

CURRICULUM VITAE

KATHERINE SELEY-RADTKE, PHD

EDUCATION

1996	Ph.D., Organic Chemistry, Auburn University
1992	B.A. Honors, Chemistry, University of South Florida
1983	A.S. High Honors, Chemistry, St. Petersburg University
1976-77	Pennsylvania State University
1973-76	Gannon University (concurrent with High School)

Experience in Higher Education

2024-present	University of Texas, San Antonio Health Sciences, Scientific Advisory Board member, NCI APOBEC Mutagenesis in Cancer program
2023-present	Wayne State University, NIH CBI program, External Advisory Board member
2021-present	Wayne State University, NIH FIRST program, External Advisory Board member
2019-present	Pennsylvania State University, NIH T32 Chemistry Biology Interface Graduate Training Program Advisory Board
2017	Distinguished Visiting Professor, Université d'Orléans, Orléans, France
2017-2018	University System of Maryland Regents' Professor for Excellent in Research
2015-2018	UMBC Presidential Research Professor
2015-2016	Chair, University Faculty Promotion and Tenure Review Committee (UFRC)
2011-present	Professor, Chemistry & Biochemistry, UMBC, & Joint UMB Biochemistry program
2010-present	Auburn University COSAM Advisory Council member
2009-present	UMBC Honors College Advisory Board member
2008-2010	UMBC Honors Program Faculty Fellow
2007-present	NIH Chemistry Biology Interface Graduate Program, Director (2007-2022), Advisory Board (2022-present) and mentor (2007-present)
2007-2008	UMBC President's Commission on Women, Faculty representative
2005-present	Program in Oncology, Greenebaum Cancer Center, Faculty Member
2005-present	Auburn University Society of Women in Sciences & Mathematics Board Member
2004-2006	UMBC Graduate Summer Bridge Program, Founder & Inaugural Director
2003-present	NIH/UMBC Meyerhoff Minority Graduate & Undergraduate Faculty mentor
2003-present	NSF UMBC MARC U*STAR program, Faculty mentor
2003-2004	NSF UMBC EMBARC (REU) Program, Program Director
2003-2011	Associate Professor, Chemistry & Biochemistry, UMBC
1998-2003	Assistant Professor, Chemistry & Biochemistry, Georgia Institute of Technology
1997-98	Visiting Assistant Professor, Auburn University
1996-98	Postdoctoral Research Fellow, Auburn University

Experience in Other than Higher Education

2026	Session Chair, XXVI International Roundtable on Nucleosides, Nucleotides & Nucleic Acids, Barcelona, Spain, August 25-28
2026	Session Chair, International Conference for Antiviral Research, Prague, Czech Republic, April 27-May 1
2025	Session Chair, ANNA 2025, Advances in Noncanonical Nucleic Acids, Bohinj, Slovenia, Oct 23-25
2025	Session Chair, Nucleosides, Nucleotides & Oligonucleotides Gordon Research Conference, July 6-11
2025	Session Chair, International Conference for Antiviral Research, Las Vegas, USA, March 17-21
2024-2026	Immediate Past President, International Society for Antiviral Research (ISAR)
2024-2026	ISAR Nominations Committee, Chair

2024	Chair, NIH Review Panel, Infectious Disease Drug Development and Molecular Pharmacology (DCAI 81) study section, Nov 5-6
2024	Session Chair, Innovative Approaches for Antiviral Agents Summer School (IAAASS), Cagliari, Sardinia, Sept 23-27
2024	Session Chair, XXV International Roundtable on Nucleosides, Nucleotides & Nucleic Acids, Tokyo, Japan, Sept 2-6
2024	Co-Chair, NIH review panel, Topics in Drug Discovery and Molecular Pharmacology, DCAI-U(90), July 15
2024	Session Chair, International Conference for Antiviral Research, Gold Coast, Australia, May 20-24
2024	NIH review panel, ZAI1 CAB-D (M1), March 26-28.
2023	Chair, NIH review panel, Topics in Drug Discovery and Molecular Pharmacology, DCAI-U(90), November 17
2023	Session Chair, ANNA 2023, Advances in Noncanonical Nucleic Acids, Maribor, Slovenia, Oct 18-21
2023	Chair, NIH review panel, ZAI1 RK-M (S2), May 11
2023	Session Chair, International Conference on Antiviral Research, Lyon, France, March 13-17
2022	Session Chair, International Conference on Antiviral Research, Seattle, March 21-25
2023-present	Organizing committee - Innovative Approaches for Antiviral Agents Summer School (IAAASS), Cagliari, Sardinia
2022-present	Editor in Chief, Annual Reports in Medicinal Chemistry
2022-2024	President, International Society for Antiviral Research (ISAR)
2022-present	Associate Editor, Science Advances/AAAS
2022-present	Scientific Advisory Board, World Antiviral Congress
2020-2022	President-elect, International Society for Antiviral Research
2021-2023	Scientific and Clinical Advisory Board, Antios Therapeutics
2021	Chair, NIH review panel, AIDC-B, July 22-23
2021	Chair, NIH review panel – Topics in Coronavirus Drug Discovery and Development [2021/05 ZRG1 AIDC-K (83)], March 31-April 1
2021	Louisiana Board of Regents Chemistry Enhancement review panel
2020-2022	Chair, ICAR Program committee, ISAR
2020-2022	CEO and President, Flexivir Biosciences LLC
2020-2023	Co-Chair, Gordon Research Conference on Nucleosides, Nucleotides & Oligonucleotides
2020	Chair, NIH review panel - Emergency Awards: Rapid Investigation of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and Coronavirus Disease 2019 (COVID-19), July 17; Dec 28-29
2020	Co-Chair, NIH review panel - Antimicrobial Therapeutics and Resistance, March 19-20, July 8-9, Oct 11-12
2020-2022	Editorial Board, Annual Reports in Medicinal Chemistry
2020-present	Advisory Board, American Council on Science and Health
2020	NIH Review panel: ZRG1 BCMB-A; NIH Transformative Research Awards, April 7
2019-present	Gordon Research Conference Council, member
2018-2019	Co-Vice Chair, Gordon Research Conference on Nucleosides, Nucleotides & Oligonucleotides, June 23-29, 2019
2019-2023	Secretary, International Society of Nucleosides, Nucleotides & Nucleic Acids (IS3NA)
2019	NIH Review panel - Antimicrobial Therapeutics and Resistance - Co-Chair, March 25-26, June 3-4 and Nov 7-8, July 31 (Chair)
2019	Session Chair, Advances in Noncanonical Nucleic Acids, Rogaška Slatina, Slovenia, Oct 17-19.
2019	Session Chair, Gordon Research Conference on Nucleosides, Nucleotides & Oligonucleotides, June 23-29
2019	NIH ZRG1 IMM-R(50) U.S.-Brazil Collaborative Biomedical Research Program, ad hoc reviewer, July 16
2019	Session Chair, 32nd International Conference on Antiviral Research, Baltimore, May 12-15th.
2019	NIH Review panel - Antimicrobial Therapeutics and Resistance - Co-Chair, March 25-26, June 3-4, and Nov 7-8; July 31 (Chair)
2018	Session Chair, Advances in Noncanonical Nucleic Acids, Portorož, Slovenia, Oct 25-27.

KATHERINE SELEY-RADTKE**CURRICULUM VITAE**

2018	Session Chair and Co-organizer, XXIII International Roundtable on Nucleosides, Nucleotides & Nucleic Acids, San Diego, August 26-30
2018	Session Chair, 31st International Conference for Antiviral Research (ICAR), Porto, Portugal, June 11-15
2018	NIH Special Emphasis Panel - Antimicrobial Therapeutics and Resistance - ZRG1 IDM-Y (82) and 2018/05 ZRG1 IDM-T (07)S, March 28-29, June 28-29, Nov 15-16
2018	Session Chair, 7th European Workshop in Drug Synthesis, Siena, Italy, May 24
2018-present	Section Editor, Molecules – Chemical Biology
2017	NIH Special Emphasis Panel - Antimicrobial Therapeutics and Resistance ZRG1 IDM-Y (82), Nov 2-3
2017	NIH/NCI ZCA1 SRBK NCI Clinical and Translational R21 & Omnibus R03 review panel, Vice Chair, June 13-14
2017-2018	Immediate Past President, International Society for Nucleosides, Nucleotides & Nucleic Acids (IS3NA)
2017-2018	Chair, Nominations Committee, IS3NA
2017-present	Chair, The Chu Family Foundation awards, International Society of Antiviral Research (ISAR)
2017	Session Chair, Gordon Research Conference on Nucleosides, Nucleotides & Oligonucleotides, Salve Regina University, Newport, RI, June 25-30
2017	Session Chair, 30th International Conference on Antiviral Research, Atlanta, GA, May 21-25
2016-2024	Associate Editor, Antiviral Chemistry & Chemotherapy
2016	NIH/NIGMS ZGM1 TRN-Y, Maximizing Investigators Research Awards (MIRA) review panel, Nov 10-11
2016	NIH ZAI1-JRR-M-J3 Rapid Assessment of Zika Virus (ZIKV) Complications review panel, ad hoc member and vice chair, Oct 20
2016	NIH AIDS Discovery & Development of Therapeutics (ADDT) study section, ad hoc member, July 26
2016	NIH F04A-Y(20)L T31/T32 Fellowship study section, ad hoc member, July 13
2016	Session Chair, XXII International Roundtable on Nucleosides, Nucleotides & Nucleic Acids, Paris, France, July 18-21
2016	Session Chair, 6th European Workshop in Drug Synthesis, Siena, Italy, May 17
2016	Session Chair, 5th Antiviral Drugs Research & Development, San Diego, June 1
2016	Conference Committee, 29th International Conference on Antiviral Research, San Diego, CA
2016	Session Chair, 29th International Conference on Antiviral Research, San Diego, CA, April 19
2015-2016	President, International Society on Nucleosides, Nucleotides & Nucleic Acids (IS3NA)
2016-2018	Board of Directors, International Society for Antiviral Research (ISAR)
2016-present	Chair, The Chu Family Women in Science Awards Committee, ISAR
2016-present	Chair, The Chu Family Early Career Awards Committee, IS3NA
2015	NIH/NIGMS ZGM1 TRN-Y, Maximizing Investigators Research Awards (MIRA) review panel
2015-present	Women in Science Scholarship Committee, ISAR
2015-present	UMBC Meyerhoff Program Advisory Board
2015	NIH/NCI ZCA1 SRB-2 Drug Development & Targeting Special Emphasis Panel, Acting Chair
2015	Session Chair, 10th European Workshop in Drug Design, Siena, Italy, May 18-22
2105	Session Chair, 28th International Conference on Antiviral Research, Rome, Italy, May 11-15
2014	Session Chair, 21st International Roundtable on Nucleosides, Nucleotides & Nucleic Acids, August 24-28, Poznan, Poland
2014-present	Program Committee, ISAR
2014	Broadening Experiences in Scientific Training, Advisory Board member, University of Notre Dame Ph.D. program
2014	Session Chair, National ACS Medicinal Chemistry Symposium, Charleston, SC, May 18, 2014
2014	Session Chair, 27th International Conference on Antiviral Research (ICAR), Raleigh, May 12-15
2014	NIH ZRG1 AARR-J PAR Panel: Sustained Release of Antivirals for Treatment or Prevention of HIV, Alternate Chair
2013-present	Women in Chemistry Committee, ISAR
2013-2016	Board of Directors, ISAR
2013	NIH/NCI ZCA1 SRLB-2 Exploratory/Developmental Research study section
2013-2014	Vice President, IS3NA

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2013-2014	Co-organizer, National ACS Medicinal Chemistry Symposium, Charleston, SC, May 18-21, 2014
2013-2014	Session Chair, National ACS Medicinal Chemistry Symposium, Charleston, SC, May 18-21, 2014
2013-2017	Award Nomination & Selection Committee, ACS Medicinal Chemistry Division
2013	Session Chair, 26th ICAR, San Francisco, May 10-16
2012-2017	ISAR Poster Award Committee Chair
2012-present	Editorial Board, Clinical Medicine Insights, Therapeutics
2012	Med Chem Session Chair, 244th National ACS meeting, Philadelphia, PA
2012	Session Chair, 4th European Workshop in Drug Synthesis, May 28, Siena, Italy
2012	Med Chem Session Chair, 243rd National ACS meeting, San Diego, CA
2012	NIH ZRG1 Member Conflict study section (ad hoc)
2011-2013	Editorial Board, Research and Reports in Medicinal Chemistry
2011	Med Chem Session Chair, 242nd National ACS meeting, Denver, CO.
2011	Session Chair, 8th European Workshop in Drug Design, May 22-28, Siena, Italy
2011-present	Associate Editor, Current Protocols in Chemical Biology
2010-2014	NIH AIDS Discovery & Development of Therapeutics (ADDT) study section, member (Vice Chair - 2013-2014)
2010-2012	ACS Div. of Med. Chem. Long Range Planning Committee
2007-2012	Secretary, IS3NA
2007-2012	U.S. Dept. of State, Embassy Moscow, Senior Science Advisor ("in residence" 7/11-8/11, 7/08-8/08, 8/07-11/07)
2010	U.S. Dept. of State, Senior Science Analyst, Bureau of Intelligence and Research
2010	Session Chair, 19th International Roundtable on Nucleosides, Nucleotides & Nucleic Acids, August 29-Sept 3, 2010, Lyon, France
2009	NSF Chemical Synthesis study section
2008-present	NAS Jefferson Science Fellowship Selection Committee
2008-2012	Scientific Advisory Board, Deszyme Inc.
2008	Session Chair, 12th Indian Society of Chemists & Biologists Int. Conf. on "The Interface of Chemistry-Biology in Biomedical Research", Pilani, India
2007-2016	U.S. Embassy, Moscow Russia, Senior Science Advisor
2007	Women in International Security (WIIS) workshop "Science, Technology and U.S. National Security: Engaging the Next Generation" invited panel member and discussion leader, Washington, DC
2006-present	NAS Jefferson Science Fellow, U.S. Department of State
2005-2010	NIH/NIGMS Biomedical Research Training-A and-B study sections member
2005-present	IS3NA, Membership (Chair), Publications & website committees
2005-present	ISAR, Career Development Committee, Poster Awards Committee
2004-2008	Merck/AAAS Undergraduate Science Research Program (USRP) Selection Committee Member
2004	NIH Tropical Medicine & Parasitology Study Section member (ad hoc)
2004	Session Chair, International Roundtable on Nucleosides, Nucleotides and Nucleic Acids, Minneapolis, MN
2003	NIH Tropical Medicine & Parasitology Study Section member (ad hoc)
2003	Session Chair, Gordon Research Conference, Purines, Pyrimidines & Related Substances, Newport, RI
2002	NIH Bioorganic & Natural Products Study Section member (ad hoc)
2002	NIH BNZP Bioengineering Study Section member (ad hoc)
2001-2009	U.S. Collaborator, HHS/DoD Cooperative Threat Reduction (CTR) Program with Russia, Smallpox projects

Honors Received

2021	Baltimore Sun's 25 Women to Watch
2020	International Society for Antiviral Research (ISAR) Antonín Holý Memorial Award
2017	USM Regents' Faculty Award for Excellence in Research
2016	Maryland Chemist of the Year, American Chemical Society
2015-2018	UMBC Presidential Research Professor
2015	Outstanding Chemistry Alumni Award, University of South Florida
2011	Outstanding Faculty Member of the Year, UMBC Honors College students

2008-2010	Inaugural Faculty Fellow, UMBC Honors College Program
2006	NAS Jefferson Science Fellow, U.S. Department of State
2006	Distinguished Faculty Award, The National Society of Collegiate Scholars
2003	ACS PROGRESS Lectureship in Chemical Sciences Award
2002	"Class Of 1940 W. Howard Ector Outstanding Teacher" Georgia Institute of Technology (\$10,000 prize)
1998	Outstanding Faculty Award, Cardinal Key Honor Society, Auburn University
1997	Sigma Xi Outstanding Dissertation, Auburn University
1997	Carolyn Taylor Carr Award, Auburn University
1992	American Association of University Women Scholarship, U. of South Florida
1992	Hugh Culverhouse Outstanding Graduate Student Award, U. of South Florida

Research Support and/or Fellowships

1. NIH AViDD U19 AI171292; University of North Carolina University "Rapidly Emerging Antiviral Drug Discovery AViDD Center (READDI-AC)", U19 PI Ralph Baric; Project titles: Developing Broad-Spectrum Antivirals Targeting Coronavirus Replicase and Helicase" and "Targeting the Filovirus Replicase" K. L. Seley-Radtke, Co-I on both projects; Total U19 Budget \$68,483,194 direct, KSR Project budgets \$2,128,428 direct (years 1-3, 2022-2025). NOTE: All 9 AViDD grants were ended 2 years earlier than initially promised by the current administration, thus the additional funds initially awarded for years 4 and 5 (\$1,071,572) were never distributed.
2. NIH T32 GM066706, "Graduate Training at the Chemistry Biology Interface", K. L. Seley-Radtke, PI, \$1,269,590.00 direct (years 16-20, 2019-2024).
3. North Carolina State Appropriation grant #22-4446, "Rapidly Emerging Antiviral Drug Development Initiative (READDI)" K. L. Seley-Radtke, subcontract, \$250,000.00 direct (2022-2024).
4. NIH R13 AI174632-01, K. L. Seley-Radtke, PI; "2023 Nucleosides, Nucleotides and Oligonucleotides Gordon Research Conference and Gordon Research Seminar" \$17,010.00 (2023).
5. NIH R21AI135252-01 "Hybrid nucleoside scaffolds for targeting filoviruses" K. L. Seley-Radtke, PI \$275,000 direct (2018-2022).
6. Maryland Innovation Initiative (MD MII) "Flex-nucleosides to treat SARS-CoV-2 and COVID-19" \$115,000 direct (2021).
7. FastGrant – George Mason University/Emergent Ventures, "Flexible Nucleoside Antiviral Therapeutics – Dual inhibitors against SARS, MERS, SARS CoV-2 and future emerging Coronavirus infections", K. L. Seley-Radtke, PI, \$150,000 direct (2020-21).
8. UMBC Technology Catalyst Fund, "Further Studies Towards the Development of Broad-Spectrum Inhibitors", K. L. Seley-Radtke, PI \$15,000 direct (2019-2020).
9. NIH T32 GM066706, "Graduate Training at the Chemistry Biology Interface", K. L. Seley-Radtke, PI, \$957,084 direct (years 11-15, 2014-2019).
10. NIH R21 AI118470-01 "A flexible approach to inhibiting HIV NCP7" K. L. Seley-Radtke, PI. \$278,704 direct (2015-2017).
11. UMBC Technology Catalyst Fund, "Flexible Inhibitors to Treat SARS & MERS-CoV, K. L. Seley-Radtke, PI \$25,000 direct (2017-2018).
12. UMBC Technology Catalyst Fund, "Flexible Inhibitors to Treat SARS & MERS-CoV, K. L. Seley-Radtke, PI \$20,000 direct (2015-2017).
13. UMBC Technology Catalyst Fund, "Development of Broad-Spectrum Inhibitors of Flaviviruses", K. L. Seley-Radtke, PI \$20,000 direct (2018-2019).
14. Maryland Innovation Initiative (MD MII) "Small molecule pyrimidines – potent anticancer therapeutics" K. L. Seley-Radtke, PI, \$165,000 direct (2016-2017).
15. NIH R21 AI097685 "A flexible approach to avoid viral escape mutations", Katherine Seley-Radtke, PI, \$275,000 direct (2012-2015).
16. NIH R21 AI094639, "Prodrug strategies for HCV nucleoside lead development", Katherine Seley-Radtke, PI, \$275,000 direct (2012-2015).
17. UMBC Technology Catalyst Fund, "Flexible Inhibitors to Treat SARS & MERS-CoV, K. L. Seley-Radtke, PI \$20,000 direct (2015-2016).
18. NIH-RFBR US-Russia Bilateral Collaborative Research Partnership Grant #13-04-91441 "Suppression of HIV and TB in co-infected human tissues development of dual-targeted compounds" S. Kochetkov and L. Margolis, Co-PI's; K. L. Seley-Radtke, subcontractor. \$10,000 direct (2014-2015).

19. NIH T32 GM066706, "Graduate Training at the Chemistry Biology Interface", Katherine L. Seley-Radtke, PI, \$955,516 direct (years 4-10, 2007-2014).
20. NIH R01 GM076345, "Unnatural Base Pairs as DNA Bioprobes", Katherine L. Seley-Radtke, PI, \$940,800 direct, (2005-2011).
21. NIH R01 Administrative Supplement, "Unnatural Base Pairs as DNA Bioprobes", Katherine L. Seley-Radtke, PI, \$155,913 direct (2009-2011).
22. Kimberly-Clark, unrestricted research support \$50,000.
23. U. S. Army, unrestricted research support \$35,000 (2013-2014).
24. National Academies of Science "Jefferson Science Fellowship", co-funded by the U.S. Department of State, University of Maryland, Baltimore County, MacArthur Foundation, Carnegie Corporation and the National Academies; Katherine L. Seley-Radtke, awardee, \$300,000 approximate total value.
25. NIH R01 CA097634, "Fused Pyrimidine (IsoA) Nucleosides: Design, Synthesis and Biological Investigations", Katherine L. Seley, PI, \$1,401,075 direct (2002-08).
26. US Department of Defense/Defense Threat Reduction Agency, U.S.-Russia Collaborative Research project "Antivirals for Orthopoxviral Infections", Katherine L. Seley, US Collaborator, \$260,000 direct (2002-06).
27. American Cancer Society, "Fused Pyrimidine (IsoA) Nucleosides: Design, Synthesis and Biological Investigations", Katherine L. Seley, PI, \$739,000 direct (2002-07), awarded, ranked 2nd out of 27 awarded, declined due to overlap.
28. GAANN, Drug and Gene Therapy Development, A. Bommarius, M. R. Prausnitz, K.L. Seley, co-PI's, \$1,099,548 direct (2003-06).
29. Georgia Tech/Medical College of Georgia Biomedical Research and Education Grant, "Chlorinated Adenosine Derivatives as Regulators of Colorectal Cell Growth, Katherine L. Seley, PI, \$60,000 direct (2000-02).
30. Georgia Tech College of Science Faculty Development Award, \$7500 direct (2002).
31. Emory/Georgia Tech Biomedical Technology Collaborative Research Grant, "Modified Nucleoside "Fleximers" as Biological Probes", K. L. Seley, PI, \$24,700 direct (1998-99).

Funding Obtained For Students And Postdoctoral Researchers

1. NIH CBI Fellowship (Kyle Davis), \$35,000/yr (2025-2026) – stipend, tuition, health insurance, supplies and travel.
2. UMBC G-RISE award (Jason Smith) \$35,000 (2025-2026) – stipend, tuition, health insurance, supplies and travel.
3. UMBC G-Rise award (Trisha de Jesus) \$35,000 (2022-2025) – stipend, tuition, health insurance, supplies and travel.
4. Meyerhoff Genentech Fellow (Trisha de Jesus) – (2025-2026) \$45,000 stipend, tuition, health insurance, supplies, travel, plus salary and travel during her summer internship at Genentech (\$20,970).
5. NIH CBI Fellowship (Joy Thames), \$35,000/yr (2022-2023) – stipend, tuition, health insurance and travel.
6. UMBC URISE award (Vivana Smart) \$2500 (2022-2023)
7. UMBC URA award (Lexi Wise) \$1000 (2022-2023)
8. UMBC URA award (Grayson Pipher) \$1000 (2022-2023)
9. NIH CBI Fellowship (Charlie Waters), \$35,000/yr (2019-20, 2020-2021, 2021-2022) – stipend, tuition, health insurance and travel.
10. UMBC Undergraduate Research award (Owen Sparr), \$1300.00, 2021-2022.
11. UMBC URISE award (Evan Carlyle) \$2500/yr (2020-2021, 2021-2022)
12. NIH CBI Fellowship (Mary Yates), \$35,000/yr (2016-17, 2017-18, 2018-19) – stipend, tuition, health insurance and travel.
13. UMBC Supplement for Undergraduate Research (SURE) award (Yafet Arefeayn) \$1500 (2016-17)
14. UMBC Undergraduate Research Award (Arisa Falat) \$1500 (2017-18).
15. UMBC Undergraduate Research Award (Yafet Arefeayne) \$1500 (2017-18).
16. NIH CBI Fellowship (Therese Ku), \$34,000/yr (2016-17).
17. UMBC Undergraduate Research Award (Brian O'Conner) \$1400 (2016-17).
18. UMBC Undergraduate Research Award (Aarti Shah) \$1400 (2016-17).
19. UMBC Undergraduate Research Award (Matt Shirley) \$1500 (2015-2016).
20. UMBC Undergraduate Research Award (Natalie Steenrod) \$1500 (2015-2016).
21. NIH CBI Fellowship (Brian Cawrse), \$33,000/yr (2015-2016).
22. NIH CBI Fellowship (Therese Ku), \$33,000/yr (2014-15).
23. UMBC Undergraduate Research Award (Matt Shin) \$1500 (2014-2015).

24. NIH CBI Fellowship (Hannah Peters), \$33,000/yr (2011-12, 2012-13, 2013-14).
25. UMBC Undergraduate Research Award (Uchenna Okoro) \$1500 (2013-2014).
26. UNCF/Merck Undergraduate Fellowship (Uchenna Okoro) \$30,000 (2013-2014).
27. UMBC Undergraduate Research Award (Brian Brown) \$1500 (2012-2013).
28. UMBC Undergraduate Research Award (Kelin Brace) \$1500 (2012-2013).
29. UMBC Undergraduate Research Award (Uchenna Okoro) \$1500 (2012-2013).
30. NIH CBI Fellowship (Sarah Zimmermann), \$33,000/yr (2009, 2010, 2011).
31. UMBC Undergraduate Research Award (Chikezie Okoro) \$1500 (2011-2012).
32. UMBC Undergraduate Research Award (Brian Brown) \$1500 (2011-2012).
33. UMBC Undergraduate Research Award (Kelin Brace) \$1500 (2011-2012).
34. Goldwater Scholarship (Nathaniel Kim), \$7500 (2010-2011).
35. NSF MARC U*STAR Scholars Program, funds for one undergraduate underrepresented minority student's supplies (Cameron Johnson), \$1500 (2010-2011).
36. UMBC Undergraduate Research Assistant Award (Omar Bukhari, Matthew Panicker) \$1500 (2010-2011).
37. UMBC Undergraduate Research Award (Nathaniel Kim) \$1500/yr (2009-2010, 2010-2011).
38. NIH PA-01-179, Research Supplements for Underrepresented Minorities, "Unnatural Base Pairs as DNA Probes", (Lizette Rivera), Katherine L. Seley-Radtke, PI, \$198,303 direct (2005-09).
39. NIH PA-01-179, Research Supplements for Underrepresented Minorities, "Fused Pyrimidine (IsoA) Nucleosides", (Sylvester Mosley), Katherine L. Seley-Radtke, PI, \$183,445 direct (2002-06).
40. NSF MARC U*STAR Scholars Program, funds for three Seley-Radtke undergraduate students' supplies (Cameron Johnson, Chikezie Okura, Melvin Velasquez), \$4500/yr (2008-2009 and 2009-2010).
41. Meharry Medical College Summer Research Program, Katherine L. Seley-Radtke, PI, Olubukola Ojewoye, trainee, \$5000 (Summer 2009).
42. Meyerhoff Scholars Program, funds for travel, insurance and supplies for Seley graduate student (Sylvester Mosley), \$2250 (2003-2006).
43. CRDF HIV/AIDS Research Fellowship, Katherine L. Seley-Radtke, PI, Dr. Alexander Ivanov, postdoctoral trainee, \$5,500 (2008).
44. NSF MARC U*STAR Scholars Program, room and board, tuition, stipend, travel and supplies for Seley undergraduate Jennifer Greene, \$25,600 (including \$2500 lab supplies and travel) (2003-2004).
45. Howard Hughes Medical Institute Scholars Program, Exceptional Research Opportunities (EXROP), stipend, room and board, and travel for Seley undergraduate Jennifer Greene, \$6,000, Summer 2004.
46. NSF EMBARC Summer Research REU program; \$1000 each (Amanda Smith and Alexandra Clark).
47. MDI Molecular Design Institute, "Fleximers. New Molecular Tools for Drug Design", provided 50% support for Seley Graduate student Peter O' Daniel, and supplies, \$11,000 (2002-2003).
48. Howard Hughes Medical Institute Scholars Program, \$10,000 stipend for Seley undergraduate Julia Sponaugle and \$2500 for supplies (2002-2003).
49. NSF Faculty Development Program, Georgia Tech, support for Dr. John Boulos and summer REU stipend for Seley undergraduate Christina Stujenski, and supplies \$37,625 direct (2000-2001).
50. NSF Summer REU program, Georgia Tech, support for Seley undergraduate Marilyn Philips, and supplies \$5000 (Summer 2000).

Ph.D. Students

1. Liang Zhang, Ph.D.; May 2003, Chair, (Georgia Institute of Technology).
2. *Asmerom Hagos, Ph.D.; November 2003, Chair, (Georgia Institute of Technology)
3. Samer Salim, Ph.D. December 2004, Chair, (Georgia Institute of Technology)
4. Peter O'Daniel, Ph.D. August 2005, Chair, (Georgia Institute of Technology)
5. *Sylvester Mosley, Ph.D.; December 2006, Chair, (UMBC)
6. Naresh Sunkara, Ph.D.; December 2008, Chair, (UMBC)
7. Joshua Sadler, Ph.D.; May 2009, Chair, (UMBC)
8. *Orrette Wauchope, Ph.D.; December 2011, Chair, (UMBC)
9. Kartik Temburnikar, Ph.D. September 2012, Chair, (UMBC)
10. Elena Matyugina, Ph.D. December 2012, Co-advisor with Dr. Anastasia Khandazhinskaya; (degree granted from Engelhardt Institute of Molecular Biology (EIMB), Russian Academy of Sciences, Moscow, Russia),
11. Sarah Zimmermann (Noble), Ph.D. May 2014, Chair, (UMBC)
12. Hannah Peters, Ph.D. October 2015, Chair, (UMBC)

13. Therese Ku, Ph.D. 2018, Chair, (UMBC)
14. Brian Cawrse, Ph.D. 2019, Chair, (UMBC)
15. Mary Yates, Ph.D. 2019, Chair, (UMBC)
16. Joy Thames, Ph.D. July 27, 2024, Chair, (UMBC)
17. Christianna Kutz, Ph.D. August 14th, 2025, Chair, (UMBC)
18. Charlie Waters, Ph.D. candidate, 8th year, Chair, (UMBC)
19. Trisha de Jesus, Ph.D. candidate, 4th year, Chair, (UMBC)
20. Kyle Davis, Ph.D. seeking, 3rd year, Chair, (UMBC)
21. Jason Smith, Ph.D. seeking, 1st year, Chair, (UMBC)

Master's Students

1. *Sylvester Mosley, M.S.; November 2001, Chair, (Georgia Institute of Technology)
2. Raju Katri, M.S. May 2008, Chair, (UMBC)
3. Matthew Tomney, M.S.; May 2010, Chair, (UMBC)
4. Lauren Resch, M.A.; May, 2014; Chair, (UMBC)
5. Sadika Maharjan, M.A.; December 2014; Chair, (UMBC)
6. *Alex Vega, M.A. 2017, Chair, (UMBC)
7. Renee Dupre, MA seeking, left the program
8. Courtney Coopersmith, M.A. 2023, Chair, (UMBC)

Other Thesis/Dissertation Committees (member):

1. Carmen Jimenez Antunez, Cardiff University, Cardiff, Wales, Ph.D., Feb. 2017
2. Evgenia Barannikova, Ph.D. Chemistry, 2020
3. Kim Berk, Ph.D. seeking, Biochemistry (UMB) (left program)
4. Joseph Blasic, Ph.D. Biology, 2011
5. Amanda Bowers, Ph.D. seeking, UMB/UMBC joint Biochemistry program – left the program
6. *Patricia Boyd, M.S.. seeking, Chemistry – left the program
7. Kenneth Childers, Ph.D. Chemistry, 2019
8. Matthew Denney, Ph.D. seeking
9. Lance Dockery, Ph.D., Chemistry, 2022
10. Jake Dow, Ph.D. Biochemistry, UMB, 2020
11. Sarah Evans, Ph.D. Chemistry, 2008
12. Thomas Gallagher, MS, Chemistry 2013
13. *Mileidy Gonzales, Ph.D., Biology, 2010 (Co-Chair)
14. *Samuel Haile, Ph.D., Biology 2013
15. Ron Holinski, Ph.D. Biochemistry, 2008
16. Emily Jackson, Ph.D. Chemistry (George Washington University), 2013
17. Michael Marciniak, Ph.D. seeking, Chemistry & Biochemistry - current
18. Johan Melendez, Ph.D. Chemistry, 2016
19. Edith Melecki, Ph.D., Chemistry, 2014, University of Osnabrück, Germany
20. Amanda Monahan, Ph.D. Biology, 2015
21. Julie Nyman, Ph.D., Ph.D. seeking, Biochemistry – left the program
22. *Tijesunimi Odebode, Ph.D. seeking, Chemistry - left the program
23. Arun Saha Ray, Ph.D. Chemistry, 2018
24. Courtney Petro, Ph.D. Biochemistry (UMB) 2015
25. Dan Talley, Ph.D. Chemistry, 2017
26. Rachel (Taylor) Schmitz, Chemistry Ph.D. 2017
27. Hardler Servious, Pharmaceutical Sciences, PhD seeking (2022-present)
28. Peng Zhang, Ph.D. Chemistry, 2007
29. Zheng Zheng, Ph.D. Chemistry, 2020
30. Francesca Burton, UMBC's INDS program, 2024

Other Thesis/Dissertation Committees (Georgia Tech) (member):

1. Chemistry: 47 total, MS (4) and Ph.D. (41)
2. Biomedical Engineering: 1, Ph.D.
3. Environmental Engineering: 2, Ph.D.

4. Chemical Engineering: 2, Ph.D.

*Underrepresented Minority

Undergraduate Students

Jr High and High School (Research) Students (5 total): Past: UMBC: Matthew Jacoby (senior); Niri Seerchal (8th grader); Ga Tech: Amanda Cooper, Gwinnett Co. HS Senior Intern Program; Elizabeth Gooding and Julia Sponaugle, Gwinnett Co. HS, senior projects.

Undergraduate (Research) Students (92 total): Present: Thomas Foulkes; Nate Jones-Lang; *Naomi Nance (URISE Scholar); Past: Suzanne Abdelazim; *Nnenna Agu (Meyerhoff Scholar); *Assefa Akinwole (HHMI Scholar); Yafet Arefeayn (Meyerhoff Scholar, HHMI Scholar, UMBC Undergraduate Research Scholar); Jennifer Ayers (URS 2001); *Maria Beckford (MARC U* STAR Scholar, Meyerhoff Scholar); Amanda Bishop; Kelin Brace (Meyerhoff Scholar, UMBC Undergraduate Research Award winner 2011-2012, 2012-2013); Brian Brown (Meyerhoff Scholar, UMBC Undergraduate Research Award winner 2011-2012, 2012-2013, selected for a full scholarship to the 63rd Annual Lindau Nobel Laureate Meeting); *Devin Bryant (HHMI Scholar, Meyerhoff Scholar); Omar Bukhari (MARC U*STAR scholar, Meyerhoff Scholar; HHMI Scholar); *Evan Carlyle (Meyerhoff Scholar, HHMI Scholar, URISE Scholar); *Justin Chavez (Meyerhoff Scholar, HHMI Scholar); Vincent Chen; *Frances Chingcuanco; Marie Claire Cicenja; *Alexandra Clark (EMBARC Summer REU); Tessa Clement; *Luis Cocka (Meyerhoff, MARC U*STAR Scholar); Kyle Davis; Alex Demyan; Nick Demyan; Danny Dennin; Huy Do; Julia Engle; Arissa Falat (Honors Scholar, UMBC Undergraduate Research Scholar); Anoop Gollapudi; Elizabeth Gooding (Presidential Undergraduate Research awardee); *Jennifer Greene (Howard Hughes Medical Institute Scholar, EXROP Scholar, MARC U*Star, Meyerhoff); *Simon Guteng (HHMI Scholar, Meyerhoff Scholar); Dan Hass; Sunit Harris; *Oritsemoyowa "Moyo" Ikomi; *Chikwerendu Imo; *Malcolm Jefferson (Meyerhoff); *Cameron Johnson (MARC U*STAR Scholar, Meyerhoff Scholar); Layanne Khaskia; Nathaniel Kim (Goldwater Scholar 2010-2011, MARC U*STAR Scholar, UMBC Undergraduate Research Award winner, 2010-2011, 2011-2012); Jeanette Krug (Villa Julia senior project); Alex Kuznetsov; Michael Mann; *Kori McDonald (HHMI Scholar, Meyerhoff Scholar); *Logan Lineburg (HHMI Scholar, R); *Lauryn Mitchell (HHMI Scholar, Meyerhoff Scholar); *Louise Njapagne (McNair Scholar); Brian O'Conner, UMBC Undergraduate Research Scholar; ; *Olubukola Ojewoye (MARC U*Star, Wyeth Fellowship); *Chikezie Okoro (MARC U*STAR Scholar, UMBC Undergraduate Research Award winner 2010-2011; 2011, 2012); *Uchenna Okoro (Meyerhoff Scholar, HHMI Scholar); *Royce Onyimba (MARC U*STAR Scholar, Meyerhoff Scholar); *Onyinye Okpukpara; Elizaveta O'Neill; *Elilbin Orteiz (HHMI Scholar, Meyerhoff Scholar); *Kwadwo Owusu-Boaitey (HHMI Scholar, Meyerhoff Scholar); Matthew Panicker (Meyerhoff Scholar, UMBC Premier Scholar); Marilyn Phillips (NSF Summer REU, and Sherry Award and Spicer Award winner); Leo Pepper; *Grayson Pipher (URA Scholar); Nadeesha Ranasinghi; Matt Reger (Sherry Award and Spicer Award winner); Zachary Reinhart; Sarah Scrivener (NSF REU); *Nia'mani Robinson (Meyerhoff Scholar); Kaveh Samimi; Aarti Shah (Meyerhoff Scholar, UMBC Undergraduate Research Scholar); Matt Shin (UMBC Undergraduate Research Scholar); *Matt Shirley (HHMI Scholar, Meyerhoff Scholar, National Institute of Biomedical Imaging and Bioengineering (NIBIB) Scholar, UMBC Undergraduate Research Scholar; Pfizer Scholar); Shalene Singh; *Vivianna Smart (Meyerhoff Scholar, URISE Scholar); Amanda Smith (EMBARC Summer REU); *Jacqueline Smith (Meyerhoff); Jason Smith; Julia Spaunagle (Howard Hughes Medical Institute Scholar); Owen Sparr (URISE scholar); Aarthi Sridhar; Clark Stallings (Summer REU); Natalie Steenrod (HHMI Scholar, Meyerhoff Scholar, UMBC Undergraduate Research Scholar); Christina Stujenske (REU, Barry University, Summer 2001); Eric Sugarmann; *Christian Taylor; Boris Tizenberg; Anika Vedire; *Melvin Velasquez (Meyerhoff Scholar, Avon Scholar, NSCS Scholar, MARC U*STAR Scholar); Stelios Ventelas; Yu-Tsung (Matt) Wang; Aren Vista; *Marc Webb (HHMI Scholar, Meyerhoff Scholar); *Chantel Wilson (Meyerhoff Scholar, HHMI Scholar); Lexi Wise (URA Scholar). *Underrepresented Minority

Graduate Students (76 total; R=rotation): Present: Kyle Davis (NIH CBI Fellow); *Trisha De Jesus (G-Rise scholar, Genentech Fellow); Jason Smith; Charlie Waters (NIH CBI Fellow); Past: Lekan Ajiboye (R); Brian

Anderson (R); Candice Armstrong (R); Andrew Brown (R); Andrienne Blockin (R); Brian Cawrse (NIH CBI Fellow, current position FDA); Courtney Coppersmith; Joelle Cusic; *David Darby (R); Lance Dockery (R); Renee Dupre; *Leopoldo Escobar (R); Thomas Gallagher (R); *Veronica Gantert; Marion Gotz; Ryan Grant; Margaret Grow (R); *Asmerom Hagos (Ph.D.); Katerina Horejsi; *Cheryl Crummie Jacks (deceased); *Temem Juhar; Monia Kabandana (R); Raju Katri (M.A., current position, Ph.D. seeking UMD-Baltimore); Therese Ku (Ph.D., current position NIH/NCATS, NIH CBI Fellow, Meyerhoff Scholar); Christianna Kutz (Ph.D., current position Biosil); Jung Yeon Lee (R); Jeff Longenberger (R); *Sylvester Mosley (M.S. and Ph.D., current position, Coca-Cola Corporation); Jane MacDonald (R); Sadika Maharjan (M.S.); Brittney Manvilla (Ph.D., CBI research trainee); Lena Matyugina, Ph.D. (co-advisor with Anastasia Khandazhinskaya, EIMB, Moscow, Russia – winner of 2013-2016 Young Investigator Award from President Vladimir Putin); Amanda Monahan, Ph.D. (NIH CBI research trainee); William Motel; Kelly Moylan (R); *Thomas Ntim (R); Gokul Nukala (R); Peter O'Daniel (Ph.D., current position, Head, Organic Chemistry Division, Callison and Sons); *Frank Onyemauwa; Elisa Palmas (international visiting student – Globus Scholar); Misti Persaud (R); Hannah Peters (Ph.D., current position, postdoctoral researcher, NCI); Arunendra Ray (R); Lauren Resch (M.S.); *Lizette Rivera; Joshua Sadler (Ph.D., current position, ARL-Aberdeen); Samer Salim (Ph.D., current position, Booz Allen Hamilton); Nithya Santhanum (R); Lauren Schoukroun (R); Brahmi Shukla (R); Lauren Schwimmer (Ph.D. coadvisor: Doyle, GT, last known position, postdoctoral research associate, Scripps); Franziska Seeger (R); Joe Sparenberg (R); Naresh Sunkara (Ph.D., current position postdoctoral researcher, U of CA, Berkeley); Kartik Temburnikar (Ph.D., current position postdoctoral researcher, Johns Hopkins); Joy Thames (NIH CBI Fellow, current position, ORISE postdoctoral fellow Aberdeen Proving Grounds); Matt Tomney (M.S.); Gregory Trzcinski (R); Rajeev Varma (R); Lindsey Verbisk (R); *Alex Vega (Meyerhoff Scholar, M.A.); *Dawn Ward (R); *Orrette Wauchope (Ph.D., 2007-2009 Wyeth Graduate Fellow, NIH CBI Fellow, Meyerhoff Fellow, current position, Assistant Professor, Baruch College); Peng Yan; Mary Yates (NIH CBI Fellow, current position JHU); Jozef Zemek (R); Liang Zhang (Ph.D., current position, senior scientist, Walter Reed); Sarah Zimmerman (Ph.D., NIH CBI Fellow, current position, FDA). *Underrepresented Minority

Postdoctoral Associates and Technicians (28 total): Past: Dr. Brian Bakke; Dr. Zhe Chen; Marie Christine Cicienia; Dr. Varaprasad Dasari; Dr. Xuesen Fan; Xing Feng; Dr. Rayane Ghoteimi; Dr. Giuliano Kullik; Dr. Sherif Hammad; Dr. Alexander Ivanov; Dr. Piotr Januszczak; Dr. Pasu Krishnamoorthy; *Dr. Leticia Lafuente; Dr. Céline Martin; *Dr. Rachel Ndonye; Dr. Peter O' Daniel; Elizveta O'Neill; *Tijesunimi Odebode; *Grayson Pipher; Dr. Mithun Raje; Matt Reger; Dr. Samer Salim; *Armel Silenou; Jason Smith; Dr. Kartik Temburnikar; *Ismael Watts-Outtara; Dr. Fanxing Zeng; Dr. Zhibo Zhang.

*Underrepresented Minority

PUBLICATIONS, PRESENTATIONS, AND CREATIVE ACHIEVEMENTS

Peer-reviewed Publications (in review or in preparation):

1. Thames-Lukens, J. E.; Davis, K. A.; Ciciena, M.-C.; Correa-Sierra, C. B.; Rega, P.; DeMarzo, A.; Schang, L. M.; Bieberich, C.J.; *Seley-Radtke, K. L. "Optimization of Flex-Acyclovir Nucleoside Analogues and their Biological Activity in vitro and in vivo" in review Tet Lett.
2. Kutz, C.H.M.; Pipher, G.; Vedire, A.; *Seley-Radtke, K. L. "Novel β -L-2'-deoxyribonucleoside reverse fleximers with inhibitory activity against HBV, BKV, and other viruses" in preparation.
3. Davis, K. A.; Thames-Lukens, J. E.; *Seley-Radtke, K. L. Probing an alternative heterobase connectivity for acyclic fleximer nucleoside analogues. (in preparation).
4. Davis, K. A.; Foulkes, T.; Smith, J. K.; Smith, J. L.; Halfmann, P.; Hirsch, A. J.; *Seley-Radtke, K. L. "Broad-spectrum antiviral activity for a series of 4'-azido fleximer analogues" (in preparation).

Peer-reviewed Publications (Published):

1. Martin-Ghoteimia, C.; Davis, K. A.; Ghoteimia, R.; Amare, M.; Diefenbacher, M.V.; Kutz, C., Smith, J. L.; Stevens, L. J.; Tchesnokov, E.; Walker, S. M.; Denison, M.; Götte, M.; Halfmann, P.; Hirsch, A. J.; Sheahan, T.P.; Katherine L. Seley-Radtke, K. L. * "Novel Tricyclic Expanded Purine Nucleosides with Pan-Viral Activity" 2025, *Bioorg. Med. Chem.* 130, 118384.

2. Davis, K. A.; Smith, J. K.; Smith, J. L.; Amare M.; Diefenbacher, M. V.; Halfmann, P.; Sheahan, T. P.; Hirsch, A. J.; *Seley-Radtke, K. L.; “Exploration of 4’-F-fleximer nucleoside analogues as antiviral agents” **2025**, *Bioorg. Med. Chem.* **128**, 118243.
3. Corona, A., Cagno, V., Grandi, N., Fanunza, E., Esposito, F., Seley-Radtke, K.L.; Tramontano, E., Meeting report: Seventh Summer School on Innovative Approaches for Identification of Antiviral Agents (IAAASS), *Antiviral Research* **2025**, <https://doi.org/10.1016/j.antiviral.2025.106170>.
4. Welch, S.R.; Bilello, J.P.; Carter, K.; Delang, L.; Dirr, L.; Durantel, D.; Feng, J.Y.; Gowen, B.B.; Herrero, L.J.; Janeba, Z.; Kleymann, G.; Lee, A.A.; Meier, C.; Moffat, J.; Schang, L.M.; Schiffer, J.T.; Seley-Radtke, K.L.; Sheahan, T.P.; Spengler, J.R.* Meeting report of the 37th International Conference on Antiviral Research in Gold Coast, Australia, May 20–24, 2024, organized by the International Society for Antiviral Research **2024** Dec:232:106037. doi: 10.1016/j.antiviral.2024.106037.
5. Waters III, C. D.; Carlyle, E.; Smart, V.; Rege, A.; Bieberich, C.J.; Seley-Radtke, K. L.* “Proximal Fleximer Analogues of 2’-deoxy-2’-fluoro-2’-methyl Purine Nucleos(t)ides: Synthesis and Preliminary Pharmacokinetic and Antiviral Evaluation.” *Bioorganic Med Chem* **2024**, *112*, 117898. <https://doi.org/10.1016/j.bmc.2024.117898>.
6. Aida-Ficken, V.; Kelly, J. A.; Chatterjee, P.; Jenks, H.; McMullan, Laura K.; Albariño, C. G.; Montgomery, J. M.; Seley-Radtke, K. L.; Spiropoulou, C. F.; Flint, M.; “Identification of a Macrocyclic Compound Targeting the Lassa Virus Polymerase” *Antiviral Res* **2024** *228*, 105923. <https://doi.org/10.1016/j.antiviral.2024.105923>.
7. Khandazhinskaya, A.; Eletskaya, B.; Mironov, A.; Konstantinova, I.; Efremenkova, O.; Andreevskaya, S.; Smirnova, T.; Chernousova, L.; Kondrashova, E.; Chizhov, A.; Seley-Radtke, K. L.; Kochetkov, S.; Matyugina, E.; “New flexible analogues of 8-aza-7-deazapurine nucleosides as potential antibacterial agents” *Int J Mol Sci*, **2023** *24*(20):15421. doi: 10.3390/ijms242015421.
8. Khandazhinskaya, A.; Fateev, I.; Eletskaya, B.; Maslova, A.; Konstantinova, I.; Seley-Radtke, K.L.; Kochetkov, S.; Matyugina, E.* “Design and synthesis of new modified flexible purine bases as potential inhibitors of Human PNP” *Molecules*, **2023** *28*, 928.
9. Spengler, J. R.; Carter, K.; Delang, L.; Durantel, D.; Gowen, B. B.; Herrero, L. J.; Hurst, B.; Janeba, Z.; Jordan, R.; Luo, D.; Meier, C.; Moffat, J.; Rocha-Pereira, J.; Seley-Radtke, K. L.; Welch, S. R.; Schang, L. M.; “Meeting report: 36th International Conference on Antiviral Research in Lyon, France – March 13–17, 2023”, *Antiviral Res.* **2023**, *217*, 105678. DOI10.1016/j.antiviral.2023.105678
10. Eyer, L.; Seley-Radtke, K.; Ruzek, D. “New directions in the experimental therapy of tick-borne encephalitis” *Antiviral Res.* **2023**, *210*, 105504. <https://doi.org/10.1016/j.antiviral.2022.105504>.
11. Spengler, J. R.; Welch, S. R.; Deval, J.; Gentry, B. G.; Brancale, A.; Carter, K.; Moffat, J.; Meier, C.; Seley-Radtke, K. L.; Schang, L. M.; Meeting report: 35th International Conference on Antiviral Research in Seattle, Washington, USA – March 21-25, 2022, *Antiviral Research* **2023**, *211*, 105521.
12. Thames, J. E.; *Seley-Radtke, K. L. “Comparison of the old and the new - novel mechanisms of action for anti-coronavirus nucleoside analogues” *Chimia* **2022**, *76*(5), 409-417.
13. Khandazhinskaya, A.; Fateev, I.; Konstantinova, I.; Esipov, R.; Polyakov, K.; *Seley-Radtke, K.; Kochetkov, S.; Matyugina, E. “Synthesis of new flexible 5’-norcarbocyclic aza/deaza-purine fleximers - noncompetitive inhibitors of *E.coli* purine nucleoside phosphorylase” **2022**, *Front. Chem.* 10:867587; doi: 10.3389/fchem.2022.867587.
14. Khandazhinskaya, A.; Eletskaya, B.; Fateev, I.; Kharitonova, M.; Konstantinova, I.; Barai, V.; Azhaev, A.; Hyvonen, M.; Keinanen, T.; Kochetkov, S.; Seley-Radtke*, K.; Khomutov, A.; Matyugina, E. “Novel fleximer pyrazole-containing adenosine analogues: chemical and biotechnological synthesis” **2021**, *Org Biomol Chem*, *19*(34), 7379-7389. DOI: 10.1039/d1ob01069g. **(featured article and cover)**
15. Eyer, L.; Svobodfa, P.; Balvan, J.; Vičar, T.; Raudenska, M.; Stefánik, M.; Haviernik, J.; Huvarová, I.; Straková, P.; Hubálek, Z.; Seley-Radtke, K. L.; de Clercq, E.; Růžek, D. “Broad-spectrum antiviral activity of 3’-deoxy-3’-fluoroadenosine against emerging flaviviruses”, **2021**, *Antimicrob Agents Chemoth*; 5:e01522-20.<https://doi.org/10.1128/AAC.01522-20>.
16. Thames, J. E.; Waters III, C. D.; Valle, C.; Bassetto, M.; Aouadi, W.; Martin, B.; Falat, A.; Coutard, B.; Brancale, A.; Canard, B.; Decroly, E.; *Seley-Radtke, K. L. “Synthesis and Biological Evaluation of Novel Flexible Nucleoside Analogues that Inhibit Flavivirus Replication In Vitro” *Bioorg Med Chem* **2020**, *28*, 115713.
17. Vichier-Guerre, S.; Ku, T.; Pochet, S.; Seley-Radtke, K. L.* “An expedient synthesis of flexible nucleosides through enzymatic glycosylation of proximal and distal fleximer bases”, *ChemBioChem*, **2020**, *21*, 1412-1417 **(featured article and cover)**.

18. Matugina, E. S.; Khandazhinskaya, A. L.; Kochetkov, S. N. **Seley-Radtke, K. L.* "Synthesis of 3-hetarylpyrroles by Suzuki-Miyaura cross-coupling" *Mendeleev Communications* **2020**, 30, 231-231.
19. Yates, M. K.; Chatterjee, P.; Flint, M.; Arefeayne, Y.; Plavec, J.; Spiropoulou, C. F.; **Seley-Radtke, K. L.*; "Probing the Effects of Pyrimidine Functional Group Switches on Acyclic Fleximer Analogues for Antiviral Activity" *Molecules: Discovery, Design, Synthesis, and Application of Nucleoside/Nucleotides* **2019**, 24, 3184-3197, doi.org/10.3390/molecules24173184.
20. Khandazhinskaya, A. L.; Matyugina, E. S.; Solyev, P. N.; Wilkinson, M.; Buckheit, K. W.; Buckheit Jr., R. W.; Chernousova, L. N.; Smirnova, T. G.; Andreevskaya, S. N.; Kochetkov, S. N.; De Koning, H. P.; **Seley-Radtke, K. L.* "Investigation of 5'-Norcarbocyclic Nucleoside Analogues as Antiprotozoal and Antibacterial Agents", *Molecules: Discovery, Design, Synthesis, and Application of Nucleoside/Nucleotides* **2019**, 24(19), 3433-3448, doi:10.3390/molecules24193433.
21. Cawse, B. M.; Robinson, N. M.; Lee, N. C.; Wilson, G. M.; **Seley-Radtke, K. L.*; Structural and biological Investigations for a series of N-5 substituted pyrrolo[3,2-d]pyrimidines as potential anticancer therapeutics. *Molecules: Bioactive Nucleosides and Nucleotides* **2019**, 24, 2656-68; doi:10.3390/molecules24142656.
22. Ku, T.; Lopresti, N.; Shirley, M.; Mori, M.; Marchant, J.; Heng, X.; Botta, M.; Summers, M. F.; **Seley-Radtke, K. L.* Synthesis of Distal and Proximal Fleximer Base Analogues and Evaluation in the Nucleocapsid Protein of HIV-1. *Bioorganic Med Chem*; **2019**, 27, 2883-92.
23. Yates, M. and **Seley-Radtke, K. L.*, "The evolution of nucleoside analogue antivirals: a review for chemists and non-chemists. Part II: complex modifications to the nucleoside scaffold" *Antiviral Res.* **2019**, 162, 5-21. **Highlighted article.**
24. Khandazhinskaya, A. L.; Alexandrova, L.A.; Matyugina, E. S.; Solyev, P. N.; Efremenkova, O. V.; Buckheit, K. W.; Garvey, M.; Buckheit Jr, R. W.; Chernousova, L. N.; Smirnova, T. G.; Andreevskaya, S. N.; Leonova, O. G.; Popenko, V. I.; Kochetkov, S. N.; **Seley-Radtke, K. L.* "Novel 5'-Norcarbocyclic Pyrimidine Derivatives" as Antibacterial Agents, *Molecules*, **2018**, 23, 3069-87.
25. **Seley-Radtke, K. L.* and Yates, M. "The evolution of nucleoside analogue antivirals: a review for chemists and non-chemists. Part I: early structural modifications to the nucleoside scaffold." *Antiviral Res.* **2018**, 154, 66-86. **Highlighted article.**
26. Temburnikar, K.; **Seley-Radtke, K. L.*; "Recent advances in synthetic approaches to C-nucleosides", *Beilstein J Org Chem* **2018**, 14, 772-785.
27. **Seley-Radtke, K. L.* "Flexibility – not just for Yoga!" *Antiviral Chem Chemoth*, **2018**, 26, 1-12. **Highlighted article.**
28. Eyer, L.; Nencka, R.; de Clercq, E.; *Seley-Radtke, K.L.*; Růžek, D. "Nucleoside analogues as a rich source of antiviral agents against arthropod-borne flaviviruses", *Antiviral Chem Chemother* **2018**, 26, 1-28.
29. Cawse, B.M.; Lapidus, R.S.; Cooper, B.; Choi, E. Y.; **Seley-Radtke, K.L.*; "Anticancer Properties of Halogenated Pyrrolo[3,2-d]-pyrimidines with Decreased Toxicity via N5 Substitution." *ChemMedChem* **2018**, 13, 178-185.
30. Alzahrani, K. J.; Khandazhinskaya, A. L.; Matyugina, E. S.; Kochetkov, S. N.; **Seley-Radtke, K. L.*; **de Koning, H. P.*; "Evaluation of the antiprotozoan properties of 5'-norcarbocyclic pyrimidine nucleosides" *Bioorganic Med Chem Lett* **2017**, 27, 3081-3086.
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32. Paramonova, M. P.; Khandazhinskaya, A. L.; **Seley-Radtke, K. L.*; Novikov, M. S. "Synthesis of novel 2-[3-[5-(4-bromophenoxy)pentyl]-2,6-dioxo-3,6-dihydropyrimidin-1(2H)-yl]-N-arylacetamides as potential antivirals" *Mendeleev Communications* **2017**, 27, 85-87.
33. Safarov, S.; Khalikova, M.; Kuznetsov, A.S.; Radzha, M.; Seley-Radtke, K.L. "Elaboration of new medicines for NCp7 and hepatitis C viruses" *Academy of Sciences of the Republic of Tajikistan, IAEA*; **2017**, 14, 196-199.
34. Geisman, A. N.; Valuev-Elliston, V. T.; Ozerov, A. A.; Khandazhinskaya, A. L.; Chizhov, A. O.; Kochetkov, S. N.; Pannecouque, C.; Naesens, L.; **Seley-Radtke, K. L.*; Novikov, M. S. "1,6-Bis(benzyloxy)methyluracil derivatives – novel antivirals with activity against HIV-1 and influenza H1N1" *Bioorg Med Chem*, **2016**, 24, 2476-2485.
35. Peters, H. L.; Ku, T. C.; **Seley-Radtke, K. L.* "Flexibility as a Strategy in Nucleoside Antiviral Drug Design" *Curr Med Chem* **2015**, 22, 3910-3921.
36. Matugina, E. S.; Novikov, M. S.; Babkov, D. A.; Ozerov, A. A.; Chernousova, L. N.; Andreevskaya, S.; Smirnova, T. G.; Karpenko, I.; Chizhov, A. O.; Muthu, P.; Lutz, S.; Kochetkov, N. S.; **Seley-Radtke, K. L.*; Khandazhinskaya, A. L.; "5-Arylamino-uracil derivatives: new inhibitors of M. tuberculosis" *Chemical Biology & Drug Design* **2015**, 86, 1387-1396. **corresponding author*

37. Chen, Z.; Ku, T. C.; *Seley-Radtke, K. L. "Thiophene-expanded guanosine analogues of Gemcitabine" *Bioorg Med Chem Lett.* **2015**, 25, 4274-4276.
38. Babkov, D. A.; Khandazhinskaya, A.; Chizhov, A. O.; Andrei, G.; Snoeck, R.; *Seley-Radtke, K. L., Novikov, M. S. "Toward the Discovery of Dual HCMV-VZV Inhibitors: Synthesis, Structure-Activity Relationship Analysis, and Cytotoxicity Studies of Long Chained 2-Uracil-3-yl-N-(4-phenoxyphenyl)acetamides". *Bioorg Chem Med Chem* **2015**, 23, 7035-7044. *corresponding author.
39. Fateev, I. V.; Kharitonova, M. I.; Esipov, R. S.; Antonov, K. V.; Konstantinova, I. D.; Stepanenko, V. N.; Seela, F.; Temburnikar, K. W.; *Seley-Radtke, K. L.; Stepchenko, V. A.; Sokolov, Y. A.; Miroshnikov, A. I.; Mikhailopulo, I. A.; " Recognition of Artificial Nucleobases by E-coli Purine Nucleoside Phosphorylase versus its Ser90Ala Mutant in the Synthesis of Base-Modified Nucleosides" *Chem. Eur. J.* **2015**, 21, 13146-13156.
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1. Thames-Lukens, J. E.; Davis, K. A.; Ciciena, M.-C.; Correa-Sierra, C. B.; Rega, P.; DeMarzo, A.; Schang, L. M.; Bieberich, C.J.; Seley-Radtke, K. L. "Optimization of Flex-Acyclovir Nucleoside Analogues and their Biological Activity *in vitro* and *in vivo*" **in review** *Tet Lett.*
2. Kutz, C.H.M., Pipher, G., Vedire, A., Seley-Radtke, K. Novel β -L-2'-deoxyribonucleoside reverse fleximers with inhibitory activity against HBV, BKV, and other viruses. **in preparation.**
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1. *Seley-Radtke, K.; Kutz, C.; Thames, J. "Flex-Nucleosides – A Strategic Approach to Antiviral Therapeutics" in *Handbook of Chemical Biology of Nucleic Acids*, **2023**, 61, 2107-2037. Springer Nature Singapore Pte Ltd., N. Sugimoto (ed.); https://doi.org/10.1007/978-981-16-1313-5_67-1.
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Invited Book Reviews:

1. Seley-Radtke, K. L. "The Organic Chemistry of Drug Synthesis" by Daniel Lednicer, invited book review, *J Am Chem Soc*, **2008**, 130, 3231-3232.

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1. <https://www.acsh.org/news/2020/11/18/drs-bloom-and-seley-radtke-duluth-news-tribune-vaccines-are-close-well-still-need-antiviral-drugs-15162> (2021)
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3. Seley-Radtke, K. L.; Bloom, J. "Herd immunity is a dangerous way to go in the fight against CoVID-19" <https://www.baltimoresun.com/opinion/op-ed/bs-ed-op-1023-herd-immunity-20201022-aljhcd2ggvfoxinxsozco6mopm-story.html>, Baltimore Sun, Oct. 23, 2020.
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Patents:

1. U.S. Patent 11,980,630, May 14, 2024; "Flex-nucleoside analogues, novel therapeutics against filoviruses and flaviviruses".
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22. EU patent EP3250564 B1, June 12, 2017; "Design, Synthesis and Methods of Use of Acyclic Nucleoside Analogues Having Anti-coronavirus Activity".
23. U.S. Patent 0,014,415-A1, January 19, 2017; "Thieno- and pyrrolopyrimidine analogues as anticancer agents and methods of use thereof".
24. U.S. Patent 9,434,742 B1, September 6, 2016; "Thieno- and pyrrolopyrimidine analogues as anticancer agents and methods of use thereof".
25. U.S. Patent 0,257,696-A1, September 8, 2016; "Thieno- and pyrrolopyrimidine analogues as anticancer agents and methods of use thereof".
26. WO/2016/123318 A3, August 4, 2016; "Design, Synthesis and Methods of Use of Acyclic Nucleoside Analogues Having Anti-coronavirus Activity".

Invited and Plenary Lectures:

1. "Development of Pan-Viral Nucleoside Inhibitors", 8th IAAASS, Pula, Sardinia, September 2026.
2. "Development of Pan-Viral Nucleoside Inhibitors", International Roundtable on Nucleosides, Nucleotides & Nucleic Acids, Barcelona, Spain, August 25-28, 2026.
3. "Development of Pan-Viral Nucleoside Inhibitors", UTHS, San Antonio, Texas, Nov 14, 2025.
4. "Development of Pan-Viral Nucleoside Inhibitors", ANNA 2025, Advances in Noncanonical Nucleic Acids, Bohinj, Slovenia, Oct 23-25.
5. "Development of Pan-Viral Nucleoside Inhibitors", Shanghai Institute of Materia Medica, CAS, Shanghai, China, June 7, 2025. (Plenary)
6. "Development of Pan-Viral Nucleoside Inhibitors", Shengzhou University, Shengzhou, China, May 30, 2025.
7. "Development of Pan-Viral Nucleoside Inhibitors", Emory University School of Medicine, Atlanta, GA, April 25, 2025.
8. "Development of Pan-Viral Nucleoside Inhibitors", 269th ACS National Meeting, San Diego, March 23-27, 2025.
9. "Rational (and sometimes irrational!) Strategies in Nucleoside Drug Design" G4 Interaction Wins Winter School, University of Pavia, Italy, March 6, 2025.
10. "Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics", University of Wisconsin-Madison, Madison, WI, November 1, 2024.
11. "Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics", University of Kentucky, TODD Symposium, Lexington, KY, October 15, 2024. (Keynote)
12. "Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics", 7th IAAASS, Pula, Sardinia, September 23, 2024. (Plenary)
13. "Development of Pan-Viral Nucleosides" READDI-AC Face to Face, University of North Carolina Chapel Hill, Sept 9, 2024
14. "Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics", FISNA symposium, Konan University, Kobe, Japan, September 2, 2024.
15. "Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics" International Conference on Arginine and Pyrimidines and International Conference on Amino Acids and Nucleotides-2024 (ICAP/ICAN-2024), Kaiserslautern, Germany, July 9-11, 2024.
16. "Rational (and sometimes irrational!) strategies in nucleoside drug design", G4 Interaction Wins 2023 Virtual Winter School, February 20-24, 2024.
17. "Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics", Georgia State University, Atlanta, February 21, 2024.
18. "Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics", 13th IUPAC's International Symposium on Bioorganic Chemistry (ISBOC-13), Singapore, December 20, 2023.

19. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, 6th ANNA, Maribor, Slovenia, October 21, 2023.
20. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, Cardiff University, Cardiff Wales, Feb 15, 2023.
21. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, World Antiviral Congress, San Diego, Nov 28, 2022.
22. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"* International Symposium on Nucleic Acids Chemistry (ISNAC2022), Tokyo, Japan, Nov 2-4, 2022.
23. *"Molecular chameleons - flexibility in nucleoside antiviral drug design"*, Konan University, Kobe, Japan, Nov 1, 2022.
24. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, University of Arizona, Tucson, Oct 18, 2022.
25. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, 6th IAAASS, Pula, Sardinia, Sept. 26, 2022. (Plenary)
26. *"Round Table: Is there any life after PhD?"* 6th IAAASS, Pula, Sardinia, Sept. 26, 2022. (panel member), Sept 30, 2022
27. *"Succeeding as a woman in Baltimore STEM"* Association for Women Scientists, Baltimore, MD, Sept 22, 2022 (panel member)
28. *"Fleximer nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"* XXIV International Roundtable of Nucleosides, Nucleotides & Nucleic Acids (IRT) Stockholm, Sweden, August 28-31, 2022.
29. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"* ACS CERM Regional Meeting, Ypsilanti, MI, June 8, 2022.
30. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"* Antonín Holý Memorial Award Lecture - International Conference on Antiviral Research (ICAR), Seattle, WA, March 21-25, 2022.
31. *"Are oral antivirals the answer to eradicating the COVID-19 pandemic"* – invited panelist, World Antiviral Conference, San Diego, CA, December 1, 2021
32. *"Antiviral drug development – good things DO come in small packages!"* SAVICA 2021, Embassy of the Republic of Slovenia, Washington, DC., October 29, 2021.
33. *"Fleximers – bending over backwards for a cure"* – plenary speaker, GRIT-X 2021, Baltimore, MD.
34. *"Rational (and sometimes irrational!) strategies in nucleoside drug design"*, Innovative Approaches for Identification of Antiviral Agents Summer School (IAAASS), Cagliari, Italy September 19th-23rd, 2021.
35. *Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"* Bar-Ilan University, Ramat-Gan, Israel, February 15, 2021.
36. *"Viruses 101 and SARS-CoV-2"* UMBC Honors Forum, Nov 9, 2020.
37. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"* Wayne State University, Oct 14, 2020.
38. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, UMBC CHEM 101H, Sept 24, 2020.
39. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"* Duquesne University, July 24, 2020.
40. *"A Nontraditional Journey in Science"* UMBC Meyerhoff Summer Bridge Program, June 20, 2020.
41. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"* International Symposium on Nucleic Acids Chemistry (ISNC2020), Tokyo, Japan, October 14-16, 2020 (postponed to 2022 due to CoVID-19).
42. *"Rational (and sometimes irrational!) strategies in nucleoside drug design"*, Innovative Approaches for Identification of Antiviral Agents Summer School (IAAASS), Cagliari, Italy September, 28th-October, 2nd 2020. (postponed to 2021 due to CoVID-19).
43. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"* XXIV International Roundtable of Nucleosides, Nucleotides & Nucleic Acids (IRT) Stockholm, Sweden, August 23-27, 2020. (postponed to 2021 due to CoVID-19).
44. *"Non-traditional Journey in Science – or how to see the world and do what you love!"* Meyerhoff Summer Bridge Program, UMBC, July 30, 2020.
45. Baltimore Women in STEM vs CoVID-19, virtual panel discussion, June 5, 2020.
46. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"* Antonín Holý Memorial Award Lecture - International Conference on Antiviral Research (ICAR), March 30 – April 3, 2020. (postponed to 2021 due to CoVID-19).

47. *"Rational (and sometimes irrational!) strategies in nucleoside drug design"*, Advances in Noncanonical Nucleic Acids (ANNA), Rogaška Slatina, Slovenia, Oct 17, 2019.
48. *"Flexibility – not just for Yoga!"* Penn State University, September 18, 2019.
49. *"Rational (and sometimes irrational!) strategies in nucleoside drug design"*, 32nd International Conference on Antiviral Research, Baltimore, May 12-15th, 2019.
50. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, St. Mary's College of Maryland, March 6, 2019.
51. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, German Chemical Society hosted by Saarland University, Saarbrücken, Germany, January 7, 2019.
52. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, Advances in Noncanonical Nucleic Acids, Portorož, Slovenia, Oct 25-27, 2018.
53. *"Flexibility – not just for Yoga!"*, San Diego State University, San Diego, August 31, 2018.
54. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, 11th European Workshop in Drug Design, Siena, Italy, May 20-24th, 2018.
55. *"Flexibility – not just for Yoga!"*, Cardiff University, Cardiff, Wales, March 9, 2018.
56. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, Université Paris Descartes, Paris, France, July 25th, 2017.
57. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, Institute of Organic and Analytical Chemistry, Université Orleans, CNRS, Orleans, France, July 19th, 2017.
58. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, Université Montpellier, Montpellier, France, July 13, 2017.
59. *"Flex-nucleosides – a strategic approach to broad-spectrum antiviral therapeutics"*, Université Marseille, CNRS, Marseille, France, July 10, 2017.
60. *"Broad-spectrum fleximer and flex-base antiviral inhibitors"*, Merck Pharmaceuticals, West Point, PA June 6, 2017.
61. *"Flex-nucleosides – a strategic approach to antiviral therapeutics"*, Goucher College, Baltimore, March 31, 2017
62. *"Flex-nucleosides – a strategic approach to antiviral therapeutics"*, Carnegie Mellon University, March 23, 2017
63. *"Flex-nucleosides – a strategic approach to antiviral therapeutics"*, University of Pittsburg, March 22, 2017
64. *"Flex-nucleosides – a strategic approach to antiviral therapeutics"*, U of Toledo, Jan 26, 2017
65. *"Rational (and sometimes irrational!) strategies in drug design"* ACS Maryland Chemist of the Year lecture, Dec. 14, 2016
66. *"Rational (and sometimes irrational!) strategies in nucleoside drug design"* 4th Antivirals Congress, Stiges, Spain, Sept. 18-21, 2016. (Plenary)
67. *"Flex-nucleosides – a strategic approach to antiviral therapeutics"*, TransCure Symposium on Medicinal Chemistry, Swiss National Competence Center in Research (NCCR), Bern, Switzerland, Sept. 16, 2016. (Plenary)
68. *"Flex-nucleosides – a strategic approach to antiviral therapeutics"*, University of Bern, Switzerland, Sept. 15, 2016.
69. *"Flex-nucleosides – a strategic approach to antiviral therapeutics"*, 5th Antiviral Drugs Research & Development, San Diego, June 1, 2016.
70. *"Flex-nucleosides – a strategic approach to antiviral therapeutics"*, International Symposium of Drug Discovery, University of Georgia, May 22-24, 2016. (Plenary)
71. *"Flex-nucleosides – a strategic approach to antiviral therapeutics for neglected diseases"*, Sixth European Workshop in Drug Synthesis (VI EWDSy), Siena, Italy, May 15-19, 2016. (Plenary)
72. *"Flex-nucleosides – a strategic approach to antiviral therapeutics"*, 2016 UMB Biochemistry and Molecular Biology Retreat, Jan 8, 2016.
73. *"Design, Synthesis and Anti-MERS-CoV Activity of a Series of Acyclic Fleximers"* Bridging the Sciences (BTS), Ft. Lauderdale, FL, Sept. 16-17, 2015.
74. *"Flex-nucleosides – a strategic approach to antiviral therapeutics"*, Nucleosides, Nucleosides & Nucleic Acids Gordon Research Conference, Salve Regina, RI, July 1, 2015.
75. *"Flex-nucleosides – a strategic approach to antiviral therapeutics"*, 10th European Workshop in Drug Design, Siena, Italy, May 18-22, 2015.
76. *"A Non-traditional Pathway"*, International Conference on Antiviral Research (ICAR), Women in Science Program, May 11, 2015, Rome, Italy.

77. "Adventures in Science, Policy and Diplomacy" University of South Florida, March 18th, 2015.
78. "Exploring structural diversity in nucleobase drug design" McGill University, Montreal, Canada, Nov. 24, 2014.
79. "Exploring structural diversity in nucleobase drug design", Amsterdam Institute for Molecules, Medicines and Systems, Amsterdam, The Netherlands, October 13, 2014.
80. "Exploiting the nucleobase scaffold for drug design and diversity", Wesleyan University, Middletown, Connecticut, Sept 19, 2014.
81. "Exploiting the nucleobase scaffold for drug design and diversity", 1966 Hilltop Society, Catonsville, MD, Sept 15, 2014.
82. "Science, Policy & Diplomacy – New Changes On Campus", Jefferson Science Fellows Ten year Convocation, July 15, 2014, National Academies of Science, Washington, DC.
83. "Exploiting the nucleobase scaffold for drug design and diversity", Heterocyclic Compounds Gordon Research Conference, Salve Regina, June 18, 2014.
84. "Exploiting the nucleobase scaffold for drug design and diversity", University of Florida, March 6, 2014.
85. "Exploiting the nucleobase scaffold for drug design and diversity" UMD-Baltimore, Jan. 10, 2014.
86. "Adventures in Science, Policy and Diplomacy" ACS MD Women Chemists, Nov. 14, 2013
87. "Adventures in Science, Policy and Diplomacy" University of Notre Dame, NIH Chemistry Biology Biochemistry Interface (CBBI) graduate program, October 31, 2013.
88. "Exploiting the Nucleobase Scaffold for Drug Design and Diversity" Medical University of South Carolina, Sept. 17, 2013.
89. "Exploring Structural Diversity in Nucleoside Drug Design" FEBS Congress, St. Petersburg, Russia, July 9, 2013.
90. "Adventures in Science, Policy and Diplomacy" Salisbury State University, April 22, 2013.
91. "Structural Diversity in Nucleoside Drug Design" Cardiff University, Wales, Nov. 27, 2012.
92. "Structural Diversity in Nucleoside Drug Design" National Institutes of Health, Nov. 9, 2012.
93. "Structural Diversity in Nucleoside Drug Design" Purdue University, September 6, 2012.
94. "Structural Diversity in Nucleoside Drug Design" XXth International Roundtable on Nucleosides, Nucleotides and Nucleic Acids, Montreal, August 5-9, 2012.
95. "Structural Diversity in Nucleoside Drug Design" 4th European Workshop in Drug Synthesis, Siena, Italy, May 27-31, 2012.
96. "Adventures in Science, Policy & Diplomacy", CCCC SMART Scholars program, Carroll County Community College, MD, April 27, 2012.
97. "Flexibility. A New Paradigm for Nucleoside Drug Design" University of Minnesota, January 24, 2012.
98. "Flexibility. A New Paradigm for Nucleoside Drug Design" University of Louisville, October 21, 2011, 2011.
99. "Flexibility. A New Paradigm for Nucleoside Drug Design" Idenix Pharmaceuticals, Montpellier, France, October 18, 2011.
100. "Flexibility. A New Paradigm for Nucleoside Drug Design" George Washington University, October 14, 2011.
101. "Flexibility. A New Paradigm for Nucleoside Drug Design" Nucleosides, Nucleotides and Nucleic Acids Gordon Research Conference, Salve Regina, RI July 3-8, 2011.
102. "Flexibility. A New Paradigm for Nucleoside Drug Design" 8th European Workshop in Drug Design, Siena, Italy, May 22-28, 2011.
103. "Flexibility. A New Paradigm for Nucleoside Drug Design" Scripps Research Institute, April 21, 2011.
104. "Flexibility. A New Paradigm for Nucleoside Drug Design" CUNY, May 2, 2011.
105. "Adventures in Science, Policy and Diplomacy" UMBC Honors College, April 6, 2011.
106. "Flexibility. A New Paradigm for Nucleoside Drug Design" University of Iowa, March 4, 2011.
107. "Adventures in Science, Policy and Diplomacy" UMBC Honors Forum, October 4, 2010.
108. "Flexibility. A New Paradigm for Nucleoside Drug Design" 19th International Roundtable on Nucleosides, Nucleotides and Nucleic Acids, Lyon, France, August 29-Sept 3, 2010.
109. "Exploring Structural Diversity in Drug Design" Symposium on Nucleic Acid Chemistry, Structure and Interactions, Nova Gorica, Slovenia, May 2010.
110. "Staying Involved – The Longer Term Relationship", Jefferson Science Fellows Five-Year Convocation, National Academies of Science, February 1-2, 2010.
111. "Exploring Structural Diversity in Drug Design", University of Minnesota, Center for Drug Design, March 16, 2010.
112. "Exploring Structural Diversity in Drug Design", University of Notre Dame, October 1, 2009.
113. "Careers in Science, Policy and Diplomacy", University of Notre Dame, October 2, 2009.

114. Columbus, OH, May 18, 2009. "*Fellowship Opportunities in Science, Policy and Diplomacy*", Ohio State University Medical School, Columbus, OH, May 18, 2009.
115. "*Careers in Science, Policy and Diplomacy*", Ohio State University Medical School, Columbus, OH, May 18, 2009.
116. "*Adventures in Chemistry. A Non-traditional Journey in Science*", UMBC Teacher Quality in High Schools "Share our Success" Conference, April 25, 2009.
117. "*Exploring Structural Diversity in Drug Design*", University of North Carolina - Greensboro, February 20, 2009.
118. "*Science, Policy and Diplomacy*", UMBC Honors College, November 7, 2008.
119. "*Exploring Structural Diversity in Nucleoside Drug Design*", Ewha Women's University, Seoul, Korea, September 16, 2008.
120. "*Adventures in Chemistry. A Non-traditional Journey in Science*", 3rd Annual Women's Leadership Symposium, Society of Women in Science and Mathematics, **keynote speaker**, Auburn University, August 22, 2008.
121. "*Distinctive Learning Experiences Inside and Outside of the Classroom*", UMBC Annual Retreat, August 22-23, 2008.
122. "*Exploring Structural Diversity in Nucleoside Drug Design*", Natural Products Gordon Research Conference, Tilton, NH, July 20-25, 2008.
123. "*Novel Expanded Nucleosides as Potential Anti-HCV Agents*", 21st International Conference on Antiviral Research, Montreal, Canada, April 13-17th, 2008.
124. "*Exploring Structural Diversity in Nucleoside Drug Design*", 12th Annual Indian Society of Chemists and Biologists International Conference on "*The Interface of Chemistry-Biology in Biomedical Research*" Pilani, India, February 22-24, 2008.
125. "*Opportunities in Science*" The American Center, Moscow Russia, October 24, 2007.
126. "*Exploring Structural Diversity in Nucleoside Drug Design*", Moscow State University, Moscow, Russia. October 8, 2007.
127. "*Exploring Structural Diversity in Nucleoside Drug Design*", Engelhardt Institute of Molecular Biology, Moscow, Russia. February 28, 2007.
128. "*Exploring Structural Diversity in Nucleoside Drug Design*", Gilead Pharmaceuticals, Foster City, CA. January 19, 2006.
129. "*Tenure, Promotion and Mentoring*", UMBC National Science Foundation ADVANCE Faculty Horizons workshop, July 16, 2005.
130. "*Exploring Structural Diversity in Nucleoside Drug Design*", Gordon Research Conference, Nucleosides, Nucleotides and Oligonucleotides, Newport, RI, June 29, 2005.
131. "*Some Twists and Turns in a Tale of Drug Design*", UMBC Biology Dept, March 9th 2005.
132. "*Careers in Chemistry*", AAAS/Merck Scholars Award Dinner, **keynote speaker**, Washington, DC, February 18th, 2005.
133. "*Some Twists and Turns in a Tale of Drug Design*", Scripps Research Institute, November 12th, 2004.
134. "*Some Twists and Turns in a Tale of Drug Design*", Virginia Commonwealth University, October 15, 2004.
135. "*Some Twists and Turns in a Tale of Drug Design*", Thomas Jefferson University, June 1st, 2004.
136. "*Some Twists and Turns in a Tale of Drug Design*", National Cancer Institute, May 14th, 2004.
137. "*Dissecting enzyme active site structures with isothermal titration calorimetry*", SE Thermodynamics Conference, May, 2004.
138. "*Some Twists and Turns in a Tale of Drug Design*", Georgetown University, Feb. 17th, 2004.
139. "*Some Twists and Turns in a Tale of Drug Design*", Notre Dame University, Oct. 17th, 2003.
140. "*Some Twists and Turns in a Tale of Drug Design*", Washington State University, September 29th, 2003.
141. "*Small Molecule Properties and Synthesis*", Gordon Conference on Purines, Pyrimidines and Related Substances, Newport, RI, July 2003.
142. "*Fleximers. Some Twists and Turns in a Tale of Drug Design*", University Maryland, College Park, May 8th, 2003.
143. "*Fleximers. Some Twists and Turns in a Tale of Drug Design*", Developments in Nucleic Acids: Chemistry, Pharmacology & Clinical Medicine Symposium, Atlanta, April 25th, 2003.
144. "*Traditional and Non-Traditional Career Pathways*" ACS Georgia Chapter, Atlanta, GA, April 22nd, 2003.
145. "*Fleximers. Some Twists and Turns in a Tale of Drug Design*", University of Arizona, February 27th, 2003.
146. "*Fleximers. New Molecular Tools for Drug Design*", Washington University, Feb. 11th, 2003.
147. "*Fleximers. New Molecular Tools for Drug Design*", University of Arkansas, Feb. 12th, 2003.

148. "Fleximers." *New Molecular Tools for Drug Design*, University of Kansas, Feb. 14th, 2003.
149. "Fleximers." *New Molecular Tools for Drug Design*", George Washington University, December 12th, 2002.
150. "Some Twists and Turns in a Tale of Drug Design", George Washington University, December 13th, 2002.
151. "Some Twists and Turns in a Tale of Drug Design", University of Maryland-Baltimore County, December 4th, 2002.
152. "Fleximers." *New Molecular Tools for Drug Designs*, Pfizer Seminar in Medicinal Chemistry, University of Michigan, Ann Arbor, MI, October 24th, 2002.
153. "Fleximers." *New Molecular Tools for Drug Designs*, University of Georgia, Oct. 17th, 2002.
154. "Fleximers." *New Molecular Tools for Drug Designs*, XV International Roundtable, Nucleosides Nucleotides & Their Biological Applications, Leuven, Belgium, Sept. 2002.
155. "Fleximers." *New Molecular Tools for Drug Design*, National Institute of Chemistry, Ljubljana, Slovenia, September 17th, 2002.
156. "Fleximers". *New Molecular Tools for Drug Design*, Auburn University, April, 2002.
157. "Fleximers" *Design and Synthesis of Two Novel Split Nucleosides*, Gordon Conference on Purines, Pyrimidines and Related Substances, Newport, RI, July 2001.
158. "Thieno-separated Adenosine" Gordon Conference; Purines, Pyrimidines and Related Substances, Newport, RI, July 1999.
159. "Carbocyclic Nucleosides in Medicinal Agent Design" Middle Tennessee State University, March 1999.
160. "Career Pathways for Women in Chemistry", Futurescape: CEISMC High School Outreach for Young Women Programs, Chemistry Keynote Speaker, February 1999.
161. "Career Pathways for Women in Chemistry", Futurescape: CEISMC Middle School Outreach for Young Women Programs, Chemistry Keynote Speaker, February 1999.
162. "New Directions in Nucleoside Drug Design", Georgia Institute of Technology, December 4, 1997.
163. "Carbocyclic Nucleosides in Medicinal Agent Design" Georgia Institute of Technology, December 3, 1997.

Presentations from Professor Seley-Radtke and/or her students and postdocs:

1. " β -L-2'-deoxy-nucleoside Reverse Fleximer Analogues with Antiviral Activity Against Hepatitis B and Other Viruses. International Conference on Antiviral Research, Las Vegas, NV. March 2025.
2. "Synthesis and Evaluation of a Series of Ribose and 2'-Deoxy-2'-Fluoro-2'Methyl Ribose Fleximers" Frontiers in Chemistry and Biology Interface Symposium (FCBIS), UMBC, Baltimore, MD May 4, 2024.
3. "The Design, Synthesis, and Antiviral Evaluation of a Series of Flex-2'-deoxy-2'-fluoro-2'-methyl Nucleos(t)ide Analogues" 37th International Conference on Antiviral Research, Gold Coast, Australia, May 2024.
4. "Design and Synthesis of Linker-based Flexible Nucleoside Analogues" Frontiers in Chemistry and Biology Interface Symposium (FCBIS); UMBC, Baltimore MD. May 4, 2024.
5. "Design and Synthesis of Linker-based Flexible Nucleoside Analogues." College of Natural and Mathematical Sciences (CNMS) Graduate Research Festival (GradFest); UMBC, Baltimore MD. April 12, 2024.
6. "Design and Synthesis of Linker-based Flexible Nucleoside Analogues" Chemistry Graduate Research Day; UMBC, Baltimore MD, March 1, 2024.
7. "Design, Synthesis, and Biological Evaluation of 5,5 Flex-Acyclovir Analogues against CHIKV and MHV" Chemistry Graduate Student Research Day, UMBC, Baltimore; March 2024.
8. "Design, synthesis, and biological evaluation of β -L-thymidine, β -L-2'-deoxycytidine, and other L-nucleoside reverse fleximer analogues" International Conference on Antiviral Research, Gold Coast, Australia. May 2024.
9. "Design, synthesis, and biological evaluation of β -L-thymidine, β -L-2'-deoxycytidine, and other L-nucleoside reverse fleximer analogues" Frontiers in Chemistry and Biology Interface Symposium, Baltimore, MD. April 2024.
10. "Modified Flex-Acyclovir Analogues: A Journey to Discovering Broad-Spectrum Antiviral Therapeutics". Oral Presentation. Chemistry Graduate Student Research Day, UMBC, Baltimore; March 2024.
11. "Design, Synthesis, and Biological Evaluation of 5,5 Flex-Acyclovir Analogues against CHIKV and MHV" Nucleosides, Nucleotides and Oligonucleotides Gordon Research Conference (NNO GRC), Newport, RI, June 24-30, 2023.
12. "Design and Synthesis of Linker-based Flexible Nucleoside Analogues", G-RISE Meyerhoff Graduate Program 2023 Annual Retreat, UMBC, August 4, 2023.

13. *"Design, Synthesis, and Biological Evaluation of 5,5 Flex-Acyclovir Analogues against CHIKV and MHV"* Nucleosides, Nucleotides and Oligonucleotides Gordon Research Symposium (NNO GRS), Newport, RI, June 23, 2023.
14. *"Modified Flex-Acyclovir Analogues: A Journey to Discovering Broad-Spectrum Antiviral Therapeutics"* Nucleosides, Nucleotides and Oligonucleotides Gordon Research Conference, Newport, RI, June 23, 2023. (short talk)
15. *"Synthesis and Evaluation of a Series of Ribose and 2'-Deoxy-2'-Fluoro-2'-Methyl Ribose Fleximers"* Nucleosides, Nucleotides and Oligonucleotides Gordon Research Conference, Newport, RI, June 24-30, 2023.
16. *"Synthesis and Biological Evaluation of L-Nucleoside Reverse Fleximer Analogues"* Nucleosides, Nucleotides and Oligonucleotides Gordon Research Conference, Newport, RI, June 24-30, 2023.
17. *"Synthesis of Flex-Tenofovir analogues"* Nucleosides, Nucleotides and Oligonucleotides Gordon Research Conference, Newport, RI, June 24-30, 2023.
18. *"Design and Synthesis of Linker-based Fleximer Nucleoside Analogues"* Nucleosides, Nucleotides and Oligonucleotides Gordon Research Conference, Newport, RI, June 24-30, 2023.
19. *"Design and Synthesis of Linker-based Fleximer Nucleoside Analogues"* Nucleosides, Nucleotides and Oligonucleotides Gordon Research Symposium, Newport, RI, June 23, 2023.
20. *"Design and Synthesis of Novel D-Ribose Fleximer Nucleosides and Evaluation as Antiviral Therapeutic Agents"* Nucleosides, Nucleotides and Oligonucleotides Gordon Research Symposium, Newport, RI, June 24-25, 2023.
21. *"Design and Synthesis of Novel D-Ribose Fleximer Nucleosides and Evaluation as Antiviral Therapeutic Agents"* Nucleosides, Nucleotides and Oligonucleotides Gordon Research Conference, Newport, RI, June 24-30, 2023. (short talk)
22. *"Novel Approach toward the Synthesis of D-ribose Fleximers with Different Combinations of C-C Bonds as Potential Antiviral Therapeutics"* Nucleosides, Nucleotides and Oligonucleotides Gordon Research Conference, Newport, RI, June 24-30, 2023.
23. *"Design and Synthesis of Telbivudine and Zidovudine Fleximer Analogues"* UMBC 27th Undergraduate Research and Creative Achievement Day (URCAD), April 12th, 2023.
24. *"Synthesis And Evaluation of Flex AT-527 Nucleos(t)ide Analogue As a Potential Antiviral Therapeutic."* UMBC 27th Undergraduate Research and Creative Achievement Day (URCAD), April 12th, 2023.
25. *"Design, Synthesis, and Biological Evaluation of Expanded (Linker) Flex-Acyclovir Analogues as Potential Broad-Spectrum Antiviral Drugs"*, 36th International Conference on Antiviral Research, Lyon, France, March 13-17, 2023.
26. *"Design, Synthesis, and Biological Evaluation of Various Flex-Acyclovir Analogues as Potential Broad-Spectrum Antiviral Drugs"* Chemistry Graduate Student Research Day, UMBC, March, 2023.
27. *"Synthesis and Evaluation of Flex AT-527 Nucleos(t)ide Analogue as a Potential Antiviral Therapeutic"* ABRCMS, Anaheim, CA Nov 9-12, 2022.
28. *"The Design, Synthesis, and Biological Evaluation of Reverse Fleximer Analogues of L-Nucleosides"* XXIV International Roundtable for Nucleosides, Nucleotides & Nucleic Acids, Stockholm, Sweden August 28-31, 2022.
29. *"Design and Synthesis of a Novel Isomer of Flex-AT-527 for Antiviral Testing"* XXIV International Roundtable for Nucleosides, Nucleotides & Nucleic Acids, Stockholm, Sweden August 28-31, 2022.
30. *"Design, Synthesis, and Biological Evaluation of Flex-Cidofovir Analogues"* XXIV International Roundtable for Nucleosides, Nucleotides & Nucleic Acids, Stockholm, Sweden August 28-31, 2022.
31. *"Synthesis and Evaluation of Flex AT-527 Nucleos(t)ide Analogue as a Potential Antiviral Therapeutic"* UMBC SURF, August, 2022.
32. *"Design and Synthesis of Lamivudine and Telbivudine Fleximer Analogues"*, Intercollegiate Student Chemists Convention 2022, April 2, 2022.
33. *"Synthesis and Biological Evaluation of a Flexible Nucleoside Analogue of AT-527"* 34th International Conference on Antiviral Research, Seattle, WA March 21-25, 2022."
34. *"Design and Synthesis of Flex AT-527 as a Potential Antiviral Therapeutic"* 34th International Conference on Antiviral Research, Seattle, WA March 21-25, 2022."
35. *"The Design and Synthesis of Reverse Fleximers of L-Nucleoside Analogues"* 34th International Conference on Antiviral Research, Seattle, WA March 21-25, 2022."
36. *"Elucidation of the Mechanism of Action of Various Flex-Acyclovir Analogues"* 34th International Conference on Antiviral Research, Seattle, WA March 21-25, 2022."

37. *"Design and Synthesis of Flex AT-527 as a Potential Antiviral Therapeutic"* UMBC 26th Undergraduate Research and Creative Achievement Day (URCAD), April 18-24, 2022.
38. *"The Design And Synthesis Of Fleximer Analogues Of Telbivudine And Lamivudine"* UMBC 26th Undergraduate Research and Creative Achievement Day (URCAD), April 18-24, 2022.
39. *"Synthesis of Reverse Fleximer-Cytosine Nucleoside Analogues as Potential Antiviral Therapeutics"* UMBC 26th Undergraduate Research and Creative Achievement Day (URCAD), April 18-24, 2022.
40. *"Synthesis of flexible nucleos(t)ide analogues of Remdesivir in broad spectrum antiviral therapeutics"*, Innovative Approaches for Identification of Antiviral Agents Summer School (IAAASS), Cagliari, Italy September 19th-23rd, 2021.
41. *"Design, synthesis and biological evaluation of flex-acyclovir analogues against SARS-CoV-2"* Innovative Approaches for Identification of Antiviral Agents Summer School (IAAASS), Cagliari, Italy September 19th-23rd, 2021.
42. *Synthesis of Flex-Remdesivir Analogues as Potential Antiviral Therapeutics*, UMBC 25th Undergraduate Research and Creative Achievement Day (URCAD), April 19-23, 2021.
43. *Synthesis and Biological Evaluation of Flex-Acyclovir Analogues Against SARS-CoV-2*, International Conference on Antiviral Research, March 22-25, 2021.
44. *Synthesis of Flex-Guanosine Analogues as Potential Antiviral Therapeutics*, ABRCMS, Nov 9-13, 2020.
45. *Synthesis of Flex-Guanosine Analogues as Potential Antiviral Therapeutics*, SURF, August 5-14, 2020.
46. *Synthesis of Flex-Guanosine Analogues as Potential Antiviral Therapeutics*, 24th Annual UMBC URCAD, April 22, 2020.
47. *7-Deaza fleximers – design, synthesis and biological applications*, 24th Annual UMBC URCAD, April 22, 2020.
48. *Design, Synthesis, and Optimization of Flex-Tenofovir and Flex-Acyclovir Analogues*, International Conference on Antiviral Research (ICAR), Seattle, WA April, 2020. (canceled due to CoVID-19)
49. *Design and Synthesis of Nucleos(t)ide Drug Ribose Analogues for Antiviral Testing*, International Conference on Antiviral Research (ICAR), Seattle, WA April, 2020. (Canceled due to CoVID-19)
50. *Investigations into the Mechanism of Action of Flexible Nucleoside Analogues Against Flaviviruses*, Nucleosides, Nucleotides, and Oligonucleotides Gordon Research Symposium for Postdocs and Graduate Students, Newport, RI, June 23, 2019. (oral)
51. *Structural investigation on the effect of pyrimidine functional groups of fleximer analogues on antiviral activity*, Nucleosides, Nucleotides, and Oligonucleotides Gordon Research Conference, Newport, RI, June 23-28, 2019.
52. *Structural investigation on the effect of pyrimidine functional groups of fleximer analogues on antiviral activity*, 47th Middle Atlantic Regional Meeting (MARM), Baltimore MD, May 30, 2019.
53. *Synthesis and biological activity of flexible analogues of 2'-deoxyribose nucleosides*, MARM 2019, May 30, 2019.
54. *Structural investigation on the effect of pyrimidine functional groups of fleximer analogues on antiviral activity*, 32nd International Conference on Antiviral Research, Baltimore MD, May 2019.
55. *Antibacterial activity of 5'-norcarbocyclic analogues of 5-substituted pyrimidine nucleosides*, International Roundtable on Nucleosides, Nucleotides and Nucleic Acids, San Diego, August 26-30, 2018.
56. *Synthesis of Flexible Antiviral Agents Against Emerging and Reemerging Infectious Diseases*, International Roundtable on Nucleosides, Nucleotides and Nucleic Acids, San Diego, August 26-30, 2018. (poster and selected for a shotgun talk)
57. *Anticancer Properties of Halogenated Pyrrolo[3,2-d]pyrimidine Nucleobases with Decreased Toxicity Via N5 Substitution*, International Roundtable on Nucleosides, Nucleotides and Nucleic Acids, San Diego, August 26-30, 2018.
58. *Synthesis of flexible nucleosides for the Discovery of Virus Cures*, Summer Undergraduate Research Fest (SURF), August 8, 2018.
59. *Antibacterial activity of 5'-norcarbocyclic analogues of 5-substituted pyrimidine nucleosides*, June 11-15, 2018, International Conference on Antiviral Research (ICAR), Porto, Portugal.
60. *Investigating Structural Diversity in Acyclic Fleximer Analogues Targeting Ebola Virus*, 22nd Annual UMBC Undergraduate Research and Creative Achievement Day (URCAD), April 25, 2018.
61. *Design, Synthesis, and Biological Evaluation of Flexible Acyclic Nucleoside Analogues for Antiviral Therapeutics*, 22nd URCAD, April 25, 2018.
62. *Synthesis of Sugar Moieties in Flexible Anti-flavivirus Compounds*, 22nd URCAD, UMBC, April 25, 2018.
63. *Anticancer Properties of Halogenated Pyrrolo[3,2-d]pyrimidines with Decreased Toxicity Via N5 Substitution*, 1st Annual UMBC Chemistry & Biochemistry Research Symposium, March 16, 2018

64. *Synthesis of flexible antiviral agents against emerging and reemerging infectious diseases*, 1st Annual Chemistry and Biochemistry Research Symposium. Baltimore, MD, March 16 2018.
65. *Synthesis of flexible antiviral agents against emerging and reemerging infectious diseases*. 40th Graduate Research Conference. Baltimore, MD, March 2018.
66. *Design and synthesis of novel fleximers*, 17th Symposium on Chemistry of Nucleic Acid Components, June 4-9, 2017 - Cesky Krumlov, Czech Republic.
67. *Synthesis of Flexible Purine Analogues as Binders of the HIV Nucleocapsid Protein*, International Conference on Antiviral Research. May 21-25, 2017. Atlanta, GA.
68. *Synthesis of Flexible Purine Analogue Inhibitors of NCp7*, Frontiers in Chemistry and Biology Interface Symposium. May 6, 2017.
69. *Design, synthesis, and biological evaluation of flexible acyclic nucleoside analogues against human coronaviruses and filoviruses*, 10th Annual Frontiers at the Chemistry and Biology Interface Symposium, University of Delaware, May 6, 2017.
70. *Antiproliferative activity of N-substituted pyrrolo[3,2-d]pyrimidines and their potential use as therapeutic agents*, 10th Annual Frontiers at the Chemistry and Biology Interface Symposium, University of Delaware, May 6, 2017
71. *Exploring Flexible Nucleoside Analogues in Drug Discovery*, A Look Ahead XX, UMBC, May 3, 2017
72. *Synthesis of Flex-GS5734, a novel nucleoside for potential antiviral use*, 21st Annual UMBC Undergraduate Research and Creative Achievement Day (URCAD), April 26, 2017.
73. *Structure-Activity Relationships of the Sugar Moieties in Flex-4-methoxyguanosine*, 21st Annual URCAD, April 26, 2017.
74. *Design, Synthesis and Biological Evaluation of Flexible Acyclic Nucleoside Analogues for Antiviral Therapeutics*, 21st Annual URCAD, April 26, 2017.
75. *Synthesis of Flexible Purine Analogue Inhibitors of NCp7*, UMBC Graduate Research Conference, March 29, 2017.
76. *Antiproliferative activity of N-substituted pyrrolo[3,2-d]pyrimidines and their potential use as therapeutic agents*. UMBC Graduate Research Conference, March 29, 2017.
77. *The design, synthesis, and biological evaluation of flexible acyclic nucleoside analogues against human coronaviruses and filoviruses*, UMB-JHU Joint Symposium on Drug Discovery, February 24, 2017.
78. *Antiproliferative activity of N-substituted pyrrolo[3,2-d]pyrimidines and their potential use as therapeutic agents*, UMB-JHU Joint Symposium on Drug Discovery, UMB, February 24, 2017.
79. *Synthesis of Flex-BCX4430 – A potential treatment for Ebola*, ABRCMS, Tampa, FL, Nov 12-19, 2016.
80. *Synthesis of Flex-BXC4430 – A potential treatment for Ebola*, 19th Annual UMBC Summer Undergraduate Research Fest (SURF), August 10, 2016.
81. *Design and evaluation of acyclic fleximer nucleoside analogues that inhibit MERS-CoV and SARS-CoV replication*, 4th Antivirals Congress, Barcelona, Spain, Sept. 18-21, 2016.
82. *Design, Synthesis and Biological Evaluation of Flex-bases*, XXII International Roundtable, Paris, France, July 18-22, 2016.
83. *Targeting MERS-CoV with flexible nucleosides* XXII International Roundtable, Paris, France, July 18-22, 2016.
84. *Design and synthesis of a series of Flex-base Nucleoside Analogues to Target Filoviruses*; 29th International Conference on Antiviral Research (ICAR), San Diego, April 17-21, 2016.
85. *Design and evaluation of acyclic fleximer nucleoside analogues that inhibit MERS-CoV and SARS-CoV replication*, 29th International Conference on Antiviral Research (ICAR), San Diego, April 17-21, 2016.
86. *A Flexible Approach To Treating The Ebola Virus*, 20th Annual UMBC Undergraduate Research and Creative Achievement Day (URCAD), April 27, 2016.
87. *Flexible Nucleosides As Potential Ebola Inhibitors*, URCAD, April 27, 2016.
88. *Flexible Nucleosides As Potential Ebola Inhibitors*, NOTE: one of 20 posters to be highlighted at the SciMix Poster Session, March 14, 2016 at the National ACS Meeting in San Diego.
89. *Design and Synthesis of Flexible Nucleoside-based Inhibitors of S-Adenosylhomocysteine Hydrolase and RNA-Dependent RNA Polymerase as Useful Anti-Filovirus Agents*, 2016 Biochemistry and Molecular Biology Retreat, UMB, Jan 8, 2016.
90. *Design, Synthesis and Anti-MERS-CoV Activity of a Series of Acyclic Fleximers* HEP DART 2015, Maui, Hawaii, Dec. 6-10, 2015.
91. *Design, Synthesis and Anti-MERS-CoV Activity of a Series of Acyclic Fleximers* Bridging the Sciences 2015, Ft. Lauderdale, FL, Sept. 16-17, 2015.

92. *Targeting the Nucleocapsid Protein of HIV-1 (NCp7) with Nucleobase Flexibility*, ACS National Meeting, Boston, MA, August 16-20, 2015.
93. *Synthesis Of Halogenated Thieno[3,2-d]Pyrimidines As Potential Anticancer Agents*, ACS National Meeting, Boston, MA, August 16-20, 2015.
94. *Examining the Effect of Structural Diversity in Nucleoside Drug Design*. Nucleosides, Nucleotides & Oligonucleotides - Gordon Research Conference, Newport, RI, June 28-July 3, 2015.
95. *New Antiviral Properties of 5'-Norcarbocyclic Nucleoside Analogues*, ISAR, May 11-15, 2015, Rome, Italy.
96. *Examining the Effect of Structural Diversity in Nucleoside Drug Design*. Eighth Annual Frontiers at the Chemistry-Biology Interface Symposium, Baltimore, MD. May 2015.
97. *Examining the Effect of Structural Diversity in Nucleoside Drug Design*. UMBC Graduate Research Conference, Baltimore, MD. May 2015.
98. *Synthesis of Halogenated thieno[3,2-d]pyrimidines as Anticancer Agents* 19th Annual UMBC URCAD, April 22, 2015. (oral)
99. *A Flexible Approach to Treating the Ebola Virus* 19th Annual UMBC URCAD, April 22, 2015.
100. *A Flexible Nucleoside as a Potential Ebola Inhibitor* 19th Annual UMBC URCAD, April 22, 2015.
101. *Exploring Structural Diversity in Nucleic Acid Drug Design*, XVIII A Look Ahead, UMBC, April 15, 2015.
102. *Synthesis of halogenated thieno[3,2-d] pyrimidines as potential anticancer agents*, UMBC's Undergraduate Research Symposium in the Chemical and Biological Sciences, Oct. 25, 2014.
103. *Nucleobase analogues of 2'-modified Sofosbuvir*, 3rd Antivirals Conference, Amsterdam, The Netherlands, Oct 11-15, 2014.
104. *Design of New Potential Antiviral and Antimicrobial Arylamino Uracil Derivatives*, 21st International Roundtable on Nucleosides, Nucleotides & Nucleic Acids, August 24-28, Poznan, Poland.
105. *Synthesis of flexible purine analogue inhibitors of NCp7*, ACS National meeting, San Francisco, CA, August 11, 2014.
106. *Flexible nucleosides as antivirals*, Heterocyclic Compounds Gordon Research Conference, Salve Regina, Newport, RI, June 18, 2014.
107. *Synthesis of flexible purine analogue inhibitors of NCp7*, 7th annual Frontiers at the Chemistry-Biology Interface Symposium, Baltimore, May 10, 2014.
108. *Exploring Structural Diversity in Nucleic Acid Drug Design*, XVII A Look Ahead, UMBC, April 29, 2014.
109. *Synthesis Of Flexible Guanine Nucleobases As Inhibitors Of The HIV-1 Nucleocapsid Protein NCp7*, 18th Annual UMBC URCAD, April 23, 2014.
110. *Targeting the Nucleocapsid Protein of HIV (NCp7) with Nucleobase Flexibility*, 18th Annual URCAD, April 23, 2014.
111. *Flexible Guanine Nucleobase Inhibitors of the HIV-1 Nucleocapsid Protein NCp7*, 18th Annual UMBC URCAD, April 23, 2014.
112. *Synthesis of flexible purine analogue inhibitors of NCp7*, Graduate Research Conference, University of Maryland, Baltimore, April 17, 2014.
113. *Flexible nucleosides as antivirals*, Graduate Research Conference, University of Maryland, Baltimore, April 17, 2014.
114. *Synthesis of Flexible Purine Analogue Inhibitors of NCp7*, UMBC's 36th Annual Graduate Research Conference, March 26th 2014.
115. *Flexible Nucleosides as Antivirals*, UMBC's 36th Annual Graduate Research Conference, March 26th 2014.
116. *Flexible Purine Analogue Inhibitors of NCp7*, UMBC's 36th Annual Graduate Research Conference, March 26, 2014.
117. *Targeting the Nucleocapsid Protein of HIV (NCp7) with Nucleobase Flexibility* ABRCMS, Nov. 16, 2013.
118. *Targeting the Nucleocapsid Protein of HIV (NCp7) with Nucleobase Flexibility* UMBC Summer Undergraduate Research Festival (SURF), August 7, 2013.
119. *New Carbocyclic Uracil Derivatives as Potential Antiviral and Antibacterial Agents* FEBS Conference, St. Petersburg, Russia, July 9, 2013.
120. *Genetic and Chemical Genetic Approach to Study Cell Fate Decisions Via JAK/STAT Attenuation*, 72nd Annual Meeting of the Society of Developmental Biology, Cancun, Mexico, June 16-20, 2013 (student talk).
121. *Flexible Nucleotides as Antiviral Agents*, International Conference for Antiviral Research (ICAR), San Francisco, May 12, 2013 (student talk and poster).
122. *Flexible Carbocyclic Nucleosides: Design, Synthesis and Preliminary Biological Activity* 6th Annual Frontiers at the Chemistry Biology Interface Symposium, UMD-College Park, May 4, 2013.

123. *Synthesis of Carbocyclic Nucleosides*, 17th Annual UMBC Undergraduate Research and Creative Achievement Day (URCAD), April 24, 2013.
124. [*Synthesis of Cyclic and Acyclic Nucleotide Viral Polymerase Inhibitors*](#) 17th Annual UMBC URCAD, April 24, 2013.
125. *Targeting the Nucleocapsid Protein of HIV-1 (NCp7) with Nucleobase Flexibility*, Annual Biomedical Research Conference for Minority Students (ABRCMS), Nashville, TN, Nov. 13-16, 2013.
126. [*Flexible Guanosine Nucleobase Analogues as Antiviral Agents*](#) 17th Annual UMBC URCAD, April 24, 2013.
127. *"Drug Diversity in Nucleic Acids" XVI A Look Ahead*, UMBC, April 17, 2013.
128. *Synthesis and preliminary results of a series of forward and reverse fleximers*. 244th American Chemical Society National Meeting. Philadelphia, August 2012.
129. *Flexible nucleotides as antivirals*. International Roundtable on Nucleosides, Nucleotides and Nucleic Acids, Montreal, August 2012.
130. *Correlating chemical reactivity to biological activity of chlorinated pyrimidines*, International Roundtable on Nucleosides, Nucleotides and Nucleic Acids, Montreal, August 2012.
131. *Carbocyclic C5 Substituted Uracils as Adenosine Deaminase Inhibitors*. XX International Roundtable on Nucleosides, Nucleotides & Nucleic Acids. Montreal, Canada. August 2012.
132. *Flexible nucleotides as antivirals*. 4th European Workshop in Drug Synthesis, Siena, Italy, May 27-31, 2012. (student talk)
133. *Inhibition of Adenosine Deaminase by Carbocyclic C5-substituted Uracils*. Bioorganic Chemistry Gordon Conference. Andover, NH. June 2012.
134. *Correlating chemical reactivity to biological activity of chlorinated pyrimidines*, Gordon Research Conference on Bioorganic Chemistry, Andover, NH, June 2012.
135. *Correlating chemical reactivity to biological activity of chlorinated pyrimidines*, ACS Middle Atlantic Regional Meeting, Baltimore, MD, May 2012.
136. *Correlating chemical reactivity to biological activity of chlorinated pyrimidines* (student talk), Graduate Research Conference, UMBC, Baltimore, MD, April 27, 2012.
137. *Synthesis of Pyrrolopyrimidine Nucleosides using Heck Methodology*, 16th Annual UMBC URCAD, April 25, 2012.
138. *Flexible Carbocyclic Nucleosides as Antiviral Agents*, 16th Annual UMBC URCAD, April 25, 2012.
139. *Synthesis of a Novel Set of Flexible Expanded Nucleoside Reverse Transcriptase Inhibitors*, 16th Annual UMBC URCAD, April 25, 2012.
140. *Reverse Carbocyclic Fleximers As A Means To Overcome Drug Resistance*, 16th Annual UMBC URCAD, April 25, 2012.
141. *Exploring Structural Diversity in Nucleoside Drug Design*, XV A Look Ahead, April 18, 2012.
142. *A Signal to Go, a Cue to Stay: A Multidisciplinary Approach to Study JAK/STAT Regulation*, UMBC GABS Symposium, March 16, 2012.
143. *Synthesis of C-nucleosides and their biological implications*, ABRCMS, St. Louis, November 9, 2011.
144. *Inhibition of Adenosine Deaminase by C5-substituted Uracils*, Sao Paulo Advanced School on Natural Products, Medicinal Chemistry and Organic Synthesis, ESPCA Chemistry, Campinas, Sao Paulo, Brazil, August 14-18, 2011.
145. *Modified Carbocyclic Nucleosides as Antiviral Agents* UMBC Summer Undergraduate Research Fest (SURF). August 10, 2011.
146. *Synthesis of Pyrrolopyrimidine Nucleosides using Heck Methodology* Gordon Research Conference on Nucleosides, Nucleotides and Nucleic Acids, Newport, RI July 2011.
147. *Exploring Flexible Nucleoside Analogues and Enzyme Recognition* Gordon Research Conference on Nucleosides, Nucleotides and Nucleic Acids, Newport, RI, July 2011.
148. *Inhibition of Adenosine Deaminase by C5-substituted Uracils* Gordon Research Conference on Nucleosides, Nucleotides and Nucleic Acids, Newport, RI, July 2011. (Short talk and poster)
149. *Synthesis of a 2'-Modified Flexible Nucleoside as a Potential Anti-HCV Agent* 4th Annual Frontiers at the Chemistry-Biology Interface, University of Delaware, April 30, 2011.
150. *Flexible Nucleosides as Polymerase Inhibitors*, 4th Annual Frontiers at the Chemistry-Biology Interface, University of Delaware, April 30, 2011.
151. *Inhibition of Adenosine Deaminase by C5-substituted Uracils* 4th Annual Frontiers at the Chemistry-Biology Interface, University of Delaware, April 30, 2011.
152. *Synthesis of a 2'-Modified Flexible Nucleoside as a Potential Anti-HCV Agent* UMBC Graduate Research Conference, April 29, 2011.

153. *Design And Synthesis Of Unnatural DNA Base Pairs Containing Expanded Purine Analogues*, 15th Annual UMBC URCAD, April 27, 2011.
154. *"Reverse" Carbocyclic Fleximers as a Means of Overcoming Resistance*, 15th Annual UMBC URCAD, April 27, 2011.
155. *Carbocyclic Nucleoside Aromatic Fleximers as Antiviral Targets for Inhibiting S-Adenosyl-L-homocysteine Hydrolase*, 15th Annual UMBC URCAD, April 27, 2011.
156. *Exploring Structural Diversity in Nucleoside Drug Design*, UMBC A Look Ahead, April 13, 2011.
157. *Inhibition of Adenosine Deaminase by 5-substituted Uracils*, Enzymes, Coenzymes and Metabolic Pathways Gordon Research Conference, Waterville Valley, NH, July 18-23, 2010.
158. *Investigating DNA structure and function – Design and synthesis of extended pyrimidine nucleoside analogues*, Bioorganic Chemistry Gordon Research Conference, Andover, NH, June 13-18, 2010.
159. *Carbocyclic Fleximers as Potential Medicinal Agents* 3rd Annual Frontiers at the Chemistry-Biology Interface, Johns Hopkins University, May 1, 2010.
160. *Carbocyclic Fleximers as Potential Medicinal Agents* UMBC Graduate Research Conference, April 30, 2010.
161. *Fluorescent Expanded Nucleosides* UMBC Graduate Research Conference, April 30, 2010.
162. *Synthesis of a Series of 2'-Modified Tricyclic Nucleosides as Potential HCV Agents*, International Conference on Antiviral Research, San Francisco, April 25-28, 2010.
163. *Extended Pyrimidine Nucleoside Analogues: Investigations into DNA Structure and Function*, 14th Annual UMBC URCAD, April 28, 2010.
164. *Design and Synthesis of Unnatural DNA Containing Expanded Purine Analogues*, 14th Annual UMBC URCAD, April 28, 2010.
165. *Carbocyclic Fleximers as Anti-Trypanosomal Agents*, 14th UMBC URCAD, April 28, 2010.
166. *Developing a New Class of Chemotherapeutic Drugs: 2'-Deoxy Proximal Flexible Nucleosides*, 14th Annual UMBC URCAD, April 28, 2010.
167. *Exploring Structural Diversity in Nucleoside Drug Design A Look Ahead XIII—Futures in Biomedical Research*, March 31, 2010.
168. *Developing a New Class of Chemotherapeutic Drugs: 2'-Deoxy Proximal Flexible Nucleosides*, ACS National Meeting, San Francisco, March 21-25, 2010.
169. *Extended Pyrimidine Nucleoside Analogues: Investigations into DNA Structure and Function*, ACS National Meeting, San Francisco, March 21-25, 2010 (note: this was a talk given by one of the Seley-Radtke undergraduates at a regular Organic Division session).
170. *Exploring Flexible Nucleoside Analogues and Enzyme Inhibition*, ACS National Meeting, Washington, DC. August 16-20, 2009.
171. *Extended Pyrimidine Nucleoside Analogues*, ACS National Meeting, Washington, DC. August 16-20, 2009.
172. *Increasing the Genetic Alphabet - Design, synthesis and preliminary studies of extended pyrimidine and expanded purine nucleoside analogues*, Natural Products Gordon Research Conference, Tilton, NH, July 26-31, 2009.
173. *"Reverse Fleximers": Synthesis of a series of 5-pyrrole-substituted carbocyclic uridine analogues*, Meharry Medical College Summer Research Symposium, July 24, 2009.
174. *Synthesis and Antiviral Activity of Substituted Uracils*, 22nd International Conference on Antiviral Research, Miami, FL, May 3-7, 2009.
175. *Developing Carbocyclic Nucleoside Reverse Fleximers as Novel Drug Tools to Combat Drug Resistance*, 13th Annual UMBC URCAD, April 22, 2009.
176. *Design and Synthesis of Flexible 2'-Deoxy Nucleoside Analogues (Fleximers) As Potential Chemotherapeutic Agents*, 13th Annual UMBC URCAD, April 22, 2009.
177. *Synthesis of a Flexible Carbocyclic Nucleoside*, 13th Annual UMBC URCAD, April 22, 2009.
178. *Design and Synthesis of Flexible Nucleoside Inhibitors ("Fleximers") As Potential Chemotherapeutic Agents*, 2008 Annual Biomedical Research Conference for Minority Students (ABRCMS), November 6, 2008.
179. *Hetero-expanded Purine Nucleosides. Design, Synthesis and Preliminary Biological Activity* The Joint Symposium of the 18th International Roundtable on Nucleosides, Nucleotides and Nucleic Acids and the 35th Symposium on Nucleic Acids Chemistry, Kyoto, Japan, September 8-12, 2008.
180. *"Reverse Fleximers": Introduction of a Series of 5-Substituted Carbocyclic Uridine Analogues* The Joint Symposium of the 18th International Roundtable on Nucleosides, Nucleotides and Nucleic Acids and the 35th Symposium on Nucleic Acids Chemistry, Kyoto, Japan, September 8-12, 2008.
181. *Flexibility - Not Just for Gumby Anymore* 12th Annual UMBC URCAD April 2008.

182. *Novel Expanded Nucleosides as Potential Anti-HCV Agents*, 20th International Conference on Antiviral Research, Montreal, Canada, April 13-17th, 2008.
183. *Synthesis And Anticancer Activity Of 2', 3'-Dideoxy Carbocyclic N4-Hydroxycytidine*, 12th Annual Indian Society of Chemists and Biologists International Conference on "The Interface of Chemistry-Biology in Biomedical Research" February 22-24, 2008.
184. *Design and Synthesis of Carbocyclic Nucleoside Analogues as Anti-Cancer and Anti-Viral Drugs*, 234th American Chemical Society Conference, Boston, August 2007.
185. *Design and Synthesis of Unnatural DNA-Containing Ring Expanded Analogues*, 234th American Chemical Society Conference, Boston, August 2007.
186. *Molecular Design Simulations on Unnatural DNA Containing Expanded and Flexible Purine Analogues*, 6th European Workshop on Drug Design, Sienna, Italy, June 2007.
187. *Design and Synthesis of Unnatural DNA-Containing Ring Expanded Purine Analogues*, 29th Annual Graduate Research Conference, UMBC, April 2007.
188. *Design and Synthesis of Isoadenosine Analogues as Potential Inhibitors of S-Adenosyl-L-homocysteine Hydrolase*, 11th Annual UMBC URCAD, April 2007.
189. *The Design and Synthesis of Carbocyclic Purine-Pyrimidine Hybrid Nucleosides as Anticancer and Antiviral Drugs*, Life Science Symposium-A Look Ahead X, Futures in Biomedical Research, University of Maryland, Baltimore County, November 2006.
190. *Synthesis of Carbocyclic Nucleoside Analogues as Potential Inhibitors of SAHase and Adenosine Deaminase*, 10th Annual UMBC URCAD April 2006.
191. *Synthetic Strategies Towards Carbocyclic Thiazole Purine-Pyrimidine Hybrid Nucleosides*, 28th Annual Graduate Research Conference, UMBC, April 2006.
192. *Carbocyclic N-3 Isonucleosides as SAHase Inhibitors for Antiviral Chemotherapeutics*, 230th American Chemical Society Conference, Washington DC, August 2005. *Molecular Dynamics Simulations on Expanded Purines in Unnatural DNA*, Gordon Research Conference, Nucleosides, Nucleotides and Oligonucleotides, Salve Regina University, Newport, RI, June 29, 2005.
194. *Carbocyclic N-3 Isonucleosides as SAHase Inhibitors for Antiviral Chemotherapeutics*, 18th International Conference on Antiviral Research, Barcelona, Spain, April 11-14th, 2005. (Sylvester Mosley, first place graduate student category, \$1000 prize).
195. "Molecular Chameleons". *Molecular Modeling and Computational Analysis of a Second Series of Flexible Nucleosides*, International Roundtable on Nucleosides, Nucleotides & Nucleic Acids, Minneapolis, MN, Sept. 2004.
196. "Molecular Chameleons". *Design and Synthesis of a Second Series of Flexible Nucleosides*, International Roundtable on Nucleosides, Nucleotides & Nucleic Acids, Minneapolis, MN, Sept. 2004.
197. *Carbocyclic Fleximers. Design and Synthesis of a New Class of Shape-Modified Nucleosides*, Seventh Annual UMBC Summer Undergraduate Research Fest (SURF), August 9th, 2004.
198. *Design and Synthesis of "Reverse" Fleximers as Chemotherapeutic Agents*; Seventh Annual UMBC SURF, August 9th, 2004.
199. *Molecular Chameleons. Computational Analysis, Design and Synthesis of a Second Series of Flexible Nucleosides*, Walther Cancer Retreat, Notre Dame University, IN, August 2004.
200. *Fleximers. Computational Modeling, Design and Synthesis of Novel Shape-modified Nucleosides*, UMBC Graduate Research Conference, April 23, 2004.
201. *Carbocyclic Isoadenosine Analogues of Neplanocin A*, UMBC Graduate Research Conference, April 23, 2004.
202. *Molecular Modeling of Nucleoside Analogues as Inhibitors of Biologically Significant Enzymes*, AGEP Colloquium, San Francisco, April 17th, 2004.
203. *Carbocyclic Isoadenosine Analogues of Neplanocin A*, National ACS meeting, New York, August 2003.
204. *Tricyclic Purine Analogues as Antiparasitic Agents*, National ACS meeting, New York, August 2003.
205. "Fleximers". *Computational Modeling, Design and Synthesis of Novel Shape-modified Nucleosides*, National ACS meeting, New York, NY, August 2003.
206. *Selective Nucleobase Transport of a New Class of Purine Antimetabolites*, Gordon Conference on Purines, Pyrimidines and Related Substances, Newport, RI, July 2003.
207. *Design, Synthesis and Activity of Analogues of Neplanocin A*, National ACS meeting, Boston, MA, August 2002.
208. *Synthesis of Two L-7-deazaaristeromycin Analogues*, National ACS meeting, Orlando, FL. April 2002.
209. *Chlorinated Adenosine Derivatives as Potential Regulators of Colorectal Cancer Cell Growth*, Gordon Conference on Purines, Pyrimidines and Related Substances, Newport, RI, July 2001.

210. *Inhibition of Measles Virus Replication by 5'-Nor Carbocyclic Nucleoside Analogues*, 13th International Conference on Antiviral Research, Baltimore, MD April 2000.
211. *Carbocyclic 5'-Nor Pyrimidine Nucleosides in Enantiomeric Form*, National ACS meeting, Anaheim, CA March 1999.
212. *Does the Anti-HBV Activity of (+)-5'-Noraristeromycin Exist in its 4'-Epimer and 4'-Deoxygenated Derivatives?* Suddath Symposium on Drug Design and Development, Georgia Institute of Technology, April 1998.
213. *5'-Amino-5'-deoxy-5'-noraristeromycin*, Gordon Conference; Purines, Pyrimidines and Related Substances, Newport, RI, June 1997.
214. *Carbocyclic Nucleosides in Medicinal Agent Design*, Georgia Institute of Technology, December 1997.
215. *The Importance of the 4'-Hydroxy Hydrogen for the Anti-trypanosomal Properties of (+)-7-Deaza-5'-noraristeromycin*; National ACS meeting, San Francisco, CA, April 1997.
216. *A Methylated Derivative of 5'-Noraristeromycin*; International Roundtable on Nucleosides and Nucleotides: San Diego, CA, September 1996.
217. *Carbocyclic Oxetanocins Lacking the C-3' Methylene*; National ACS meeting, Orlando, FL, August 1996.
218. *(+)-7-Deaza-5'-noraristeromycin as an Anti-Trypanosomal Agent*; National ACS meeting, New Orleans, LA, March 1996.
219. *A Question of Anomeric Formation in Deprotection of a Xylofuranose Derivative*; Gordon Conference; Purines, Pyrimidines and Related Substances, Newport, RI, July 1995.

Media:

1. "Creating New Antiviral Drugs: Innovative Fleximer Research" in *Inquiring Minds*, a UMBC Research and Creative Achievement Magazine, 2023, pg 15-16. (Featured on the cover).
2. Mayo Clinic's Center for Individualized Medicine, "The Pursuit of Precision: The Science Advancing Individualized Medicine." March 22, 2023, <https://precisionpod.podbean.com/e/molecular-virology-and-novel-therapeutics-for-individualized-medicine/>
3. <https://www.aplu.org/pir-example/umbc-researchers-receive-a-fast-grant-to-study-antivirals-effectiveness-against-covid-19/> (Jan 2, 2023)
4. <https://umbc.edu/stories/antiviral-research-receives-3-5m-from-nih/> June 10, 2022.
5. Wall Street Journal: https://www.wsj.com/articles/as-covid-19-pills-roll-out-worry-mounts-that-resistance-could-develop-11642847405?mod=hp_lead_pos4
6. <https://www.politifact.com/factchecks/2022/apr/19/watch-water/stew-peters-film-watch-water-ridiculously-claims-c/>
7. WUSA9 interview with Seley-Radtke students/laboratory: live here.
8. <https://www.smithsonianmag.com/science-nature/seven-key-questions-about-omicron-answered-180979424/>
9. BBC radio 4: <https://www.bbc.co.uk/programmes/b006qskw/episodes/player>
10. <https://www.sciline.org/covid-19/quotes-antiviral-molnupiravir-paxlovid/>
11. <https://www.nature.com/articles/d41586-021-03667-0>
12. NOVA/PBS interview: YouTube link
13. <https://www.washingtonpost.com/health/2021/11/16/administration-purchases-pfizer-anti-covid-pill/> and featured on the front page of the Post in print on 11/17/21.
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SERVICE TO THE DEPARTMENT, UNIVERSITY, COMMUNITY AND PROFESSION

SERVICE TO THE DEPARTMENT

UMBC:

Chemistry & Biochemistry Library liason, 2025
 Toxicology Faculty Search Committee, Chair, 2021
 Graduate Coordinator Search Committee, 2021
 Preprofessional Faculty Search Committee, Chair, 2016-2017, member, 2017-2019
 Five year post-tenure review committee, Chair, 2016, 2018, 2019, member, 2021
 Bioorganic faculty search committee, 2015-2016
 Graduate recruitment committee, 2014-2017
 International Outreach committee (Chair), 2014-present
 Analytical Faculty search committee, 2013-2014
 Dept. of Chemistry & Biochemistry Chair search committee, 2012-2013
 Chair, Promotion & Tenure committee, Marie-Christine Daniel-Onuta, 2012; Mark Allen 2019
 Promotion and Tenure committee, 2011-present
 Organic Faculty Search Committee, 2009
 NIH Chemistry Biology Interface Graduate Program, Program Director, 2007-present
 Graduate Summer Bridge Program, Program Director, 2004-2006
 Graduate Recruiting Committee, Chair, 2004-2005
 Graduate Committee Member, 2004-2005
 Non-thesis Masters Committee, Chair, 2003-2007
 Undergraduate Advisement, 2003-present
 Dept. of Chemistry & Biochemistry, Faculty P & T committees, 2006-present (ten to date)

Georgia Tech:

Undergraduate Advisement, 1998-2003
 GTEC URS program, Faculty sponsor, Samer Salim (graduate mentor), Jennifer Ayers (undergraduate), 2000-2001
 Faculty Sponsor NSF-RSEU program, Dr. John Boulos (Barry University), 2000-2001
 Faculty Sponsor NSF-REU summer program, Christina Stujenski (Barry U.) 2001
 Faculty Sponsor NSF-RSEU program, Dr. J. Lee-Joyner (Spelman College), 1999-2000
 Faculty Sponsor NSF-REU summer program, Marilyn Philips (Georgia Tech) 2000
 Faculty Search Executive Committee (2002)
 Graduate Committee (1998, 1999, 2002)
 Seminar Committee (1998-2003)
 Organic/Polymer Search Committee (1998, 2001)
 Organic/Bioorganic Search Committee (1999, 2001)
 Safety Committee (2001)
 Undergraduate Committee (2000)

SERVICE TO THE UNIVERSITY**UMBC:**

USM COVID-19 R&D Task Force, 2020
 Faculty Sponsor, Fulbright Fellowship – Dr. Sayfidin Safarov, Tajikistan, 2015-2016
 University Faculty Promotion and Tenure Review Committee, 2015-2016, Chair 2016
 Valedictorian Selection Committee, 2016-2018
 Rhodes, Cambridge, Gates, Marshall Scholarship Selection Committee, 2016-2018
 Presidential Professorship Selection Committee, 2016-2018
 Faculty Advisor, UMBC Vietnamese Student Association, 2011-2014
 UMBC Honors College Advisory Board, 2009-present
 NIH Chemistry Biology Interface Graduate Program, Program Director, 2007-present
 President's Commission on Women, Committee Member, 2007-2008
 NSF/UMBC EMBARC Summer Research Experience Program Director, 2003-2004
 UMBC Planning Leadership Team, 2005
 Undergraduate and Graduate recommendation letters, 2003-present (>200-300 per year)

Georgia Tech:

Georgia Tech Cancer Research Council Executive Board (2002)
 College of Science Search Committee, School of Chemistry & Biochemistry Chair (2002)
 National Research Council Committee on Women in Science & Engineering (2001)
 Five-Year Review Committee for Robert Nerem, Director of the Institute for Bioengineering and Biosciences (2000)

SERVICE TO THE PROFESSION

Editorial Boards: Science Advances/AAAA (Associate Editor, 2022 - present); Annual Reports in Medicinal Chemistry (Editor in Chief 2022 - present, Advisory Board, 2019-2022); Antiviral Chemistry & Chemotherapy (Associate Editor); Current Protocols in Chemical Biology (Associate Editor); Research and Reports in Medicinal Chemistry (Editorial Board, 2011-2013); Clinical Medicine Insights, Therapeutics (Editorial Board).

Peer Review:

Funding Agencies: INF-ACT Foundation (Italy); National Academies of Science; National Institutes of Health (NIH); Natural Sciences and Engineering Research Council of Canada (NSERC); Research Foundation Flanders; National Science Foundation (NSF); AAAS/Merck; Research Council of Katholieke University, Leuven Belgium; Civilian Research and Development Foundation; CUBRIC Center for International Science and Technology Advancement; Cottrell Scholar Program; Research Corporation; American Chemical Society; International Science and Technology Center (ISTC), Moscow; Israeli Science Foundation (Israel); Defense Threat Reduction Agency

(DTRA), American Association of University Women (AAUW), Research Foundation of Flanders (Belgium); French National Research Agency (ANR); Louisiana Board of Reagents Support Fund (Chemistry).

Peer-Reviewed Journals: *Accounts of Chemical Research*; *Acta Pharmaceutica Sinica B*; *ACS Chemical Biology*; *ACS Chemical Neuroscience*; *ACS Infectious Diseases*; *ACS Medicinal Chemistry Letters*; *ACS Omega*; *ACS Pharmacology & Translational Science*; *ACS Synthetic Biology*; *Advanced Science*; *Antiviral Research*; *Applied Organometallic Chemistry*; *Archiv der Pharmazie*; *Asian Journal of Organic Chemistry*; *Beilstein Journal of Organic Chemistry*; *Biochemistry*; *Bioorganic and Medicinal Chemistry*; *Bioorganic and Medicinal Chemistry Letters*; *Bioorganic Chemistry*; *Biotechnology Progress*; *CCS Chemistry*; *Canadian Journal of Chemistry*; *Cancer Group*; *Carbohydrate Research*; *Cellular and Molecular Life Sciences*; *Chemical Biology and Drug Design*; *ChemComm*; *ChemMedChem*; *Chemical Biology and Drug Design*; *Chemical Papers*; *Chemical Reviews*; *Chemistry – a European Journal*; *Chemistry Open*; *Collection of the Czech Chemical Communications*; *Computational and Structural Biotechnology Journal*; *Current Drugs*; *Current Medicinal Chemistry*; *Current Protocols in Chemical Biology*; *Eurasian Journal of Medicine and Oncology*; *European Journal of Medicinal Chemistry*; *European Journal of Organic Chemistry*; *European Journal of Pharmacology*; *Future Medicinal Chemistry*; *Heterocycles*; *Heterocyclic Communications*; *Infectious Diseases*; *Journal of the American Chemical Society*; *Journal of Carbohydrate Chemistry*; *Journal of Heterocyclic Chemistry*; *Journal of Medical Virology*; *Journal of Medicinal Chemistry*; *Journal of Organic Chemistry*; *Journal of Physical Chemistry*; *MedChemComm*; *Medicinal Chemistry*; *Medicinal Chemistry Research*; *Medicinal Research Reviews*; *Methods*; *Molecules*; *Molecular Pharmacology*; *Nature*; *Nature Communications*; *New Journal of Chemistry*; *Nitric Oxide*; *Nucleic Acids Research*; *Nucleosides, Nucleotides and Nucleic Acids*; *Organic and Bioorganic Chemistry*; *Organic and Biomolecular Chemistry*; *Organic Chemistry Frontiers*; *Organic Chemistry International*; *Organic Letters*; *Proceedings of the National Academies (PNAS)*; *Royal Society of Chemistry (RSC) Medicinal Chemistry*; *Science*; *Science Advances*; *Synlett*; *Synthesis*; *Synthetic Communications*; *Tetrahedron*; *Tetrahedron Asymmetry*; *Tetrahedron Letters*; *Virus*.

External University tenure and/or promotion reviews: 74

External University Departmental/Institute reviews: Katholieke University, Leuven, Belgium (multiple), Institute of Organic Chemistry and Biochemistry (IOCB) at the Academy of Sciences of the Czech Republic in Prague (multiple), University of Vienna, Austria.

Professional Memberships:

American Chemical Society: Div. of Med Chemistry, Long Range Planning Committee, 2010-2012; American Chemical Society Georgia Chapter: **Chair**, 2001; American Chemical Society; Medicinal, Organic & Carbohydrate Divisions, member since 1991

International Society for Nucleosides, Nucleotides and Nucleic Acids: Secretary & Board Member 2007-2010, reelected 2011-2015, President-elect (2013-2014) and President (2015-2016); Immediate Past President (2017-2018); Membership Committee (Chair, 2005-present); Publications Committee (member, 2007-present); The IS3NA Chu Family Foundation Fellowship award committee, Chair (2014-present); Website Committee (2010-present); Member since the Society's creation in 2001.

International Society for Antiviral Research: President-elect (2020-2022); President (2022-2024); Immediate Past President (2024-2026); Board of Directors (2013-2016 and 2016-2019); Publication Committee (member, 2014-present); Chair of the Poster Award Committee (2012 – 2020), Poster committee (member, 2008-2012); The ISAR Chu Family Foundation Fellowship award committee, Chair (2014-present); Member since 1996.

Women in International Security (WIIS), member since 2006

Iota Sigma Pi, Chemistry Honor Society for Women, member since 1989

Phi Kappa Phi, National Honor Society, member since 1991

Phi Lambda Upsilon, Chemistry Honor Society, member since 1991

Sigma Xi, Scientific Research Society, member since 1996