

Thomas Pettus

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Married, two children
Date of Birth: August 28, 1967 (42 years old)
Nationality: United States of America
Language: English
Local Address: 15 La Calera Way
Goleta, CA 93117

OVERVIEW

Our research program centers upon the synthesis and application of aromatic materials for the construction of complex natural products. Ours is one of only a handful of programs that aims to expand synthetic methods that pertain to aromatic compounds, and it fulfills a critical need by reducing the bottleneck found in the preparation of medicinally relevant compounds from aromatic motifs. Aromatic chemistry, once a thriving area of research and the basis of the dye industry, has largely been ignored because of its perceived maturity and simplicity. We have demonstrated that novel chiral electrophiles derived from aromatic systems can still make many important contributions to the synthesis of complex natural products. Natural products remain an important area of therapeutic research because they have been prescreened and employed by living systems for billions of years and thus they are often better tolerated in humans than entirely new compositions of matter. As such, natural products continue to provide a rich source of lead compounds for the treatment of a variety of diseases. Most medicinal agents used in chemotherapy today are derived from a natural product and most among these contain an aromatic motif. Over the past review period, the PI choreographed a cascade for the low temperature preparation of o-quinone methides (o-QMs). The PI has successfully utilized this procedure for the preparation of exotic resorcinols, which have been further transformed by enantioselective oxidative dearomatization (EOD) into the versatile non-racemic synthons for construction of densely functionalized cyclohexadienone derivatives. The PI has subsequently demonstrated these new technologies in the total syntheses of mitorubrinic acid, epoxysorbicillinol, rishirilide B, the cleroidinins, diinsinone, scyphostatin derivatives, and several other natural products. These pursuits have also led to the development of other methods including novel procedures for o-quinone formation, enone epoxidation, and phenol dearomatization.

EMPLOYMENT HISTORY

Associate Professor of Chemistry, University of California at Santa Barbara	2005-2009
Assistant Professor of Chemistry, University of California at Santa Barbara	1998-2005
Postdoctoral Fellow, Columbia University (Danishfeský Group)	1996-1998
Graduate Fellow, University of Rochester (Schlessinger Group)	1991-1996
Undergraduate Researcher (Hudlický Group)	1988-1989
Research Tech. Versar , Inc. Springfield, VA	1984-1985

EDUCATION

Post Doctorate, Columbia University	1998
Ph.D. University of Rochester	1996
M.S. University of Rochester	1993
B.S. Longwood University	1990

HONORS, AWARDS, GRANTS (OVER \$2,000K DIRECT)**University of California**

2009-2013 NIH R01-GM064831-09 "Application of Chiral Cyclohexadienones in Total Synthesis"	800K
2008-2011 NSF CHE-0806356 "Organic Synthesis with Quinone Methides and their Adducts"	360K
2008-2010 TRDRP -NA "Synthesis and Evaluation of Telomerase Inhibitors" for K. L. Wu	56K
2007-2008 UC- CRCC "Developing selective inhibitors of OVCAR-3" for M. A. Marsini	50K
2006-2007 UC- CRCC "Synthesis of the telomerase inhibitors" for K. L. Wu	50K
2005-2007 TRDRP -14DT-0130 "A novel total synthesis of brazilin and brazilide A" for Y. D. Huang	56K
2001-2008 NIH R01-GM064831-05 "Application of Chiral Cyclohexadienones in Total Synthesis"	1,100K
2002-2007 NSF Career-0135031 "New Applications of o-Quinone Methides"	415K
2001-2002 UC- CRCC "A Model for the Anti-Helicase Agent Heliquinomycin" for K. L. Wu	50K
2000-2002 CHRP "Stopping the Progress of HIV: Synthesis of S-Mase Inhibitors"	75K
2000-2002 Petroleum Research Fund-G "Asymmetric Hydride Abstractions from Organometallics"	25K
1998-2000 NSF -9971211 "Syntheses of Biologically Important Molecules"	45K
1998-2000 UC- CRCC "New Synthetic Approaches towards Natural Products"	22K
1998-2000 Research Corporation "Desymmetrization of Enol Ethers with Bisoxazoline Ligands"	35K
1999-2000 UC- CRCC "Development of an Oxidative Asymmetric Cyclizations"	40K

Columbia University

1996-1998 NSF postdoctoral fellow in chemistry (the last in this program)

University of Rochester

1994-1995 [American Chemical Society Organic Division, SmithKline Beecham Graduate Fellow](#)

1993-1994 Hooker Fellowship

1992-1993 Merck Academic Development Program Fellowship

1991-1992 Bristol-Myers Squibb Graduate Fellow

1990-1991 Sherman-Clarke Graduate Fellow

Longwood University

1990-Summa Cum Laude with Honors in Chemistry (top 1% of graduating class)

1989-1990 [Barry M. Goldwater Fellow](#)

1989-[USA Today's ALL-USA College Academic Team](#), Honorable Mention,

1990-[Sigma Xi](#) inductee

1988-[Phi Kappa Phi](#) inductee (minimum GPA > 3.75)

LECTURES & PRESENTATIONS (OVER 85 GIVEN)**Universities (host)**

Northeastern University (Graham Jones) Boston MA	June 7, 2009
University of Illinois at Chicago (Tom Driver) Chicago IL	March 19, 2007
Virginia Commonwealth University (Qibing Zhou) Richmond VA	Nov. 3, 2005
University of Tennessee (David Baker) Knoxville, TN	Jan. 13, 2005
Dartmouth University (Dennis Wright) Hanover, NH	Dec. 14, 2004
University of Vermont (José S. Madalengoitia) Burlington, VT	Dec. 9, 2004
Southwest Medical Institute (Jef De Brabander) Dallas, TX	Dec. 7, 2004
Auburn University (Gene Hill) Auburn, AL	Dec. 1, 2004
University of Florida (Kenneth Sloan) Gainesville, FL	Nov. 29, 2004
University of Rhode Island (Bill Euler) Providence, RI	Nov. 15, 2004
University of California, Irvine (Scott Rychnovsky) Irvine, CA	Oct. 22, 2003
Temple University (Scott Sieburth) Philadelphia, PA	Oct. 28, 2004
Stanford University (Justin Dubois) Palo Alto, CA	Oct. 15, 2003
Cal Tech (Brian Stolz) Pasadena, CA	Sept. 24, 2003
Ohio State University (Robert Coleman) Columbus, OH	Aug. 13, 2003
University of Pennsylvania (Gary Molander) Philadelphia, PA	May 2, 2003
Flinders University, (Michael Perkins) Adelaide, AU	Mar. 26, 2003
University of Melbourne, (Mark Rizzacasa) Melbourne, AU	Mar. 21, 2003
Australian National University, (Martin Banwell) Canberra, AU	Mar. 19, 2003
University of Sydney, (Kate Joliffe) Sydney, AU	Mar. 17, 2003
Rutgers University (Laurence Williams) Piscataway, NJ	April 29, 2003
University of Pittsburgh (Peter Wipf) Pittsburgh, IN	April 25, 2003
Notre Dame (Richard Taylor) South Bend, IN	April 22, 2003
University of Indiana (David Williams) Bloomington, IN	April 21, 2003
University of Wisconsin (Steve Burke) Madison, WI	April 16, 2003
University of Minnesota (Richard Hsung) St. Paul, MN	April 15, 2003
Scripps Institute (Eric Sorensen) La Jolla, CA	Jan. 14, 2003
UC San Diego (Emmanuel Theodorakis) San Diego, CA	Jan. 13, 2003
Florida State University (Marie Krafft) Tallahassee, FL	Oct. 29, 2002
UC Los Angeles (Mike Jung) Los Angeles, CA	Oct. 17, 2002
University of Rochester (Andrew Kende) Rochester, NY	Nov. 16, 2001
Yale University (John Wood) New Haven, CT	Nov. 14, 2001
University of Connecticut (Amy Howell) Storrs, CT	Nov. 12, 2001
UC Berkeley (Dirk Trauner) Berkeley, CA	Oct. 11, 2001
UC San Francisco (Kip Guy) San Francisco CA	Oct. 10, 2001
University of Oregon (Bruce Branchaud) Eugene, OR	Oct. 1, 2001
Oregon State University (David Horne) Corvallis, OR	Sept. 28, 2001
UC Riverside (Keith Hollis) Riverside, CA	Oct. 5, 2000
UC Davis (Michael Nantz) Davis, CA	Oct. 3, 2000
UC Santa Cruz (Rebecca Braslau) Santa Cruz, CA	Oct. 2, 2000

Colleges (host)

University of the Pacific (Silvio Rodriguez) Stockton CA	May. 2, 2006
Longwood University (Melissa C. Rhoten) Farmville VA	Oct. 31, 2005
Cal State Chico (Randy Miller) Chico CA	Sept. 12, 2005
Cal State San Diego (Shelli McAlpine) San Diego CA	April 12, 2004
Cal State Chico (Dave Ball) Chico, CA	Aug. 28, 2003

Allegheny College (P.J. Persichini) Meadville, PA April 24, 2003
 SUNY Geneseo Oct. 4, 2002
 Hartwick College Oct. 3, 2002
 SUNY Cortland Oct. 3, 2002
 SUNY Oswego Oct. 2, 2002
 St. Lawrence University Canton, NY Oct. 1, 2002
 SUNY Potsdam Potsdam, NY Oct. 1, 2002
 SUNY Plattsburgh Plattsburgh, NY Sept. 30, 2002
 Cal State SF Nov. 15, 1999
 Cal State Chico (Dave Ball) Chico, CA Nov. 22, 1998

Presentations at Conferences and Meetings

Heterocycles, Regina Salve, RI (Moody and Vargas) June 28-July 3, 2009
 Natural Products, Tilton, NH (Scott Gilbertson) July 20-25, 2008
 Heterocycles, Regina Salve, RI (Briner and Moody) June 15-21, 2008
 Marine Natural Products, Ventura Beach Marriott, CA (Crews and Carter) Feb 24-29, 2008
 Syncon at UC San Diego in San Diego, CA May 21, 2005
 Natural Products, Tilton, NH (Rainer and Armstrong) July 24-27, 2004
 Org. Reactions and Process, Roger Williams Univ., RI (Brummond and King) July 18-23, 2004
 Heterocycles, Regina Salve, RI (Burnett and Davies) July 4-7, 2004
 20th Mona Symposium (Paul Reese) in Kingston, Jamaica Jan. 7-10, 2004
 Syncon at UC Irvine in Irvine, CA May 21, 2003
 225th ACS National Meeting in New Orleans, LA Mar. 23-27, 2003
 10th Symp. on Latest Trends in Organic Synthesis in Gainesville, FL Oct. 23-26, 2002
 National Science Foundation-Workshop at Squam Lake, NH July 1-4 2002
 Syncon at Cal. Tech, May 21, 2002
 37th National Organic Chemistry Symposium in Bozeman, MT June 10-14, 2001
 Syncon at UC Santa Barbara in Santa Barbara, CA May 21, 2001
 37th ACS Western Regional Meeting in Santa Barbara, CA April 29-31, 2001
 221st American Chemical Society in San Diego, CA April 1-5, 2001
 Syncon at UC Los Angeles, Los Angeles CA May 21, 2000
 219th ACS National Meeting in San Francisco, CA Mar. 26-30, 2000
 35th ACS Western Regional Meeting in San Francisco, CA Oct. 25-28, 2000
 Syncon at University of Southern California May 21, 2000
 Natural Products, New England College, NH (Majetich and Webb) July 24-27, 1999

Pharmaceutical and Biotech Companies (host)

Bristol Myers Squibb (Michael Miller) Lawrenceville, NJ November 19, 2008
 Bristol Myers Squibb (Prashant Deshpande) New Brunswick, NJ November 20, 2008
 Exelixis (James W. Leahy) South San Francisco, CA July 28, 2005
 Pfizer (Kim Albizani) San Diego, CA July 6, 2005
 Albany Molecular (Silvina Garcia) Syracuse, NY June 23, 2005
 Amgen (Vinet Patel) Boston, MA June 21, 2005
 Bristol Myers-Squibb (John Macor) Wallingford, CT Oct. 8, 2003
 Procter and Gamble (Benjamin Blass) Cincinnati, OH Aug. 15, 2003
 Merck Sharp and Dome (Robert Armstrong) Rahway, NJ April 28, 2003
 Pfizer (Sammit Bhattacharya) Groton, CT June 17, 2002
 Boehringer-Ingelheim (Vittorio Farina) Danbury, CT Nov. 15, 2001
 Bristol Myers-Squibb (Peter Cheng) Princeton, NJ May 22, 2000

COURSES TAUGHT (Credits)

6a (3)-6b (3)-6c (3): Techniques & Properties in Microscale and Macroscale Synthesis

Covers basic laboratory techniques along with colligative properties and IR, MS, NMR, UV Spectroscopy.

Visit the websites USERID = chem6a PASSWORD = thinkhard

Visit the websites USERID = chem6b PASSWORD = thinkhard

offered every quarter

6b and 6c honors Techniques & Properties in Microscale and Macroscale Synthesis

Undergraduates with > 3.5 GPA work with mentors in the graduate program.

offered when mentors are available

199 (2-5): Independent Undergraduate Research

Independent research carried out by undergraduates.

offered every quarter

223 (2-5): Modern Organic Chemistry

A seminar course where students present the most recent organic discoveries

offered every quarter

129/229 (3): Synthetic Organic Reactions

A discussion of basic organic reactions used in the synthesis of natural products.

usually fall

133/233 (3): Advanced Organic Synthesis

A discussion of synthetic strategies used for the construction of natural products and pharmaceuticals.

Visit the [secret website](#) USERID = chem233 PASSWORD = enlightenment

usually winter

SYNERGISTIC ACTIVITIES

Consultant: [Stern and Kessler Goldstein Fox](#)

[Winston and Strawn LLP](#)

Collaborator: [Norbert Reich](#)

CURRENT AND PAST PERSONS SUPERVISED**Postdoctorate personnel, presently in the Pettus group**

none

Ph. D. Candidates, currently in the Pettus group

Jason Green, Kun-Liang Wu, Todd Wenderski, Jake Cha

First and Second Year Graduate students, currently in the Pettus group

Les Burnett, Matthew Miner

Undergraduate students, currently in the Pettus group

Eduardo Mercado

Undergraduate students, previously in the Pettus group

Jennifer Chau (USF pharmacy) 2000; Thay Ung (USC) 2001; Andy Rodriguez (UC Irvine) 2001; Simon Meek (Univ. Sheffield) 2001; Jeffery Gardina (UCI) 2002; Brendan O'Boyle (Stanford U) 2003; Kristie Tuttle (Pfizer) 2002; Kevin McQuaid (Columbia University) 2003; José Lopez (UNM College of Pharmacy) 2003; Lily Talevera (Amgen) 2004; Stephanie Mercedes (Amgen) 2005; Dave Freeman (Colorado State) 2006; Jonathan Hernandez (medical school) 2005; Elizabeth Bacon, 2007 (Gilead); Vince DeNatale, 2009 (Princeton); Elysia Cohn 2009 (UCSB).

Postdoctorate personnel, previously in the Pettus group

Jinsong Zhang (UC Chico), Junhua Wang (Univ. Hong Kong), Liping Pettus (Amgen)

Other Visiting personnel, previously in the Pettus group

Sandra Jimenez Alonso (University of Canary Islands)

THESIS COMMITTEES**Ph.D. students directly supervised by Pettus (eight)**

8. Marsini, M.A. "Total synthesis of Mitorubrinic Acid" 2008. [Postdoc Sorensen at Princeton]
7. Huang, Yaodong, Ph.D., University of California, Santa Barbara, 2007, 154 pages; AAT 3283678. "Synthesis of brazilin and the core of an ornate scyphostatin analog." [Postdoc M. Pirrung at UCR, employed with Acme Bioscience @ San Francisco]
6. Mejorado, Lupe H., Ph.D., University of California, Santa Barbara, 2006, 249 pages; AAT 3206435. "Development and application of nonracemic cyclohexa-2,5-dienones in the total synthesis of (+)-epoxysorbicillinol and (+)-rishirilide B." [Postdoc S. Rychnovsky at UCI, employed at Auspex Pharmaceuticals @ San Diego]
5. Selenski, Carolyn, Ph.D., University of California, Santa Barbara, 2006, 217 pages; AAT 3245954. "General method for the construction of type-A proanthocyanidins: Synthesis of racemic-diinsininone." [Postdoc R. Williams at Colorado State University, employed at Glaxo @ Raleigh Durham]
4. Lindsey, Christopher C., Ph.D., University of California, Santa Barbara, 2005, 91 pages; AAT 3203099. "Synthetic approach for the rubromycin family of natural products" [Postdoc J. Debrabander, UT Southwest Medical, employed at Omni Scientific @ Dallas]
3. Hoarau, Christophe, Ph.D., University of California, Santa Barbara, 2005, 210 pages "Synthetic Approaches For Natural Products isolated from *Tapirira Guianensis*." [Postdoc R. D. Little, UCSB, employed with Vertex, then with Myriad @ Salt Lake]

2. Magdziak, Derek John, Ph.D., University of California, Santa Barbara, 2003, 286 pages; AAT 3103446 "[Development of new oxidation reactions for organic synthesis.](#)" [Postdoc Shair, Harvard University, employed with [Vertex](#) in Boston MA]
1. Van De Water, Ryan William, Ph.D., University of California, Santa Barbara, 2003, 279 pages; AAT 3103479 "[Alkylation and dearomatization of resorcinol derivatives: A synthetic route towards scyphostatin.](#)" [Postdoc Danishefsky at Sloan Kettering, employed with [Biogen](#) in San Diego CA]

M.S. students directly supervised by Pettus (three)

3. Ward, J. 2008 [Chevron, San Francisco]
2. Gowin, K. 2005. [resides in Chicago]
1. Jones, R. M. 2002. [Pfizer in Groton CT]

Others Ph.D. students evaluated (over 20)

Lee, Pierce, Ph.D., University of California, Santa Barbara, 2008, 342 pages; AAT 3342054 [advisor = [Lipshutz](#)] "I. Carbon-supported nickel and copper catalysts. II. Copper hydride catalyzed asymmetric 1,4-reductions. III. Designer surfactants for organometallic cross-couplings"

Taft, Benjamin, Ph.D., University of California, Santa Barbara, 2008, 342 pages; AAT 3342054 [advisor = [Lipshutz](#)] "I. Carbon-supported nickel and copper catalysts. II. Copper hydride catalyzed asymmetric 1,4-reductions. III. Designer surfactants for organometallic cross-couplings"

Nihan, Danielle Ph.D., University of California, Santa Barbara, 2008. [advisor = [Lipshutz](#)]

Petersen, Tue Bruun, Ph.D., University of California, Santa Barbara, 2008, 401 pages. AAT 3297639 [advisor = [Lipshutz](#)] "I. Control of atropisomerism en route to the michellamines. II. Aqueous Suzuki-Miyaura couplings at ambient temperatures. III. Studies in asymmetric copper hydride chemistry."

He, Ming, Ph.D., University of California, Santa Barbara, 2007, 456 pages; AAT 3304616 "Enantioselective, N-heterocyclic carbene catalyzed annulations" [advisor = [Bode](#)]

Sohn, Stephanie Ph.D., University of California, Santa Barbara, 2007, 159 pages; AAT 3291330. [advisor = [Bode](#)] "N-heterocyclic carbene catalyzed redox reactions."

Lower, Asher, Ph.D., University of California, Santa Barbara, 2006, 275 pages; AAT 3232978. [advisor = [Lipshutz](#)] "I. Copper hydride catalyzed asymmetric hydrosilylation of ketones. II. The synthesis of coenzyme Q(10) leading to the development of a modernized carboalumination protocol."

Servesko, Jeffrey Michael, Ph.D., University of California, Santa Barbara, 2006, 406 pages; AAT 3218823. [advisor = [Lipshutz](#)] "Development and applications of asymmetric copper hydride chemistry."

Blomgren, Peter, Ph.D., University of California, Santa Barbara, 2006, [advisor = [Lipshutz](#)]

Chrisman, Will, Ph.D., University of California, Santa Barbara, 2004, 692 pages; AAT 3145714. [advisor = [Lipshutz](#)] "I. Carbonyl blocking using a dioxacyclosilyloctane. II. Stannyldienynes for stereoselective retinoid synthesis."

Gerken, James Beall, Ph.D., University of California, Santa Barbara, 2004, 239 pages; AAT 3156355. [advisor = [Little](#)] "Experimental and computational investigations of substituent effects on housane cation radical rearrangement, intramolecular atom transfer reactions of trimethylenemethane diradicals, and kinetic isotope effects on alkylidene carbene insertion reactions."

- Tomioaka, Takashi, Ph.D., University of California, Santa Barbara, 2004, 201 pages; AAT 3120380. [[advisor = Lipshutz](#)] "Development of novel synthetic approaches in nickel-catalyzed cross-coupling reactions."
- Noson, Kevin, Ph.D., University of California, Santa Barbara, 2003, 301 pages; AAT 3112906. [[advisor = Lipshutz](#)] "I. Recent advances in copper-catalyzed asymmetric transformations. II. Towards the stereoselective assembly and application of cyclo-NOBINS."
- Fang, Cindy Ching, Ph.D., University of California, Santa Barbara, 2003, 410 pages; AAT 3112888. [[advisor = Bazan](#)] "Structure-reactivity investigations of ethylene polymerization and copolymerization using zwitterionic nickel and palladium complexes, and copolymerization of carbon dioxide and epoxides using salen chromium chloride complexes."
- Pfeiffer, Steven Shane, Ph.D., University of California, Santa Barbara, 2003, 700 pages; AAT 3079960. [[advisor = Lipshutz](#)] "Novel utilization of transition metal organometallic chemistry for the synthesis of natural products."
- Parrish, Jonathan David Searight, Ph.D., University of California, Santa Barbara, 2003, 183 pages; AAT 3079959 [[advisor = Little](#)] "Novel methods in electron transfer chemistry."
- Papa, Patrick William, Ph.D., University of California, Santa Barbara, 2002, 232 pages; AAT 3064754. [[advisor = Lipshutz](#)] "I. Development of a novel nitrogen protection group: Tsoc (triisopropylsilyloxy-carbonyl). II. Controlling atropisomerism using a chiral tether in biaryl bond formation. III. Advances in copper hydride chemistry."
- Vivian, Randall Wayne, Ph.D., University of California, Santa Barbara, 2002, 400 pages; AAT 3056036. [[advisor = Lipshutz](#)] "I. Advances in transition metal catalyzed alkylations and reductions. II. Investigation of palladium(0)-catalyzed cross-coupling of polyenyl borolanones toward all (E) polyenes."
- Mollard, Paul, Ph.D., University of California, Santa Barbara, 2001, 505 pages; AAT 3035373. [[advisor = Lipshutz](#)] "Cyclo-SEM, a new carbonyl protecting group and new methods in nickel(0) cross-coupling reactions."
- Carroll, Georgia Law, Ph.D., University of California, Santa Barbara, 2000, 253 pages; AAT 3034824. [[advisor = Little](#)] "Investigation of the vinylcyclopropane trimethylenemethane diradical and exploration of a route to phorbol analogs."
- Sclafani, Joseph Anthony, Ph.D., University of California, Santa Barbara, 2000, 150 pages; AAT 3015632. [[advisor = Lipshutz](#)] "New methods employing organometallics for large scale synthesis."
- Allan, Amy Kim, Ph.D., University of California, Santa Barbara, 1999, 238 pages; AAT 9956137. [[advisor = Little](#)] "Application of an intramolecular atom transfer reaction of the trimethylenemethane (TMM) diyl towards the synthesis of rudmollin, and, Studies on trimethylenemethane (TMM)-DNA interactions."
- Buzard, Daniel John, Ph.D., University of California, Santa Barbara, 1999, 419 pages; AAT 9986871 [[advisor = Lipshutz](#)] "New methods for organometallic synthesis: Stereoselective ligand construction and transition metal mediated transformations"

Evaluator of others M.S. students (over 3)

Gallagher, B. (Lipshutz Group) 2009.

Pcion, D. (Lipshutz Group) 2005.

Young K. (Bode Group) 2005.

Reed, A. (Lipshutz Group) 2002.

Hong, J. (Little group) "Application of an intramolecular atom transfer reaction of the trimethylenemethane (TMM) diyl towards the synthesis of rudmollin, and, Studies on trimethylenemethane (TMM)-DNA interactions." 1999

SERVICE FOR PROFESSION, DEPARTMENT AND UNIVERSITY

Division

The Undergraduate Laboratory Sequence, Chem 6a, 6b, 6c: Rewrote the lab manuals in 2005 and developed a website for the Organic Laboratory Sequence know as the Chem 6abc series. Standardized the experience by establishing a quiz bank of potential questions and began a program of regimented testing. Oversee TA training for chem 6abc series by require 6a TAs attend the faculty lecture.

Organic Search Committees: Member of the Organic Search Committee ('06 '07) no-hires; Chair of Organic Search Committee ('07 '08) hired [Armen Zakarian](#);

Speakers Hosted: **2009:** Paul Blakemore Oregon State University; Marty Burke University of Illinois; Teshik Yoon University of Wisconsin; Jon Antilla University of South Florida; Andy Evan University of Liverpool; **2008:** Thomas Letka University of Maryland; Christina White University of Illinois; Wei Wang University of New Mexico; Eric Alexanian University of Illinois; Zev Gartner UCB; **2007:** Eric Ferreria Stanford University; Yoshihisa Kobayahi UCSD; Takahiko Akiyama Gakushuin University; Doug Grotjahn SDSU; André Charette University of Ontario; Sherry Chemler University of Buffalo; Greg Dudley Florida State University; **2006:** Lawrence Williams Rutgers; Ohyun Kwon UCLA; **2005:** Jim Leighton Columbia University; Van Martin Pfizer in San Diego; Peter Wutz Pfizer in Michigan; Matt Sigman Utah; Jef Debrabander Southwestern Medical Institute; Patrick Harran Southwestern Medical Institute); **2004:** Shelli McAlpine San Diego State; **2003:** Tomás Hudlicky University of Florida; **2002:** Kip Guy University of California at San Francisco; **2001:** George Majetich University of Georgia; Greg Cook North Dakota State; Matt McIntosh University of Arkansas; **2000:** Bill Parsons Merck Sharp and Dohme; Richard Taylor Notre Dame; Richard Hsung University of Minnesota; Michael Calter University of Rochester; **1999:** Emmanuel Theodorakis UCSD; Norton Peet Aventis; Jim Hendrickson Brandéis; Scott Nelson Univ. Pittsburgh; **1998** None)

Department

Organic Search Committee ('08). This committee was charged with recruiting two FTE's

Student Awards Committee ('98 '08). This committee selected all students for departmental awards.

NMR Committee ('04). This committee is charged with overseeing the NMR facility.

Space Committee ('06). This committee is charged with overseeing the allocation of space through-out the department.

Vice Chair of Finance ('06). This administrator oversees the allocation of department of funds. Working with the MSO, we spearhead "pay to play" where faculty shoulder recruitment costs from the prior year when accepting a new student into the group.

Curriculum Committee ('04). This committee is charged with overseeing the course for both the undergraduate and graduate curriculum.

TA Committee ('08). This committee is charged with overseeing the allocation of teaching assistantships to faculty and students in most need and it addresses disciplinary problems that arise with the teaching assistants.

Weakliem Replacement Committee ('07). This committee was charged with replacing Paul Wealiem, our resident UNIX expert.

University

UC CRCC: Member of a Multi-campus Research Unit (MRU), appointed by the Office of the President for a four year term to select grant applicants.('08-'12)

K1-12 Outreach

Parent presentation of "dry ice" to 2nd grade

Community

Soccer: Ayso region 9 Soccer Referee U8 ('05-07); Ayso region 9 Coach U8 ('07-08)

Professional

Reviewer:

Angew. Chemie.;

J. Am. Chem. Soc.;

J. Org. Chem.;

Org. Lett.;

Synthesis;

Synlett;

Tet. Lett.

Tetrahedron

Other Memberships:

American Chemical Society (ACS),

International Society of Heterocyclic Chemistry (ISHC)

> 50 PUBLICATIONS (BOOKS, CHAPTERS, AND ARTICLES)

50. Wenderski, T.; **DeNatale, V.**; Pettus, T. R. R. "Examination of the Synthesis of 2,2-disubstituted Pentalenes, Indenes, and Azulenes by Modification of Nakamura's [3 + 2] Cycloaddition Protocol" **2009**, *Synlett*. submitted.
49. Miller, L. A.; Marsini, M. A.; Pettus, T. R. R. "Chemoselective Reactions of 3-Benzyloxy-1,2-o-Quinone with Organometallic Reagents" **2009**, *Org. Lett.* in press.
48. Wenderski, T.; Huang, S.; Pettus, T. R. R. "Enantioselective Total Synthesis of All of the Known Chiral Cleroidicins (C-F): Clarification Among Some Assignments and Optical Rotations" **2009**, *J. Org. Chem.* in press.
47. Wu, K.-L.; **Cohn, P. M. T.**; Huang, Y.; Pettus, T. R. R. "First Total Synthesis of Malvone A and Formal Syntheses of Boryquinone and Hybocarpone Using a Concise Strategy for Construction of Unsymmetrical Naphthoquinones" *Synlett*, **2009**, in press.
46. Pettus, L. H.; **Pettus, T. R. R.** "Anionic Generation of o-Quinone Methides for Organic Synthesis" vol 1. o-Quinone Methides: **2008**.
45. Huang, Y.; **Pettus, T. R. R.** "Synthesis of the Spiroketal Portion of Berkelic Acid" *Synlett*, **2008**, 1353-1356.
44. Marsini, M.; Huang, Y.; Lindsey, C.; Wu, K. L.; Pettus, T. R. R. "Diastereoselective Syntheses of Chroman Spiroketal via Cycloaddition of Chiral Enol Ethers and o-Quinone Methides" *Org. Lett.* **2008**, 10 (7): 1477-1480. .
43. Wu, K. L.; **Pettus, T. R. R.** "Facile Synthesis of Naphthoquinone Spiroketal by Diastereoselective Oxidative [3+2] Cycloaddition" *Org. Lett.* **2007**, 9 (26): 5537-5540.
42. Marsini, M. A.; Huang, Y.; Van De Water, R. W.; **Pettus, T. R. R.** "Synthesis and Reactions of Spironitronates" *Org. Lett.*, **2007**, 9 (26): 3229-3232.
41. Wenderski, T.; M.; **Pettus, T. R. R.** "Seduced by the Siren's Call: Expanding Applications for Aromatic Compounds: the synthesis of rishirilide B" Strategies and Tactics in Organic Synthesis **2007**.
40. Marsini, M. A.; **Pettus, T. R. R.** "31.5.2: Areene-OH and Arene-OM" *Science of Synthesis* (31): **2007**.
39. Mejorado, L.; **Pettus, T. R. R.** "The Total Synthesis of (+)-Rishirilide B Enabled by the Enantioselective Oxidative Dearomatization of Resorcinol Derivatives" *J. Am. Chem. Soc.* **2006**, 128, (49) 15625-15631.
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