

ANN E WEBER, PHD

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PROFESSIONAL SUMMARY

Accomplished independent consultant and former pharmaceutical executive with a passion for discovering innovative therapeutics to address unmet medical needs. Over 28 years of industrial experience focused on small molecule and peptide drug discovery across therapeutic areas leading to over 40 development candidates, including JANUVIA® (sitagliptin), a treatment for patients with Type 2 diabetes (T2DM), and MARIZEV® (omarigliptin), a once-weekly treatment for T2DM recently approved in Japan; vibegron for the treatment of overactive bladder is in late stage clinical trials. Highly collaborative scientific leader in drug discovery and early development, recognized for building strong teams, setting strategy and managing change. Noted for strong interpersonal skills, talent development, and commitment to advancing women in chemistry.

EXPERIENCE

ANN WEBER PHARMA CONSULTING

December 2015 – present

Independent consultant to biotech and pharma for all aspects of drug discovery including target and lead identification, lead optimization, and development candidate nomination

MERCK & CO

August 1987 – November 2015

Vice President – Lead Optimization Chemistry, Kenilworth, NJ and Boston, MA

November 2013 – November 2015

Responsible for delivering the lead optimization pipeline to the clinic, particularly in the areas of cardiometabolic diseases, infectious diseases, neurological disorders, oncology and asthma; talent recruitment, management and development for department of ~100 lead optimization chemists in Kenilworth and Boston, working in small-molecule and peptide modalities; Cubist integration team co-lead for Discovery Research

Vice President – Kenilworth Discovery Chemistry Site Head, Kenilworth, NJ

September 2011 – October 2013

Discovery of innovative therapeutic agents to treat patients with cardiovascular disease, diabetes, infectious diseases, and neurological disorders; leadership of chemists at Kenilworth site working in Lead Identification, Lead Optimization, and Automated Synthesis & Purification; Joint Steering Committee for Theravance collaboration; leadership and executive sponsorship of strategic initiatives; Six Sigma Executive Black Belt

Vice President – Rahway Discovery Chemistry Site Head, Rahway, NJ

February 2010 – August 2011

Primary focus on the development of new therapies for cardiovascular disease and metabolic disorders; provided leadership for department of ~200 medicinal chemists during re-organization activities following Schering Plough merger; established Rahway Women in Chemistry Lunch, providing networking and leadership opportunities for emerging women leaders across the internal chemistry organization, sponsored the first Merck Women in Chemistry Symposium

Executive Director, Medicinal Chemistry, Rahway, NJ

July 2005 – January 2010

Scientific oversight for teams that identified clinical candidates in the fields of obesity, diabetes, urinary incontinence, and pain; discovery of omarigliptin (approved in Japan Sept 2015), a once weekly agent for diabetes, and vibegron (licensed to Kyorin at Phase III) for urinary incontinence; Diabetes & Obesity Research Licensing Committee; Joint Research Committees for Metabasis and Neuromed collaborations; leadership of Early

Development Teams in diabetes and pain; basic research representative on Urinary Incontinence Product Development Team; chair of the Lead Optimization Work Stream tasked with implementing the new Basic Research Global Operating Strategy in the lead optimization space; Merck Women's Global Constituency Group member

Senior Director, Medicinal Chemistry, Rahway, NJ

March 2002 – June 2005

Leadership of a group of 24 medicinal chemists; identification of clinical candidates in the areas of obesity, diabetes, and pain; co-chair of DPP-4 Back-Up Early Development Team; Diabetes & Obesity Research Licensing Committee

Director, Medicinal Chemistry, Rahway, NJ

November 1997 – February 2002

Leadership for emerging programs in obesity and transplant therapy; initiation of chemistry effort on the DPP-4 inhibitor program for diabetes; co-lead of program core team that identified JANUVIA® (sitagliptin), the first marketed DPP-4 inhibitor for the treatment of patients with type2 diabetes; basic research representative on DPP-4 Early Development Team

Associate Director, Medicinal Chemistry, Rahway, NJ

November 1994 – October 1997

Chemistry group leader of the β_3 adrenergic receptor agonist program, leading to the identification of two compounds that entered clinical development; medicinal chemistry representative on the Product Development Team

Research Fellow, Medicinal Chemistry, Rahway, NJ

December 1991 – October 1994

Identification of the first human selective β_3 adrenergic receptor agonists for the treatment of obesity

Senior Research Chemist, Medicinal Chemistry, Rahway, NJ

August 1987 – November 1991

Design and synthesis of conformationally-restricted renin inhibitors for hypertension; initiation of the β_3 adrenergic receptor agonist program for obesity

Research Assistant, Harvard University, Cambridge, MA

September 1983 – July 1987

Oxazolidinethiones, active ester analogs of oxazolidinone chiral auxiliaries in the asymmetric aldol reaction; asymmetric synthesis of beta-hydroxy amino acids including the total synthesis of Echinocandin D

Research Assistant, California Institute of Technology, Pasadena, CA

September 1982 – August 1987

Initiated graduate work; assisted in laboratory move to Cambridge, MA

Research Assistant / Summer Intern, Monsanto Company, St. Louis, MO

June 1982 – August 1982

Synthesis of novel herbicides for crop protection

EDUCATION

Harvard University

1987 - Ph.D. in Organic Chemistry

Thesis Advisor: David A. Evans

University of Notre Dame

1982 - B.S. in Chemistry, Summa cum Laude

Research Advisor: Conrad J. Kowlaski

AWARDS

1981 Chicago Drug and Chemical Association Undergraduate Scholarship

1981 American Chemical Society Division of Analytical Chemistry Undergraduate Award

1981 National Science Foundation Summer Undergraduate Research Program Participant

1982 Atlantic Richfield Academic Excellence Award

1982 American Institute of Chemists Student Award Certificate

1982 Phi Beta Kappa

1982 Valedictorian, University of Notre Dame

1982 – 1985 National Science Foundation Pre-doctoral Fellowship

2002 American Chemical Society Women Chemists Committee, Women at the Forefront of Chemistry

2007 Merck Directors' Award

2007 Thomas Alva Edison Patent Award (Research & Development Council of New Jersey)

2007 Prix Galien USA for JANUVIA® (team member)

2008 Outstanding Women in Science (New Jersey Association for Biomedical Research)

2009 Award for Drug Discovery (Society for Medicines Research, London) for JANUVIA® (team member)

2010 Robert M. Scarborough Award for Excellence in Medicinal Chemistry (Medicinal Chemistry Division of the American Chemical Society)

2010 Heroes of Chemistry Award for JANUVIA® (American Chemical Society)

2011 Discoverer's Award (Pharmaceutical Research and Manufacturers of America)

2011 Industrial Award (Philadelphia Organic Chemists' Club)

2011 Science and Technology Medal (Research & Development Council of NJ)

2013 Liberty Science Center Women in STEM Honoree (LSC Women's Leadership Council and Board of Trustees)

2015 Gift of Mentoring Award (Metro Women Chemists Committee of the American Chemical Society)

ADVISORY BOARDS

Industrial Advisory Board, Department of Chemistry & Chemical Biology, Rutgers, The State University of NJ

2009 – 2015

Editorial Advisory Board, ACS Medicinal Chemistry Letters

2009 – 2014

PUBLICATIONS

C. J. Kowlaski, A. E. Weber, and K. W. Fields; " α -Keto Dianion Precursors *via* Conjugate Additions to Cyclic α -Bromo Enones." *J. Org. Chem.* **1982**, *47*, 5088.

D. A. Evans and A. E. Weber; "Asymmetric Glycine Enolate Aldol Reactions: Synthesis of Cyclosporine's Unusual Amino Acid, MeBmt." *J. Amer. Chem. Soc.* **1986**, *108*, 6757.

D. A. Evans, E. B. Sjogren, A. E. Weber, and R. E. Conn; "Asymmetric Synthesis of *Anti*- β -Hydroxy α -Amino Acids." *Tetrahedron Lett.* **1987**, *28*, 39.

D. A. Evans and A. E. Weber; "Synthesis of the Cyclic Hexapeptide Echinocandin D. New Approaches to the Asymmetric Synthesis of β -Hydroxy α -Amino Acids." *J. Amer. Chem. Soc.* **1987**, *109*, 7151.

D. A. Evans, A. E. Weber, T. C. Britton, J. A. Ellman, and E. B. Sjogren; "Asymmetric Synthesis of Amino Acids," in "Peptides: Chemistry and Biology; Proceedings of the Tenth American Peptide Symposium, May 23-28, 1987, St. Louis, Missouri", G. R. Marshall, ed., Leiden : ESCOM Science Publishers, 1988, p. 143.

D. H. Rich, C.-Q. Sun, D. Guillaume, B. Dunlap, D. A. Evans, and A. E. Weber; "Synthesis, Biological Activity, and Conformational Analysis of (2S,3R,4S)-MeBmt¹-cyclosporin, a Novel 1-Position Epimer of Cyclosporin A." *J. Med. Chem.* **1989**, *32*, 1982.

W. J. Greenlee and A. E. Weber; "Renin Inhibitors." *Drug News & Perspectives* **1991**, *4*, 332.

A. E. Weber, T. A. Halgren, J. J. Doyle, R. J. Lynch, P. K. S. Siegl, W. H. Parsons, W. J. Greenlee, and A. A. Patchett; "Design and Synthesis of P₂-P₁' Linked Macrocyclic Human Renin Inhibitors." *J. Med. Chem.* **1991**, *34*, 2692.

A. E. Weber, M. G. Steiner, L. Yang, D. S. Dhanoa, J. R. Tata, T. A. Halgren, P. K. S. Siegl, W. H. Parsons, W. J. Greenlee, and A. A. Patchett; "Highly Potent, Orally Active P₂-P₁' Linked Macrocyclic Human Renin Inhibitors," in "Peptides: Chemistry and Biology; Proceedings of the Twelfth American Peptide Symposium, June 16-21, 1991, Cambridge, Massachusetts" J. E. Rivier and J. A. Smith, eds., Leiden: ESCOM Science Publishers, p. 749.

A. E. Weber, M. G. Steiner, P. A. Krieter, A. E. Colletti, J. R. Tata, T. A. Halgren, R. G. Ball, J. J. Doyle, T. W. Schorn, R. A. Stearns, R. R. Miller, P. K. S. Siegl, W. J. Greenlee, and A. A. Patchett; "Highly Potent, Orally Active Diester Macrocyclic Human Renin Inhibitors." *J. Med. Chem.* **1992**, *35*, 3755.

L. Yang, A. E. Weber, W. J. Greenlee, and A. A. Patchett; "Macrocyclic Renin Inhibitors: Synthesis of a Subnanomolar, Orally Active Cysteine Derived Inhibitor." *Tetrahedron Lett.* **1993**, *34*, 7035.

A. E. Weber, R. J. Mathvink, L. Perkins, J. E. Hutchins, M. R. Candelore, L. Tota, C. D. Strader, M. J. Wyvratt, and M. H. Fisher; "Potent, Selective Benzenesulfonamide Agonists of the Human β_3 Adrenergic Receptor." *Bioorg. Med. Chem. Lett.* **1998**, *8*, 1101.

E. R. Parmee, H. O. Ok, M. R. Candelore, L. Tota, L. Deng, C. D. Strader, M. J. Wyvratt, M. H. Fisher, and A. E. Weber; "Discovery of L-755,507: A Subnanomolar Human β_3 Adrenergic Receptor Agonist." *Bioorg. Med. Chem. Lett.* **1998**, *8*, 1107.

M. H. Fisher, A. M. Amend, T. J. Bach, J. M. Barker, E. J. Brady, M. R. Candelore, D. Carroll, M. A. Cascieri, S.-H. L. Chiu, L. Deng, M. J. Forrest, B. Hegarty-Friscino, X. M. Guan, G. J. Hom, J. E. Hutchins, L. J. Kelly, R. J. Mathvink, J. M. Metzger, R. R. Miller, H. O. Ok, E. R. Parmee, R. Saperstein, C. D. Strader, R. A. Stearns, G. M. Thompson, L. Tota, P. P. Vicario, A. E. Weber, J. W. Woods, M. J. Wyvratt, P. T. Zafian, and D. E. MacIntyre; "A Selective Human β_3 Adrenergic Receptor Agonists Increases Metabolism Rate in Rhesus Monkeys." *J. Clin. Invest.* **1998**, *101*, 2387.

A. E. Weber; " β_3 Adrenergic Receptor Agonists for the Treatment of Obesity." *Ann. Rep. Med. Chem.* **1998**, *33*, 193.

A. E. Weber, H. O. Ok, R. F. Alvaro, M. R. Candelore, M. A. Cascieri, S.-H. L. Chiu, L. Deng, M. J. Forrest, G. J. Hom, J. E. Hutchins, J. Kao, D. E. MacIntyre, R. J. Mathvink, D. McLoughlin, R. R. Miller, R. C. Newbold, T. V. Olah, E. R. Parmee, L. Perkins, R. A. Stearns, C. D. Strader, J. Szumiloski, Y. S. Tang, L. Tota, P. P. Vicario, M. J. Wyvratt, and M. H. Fisher; "3-Pyridyloxypropanolamine Agonists of the β_3 Adrenergic Receptor with Improved Pharmacokinetic Properties." *Bioorg. Med. Chem. Lett.* **1998**, *8*, 2111-2116.

E. M. Naylor, V. J. Colandrea, M. R. Candelore, M. A. Cascieri, L. F. Colwell, Jr., L. Deng, W. P. Feeney, M. J. Forrest, G. J. Hom, D. E. MacIntyre, C. D. Strader, L. Tota, P.-R. Wang, M. J. Wyvratt, M. H. Fisher, and A. E. Weber; "3-Pyridylethanolamines: Potent and Selective Human β_3 Adrenergic Receptor Agonists." *Bioorg. Med. Chem. Lett.* **1998**, *8*, 3087-3092.

E. R. Parmee, E. M. Naylor, L. Perkins, V. J. Colandrea, H. O. Ok, M. R. Candelore, M. A. Cascieri, L. Deng, W. P. Feeney, M. J. Forrest, G. J. Hom, D. E. MacIntyre, R. R. Miller, R. A. Stearns, C. D. Strader, L. Tota, M. J. Wyvratt, M. H. Fisher, and A. E. Weber; "Human β_3 Adrenergic Receptor Agonists Containing Cyclic Ureido-benzenesulfonamides." *Bioorg. Med. Chem. Lett.* **1999**, *9*, 749.

E. M. Naylor, E. R. Parmee, V. J. Colandrea, L. Perkins, L. Brockunier, M. R. Candelore, M. A. Cascieri, L. F. Colwell, Jr., L. Deng, W. P. Feeney, M. J. Forrest, G. J. Hom, D. E. MacIntyre, C. D. Strader, L. Tota, P.-R. Wang, M. J. Wyvratt, M. H.

Fisher, and A. E. Weber; "Human β_3 Adrenergic Receptor Agonists Containing Imidazolidinone and Imidazolone Benzenesulfonamides." *Bioorg. Med. Chem. Lett.* **1999**, *9*, 755.

T. L. Shih, M. R. Candelore, M. A. Cascieri, S.-H. L. Chiu, L. F. Colwell, Jr., L. Deng, W. P. Feeney, M. J. Forrest, G. J. Hom, D. E. MacIntyre, R. R. Miller, R. A. Stearns, C. D. Strader, L. Tota, M. J. Wyvratt, M. H. Fisher, and A. E. Weber; "L-770,644: A Potent and Selective Human β_3 Adrenergic Receptor Agonist with Improved Oral Bioavailability." *Bioorg. Med. Chem. Lett.* **1999**, *9*, 1251.

R. J. Mathvink, A. M. Barritta, M. R. Candelore, M. A. Cascieri, L. Deng, L. Tota, C. D. Strader, M. J. Wyvratt, M. H. Fisher, and A. E. Weber; "Potent, Selective Human β_3 Adrenergic Receptor Agonists Containing a Substituted Indoline-5-Sulfonamide Pharmacophore." *Bioorg. Med. Chem. Lett.* **1999**, *9*, 1869.

M. R. Candelore, L. Deng, L. Tota, X.-M. Guan, A. Amend, Y. Liu, R. Newbold, M. A. Cascieri, and A. E. Weber; "Potent and Selective Human β_3 -Adrenergic Receptor Antagonists." *J. Pharmacol. Exper. Ther.* **1999**, *290*, 649.

D. D. Feng, T. Biftu, M. R. Candelore, M. A. Cascieri, L. F. Colwell, Jr., L. Deng, W. P. Feeney, M. J. Forrest, G. J. Hom, D. E. MacIntyre, R. R. Miller, R. A. Stearns, C. D. Strader, L. Tota, M. J. Wyvratt, M. H. Fisher, and A. E. Weber; "Discovery of an Orally Bioavailable Alkyl Oxadiazole β_3 Adrenergic Receptor Agonist." *Bioorg. Med. Chem. Lett.* **2000**, *10*, 1427.

T. Biftu, D. Feng, G.-B. Liang, H. Kuo, X. Qian, E. M. Naylor, V. J. Colandrea, M. R. Candelore, M. A. Cascieri, L. F. Colwell, Jr., M. J. Forrest, G. J. Hom, D. Euan MacIntyre, R. A. Stearns, C. D. Strader, M. J. Wyvratt, M. H. Fisher, and A. E. Weber; "Synthesis and SAR of Benzyl and phenoxyethylene oxadiazole Benzenesulfonamides as Selective β_3 Adrenergic Receptor Agonist Antiobesity Agents." *Bioorg. Med. Chem. Lett.* **2000**, *10*, 1431.

H. O. Ok, L. B. Reigle, M. R. Candelore, M. A. Cascieri, L. F. Colwell, L. Deng, W. P. Feeney, M. J. Forrest, G. J. Hom, D. E. MacIntyre, C. D. Strader, L. Tota, P. Wang, M. J. Wyvratt, M. H. Fisher and A. E. Weber; "Substituted Oxazole Benzenesulfonamides as Potent Human β_3 Adrenergic Receptor Agonists." *Bioorg. Med. Chem. Lett.* **2000**, *10*, 1531.

R. J. Mathvink, J. S. Tolman, D. Chitty, M. R. Candelore, M. A. Cascieri, L. F. Colwell, Jr., L. Deng, W. P. Feeney, M. J. Forrest, G. J. Hom, D. E. MacIntyre, L. Tota, M. J. Wyvratt, M. H. Fisher and A. E. Weber; "Potent, Selective 3-Pyridylethanolamine β_3 Adrenergic Receptor Agonists Possessing a Thiazole Benzenesulfonamide Pharmacophore." *Bioorg. Med. Chem. Lett.* **2000**, *10*, 1971.

L. L. Brockunier, E. R. Parmee, H. O. Ok, M. R. Candelore, M. A. Cascieri, L. F. Colwell, Jr., L. Deng, W. P. Feeney, M. J. Forrest, G. J. Hom, D. E. MacIntyre, L. Tota, M. J. Wyvratt, M. H. Fisher and A. E. Weber; "Human β_3 Adrenergic Receptor Agonists Containing 1,2,3-Triazole-Substituted Benzenesulfonamides." *Bioorg. Med. Chem. Lett.* **2000**, *10*, 2111.

E. R. Parmee, L. L. Brockunier, J. He, S. B. Singh, M. R. Candelore, M. A. Cascieri, L. Deng, Y. Liu, L. Tota, M. J. Wyvratt, M. H. Fisher and A. E. Weber; "Tetrahydroisoquinoline Derivatives Containing a Benzenesulfonamide Moiety as Potent, Selective Human β_3 Adrenergic Receptor Agonists." *Bioorg. Med. Chem. Lett.* **2000**, *10*, 2283.

R. J. Mathvink, J. S. Tolman, D. Chitty, M. R. Candelore, M. A. Cascieri, L. F. Colwell, Jr., L. Deng, W. P. Feeney, M. J. Forrest, G. J. Hom, D. E. MacIntyre, R. R. Miller, R. A. Stearns, L. Tota, M. J. Wyvratt, M. H. Fisher, and A. E. Weber; "Discovery of a Potent, Orally Bioavailable β_3 Adrenergic Receptor Agonist, (R)-N-[4-[2-[[2-Hydroxy-2-(3-pyridinyl)ethyl]amino]ethyl]phenyl]-[4-[4-(trifluoromethyl)phen-yl]thiazol-2-yl]benzenesulfonamide." *J. Med. Chem.* **2000**, *43*, 3832.

M. J. Forrest, G. Hom, T. Bach, M. R. Candelore, M. A. Cascieri, C. Strader, L. Tota, M. H. Fisher, J. Szumiloski, H. O. Ok, A. E. Weber, M. Wyvratt P. Vicario, O. Marko, L. Deng, C. Cioffe, B. Hegarty-Friscino and E. MacIntyre; "L-750355, a human β_3 adrenergic receptor agonist; in vitro pharmacology and profile of activity in vivo in the rhesus monkey." *Eur. J. Pharmacol.* **2000**, *407*, 175.

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