

**DAVID P. ROTELLA, Ph.D.**

Margaret and Herman Sokol Professor of Chemistry & Biochemistry  
Department of Chemistry & Biochemistry  
Montclair State University  
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973-655-7204

**Experience:**

- **Montclair State University July 2011-present**  
Margaret and Herman Sokol Professor of Chemistry, Department of Chemistry and Biochemistry; joint appointment in Sokol Institute of Pharmaceutical Life Sciences
- **Independent Consultant, February 2010-present**  
Provide expertise to advance drug discovery programs at industrial partners
- **Wyeth Research/Pfizer, 2005-February 2010**  
Principal Research Scientist III, chemistry team leader. Directed up to 20 chemists with 4 direct reports. Member of Princeton Chemical Science leadership team.
- **Lexicon Pharmaceuticals, 2003-2005**  
Senior Group Leader, responsible for multiple drug discovery programs. Directed up to 18 chemists with 4 direct reports. Member of department leadership team.
- **Bristol-Myers Squibb PRI, 1997-2003**  
Principal Scientist, cardiovascular and metabolic disease drug discovery
- **Cephalon, Incorporated, 1991-1997**  
Group Leader, CNS and cancer drug discovery.
- **School of Pharmacy, University of Mississippi**  
Assistant Professor, Department of Pharmacognosy 1987-1991  
Adjunct Professor, Department of Medicinal Chemistry, 2009-present
- **School of Pharmacy, University of Pittsburgh, 2010-present**  
Adjunct Professor, Department of Pharmaceutical Sciences
- **Center for Drug Discovery, Northeastern University, 2010-present, Adjunct Professor**

**Education:**

- Postdoctoral Scholar, Department of Chemistry, The Pennsylvania State University, 1985-1987, under the direction of Prof. K. S. Feldman.
- Ph.D. Medicinal Chemistry, The Ohio State University, 1985, under the direction of Prof. D. T. Witiak.
- B.S. Pharm., Magna cum laude, School of Pharmacy, University of Pittsburgh, April 1981.

**Professional Activities:**

American Chemical Society, Organic and Medicinal Chemistry Divisions  
Fellow, Royal Society of Chemistry  
American Chemical Society Fellow

Member, Drug Discovery for Neuroscience NIH study section, 2013-2017, ad hoc member, 2010- 2012, 2018-present

Editorial Advisory Board, *ACS Chemical Neuroscience* 2018-present

Division of Medicinal Chemistry, American Chemical Society:

- Treasurer 2015-2020
- Five year term as Vice Chair/Long Range Planning Committee chair, Program Chair, Chair and past Chair (2004-2008). These roles required leadership and collaborative interactions nationally and internationally.
- Three year term as academic councilor (2012-2014)

Gordon Research Conference on Medicinal Chemistry

- 2012 vice chair elect
- 2013 vice chair
- 2014 chair

Co-editor, 3<sup>rd</sup> edition, *Comprehensive Medicinal Chemistry* 2017

Co-editor, 7<sup>th</sup> edition, *Burger's Medicinal Chemistry* 2007

Senior Editor, Royal Society of Chemistry series on Drug Discovery, 2008-2020

Co-editor, "Successful Drug Discovery", (2014), Wiley VCH

Co-editor, "Analogue-Based Drug Discovery", volume 3, (2012), Wiley VCH

Program co-chair, National Medicinal Chemistry Symposium (2010)

Scientific Advisory Board National Medicinal Chemistry Symposium (2014)

Scientific Advisory Board *Frontiers in Medicinal Chemistry* 2014-2015

Organizer and conference co-chair for "Frontiers in CNS and Oncology Medicinal Chemistry", Siena, Italy, October 7-9, 2007, jointly organized with European Federation for Medicinal Chemistry.

### **Montclair State University Advising, Service and Teaching**

- MS advisor for 5 research students: Carlos Gomez (2015), Arpita Patel (2017), Noor Abouchackra (2020), Joseph Quinlan (2021), Fanny Mai (2022). All are either employed or in Ph.D. programs.
- Advisor for 6 undergraduate students: Amna Adam, Melissa Coward, Karla Sanchez, Amy Von der Haar, Rochelle Cyrille, Mitul Rana. Melissa, and Carla are now in medical school. Amna earned her Ph.D. in medicinal chemistry and is employed at a pharmaceutical company. Amy is in a Ph.D. program and Rochelle and Mitul are employed locally as chemists.
- Advisor for 6 postdoctoral scientists: Rohit Bhat, Huimin Cheng, Mariana Lozano Gonzalez, Ramappa Chakrasali, Sreedhar Tummalapalli, Shams Ul Mahmood (current). Others employed in the chemical and pharmaceutical industry in their home country.

- Member of Presidential search committee 2021
- Member of Graduate School Dean/Vice Provost for Research search committee 2018
- Member Provost's advisory committee for formation of college for health-related programs, 2022
- Member University Research Committee, 2019-present
- Member CSAM safety 2019-present
- Chair, chemistry/biochemistry faculty search committee 2017
- DPAC member 2022-present
- BS/PharmD program advisor, 2017-2022
- Chair, University patent committee, 2015-present
- Instructor for Chemistry 130, 230, 231, 232, 233, 430, 530, 531, 538 (organic and medicinal chemistry lectures and laboratories)

### **Current Extramural Funding:**

- R01-AG-0678360-01 "Pharmacologic Inhibition of PDE11A for Age-Related Memory Disorders", 9/15/20-9/14/25, direct costs \$2.39MM, PI, with collaborators at University of South Carolina, Boston College.
- NSF 2830879, "Increasing access to graduate degrees, professional development and research experiences", 1/1/21-12/31/26, \$1.0MM direct costs, co-PI
- Research Support, 9/1/11-present, ~\$60,000 annually, Margaret and Herman Sokol Endowment

### **Past Research Funding:**

- RO1-AI133633-01, "Development of inhibitors of *P. falciparum* cGMP dependent protein kinase (PfPKG) for malaria chemoprevention", 8/1/17-7/31/21, \$1.5MM direct costs, co-PI.
- Optimization of Novel Botulinum Toxin Protease A Inhibitors, 8/19/14-12/31/15, \$550,000 direct costs, Defense Threat Reduction Agency
- Protein Kinase Inhibitors for Parasitic Diseases, 3/1/12-12/31/15, \$382,900, Celgene Corporation
- Purchase of LCMS, 10/1/13, \$70,000, Shimadzu Corporation
- Purchase of Essential Research Equipment, 10/1/12-9/30/14, \$100,000, co-PI with Dr. Vladimir Snitsarev, Montclair State University, Sokol Faculty Award Fund
- Lactam Inhibitors of Phospholipase A2, 7/1/88-6/30/90, direct costs \$25,000, Mississippi Affiliate, American Heart Association
- Novel Calmodulin Inhibitors, 7/1/89-6/30/91, direct costs \$35,000, Elsa U Pardee Foundation
- Phospholipase A2 Inhibitors as Novel Anti-inflammatory Agents, 7/1/89-6/30/91, direct costs \$200,000, American Lung Association

### **Publications:**

1. "Stereocontrolled Syntheses for the Six Diastereomeric 1,2-Dihydroxy-4,5-Diaminocyclohexanes: Pt(II) Complexes and P388 Antitumor Properties", Donald T. Witiak, David P. Rotella, Joyce A. Filppi, and Judith Galucci, *J. Med. Chem.* **30**, 1327 (1987).

2. "Synthesis and P-388 Antitumor Properties of the Four Diastereomeric Dichloro 1-Hydroxy-3,4-diaminocyclohexane Pt(II) Complexes" , Donald T. Witiak, David P. Rotella, Yong Wei, Joyce A. Filppi and Judith C. Gallucci *J. Med. Chem.* **32**, 214 (1989).
3. "Mechanistic and Preparative Studies of the Intramolecular Photocyclization of Methylated 2-(4-Pentenyl)tropones", Ken S. Feldman, Jon H. Come, Benedict J. Kosmider, Pamela M. Smith, David P. Rotella and Ming-Jung Wu, *J. Org. Chem.* **54**, 592 (1989).
4. "Homoallylically Controlled Epoxidation of  $\Delta^4$ -cis-1,2-Disubstituted Cyclohexenes", David P. Rotella, *Tetrahedron Letters*, 1913 (1989).
5. "Application of an Intramolecular Tropono-Alkene Photocyclization to the Total Synthesis of ( $\pm$ ) Dactyol", Ken S. Feldman, Ming-Jung Wu and David P. Rotella, *J. Am. Chem. Soc.* **111**, 6457 (1989).
6. "Chloroperoxidase Mediated Halogenation of Phenols", Cheryl F. Wannstedt, David P. Rotella and Jerome F. Siuda, *Bull. Contamin. Environ. Toxicol.* **44**, 282 (1990).
7. "Stereocontrolled Iodolactonization of *Erythro* and *Threo* Tertiary Amides", David P. Rotella and Xun Li, *Heterocycles* **31**, 1205 (1990).
8. "The Total Synthesis of ( $\pm$ ) Dactyol and Related Studies", Ken S. Feldman, Ming-Jung Wu and David P. Rotella, *J. Am. Chem. Soc.* **112**, 8490 (1990).
9. "Synthesis and Structural Analysis of Stereospecific 3,4,5-Trisubstituted  $\gamma$ -Butyrolactone Phospholipids", Xun Li and David P. Rotella, *Lipids* **29**, 211-224 (1994).
10. "The Effect of Pyrrolo[3,4-c]Carbazole Derivatives on Spinal Cord ChAT Activity" David P. Rotella, Marcie A. Glicksman, J. Eric Prantner, Nicola Neff and Robert L Hudkins, *Bioorganic and Medicinal Chemistry Letters*. **5**, 1167-1170 (1995).
11. "Microbial Metabolites of Ophiobolin A and Antimicrobial Evaluation of Ophiobolins", Erguang Li, Alice M. Clark, David P. Rotella and Charles D. Hufford, *J. Nat. Products* **58**, 74-81, (1995).
12. "Stereoselective Synthesis of *Erythro*  $\alpha$ -Amino Epoxides" David P. Rotella, *Tetrahedron Letters* **35**, 5453-5456 (1995).
13. "Genesis and Degradation of A $\beta$  Protein by Cultured Human Neuroblastoma Cells", Robert Siman, John T. Durkin, E. Jean Husten, Mary J. Savage, Seetha Murthy, Suzanne Mistretta, David P. Rotella, Sankar Chatterjee, Bruce Dembofsky, Roger Poorman and Barry D. Greenberg, *Recent Advances in Alzheimer's Disease and Related Disorders*, John Wiley and Sons (1995).
14. "Facile Lewis Acid-Mediated Ring Opening of 4-Hydroxypyrrolidin-2-ones by Amino Acid Esters", David P. Rotella, *Synlett*, 479-480 (1996).

15. "Solid Phase Synthesis of Olefin and Hydroxyethylene Peptidomimetics", David P. Rotella, *J. Am. Chem. Soc.* **118**, 12246-12247 (1996).
16. "Neurotrophic 3,9-Bis[(alkylthio)methyl]- and -Bis(alkoxymethyl)-K-252a Derivatives", Masami Kaneko, Yutaka Saito, Hiromitsu Saito, Tadashi Matsumoto, Yuzuru Matsuda, Jeffrey L. Vaught, Craig A. Dionne, Thelma S. Angeles, Marcie A. Glicksman, Nicola T. Neff, David P. Rotella, James C. Kauer, John P. Mallamo, Robert L. Hudkins, Chikara Murakata, *J. Med. Chem.* **40**, 1863-1869 (1997).
17. "An Update on COX-2 and Farnesyltransferase Inhibitor Development", David P. Rotella, *Curr. Opin. Drug Discovery and Development*, **1**, 165-174 (1998).
18. "Rank-Order of Potencies for Inhibition of the Secretion of A $\beta$ 40 and A $\beta$ 42 Suggests that Both are Generated by a Single  $\gamma$ -Secretase", John T. Durkin, Seetha Murthy, E. Jean Husten, Stephen P. Trusko, Mary J. Savage, David P. Rotella, Barry D. Greenberg and Robert Siman, *J. Biol. Chem.* **274**, 20499-20504 (1999).
19. "N-3 Substituted Imidazaquinazolinones: Potent and Selective PDE5 Inhibitors as Potential Agents for Treatment of Erectile Dysfunction" David P. Rotella, Yeheng Zhu, Zhong Sun, John Krupinski, Ronald Pongrac, Laurie Seliger, Diane Normandin, John E. Macor, *J. Med. Chem.* **43**, 1257-1263 (2000).
20. "Optimization of Substituted N-3-Benzyl Imidazoquinazolinone Sulfonamides as Potent and Selective PDE5 Inhibitors" David P. Rotella, Yeheng Zhu, Zhong Sun, John Krupinski, Ronald Pongrac, Laurie Seliger, Diane Normandin, John E. Macor, *J. Med. Chem.* **43**, 5037-5043 (2000).
21. "Phosphodiesterase 5 Inhibitors: Discovery and Therapeutic Utility", David P. Rotella, *Drugs of the Future* **26**, 153-162 (2001).
22. "Osteoporosis: Challenges and New Opportunities for Therapy", *Curr. Opin. In Drug Discovery and Development* **5**, 477-486 (2002).
23. "Phosphodiesterase Type 5 Inhibitors: Current Status and Potential Applications", *Nature Reviews Drug Discovery* **1**, 674-683 (2002).
24. "Tadalafil (Lilly/ICOS)", *Curr. Opin. Invest. Drugs* **4**, 60-65 (2003).
25. "SB-480848. GlaxoSmithKline", *Curr. Opin. Invest. Drugs* **5**, 348-351 (2004).
26. "Novel Second Generation Approaches for the Control of Type 2 Diabetes", *J. Med. Chem.* **47**, 4111-4112 (2004).
27. "Discovery and Structure Activity Relationships of 2-Benzylpyrrolidine-Substituted Aryloxypropanols as Calcium-Sensing Receptor Antagonists", Wu Yang, Yufeng Wang, Jacques

Roberge, Zhengping Pa, Yalei Yu, David P. Rotella, Ramakrishna Seethala, R. Michael Lawrence, Jean H. M. Feyen, John K. Dickson, *Bioorg. Med. Chem. Lett.* **15**,1225-1228 (2005).

28. “Phosphodiesterase Inhibitors: Potential CNS Applications”, Nicholas J. Brandon, David P. Rotella, *Annual Reports in Medicinal Chemistry*, **42**, 3-12 (2007)

29. “Potent Non-nitrile Dipeptidic Dipeptidyl Peptidase IV Inhibitors”, Ligaya M. Simpkins, Scott Bolton, Zulan Pi, James C. Sutton, Chet Kwon, Guohua Zhao, David R. Magnin, David J. Augeri, Timur Gungor, David P. Rotella, Zhong Sun, Yajun Liu, William S. Slusarchyk, Jovita Marcinkeviciene, James G. Robertson, Aiyang Wang, Jeffrey A. Robl, Karnail S. Atwal, Robert Zahler, Rex A. Parker, Mark S. Kirby, Lawrence G. Hamann, *Bioorg. Med. Chem. Lett.* **17**, 6476-6480 (2007).

30. “Alzheimer’s Disease: A Light at the End of the Tunnel?”, Albert J. Robichaud, David P. Rotella, *Drug. Development Res.* **2009**, *70*, 57-59.

31. “Tetrahydrocarbazole-based Serotonin Reuptake Inhibitors/Dopamine D2 Partial Agonists for the Potential Treatment of Schizophrenia”, David P. Rotella, Geraldine R. McFarlane, Alexander Greenfield, Cristina Grosanu, Albert J. Robichaud, Rajiah Aldrin Denny, Rolf W. Feenstra, Sara Núñez-García, Jan-Hendrik Reinders, Martina van der Neut, Andrew McCreary, Chris G. Kruse, Kelly Sullivan, Farhana Pruthi, Margaret Lai, Jean Zhang, Dianne M. Kowal, Tikva Carrick, Steven M. Grauer, Rachel L. Navarra, Radka Graf, Julie Brennan, Karen L. Marquis, Mark H. Pausch, *Bioorg. Med. Chem. Lett.* **2009**, *19*, 5552-5555.

32. “WS-50030 [7-{4-[3-(1H-inden-3-yl)propyl]piperazin-1-yl}-1,3-benzoxazol-2(3H)-one]: A Novel Dopamine Receptor Partial Agonist/Serotonin Reuptake Inhibitor with Preclinical Antipsychotic-Like and Antidepressant-Like Activity”, Julie A. Brennan, Karen L. Marquis, Mark H. Pausch, Chad E. Beyer, Zoe Hughes, Radka Graf, Steven Grauer, Qian Lin, Sharon Rosenzweig-Lipson, Farhana Pruthi, Claudine Pulicchio, David P. Rotella, Albert J. Robichaud, Deborah L. Smith, Rolf Feenstra, Chris G. Kruse, Andrew McCreary, Pierre Broqua, Wouter Grotier, Martina van der Neut, *J. Pharmacol. Exp. Ther.* **2010**, *332*, 190-201.

33. “Potent Dihydroisoquinolone-Based Dopamine D<sub>2</sub> Partial Agonist/Serotonin Reuptake Inhibitors for Treatment of Schizophrenia”, Yinfā Yan, Ping Zhou, David P. Rotella, Rolf Feenstra, Chris G. Kruse, Martina van der Neut, Jan-Hendrik Reinders, Farhana Pruthi, Dianne Kowal, Tikva Carrick, Margaret Lai, Karen L. Marquis, Mark H. Pausch, Albert J. Robichaud, *Bioorg. Med. Chem. Lett.* **2010**, *20*, 2983-2986.

34. “Drug Discovery 2012 and Beyond”, David P. Rotella, *ACS Med. Chem. Lett.* **2012**, *3*, 172-174.

35. “Recent Results on Protein Kinase Inhibition for Tropical Diseases”, David P. Rotella, *Bioorg. Med. Chem. Lett.* **2012**, *22*, 6788-6793.

36. “Discovery and Development of Boceprevir”, David P. Rotella, *Expert Opin. Drug Discovery* **2013**, *8*, 1-9.

37. “The Spectral Properties of (-)-Epigallocatechin-3-O-Gallate (EGCG) Fluorescence in Different Solvents: Dependence on Solvent Polarity”, Vladislav Snitsarev, Michael N. Young, Ross M. S. Miller, David P. Rotella, *PLoS One*, **2013**, 8(11) e79834.
38. “Toward the Discovery of Drug Like Epigallocatechin Gallate Analogs as Hsp90 Inhibitors”, Rohit Bhat, Amna Adam, Jungeun Jasmine Lee, Ellen C. Henry, Thomas A. Gasiewicz, David P. Rotella, *Bioorg. Med. Chem. Lett.* **2014**, 24, 2263-2266.
39. “Structure-activity Studies of (-)-Epigallocatechin Gallate Derivatives as HCV Entry Inhibitors” Rohit Bhat, Amna Adam, Jungeun Jasmine Lee, Gaspard Deloison, Yves Rouillé, Karin Séron, David P. Rotella, *Bioorg. Med. Chem. Lett.* **2014**, 24, 4162-4165.
40. “An Update on Hsp90 Inhibitor Biology, Medicinal Chemistry and Clinical Development”, Rohit Bhat, Sreedhar Reddy Tummalapalli, David P. Rotella, invited miniperspective *J. Med. Chem.* **2014**, 57, 8718-8728.
41. “Mechanism of Inhibition of Botulinum Neurotoxin Type A Light Chain by Two Quinolinol Compounds”, Yacoba V. T. Minnow, Ronald Goldberg, Sreedhar R. Tummalapalli, David P. Rotella, Nina Goodey, *Biochem. Biophys. Res. Commun.* **2017**, 638, 15-22.
42. “Synthesis and computational analysis of conformationally restricted [3.2.1]- and [3.2.2]-3-azabicyclic diamines”, Sreedhar Reddy Tummalapalli, Rohit Bhat, Craig Waitt, Henk Eshuis, David P. Rotella, *Tetrahedron Letters* **2017**, 58,4087-4089.
43. “Discovery of a stress-activated protein kinase inhibitor for lymphatic filariasis”, Sreedhar R. Tummalapalli, Rohit Bhat, Agnieszka Chojnowski, Monika Prorok, Tamara Kreiss, Ronald Goldberg, Stacie Canan, Natalie Hawryluk, Deborah Mortensen, Vikram Khetani, Jerome Zeldis, John J. Siekierka, David P. Rotella, *ACS Med Chem Letters*, **2018**, 9, 210-214.
44. “Expression, purification, and inhibition profile of dihydrofolate reductase from the filarial nematode *Wuchereria bancrofti*”. Andrew M. Tobias, Dea Toska, Keith Lange, Tyler Eck, Rohit Bhat, Cheryl A. Janson, David P. Rotella, Ueli Gubler, and Nina M. Goodey *PLOS ONE*. *PLoS ONE* 13(5): e0197173.
45. “Discovery of isoxazolyl-based inhibitors of *Plasmodium falciparum* cGMP-dependent protein kinase”, Shams Ul Mahmood, Huimin Cheng, Sreedhar R. Tummalapalli, Ramappa Chakrasali, Rammohan Yadav Bheemanaboina, Tamara Kreiss, Agnieszka Chojnowski, Tyler Eck, John J. Siekierka, David P. Rotella, *RSC Medicinal Chemistry*, **2020**, 11, 98-101.
46. “*Plasmodium falciparum* cGMP-Dependent Protein Kinase-A Novel Chemotherapeutic Target” David Rotella, John Siekierka, Purnima Bhanot, *Frontiers in Microbiology*, **2021**, 11, 610408.
47. “Discovery of imidazole-based inhibitors of *P. falciparum* cGMP-dependent protein kinase”, Rammohan R. Yadav Bheemanaboina, Mariana Laureano de Silva, Mariana Lozano

Gonzalez, Shams Ul Mahmood, Tyler Eck, Tamara Kreiss, Samantha O. Aylor, Alison Roth, Patricia Lee, Brandon S. Pybus, Dennis J. Colussi, Wayne E. Childers, John Gordon, John J. Siekierka, Purnima Bhanot, David P. Rotella, *ACS Med. Chem. Lett.*, **2021**, 12, 1962-1967.

**48.** “Characterization of competitive inhibitors of *P. falciparum* cGMP-dependent protein kinase”, Mariana Laureano de Souza; Melvin Delvillar; Kutub Ashraf; Rammohan R. Yadav Bheemanaboina; Ramappa Chakrasali; Tamara Kreiss; John J Siekierka; David P Rotella; Purnima Bhanot; Nina M Goodey, *ChemBioChem.*, **2022**, e202100704.

**49.** “A novel series of putative *Brugia malayi* histone demethylase inhibitors as potential anti-filarial parasitic drugs”, Tamara Kreiss, Tyler Eck, Brittany Hart, Sreedhar Tummalapalli, David Rotella, John Siekierka, *PLoS Neglected Tropical Diseases*, **2022**, 16(3): e0010216.

### **Patents:**

1. "Diastereomeric Mono- and Di-Substituted Diaminocyclohexane Compounds and Methods of Preparation Thereof" Donald T. Witiak and David P. Rotella, US 5,206,400.
2. "K252a Functional Derivatives Potentiate Neurotrophin-3 Activity for the Treatment of Neurological Disorders" Marcie A. Glicksman, Robert L. Hudkins, David P. Rotella, Nicola Neff and Chikara Murakata, US 5,468,872.
3. “K252 Derivatives Which Enhance Neurotrophin-Induced Activity” Marcie A. Glicksman, Robert L. Hudkins, David P. Rotella, Nicola Neff and Chikara Murakata, US 5,516,772.
4. “Quinazolinone Inhibitors of cGMP Phosphodiesterase”, David P. Rotella, John E. Macor, David Cushman, Joseph Yevich, US 6,087,368
5. “Quinoline Inhibitors of cGMP Phosphodiesterase”, Yingzhi Bi, David P. Rotella, Guixue Yu, John E. Macor, US 7,378,430 .
6. “2-Substituted cyclic amines as calcium sensing receptor modulators”, Ashvinikumar Gavai, Roy J. Vaz, John K. Dickson, Jacques Y. Roberge, Wu Wang, Timur Gungor, James R. Corte, David P. Rotella, Yufeng Wang, Wu Yang, US 7,105,537.
7. “Preparation of substituted piperidines and pyrrolidines as calcium sensing receptor modulators”, John K. Dickson, Michael R. Lawrence, Jacques Y. Roberge, David P. Rotella, Wu Yang, US 7,265,145.
8. “Processes for the preparation of imidazo[5,1-f][1,2,4]triazin-4-ones”, US20060264624, Alexander Heim-Riether and David P. Rotella.

### **Book Chapters:**

“Recent Progress in Neuroinflammatory Drug Targets”, *Medicinal Chemistry Reviews*, volume 55, **2020**, 87-100.



“Heterocycle Properties in Drug Design”, *Advances in Heterocyclic Chemistry*, volume 134, Elsevier Science, 149-183, **2021**.

“Drug Discovery in Lifestyle Disorders”, *Burger’s Medicinal Chemistry*, 8<sup>th</sup> edition, John Wiley and Sons, volume 5, **2021**.

“Recent Results in Phosphodiesterase Inhibitor Development and CNS Applications”, “Cyclic-Nucleotide Phosphodiesterases in the Central Nervous System: From Biology to Drug Discovery”, John Wiley and Sons, **2014** 115-144, Anthony West, Nicholas J. Brandon, editors.

“Monoaminergic Targets for Treatment of Schizophrenia”, “New Approaches to Psychiatric Drug Discovery”, Royal Society of Chemistry Press, **2012**, 33-47, Zoran Rankovic, editor.

“Pioneer and Analogue Drugs”, “Analogue-based Drug Discovery”, volume 3, Wiley VCH, **2012**, 3-18, edited by Janos Fischer, C. Robin Ganellin, David P. Rotella

“SSRIs” David P. Rotella and Wayne E. Childers, “Analogue-Based Drug Discovery”, volume 2, Wiley-VCH, **2010**, 269-296, Janos Fischer and Robin Ganellin, editors.

“Medicinal Chemistry Challenges in the Discovery of Novel Antidepressants”, “Next Generation Antidepressants”, **2010**, 102-118, Cambridge University Press, Chad E. Beyer, Stephen M. Stahl, editors.

“Drug Discovery for Non-Life Threatening Disorders”, “Burger’s Medicinal Chemistry”, volume 5, 7<sup>th</sup> edition, John Wiley and Sons, **2010**, 711-728, Donald J. Abraham and David P. Rotella, co-editors.

“Phosphodiesterase Enzymes, Inhibitors and Therapeutic Applications” “Comprehensive Medicinal Chemistry II” Elsevier Science, **2006**, 919-957, Walter H. Moos editor.

### **Abstracts and Presentations:**

#### **Invited lectures:**

“Novel approaches for discovery of antimalarial agents”, 3<sup>rd</sup> New York University Abu Dhabi Biomedical and Biosystems Conference, January 12, 2020.

“Progress in the discovery of kinase inhibitors for treatment of parasitic diseases”, MEDI 194, 258<sup>th</sup> American Chemical Society National Meeting, August 26, 2019, San Diego CA.

“Discovery of Novel Antiparasitic Agents”, Virginia Commonwealth University, Department of Medicinal Chemistry, March 2019.

“Discovery of Novel Hsp90 Inhibitors”, Department of Cell Biology and Neuroscience, Rutgers University, November 2015.

“A Natural Product Template for Medicinal Chemistry” Merck Research Laboratories, Kenilworth NJ, March 2014.

“A Natural Product Template for Medicinal Chemistry”, University of Kansas, Department of Medicinal Chemistry, October 2014.

“Conformationally Restrained Ligand Design in Medicinal Chemistry” Vanderbilt University, Department of Pharmacology, May 2015

“Progress Toward the Identification of Drug-Like Hsp90 Inhibitors”, Department of Medicinal Chemistry, University of Illinois at Chicago, October 2013.

“Design, Synthesis and Use of Novel Diamine Templates in Medicinal Chemistry” Eli Lilly Research Laboratories, May 2013.

“Structure-activity Relationships of Novel Inhibitors of the *Brugia malayi* Stress-activated Protein Kinase, Bm-MPK1” David P. Rotella, Sreedhar R. Tummalapalli, Agnieska Chojnowski, Tamara W. Kreiss, Deborah S. Mortensen, Veronique Plantevin, Stacie Canan, Vikram Khetani, Jerome B. Zeldis, Ronald Goldberg, John Siekierka, poster presentation American Society of Tropical Medicine and Health national meeting, Washington DC November 5, 2013.

“Novel inhibitors of the *Brugia malayi* stress-activated protein kinase, Bm-MPK1”, Mortensen DS, Khetani V, Satoh Y, Cathers B, Canan S, Zeldis J, Chojnowski AN, Patel A, Goldberg R, Rotella D, Siekierka J. poster presentation American Society of Tropical Medicine and Hygiene, Atlanta, GA, November 11-15, 2012.

### **Poster Presentations**

“Antipsychotic-like profile of WS-50030, a combined partial D<sub>2</sub> receptor agonist and selective serotonin reuptake inhibitor”, Julie Brennan, Karen Marquis, Claudine Pulichicchio, Mark Pausch, Steven Grauer, David P. Rotella, Rolf Feenstra, Andrew McCreary, poster presentation, Society for Neuroscience meeting 2008, Washington DC, November 2008.

“PDE5 Inhibitors: Comparison of Current Agents and Future Prospects”, David P. Rotella, 2<sup>nd</sup> Annual Phosphodiesterases in Drug Discovery and Development, November 8-9, 2004.

“Phosphodiesterase Type 5 Inhibitors: Is There Room for More?” David P. Rotella, American Society of Andrology 29<sup>th</sup> National Meeting, April 18, 2004.

“Effects of the M3 antagonist, darafenicin, on food intake and body weight in two models of obesity.” M.J. Cullen, M.A. Pelleymounter, D. Rotella, K. Carlson and K. Behnia, Keystone Symposium: Obesity: New Insights into Pathogenesis and Treatment, Keystone, CO, January 21-26, 2003.

“Discovery and Optimization of PDE5 Inhibitors” David P. Rotella, Zhong Sun, Yeheng Zhu, Laurie Seliger, Ronald Pongrac, Diane Normandin, John Krupinski, John E. Macor, 220<sup>th</sup> National American Chemical Society Meeting, Washington DC, August 21-24, 2000, MEDI 322.

"Neurotrophic Derivatives of K252A. Profile of CEP 1347/KT7515 and SAR of Survival Promoting Analogs", Chikara Murakata, Masami Kanedo, Yuzuru Matsuda, Hiromitsu Saito, Yutaka Saito, Eriko Tanaka, Tatsuya Tamaoki, Tadashi Matsumoto, James C. Kauer, Robert L. Hudkins, David P. Rotella, Marcie A. Glicksman, Michael Saporito, Susan Carswell, Forrest Haun, Ernest Knight, Jr., Craig Dionne, Nicola T. Neff, Jeffry L. Vaught and John P. Mallamo, 212th National American Chemical Society Meeting, August 25-29, 1996, Orlando, FL, MEDI 211.

"Potent and Selective Neurotrophic Derivatives of K252a", John P. Mallamo, James C. Kauer, Robert L. Hudkins, David P. Rotella, Marcie A. Glicksman, Michael Saporito, Susan Carswell, Forrest Haun, Ernest Knight, Jr., Nicola T. Neff, Jeffry L. Vaught, Chikara Murakata and Masami Kaneko, Second Symposium on Medicinal Chemistry Approaches to Alzheimer's Disease, August 28-30 1995, Strasbourg, France.

"Neurotrophic Structure Activity Relationships for Potent and Selective Derivatives of K252a", Robert L. Hudkins, Chikara Murakata, Masami Kaneko, Yuzuru Matsuda, David P. Rotella, Craig A. Dionne, Ernest Knight, Jr., Marcie A. Glicksman, Nicola T. Neff and John P. Mallamo, Second Symposium on Medicinal Chemistry Approaches to Alzheimer's Disease, August 28-30 1995, Strasbourg, France.

"Carbazole and Carboline Derivatives of K252C as Potential Small Molecule Neurotrophic Agents", David P. Rotella, Marcie A. Glicksman, J. Eric Prantner and Robert L. Hudkins, First Annual Medicinal and Bioorganic Chemistry Conference, Steamboat Springs Colorado, January 29-February 2, 1995.

"The Effect of Hydroxyl Protection on Stereochemistry and Stereocontrol During Amide Iodolactonization" David P. Rotella, 202nd National Meeting of the American Chemical Society, August 25-30, 1991, New York, NY, ORGN 258.

"Conformationally Restricted Substrate Analogues as Potential Phospholipase A<sub>2</sub> Inhibitors" David P. Rotella, Xun Li and John K. Baker, Fifth Annual National Meeting of the American Association of Pharmaceutical Scientists, November 4-6, 1990, Las Vegas, NV.

"Synthesis and Preliminary <sup>31</sup>P NMR Evaluation of Lactones as Substrates for Phospholipase A<sub>2</sub>" David P. Rotella, Xun Li and John K. Baker, invited poster presentation

to the National Meeting of the American Association of Colleges of Pharmacy, Salt Lake City, UT, July 8-11, 1990.

"Structure-Activity and Cytotoxicity Studies of Irreversible Calmodulin Antagonists Based on a Natural Product Model" David P. Rotella, Qingwu He, John M. Pezzuto and Carl L. Tipton, poster presentation at the National Medicinal Chemistry Symposium, Austin, TX, July 29-August 2, 1990.

"Homoallylically Controlled Epoxidation of  $\Delta^4$ -*cis*-1,2-Disubstituted Cyclohexenes", David P. Rotella, 197th National Meeting of the American Chemical Society, Dallas, TX, April 9-14, 1989, ORGN 34.

"Synthesis and Biological Evaluation of Novel Hydroxycyclohexanediamine Pt(II) Complexes as Potential Antitumor Agents", David P. Rotella and Donald T. Witiak, 191st National Meeting of the American Chemical Society, New York, NY, April 16-21, 1986, MEDI 54.

"Synthesis and Antitumor Activity of Novel Pt(II) Hydroxycyclohexanediamine Complexes", D.P. Rotella, D.T. Witiak, and J.A. Filppi, First International Biotechnology Conference, Columbus, OH, November 13-15, 1985.

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