Dr. Craig W. Lindsley, FRSC, FASPET

Home Address:
109 Chatfield Way
Franklin, TN 37067
(615) 618-2012

Laboratory Address:
WCNDD – Cool Springs
Innovation Park
393 Nichol Mills Road
Franklin, TN 37067

A creative, innovative scientist (project leader, director, inventor and editor) with over 25 years experience in drug discovery and development in both industry (Eli Lilly, Merck) and academia (Vanderbilt, WCNDD). A proven track record of delivering results; involved in the discovery of over 19 preclinical candidates, with 6 successfully entering clinical trials and several still in various stages of clinical development. At Merck, I was responsible for a group of 22 BS/MS/PhD medicinal chemists and delivered six preclinical candidates for CNS and oncology programs. Currently, I am the Director of the WCNDD (*a clinical-stage biotech within VU*), and oversee 95 BS/MS/PhD scientists across medicinal chemistry, molecular pharmacology, DMPK, behavioral pharmacology and biomarkers, as well as a >$25 million dollar annual budget (which I raise). While a leader in the WCNDD, I delivered 16 clinical candidates (with 3 more to be declared in 2023). Inventor of 129 issued US patents and 276 patent applications, author of >580 scientific journal papers and invited speaker at over 100 international conferences and named lectureships. Founding Editor-in-Chief of *ACS Chemical Neuroscience* (2009-2020), interim Editor-in-Chief of *ACS Pharmacology & Translational Science* (2020-2021) and current Editor-in-Chief of *Journal of Medicinal Chemistry* (2020-). Recipient of major awards from ACS and ASPET, including induction into the **ACS MEDI Hall of Fame** (2021), and named a **Fellow** of the American Society for Pharmacology and Experimental Therapeutics, the Royal Society for Chemistry, the National Academy of Inventors and the American Association for the Advancement of Science.

E-mail: craig.lindsley@vanderbilt.edu; phone (office): 615-322-8700
Web sites: www.lab.vanderbilt.edu/lindsleylab; www.wcndd.org; www.appellopharma.com
Citizenship: US
Date of Birth: February 7, 1970
Marital status: Divorced, six children: Cameron (17), Jayma (15), Paige (14), Madison (10), Logan (8), Luke (6)

Education:

1997 – 1999	Postdoctoral Fellow, Harvard University, Cambridge, MA
1992 - 1996	Ph.D., University of California, Santa Barbara, Santa Barbara, CA
1988 - 1992	B.S., Chemistry, California State University, Chico, Chico, CA

Academic Appointments, Industrial Positions, Leadership Roles and Research Experience:

04/2021 – present
Executive Director, Warren Center for Neuroscience Drug Discovery (at Vanderbilt), University Distinguished Professor of Chemistry, Pharmacology, and Biochemistry, William K. Warren, Jr. Chair in Medicine
Editor-in-Chief, *Journal of Medicinal Chemistry*
Adjunct Professor (Research), in Drug Discovery Biology, Faculty of Pharmacy and Pharmaceutical Sciences at Monash University
Founder, Appello Pharmaceuticals
Founder, Lindsley Records, LLC
Member, Vanderbilt Institute of Chemical Biology, VU-Ingram Cancer Center, Vanderbilt Center for Addiction Research, Vanderbilt University School of Medicine, Vanderbilt University
(*Medicinal Chemistry, Drug Discovery, Total Synthesis, Chemical Biology*)

04/2021 – 08/2022
Director, Warren Center for Neuroscience Drug Discovery (at Vanderbilt)
University Professor of Chemistry, University Professor of Pharmacology,

University Professor of Biochemistry
William K. Warren, Jr. Chair in Medicine
Site Head, WCNDD Cool Springs Innovation Park
Editor-in-Chief, *Journal of Medicinal Chemistry*
Adjunct Professor (Research), in Drug Discovery Biology, Faculty of Pharmacy and Pharmaceutical Sciences at Monash University
Founder, Appello Pharmaceuticals
Founder, Lindsley Records, LLC
Member, Vanderbilt Institute of Chemical Biology, VU-Ingram Cancer Center, Vanderbilt Center for Addiction Research, Vanderbilt University School of Medicine, Vanderbilt University
(*Medicinal Chemistry, Drug Discovery, Total Synthesis, Chemical Biology*)

12/2020 – 04/2021

Director, Warren Center for Neuroscience Drug Discovery (at Vanderbilt)
University Professor of Chemistry, University Professor of Pharmacology, University Professor of Biochemistry
William K. Warren, Jr. Chair in Medicine
Site Head, WCNDD Cool Springs Innovation Park
Editor-in-Chief, *Journal of Medicinal Chemistry*
Editor-in-Chief (interim), *ACS Pharmacology & Translational Science*
Adjunct Professor (Research), in Drug Discovery Biology, Faculty of Pharmacy and Pharmaceutical Sciences at Monash University
Founder, Appello Pharmaceuticals
Founder, Lindsley Records, LLC
Member, Vanderbilt Institute of Chemical Biology, VU-Ingram Cancer Center, Vanderbilt Center for Addiction Research, Vanderbilt University School of Medicine, Vanderbilt University
(*Medicinal Chemistry, Drug Discovery, Total Synthesis, Chemical Biology*)

05/2020-11/2020

University Professor of Chemistry, University Professor of Pharmacology, University Professor of Biochemistry, William K. Warren, Jr. Chair in Medicine, Co-Director and Director of Medicinal Chemistry and DMPK, Warren Center for Neuroscience Drug Discovery (at Vanderbilt); Site Head, WCNDD Cool Springs Innovation Park; Editor-in-Chief, *ACS Chemical Neuroscience*; Editor-in-Chief (interim), *ACS Pharmacology & Translational Science;* Adjunct Professor (Research), in Drug Discovery Biology, Faculty of Pharmacy and Pharmaceutical Sciences at Monash University
Founder, Appello Pharmaceuticals
Member, Vanderbilt Institute of Chemical Biology, VU-Ingram Cancer Center, Vanderbilt Center for Addiction Research, Vanderbilt University School of Medicine, Vanderbilt University
(*Medicinal Chemistry, Drug Discovery, Total Synthesis, Chemical Biology*)

05/2019-4/2020

University Professor of Chemistry, University Professor of Pharmacology, University Professor of Biochemistry, William K. Warren, Jr. Chair in Medicine, Co-Director and Director of Medicinal Chemistry and DMPK, Vanderbilt Center for Neuroscience Drug Discovery; Site Head, VCNDD Cool Springs Innovation Park; Editor-in-Chief, *ACS Chemical Neuroscienc*; Adjunct Professor (Research), in Drug Discovery Biology, Faculty of Pharmacy and Pharmaceutical Sciences at Monash University
Founder, Appello Pharmaceuticals
Member, Vanderbilt Institute of Chemical Biology, VU-Ingram Cancer Center, Vanderbilt Center for Addiction Research, Vanderbilt University School of Medicine, Vanderbilt University

Dr. Craig W. Lindsley

(*Medicinal Chemistry, Drug Discovery, Total Synthesis, Chemical Biology*)

01/2018-04/2019 **University Professor of Chemistry, University Professor of Pharmacology, University Professor of Biochemistry William K. Warren, Jr. Chair in Medicine**, **Co-Director and Director of Medicinal Chemistry and DMPK, Vanderbilt Center for Neuroscience Drug Discovery; Site Head, VCNDD Cool Springs Innovation Park; Editor-in-Chief, *ACS Chemical Neuroscience*; Founder, Appello Pharmaceuticals**
Member, Vanderbilt Institute of Chemical Biology, VU-Ingram Cancer Center, Vanderbilt Center for Addiction Research
Vanderbilt University School of Medicine, Vanderbilt University
(*Medicinal Chemistry, Drug Discovery, Total Synthesis, Chemical Biology*)

01/2011-12/2017 **William K. Warren, Jr. Chair in Medicine**, **Professor of Pharmacology, Professor of Biochemistry, Professor of Chemistry; Co-Director and Director of Medicinal Chemistry and DMPK, Vanderbilt Center for Neuroscience Drug Discovery (formerly Vanderbilt Program in Drug Discovery); Associate Director of Therapeutics, Vanderbilt Institute of Chemical Biology, Director of Drug Discovery, Human Chemical Sciences Institute (Scripps-Vanderbilt); PI, Vanderbilt MLPCN Specialized Chemistry Center; Editor-in-Chief, *ACS Chemical Neuroscience***
Member, Vanderbilt Institute of Chemical Biology, VU-Ingram Cancer Center, Vanderbilt Center for Addiction Research
Vanderbilt University School of Medicine, Vanderbilt University
(*Medicinal Chemistry, Drug Discovery, Total Synthesis, Chemical Biology*)

04/2010-01/2011 **Professor of Pharmacology, Professor of Chemistry; Director of Medicinal Chemistry, Vanderbilt Program in Drug Discovery; PI, Vanderbilt MLPCN Specialized Chemistry Center; Editor-in-Chief, *ACS Chemical Neuroscience***
Member, Vanderbilt Institute of Chemical Biology, VU-Ingram Cancer Center
Vanderbilt University School of Medicine, Vanderbilt University
(*Medicinal Chemistry, Drug Discovery, Total Synthesis, Chemical Biology*)

05/08-04/2010 **Associate Professor of Pharmacology (*with tenure*), Associate Professor of Chemistry; Director of Medicinal Chemistry, Vanderbilt Program in Drug Discovery; PI, Vanderbilt MLPCN Specialized Chemistry Center; Co-Director, VICB Synthesis Facility, Editor-in-Chief, *ACS Chemical Neuroscience.*** *Member, Vanderbilt Institute of Chemical Biology, VU-Ingram Cancer Center***,** Vanderbilt University School of Medicine, Vanderbilt University
(*Medicinal Chemistry, Drug Discovery, Total Synthesis, Chemical Biology*)

09/06 – 05/08 **Associate Professor of Pharmacology, Associate Professor of Chemistry; Director of Medicinal Chemistry, Vanderbilt Program in Drug Discovery; Director, Vanderbilt MLSCN Chemistry Molecular Probe Center; Co-Director, VICB Synthesis Facility**
Member, Vanderbilt Institute of Chemical Biology, VU-Ingram Cancer Center
Vanderbilt University School of Medicine, Vanderbilt University
(*Medicinal Chemistry, Drug Discovery, Total Synthesis, Chemical Biology*)

07/05-09/06 **Senior Research Fellow/Group Leader**

(Medicinal Chemistry Department)
Merck Research Laboratories, Merck & Co., West Point, PA
Supervise a group of 20 Ph.D. and B.S./M.S. scientists
(Neuroscience, Antiviral, Cardiovascular, Cancer, Small Molecule PPIs)

08/02-07/05 **Research Fellow/Group Leader**
(Medicinal Chemistry Department)
Merck Research Laboratories, Merck & Co., West Point, PA
(Cancer, Neuroscience, Antiviral)

06/01-08/02 **Senior Research Chemist/Group Leader**
(Medicinal Chemistry Department)
Merck Research Laboratories, Merck & Co., West Point, PA
(Cancer, Neuroscience, Antiviral)

05/00-6/01 **Senior Organic Chemist (Chemistry Research Technologies)**
Eli Lilly & Co., Indianapolis, IN
Lead Discovery (H_3 antagonists, MC_4 agonists)

04/99-05/00 **Senior Scientist (Medicinal Chemistry)**
Parke-Davis Pharmaceuticals, Ann Arbor, MI
Anti-Viral (HIV), Anti-Bacterial, SERM and Rasta resin research.

05/97-04/99 **Postdoctoral Research with Professor Matthew D. Shair**
Harvard Institute of Chemistry and Cell Biology (ICCB)/Department of Chemistry & Chemical Biology; Harvard University, Cambridge, MA
Biomimetic Solid Phase Synthesis of Benzoxanthenone Unnatural Products
Novel Organometallic and Solid Phase Methodologies.

06/92-11/96 **Graduate Research with Professor Bruce Lipshutz,**
University of California, Santa Barbara, Santa Barbara, CA
Organometallic Methodology, Novel Bi-Directional Polyene Linchpins for All-E Polyene Synthesis, Development of New Protecting Groups.

06/91-05/92 **Undergraduate Research with Professor David Ball,**
California State University, Chico, Chico, CA
Progress Towards the Total Synthesis of Borrellidin.

Summer 1991 **NSF Summer Undergraduate Research Fellowship with Professor Phillip Cruz**
University of California, Santa Cruz, Santa Cruz, CA
Isolation, Purification and Characterization of Secondary Sponge Metabolites.

Teaching Experience

Fall 2006 – present **University Professor of Pharmacology, Chemistry & Biochemistry**
Vanderbilt University Medical Center/Vanderbilt University
Pharm 327 *Modern Drug Discovery*
Chem 324 *Heterocyclic Chemistry/ Heterocyclic Chemistry Short Course*
IGP 300B: *Small Molecule Design for Biologists*
Chem 4720/5720 *Drug Discovery and Development*

Fall 2004	**Adjunct Faculty** Villanova University Chem 398 *Graduate Course on Medicinal/Combinatorial Chemistry*
2000-2001	**Part-time Instructor/Lecturer** Indiana University/Purdue University at Indianapolis (IUPUI) *General and Organic Chemistry lectures and laboratory*
1992-1996	**Graduate Teaching Assistant** University of California, Santa Barbara *Organic Laboratory, Honors Organic lab, NMR lab*

Professional Organizations:

- American Chemical Society (ACS), 1991-present
- American Society of Pharmacology and Experimental Therapeutics (ASPET Fellow), 2009-present
- American Association for the Advancement of Science (AAAS Fellow), 2012-present
- Society for Neuroscience (SFN), 2009-present
- Royal Society of Chemistry (Fellow), 2018-present
- National Academy of Inventors (Fellow), 2018-present

Professional Activities:

Intramural:

- Center Executive Director, Warren Center for Neuroscience Drug Discovery
- School of Medicine Basic Sciences (VBS) leadership team, Vanderbilt University
- School of Medicine Executive Faculty, Vanderbilt University
- School of Medicine Executive Committee of the Executive Faculty (ECEF), Vanderbilt University

Thesis Committees:

J. Phillip Kennedy	Chemistry	2007-2010, Chair
R. Nathan Daniels	Chemistry	2007-2010, Chair
Sameer Sharma	Chemical & Physical Biology	2007-2009, Member
Leslie Aldrich	Chemistry	2008-2012, Chair
Olgubeminiyi Fadeyi	Chemistry	2008-2012, Chair
Michael Schulte	Chemistry	2009-2103, Chair
Gordon Lemmon	Chemical & Physical Biology	2008-2010, Chair
Paige Selvey	Pharmacology	2007-2011, Chair
Sydney Stoops	Pharmacology	2008-2012, Member
Nicole Miller	Pharmacology	2008-2010, Member
Jonathan Hemphill	Chemistry	2008-2012, Member
Sean Deguire	Chemistry	2008-2013, Member
Evan Lebois	Pharmacology	2008-2010, Member
Thomas Bridges	Pharmacology	2007-2010, Member
Steve Townsend	Chemistry	2007-2011, Member
Robert Lavieri	Pharmacology	2007-2014, Member
Uyen Le	Chemical & Physical Biology	2009-2011, Member
John Brogan	Chemical & Physical Biology	2009-2013, Member
Matthew O'Reilly	Chemistry	2010-2014, Chair
Kris Hahn	Chemistry	2010-2012, Chair
Tim Senter	Chemistry	2010-2014, Chair
Joshua Bruner	Chemistry	2011-2012, Chair
Patrick Gentry	Chemical & Physical Biology	2011-2014, Member

Craig Goodwin	Pharmacology	2011-2015, Chair
Nina Collins	Chemistry	2011-2013, Member
Zack Zurawski	Pharmacology	2011-2016, Member
Cody Wenthur	Pharmacology	2011-2015, Member
Cierra Spencer	Pharmacology	2011-2014, Member
Brandon Vara	Chemistry	2011-2015, Member
Cynthia Bollinger	Chemistry	2012-2014, Chair
Britney Bates	Chemical & Physical Biology	2012-2013, Member
Pedro Garcia	Chemical & Physical Biology	2013-2016, Member
Alex Geanes	Chemistry	2014-2016, Member
Kellie Nance	Chemistry	2014-2017, Chair
Brendan Dutter	Chemical & Physical Biology	2012-2016, Chair
Shane Rainey	Chemistry	2014-2015, Chair
Andrea Mccollum	Chemistry	2015-2016, Chair
Mark Fulton	Chemistry	2016-2019, Chair
Adam Metts	Chemistry	2016-2017, Chair
Daniel Jeffries	Chemistry	2016-2019, Chair
Mabel Seto	Pharmacology	2016-2019, Chair
Jeanette Bertron	Chemistry	2016-2020, Chair
Carson Reed	Chemistry	2017-2019, Chair
Jacob Kalbfleisch	Chemistry	2019-2023, Chair
Caitlin Kent	Chemistry	2019-2020, Chair
Lauren Parr	Pharmacology	2023-

Extramural:

NIH, grant reviewer and/or ad hoc on 8 NIH panels including Synthetic Chemistry and Biology A. Standing member of NIH Drug Discovery Review Panel.
Reviewer for: *Organic Letters, Journal of Organic Chemistry, Journal of Medicinal Chemistry, Journal of the American Chemical Society, Bioorganic and Medicinal Chemistry Letters, Journal of Neuroscience, Neuropharmacology, Neuropsychopharmacology* and *Current Topics in Medicinal Chemistry*

Scientific Advisory Board: Haystack Biosciences, Blue Therapeutics, Delix Therapeutics, Septerna, Escentia, CAS Life Science Advisory Board, UC Davis Institute for Psychedelics and Neurotherapeutics

Board Observer: Appello Pharmaceuticals

Medicinal Chemistry Consultant for: Ono, Amgen, AbbVie, Eisai, Michael J. Fox Foundation, Orexia,
External Advisory Committees: AbbVie, The Moody Foundation, St. Jude's Chemical Biology & Therapeutics (CBT) Program, Institute for Research in Immunology and Cancer (University of Montreal)
Co-Chair, Chemistry Coordination Committee, MLPCN (2007-2011)
Chairman, NIH Molecular Libraries Network, 2012-2014.
ACS Pharma Leaders (2010-2015)
ACS Expert (2014-onward)
ACS Medicinal Chemistry Division Long Range Planning Committee, 2012-2014
Academic Councilor, ACS MEDI, 2015-2017 (Nationally elected position, MEDI Executive Committee)
ASPET Executive Committee (Molecular Pharmacology division), 2014-2016
ASPET Executive Committee (Drug Discovery division), 2018-2021.
Faculty, Drew University Residential School on Medicinal Chemistry, 2010-2018
Faculty, Medicinal Chemistry India, 2013-2017
Faculty, NIH Blueprint for Neuroscience-ASENT Training Program in Neurotherapeutics Discovery and Development, 2013-2016.
Chair, 2018 National Medicinal Chemistry Symposium
Chair-Elect of the Section on Pharmaceutical Science (AAAS), 2019 (nationally elected position)
NAI Fellows Advisory Committee, 2019-present

Dr. Craig W. Lindsley
Editorial Positions:

- Editor-in-Chief, *Journal of Medicinal Chemistry* – 2021-onward
- Editor-in-Chief (interim), *ACS Pharmacology & Translational Science* – 2020-2021.
- Editor-in-Chief (Founding Editor), *ACS Chemical Neuroscience* – 2009-2020.
- CNS Section Editor, *Medicinal Chemistry Reviews* (ACS-MEDI) – 2016-2020.
- Associate Editor, *Current Topics in Medicinal Chemistry* – 2007-2009.
- International Advisory Board of *ChemMedChem* – 2014-2020.
- Editorial Advisory Boards: *Journal of Combinatorial Chemistry*, *Current Topics in Medicinal Chemistry*, *International Journal of High-Throughput Screening, ACS Combinatorial Science.*
- Guest Editor, *Curr. Top. Med. Chem*., issue on Small Molecule Protein-Protein Inhibitors (2006/2007)
- Guest Editor, *Curr. Top. Med. Chem*., issue on Metabotropic Glutamate Receptors (2004/2005)

Awards, Honors, Review Positions and Advisory Boards:

- Fellow, American Society of Pharmacology and Experimental Therapeutics, 2022
- Innovator's Hall of Fame, Vanderbilt Center for Technology Transfer & Commercialization, 2022
- 2022 Master Innovator Award, Vanderbilt University
- Promoted to University Distinguished Professor of Pharmacology, Chemistry & Biochemistry, Vanderbilt, 2022
- 22nd Sydney Archer Endowed Lecture in Medicinal Chemistry (Rensselaer Polytechnic Institute), 2022
- WARF Therapeutics Distinguished Lecture in Drug Discovery, 2022
- ACS MEDI Hall of Fame, 2021
- Endowment of the Center, Warren Center for Neuroscience Drug Discovery (WCNDD), 2020
- The Robert M. Scarborough Award for Excellence in Medicinal Chemistry (ACS MEDI division), 2019
- ASPET Executive Committee (Drug Discovery division), 2018-2021.
- Expert Witness, patent litigation (29 cases)
- Adjunct Professor (Research) in Drug Discovery Biology, Faculty of Pharmacy and Pharmaceutical Sciences (Monash University), 2019.
- ASPET Scientific Achievement Award in Drug Discovery and Development, 2019
- Fellow, National Academy of Inventors, 2018
- Promoted to University Professor of Pharmacology, Chemistry & Biochemistry, Vanderbilt, 2018
- Founder, Appello Pharmaceuticals, 2018
- J.D. Smith/Larry Winter Memorial Lecture (Virginia Commonwealth University), 2018
- Fellow, Royal Society of Chemistry, 2018
- Chair-Elect of the Section on Pharmaceutical Science (AAAS), 2019-2021 (nationally elected position)
- 41st Sato Memorial International Award (Pharmaceutical Society of Japan), 2018
- 22nd Smissman Memorial Lecturer (KU Department of Medicinal Chemistry), 2018
- 2017 Clarivate Analytics Highly Cited Researcher (Pharmacology & Toxicology)
- Sigma-Xi, the Scientific Research Honor Society, 2017
- John A. Oates Award for Outstanding Contributions to Research, 2017; VU School of Medicine
- Pharmacia-ASPET Award in Experimental Therapeutics, 2017
- Fellow of the American Association for the Advancement of Science (AAAS), 2016
- Haystack Sciences LLC, SAB Member, 2016-2020
- Meeting Chair and Local Organizer, 2018 National Medicinal Chemistry Symposium
- Innovator to Vanderbilt ***14*** preclinical candidates: **NMRA-831** (Schizophrenia), **NMRA-266/VU220** (schizophrenia), **VU988** (dystonia), **VU472/AP-472** (Parkinson's disease), **VU8055/AF98943** (Schizophrenia), **VU2254/ACP-2254** (Alzheimer's disease/schizophrenia); **VU422/ACP-422** (Alzheimer's disease/schizophrenia); **VU319/ACP-319** (Alzheimer's disease/schizophrenia); **VU238** (Parkinson's disease/depression); **VU521** (Parkinson's disease); **VU957** (Parkinson's disease); Vanderbilt/JNJ preclinical candidate (NME) **JNJ212** (Schizophrenia); Vanderbilt/Seaside preclinical candidate: **STX110** (Fragile X Syndrome); **VU-612** (pain).
- 2016 Thomson Reuters Highly Cited Researcher (Pharmacology & Toxicology)

Dr. Craig W. Lindsley

- Philip S. Portoghese Distinguished Lecture in Medicinal Chemistry (U. Minnesota), 2015
- 2015 Thomson Reuters World's Most Influential Scientific Minds (Pharmacology & Toxicology)
- 2015 Thomson Reuters Highly Cited Researcher (Pharmacology & Toxicology)
- John J. Abel Award in Pharmacology (ASPET), 2014
- Academic Councilor, ACS MEDI, 2014-2018 (nationally elected position)
- *ACS Chem. Neurosci.* ref. 261. ACS Editor's Choice
- *ACS Chem. Bio.* ref. 247. ACS Editor's favorite paper of 2014.
- *ACS Chem. Bio.* ref. 247. ACS Editor's Choice, featured in C&E News (9-9-2014)
- ACS Experts Program, 2014-onward.
- ASPET Executive Committee (Molecular Pharmacology division), 2014-2016.
- Distinguished Alumni (College of Natural Sciences), California State University, Chico, 2014.
- The Philip S. Portoghese *Journal of Medicinal Chemistry*/ACS Division of Medicinal Chemistry Joint Lectureship Award, 2013.
- Sidney P. Colowick Award for research that serves as a platform for discovery in diverse areas, 2013: Vanderbilt Medical Center Faculty Award.
- Awarded an Endowed Chair, the William K. Warren, Jr. Chair in Medicine, 2012.
- Chairman, NIH Molecular Libraries Network, 2012-2014.
- ACS Medicinal Chemistry Division Long Range Planning Committee, 2012-2014.
- Innovator/key contributor to six MERCK preclinical candidates (2001-2006): **MK-7816** (insomnia), **MK-2637** (schizophrenia), **MK-1832** (atrial fibrillation), **MK-6673** (oncology), **MK-2206** (oncology) and [^{18}F]**MK-6577** (schizophrenia tracer).
- Vanderbilt Medical Center Faculty Award 2011: Vanderbilt Leadership of a Multi-Investigator Team Award for Two or More Faculty Working Collaboratively or in a Multidisciplinary Manner to Address Important Biological Processes and/or Diseases, 2011.
- Chair, Chemical Neuroscience Session (ORGN), ACS 243th National Meeting 2012.
- 'Most Cited Article' *Curr. Top. Med. Chem*. (review ref. 5)
- 'Most Cited Article 2003-2010' *Bioorg. Med. Chem. Lett.* (ref. 26)
- Top 50 'Most Cited Articles 2003-2010' *Bioorg. Med. Chem. Lett.* (ref. 40)
- Invited Instructor, Drew University Medicinal Chemistry Short Course, 2010-2018
- ASPET-Astellas Award for Translational Pharmacology, 2010
- Organizer, Keystone Symposia on 'Early Stage Drug Discovery', 2011.
- Thomson Reuters *Essential Science Indicators*^{SM} Hot New Paper, Most Cited in Field of Pharmacology 2008/2009 (Review ref. 28)
- 6th Most Accessed and Downloaded Manuscript in 2009, *ChemMedChem* (ref. 70)
- Co-Chair, Allosteric Modulator Session (MEDI), ACS 238th National Meeting 2009.
- Most Read and Cited Article 2008, *Journal of Combinatorial Chemistry* (Review ref. 23)
- Most Read and Cited Article 2008, *ACS Chemical Biology* (Review ref. 27)
- Abbott - medicinal chemistry consultant, 2010-2014
- Eisai - medicinal chemistry consultant, 2008-2010
- Amgen – medicinal chemistry consultant, 2007-2009
- Reuter's – medicinal chemistry consultant, 2007-2012
- Most Cited Paper 2005-2008 Award, *Bioorg. Med. Chem. Lett.* (reference 27).
- Assessor – Michael J. Fox Foundation for Parkinson's Research, 2006-onward
- Scientific Advisory Board Member. NIH Chemical Genomics Center, 2004-2012
- NIH SEP Pilot Library Grant Review Committee – 2005-2007
- Early Development Team (EDT) Chemistry Representative MK-2637
- Merck Research Labs (MRL) Chemistry Representative: Schizophrenia and Neuroscience Target Area Group (TAGs)
- Most Cited Paper 2003-2006 Award, *Bioorg. Med. Chem. Lett.* (reference 26).
- 3rd most downloaded and 2nd most cited manuscript in 2005, *Bioorg. Med. Chem. Lett.* (reference 26)
- Top 25 most downloaded manuscripts in 2005, *Bioorg. Med. Chem. Lett.* (reference 27)
- Merck Research Labs (MRL) Quarterly Stock Grant Award: 1Q2005, 4Q2005, 1Q2006 (2)
- LHS Alumni Hall of Honor Inductee, 2005

- TES lead optimization paradigm featured in Genetic Engineering News, Vol. 25(14), 2005
- Aldrich commercialized our Rasta resins utilizing our MAOS protocol – 2005
- Our MAOS research featured in C&E NEWS, Vol. 82 (50), Exclusive Online – 2004
- Merck Award for Excellence, Merck Research Laboratories, 2002, 2005, 2006 (3)
- 'Change the World' Award, Eli Lilly & Co., 2001
- Parke-Davis/University of Michigan Mentor/Instructor, 1999-2000
- Harvard Institute of Chemistry and Cell Biology Postdoctoral Fellowship Recipient, 1997-1999
- Robert H. DeWolfe Award for Excellence in Undergraduate Instruction, UCSB, 1995-1996
- Outstanding Graduating Senior in Chemistry, CSUC, 1992
- American Institute of Chemists Award for Outstanding Senior in Chemistry, CSUC, 1992
- President, Student Affiliates of the American Chemical Society, CSUC chapter, 1991-1992
- NSF Summer Undergraduate Research Fellowship Recipient, 1991

STUDENTS SUPERVISED:

Over 60 rotation and 50 summer UG students (Pharmacology, Chemistry and Chemical & Physical Biology)
Trained over 65 graduate students and postdoctoral fellows since 2006.

J. Phillip Kennedy - Chemistry Graduate Student (2006-2010); currently Sr. Research Manager, Revance
R. Nathan Daniels - Chemistry Graduate Student (2006-2010); Assistant Professor, Lipscomb University
Olgubeminiyi Fadeyi - Chemistry Graduate Student (2007-2011); Sr. Scientist (Pfizer); Director (Merck)
Michael Schulte - Chemistry Graduate Student (2009-2013); postdoc in Manning lab (VU); Research Assistant professor, VCNDD; now Assistant Professor in Radiology, IUPUI
Leslie Aldrich - Chemistry Graduate Student (2008-2012); postdoc in Schreiber lab (Broad); currently Assistant Professor, UIC
Sydney Stoops - Pharmacology Graduate Student (2007-2011); postdoc in Kodadek lab (SCRIPPS); Sr. Scientist at Incyte Pharmaceuticals
Thomas Bridges - Pharmacology Graduate Student (2006-2010); currently Drug Discovery Scientist II, VCNDD
Evan Lebois - Pharmacology Graduate Student (2008-2010); currently Sr. Scientist (Pfizer), now BROAD
Robert Lavieri - Pharmacology Graduate Student (2007-2014); currently scientist at VICTR
Sameer Sharma – CPB Graduate Student (2007-2009); currently in VU MBA Program
Uyen Le – CPB Graduate Student (2009-2011); currently in Pharmacy School (UT)
John Brogan - CPB Graduate Student (2009-2013); Biogen-IDEC; now Regulatory CMC Manager at Seattle Genetics
Matthew O'Reilly- Chemistry Graduate Student (2010-2014); postdoc with Blackwell (WIS); assistant professor, UWRF; now Professor, Villanova
Patrick Gentry - CPB Graduate Student (2011-2014); postdoc with Christopoulos (Monash)
Tim Senter - Chemistry Graduate Student (2010-2014); postdoc with Steven Buchwald (MIT); now Vertex
Kris Hahn - Chemistry Graduate Student (2010-2012); M.S., currently Medicinal Chemist at Morphic
Josh Bruner - Chemistry Graduate Student (2010-2012); M.S., currently Bus. Dev. at Triumvirate
Cynthia Bollinger - Chemistry Graduate Student (2011-2014), currently medicinal chemist at Janssen
Cody Wenthur - Pharmacology Graduate Student (2011-2015); postdoc with Kim Janda (SCRIPPS); Assistant Professor, University of Wisconsin-Madison
Brittney Bates - CPB Graduate Student (2011-2013); Technology License Officer, CTTC; currently Pharmacist
Pedro Garcia - CPB Graduate Student (2013-2016); postdoc with Tim Jamison (MIT); now Vertex
Kellie Nance - Chemistry Graduate Student (2014-2017); postdoc with Meier (NIH/NCI)
Alexander Geanes - Chemistry Graduate Student (2014-2016); National Lab (Seattle)
Shane Rainey- Chemistry Graduate Student (2014-2015); currently, Test America
Andrea Mccollum- Chemistry Graduate Student (2014-2015); Surgical Critical Care Medicine Physician Assistant at Shands Teaching Hospital and Clinics, Inc.
Mark Fulton - Chemistry Graduate Student (2016-2019); postdoc with Matthew Shair (Harvard); now Senior Consultant, Prescient Healthcare Group.
Daniel Jeffries - Chemistry Graduate Student (2016-2019); postdoc with Matthew Shair (Harvard); now Senior Analyst, Roivant Sciences.
Mabel Seto - Pharmacology Graduate Student (2016-2019); Vanderbilt Memory & Alzheimer's center
Jeanette Bertron - Chemistry Graduate Student (2017-2020); postdoc with Jason Gestwicki (UCSF); currently, Scientists I, Nurix Pharmaceuticals

Carson Reed - Chemistry Graduate Student (2017-2019); currently Drug Discovery Scientist I in WCNDD
Jacob Kalbfleish - Chemistry Graduate Student (2019-2023); postdoc Naval Air Warfare Center, Weapons Division Research Department (NAWCD)
Caitlin Kent - Chemistry Graduate Student (2019-2021); currently, Scientist, Integrated Drug Discovery, Sanofi
Lauren Parr (2023-)

POSTDOCTORAL FELLOWS SUPERVISED (42):
Jana Lewis (2007-2009); currently Sr. Scientist at Living Proof, Inc.
Jason Buck (2007-2008); currently staff scientist, VU Imaging Center
Ya Zhou (2007-2009); currently Drug Discovery Scientist I in VCNDD
Dustin Haddenham (2010- 2011); currently, Scientist at Boehringer-Ingelheim (Process Chemistry)
Steven Townsend (2010-2011); postdoc at Sloan-Kettering (Danishefsky); currently, Assoc. Prof. Vanderbilt
Chris Tarr (2010-2011); currently Drug Discovery Scientist I, VUMC Oncology Drug Discovery
Margie Mattmann (2010- 2012); currently scientist at Biomatrica
Kimberly Lovell (2011- 2012); second postdoc at SCRIPPS (Bohn); KU Clinical Trial
Mark Turlington (2011-2013); currently Associate Professor of Chemistry at Berry College
Thomas Matthews (2011-2014); scientist with the Center for Disease Control (CDC)
Joseph Panarese (2011-2012); postdoc with Matt Shair (Harvard); currently, Director at Enanta
Leah Konkol (2012-2012); currently Sr. Scientist, Incyte
Changho Han (2013-2014); currently Drug Discovery Scientist II, VCNDD
Kyuk Yeon (2013-2014); currently Drug Discovery Scientist I, VUMC Oncology Drug Discovery
Karl Voigtritter (2014-2015); currently Assistant Professor at CSU, Chico
Kayla Temple (2014-2016); currently Drug Discovery Scientist II in VCNDD
Kevin McGowan (2015-present); currently, Sr. Scientist, St. Judes
Josh Wieting (2016-2017); currently Sr. Scientist, Pharmaceutical Product Development.
Aaron Bender (2016-present); currently Drug Discovery Scientist II in WCNDD
Rachel Crouch (2016-2017); Assistant Professor, Lipscomb University School of Pharmacy
Christopher Brassard (2016); Sr. Scientist, Leidos; currently Scientists III, ThermoFisher
Shahrina Alam (2016); second postdoc at UT
Dexter Davis (2017-2018); Sr. Scientist, Enanta Pharmaceuticals
Elizabeth Childress (2017-2019); currently Drug Discovery Scientist I, WCNDD
Aaron Garrison (2018-2019); Sr. Scientist, AstraZeneca (Sweden)
Christopher Presley (2018-2019); current Drug Discovery Scientist I, WCNDD
Charles Perry (2018-2020), current, Sr. Scientist II, Broad Institute
Anthony Nastase (2019); scientific advisor, Wilson, Sonsini, Goodrich & Rosati
Kwaku Kyei-Baffour (2019-2021); current, Sr. Scientist, Broad Institute
Douglas Orsi (2019-2020), current, Sr. Scientist, Broad Institute
Jingmin Li (2019-2021); currently Drug Discovery Scientist I, WCNDD
Scott Henderson (2019-2020); Sr. Scientist, Benevolent AI (UK)
Lisa Barbaro (2019-2021); currently Drug Discovery Scientist I, WCNDD
Anthony Scruse (2020-2021); Sr. Scientist, Pfizer
Joseph Bungard (2020-2023); Drug Discovery Scientist I, WCND; currently, Rapafusyn Pharmaceuticals
Melissa Korkmaz (2020-2021); currently, Scientist I Med Chem, LifeMine Therapeutics
Katie Crocker (2020-2021); currently Drug Discovery Scientist I, WCNDD
Cori Malinky (2020-2022); currently, Scientist I Med Chem, Cogent Therapeutics
Caleb Jones (2021-2022); currently Drug Discovery Scientist I, WCNDD
Jacob Murray (2021-2022); currently Sr. Scienitst, Andluca
Jeremy Coleman (2021-2022); currently Drug Discovery Scientist I, WCNDD
Upendra Rathnayake (2021-2022); currently Drug Discovery Scientist I, WCNDD
Navoda Jayakodiarachchi (2022 -)
Morgan Crowley (2022-)
Pedro Horn (2023-)
Dan Schultz (2023-)
Tomayo Berida (2023-)
Jacob Bouchard (2023 -)

MERCK: Supervised a group of 20 Medicinal Chemists (4 Ph.D.s, 16 B.S./M.S.)

WCNDD/MLPCN STAFF SCIENTISTS SUPERVISED: Oversee, as Center Director, a staff of 95 FTEs across medicinal chemistry, molecular pharmacology, drug metabolism & disposition, behavioral pharmacology and pre-clinical/clinical development.

Funding

Endowment

- GET300064 'Warren Center for Neuroscience Drug Discovery' ($20 million)

Active (Grants):

- INV-049944 (Gates Foundation) 'SLO3 inhibitors: a new class of non-hormonal female contraceptive' ($453K), Co-PI, 11/21/2022-10/31/2024, 1% effort
- 1R01MH124671-01 'Development of mGlu7 receptor allosteric modulators for neurologic and psychiatric disorders' ($3.53 million), co-PI, 09/21/2020 – 06/30/2025, 10% effort
- 4UH3NS116218-01 'Novel $mGlu_5$ negative allosteric modulators as first-in-class non-addictive analgesic therapeutics' ($573 K), co-PI, 09/01/2021-08/31/2023, 15% effort
- 1R61HD099742-01 'Development of Novel Nonsteroidal Contraceptive Methods' ($6.3 million), co-PI, 07/01/2019-06-30-2025, 1% effort
- 1R01MH119673-01 'Discovery of mGlu1 receptor PAMs for the treatment of schizophrenia'($2.27 million), co-PI, 02/15/2019-02/14/2024, 10% effort

Funding (Corporate Partnerships):

- SRA00000038, Neumora Therapeutics ($3.95 million), PI, 02/10/2022 – 09/30/2023
- U0057213, Prothena Biosciences, Inc. ($5.50 million), PI, 12/13/2021 – 12/13/2023
- UNIV61505, Acadia Pharmaceuticals ($9.65 million), PI, 03/01/2020-09/27/2023
- UNIV60533, Boehringer Ingelheim Pharmaceuticals ($11.55 million), PI, 11/15/2018-12/31/2023
- VUMC54551, Ono Pharmaceuticals ($14.85 million), PI, 11/11/2015 – 11/31/2024

Completed

- PR180732 (DoD) 'Optimization of selective M_4 muscarinic receptor antagonists for treatment of dystonia' ($2.99 million), co-PI, 07/01/2019-06/30/2022; NCE until 06/30/2023.
- SRA00000012, Onsero Therapeutics ($275K), PI, 03/07/2022 – 03/06/2023
- 1R01 DK120821-01A1 'Development of Distal Nephron Diuretics Targeting Kir4.1/5.1 Heteromeric Potassium Channels' ($1.2 million), co-PI, 09/10/2019-09/09/2022, 1% effort
- SRA00000028, EscapeBio ($675K), PI, 04/12/2022 – 09/30/2022
- UNIV61909, Soleno Pharmaceuticals ($825K), PI, 03/01/2021-02/27/2022
- 1UG3NS116218-01 'Novel $mGlu_5$ negative allosteric modulators as first-in-class non-addictive analgesic therapeutics' ($1.98 million), co-PI, 09/17/2019-09/16/2021, 15% effort
- UNIV60628, Ancora Innovation ($6.75 million), co-PI, 01/08/2019-06/31/2021
- UNIV60542, Boehringer Ingelheim Pharmaceuticals ($7.7 million), PI, 11/15/2018-06/14/2021
- UNIV60623, Ancora Innovation ($5.9 million), PI, 01/08/2019-01/07/2021
- 1R01MH113543-01 'Development of a Selective Metabotropic Glutamate Receptor 7 Allosteric Modulator Probe' ($1.2 million), co-PI, 08/01/2017-05/31/2020, 12% effort.
- PR160102 (DoD) 'The Role of Metabotropic Glutamate 7 in the Etiology and Treatment of Rett Syndrome' ($1.19 million), co-PI, 07/01/2017-06/30/2020, 12% effort.
- 1R01MH108498-01 'Development of an $mGlu_{2/4}$ heterodimer-selective allosteric modulators' ($1.49 million), co-PI, 12/10/2015-11/30/2018, currently in NCE, 2% effort.
- UNIV60006, Lundbeck Pharmaceuticals ($6.2 million), PI, 12/20/2017 – 03/31/2021
- VUMC65362, Bayer Pharmaceuticals ($22.5 million), co-PI, 09/15/2017-09/14/2019
- 1U19MH106839-01 'M1 PAM Optimization and Clinical Development' ($3.93 million), co-PI, 09/10/2015-09/09/2018, 10% effort.
- 2RO1MH082867-06 'Sel. M1 mAChR Allost. Mod. for Schizophrenia' ($1.12 million), PI, 07/01/2008-06/30/2018, 15% effort.
- 1RO1DA037207-01 'Discovery of mAChR5 modulators for use in rodent models of drug addiction' ($1.07 million), PI, 04/01/2015-03/31/2018, 10% effort.

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- VUMC 55115 (WKWF Drug Discovery Award) 'Supporting IND-Enabling Studies of Novel MDD Therapeutics' ($2.25 million), PI, 07/01/2015-06/30/2017, 5% effort.
- VUMC 53205 (WKWF Drug Discovery Award) 'Novel Schizophrenia Therapies' ($5 million), PI, 10/01/2014-09/30/2017, 10% effort.
- UNIV58493 (WKWF Drug Discovery Award) 'Novel Schizophrenia Therapies - II' ($1 million), PI, 09/01/2016-08/31/2017, 10% effort.
- S10 OD021734-01 'Fluorescent and Luminescent Kinetic Imaging Plate Reader' ($679,818), PI, no effort.
- 1RO1GM106232-01 'Allost. Modulators of the GLP-1 receptor' ($1.1 million), co-PI, 02/01/2014-01/31/2017, 7% effort.
- DRMF07721 'Development of novel reagents to augment cholinergic signaling in dystonia' ($200K), co-PI, 08/01/2014-07/31/2016, 5% effort.
- VUMC40457, AstraZeneca, M_4 PAM ($8.75 million), co-PI, 12/21/12 – 08/15/2016.
- VUMC43294, LaJolla Pharmaceuticals ($1.16 million), co-PI, 11/21/2014-06/20/2016.
- 1RO1DA023947-01 'Partial Antag. of mGluR5 for the Treatment of Cocaine Addiction ($1.36 million), PI, 06/01/2008-05/31/2014, 20% effort; currently in NCE until 05-30-2015.
- 1U54MH084659-01 'Vanderbilt Spec. Chem. Center for Accel. Probe Dev.' ($28.9 million), PI, 09/01/2008-05/31/2014, 25% effort; currently in NCE until 05-30-2015.
- 1U01MH087965-01 'Vanderbilt NCDDDG for Discovery of Novel Treatments for Schizophrenia' ($11.3 million), co-PI, 12/01/2009-11/30/2014, 15% effort; currently in NCE until 05-30-2015.
- 1U19MH097056-01 'Development of mGluR5 NAMS for Treatment of Major Depression' ($3.75 million), co-PI, Project 1, PI, 01/08/2013-11/30/2015, 10% effort.
- 3U54MH084659-S01 'Development of novel, M_4 muscarinic Negative Allosteric Modulators (NAMs).' ($488K), PI, 05/01/2013 – 05/30/2015, no effort.
- 3U54MH084659-S02 'Development of novel, M_5 muscarinic Negative Allosteric Modulators (NAMs).' ($499.6K), PI, 05/01/2013 – 05/30/2015, no effort.
- 3U54MH084659-S03 'Development of novel D_4 antagonists and progress towards a PET tracer' ($512K), PI, 05/01/2013 – 05/30/2015, no effort.
- VUMC39328, Bristol Myers Squibb, $mGlu_4$ PAM, ($8.0 million), co-PI, 9/19/12 – 3/18/15.
- McDonnell Foundation, VUMC220020246 'PLD Inhibitors for the Treatment of Cancer'($450K), co-PI, 08/01/2010 – 07/31/2013, no effort.
- VUMC34998, Johnson & Johnson 'mGluR5 Positive Allosteric Modulators for Schizophrenia' ($11 million), co-PI, 12/01/2008-12/31/2012, 1% effort.
- VUMC36176, Seaside Therapeutics 'M1 Antagonists for the Treatment of FXS' ($5.0 million), co-PI, 01/01/2010-12/31/2012, 1% effort.
- 1U54MH084659-S01 'Design and synthesis of libraries of small molecule protein-protein inhibitors' ($1 million), PI, 06/01/2010 – 05/31/2012, no effort.
- 1U54MH084659-S02 'DMPK Profiling and Optimization of MLPCN Probes'($1 million), PI, 06/01/2010 – 05/31/2012, no effort.
- VUMC33842, Seaside Therapeutics 'mGluR5 Partial Antagonists for the Treatment of FXS' ($4.5 million), co-PI, 12/01/2007-6/31/2011, 1% effort.
- VU Therapeutic Discovery Grant 'mGluR4 PAMs for Parkinson's Disease' ($4.5 million), co-PI, 01/01/2007-02/28/2010, 0% effort.
- Michael J. Fox Foundation LEAPS Award 'mGluR4 PAMs for PD' ($4.4 million), co-PI, 01/01/2008 - 12/31/2011, 10% effort.
- Alzheimer Association IIRG-07-57131 'Novel Muscarinic Therapeutics for AD' ($239 K), PI.
- VICB Pilot Project Grant 'M1 PAMs for Alzheimer's Disease' ($45K), PI
- VICB Pilot Project Grant 'GLP-1 PAMs for Diabetes' ($45K), co-PI
- ACS-IRG 'Allosteric Akt and PDK1 inhibitors' ($20K), PI
- 3U54 MH074427-02S1, NIH/MLSCN Chemistry Core Supplement ($500K), PI
- Vanderbilt UCDPG Infrastructure Grant 'Preparative Chiral HPLC' ($174,600), co-PI

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Bilbiometrics (based on Web of Science Database)
- Total citations (1994-2022): 22,549
- Average citations per manuscript: 23.39; Average citations per year: 751.6
- h-index: 74
- i10-index: 418

Bilbiometrics (based on Google Scholar)
- Total citations (1994-2022): 32,158 h-index: 88
- i10-index: 510

Publications:

In Press/submitted

6. Li, K.; McClenahan, S.J.; Han, C.; Bungard, J.D.; Rathnayake, U.A.; Bauer, J.; Days, E.; Shelton, E.; Lindsley, C.W.; Denton, J.S. 'Discovery and characterization of VU0542270, the first selective inhibitor of vascular Kir6.1/SUR2B K_{ATP} channels' *Mol. Pharmacol., in press*.

5. Conley, A.; McCabe, D.; Gilliland, K.; Lindsley, C.W.; Oliver, K.H. 'Rethinking online education for external audiences: taking a LMS course through a UX design-centered process' *J. Chem. Ed., submitted*.

4. Smith, S.T.; Bender, B.; Cassada, J.; Mitchell, S.G.; Trombley, T.; Von Bredow, L.; Webb, E.M.; Erreger, K.; Lindsley, C.W.; Shoichet, B.; Hamm, H.E.; Meiler, J. 'Discovery of protease-activated receptor 4 (PAR4) tethered ligand antagonists using ultra-large virtual screening' *Nat. Commun., submitted*.

3. Qi, A.; Kling, H.E.; Billard, N.; Rodriguez, A.L.; Peng, L.; Dickerson, J.W.; Bender, A.M.; Lindsley, C.W.; Rook. J.M.; Niswender, C.M. 'Development of a selective and high affinity radioligand, [^{3}H]VU6013720, for the M_4 muscarinic receptor' *Mol. Pharmacol., in press*.

2. Valentine, M.S.; Bender, A.M.; Shay, S.; Paffenroth, K.C.; Gladson, S.; Dickerson, J.W.; Watson, K.J.; Kapolka, N.J.; Boutaud, O.; Rook, J.M.; Blackwell, T.; Roth, B.L.; Harriosn, F.E.; Austin,m E.D.; West, J.; Lindsley, C.W.; Merryman, W.D. 'Peripherally Restricted 5-HT_{2B} Antagonists for Treatment of Pulmonary Arterial Hypertension' *J. Am. Coll. Cardiol. Basic Trans. Science, in press*.

1. Zucca, S.; Dao, M.T.; Dunn, H.A.; Sutton, L.P.; Maza, N.A.; Crynen, G.; Lindsley, C.W.; Niswender, C.M.; Luján, R.; Martemyanov, K.A. 'Rewiring cholinergic circuits in the nucleus accumbens orchestrates opioid reward' *Neuron, submitted.*

Primary Literature

580. Bender, A.M.; Parr, L.C.; Livingston, W.B.; Lindsley, C.W.; Merryman, W.D. '2B Determined: The Future of the Serotonin Receptor 2B in Drug Discovery' *J. Med. Chem.* **2023**, *66*, 11027-11039.

579. Dodd, C.J.; Schultz, D.C.; Li, J.; Lindsley, C.W.; Bender, A.M. 'Alylation of *N*H-Sulfoximines under Mitsunobu-type conditions' *Org. Biomol. Chem.* **2023**, *21*, 5181-5184.

578. Vuckovic, Z.; Wang, J.; Mobbs, J.; Belousoff, M.J.; Bhattarai, A.; Burger, W.A.C.; Thompson, G.; Yeasmin, M.; Nawarante, V.; Leach, K.; van der Westhuizen, E.T.; Khajehali, E.; Liang, Y-L.; Glukhova, A.; Wootten, D.; Lindsley, C.W.; Tobin, A.B.; Sexton, P.M.; Danev, R.; Valant, C.; Miao, Y.; Christopoulos, A.; Thal. D.M. 'Pharmacological hallmarks of allostery at the M_4 muscarinic receptor elucidated through structure and dynamics' *eLife* **2023**, *12*, e83477.

577. Dodd, C.J.; Chronister, K.S.; Rathnayake, U.A.: Parr, L.C.; Chang, S.; Mi, D.; Days, E.L.; Bauer, J.A.; Cho, H.P.; Boutaud, O.; Denton, J.S.; Lindsley, C.W.; Han, C. 'Synthesis and SAR of a novel Kir6.2/SUR1 channel opener scaffold identified by HTS' *Bioorg. Med. Chem. Lett*. **2023**, *80*, article 129256.

576. Nunes, E.J.; Kebede, N.A.; Haight, J.L.; Foster, D.; Lindsley, C.W.; Conn, P.J.; Addy, N.A. 'Ventral tegmental area M_5 muscarinic receptors mediate effort-choice responding and nucleus accumbens dopamine release in a sex-specific manner.' *J. Pharmacol. Exp. Ther.* **2023**, *385,* 146-156.

575. Bender, A.M.; Valentine, M.S.; Bauer, J.A.; Days, E.; Lindsley, C.W.; Merryman, W.D. 'Identification of Potent, Selective and Peripherally Restricted Serotonin Receptor 2B Antagonists from a High-Throughput Screen' *ASSAY and Drug Development Technologies* **2023**, *21*, 89-96.

574. Teal, L.B.; Bubser, M.; Duncan, E.; Gould, R.W.; Lindsley, C.W.; Jones, C.K. 'Selective M_5 Muscarinic Acetylcholine Receptor Negative Allosteric Modulation VU6008667 Blocks Acquisition of Opioid-Self Administration' *Neuropharmacology* **2023**, *277*, article 109424.

573. Inger, J.A.; Mihan, E.R.; Kolli, J.U.; Lindsley, C.W.; Bender, A.M. 'DARK Classics in Chemical Neuroscience: Methaqualone' *ACS Chem. Neurosci.* **2023**, *14*, 340-350.

572. Russell, J.K.; Ingrm, S.; Teal, L.B.; Lindsley, C.W.; Jones, C.K. 'The M_1/M_4-Preferring Muscarinic Cholinergic Receptor Agonist Xanomeline Reverses Wake and Arousal Deficits in Non-pathologically Aged Mice' *ACS Chem. Neurosci.* **2023**, *14*, 435-457.

571. Lyon, M.; Li, P.; Ferreria, J.; Lazarenko, R.; Kharade, S.; Kramer, M.; McClenahan, S.; Days, E.; Bauer, J.; Spitznagel, B.; Weaver, C.D.; Alvarez, A.B.; Puga, L.M.; Lybaert, P.; Khambekar, S.; Liu, A.; Lindsley, C.W.; Denton, J.; Santi, C.M. 'A selective inhibitor of the sperm-specific potassium channel SLO3 impairs human sperm function.' *Proc. Natl. Acad. Sci., USA* **2023**, *120*, e2212338120

570. Kalbflesich, J.J.; Rodriguez, A.L.; Blobaum, A.L.; Lei, X.; Boutaud, O.; Niswender, C.M.; Lindsley, C.W. 'Persistent challenges in the development of an $mGlu_7$ PAM in vivo tool compound: the discovery of VU6046980' *Bioorg. Med. Chem. Lett*. **2023**, *80*, article 129106.

569. Dwomoh, L.; Rossi, M.; Scarpa, M.; Khajehali, E.; Molloy, C.; Herzyk, P.; Bottrill, A.R.; Sexton, P.M.; Christopoulos, A.; Conn, P.J.; Lindsley, C.W.; Bradley, S.J.; Tobin, A.B. 'M_1 muscarinic receptor activation reduces pathology and slows the progression of prion-mediated neurodegenerative diseases' *Sci. Signal.* **2022**, *15*, eabm3720.

568. Smith, M.; Arthur, B.; Cikowski, J.; Holt, C.; Gonzalez, S.; Fisher, N.M.; Vermudez, S.A.; Lindsley, C.W.; Conn, P.J.; Niswender, C.M.; Gogliotti, R.G. 'Clinical and preclinical evidence for M_1 muscarinic acetylcholine receptor potentiation as a novel therapeutic approach for Rett syndrome' *Neurotherapeutics* **2022**, *19*, 1340-1352.

567. Orsi, D.L.; Felts, A.S.; Rodriguez, A.L.; Vinson, P.N.; Cho, H.P.; Chang, S.; Blobaum, A.L.; Niswender, C.M.; Conn, P.J.; Jones, C.K.; Lindsley, C.W.; Han, C. 'Discovery of a potent M_5 antagonist with improved clearance profile. Part 2: piperidine amide-based antagonists' *Bioorg. Med. Chem. Lett*. **2022**, *76*, 129021.

566. Lin, X.; Fisher, N.M.; Dogra, S.; Senter, R.K.; Reed, C.W.; Kalbfleisch, J.J.; Lindsley, C.W.; Asher, W.B.; Xiang, Z.; Niswender, C.M.; Javitch, J.A. 'Differential activity of $mGlu_7$ allosteric modulators provides evidence for $mGlu_{7/8}$ heterodimers at hippocampal Schaffer Collateral-CA1 synapses' *J. Biol. Chem*. **2022**, *298*, 102458 (Accelerated Communication).

565. Capstick, R.A.; Whomble, D.; Orsi, D.L.; Felts, A.S.; Rodriguez, A.L.; Vinson, P.N.; Cho, H.P.; Chang, S.; Blobaum, A.L.; Niswender, C.M.; Conn, P.J.; Jones, C.K.; Lindsley, C.W.; Han, C. 'Discovery of a potent M_5 antagonist with improved clearance profile. Part 1: pyrrolidine amide-based antagonists' *Bioorg. Med. Chem. Lett*. **2022**, *76*, 128988.

564. Luessen, D.J.; Gallinger, I.M.; Ferranti, A.S.; Foster, D.J.; Melancon, B.J.; Lindsley, C.W.; Niswender, C.M.; Conn, P.J. '$mGlu_1$-Mediated Restoration of Prefrontal Cortex Inhibitory Signaling Reverses Social and Cognitive Deficits in an NMDA Hypofunction Model' *Neuropsychopharmcology* **2022**, *47*, 1826-1835.

563. Reed, C.W.; Rodriguez, A.L.; Kalbfleisch, J.J.; Seto, M.; Jenkins, M.T.; Blobaum, A.L.; Chang, S.; Lindsley, C.W.; Niswnder, C.M. 'Devleopment and profiling of $mGlu_7$ NAMs with a range of saturable inhibition of agonist responses *in vitro*' *Bioorg. Med. Chem. Lett.* **2022**, *74*, article 128923.

562. Cikowski, J.; Holt, C.; Arthur, B.; Smooth, M.; Gonzales, S.; Lindsley, C.W.; Niswender, C.M.; Gogliotti, R.G. 'Optimized administration of the M_4 PAM VU0467154 demonstrates broad efficacy, but limited effective concentrations in *Mecp2*$^{+/-}$ mice' *ACS Chem. Nueurosci.* **2022**, *13*, 1891-1901.

561. Garrison, A.; Orsi, D.; Capstick, R.; Whomble, D.; Carter, T.R.; Felts, A.; Vinson, P.; Rodriguez, A.; Fu, A.; Hajai, K.; Cho, H.P.; Teal, L.B.; Ragland, M.G.; Ghamari-Langroudi, M.; Bubser, M.; Chnag, S.; Schnetz-Boutaud, N.; Blobaum, A.; Foster, D.J.; Niswender, C.M.; Conn, P.J.; Lindsley, C.W.; Jones, C.K.; Han, C. 'Development of VU6019650: a potent, highly selective and systemically active orthosteric antagonist of the M_5 muscarinic acetylcholine receptor for the treatment of Opioid Use Disorder' *J. Med. Chem.* **2022**, *65*, 6273-6286.

560. McCleanahan, S.J.; Kent, C.N.; Kharade, S.V.; Greshman, R.; Isaeva, O.; Lazarenko, R.; Days, E.; Bauer, J.; Sulikowski, G.; Strauschenko, A.; Lindsley, C.W.; Denton, J.S. 'VU6036720: The first potent and selective small-molecule inhibitor of heteromeric Kir4.1/5.1 potassium channels' *Mol. Pharmacol.* **2022**, *101*, 357-370.

559. Joffe, M.E.; Maksymetz, J.; Luschinger, J.L.; Dogra, S.; Ferranti, A.S.; Luessen, D.J.; Gallinger, I..M.; Branthwaite, H.; Melugin, P.R.; Williford, K.M.; Centanni, S.W.; Shields, B.C.; Lindsley, C.W.; Calpari, E.S.; Siciliano, C.A.; Niswender, C.M.; Tadross, M.R.; Winder, D.G.; Conn, P.J. 'Acute stress usurps prefrontal cortex circuit function through $mGlu_5$ receptor plasticity on somatostatin-expressing interneurons' *Neuron* **2022**, *110*, 1068-1083.

558. Thomsen, M.; Crittenden, J.R.; Graybiel, Lindsley, C.W. 'Effects of acute and repeated administration of the M_4-selective muscarinic receptor positive allosteric modulator VU0152099 on cocaine vs. food choice in male rats'*Addiction Biology* **2022**, *27*, e13145.

557. Bogan, C.; Kaczmarek, J.; Pierce, J.; Tao, Y.; Chen, S-C.; Boyd, K.; Calcutt, M.W.; Bridges, T.M.; Lindsley, C.W.; Nadelmann, J.B.; Liao, A.; Hsieh, T.; Abramson, D.H.; Francis, J.H.; Friedman, D.; Richmond, A.; Daniels, A. 'Evaluation of intravitreal topotecan dose levels, toxicity, and efficacy for retinoblastoma vitreous seeds: A preclinical and clinical study' *Br. J. Ophthalmology* **2022**, *106*, 288-296.

556. Tyler, R.E.; Bluitt, M.; Engers, J.L.; Lindsley, C.W.; Besheer, J. 'The effects of predator odor (TMT) exposure and $mGlu_3$ NAM pretreatment on behavioral and NMDA receptor adaptations in the brain' *Neuropharmacology* **2022**, *207*, 108943.

555. Bender, A.M.; Carter, T.R.; Rodriguez, A.L.; Dickerson, J.W.; Rook, J.M.; Chang, S.; Engers, D.W.; Harp, J.R.; Bridges, T.M.; Niswender, C.M.; Conn, P.J.; Lindsley, C.W. 'Synthesis and Characterization of Chiral 6-Azaspiro[2.5]Octanes as Potent and Selective Antagonists of the M_4 Muscarinic Acetylcholine Receptor' *Bioorg. Med. Chem. Lett.* **2022**, *56*, article 128479.

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Presentations

163. Lindsley, C.W. 'Adventures in Allosteric drug discovery' 258th ACS National Meeting & Exposition, San Diego, CA, United States, August 27, 2019 (ACS MEDI Robert M. Scarborough Award Lecture).

162. Lindsley, C.W. 'Considerations for optimizing CNS penetration and successful programs' 258th ACS National Meeting & Exposition, San Diego, CA, United States, August 26, 2019.

161. Lindsley, C.W. 'The value of small molecule probes to drive translation' VICB Summer Research Symposium, Nashville, TN, August 8, 2019.

160. Lindsley, C.W. 'Academic drug discovery' UNC Seminars in Chemical Biology and Bioorganic Chemistry program, August 21, 2019.

159. Lindsley, C.W. 'Discovery and development of PLD inhibitors' NCI Chemical Biology Consortium, Nashville, TN, July 10, 2019.

158. Lindsley, C.W. **'**Translational Drug Discovery in an Academic Setting', ASPET 2019 Annual Meeting at Experimental Biology, Orlando, FL, April 8, 2019 (Scientific Achievement Award in Drug Discovery and Development Lecture).

157. Lindsley, C.W. 'Discovery and Development of M_1 positive allosteric modulators' Peking University, December 4, 2018 (ACS Publications Innovation Symposium).

156. Lindsley, C.W. 'M_1 positive allosteric modulators – from concept to clinic' Virginia Commonwealth University, October 4, 2018 (J. Doyle Smith/Larry Winter Joint Chemistry/Medicinal Chemistry Seminar).

155. Lindsley, C.W. 'The rebirth of $mGlu_1$ for the treatment of schizophrenia' University of Kansas, September 21, 2018.

154. Lindsley, C.W. 'Beside to bench and back again – Drug discovery within the VCNDD' University of Kansas, September 20, 2018 (2018 Edward E. Smissman Memorial Lecture).

153. Lindsley, C.W. 'Allosteric modulation of muscarinic acetylcholine receptors' University of Kansas, September 20, 2018.

152. Lindsley, C.W. 'M_1 PAMs for the treatment of schizophrenia' Ono Pharmaceuticals, Kyoto, Japan March 26, 2018.

151. Lindsley, C.W. 'Recent advances with GPCR allosteric modulators for the treatment of schizophrenia' Japanese Pharmaceutical Society, Kanazawa, Japan March 27, 2018 (41st Sato Memorial International Award Lecture).

150. Lindsley, C.W. 'Allosteric modulation of GPCRs' Vertex Pharmaceuticals, Boston, MA, September 29, 2017.

149. Lindsley, C.W. 'The curious caseof $mGlu_1$ PAMs – the forgotten mGluR with new life' Frontiers in Biochemistry Series, Department of Biochemistry, Vanderbilt University, August 25, 2017.

148. Lindsley, C.W. 'Discovery, development, mechanistic insights and therapetuic potential of M4 PAMs' 254th ACS National Meeting (MEDI 243), Washington DC, August 22, 2017.

147. Lindsley, C.W. 'Leveraging foundation, corporate and NIH support for academic drug discovery' The 35th National Medicinal Chemistry Symposium, Chicago, IL, June 29, 2016.

146. Lindsley, C.W. 'Academic Drug Discovery in an Academic Environment' 2016 Annual Texas Drug Discovery Symposium, University of Texas, San Antonio, San Antonio, TX, June 9, 2016. (Plenary/Key Note Speaker).

145. Lindsley, C.W. 'Allosteric modulation of GPCRs: Leveraging signal bias' University of Illinois, Chicago, Chicago, IL, April 26, 2016

144. Lindsley, C.W. 'Allosteric modulation of GPCRs: Leveraging signal bias' Ono Pharmaceuticals, Osaka, Japan, March 29, 2016.

143. Lindsley, C.W. 'Allosteric modulation of GPCRs: Leveraging signal bias' 136th Annual Meeting of the Pharmaceutical Society of Japan, Yokohama, Japan, March 28, 2016 (Plenary Speaker).

142. Lindsley, C.W. 'Allosteric Modulation: From Preclinical Concepts to Clinical Candidates and Beyond' UT Southwestern Medical Center, Dallas, TX, November 12, 2015.

141. Lindsley, C.W. 'Allosteric modulation of mGlu5 and PLD: New insights and therapeutic potential' The 2015 Philip S. Portoghese lecture, University of Minnesota, Minneapolis, MN, September 15, 2015.

140. Lindsley, C.W. 'Small changes (Molecular Switches) that change either the mode of pharmacology or subtype selectivity within GPCR allosteric modulators 250th ACS National Meeting, Boston, MA, August 19, 2015.

139. Lindsley, C.W. 'HTS to IND-enabling studies at the Vanderbilt Center for Neuroscience Drug Discovery' Great Lakes/Central Michigan 46th Regional ACS Meeting, Grand Rapids, MI, May 28, 2015.

138. Lindsley, C.W. 'Allosteric Modulation of Muscarinic Receptors', 12th Medicinal and Bioorganic Chemistry Conference, Steamboat Springs, CO, January 24, 2015.

137. Lindsley, C.W. 'Academic Drug Discovery Targeting Allosteric Modulation', University of Notre Dame, Southbend, IN, December 19, 2014.

136. Lindsley, C.W. 'Academic Drug Discovery Targeting Allosteric Modulation', Washington University, St. Louis, MS, December 11, 2014.

135. Lindsley, C.W. 'Allosteric modulation of GPCRS and other Targets' Gilead Pharmaceuticals, San Francisco, CA, August 21, 2014.

134. Lindsley, C.W. 'Allosteric modulation of phospholipase D: Oncology, Virology and Beyond' World Pharma Congress, Mastering Medicinal Chemistry, Boston, MA, May 21, 2014.

133. Lindsley, C.W. 'Exploiting allosteric sites for target modulation' Experimental; Biology (ASPET) 2014, San Diego, CA, April 28, 2014 (John J. Abel Award Lecture).

132. Mathews, T.P.; Rose, K.L.; Lindsley, C.W.; Brown, H.A. 'Phospholipase D regulates deoxy-riboncleotide biosynthesis through pyrimidine metabolic intermediates' 247th ACS National Meeting, Dallas, TX, March 16-20, 2014.

131. Lindsley, C.W. 'Talking neuroscience drug discovery in an academic environment' Applied Pharmaceutical Chemistry 2014 (the Boston Society), Broad Institute, March 4, 2014 (plenary speaker).

130. Lindsley, C.W. 'Allosteric modulation of GPCRs for the treatment of CNS disorders' St. Jude Children's Research Hospital, Chemical Biology & Therapeutics Department, Memphis, January 9, 2014.

129. Lindsley, C.W. 'Allosteric modulation of GPCRs for the treatment of CNS disorders' University of Mississippi, Oxford, MS, November 5, 2013.

128. Lindsley, C.W. 'Allosteric modulation of GPCRs for the treatment of CNS disorders' UT Medical Branch, Galveston, TX, September 20, 2013.

127. Dawson, E.S.; Stauffer, S.R.; Lindsley, C.W. 'Development of the BioAssay Research Database (BARD): A User Friendly perspective based on active participation from biologists and chemists' 246th ACS National Meeting Indianapolis, IN, September 8, 2013.

126. Hopkins, C.R.; Engers, D.W.; Frist, A.Y.; Lindsley, C.W.; Hong, C.H. 'Development of a potent and ALK2 selective bone morphogenetic protein receptor (BMP) inhibitor' 246th ACS National Meeting Indianapolis, IN, September 11, 2013.

125. Gentry, P.R.; Lindsley, C.W. 'Discovery of ML326: The First Sub-micromolar, Selective M_5 PAM' 246th ACS National Meeting Indianapolis, IN, September 11, 2013.

124. Engers, D.W.; Ennis, E.A.; Ruggerio, A.M.; Blakely, R.D.; Hopkins, C.R.; Lindsley, C.W. 'Discovery and Structure-Activity Relationship of a Novel Choline Transporter Inhibitor (ML352)' 246th ACS National Meeting Indianapolis, IN, September 9, 2013.

123. Lindsley, C.W. 'Adventures in Allosteric Drug Discovery' Portoghese Award Lecture, 246th ACS National Meeting, Indianapolis, IN, September 10, 2013.

122. Lindsley, C.W. 'Development of allosteric inhibitors of phospholipase D: engineering isoform selectivity and emerging therapeutic applications' Medicinal Chemistry Gordon Research Conference, New London, NH, August 5, 2013.

121. Lindsley, C.W. 'Allosteric modulation of GPCRs' Merck Research Laboratories, Rahway, NJ, May 1, 2013.

120. Lindsley, C.W. 'Chemical Optimization of Direct Inhibitors of Phospholipase D (PLD)' 245th ACS National Meeting, New Orleans, LA, April 9, 2013.

119. Guha, R.; Lahr, D.; Bittker, J.; Chung, T.D.; Southern, M.; Chatwin, S.; Yang, J.J.; Ursu, O.; Bologa, C.G.; Oprea, T.I.; Dawson, E.; Stauffer, S.R.; Lindsley, C.W.; Vempati, U.; Kucuk, H.; Schurer, S.C.; Brudz, S.; Clemons, P.A.; de Souza, A.; Southall, N.; Nguyen, D-T.; Braisted, J.; Peryea, T. 'BioAssay Research Database: A platform to support collection, management and analysis of chemical biology data' 245th ACS National Meeting, New Orleans, LA, April 9, 2013.

118. Panarese, J.D.; Lindsley, C.W. 'Biomimetic synthesis and biological evaluation of Aplidiopsamine A and unnatural analogs' 245th ACS National Meeting, New Orleans, LA, April 8, 2013.

117. Lindsley, C.W. 'Novel, non-dopaminergic approaches for the treatment of schizophrenia' William K. Warren, Jr. Frontiers in Neuroscience Conference, LIBR Institute, Tulsa, OK, November 13, 2012.

116. Morrsion, R.D.; Byers, F.W.; Burleigh, J.; Blobaum, A.L.; Niswender, C.M.; Jones, C.K.; Emmitte, K.A.; Lindsley, C.W.; Conn, P.J.; Mutlib, A.; Daniels, J.S. 'Evaluating the in vivo clearance of a novel mGlu5 NAM employing selective inhibition of aldehyde oxidase and cytochrome P450' 18th North American Regional ISSX Meeting, Dallas, TX, October 14-18, 2012.

115. Bridges, T.M.; Rook, J.M.; Noetzel, M.J.; Morrison, R.D.; Blobaum, A.L.; Byers, F.W.; Stauffer, S.R.; Lindsley, C.W.; Jones, C.; Niswender, C.M.; Conn, P.J.; Daniels, J.S. 'Biotransformation of a novel positive allosteric modulator of mGlu5 produces adverse events in rats: evidence for receptor agonism-dependent seizures induced by oxidative metabolism' 18th North American Regional ISSX Meeting, Dallas, TX, October 14-18, 2012.

114. Blobaum, A.L.; Bridges, T.M.; Byers, F.W.; Mattmann, M.E.; Morrison, R.D.; Mackie, C.; Lavreysen, H.; Bartolome, J.M.; MacDonald, G.J.; Steckler, T.; Jones, C.K.; Niswender, C.M.; Conn, P.J.; Lindsley, C.W.; Stauffer, S.R.; Daniels, J.S. 'The heterotropic activation of the midazolam hydroxylase activity of P450 3A by a GPCR allosteric modulator' 18th North American Regional ISSX Meeting, Dallas, TX, October 14-18, 2012. 113.

113. Grannan, M.D.; Bubser, M.; Mulder, M.J.; Byun, N.E.; Bridges, T.M.; Wood, M.R.; Lindsley, C.W.; Conn, P.J.; Jones, C.K. 'The role of the M4 positive allosteric modulator VU0152100 in reversing psychostimulant-induced dopamine release and behaviors' Neuroscience 2012, New Orleans, LA, October 13-17, 2012.

112. Byun, N.E.; Barry, R.L.; Damon, S.M.; Avison, M.J.; Bridges, T.M.; Lindsley, C.W.; Conn, P.J.; Gore, J.C.; Jones, C.K. 'The M4 muscarinic acetylcholine receptor positive allosteric modulator VU0152100 modulates dopaminergic network activity: a functional connectivity study' Neuroscience 2012, New Orleans, LA, October 13-17, 2012.

111. Dickerson, J.W.; Nedelcovych, M.T.; Stauffer, S.R.; Hopkins, C.R.; Niswender, C.M.; Lindsley, C.W.; Jones, C.K.; Conn, P.J. 'Effect of metabotropic glutamate receptor activation on neuroinflammation' Neuroscience 2012, New Orleans, LA, October 13-17, 2012.

110. Ghoshal, A.; Pouget, P.; Byun, N.; Stauffer, S.R.; Rook, J.M.; Rodriguez, A.L.; Niswender, C.M.; Jones, C.K.; Lindsley, C.W.; Conn, P.J. 'Role of mGlu5 on sensory processing in vivo: effect of mGlu5 PAM VU0360172 on spontaneous neural physiology' Neuroscience 2012, New Orleans, LA, October 13-17, 2012.

109. Rook, J.M.; Noetzel, M.J.; Pouliot, W.A.; Bridges, T.M.; Vinson, P.N.; Zhou, Y.; Gogliotti, R.D.; Manka, J.T.; Stauffer, S.R.; Niswender, C.M.; Dudek, F.E.; Daniels, J.S.; Jones, C.K.; Lindsley, C.W.; Conn, P.J. 'Molecular actions of positive allosteric agonists of mGlu5 determine efficacy versus adverse liability in animal models' Neuroscience 2012, New Orleans, LA, October 13-17, 2012.

108. Amato, R.J.; Joffe, M.E.; Morrison, R.D.; Rodriguez, A.L.; Felts, A.S.; Emmitte, K.A.; Daniels, J.S.; Conn, P.J.; Lindsley, C.W.; Jones, C.K. 'Potential of partial negative allosteric modulators of the metabotropic glutamate receptor subtype 5 for reversal of cocaine self-administration' Neuroscience 2012, New Orleans, LA, October 13-17, 2012.

107. Manka, J.; Jacobs, J.; Zhou, Y.; Vinson, P.N.; Jadhav, S,; Herman, E.J.; Lavreysen, H.; Mackie, C.; Bartolome, J.M.; MacDonald, G.J.; Steckler, T.; Daniels, J.S.; Weaver, C.D.; Niswender, C.M.; Jones, C.K.; Conn, P.J.; Lindsley, C.W.; Stauffer, S.R. 'Bicyclic tetrahydronaphthyridine ethers as positive allosteric modulators of mGlu5' 244th ACS National Meeting, Philadelphia, PA August 21, 2012.

106. O'Reilly, M. C.; Scott, S.A.; Lavieri, R.; Brown, H.A.; Lindsley, C.W. 'Design, synthesis and biological significance of potent, isoform selective inhibitors of phospholipase D2' 244th ACS National Meeting, Philadelphia, PA August 20, 2012.

105. Lindsley, C.W. 'mGlu4 PAMs for the treatment of Parkinson's disease; 244th ACS National Meeting, Philadelphia, PA August 20, 2012.

104. Malosh, C.F.; Manka, J.; Zhou, Y.; Williams, R.; Vinson, P.N.; Gregory, K.J.; Jadhav, S.; Herman, E.J.; Lavreysen, H.; Mackie, C.; Bartolome, J.M.; MacDonald, G.J.; Steckler, T.; Daniels, J. S.; Weaver, C. D.; Niswender, C.M.; Jones, C.K.; Conn, P.J.; Lindsley, C.W.; Stauffer, S.R. 'Investigation of monocyclic ethers as positive allosteric modulators of mGlu5' 244th ACS National Meeting, Philadelphia, PA August 21, 2012.

103. Chun, A.; Jacobs, J.; Zhou, Y.; Tokars, V.; Saldanha, S.A.; Chase, P.; Eggler, A.; Dawson, E.S.; Baez, Y.; Lindsley, C.W.; Hodder, P.; Mesecar, A.; Stauffer, S.R. 'Discovery of the noncovalent SARsS-CoV 3CLpro proteinase inhibitor ML188 and further optimization of the *N*-anilido P2 subgroup' 244th ACS National Meeting, Philadelphia, PA August 21, 2012.

102. Lindsley, C.W. 'Molecular switches on mGluR allosteric ligands that modulate modes of pharmacology and/or selectivity'243rd ACS National Meeting, San Diego, CA, March 29, 2012.

101. Lindsley, C.W.; MacDonald, G. 'Development of novel reagents for the treatment of schizophrenia' 243rd ACS National Meeting, San Diego, CA, March 29, 2012.

100. Senter, T.J.; Fadeyi, O.O.; Lindsley, C.W. 'A General and Stereoselective Approach for the Construction of Azabicyclic Compounds: Applications in the Synthesis of Alkaloid Natural Products' 63rd ACS Regional Meeting, Richmond, VA, October 26-29, 2011.

99. Lindsley, C.W. 'Molecular Switches on mGluR Allosteric Ligands that Modulate Modes of Pharmacology and/or Subtype Selectivity' 7th Int. Meeting on mGluRs, Taromina, Sicily, October 3, 2011.

98. Lindsley, C.W. 'Development of Allosteric Modulators for Psychiatric and Neurological Disorders' Purdue University, August 31, 2011.

97. Lindsley, C.W. 'Development of Allosteric Modulators for Psychiatric and Neurological Disorders' BIOGEN IDEC, June 9, 2011.

96. Lindsley, C.W. 'Development of M_4 Allosteric Modulators for Psychiatric Disorders' Keystone Conference on Early Stage Drug Discovery, Snowbird, Utah, April 2, 2011.

95. Fadeyi, O.O.; Lindsley, C.W. 'Application of organocatalysis to the synthesis of pharmacological relevant scaffolds: Chiral β-fluoroamines and aziridines' 241st ACS National Meeting, March 27-31, 2011.

94. Lindsley, C.W. 'Development of M_4 Allosteric Modulators for Psychiatric Disorders' University of Minnesota, February 15, 2010.

93. Lindsley, C.W. 'Development of Allosteric Modulators for Psychiatric and Neurological Disorders' Broad Institute, December 1, 2010.

92. Lindsley, C.W. 'Modulation of Glutamate Signaling at Multiple Levels for Treatment of Positive Symptoms and Cognitive Disturbances in Schizophrenia' ACNP 2010, December 6, 2010.

91. Lindsley, C.W. 'Development of Allosteric Modulators for Psychiatric and Neurological Disorders' ACNP 2010, December 7, 2010.

90. Lindsley, C.W. 'Discovery and Optimization of allosteric activators of M1 and M5: Efficacy in preclinical AD models' ICAD 2010, Honolulu, HI, July 13, 2010.

89. Lindsley, C.W. ''Molecular Switches' on allosteric ligands that modulate modes of pharmacology' Gordon Research Conference on High Throughput Chemistry and Chemical Biology, Les Diableres, Switzerland, June 20, 2010.

88. Lindsley, C.W. 'Development of allosteric modulators of GPCRS, kinases and lipases' Merck Pharmaceuticals (Legacy Schering), July 22, 2010.

87. Lindsley, C.W. 'Development of allosteric modulators of GPCRS, kinases and lipases' Abbott Pharmaceuticals, June 11, 2010.

86. Lindsley, Craig W. ' Development of positive allosteric modulators of mAChRs 1, 4 and 5' Abstracts of Papers, 238th ACS National Meeting, Washington, DC, United States, August 16-20, 2009.

85. Reger, T.S.; Yang, Z-Q.; Schlegel, K-A. S.; Shu, Y.; Cube, R.V.; Mattern, C.; Rittle, K.E.; Ngo, P.L.; Shipe, W. D.; Yang, V.; Lindsley, C.W.; Barrow, J.; Coleman, P.; Hartman, G.D.; Tang, C.; Ballard, J.; Kuo, Y.; Prueksaritanont, T.; Kane, S.A.; Urban, M.O.; Liang, A.; Sain, N.M.; Uebele, V.N.; Nuss, C. E.; Doran, S.M.; Garson, S.L.; Fox, S.V.; Kraus, R.L.; Renger, J.J. 'Evaluation of potent and selective T-Type calcium channel antagonists in models of pain and insomnia' Abstracts of Papers, 237th ACS National Meeting, Salt Lake City, UT, United States, March 22-26, 2009

84. Felts, A.S.; Lindsley, C.W. 'Development of novel chemotypes for negative allosteric modulation of mGluR5' Abstracts of Papers, 237th ACS National Meeting, Salt Lake City, UT, United States, March 22-26, 2009.

83. Robertson, S.D.; Matthies, H.; Bibus-Christianson, N.; Kennedy, J.P.; Lindsley, C.W.; Blakely, R.D.; Galli, A. 'Insulin regulation of the norepinephrine transporter (NET)' Society for Neuroscience, Washington, D.C., November 15-19, 2008.

82. Speed, N.; Owens, W.A.; Matthies, H.; Saunders, C.; Situ, M.; Kennedy, J.P.; Vaughan, R.; Lindsley, C.W.; Niswender, K.; Daws, L.C.; Galli, A. 'Insulin regulation of the dopamine transporter' Society for Neuroscience, Washington, D.C., November 15-19, 2008.

81. Oluwatola, O.O.; Engers, D.W.; Sulikowski, G.A.; Lindsley, C.W. 'Advances in the Development of Positive Allosteric Modulators for Metabotropic Glutamate Receptor Subtype 5 (mGluR5)' 60th Southeast Regional Meeting of the American Chemical Society, Nashville, TN, United States, November 12-15, 2008.

80. Kennedy, J.P.; Lindsley, C.W. 'Progress toward the Total Synthesis of Piperazimycin A' 60th Southeast Regional Meeting of the American Chemical Society, Nashville, TN, United States, November 12-15, 2008.

79. Lewis, J.A.; Daniels, R.N.; Lindsley, C.W. 'Total Synthesis of Ciliatamides A - C: Stereochemical Revision and Unnatural Analogs' 60th Southeast Regional Meeting of the American Chemical Society, Nashville, TN, United States, November 12-15, 2008.

78. Wang, E.A.; Daniels, R.N.; Melancon, B.J.; Sulikowski, G.A.; Lindsley, C.W. 'Efforts toward the Ethylideneproline Core of Lucentamycins A-D. 60th Southeast Regional Meeting of the American Chemical Society, Nashville, TN, United States, November 12-15, 2008.

77. Daniels, R.N.; Lindsley, C.W. 'Total Synthesis of Lucentamycins A-D' Abstracts, 60th Southeast Regional Meeting of the American Chemical Society, Nashville, TN, United States, November 12-15, 2008.

76. Davis, A.A.; Brady, A.E.; Heilman, C.J.; Gurevich, V.V.; Lindsley, C.W.; Conn, P.J.; Lah, J.J.; Levey, A.I. 'The novel allosteric agonist TBPB activates M1 muscarinic acetylcholine receptors without inducing arrestin recruitment or functional desensitization' Society for Neuroscience, Washington, DC, Nov. 15-19th, 2008.

75. Lindsley, C.W. 'An Allosteric Approach for the Modulation of Class A GPCRs: Potential New Therapeutics for Schizophrenia and Alzheimer's Disease' NYAS Novel Approaches to 7-Transmembrane Receptor Therapeutics, New York, NY September 23, 2008.

74. Lewis, J.A.; Jaboin, J.; Tu, T.; Daniels, R.N.; Wiley, C.D.; Lindsley, C.W.; Hallahan, D.E. 'Development of Radiation Sensitizers that Inhibit Bone Marrow X Kinase' Radiation Research Society Meeting, Boston, MA September 21-25, 2008.

73. Hammond, A.S.; Rodriguez, A.L.; Engers, D.W.; Jones, C.K.; Ayala, J.; Chen, Y.; Venable, D.F.; Oluwatola, O.; Lindsley, C.W.; Conn, P.J. 'Optimization of mGluR5 PAMs related to ADX47273' 6th International Meeting on Metabotropic Glutamate Receptors, Taormina, Sicily – Italy, September 14-19, 2008.

72. Lindsley, C.W. 'Challenges in the development of mGluR allosteric ligands: Medicinal chemistry strategies to address confounding structure-activity-relationships' 6th International Meeting on Metabotropic Glutamate Receptors, Taormina, Sicily – Italy, September 14-19, 2008.

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69. Pawluczyk, J.M.; McClain, R.T.; Mulhearn, J.J., Jr.; Rudd, D.J.; Denicola, C.; Lindsley, C.W. 'Microwave initiated living free radical polymerization: Optimization of the preparative scale synthesis of Rasta resins. 236th ACS National Meeting, Philadelphia, PA, August 17-21, 2008.

68. Lindsley, C.W. 'Discovery of Centrally Active M1 and M4 Positive Allosteric Modualtors' Gordon Research Conference on Medicinal Chemistry, New London, NH, August 4-8, 2008 (invited Speaker).

67. Lindsley, C.W. 'Development of allosteric ligands of Class A and Class C GPCRs Boston University's 9th Annual Symposium on Chemical Synthesis: Advances and Applications' Boston University, Boston, MA, June 27, 2008 (invited speaker).

66. Speed, N.; Owens, W.A.; Williams, J.M.; Saunders, C.; Siuta, M.; Kennedy, J.P.; Lindsley, C.W.; Niswender, K.; Avison, M.J.; Daws, L.C.; Galli, A. 'How sweet is DAT: insulin regulation of dopamine transporter activity' ACNP 47th Annual Meeting, Scottsdale, AZ, December 7-11, 2008.

65. Doughty, S.E.; Bibus-Christianson, N.; Kennedy, P.; Lindsley, C.; Blakely, R.D.; Galli, A. 'Insulin regulation of the norepinephrine transporter' Society for Neuroscience, Washington, DC, November 15-19, 2008 .

64. Lindsley, C.W. 'Discovery and development of allosteric modulators of Class A and Class C GPCRs'235th ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008 (invited speaker).

63. Lewis, L.M.; Sheffler, D.; Williams, R.; Bridges, T.M.; Kennedy, J.P.; Brogan, J.T.; Mulder, M.J.; Williams, L.; Nalywajko, N.T.; Niswender, C.M.; Weaver, C.D.; Conn, P.J.; Lindsley, C.W. 'Discovery and development of of a highly selective and centrally active M1 antagonist' 235th ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008.

62. Bridges, T.M.; Jones, C.K.; Brady, A.; Marlo, J.E.; Rodriguez, A.L.; Niswender, C.M.; Sheffler, D.; Kennedy, P.; Williams, R.; Orton, D.; Kim, K.; Williams, L.; Mulder, M.; Lewis, M.; Shirey, J.K.; Davis, A.A.; Lah, J.J.; Levey, A.I.; Weaver, C.D.; Conn, P.J.; Lindsley, C.W. 'Subtype-selective allosteric modulation of the M1 and M4 muscarinic receptors' 235th ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008.

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60. Sharma, S.; Williams, R.; Rodriguez, A.L.; Niswender, C.M.; Weaver, C.D.; Conn, P. J.; Lindsley, C.W. 'Synthesis and SAR of a partial mGluR5 antagonist lead: Unexpected modulation of pharmacology with slight structural modifications to a 5-(phenylethynyl)pyrimidine scaffold' 235th ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008

59. Daniels, R.N.; Lindsley, C.W. 'Total synthesis of lucentamycins' 235th ACS National Meeting, New Orleans, LA, United States, April 6-10, 2008.

58. Thomsen, M.; Conn, P.J.; Lindsley, C.W.; Fink-Jensen, A.; Caine, S.B. 'Modulation of cocaine discrimination by muscarinic ligands in mice' Experimental Biology 2008, San Diego, CA, April 5-9, 2008.

57. Bridges, T.M.; Jones, C.K.; Brady, A.; Marlo, J.E.; Rodriguez, A.L.; Niswender, C.M.; Sheffler, D. Kennedy, P.; Williams, R.; Orton, D.; Kim, K.; Williams, L.; Mulder, M.; Lewis, M.; Shirey, J.K.; Davis, A.A.; Lah, J.J.; Levey, A.I.; Weaver, C.D.; Conn, P.J.; Lindsley, C.W. 'Discovery and characterization of novel, highly-selective agonists and antagonists of mAChR1: *In vitro* and *in vivo* profiles relevant to Alzheimer's disease and schizophrenia' ASPET Centennial Meeting, Experimental Biology 2008, San Diego, CA, April 5-9, 2008.

56. Brady, A.E.; Bridges, T.M.; Thompson, A.D.; Yin, H.; Shirey, J.K.; Lindsley, C.W.; Conn, P.J. 'Characterization of novel and selective positive allosteric modulators (PAMs) of the M4 muscarinic acetylcholine receptor (mAChR)' ASPET Centennial Meeting, Experimental Biology 2008, San Diego, CA, April 5-9, 2008.

55. Lindsley, C.W. 'De novo design of potent GlyT1 inhibitors: *In vitro* and *in vivo* profiles' ASPET Centennial Meeting, Experimental Biology 2008, San Diego, CA, April 5-9, 2008 (invited speaker).

54. Ray. W.J.; Seager, M.; Ma, L.; Wittman, M.; Getty, K.; Marlatt, M.; Crouthamel, M-C.; Wu, G.; Sankaranarayananan, S.; Simon, A.; Burno, M.; Jones, K.; Graufileds, V.K.; Bickel, D.; Posavec, D.; Cook, J.; Veng, L.; Kuduk, S.; Sur, C.; Shipe, W.; Lindsley, C.; Kinney, G.; Pascarella, D. Jacobson, M.; Seabrook, G. 'Allosteric potentiation of the M1 muscarinic receptor provides unprecedented selectivity and a novel therapeutic strategy for the treatment of Alzheimer's Disease' Keystone Symposium on Alzheimer's Disease (C7), Keystone, CO, March 24-27, 2008.

53. Myers-Johnson, K.A.; Niswender, C.M.; Luo, Q.; Ayala, J.E.; Rodriguez, A.L.; Marlo, J.E.; Days, E.L.; Nalawajko, N.T.; Lornsen, K.A.; Williams, M.; Lewis, M.; Weaver, C.D.; Conn, P.J.; Lindsley, C.W. 'Discovery, synthesis and SAR of a series of novel positive allosteric modulators of metabotropic glutamate receptor subtype 4' Society for Neuroscience, San Diego, CA November 6, 2007.

52. Miller, T.W.; Perez-Torres, M.; Guix, M.; Lindsley, C.W.; Arteaga, C.L. 'Loss of PTEN confers hormone-independent and anti-estrogen resistance to hormone receptor-positive human breast cancer cells' AACR special conf. on breast cancer, San Diego, CA, October 17-20, 2007.

51. Buck, J.; Williams, R.; Marlo, J.; Brady, A.; Conn, P.J.; Lindsley, C.W. 'Development of M1 muscarinic receptor modulators' ACS WRM, San Diego, CA, October 9-13, 2007.

50. Lewis, J.A.; Orton, D.; Fu, A.; Lindsley, C.W.; Hallahan, D.E. 'Development of phosphatidylinostitol-3 kinase inhibitors as cancer therapeutics' ACS WRM, San Diego, CA, October 9-13, 2007.

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48. Bridges, T.; Brady, A.; Shirey, J.; Marlo, J.; Jones, C.K.; Conn, P.J.; Lindsley, C.W. 'Sub-type selective allosteric modualtion of the M1 and M4 muscarinic receptors: novel agonists and potentiatiors relevant to Alzheimer's disease and schizophrenia' ACS-EFMC Frontiers in CNS and Oncology Medicinal Chemistry, Sienna, Italy, October 7-9, 2007 (voted best poster).

47. Lindsley, C.W. 'Natural Product Guided Synthesis: Total Synthesis, Molecular Editing and Biological Evaluation of Natural Products' ICCA X, Nashville, TN, August 12-15, 2007 (invited speaker).

46. Williams, R.; Jones, C.; Brady, A.; Conn, P.J.; Lindsley, C.W. 'Development of M1 muscarinic modulators' Gordon Research Conference on Combinatorial Chemistry, New London, NH, June 3-7, 2007.

45. Lindsley, C.W. 'Preclinical Drug Discovery in an Academic Setting - It is Possible' Gordon Research Conference on Combinatorial Chemistry, New London, NH, June 3-7, 2007 (invited speaker).

44. Zhao, Z.; Nolt, M.B.; McDonald, T.P.; Maxwell. J.W.; Kinose, F.; Thut, C.; Lindsley, C.W.; Wolkenberg, S.E. 'Discovery of selective agonists of somatostatin receptor subtype 2 (SSTR2): application of an iterative analogue library approach' ACS MARM 2007, Ursinus College, Collegeville, PA May 16, 2007.

43. Lindsley, C.W. 'Development of novel, centrally active GlyT1 inhibitors that further validate the NMDA hypofunction hypothesis of schizophrenia in preclinical animal models' International Congress on Schizophrenia Research (ICOSR), Colorado Springs, CO, March 28-May1, 2007.

42. Lindsley, C.W. 'Progress towards validation of the NMDA hypofunction hypothesis of schizophrenia: discovery and development of centrally active glycine transporter (GlyT1) inhibitors' American College of Neuropsychopharmacology 45th Annual Meeting, Hollywood, FL, December 3-7, 2006.

41. Zeng, Z.; Lemaire, W.; O'Malley, S.S.; O'Brien, J.A.; Miller, P.J.; Zhao, Z.J.; Wisnoski, D.D.; Lindsley, C.W.; Raab, C.E.; Williams, D.L.; Sur, C. 'Localization of GlyT1 in CNS tissues of rat and rhesus monkey by in vitro quantitative autoradiography using a novel GlyT1 radioligand' Society For Neuroscience 2006\ Meeting, Atlanta, Georgia, October 10, 2006.

40. Wolkenberg, S.E.; Zhao, Z.; Nolt, B.M.; Wisnoski, D.D.; Nanda, K.; Trotter, B.W.; Leister, W.H.; Hartman, G.D.; Lindsley, C.W. 'Application of an iterative analogue library approach to cardiovascular and neuroscience programs' Gordon Research Conference on Combinatorial Chemistry, Oxford, UK, August 20-25, 2006. (Voted Best Poster).

39. Lindsley, C.W. 'Discovery and development of the first centrally active mGluR5 positive allosteric modulators' Gordon Research Conference on Medicinal Chemistry, New London, NH, August 6-11, 2006 (invited speaker).

38. Nanda, K.K.; Trotter, B.W.; Nolt, M.B.; Wolkenberg, S.E., Lindsley, C.W.; Kiss, L.; Spencer, R.H.; Wang, J.; Cato, M.J.; White, R.B.; Yeh, S.; Lynch, J.J.; Regan, C.P.; Stump, G.L. 'Synthesis and characterization of a series of 2,3-diarylbutanamide Kv1.5 potassium channel antagonists' Medicinal Chemistry 30th National Symposium, Seattle, WA., June 25, 2006.

37. Dudkina, A.; Lindsley, C.W.; McClain, R.T.; Cox, A.L.; Wang, Y., Denicola, C.J. 'Toward fully automated analytical support for high-throughput medicinal chemistry' High Performance Liquid Phase Separations 30th International Symposium (HPLC 2006), San Francisco, California, May 17-24, 2006.

36. Jesudason, C.D.; Beavers, L.S.; Cramer, J.W.; Dill, J.; Finley, D.R.; Gleason, S.D.; Hemrick-Leuke, S.K.; Lindsley, C.W.; Nelson, D.L.G.; Stevens, F.C.; Gadski, R.A.; Oldham, S.W.; Pickard, R.T.; Siedem, C.S.; Sindelar, D.K.; Singh, A.; Watson, B.M.; Witkin, J.M.;Hipskind, P.A. '(3-Piperidin-1-yl-propoxy)-tetrahydroisoquinolines and tetrahydrozaepines: A novel series of selective H3 antagonists' 35th European Histamine Research Society Meeting, Delphi, Greece, May 10-13, 2006.

35. Wang, Y.; McClain, R.T.; Dudkina, A.; Cox, A.L.; Denicola, C.J.; Lindsley, C.W. 'Automated purification and post purification support in a high throughput synthesis group' Prep 19th International Symposium, Baltimore, Maryland, May 14-17, 2006.

34. McClain, R.T.; Varga, S.L.; Wolkenberg, S.E.; Lindsley, C.W.; Smiley, M.A.; Nolt, M.B. 'Convenient preparation of substituted 5-amino oxazoles via a microwave-assisted Cornforth rearrangement' Cambridge Health Institute: Chemistry Enabled Drug Design Meeting, San Diego, CA April 23-26, 2006.

33. Yang, F.V.; Shipe, W.D.; Lindsley, C.W. 'General microwave-assisted protocol for the expedient synthesis of quinoxalinones' Microwaves In Chemistry 4th International Conference, Orlando, FL. March 10, 2006.

32. Wisnoski, D.D.; Lindsley, C.W.; Williams Jr., D.L.; Sur, C. 'Discovery and development of the first centrally active mGluR5 positive allosteric modulators' Gordon Research Conference on Combinatorial Chemistry, Andover, NH, August 21-26, 2005 (invited poster).

31. Lindsley, C.W. 'Lead optimization driven by iterative analogue library synthesis: development of of novel allosteric Akt kinase inhibitors' Gordon Research Conference on Combinatorial Chemistry, Andover, NH, August 21-26, 2005 (invited speaker).

30. Lindsley, C.W. 'Hit-to-Lead-to-Proof of Concept: Akt kinase inhibitors and mGluR5 positive allosteric modulators' World Pharmaceutical Congress - Hit-to-Lead: Streamling Lead Generation to Enhance Downstream Success, Philadelphia, PA May 24-25, 2005 (invited speaker).

29. Lindsley, C.W. 'Discovery and development of the first centrally active mGluR5 positive allosteric modulators' ACS Mid-Atlantic Regional Meeting, Rutgers University, New Brunswick, NJ, May 23, 2005 (invited speaker).

28. Lindsley, C.W. 'Technology Enabled Synthesis: A new paradigm for lead optimization' ACS ProSpectives on Medicinal Chemistry, Boston, MA, May 15-18, 2005 (invited speaker).

27. Zhao, Z.; Leister, W.H.; Wisnoski, D.D.; Wang, Y.; Wolkenebrg, S.E.; Lindsley, C.W. 'Microwave-assisted organic synthesis of quinoxalines and 5,6-diphenylpyrazin-2(1*H*)-one libraries as isoyzme selective Akt inhibitors' ACS ProSpectives on Medicinal Chemistry, Boston, MA, May 15-18, 2005.

26. Lindsley, C.W. 'Technology enhanced medicinal chemistry: development of allosteric Akt kinase inhibitors' The Royal Society of Chemistry – High Throughput Medicinal Chemistry, London, UK, May 10, 2005 (invited speaker).

25. Lindsley, C.W. 'Technology Enabled Synthesis: application to the development of the first centrally active mGluR5 positive allosteric modulators' Vanderbilt Institute of Chemical Biology Nashville, TN, February 9, 2005 (invited speaker).

24. Huber, H.E.; Barnett, S.F.; Defeo-Jones, D.; Hancock, P.J.; Haskell, K.M.; Jones, R.E.; Leander, K.R.; Lindsley, C.W.; Robinson, R.G.; Zhao, Z.J. 'Akt inhibitors as chemosensitizers' Nature Biotechnology 2005 Winter Symposium, Miami, FL, February 5-9, 2005.

23. Lindsley, C.W. 'Application of microwave-assisted organic synthesis (MAOS) for lead optimization' LabAutomation 2005, San Jose, CA, February 3, 2005 (invited speaker).

22. Wang, Y.; Leister, W.; McClain, R.; Dudkina, A.; Wolkenberg, S.W.; Lindsley, C.W. 'Automated post-purification sample handling in a high-throughput medicinal chemistry group' LabAutomation 2005, San Jose, CA, February 3, 2005.

21. Zhao, Z.; Wisnoski, D.D.; Leister, W.H.; Wang, Y.; Wolkenberg, S.E.; Lindsley, C.W. 'Microwave-assisted organic synthesis of quinoxaline and 5,6-diphenylpyrazin-2(1*H*)-one libraries as Akt inhibitors' Microwave User Group Meeting, Princeton, New Jersey, October 26, 2004.

20. Balitza, A.E.; Barnett, S.F.; Bilodeau, M.T.; Defeo-Jones, D.; Hartman, G.D.; Hoffman, J.M.; Huber, H.E. Jones, R.E.; Kral, A.M.; Lindsley, C.W.; Manley, P.J.; Robinson, R.G.; Smith, A.M. 'Development of diaryl-naphthyridine inhibitors of Akt kinase' American Chemical Society 228th National Meeting, Philadelphia, Pennsylvania, August 22-28, 2004.

19. Lindsley, C.W. 'Establishing an effective lead discovery and development operation' The National Institute of Health, Bethesda, MD., August 27, 2004 (invited speaker).

18. Defeo-Jones, D.; Barnett, S.F.; Hancock, P.J.; Haskell, K.M.; Leander, K.R.; Fu, S.; Robinson, R.G.; Huber, H.E.; Jones, R.E.; Zhao, Z.; Duggan, M.E.; Lindsley, C.W. 'Tumor cell sensitization to apoptotic stimuli by selective inhibition of specific Akt/PKB family members'Gordon Research Conference on Cancer Models and Mechanisms, Salve Regina University, New Port, RI, August 1-6, 2004.

17. Lindsley, C.W. 'Development pleckstrin homology domain dependent and isozyme selective Akt kinase inhibitors' Gordon Research Conference on Medicinal Chemistry, New London, NH, August 1-6, 2004 (invited speaker).

16. Defeo-Jones, D.; Barnett, S.F.; Hancock, P.J.; Haskell, K.M.; Leander, K.R.; Fu, S.; Robinson, R.G.; Huber, H.E.; Jones, R.E.; Zhao, Z.; Duggan, M.E.; Lindsley, C.W. 'Tumor cell sensitization to apoptotic stimuli by selective inhibition of specific Akt/PKB family members' Anti-Cancer Drug Discovery and Development, 6th Annual Summit, Philadelphia, PA July 21-23, 2004.

15. Leister, W.H.; Lindsley, C.W. 'Complete high throughput analytical support for drug discovery: from customization of a preparative liquid chromatograph/mass spectrometer to plating samples for screening' World Pharmaceutical Congress - Hit-to-Lead: Streamlining Lead Generation to Enhance Downstream Success, Philadelphia, PA May 18-19, 2004.

14. Lindsley, C.W. 'The challenges of establishing an effective lead discovery and development group' World Pharmaceutical Congress - Hit-to-Lead: Streamling Lead Generation to Enhance Downstream Success, Philadelphia, PA May 18-19, 2004 (invited speaker).

13. Duggan, M.E.; Lindsley, C.W.; Leister, W.H.; Strauss, K.A.; Wang, Y.; Wisnoski, D.D.; Zhao, Z. 'Application of enabling technologies to expedite drug discovery' Advances in Synthetic, Combinatorial and Medicinal Chemistry International Symposium, Moscow, Russia May 5-8, 2004.

12. Lindsley, C.W. 'Technology enhanced medicinal chemistry' CHI's Molecular Medicine Triconference: Mastering Medicinal Chemistry, San Francisco, CA March 26, 2004 (invited speaker).

11. Lindsley, C.W. 'Target and diversity-oriented organic synthesis employing microwave technology' 2nd International Microwaves in Chemistry Conference, Orlando, FL, March 5, 2004 (invited speaker).

10. Williams, D.L., O'Brien, J. A., Lemaire, W., Wittmann, M., Chen, T., Chang, R.S.L., Jacobson, M.A., Ha, S.N., Wisnoski, D.D., Lindsley, C.W., Sur, C., Duggan, M.E., Pettibone, D.J., Conn, P.J. 'Actions of a novel allosteric potentiator of mGluR5 in recombinant and native systems' Society for Neuroscience, New Orleans, LA, November 8-12, 2003.

9. Lindsley, C.W. 'Methodology and tools to expedite the synthesis and purification of analog libraries' 35th ACS Central Regional Meeting, Pittsburgh, PA, October 22, 2003 (invited speaker).

8. Lindsley, C.W. 'Microwave-assisted organic synthesis: A powerful approach for small molecule construction and the expedient development of new materials' Mid-Atlantic Fall Symposium on Microwave-Assisted Organic Synthesis, Iselin, NJ, October 16, 2003 (invited speaker).

7. Lindsley, C.W. 'Technology enhanced medicinal chemistry – practical tools to accelerate lead discovery and development' Presented at Meeting the Challenges of Modern Medicinal Chemistry East Brunswick, NJ, October 2, 2003 (invited speaker).

6. Lindsley, C.W. 'Microwave-mediated synthesis: A powerful approach for small molecule construction and the expedient development of new materials' Mid-Atlantic Symposium on Microwave-Assisted Organic Synthesis, King of Prussia, PA, June 19, 2003 (invited speaker).

5. Williams, D.L. Jr.; O'Brien, J.A; Lemaire, W. Chen, T.B. Chang, R.S.L.; Jacobson, M.A., Ha, S.N.; Wisnoski, D. D.; Lindsley, C. W.; Sur, C.; Duggan, M.E.; Pettibone, D.J.; Conn, P. J. 'Difference in mGluR5 interaction between positive allosteric modulators from two structural classes' New York Academy of Sciences Meeting on Glutamate and Disorders of Cognition and Motivation, New Haven CT, 13-15 April 2003.

4. Lindsley, C.W. 'Fluorous technology for solution phase parallel synthesis' University of Pittsburgh, Departmental Seminar, Pittsburgh, PA, September 17, 2002 (invited speaker).

3. Lindsley, C. W. 'West Point's Technology Enabled Synthesis (TES) group: A targeted library approach to chemical lead development for nascent programs' Merck Chemistry Council Medicinal Chemistry Conference, La Sapiniere Resort, Val David, Quebec, Canada, June 15-19, 2002.

2. Lindsley, C. W. 'Biomimetic solid-phase synthesis of benzoxanthenone unnatural products', University of California, Santa Barbara, Departmental Seminar, Santa Barbara, CA, November 17, 1998 (invited speaker).

1. Lindsley, C. W. 'Novel bi-directional organometallic linchpins for all-E polyene synthesis
2. Chemistry Alumni Research Symposium (CARS), California State University, Chico, Chico, CA, 1997.

Webinars

1. Lindsley, C.W. 'A New Resurgence of Neuroscience R&D' WuXi AppTec, March 27, 2014.

2. Lindsley, C.W. 'Lead Optimization' ACS Webinars, 2014 Drug Discovery Series, May 29, 2014.

3. Lindsley, C.W. 'Multiple Models for Academic-Industrial Collaborations' C&E News Webinar Series, September 24, 2014.

4. Lindsley, C.W. 'Lab of Today: Tips for Setting Up Great Research Labs' C&E News Webinar Series, June 22, 2017.

5. Lindsley, C.W. 'How to Optimize Central Nervous System Therapeutics: Med Chem Strategies, Tactics, and Workflows' ACS Webinar Series, July 26, 2018.

References

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