1. NAME

JAMES M. KOVACS

University of Colorado, Colorado Springs

1420 Austin Bluffs Pkwy.

Colorado Springs, CO 80918

Department of Chemistry & Biochemistry

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2. EDUCATION

Harvard Medical School Boston, MA **2010-2015**

Boston Children's Hospital

Postdoctoral Researcher, Advisors: Bing Chen & Stephen Harrison

University of Colorado – School of Medicine Aurora, CO 2005-2010

PhD in Biophysics and Structural Biology, Advisor: V. Michael Holers

Thesis: "Investigating Complement Receptor 2 (CD21/CR2) – Ligand Interactions and Inhibitors Thereof."

University of Colorado Denver Denver, CO 2003-2005

MSc in Chemistry, Advisor: Robert S. Hodges

Thesis: "Determination of Intrinsic Hydrophilicity/Hydrophobicity Coefficients of Amino Acid Side-Chains

Using Synthetic Model Peptides."

Goshen College Goshen, IN 1998-2002

BA in Chemistry and **BA** in Molecular Biology

3. PROFESSIONAL EXPERIENCE

University of Colorado Colorado Springs Colorado Springs, CO 08/21/2017-present

Assistant Professor, Department of Chemistry & Biochemistry (full time)

Colorado College Colorado Springs, CO 08/15/2015-05/10/2017

Visiting Assistant Professor, Department of Chemistry & Biochemistry (full time)

Emmanuel College Boston, MA 01/15/2011-05/15/2015

Adjunct Assistant Professor, Department of Chemistry & Biochemistry (part time)

University of Colorado Denver Denver, CO 08/15/2003-05/15/2005

Graduate Teaching Assistant, Department of Chemistry (full time)

Goshen College Goshen, IN **08/15/1999-05/10/2002**

Undergraduate Teaching Assistant, Departments of Chemistry & Biology (full time)

Micrology Laboratories, LLC Goshen, IN 06/01/2002-08/01/2003

Research and Development Technician (full time)

Developed novel chromogenic microbiological media

4. REFEREED PUBLICATIONS (TOTAL TIMES CITED: 1100, H-INDEX: 16) (*UNDERGRADUATE STUDENT)

- 18. Jaenisch T., Lamb M.M., Gallichotte E., Henry C., Adams B., Riess J., van Sickle J., Hawkins K., Montague B., Coburn C., Bauer L.C., McDuffie J.B., Hanenberg S., James S., Graham L., Kovacs J.M., Spencer J., Hernandez M., Zabel M., Fox P., Pluss O., Windsor W.J., Winstanley G., Olson D., Barer M., Bronson A., Berman S., Ebel G., Chu M. (Submitted) Asymptomatic and pre-symptomatic transmission of SARS-CoV-2 using novel face mask sampling: A protocol for a prospective study of index cases and their contacts in a congregant setting. (2022) **BMJ Open,** Nov 23;12(11)
- 17. Renner B., Laskowski J., Poppelaars F., Ferreira V.P., Blaine J., Antonioli A.H., Hannan J.P., Kovacs J.M., van Kooten C., You Z., Pickering M.C., Holers V.M., Thurman J.M. Factor H related proteins modulate complement activation of kidney cells. (2022) **Kidney International**, 102(6):1331-1344.
- 16. Bricault, C.A., Yusim, K., Seaman, M.S., Yoon, H., Theiler, J., Giorgi, E.E., Wagh, K., Theiler, M., Hraber, P., Macke, J.P., Kreider, E.F., Learn, G.H., Hahn, B.H., Scheid, J.F., Kovacs, J.M., Shields, J.L., Lavine, C.L., Ghantous, F., Rist, M., Bayne, M.G., Neubauer, G.H., McMahan, K., Peng, H., Chéneau, C., Jones, J.J., Zeng, J., Ochsenbauer, C., Nkolola, J.P., Stephenson, K.E., Chen, B., Gnanakaran, S., Bonsignori, M., Williams, L.D., Haynes, B.F., Doria-Rose, N., Mascola, J.R., Montefiori, D.C., Barouch, D.H., Korber, B. (2019) **Cell Host Microbe**, 25(1)59-72
- 15. Bricault, C.A., Kovacs, J.M., Badamchi-Zadeh, A., McKee, K., Shields, J.L., Gunn, B.M., Neubauer, G.H., Ghantous, F., Jennings, J., Gillis, L., Perry, J., Nkolola, J.P., Alter, G., Chen, B., Stephenson, K.E., Doria-Rose, N., Mascola, J.R., Seaman, M.S., Barouch, D.H. (2018) Neutralizing Antibody Responses following Long-Term Vaccination with HIV-1 Env gp140 in Guinea Pigs. **Journal of Virology**, 92(13)e00369-18
- 14. Chen, J., Kovacs, J.M., Peng, H., Rits-Volloch, S., Lu, J., Park, D., Zablowsky, E., Seaman, M.S., Chen, B. (2015) HIV-1 ENVELOPE. Effect of the cytoplasmic domain on antigenic characteristics of HIV-1 envelope glycoprotein. **Science**, 349(6244):191-5
- 13. Bricault, C.A., Kovacs, J.M., Nkolola, J.P., Yusim, K., Shields, J.L., Perry, J., Lavine, C.L., Cheung, A., Stamatatos, L., Seaman, M.S., Korber, B.T., Chen, B., Barouch, D.H. (2015) A Multivalent Clade C HIV-1 Env Trimer Cocktail Elicits a Greater Magnitude of Neutralizing Antibodies than Any Individual Component. **Journal of Virology**, 89(5):2507-19
- 12. Kovacs, J.M., Noeldeke, E., Ha, H., Peng, H., Rits-Volloch, S., Harrison, S.C., Chen, B. (2014) Stable Uncleaved HIV-1 Envelope Glycoprotein gp140 forms a Tightly Folded Trimer with a Native-Like Structure. **PNAS**, 111(52):18542-7
- 11. Pejawar-Gaddy, S., Kovacs, J.M., Chen, B., Barouch, D.H., Irvine, D. (2014) Design of lipid nanocapsule delivery vehicles for multivalent display of recombinant Env trimers in HIV vaccination. **Bioconjugate Chemistry**, 25(8):1470-8
- 10. Nkolola, J.P., Bricault, C.A., Cheung, A., Shields, J., Perry, J., Kovacs, J.M., Giorgi, E., van Winsen, M., Apetri, A., Brinkman-van der Linden, E.C., Chen, B., Korber, B., Seaman, M.S., Barouch, D.H. (2014) Characterization and Immunogenicity of a Novel Mosaic M HIV-1 gp140 Trimer. **Journal of Virology**, 88(17):9538-52

- 9. Thurman, J.M., Kulik, L., Orth, H., Wong, M., Renner, B., Sargsyan, S.A., Mitchell, L.M., Hourcade, D.E., Hannan, J.P., Kovacs, J.M., Coughlin, B., Woodell, A.S., Pickering, M.C., Rohrer, B., Holers, V.M. (2013) Detection of complement activation using monoclonal antibodies against C3d. **Journal of Clinical Investigation**, 123, 2218-30
- 8. Kovacs, J.M., Nkolola, J.P., Peng, H., Cheung, A., Perry, J., Miller, C.A., Seaman, M.S., Barouch, D.H., Chen, B. (2012) HIV-1 Envelope Trimer Elicits Higher Neutralizing Antibody Responses Than Monomeric gp120. **PNAS**, 109, 12111-6
- 7. Shaw, C.D., Young, K.A., Kovacs, J.M., Thurman, J.M., Holers, V.M., Hannan, J.P. (2010) Delineation of the CR2-C3d Complex by Site-Directed Mutagenesis. **Journal of Molecular Biology**, 404, 697-710
- 6. Kovacs, J.M., Hannan, J.P., Eisenmesser, E.Z., Holers, V.M. (2010) Biophysical Investigations of Complement Receptor 2 (CD21, CR2) Ligand Interactions Revel Unique Amino Acid Contacts to Each Receptor Ligand Pair. **Journal of Biological Chemistry**, 285, 27251-8
- 5. Kovacs, J.M., Hannan, J.P., Eisenmesser, E.Z., Holers, V.M. (2009) Mapping of the C3d Ligand Binding Site on Complement Receptor 2 (CR2/CD21) Using Nuclear Magnetic Resonance and Chemical Shift Analysis. **Journal of Biological Chemistry**, 284, 9513-20
- 4. Tripet, B., Cepeniene, D., Kovacs, J.M., Mant, C.T., Krokhin, O.V. and Hodges, R.S. (2007) Requirements for prediction of peptide retention time in reversed-phase high-performance liquid chromatography: hydrophilicity/hydrophobicity of side-chains at the N- and C-termini of peptides are dramatically affected by the end-groups and location. **Journal of Chromatography**. 1141, 212-225
- 3. Lee, S.A., Kovacs, J., Stahelin, R.V., Cheever, M.L., Overduin, M., Setty, T.G., Burd, C.G., Cho, W. and Kutateladze, T.G. (2006) Molecular mechanism of membrane docking by the Vam7p PX domain. The **Journal of Biological Chemistry**. 281, 37091-37101
- 2. Kovacs, J.M., Mant, C.T., Kwok, S.C., Osguthorpe, D.J. and Hodges, R.S. (2006) Quantitation of the nearest-neighbor effects of amino acid side-chains that restrict conformational freedom of the polypeptide chain using reversed-phase liquid chromatography of synthetic model peptides with L-and D-amino acid substitutions. **Journal of Chromatography**. 1123, 212-224
- Kovacs, J.M., Mant, C.T. and Hodges, R.S. (2006) Determination of intrinsic hydrophilicity/hydrophobicity of amino acid side chains in peptides in the absence of nearest-neighbor or conformational effects. Biopolymers. 84, 283-297

5. NON-REFEREED PUBLICATIONS (*undergraduate student)

<u>Patents</u>

- 2. Holers V.M., Kovacs, J.M. (2010) NMR-Based Identification of Sites on Complement Receptor Type 2 (CR2/CD21) for Ligand-Specific Inhibition
- 1. Holers, V.M., Hannan, J.P., Kovacs, J.M. (2009) Ligand Specific Non-Antibody Polypeptides that Inhibit CR2 Activation and Methods of use Thereof

Meeting Abstracts

- 56. *Singh, A., Kovacs, J.M.; "Inhibition of Interferon-alpha and Complement Receptor 2 Binding" **Colorado Springs Undergraduate Research Forum** (Colorado Springs, CO) April 2025
- 55. Milliron, K., Kovacs, J.M.; "Understanding the Molecular Determinants Required for Epstein-Barr Virus Attachment and Inhibition" **Mountain Lion Research Day** (Colorado Springs, CO) December 2024 (Top Scholar Award Winner)
- 54. *Trent, C., Kovacs, J.M.; "Understanding the Molecular Interactions of a Potential Lupus Therapeutic" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2024
- 53. Tvrdy, K.C.: Kovacs, J.M.; Taylor, V.; Integration of Outreach Event within Senior-level Undergraduate Capstone Course: Challenges and Accomplishments" American Chemical Society National Meeting, New Orleans, LA, March 2024
- 52. *Trent, C., Kovacs, J.M.; "Understanding the Molecular Interactions of a Potential Lupus Therapeutic" **Mountain Lion Research Day** (Colorado Springs, CO) December 2023
- 51. Milliron, K., Kovacs, J.M.; "Understanding the Molecular Determinants Required For Epstein-Barr Virus Attachment and Inhibition" **Mountain Lion Research Day** (Colorado Springs, CO) December 2023
- 50. Kovacs, J.M.; "HIV-1 hijacking of the Complement System." (Invited Talk) International Complement Society Workshop, Newcastle, UK, August 2023
- 49. *Milliron, K., Kovacs, J.M.; "Understanding the Immune System Epstein Barr Virus Interaction" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2023
- 48. *Trent, C., Kovacs, J.M.; "Characterizing a Novel Engineered Therapeutic Agent to Reverse Lupus Symptoms" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2023
- 47. *Milliron, K., Kovacs, J.M.; "Understanding The Molecular Determinants Required For Epstein-Barr Virus Attachment and Inhibition" **Mountain Lion Research Day** (Colorado Springs, CO) December 2022
- 46. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Per-fluorinated Compounds" **Colorado Springs Undergraduate Research Forum** (Colorado Springs, CO) April 2022
- 45. *Milliron, K., Kovacs, J.M.; "Understanding the Immune System Epstein Barr Virus Interaction" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2022
- 44. *Harrell, S.M., Kovacs, J.M.; "Annexin A2 Interactions with Factor H Protein and 3C6 Antibodies" **Mountain Lion Research Week** (Colorado Springs, CO) November 2021
- 43. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Per-fluorinated Compounds" **Mountain Lion**Research Week (Colorado Springs, CO) November 2021
- 42. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Per-fluorinated Compounds" **American Chemical Society Meeting** (Tucson, AZ) October 2021

- 41. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Per-fluorinated Compounds" **American Chemical Society Meeting** (Los Angeles, CA) April 2021
- 40. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Per-fluorinated Compounds" **Colorado Springs Undergraduate Research Forum** (Colorado Springs, CO) April 2021
- 39. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Per-fluorinated Compounds" **Mountain Lion**Research Week (Colorado Springs, CO) November 2020
- 38. Herring, W., Kovacs, J.M.; "Establishing the HIV Reservoir: the Role of Complement" **Mountain Lion Research Week** (Colorado Springs, CO) November 2020
- 37. *Wheeler, M., Kovacs, J.M.; "Towards Understanding the EBV gp350 Complement Receptor 2 Interaction" **Mountain Lion Research Week** (Colorado Springs, CO) November 2020
- 36. *Vigil, B., Kovacs, J.M.; "Characterizing a Novel Engineered Therapeutic Agent to Reverse Lupus Symptoms" **Mountain Lion Research Day** (Colorado Springs, CO) 13 December 2019
- 35. *Wheeler, M., Kovacs, J.M.; "Towards Understanding the EBV gp350 Complement Receptor 2 Interaction" **Mountain Lion Research Day** (Colorado Springs, CO) 13 December 2019
- 34. *Herring, W., Kovacs, J.M.; "Establishing the HIV Reservoir: the Role of Complement" **Mountain Lion Research Day** (Colorado Springs, CO) 13 December 2019
- 33. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Perfluorinated Compounds" **Mountain Lion Research Day** (Colorado Springs, CO) 13 December 2019
- 32. *Stein, C., *Schafstall, A., Kovacs, J.M.; "Binding Analysis of Factor H Related Proteins with C3d" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) 16 April 2019
- 31. *Wheeler, M., Kovacs, J.M.; "Towards Understanding the EBV gp350 Complement Receptor 2 Interaction" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) 16 April 2019
- 30. *Vigil, B., Kovacs, J.M.; "Characterizing a Novel Engineered Therapeutic Agent to Reverse Lupus Symptoms" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) 16 April 2019
- 29. *Wheeler, M., Kovacs, J.M.; "Understanding the Molecular Determinants for Epstein-Barr Virus Interaction." Mountain Lion Research Day (Colorado Springs, CO) 30 November 2018
- 28. *Weidner, B., Kovacs, J.M.; "Complement Components Required for the Establishment of a Latent HIV-1 Reservoir" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) 28 April 2018
- 27. *Russell, N., Kovacs, J.M.; "Understanding the Molecular Interactions of a Complement Directed Lupus Therapeutic" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) 28 April 2018

- 26. *Lac, L., Kovacs, J.M.; "Using in Silico Methods to Develop a Therapeutic for Systemic Lupus Erythematosus via Targeting the Complement System" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) 28 April 2018
- 25. *Colwell, M., Kovacs, J.M.; "Antibody Fragment as Lupus Therapeutic" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) 28 April 2018
- 24. Bricault, C.A., J.M. Kovacs, A. Badamchi-Zadeh, K. McKee, J.P. Nkolola, B. Chen, K.E. Stephenson, N. Doria-Rose, J.R. Mascola, M.S. Seaman, D.H. Barouch. *Neutralizing Antibody Responses following Long-Term Vaccination with HIV-1 Env gp140 in Guinea Pigs*. **Progress and Pathways Towards an Effective HIV Vaccine** (Banff, Canada) 2018
- 23. Bricault, C.A., K. Yusim, E.E. Giorgi, K. Wagh, J.M. Kovacs, J.L. Shields, C.L. Lavine, F. Ghantous, M. Rist, M.G. Bayne, G.H. Neubauer, J.J. Jones, J. Zeng, C. Ochsenbauer, J.P. Nkolola, K.E. Stephenson, B. Chen, M.S. Seaman, B.T. Korber, D.H. Barouch. Antibody Signature-Based Design of HIV-1 Env gp140 Expands Tier 2 Neutralizing Antibody Breadth in Guinea Pigs. HIV Research for Prevention, Chicago, IL, USA, 2017
- 22. *Russell, N., *Muir, A., and Kovacs, J.M.; "Understanding the Molecular Interactions of a Potential Complement Directed Therapeutic" Mountain Lion Research Day (Colorado Springs, CO) 1 December 2017
- 21. Williams, B., *Hall, S., *Dorwart, L., and Kovacs, J.M.; "The Role of Complement in the Establishment of a Latent HIV-1 Reservoir" Mountain Lion Research Day (Colorado Springs, CO) 1 December 2017
- 20. Bricault, C.A., K. Yusim, K. Wagh, J.M. Kovacs, J.P. Nkolola, J.L. Shields, C.L. Lavine, M. Bayne, M.S. Seaman, B. Chen, B.T. Korber, D.H. Barouch. *Variable Loop 3 Epitope Optimization of HIV-1 Trimeric Envelope Immunogen Affects the Magnitude of Neutralization Antibodies Elicited by Vaccination*. **Keystone HIV Vaccines (x5)** (Banff, Canada) 2015
- 19. Kovacs J.M., Chen B.; *The Stable Uncleaved HIV-1 Envelope Glycoprotein gp140 Forms a Tightly Folded Trimer with a Native-like Structure.* **CHAVI-ID Annual Meeting** (Durham, NC) 2014
- 18. Bricault, C.A., J.P. Nkolola, J.M. Kovacs, J.L. Shields, J. Perry, A. Cheung, M.S. Seaman, B. Chen, D.H. Barouch. A Multivalent Mixture of Clade C HIV-1 Env Trimers Elicits a Greater Magnitude of Neutralizing Antibodies than Individual Trimer Components. AIDS Vaccine Conference (Barcelona, Spain) 2013
- 17. Kovacs J.M., Nkolola J., Barouch D.H., Chen B.; HIV-1 Envelope Trimer Elicits Higher Neutralizing Antibody Responses Than Monomeric gp120; **CHAVI-ID Annual Meeting**, Raleigh, NC, October 2012
- 16. Nkolola J.P., Kovacs J.M., Korber B., Chen B., Seaman M., Barouch D.; *Stability and Neutralization Capacity of a Novel Mosaic HIV-1 gp140 Trimer in a Guinea Pig Model.* **AIDS Vaccine 2012** (Boston, MA) 2012

- 15. Pejawar-Gaddy S., Kovacs J.M., Barouch D.H., Chen B., Irvine D.; Design of Lipid Nanoparticle Delivery Agents for Multivalent Display of Recombinant Env Trimer in HIV Vaccination; **AIDS Vaccine 2012**, Boston, MA, September 2012
- 14. Kovacs J.M., Nkolola J., Barouch D.H., Chen B.; *HIV-1 Envelope Trimer Elicits Higher Neutralizing Antibody Responses Than Monomeric gp120* **AIDS Vaccine 2012** (Boston, MA) 2012
- 13. Kovacs J.M., Nkolola J., Barouch D.H., Chen B.; HIV-1 envelope trimer elicits better neutralizing antibody responses than monomeric gp120; **Keystone Symposia- Cell Biology of Virus Entry/HIV Pathogenesis**, Whistler, British Columbia, 2012
- 12. Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Defining Ligand Binding Regions of Complement Receptor 2 and Novel Inhibitors of Said Interactions; **23**rd **International Complement Workshop**, New York City, New York, 2010
- 11. Shaw C.D., Storek M.J., Young K.A., Kovacs J.M., Thurman J.M., Holers V.M., Hannan J.P.; Delineation of the Complement Receptor Type 2-C3d Complex by Site-Directed Mutagenesis and Molecular Docking; 23rd International Complement Workshop, New York City, New York, 2010
- Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Exploring Complement Receptor 2 (CD21, CR2) Ligand interactions using NMR and ITC; University of Colorado Denver School of Medicine Student Research Symposium, 2009
- 9. Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Complement Receptor 2 (CD21, CR2) Ligand Interactions; 21st International Congress of Biochemistry and Molecular Biology, Shanghai, 2009
- 8. Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Use of NMR to Define CR2:C3d Interactions in Solution Reveals Dual SCR1-2 Interface with C3d: Confirmation Using a Novel Ligand-Selective Inhibitory Peptide; University of Colorado Denver Research and Creative Activities Symposium, 2009
- Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Exploring Complement Receptor 2 (CD21, CR2) Ligand interactions using NMR and ITC; University of Colorado Denver School of Medicine Student Research Symposium, 2009
- Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Use of NMR to Define CR2:C3d Interactions in Solution Reveals Dual SCR1-2 Interface with C3d: Confirmation Using a Novel Ligand-Selective Inhibitory Peptide; University of Colorado Denver School of Medicine Student Research Symposium, 2008
- Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Use of NMR to Define CR2:C3d Interactions in Solution Reveals Dual SCR1-2 Interface with C3d: Confirmation Using a Novel Ligand-Selective Inhibitory Peptide; 22nd International Complement Workshop Basel Switzerland, 2008

- 4. Kovacs J.M., Hannan J.P., Holers V.M.; Mapping CR2-ligand interactions using NMR and inhibitory peptides; **American Association of Immunologists San Diego**, CA 2008
- 3. Kovacs J.M., Hannan J.P., Holers V.M.; Mapping CR2-ligand interactions using NMR and inhibitory peptides; **University of Colorado Health Sciences Center Student Research Symposium**, 2007
- Kovacs J.M., Mant C.T., Hodges R.S.; Determination of Intrinsic Hydrophilicity/Hydrophobicity
 Coefficients of Amino Acid Side-Chains using Synthetic Model Peptides; 19th American Peptide Society
 San Diego, CA, 2005
- Hodges R.S., Kovacs J.M., Mehok A.R., Mant C.T.; A novel approach to the determination of inherent hydrophilicity/hydrophobicity of amino acid side-chains using reversed-phase chromatography; ISPPP 2004, Aachen, Germany, Oct 2004

6. PUBLICATIONS SUBMITTED (*UNDERGRADUATE STUDENT)

1. *Milliron, K., *Schroeder, K., *Economou, A., *Singh, A., Kovacs, J.M. (2025) Complement Receptor 2 – EBV gp350 interaction and inhibitors. **Journal of Biological Chemistry** (patent application submitted)

7. BOOK CHAPTERS

Mant, C.T., Chen, Y., Yan, Z., Popa, T.V., Kovacs, J.M., Mills, J.B., Tripet, B.P. and Hodges, R.S. (2007)
 HPLC Analysis and purification of peptides. Peptide Characterization and Application: Methods in
 Molecular Biology Series, Vol. 386:3-55, Edited by Gregg Fields, Humana Press, Totowa, New Jersey

8. PUBLISHED REVIEWS

1. Mant C.T., Kovacs J.M., Kim H.M., Pollock D.D. and Hodges R.S. (2009) Intrinsic Amino Acid Side-Chain Hydrophilicity/Hydrophobicity Coefficients Determined by Reversed-Phase High-Performance Liquid Chromatography of Model Peptides: Comparison with Other Hydrophilicity/Hydrophobicity Scales, **Biopolymers**, 92(6);573-95

9. PRESENTATIONS AT MEETINGS (*UNDERGRADUATE STUDENT)

ORAL PRESENTATIONS

- Tvrdy, K.C.: Kovacs, J.M.; Taylor, V.; Integration of Outreach Event within Senior-level Undergraduate Capstone Course: Challenges and Accomplishments" American Chemical Society National Meeting, New Orleans, LA, March 2024
- 12. Kovacs, J.M.; "HIV-1 hijacking of the Complement System." (Invited Talk) International Complement Society Workshop, Newcastle, UK, August 2023
- 11. Kovacs, J.M.; "Bioengineering a potential complement directed therapeutic and diagnostic" **Colorado ACS**, Colorado Springs, CO, November 2022 (Invited Talk)
- 10. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Per-fluorinated Compounds" **American Chemical Society National Meeting** (Tucson, AZ) October 2021
- 9. Kovacs, J.M.; Current State of Complement Therapeutics Research (Invited Panel Member and Presenter). **International Complement Society Workshop,** Santa Fe, NM, USA, 2018
- 8. Bricault, C.A., K. Yusim, E.E. Giorgi, K. Wagh, J.M. Kovacs, J.L. Shields, C.L. Lavine, F. Ghantous, M. Rist, M.G. Bayne, G.H. Neubauer, J.J. Jones, J. Zeng, C. Ochsenbauer, J.P. Nkolola, K.E. Stephenson, B. Chen, M.S. Seaman, B.T. Korber, D.H. Barouch. Antibody Signature-Based Design of HIV-1 Env gp140 Expands Tier 2 Neutralizing Antibody Breadth in Guinea Pigs. **HIV Research for Prevention**, Chicago, IL, USA, 2017
- 7. Kovacs J.M., Chen B.; The Stable Uncleaved HIV-1 Envelope Glycoprotein gp140 Forms a Tightly Folded Trimer with a Native-like Structure; **CHAVI-ID Annual Meeting**, Durham, NC, Sept 2014
- Kovacs J.M., Nkolola J., Barouch D.H., Chen B.; HIV-1 Envelope Trimer Elicits Higher Neutralizing Antibody Responses Than Monomeric gp120; CHAVI-ID Annual Meeting, Raleigh, NC, October 2012
- 5. Pejawar-Gaddy S., Kovacs J.M., Barouch D.H., Chen B., Irvine D.; Design of Lipid Nanoparticle Delivery Agents for Multivalent Display of Recombinant Env Trimer in HIV Vaccination; **AIDS Vaccine 2012**, Boston, MA, September 2012
- 4. Kovacs J.M., Nkolola J., Barouch D.H., Chen B.; HIV-1 Envelope Trimer Elicits Higher Neutralizing Antibody Responses Than Monomeric gp120; **AIDS Vaccine 2012**, Boston, MA, September 2012
- Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Defining Ligand Binding Regions of Complement Receptor 2 and Novel Inhibitors of Said Interactions; 23rd International Complement Workshop, New York City, New York, August 2010

- Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Use of NMR to Define CR2:C3d Interactions in Solution Reveals Dual SCR1-2 Interface with C3d: Confirmation Using a Novel Ligand-Selective Inhibitory Peptide; 22nd International Complement Workshop, Basel Switzerland, Oct 2008
- 1. Hodges R.S., Kovacs J.M., Mehok A.R., Mant C.T.; A novel approach to the determination of inherent hydrophilicity/hydrophobicity of amino acid side-chains using reversed-phase chromatography; **ISPPP 2004**, Aachen, Germany, Oct 2004

POSTER PRESENTATIONS

- 52. *Singh, A., Kovacs, J.M.; "Inhibition of Interferon-alpha and Complement Receptor 2 Binding" **Colorado Springs Undergraduate Research Forum** (Colorado Springs, CO) April 2025
- 51. Milliron, K., Kovacs, J.M.; "Understanding the Molecular Determinants Required For Epstein-Barr Virus Attachment and Inhibition" **Mountain Lion Research Day** (Colorado Springs, CO) December 2024 (Top Scholar Award Winner)
- 50. *Trent, C., Kovacs, J.M.; "Understanding the Molecular Interactions of a Potential Lupus Therapeutic" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2024
- 49. *Trent, C., Kovacs, J.M.; "Understanding the Molecular Interactions of a Potential Lupus Therapeutic" **Mountain Lion Research Day** (Colorado Springs, CO) December 2023
- 48. *Milliron, K., Kovacs, J.M.; "Understanding the Molecular Determinants Required For Epstein-Barr Virus Attachment and Inhibition" **Mountain Lion Research Day** (Colorado Springs, CO) December 2023
- 47. Kovacs, J.M.; "HIV-1 hijacking of the Complement System." International Complement Society Workshop, Newcastle, UK, August 2023
- 46. *Milliron, K., Kovacs, J.M.; "Understanding the Immune System Epstein Barr Virus Interaction" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2023
- 45. *Trent, C., Kovacs, J.M.; "Characterizing a Novel Engineered Therapeutic Agent to Reverse Lupus Symptoms" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2023
- 44. *Milliron, K., Kovacs, J.M.; "Understanding The Molecular Determinants Required For Epstein-Barr Virus Attachment and Inhibition" **Mountain Lion Research Day** (Colorado Springs, CO) December 2022
- 43. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Per-fluorinated Compounds" **Colorado Springs Undergraduate Research Forum** (Colorado Springs, CO) April 2022
- 42. *Milliron, K., Kovacs, J.M.; "Understanding the Immune System Epstein Barr Virus Interaction"

 Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2022
- 41. *Harrell, S.M., Kovacs, J.M.; "Annexin A2 Interactions with Factor H Protein and 3C6 Antibodies" **Mountain Lion Research Week** (Colorado Springs, CO) November 2021

- 40. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Per-fluorinated Compounds" **Mountain Lion**Research Week (Colorado Springs, CO) November 2021
- 39. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Per-fluorinated Compounds" **American Chemical Society** (Tucson, AZ) October 2021
- 38. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Per-fluorinated Compounds" **American Chemical Society** (Los Angeles, CA) April 2021
- 37. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Per-fluorinated Compounds" **Colorado Springs Undergraduate Research Forum** (Colorado Springs, CO) April 2021
- 36. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Per-fluorinated Compounds" **Mountain Lion**Research Week (Colorado Springs, CO) November 2020
- 35. Herring, W., Kovacs, J.M.; "Establishing the HIV Reservoir: the Role of Complement" **Mountain Lion Research Week** (Colorado Springs, CO) November 2020
- 34. *Wheeler, M., Kovacs, J.M.; "Towards Understanding the EBV gp350 Complement Receptor 2 Interaction" **Mountain Lion Research Week** (Colorado Springs, CO) November 2020
- 33. *Vigil, B., Kovacs, J.M.; "Characterizing a Novel Engineered Therapeutic Agent to Reverse Lupus Symptoms" **Mountain Lion Research Day** (Colorado Springs, CO) December 2019
- 32. *Wheeler, M., Kovacs, J.M.; "Towards Understanding the EBV gp350 Complement Receptor 2 Interaction" **Mountain Lion Research Day** (Colorado Springs, CO) December 2019
- 31. Herring, W., Kovacs, J.M.; "Establishing the HIV Reservoir: the Role of Complement" **Mountain Lion Research Day** (Colorado Springs, CO) December 2019
- 30. *Fox, M., Kovacs, J.M.; "Enzymatic Bioremediation of Perfluorinated Compounds" **Mountain Lion**Research Day (Colorado Springs, CO) December 2019
- 29. *Stein, C., *Schafstall, A., Kovacs, J.M.; "Binding Analysis of Factor H Related Proteins with C3d" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2019
- 28. *Wheeler, M., Kovacs, J.M.; "Towards Understanding the EBV gp350 Complement Receptor 2 Interaction" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2019
- 27. *Vigil, B., Kovacs, J.M.; "Characterizing a Novel Engineered Therapeutic Agent to Reverse Lupus Symptoms" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2019
- 26. *Wheeler, M., Kovacs, J.M.; "Understanding the Molecular Determinants for Epstein-Barr Virus Interaction." Mountain Lion Research Day (Colorado Springs, CO) November 2018
- 25. *Weidner, B., Kovacs, J.M.; "Complement Components Required for the Establishment of a Latent HIV-1 Reservoir" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2018

- 24. *Russell, N., Kovacs, J.M.; "Understanding the Molecular Interactions of a Complement Directed Lupus Therapeutic" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2018
- 23. *Lac, L., Kovacs, J.M.; "Using in Silico Methods to Develop a Therapeutic for Systemic Lupus Erythematosus via Targeting the Complement System" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2018
- 22. *Colwell, M., Kovacs, J.M.; "Antibody Fragment as Lupus Therapeutic" Colorado Springs Undergraduate Research Forum (Colorado Springs, CO) April 2018
- 21. Bricault, C.A., J.M. Kovacs, A. Badamchi-Zadeh, K. McKee, J.P. Nkolola, B. Chen, K.E. Stephenson, N. Doria-Rose, J.R. Mascola, M.S. Seaman, D.H. Barouch. *Neutralizing Antibody Responses following Long-Term Vaccination with HIV-1 Env gp140 in Guinea Pigs.* **Progress and Pathways Towards an Effective HIV Vaccine** (Banff, Canada) January 2018
- 20. *Russell, N., *Muir, A., and Kovacs, J.M.; "Understanding the Molecular Interactions of a Potential Complement Directed Therapeutic" Mountain Lion Research Day (Colorado Springs, CO) December 2017
- 19. Williams, B., *Hall, S., *Dorwart, L., and Kovacs, J.M.; "The Role of Complement in the Establishment of a Latent HIV-1 Reservoir" Mountain Lion Research Day (Colorado Springs, CO) December 2017
- 18. Bricault, C.A., K. Yusim, K. Wagh, J.M. Kovacs, J.P. Nkolola, J.L. Shields, C.L. Lavine, M. Bayne, M.S. Seaman, B. Chen, B.T. Korber, D.H. Barouch. *Variable Loop 3 Epitope Optimization of HIV-1 Trimeric Envelope Immunogen Affects the Magnitude of Neutralization Antibodies Elicited by Vaccination*. **Keystone HIV Vaccines (x5)** (Banff, Canada) March 2015
- 17. Kovacs J.M., Chen B.; *The Stable Uncleaved HIV-1 Envelope Glycoprotein gp140 Forms a Tightly Folded Trimer with a Native-like Structure.* **CHAVI-ID Annual Meeting** (Durham, NC) June 2014
- 16. Bricault, C.A., J.P. Nkolola, J.M. Kovacs, J.L. Shields, J. Perry, A. Cheung, M.S. Seaman, B. Chen, D.H. Barouch. *A Multivalent Mixture of Clade C HIV-1 Env Trimers Elicits a Greater Magnitude of Neutralizing Antibodies than Individual Trimer Components*. **AIDS Vaccine Conference** (Barcelona, Spain) October 2013.
- 15. Nkolola J.P., Kovacs J.M., Korber B., Chen B., Seaman M., Barouch D.; *Stability and Neutralization Capacity of a Novel Mosaic HIV-1 gp140 Trimer in a Guinea Pig Model.* **AIDS Vaccine 2012** (Boston, MA) September 2012
- 14. Kovacs J.M., Nkolola J., Barouch D.H., Chen B.; *HIV-1 Envelope Trimer Elicits Higher Neutralizing Antibody Responses Than Monomeric gp120* **AIDS Vaccine 2012** (Boston, MA) September 2012

- 13. Kovacs J.M., Nkolola J., Barouch D.H., Chen B.; HIV-1 envelope trimer elicits better neutralizing antibody responses than monomeric gp120; **Keystone Symposia- Cell Biology of Virus Entry/HIV Pathogenesis**, Whistler, British Columbia, March 2012
- 12. Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Defining Ligand Binding Regions of Complement Receptor 2 and Novel Inhibitors of Said Interactions; **23**rd **International Complement Workshop**, New York City, New York, July 2010
- 11. Shaw C.D., Storek M.J., Young K.A., Kovacs J.M., Thurman J.M., Holers V.M., Hannan J.P.; Delineation of the Complement Receptor Type 2-C3d Complex by Site-Directed Mutagenesis and Molecular Docking; 23rd International Complement Workshop, New York City, New York, July 2010
- Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Exploring Complement Receptor 2 (CD21, CR2) Ligand interactions using NMR and ITC; University of Colorado Denver School of Medicine Student Research Symposium, August 2009
- 9. Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Complement Receptor 2 (CD21, CR2) Ligand Interactions; 21st International Congress of Biochemistry and Molecular Biology, Shanghai, July 2009
- 8. Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Use of NMR to Define CR2:C3d Interactions in Solution Reveals Dual SCR1-2 Interface with C3d: Confirmation Using a Novel Ligand-Selective Inhibitory Peptide; University of Colorado Denver Research and Creative Activities Symposium, June 2009
- 7. Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Exploring Complement Receptor 2 (CD21, CR2) Ligand interactions using NMR and ITC; University of Colorado Denver School of Medicine Student Research Symposium, June 2009
- Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Use of NMR to Define CR2:C3d Interactions in Solution Reveals Dual SCR1-2 Interface with C3d: Confirmation Using a Novel Ligand-Selective Inhibitory Peptide; University of Colorado Denver School of Medicine Student Research Symposium, August 2008
- Kovacs J.M., Hannan J.P., Eisenmesser E.Z., Holers V.M.; Use of NMR to Define CR2:C3d Interactions in Solution Reveals Dual SCR1-2 Interface with C3d: Confirmation Using a Novel Ligand-Selective Inhibitory Peptide; 22nd International Complement Workshop Basel Switzerland, July 2008
- 4. Kovacs J.M., Hannan J.P., Holers V.M.; Mapping CR2-ligand interactions using NMR and inhibitory peptides; **American Association of Immunologists San Diego**, CA June 2008
- 3. Kovacs J.M., Hannan J.P., Holers V.M.; Mapping CR2-ligand interactions using NMR and inhibitory peptides; **University of Colorado Health Sciences Center Student Research Symposium**, August 2007

- 2. Kovacs J.M., Hannan J.P., Holers V.M.; Mapping CR2-ligand interactions using NMR and inhibitory peptides; National Science Foundation/NATO Biophysics Poster Session, Erice, Sicily, July 2007
- Kovacs J.M., Mant C.T., Hodges R.S.; Determination of Intrinsic Hydrophilicity/Hydrophobicity
 Coefficients of Amino Acid Side-Chains using Synthetic Model Peptides; 19th American Peptide Society
 San Diego, CA, July 2005

10. GRANTS AND SCHOLARSHIP

FUNDED GRANTS (*teaching and †service related grants)							
	<u>Date</u>	<u>Role</u>	<u>Agency</u>	<u>Amount</u>	Result		
17.	04/22/25	Advisor	UCCS, URA	\$4,000	Awarded		
	Title: Developing Specific Peptide Inhibitors of the Complement Receptor 2 – Epstein Barr Virus gp350 Interaction: Targeting Epstein Barr Virus gp350						
16.	04/22/25	Advisor	UCCS, URA	\$4,000	Awarded		
	Title: Developing Specific Peptide Inhibitors of the Complement Receptor 2 – Epstein Barr Virus gp350 Interaction: Targeting Complement Receptor 2						
15.	04/15/24	Advisor	UCCS, URA	\$4,000	Awarded		
	Title: Under	standing HIV-1 C	Complement Interactions	•			
14.	04/15/24	Advisor	UCCS, URA	\$4,000	Awarded -		
	Title: Investi	gating HIV-1 Cor	mplement Interactions u	sing Docking Sof	tware		
13.	04/15/23	Advisor	UCCS, URA	\$4,000	Awarded		
	Title: Engine	Title: Engineered Antibody Against Lupus					
12.	04/20/22	PI	UCCS, CRCW	\$7,500	Awarded		
	• •		•		f a Latent HIV-1 Reservoir		
44	04/45/22	A d to a	LICCS LIDA	†3 500	A		
11.	04/15/22 Title: Under	Advisor	UCCS, URA nune System – Epstein B	\$3,500 Sarr Virus Interac	Awarded		
	Title: Officer	standing the im	nane system - Epstem B	arr virus irrecrue			
10.	03/10/21	Co-PI	NSF	\$250,000	Awarded		
	Title: Micro-	Fitle: Micro-Raman NSF MRI					
•	0.4.10.6.10.0		11000 1104	42.500			
9.		Advisor	UCCS, URA	\$3,500 omnounds	Awarded		
	Title: Enzymatic Bioremediation of Per-fluorinated Compounds						
8.	04/12/19	Advisor	UCCS, URA	\$3,500	Awarded		
	Title: Engineered Antibody Against Lupus						

7. 04/16/18 PI UCCS, LAS Dean \$125,000 Awarded
 Title: Environmental PFC Impact Collaboration (EPIC) in the Fountain Creek Watershed: Determining the Environmental, Ecological, and Societal Impact of PFCs

 6. 05/11/18 Advisor UCCS, LAS Dean \$1,200 Awarded

Title: Using *in silico* Methods to Develop a Therapeutic for Systemic Lupus Erythematosus via Targeting the Complement System

5. 04/06/18 Advisor UCCS, URA \$3,500 Awarded Title: Single Chain Variable Antibody Fragment as Lupus Therapeutic

4. 04/06/18 Advisor UCCS, URA \$3,500 Awarded
Title: Understanding the Molecular Determinants Required for Epstein-Barr Virus Attachment

3. 03/05/18 PI UCCS, CRCW \$7,436 Awarded
Title: Two-Pronged approach to Understanding the Molecular Details of Epstein-Barr Virus Infection

2. 11/21/17 Advisor UCCS, LAS Dean \$4,000 Awarded
Title: Novel Therapeutic Lupus Antibody: Identifying Molecular Determinants using Peptide Inhibitors and Crystallography

1. 07/01/08 PI AHA \$48,000 Awarded Title: Defining CD21-ligand interactions using ligand specific peptides

SUBMITTED GRANTS (*teaching and †service related grants)

<u>Date</u> <u>Role</u> <u>Agency</u> <u>Amount</u> <u>Result</u>
 11. 11/15/23 PI UCCS, LAS Dean \$10,000 Rejected Title: Investigating the molecular determinants required for the establishment and maintenance of the infectious HIV intracellular reservoir.

10. 02/21/22 PI Boettcher Foundation \$325,000 Rejected Title: Development of Complement – Epstein Barr Virus Directed Therapeutics

9. 02/28/21 PI Boettcher Foundation \$325,000 Rejected
Title: Understanding the Role of the Immune System in the Establishment of an HIV Reservoir

8. 10/22/20 PI NIH \$325,000 Rejected
Title: Complement System: Role in EBV infection and Immune Response

7. 02/28/20 PI Boettcher Foundation \$325,000 Rejected
Title: Understanding the Role of the Immune System in the Establishment of an HIV Reservoir

- 6. 02/28/19 PI Boettcher Foundation \$325,000 Rejected
 Title: Understanding the Role of the Immune System in the Establishment of an HIV Reservoir
- 05/01/18 Contributor NSF, Growing Convergence Prospectus Rejected
 Title: Environmental PFC Impact Collaboration (EPIC) in the Fountain Creek Watershed: Determining the Environmental, Ecological, and Societal Impact of PFCs (Prospectus)
- 4. 04/16/18 PI UCCS, LAS Dean \$125,000 Rejected Title: Biomedical Initiative for RNA and Disease
- 04/09/18 PI UCCS, FRC \$14,000 Rejected
 Title: Development of Lupus Therapeutic and immune Disease Imaging Agent from Anti-C3d Monoclonal Antibody
- 2. 02/28/18 PI Boettcher Foundation \$325,000 Rejected
 Title: Understanding the Role of the Immune System in the Establishment of an HIV Reservoir
- 1. 11/21/17 Advisor UCCS, LAS Dean \$4,000 Rejected
 Title: Novel Therapeutic Lupus Antibody: Understanding the Interaction with C3d, in vitro and in silico Approaches

INDICATORS OF SCHOLARSHIP

Quantitative Measures of Impact of Published Research

Note: This analysis assumes that impact of research products reported in peer-reviewed journals can be quantized through an analysis of others' citations of those products. While no attempt at the quantization of scientific impact is flawless, the method employed here is the commonly accepted form to quantify impact within the research field of the analyzed scientist. Three different metrics have been included to represent broad methodology of collecting 'impact' data.

Research publications search tool "Scopus" was used to conduct this analysis on 09/24/25.

H Index: 16

Total Number of Citations: 1,100

Kovacs, James

<u>University of Colorado at Colorado Springs</u>, Colorado Springs, United States • Scopus ID: 13205061800 •

0000-0002-4755-8517

Show all information

1,100 21 16
Citations by 958 documents Documents h-index

Research Interest Score: An additional metric of the impact of a researcher from Research Gate (researchgate.net). Accessed 09/24/25



James Kovacs

PhD · Professor (Assistant) at University of Colorado Colorado Springs

Colorado Springs, United States

656.8 Research Interest Score 1,352 Citations 18 h-index

Google Scholar: An additional metric of impact of research from Google Scholar (scholar.google.com). Accessed 09/24/25





Cited by	
All	Since 2020
1638	703
17	12
20	12
	1638 17

11. COURSES TAUGHT

CHEM 2201 – Introduction to Biochemical Principles	SP20 – SP23
CHEM 4201 – Current Perspectives in Science and Medicine	SP18
CHEM 4232/5232 – Advanced Techniques in Biochemistry Laboratory	FA17 – FA23
CHEM 4251/5251 – Membrane Structure and Function	SP18 – SP19
CHEM 4231/5231 – Biochemistry II	SP23 – present
CHEM 4701/5701 – Biophysical Chemistry	FA18 – present
CHEM 4721/5721 – Biochemistry of Drugs	FA17 – present
CHEM 4741/5741 – Protein Structure & Dynamics (Biophysical Applications)	SP19, SP24 – present
CHEM 4921/5921 – Biochemistry Capstone	FA17 – present
CHEM 6020 – Journal Club	SP22

12. RECOGNITIONS

MLRD Top Scholar Mentor – Award	2024
CHAVI-ID Young Investigator Award	2014
AIDS Vaccine Scholarship, AIDS Vaccine 2012, Boston, MA	2012
International Complement Society – NIH Outstanding Student Research Award	2010
University of Colorado Denver Chancellor's Award of Excellence in Grad Research	2009
University of Colorado Health Sciences Graduate School Poster Award	2009
Pre-doctoral Fellowship (individual competitive award), American Heart Assoc.	2008
University of Colorado Health Sciences Graduate School Poster Award	2008
International Complement Society Student Travel Award	2008
NSF Award to attend NSF/NATO Summer Course on Biophysics, Erice, Sicily	2007

13. PROFESSIONAL ORGANIZATIONS

<u>Organization</u>	<u>Membership</u>	
International Complement Society	2007 – present	
The American Association of Immunologists	2008 – present	
American Chemical Society	2018 – present	

14. SERVICE

COMMITTEE MEMBER	
Hiring Committee: Pre-Health Advisor University of Colorado, Colorado Springs. Colorado Springs, CO	Spring 2025
Hiring Committee: Biochemistry Instructor University of Colorado, Colorado Springs. Colorado Springs, CO	Spring 2022, 2023
Awards Committee: UCCS Representative Rocky Mountain Athletic Conference, NCAA Division II	2024 – present
Intercollegiate Athletics Advisory Committee: UCCS Athletics Department University of Colorado, Colorado Springs. Colorado Springs, CO	2022 – present
Faculty Athletic Representative: UCCS Athletics Department University of Colorado, Colorado Springs. Colorado Springs, CO	2022 – present
Chair: Biosafety Internal Review Board University of Colorado, Colorado Springs. Colorado Springs, CO	2022 – present
CDAM Committee - Chemistry & Biochemistry Department University of Colorado, Colorado Springs. Colorado Springs, CO	2020 – present
LAS Representative: Admissions Committee University of Colorado, Colorado Springs. Colorado Springs, CO	2020 – present
EDI Committee Co-chair: Dept. of Chemistry & Biochemistry University of Colorado, Colorado Springs. Colorado Springs, CO	2019 – 2020
Hiring Committee: Pre-Health Advisor University of Colorado, Colorado Springs. Colorado Springs, CO	Fall 2020
Hiring Committee: Pre-Health Advisor University of Colorado, Colorado Springs. Colorado Springs, CO	Fall 2019
Hiring Committee Co-chair: Tenure Track Faculty, Dept. of Chem & Biochem University of Colorado, Colorado Springs. Colorado Springs, CO	Fall 2018
Chemistry Representative: Biosafety Internal Review Board University of Colorado, Colorado Springs. Colorado Springs, CO	2018 – 2021
Hiring Committee: Tenure Track Faculty, Dept. of Chemistry & Biochemistry University of Colorado, Colorado Springs. Colorado Springs, CO	Fall 2017
EVENT ORGANIZER	
"Chemistry of Taste" Outreach Event, 150 5 th grade students, Co-organized University of Colorado, Colorado Springs. Colorado Springs, CO	2017 – 2019 2023 – present
EVENT PARTICIPANT	
Represented Chemistry & Biochemistry Dept. at Advising Boot Camp University of Colorado, Colorado Springs. Colorado Springs, CO	2025 – present

Guest Speaker, CHEM 6010 Research Methods University of Colorado, Colorado Springs. Colorado Springs, CO	2021 – present
Represented Chemistry & Biochemistry Dept. at New Student Orientation University of Colorado, Colorado Springs. Colorado Springs, CO	2019 – present
Pikes Peak Regional Science Fair, Judge & Special Award Judge University of Colorado, Colorado Springs. Colorado Springs, CO	2018 – present
Represented Chemistry & Biochemistry Dept. at Majors/Minors Fair University of Colorado, Colorado Springs. Colorado Springs, CO	2017 – present
Guest Speaker (invited), Science Speakers Lecture Series Goshen College, Goshen, IN	Spring 2024
Guest Speaker, CHEM 430 Biochemistry Goshen College, Goshen, IN	Spring 2024
Guest Speaker, Biochemistry II Colorado College, Colorado Springs, CO	2019 – 2020
External Examiner, Honors Program, Biochemistry Major Swarthmore College, Swarthmore, PA	Spring 2018
Guest Speaker Science on Tap, Cool Science. Colorado Springs, CO	2018
Represented Chemistry & Biochemistry Dept. at Pre-Health Open House University of Colorado, Colorado Springs. Colorado Springs, CO	2017