

## PAUL A. ARISTOFF

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### CAREER SUMMARY

A drug discovery scientist and leader with extensive experience in the pharmaceutical industry leading multi-disciplinary research teams and chemistry departments of up to 160 scientists in a broad variety of therapeutic areas that produced over 35 development candidates, including three drugs that are on the US market. Inventor or co-inventor on twelve development candidates, including four drugs that reached the marketplace. Successfully initiated and led multiple collaborations with academia and the biotech industry. Excellent interpersonal and communication skills. Broad medicinal chemistry expertise, particularly in the antibacterial, antiviral, and oncology research areas.

### PROFESSIONAL EXPERIENCE

ARISTOFF CONSULTING LLC 2008 –  
**President and Founder**

Provide medicinal chemistry consulting services to clients in industry, academia and government.

PFIZER, INC., ANN ARBOR, MI 2003 - 2008

**Senior Director, Antibacterial Chemistry**

Provided overall leadership to 33 medicinal chemists hiring seven in 2005 in the Antibacterial Chemistry group in Ann Arbor.

- Led a group charged with designing and synthesizing antibacterial compounds to treat serious hospital and community infections delivering six development candidates in four years.
- Chaired a joint research committee leading the Vicuron Pharmaceuticals / Pfizer collaboration on Oxazolidinones, resulting in the delivery of four development candidates and a relationship that helped enable the purchase of Vicuron which increased the revenue potential for Pfizer by the acquisition of two Vicuron late stage clinical candidates (dalbavancin and Eraxis™)

PHARMACIA, KALAMAZOO, MI 1978 – 2003

**Senior Director, Chemistry** 1999-2003

Provided leadership of the Infectious Diseases Discovery Portfolio that produced six development candidates.

- Served as overall project leader of the Oxazolidinone Team and chair of the Pharmacia / Vicuron Collaboration (formerly Versicor, Inc,) resulting in the discovery of three development candidates.
- Managed the hiring of 50 medicinal chemists (including 20 PhD chemists) identifying their skills and enabling the continuation of discovery projects.

**Director, Medicinal Chemistry, Pharmacia & Upjohn** 1995 -1999

Provided chemistry leadership for 160 scientists in the Kalamazoo Chemistry Department including the medicinal, analytical, and the structural chemistry groups, enabling the delivery of 15 development candidates, including clinical candidates from the antibacterial, antiviral, CNS, cardiovascular, diabetes and inflammation disease areas.

- Led the Oxazolidinone Program Team and the Versicor Collaboration on Oxazolidinones, resulting in the delivery of four antibacterial development candidates.
- Led the global collaboration for Pharmacia & Upjohn with the Axys Company (formerly Arris, Inc.) on combinatorial chemistry in order to train company scientists on these chemistry techniques and to enlarge the P & U chemical screening file.

**Director, Medicinal Chemistry Research, The Upjohn Company** 1991-1995

Served as the overall head of medicinal chemistry, leading the 100 medicinal chemists responsible for all discovery chemistry projects at Upjohn, resulting in the discovery of 16 development candidates in the antibacterial, antiviral, CNS, and inflammatory diseases areas.

- One development candidate discovered by scientists reporting to me, linezolid (Zyvox<sup>®</sup>) for the treatment of serious gram-positive infections, represented the first new class of antibacterial agents approved in over 35 years by the FDA when it entered the marketplace in 2000. Annual sales exceed the one billion dollar mark, and the discovery has been recognized by national awards from both PhRMA and the American Chemical Society.
- Another development candidate, tipranavir (Aptivus<sup>®</sup>), designed and synthesized in my own laboratory as a non-peptidic HIV protease inhibitor, entered the US marketplace in 2005.

**Associate Director, Cancer and Viral Diseases Research, The Upjohn Company** 1984-1990

Served as overall Chemistry head directing operations and managing a staff of 20 chemists.

- Led the CC-1065 Analog Project, producing the clinical candidates adozelesin, bizelesin (developed via an NCI collaboration), and carzelesin (developed via an EORTC collaboration).
- Served as chemistry lead on an NIH AIDS grant directed towards the discovery of non-nucleoside HIV reverse transcriptase inhibitors, enabling the discovery of clinical candidate atevirdine.
- Served as Project Leader of the HIV Non-nucleoside Reverse Transcriptase Inhibitor Project that discovered atevirdine and delavirdine (Rescriptor<sup>®</sup>), the latter reaching the US marketplace in 1997.
- Served as chemistry leader on an angiogenesis collaboration with Professor Judah Folkman at Harvard which ultimately led to being co-inventor on anecortave acetate (Retaane<sup>™</sup>) that has been used for the treatment of ocular disease.

**Scientist, Experimental Chemistry Research, The Upjohn Company** 1978-1984

Served as laboratory lead scientist charged with the discovery of stable prostacyclin analogs.

- Designed and synthesized ciprostone calcium, which reached phase III clinical evaluation.
- Designed and synthesized treprostinil sodium (Remodulin<sup>®</sup>), which is indicated for the treatment of severe pulmonary arterial hypertension (PAH) and reached the US marketplace in 2002.

**EDUCATION**

<b>Postdoctoral Research Fellow</b> in Organic Chemistry with A. Eschenmoser Swiss Federal Institute of Technology (ETH), Zürich, Switzerland	1977-1978
<b>Ph.D.</b> , Organic Chemistry, California Institute of Technology, Pasadena, California Thesis Advisor: R.E. Ireland	1973-1977
<b>B.A. / M.S.</b> (Combined) in Chemistry, Northwestern University, Evanston, Illinois Thesis Advisor: J.A. Marshall	1969-1973

**ACADEMIC AND PROFESSIONAL HONORS**

Visiting Research Scientist, Med. Chem. Dept., University of Michigan	2008 -
Editorial Advisory Board member for <i>Chemical Biology &amp; Drug Design</i>	2006 -
Upjohn Achievement in Science and Medicine Award	1995
W. E. Upjohn Award	1991
Member of Ad Hoc Task Force to Monitor <i>JACS</i>	1989 - 1990
Editorial Advisory Board Member for <i>Journal of Organic Chemistry</i>	1988 - 1992
NSF National Needs Postdoctoral Fellowship	1977 - 1978
National Science Foundation Graduate Fellowship	1973 - 1976
American Institute of Chemists Student Award	1973
Phi Beta Kappa; B.A. with Distinction and Departmental Honors	1973

**PUBLICATIONS, PRESENTATIONS, AND PATENTS**

Author or co-author on 60 publications and 82 presentations (including 40 invited lectures).  
Inventor or co-inventor on 30 issued US patents, including for four marketed drugs.

**PUBLICATIONS**

1. R.E. Ireland, P.A. Aristoff, and C.F. Hoyng. "Experiments Directed toward the Total Synthesis of Terpenes. 23. Synthesis of 4a-Methyl-4,4a,7,8-tetrahydro-9H-benzocycloheptene-2(3H),5(6H)-dione (B-Homo Wieland-Miescher Ketone): A Versatile Intermediate for Terpene Synthesis." *J Org Chem* **44**, 4318 (1979).
2. R.E. Ireland and P.A. Aristoff. "Experiments Directed toward the Total Synthesis of Terpenes. 24. On the  $\pi$  Route to Aphidicolin: Synthesis of 18,19-Bisnoraphidicolan-3-one." *J Org Chem* **44**, 4323 (1979).
3. P.A. Aristoff. "Practical Synthesis of 6a-Carbaprostaglandin I<sub>2</sub> ." *J Org Chem* **46**, 1954 (1981).
4. P.A. Aristoff and A. W. Harrison. "Synthesis of Benzindene Prostaglandins: A Novel Potent Class of Stable Prostacyclin Analogs." *Tetrahedron Lett* **23**, 2067 (1982).
5. P.A. Aristoff, A.W. Harrison, J.W. Aiken, R.R. Gorman, and J.E. Pike. "Synthesis and Structure-Activity Relationship of Novel Stable Prostacyclin Analogs." *In Advances in Prostaglandin, Thromboxane, and Leukotriene Research*, Vol. 11, ed. by B. Samuelsson, R. Paoletti, and P. Ramwell, 267-274, Raven Press, New York, 1983.
6. P.A. Aristoff. "Use of Crown Ether in the Intramolecular Wadsworth-Emmons Reaction. Synthesis of Bicyclo[3.3.0]oct-1-en-3-one." *Synth Commun* **13**, 145 (1983).
7. P.A. Aristoff and C.L. Nelson. "Practical Synthesis of 3,3,4,4-Tetramethylcyclopentanone." *Org Prep Proc Int* **15**, 149 (1983).
8. P.A. Aristoff, P.D. Johnson and A.W. Harrison. "Synthesis of 9-Substituted Carbacyclin Analogues." *J Org Chem* **48**, 5341 (1983).
9. P.A. Aristoff, A.W. Harrison and A.W. Huber. "Synthesis of Benzopyran Prostaglandins, Potent Stable Prostacyclin Analogs, via an Intramolecular Mitsunobu Reaction." *Tetrahedron Lett* **24**, 3955 (1984).
10. O. Radmark, C. Serhan, M. Hamberg, U. Lundberg, M.D. Ennis, G.L. Bundy, T.D. Oglesby, P.A. Aristoff, A.W. Harrison, G. Slomp, T.A. Scahill, G. Weissmann, B. Samuelsson. "Stereochemistry, Total Synthesis and Biological Activity of 14,15-Dihydroxy-5,8,10,12-eicosatetraenoic Acid." *J Biol Chem* **259**, 13011 (1984).
11. P.A. Aristoff. "The Synthesis of Prostacyclin Analogues." *In Advances in Prostaglandin, Thromboxane, and Leukotriene Research*, Vol. 14, ed. by J.E. Pike and D.R. Morton, 309-392, Raven Press, New York, 1985.
12. P.A. Aristoff. "Improved Method for the Conversion of Enol Lactones to Cyclic  $\alpha,\beta$ -Unsaturated Ketones." *J Org Chem* **50**, 1765 (1985).

13. P.A. Aristoff, A.W. Harrison, P.D. Johnson, and A. Robert. "Synthesis and Structure-Activity Relationships of Benzindene Prostaglandins: Novel Potent Antiulcer Agents." In *Advances in Prostaglandin, Thromboxane, and Leukotriene Research*. Vol. 15, ed. by O. Hayaishi and S. Yamamoto, 275-277, Raven Press, New York, 1985.
14. A. Robert, P.A. Aristoff, M.G. Wendling, F.A. Kimball, W.L. Miller, Jr., and R.R. Gorman. "Gastrointestinal Properties of U-68,215, a Stable Prostacyclin Analog." In *Advances in Prostaglandin, Thromboxane, and Leukotriene Research*. Vol. 15, ed. by O. Hayaishi and S. Yamamoto, 641-644, Raven Press, New York, 1985.
15. A. Robert, P.A. Aristoff, M.G. Wendling, F.A. Kimball, W.L. Miller, Jr., and R.R. Gorman. "Cytoprotective and Antisecretory Properties of a Non-Diarrheogenic and Non-Uterotonic Prostacyclin Analog: U-68,215." *Prostaglandins*, **30**, 619 (1985).
16. A. Robert, P.A. Aristoff, M.G. Wendling, F.A. Kimball, W.L. Miller, Jr., and R.R. Gorman. "Cytoprotective and Antisecretory Properties of a Non-Diarrheogenic and Non-Uterotonic Prostacyclin Analog: U-68,215." *Gastroenterology* **88**, 1556 (1985).
17. P.A. Aristoff, P.D. Johnson, and A.W. Harrison. "Total Synthesis of a Novel Antiulcer Agent via a Modification of the Intramolecular Wadsworth-Emmons-Wittig Reaction." *J Am Chem Soc* **107**, 7967 (1985).
18. P.A. Aristoff. "Ciprostene Calcium." *Drugs of the Future* **10**, 900 (1985).
19. E. Vogel, G. Caravatti, P. Franck, P.A. Aristoff, C. Moody, A-M. Becker, D. Felix, and A. Eschenmoser. "On the Stereochemistry of E' and E"-Reactions." *Chem. Lett* **219** (1987).
20. R.C. Kelly, I. Gebhard, N. Wicnienski, P.A. Aristoff, P.D. Johnson, and D.G. Martin. "Coupling of Cyclopropapyrroloindole (CPI) Derivatives. The Preparation of CC-1065, ent-CC-1065, and Analogs". *J Am Chem Soc* **109**, 6837 (1987).
21. C.H. Lin, P.A. Aristoff, P.D. Johnson, J.P. McGrath, J.M. Timko, and A. Robert. "Benzindene Prostaglandins. Synthesis of Optically Pure 15-Deoxy-U-68,215 and its Enantiomer via a Modified Intramolecular Wadsworth-Emmons-Wittig Reaction." *J Org Chem* **52**, 5594 (1987).
22. L.H. Hurley, C.S. Lee, J.P. McGovren, M.A. Warpehoski, M.A. Mitchell, R.C. Kelly, and P.A. Aristoff. "Molecular Basis for Sequence-Specific DNA Alkylation by CC-1065." *Biochemistry* **27**, 3886 (1988).
23. L.H. Hurley, C.S. Lee, J.P. McGovren, M.A. Warpehoski, M.A. Mitchell, R.C. Kelly, and P.A. Aristoff. "Reaction of CC-1065 and Select Synthetic Analogs with DNA." *Biochemical Pharmacol* **37**, 1795 (1988).
24. J.F. Fisher and P.A. Aristoff. "The Chemistry of DNA Modification by Antitumor Antibiotics." In *Progress in Drug Research*, Vol. 32, ed. by E. Jucker, 411-498, Birkhauser Verlag, Basel, 1988.
25. M.A. Mitchell, P.D. Johnson, M.G. Williams, and P.A. Aristoff. "Interstrand DNA Crosslinking with Dimers of the Spirocyclopropyl Alkylating Moiety of CC-1065." *J Am Chem Soc* **111**, 6428 (1989).
26. P.D., Johnson and P.A. Aristoff. "General Procedure for the Synthesis of  $\alpha$ -Amino phenylacetates by a Modification of the Gassman Reaction." *J Org Chem* **55**, 1374 (1990).
27. B.C. Moy, G.L. Petzold, G.J. Badiner, R.C. Kelly, P.A. Aristoff, E.G. Adams, L.H. Li and B.K. Bhuyan. "Characterization of B16 Melanoma Cells Resistant to the CC-1065 Analog, U-71,184." *Cancer Research* **50**, 2485 (1990).

28. D.L. Romero, M. Busso, C.-K. Tan, F. Reusser, J.R. Palmer, S.M. Poppe, P.A. Aristoff, K.M. Downey, A.G. So, L. Resnick and W.G. Tarpley. "Nonnucleoside Reverse Transcriptase Inhibitors that Potently and Specifically Block Human Immunodeficiency Virus Type 1 Replication." *Proc Natl Acad Sci* **88**, 8806 (1991).
29. P.A. Aristoff. "CC-1065 Analogs: Sequence Specific DNA-alkylating Antitumor Agents." In *Advances in Medicinal Chemistry*, Vol 2, ed. B. E. Maryanoff and C. A. Maryanoff, 67-110, JAI Press, Inc., Greenwich, CN, 1993.
30. K.A. Parker, C.A. Coburn, P.D. Johnson and P.A. Aristoff. Reductive Aromatization of Quinols. "New Convenient Methods for the Regiospecific Synthesis of *p*-Hydroxy C-aryl Glycols." *J Org Chem* **57**, 5547 (1992).
31. P.A. Aristoff and P.D. Johnson. "Synthesis of CBI-PDE-I-Dimer, The Benzannelated Analogue of CC-1065." *J Org Chem* **57**, 6234 (1992).
32. I.W. Althaus, R.J. LeMay, A.J. Gonzales, M.R. Deibel, S.K. Sharma, F.J. Kezdy, L. Resnick, M.E. Busso, P.A. Aristoff and F. Reusser. "Enzymatic Kinetic Studies with the Non-nucleoside HIV Reverse Transcriptase Inhibitor U-9853." *Experientia* **48**, 1127 (1992).
33. P.A. Aristoff and J.P. McGovren. "Antitumor Agents Based on CC-1065." *Drug News & Perspectives* **6**, 229 (1993).
34. I.W. Althaus, J.J. Chou, A.J. Gonzales, M.R. Deibel, K.C. Chou, F.J. Kezdy, D.L. Romero, P.A. Aristoff, W.G. Tarpley and F. Reusser. "Steady-state Kinetic Studies with the Non-nucleoside HIV-1 Reverse Transcriptase Inhibitor U-87201E." *J Biol Chem* **268**, 6119 (1993).
35. T.J. Dueweke, S.M. Poppe, D.L. Romero, S.M. Swaney, A.G. So, K.M. Downey, I.W. Althaus, F. Reusser, L. Resnick, D. Mayers, P.A. Aristoff, R.C. Thomas and W.G. Tarpley. "U-90152, A Potent Inhibitor of Human Immunodeficiency Virus Type 1 Replication." *Antimicrobial Agents and Chemotherapy* **37**, 1127 (1993).
36. I.W. Althaus, A.J. Gonzales, J.J. Chou, D.C. Romero, M.R. Deibel, K.C. Chou, F.J. Kezdy, L. Resnick, M.E. Busso, A.G. So, K.M. Downey, R.C. Thomas, P.A. Aristoff, W.G. Tarpley and F. Reusser. "The Quinoline U-78036 is a Potent Inhibitor of HIV-1 Reverse Transcriptase." *J Biol Chem* **268**, 14875 (1993).
37. I.W. Althaus, J.J. Chou, A.J. Gonzales, M.R. Deibel, K.C. Chou, F.J. Kezdy, D.C. Romero, J.R. Palmer, R.C. Thomas, P.A. Aristoff, W.G. Tarpley and F. Reusser. "Kinetic Studies with the Non-nucleoside HIV-1 Reverse Transcriptase Inhibitor U-88204E." *Biochemistry* **32**, 6548 (1993).
38. P.A. Aristoff, P.D. Johnson, D. Sun and L.H. Hurley. "Synthesis and Biochemical Evaluation of CBI-PDE-I-Dimer, a Benzannelated Analogue of (+)-CC-1065 that also Produces Delayed Lethality in Mice." *J Med Chem* **36**, 1956 (1993).
39. M.A. Mitchell, K.L. Wieland, P.A. Aristoff, P.D. Johnson and T.P. Dooley. "Sequence Selective Guanine Reactivity by Duocarmycin A." *Chem Res Toxicol* **6**, 421 (1993).
40. I.W. Althaus, J.J. Chou, A.J. Gonzales, R.J. LeMay, M.R. Deibel, K.C. Chou, F.J. Kezdy, D.L. Romero, R.C. Thomas, P.A. Aristoff, W.G. Tarpley and F. Reusser. "Steady-state Kinetic Studies with the Polysulfonate U-9843, an HIV Reverse Transcriptase Inhibitor." *Experientia* **50**, 23 (1993).

41. D.L. Romero, R.A. Morge, C. Biles, N. Berrios-Pena, P.D. May, J.R. Palmer, P.D. Johnson, H.W. Smith, M. Busso, C-K. Tan, R.L. Voorman, F. Reusser, I.W. Althaus, K.M. Downey, A.G. So, L. Resnick, W.G. Tarpley, and P.A. Aristoff. "Discovery, Synthesis, and Bioactivity of Bis(heteroaryl)piperazines. 1. A Novel Class of Non-Nucleoside HIV-1 Reverse Transcriptase Inhibitors." *J Med Chem* **37**, 999 (1994).
42. I.W. Althaus, J.J. Chou, A.J. Gonzales, M.R. Deibel, K.C. Chou, F.J. Kezdy, D.C. Romero, R.C. Thomas, P.A. Aristoff, W.G. Tarpley and F. Reusser. "Kinetic Studies with the Non-nucleoside HIV-1 Reverse Transcriptase Inhibitor U-90152E." *Biochemical Pharmacol* **47**, 2017 (1994).
43. P.D. Johnson and P.A. Aristoff. "Methyl (Z)- (2)-(Bromomethyl)-2-butenonate." In *Encyclopedia of Reagents for Organic Synthesis*, Vol. 5, ed. by L.A. Paquette, 3445, John Wiley & Sons, Inc., Chichester, England, 1995.
44. I. Abraham, C.L. Wolf, K.E. Sampson, A.L. Laborde, J.A. Shelly, P.A. Aristoff, and H.I. Skulnick. "K252a, KT5720, KT5926, and U-98017 Support Taxol Dependent Cells and Synergize with Taxol." *Cancer Research* **54**, 5889 (1994).
45. P.A. Aristoff. "BHAPs, A Promising Class of Non-nucleoside HIV Reverse Transcriptase Inhibitors." *Drug News & Perspectives* **8**, 151 (1995).
46. I.W. Althaus, K.C. Chou, R.J. Lemay, K.M. Franks, M.R. Deibel, F.J. Kezdy, L. Resnick, M.E. Busso, A.G. So, K.M. Downey, D.L. Romero, R.C. Thomas, P.A. Aristoff, W.G. Tarpley, and F. Reusser. "The Benzylthio-pyrimidine U-31355 is a Potent Inhibitor of HIV-1 Reverse Transcriptase." *Biochemical Pharmacol* **8**, 743 (1996).
47. P.A. Aristoff. "Enzyme Inhibitors for the Treatment of AIDS." In *Medicinal Chemistry: Today and Tomorrow*, ed. by M. Yamazaki, 57 - 62, Blackwell Science Ltd, Oxford, 1997.
48. H.I. Skulnick, P.D. Johnson, W.J. Howe, P.K. Tomich, K.T. Chong, K.D. Watenpaugh, M.N. Janakiraman, L.A. Dolak, J.P. McGrath, J.C. Lynn, M.M. Horng, R.R. Hinshaw, G.L. Zipp, M.J. Ruwart, F.J. Schwende, W.Z. Zhong, G.E. Padbury, R.J. Dalga, L. Shiou, P.L. Possert, B.D. Rush, K.F. Wilkinson, G.M. Howard, L.N. Toth, M.G. Williams, T.J. Kakuk, S.L. Cole, R.M. Zaya, K.D. Lovasz, J.K. Morris, K.R. Romines, S. Thaisrivongs, and P.A. Aristoff. "Structure-Based Design of Sulfonamide Substituted Non-peptidic HIV Protease Inhibitors." *J Med Chem* **38**, 4968 (1995).
49. S. Thaisrivongs, D.L. Romero, R.A. Tommasi, M.N. Janakiraman, J.W. Strohbach, S.R. Turner, C. Biles, R.A. Morge, P.D. Johnson, P.A. Aristoff, P.K. Tomich, J.C. Lynn, M.-M. Horng, K.T. Chong, R.R. Hinshaw, W.J. Howe, B.C. Finzel, and K.D. Watenpaugh. "Structure-Based Design of HIV Protease Inhibitors: 5,6-Dihydro-4-hydroxy-2-pyrones as Effective, Non-peptidic Inhibitors." *J Med Chem.* **39**, 4630 (1996).
50. H.I. Skulnick, P.D. Johnson, P.A. Aristoff, J.K. Morris, K.D. Lovasz, W.J. Howe, K.D. Watenpaugh, M.N. Janakiraman, D.J. Anderson, R.J. Reischer, G.L. Bundy, T.M. Schwartz, L.S. Banitt, P.K. Tomich, J.C. Lynn, M.-M. Horng, K.-T. Chong, R.R. Hinshaw, L.A. Dolak, F.J. Schwende, B.D. Rush, G.M. Howard, L.N. Toth, K.F. Wilkinson, T.J. Kakuk, C.W. Johnson, S.L. Cole, R.M. Zaya, G.L. Zipp, P.L. Possert, R.J. Dalga, and K.R. Romines. "Structure-Based Design of Nonpeptidic HIV Protease Inhibitors: The Sulfonamide-substituted Cyclooctyl Pyranones." *J Med. Chem* **40**, 1149 (1997).

51. S. Thaisrivongs, H.I. Skulnick, S.R. Turner, J.W. Strohbach, R.A. Tommasi, P.D. Johnson, P.A. Aristoff, T. M. Judge, R.B. Gammill, J.K. Morris, K.R. Romines, R.R. Hinshaw, K.T. Chong, W.G. Tarpley, S.M. Poppe, D.E. Slade, J.C. Lynn, M.M. Horng, P.K. Tomich, E.P. Seest, L.A. Dolak, W.J. Howe, G.M. Howard, F.J. Schwende, L.N. Toth, G.E. Padbury, G.J. Wilson, L. Shiou, G.L. Zipp, K.R. Wilkinson, B.D. Rush, M.J. Ruwart, K.A. Koeplinger, Z. Zhao, S. Cole, R.M. Zaya, T.J. Kakuk, M.N. Janakiraman, and K.D. Watenpaugh. "Structure-Based Design of HIV Protease Inhibitors: Sulfonamide Containing 5,6-Dihydro-4-hydroxy-2-pyrones as Non-peptidic Inhibitors." *J Med Chem* **39**, 4349 (1996).
52. W.J. Adams, P.A. Aristoff, R.K. Jensen, W. Morozowich, D.L. Romero, W.C. Schinzer, W.G. Tarpley, and R.C. Thomas. "Discovery and Development of the BHAP Non-nucleoside Reverse Transcriptase Inhibitor Delavirdine Mesylate." In *Integration of Pharmaceutical Discovery and Development: Case Studies*, ed. by R.T. Borchardt, R.M. Freidinger, T.K. Sawyer, and P.L. Smith, 285-312, Plenum Press, New York, 1998.
53. S.R. Turner, J.W. Strohbach, R. Tommasi, P.A. Aristoff, P.D. Johnson, H.I. Skulnick, L.A. Dolak, E.P. Seest, P.K. Tomich, M.J. Bohanon, M.-M. Horng, J.C. Lynn, K.-T. Chong, R.R. Hinshaw, K.D. Watenpaugh, M.N. Janakiraman, and S. Thaisrivongs. "Tipranavir (PNU-140690): A Potent, Orally Bioavailable Nonpeptidic HIV Protease Inhibitor of the 5,6-Dihydro-4-hydroxy-2-pyrone Sulfonamide Class." *J Med Chem* **41**, 3467 (1998).
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55. G.E. Zurenko, J.K. Gibson, D.L. Shinabarger, P.A. Aristoff, C.W. Ford, and W.G. Tarpley. "Oxazolidinones: a New Class of Antibacterials." *Current Opinion in Pharmacology* **1**, 470 (2001).
56. P.D. Johnson, P.A. Aristoff, G.E. Zurenko, R.D. Schaadt, B.H. Yagi, C.W. Ford, J. C. Hamel, D. Stapert, and J.K. Moerman. "Synthesis and Evaluation of Benzazepine Oxazolidinone Antibacterials." *Bioorganic & Med Chem Lett* **13**, 4197 (2003).
57. T.J. Poel, R.C. Thomas, W.J. Adams, P.A. Aristoff, M.R. Barbachyn, F.E. Boyer, J. Brieland, R. Brideau, J. Brodfuehrer, A.P. Brown, A.L. Choy, M. Dermeyer, M. Dority, C.W. Ford, R.C. Gadwood, D. Hanna, C. Hongliang, M.C. Huband, C. Huber, R. Kelly, J.Y. Kim, J.P. Martin, Jr., P.J. Pagano, D. Ross, L. Skerlos, M.C. Sulavik, T. Zhu, G.E. Zurenko, and J.V.N. Vara Prasad. "Antibacterial Oxazolidinones Possessing a Novel C-5 Side Chain. (5*R*)-*trans*-3-[3-Fluoro-4-(1-oxotetrahydrothiopyran-4-yl)phenyl]-2-oxooxazolidine-5-carboxylic Acid Amide (PR-00422602), a New Lead Compound." *J Med Chem* **50**, 5886 (2007).
58. P.A. Aristoff, G.A. Garcia, P.D. Kirchhoff, and H.D.H. Showalter. Rifamycins – Obstacles and Opportunities. *Tuberculosis* **90**, 94 (2010).
59. K.G. Anthony, U. Strych, K.R. Yeung, C.S. Shoen, O. Perez, K.L. Krause, M.H. Cynamon, P.A. Aristoff, and R.A. Koski. "New Classes of Alanine Racemase Inhibitors Identified by High-throughput Screening Show Antimicrobial Activity against *Mycobacterium tuberculosis*." *PLoS one* **6**, e20374 (2011).
60. M. Ciustea, S. Mootien, A.E. Rosato, O. Perez, P. Cirillo, K.R. Yeung, M. Ledizet, M.H. Cynamon, P.A. Aristoff, R.A. Koski, P.A. Kaplan, and K.G. Anthony. "Thiadiazolidinones: A new Class of Alanine Racemase Inhibitors with Antimicrobial Activity Against Methicillin-resistant *Staphylococcus aureus*." *Biochemical Pharmacology* **83**, 368 (2012).

**ABSTRACTS AND ORAL PRESENTATIONS (\*Invited Lectures)**

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### **ASSOCIATIONS**

American Chemical Society, American Association for the Advancement of Science, American Association for Cancer Research, American Society for Microbiology

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