **1991**, 1, 745.
22. "Transmetalation Reactions of Alkylzirconocenes: Copper-Catalyzed Conjugate Addition to Enones." Wipf, P.; Smitrovich, J. H. *J. Org. Chem.* **1991**, 56, 6494.
21. "Stereochemical Control in the Ester Enolate Claisen Rearrangement. Part II. Chair-vs. Boatlike Transition State Selection." Ireland, R. E.; Wipf, P.; Xiang, J. N. *J. Org. Chem.* **1991**, 56, 3572.
20. "Stereochemical Control in the Ester Enolate Claisen Rearrangement. Part I. Stereoselectivity in Silyl Ketene Acetal Formation." Ireland, R. E.; Wipf, P.; Armstrong, J. D. *J. Org. Chem.* **1991**, 56, 650.
19. "The Use of a Masked Aldol Unit in the Synthesis of the Right Side of FK-506." Ireland, R. E.; Wipf, P.; Roper, T. D. *J. Org. Chem.* **1990**, 55, 2284.
18. "Carboalumination of 1-Alkynes and *in Situ* Transmetalation to Higher Order Cyanocuprates. Stereospecific Synthesis of Tri- and Disubstituted Olefins by Conjugate Addition to Enones." Ireland, R. E.; Wipf, P. *J. Org. Chem.* **1990**, 55, 1425.
17. "Methodology for Enantioselective Synthesis of Aldols and Other 1,3-Dioxygenated Systems." Ireland, R. E.; Wipf, P.; Miltz, W.; Vanasse, B. *J. Org. Chem.* **1990**, 55, 1423.
16. "Synthesis of Peptides containing  $\alpha,\alpha$ -Disubstituted  $\alpha$ -Amino Acids by the Azirine/Oxazolone Method: The (12-20)-Nonapeptide of the Ionophore Alamethicin." Wipf, P.; Heimgartner, H. *Helv. Chim. Acta* **1990**, 73, 13.
15. "Radical Cyclizations of Alkenyl-substituted 4,5-Dihydro-1,3-thiazole-5-thiols." Jenny, C.; Wipf, P.; Heimgartner, H. *Helv. Chim. Acta* **1989**, 72, 838.
14. "3-Amino-2H-azirines in the Synthesis of Peptides: Tetrapeptides with  $\alpha,\alpha$ -Disubstituted  $\alpha$ -Amino Acids." Sahebi, M.; Wipf, P.; Heimgartner, H. *Tetrahedron* **1989**, 45, 2999.
13. "Studies Directed Towards the Total Synthesis of FK-506; Preparation of a C(1) to C(15) Segment." Ireland, R. E.; Wipf, P. *Tetrahedron Lett.* **1989**, 30, 919.
12. "Thermal Generation and Reactions of (Benzylthio)- and (Arylthio)-Substituted Nitrile Ylids." Wipf, P.; Prewo, R.; Bieri, J. H.; Germain, G.; Heimgartner, H. *Helv. Chim. Acta* **1988**, 71, 1177.

11. "Conformational Analysis of Tripeptide Models: The Influence of  $\alpha,\alpha$ -Disubstituted  $\alpha$ -Amino Acids on Secondary Structure. Part II. Results from X-Ray and Conformational Energy Calculations." Wipf, P.; Kunz, R. W.; Prewo, R.; Heimgartner, H. *Helv. Chim. Acta* **1988**, 71, 268.
10. "Conformational Analysis of Tripeptide Models: The Influence of  $\alpha,\alpha$ -Disubstituted  $\alpha$ -Amino Acids on Secondary Structure. Part I. Results from NMR and CD Investigation." Wipf, P.; Heimgartner, H. *Helv. Chim. Acta* **1988**, 71, 258.
9. "The Azirine/Oxazolone Method in Peptide Chemistry: Synthesis of Tripeptide Models." Wipf, P.; Heimgartner, H. *Helv. Chim. Acta* **1988**, 71, 140.
8. "Synthesis of 4-(Benzylthio)- and 4-(Arylthio)-1,3-oxazole-5(2H)-ones." Wipf, P.; Prewo, R.; Bieri, J. H.; Heimgartner, H.; Nastopoulos, V.; Germain, G. *Helv. Chim. Acta* **1987**, 70, 1380.
7. "2,4-Bis(4-methylphenylthio)-1,3,2 $\lambda$ 5,4 $\lambda$ 5-dithiadiphosphetane-2,4-dithione: A New Reagent for the Thiation of N,N-Disubstituted Amides." Wipf, P.; Jenny, C.; Heimgartner, H. *Helv. Chim. Acta* **1987**, 70, 1001.
6. "Formation of Tricyclic Thietane Derivatives via Intramolecular (2+2) Cycloaddition." Wipf, P.; Heimgartner, H. *Helv. Chim. Acta* **1987**, 70, 992.
5. "Selective Amide Cleavage in Peptides Containing  $\alpha,\alpha$ -Disubstituted  $\alpha$ -Amino Acids." Wipf, P.; Heimgartner, H. *Helv. Chim. Acta* **1987**, 70, 354.
4. "Carbophilic Additions of Organocuprates and 1,3-Thiazole-5(4H)-thiones." Jenny, C.; Wipf, P.; Heimgartner, H. *Helv. Chim. Acta* **1986**, 69, 1837.
3. "Peptide-Bond Formation with C-Terminal  $\alpha,\alpha$ -Disubstituted  $\alpha$ -Amino Acids via intermediate Oxazole-5(4H)-ones." Wipf, P.; Heimgartner, H. *Helv. Chim. Acta* **1986**, 69, 1153.
2. "Arylthio-Substituted Nitrile Ylids by Thermolysis of 4-Arylthio-3-oxazoline-5-ones." Wipf, P.; Heimgartner, H. *Chimia* **1984**, 38(10), 357.
1. "Synthesis of 4-Arylthio-3-oxazoline-5-ones." Wipf, P.; Heimgartner, H. *Tetrahedron Lett.* **1984**, 25, 5127.

## BOOKS

2. "Organic Syntheses Vol. 87." Wipf, P., Ed.; Organic Syntheses, Inc., 2011.
1. "Handbook of Reagents for Organic Synthesis: Reagents for High-Throughput Solid-Phase and Solution-Phase Organic Synthesis." Wipf, P., Ed.; J. Wiley & Sons, Ltd., Chichester, 2005.

## PATENTS

37. "WO 2014189830. "Calcium Channel Agonists." Wipf, P.; Meriney, S. D.; Liang, M.; issued/filed dates: November 27, 2014/May 19, 2014.
36. "WO 2014179592. "Tetrahydroisoquinolines as Selective NADPH Oxidase 2 Inhibitors." Pagano, P. J.; Wipf, P.; Cifuentes-Pagano, M. E.; Skoda, E. M.; issued/filed dates: November 6, 2014/May 1, 2014.

35. "**WO 2014138121. Prosthetic Implant for Medialization Thyroplasty.**" Jaber, J. J.; Charous, S.; Wipf, P.; Siviy, C.; Chambers, A. J.; issued / filed dates: September 12, 2014 / March 4, 2014.
34. "**WO 2014093631. Formulations and Carrier Systems Including Compound Interactive Domains.**" Gao, X.; Li, S.; Wipf, P.; Epperly, M. W.; Greenberger, J. S.; issued / filed dates: June 19, 2014 / December 12, 2013.
33. "**WO 2013059651. Bifunctional compounds.**" Wipf, P.; Greenberger, J. S.; Wayne, M. W.; Sprachman, M. M.; Goff, J.; issued / filed dates: April 25, 2013 / October 19, 2012.
32. "**WO 2013055793. Small Molecules Targeting Androgen Receptor Nuclear Localization and/or Level in Prostate Cancer.**" Wang, Z.; Nelson, J. B.; Nguyen, M. M. B.; Lazo, J. S.; Johnston, P. A.; Wipf, P.; issued / filed dates: April 18, 2013 / October 10, 2012.
31. "**WO 2013007792. Novel Th2 Polarizing Compounds.**" Groettrup, M.; Wipf, P.; Mueller, M.; Pierce, J.; issued / filed dates: January 17, 2013 / July 12, 2012.
30. "**WO 2012116254. Chrysophaeintin Analogs that Inhibit Ftsz Protein.**" Bewley, C. A.; Wipf, P.; issued / filed dates: August 30, 2012 / February 24, 2012.
29. "**WO 2012112851. Targeted Nitroxide Agents.**" Wipf, P.; Frantz, M. C.; issued / filed dates: August 23, 2012 / February 17, 2012.
28. "**US 20120207687. Topical Formulations of Targeted Nitroxide Agents.**" Falo, L. D.; Greenberger, J. S.; Wipf, P.; issued / filed dates: August 16, 2012 / January 12, 2012.
27. "**WO 2012078859. Protein Kinase D Inhibitors.**" Wipf, P.; Wang, Q. J.; issued / filed dates: June 14, 2012 / December 8, 2011.
26. "**WO 2012068081. Intraesophageal Administration of Targeted Nitroxide Agents for Protection Against Ionizing Irradiation-Induced Esophagitis.**" Epperly, M. W.; Gao, X.; Greenberger, J. S.; Song, L.; Wipf, P.; issued / filed dates: May 24, 2012 / November 15, 2011.
25. "**WO 2012040719. Novel Tlr4 Inhibitors for the Treatment of Human Infectious and Inflammatory Disorders.**" Wipf, P.; Neal, M. D.; Sodhi, C. P.; Hackam, D. J.; issued / filed dates: March 29, 2012 / September 26, 2011.
24. "**WO 2010009327. Compounds for the Treatment of Pathologies Associated with Aging and Degenerative Disorders.**" Niedernhofer, L. J.; Robbins, P. D.; Wipf, P.; issued / filed dates: January 21, 2010 / July 16, 2009.
23. "**WO 2010009389. Use of Targeted Nitroxide Agents in Preventing, Mitigating and Treating Radiation Injury.**" Wipf, P.; Belikova, N. A.; Jiang, J.; Greenberger, J. S.; Pierce, J. G.; Epperly, M.; issued / filed dates: January 21, 2010 / July 17, 2009.
22. "**WO 2010009405. Targeted Nitroxide Agents.**" Wipf, P.; Frantz, M. C.; issued / filed dates: January 21, 2010 / July 17, 2009.
21. "**US 2009,042808. Use of Mitochondria-targeted Electron Scavengers as Anti-inflammatory Agents.**" Fink, M. P.; Wipf, P.; issued / filed dates: February 12, 2009 / August 8, 2008.
20. "**WO 2008106080. Synthesis of N14-Desacetoxytubulysin H and Analogs via Acylation Reactions as Antiproliferative, Especially Antitumor Agents.**" Wipf, P.; Wang, Z.; issued / filed dates: September 9, 2008 / February 2, 2008.

19. "**US 2007,161544. Selective Targeting Agents for Mitochondria; Continuation in Part of U.S. Ser. No. 465,162.**" Wipf, P.; Xiao, J.; Fink, M. P.; Kagan, V. E.; Tyurina, Y. Y.; issued/ filed dates: July 12, 2007 / August 17, 2006.
18. "**US 2007,161573. Selective Targeting Agents for Mitochondria.**" Wipf, P.; Xiao, J.; Fink, M. P.; Kagan, V. E.; Tyurina, Y. Y.; issued/ filed dates: July 12, 2007 / January 6, 2006.
17. "**WO 2007035641. Palmarumycin Based Inhibitors of Thioredoxin and Methods of Using Same.**" Powis, G.; Wipf, P.; issued/ filed dates: March 29, 2007 / September 15, 2005.
16. "**US 7,166,725 B2. Benzo[d]isoxazol-3-ol DAAO Inhibitors.**" Fang, Q. K.; Hopkins, S.; Heffernan, M.; Chytil, M.; Wipf, P.; issued/ filed dates: January 23, 2007 / December 28, 2004.
15. "**WO 2007,008200. Wortmannin Analogs and Methods of Using Same in Combination with Chemotherapeutic Agents.**" Kirkpatrick, L.; Powis, G.; Wipf, P.; issued/ filed dates: January 18, 2007 / July 11, 2005.
14. "**US 2006,063,824. Wortmannin Analogs and Methods of Using Same in Combination with Chemotherapeutic Agents.**" Kirkpatrick, L.; Powis, G.; Wipf, P.; issued/ filed dates: March 23, 2006 / July 11, 2005.
13. "**US 6,803,475. Fluorous Tagging Compounds and Methods of Use thereof.**" Wipf, P.; Reeves, J. T.; Röver, S.; issued/ filed dates: October 12, 2004 / May 31, 2000.
12. "**US 6,673,937. Syntheses and Methods of Use of New Antimitotic Agents.**" Lazo, J. S.; Wipf, P.; Day, B. W.; issued/ filed dates: Jan. 6, 2004 / July 19, 2001.
11. "**WO 2002006267. Synthesis and Biological Evaluation of Analogs of the Antimitotic Marine Natural Product Curacin A.**" Wipf, P.; Reeves, Day, B. W.; Balachandran, R.; issued/ filed dates: Jan. 24, 2002 / July 19, 2001.
10. "**US 6,392,055. Synthesis and Biological Evaluation of Analogs of the Antimitotic Marine Natural Product Curacin A.**" Wipf, P.; Reeves, Day, B. W.; Balachandran, R.; issued/ filed dates: May 21, 2002 / July 19, 2001.
9. "**US 6,673,539. Fluorous Tagging Compounds and Methods of Use thereof.**" Wipf, P.; Reeves, J. T.; Röver, S.; issued/ filed dates: Jan. 6, 2004 / May 31, 2000.
8. "**US 6,040,323. Phosphatase Inhibitors and Methods of Use thereof.**" Lazo, J. S.; Rice, R. L.; Wipf, P.; Cunningham, A.; Rice, R.; issued/ filed dates: March 21, 2000 / Aug. 22, 1997.
7. "**US 5,925,660. Phosphatase Inhibitors and Methods of Use thereof.**" Lazo, J. S.; Rice, R. L.; Wipf, P.; Cunningham, A.; Rice, R.; issued/ filed dates: July 20, 1999 / Aug. 22, 1997.
6. "**US 5,856,506. Phosphatase Inhibitors and Methods of Use thereof.**" Lazo, J. S.; Rice, R. L.; Wipf, P.; Cunningham, A.; Rice, R.; issued/ filed dates: Jan. 5, 1999 / Aug. 22, 1997.
5. "**US 6,156,896. Fluorous Reaction and Separation Systems.**" Curran, D. P.; Hadida, R. S.; Hoshino, M.; Studer, A.; Wipf, P.; Jeger, P. Kim, S.-Y.; Ferritto, R.; issued/ filed dates: Dec. 5, 2000 / May 15, 1997.
4. "**WO 9800376. Fluorous Reaction and Separation Systems.**" Curran, D. P.; Hadida, R. S.; Hoshino, M.; Studer, A.; Wipf, P.; Jeger, P. Kim, S.-Y.; Ferritto, R.; issued/ filed dates: Jan. 8, 1998 / June 6, 1997.
3. "**US 5,952,294. Peptidyl Prodrugs and Methods of Making and Using Same.**" Lazo, J. S.; Wipf, P.; issued/ filed dates: Sept. 14, 1999 / July 31, 1996.

2. "**US 5,859,247. Preparation of Fluorous Silicon, Tin, and Germanium Compounds and Their Use in Organic Synthesis to Facilitate Organic/Fluorous Extractive Purification.**" Curran, D. P.; Hadida, R. S.; Hoshino, M.; Studer, A.; Wipf, P.; Jeger, P. Kim, S.-Y.; Ferritto, R.; issued / filed dates: Jan. 12, 1999 / July 31, 1996.
1. "**US 5,700,821. Phosphatase Inhibitors and Methods of Use thereof.**" Lazo, J. S.; Rice, R. L.; Wipf, P.; Cunningham, A.; Rice, R.; issued / filed dates: Dec. 23, 1997 / July 30, 1996.