David J. Klinke II

Professor of Chemical and Biomedical Engineering

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EMPLOYMENT & AFFILIATIONS

2020 – Present	Professor in Chemical and Biomedical Engineering
2012 – 2020	Associate Professor in Chemical and Biomedical Engineering
2006 – 2012	Assistant Professor in Chemical Engineering
	West Virginia University, Morgantown, WV
2014 – Present	Adjunct Associate Professor in Microbiology, Immunology & Cell Biology
2010 – Present	Member, WVU Cancer Institute
2006 – 2014	Adjunct Assistant Professor in Microbiology, Immunology & Cell Biology
2006 – 2009	Member, Center for Immunopathology & Microbial Pathogenesis
	West Virginia University School of Medicine, Morgantown, WV
2002 – 2005	Engineer II – Metabolic and Immunologic Diseases, In Silico R&D
	Entelos, Inc., Foster City, CA
1999 – 2002	Engineer – Immunologic Diseases, In Silico R&D
	Entelos, Inc., Foster City, CA
1996 – 1997	Ph.D. Intern
	Exxon Research and Engineering Company, Annandale, NJ

EDUCATION

Post-doctoral Associate, Chemical Engineering, Sandia National Laboratory, 1999
Combustion Research Laboratory, Mentor: M. Allendorf

Ph.D. Chemical Engineering, Northwestern University, June 1998
Thesis Title: Computational Developments in Heterogeneously Catalyzed Reaction Modeling: Mechanistic Elucidation of Fischer-Tropsch Synthesis. Advisor: L. J. Broadbelt

M.S. Chemical Engineering, Northwestern University, June 1995
Thesis Title: The Effect of Zirconia Loading on Alumina-Supported Catalysts for the Lean Reduction of NO by Propene. Advisor: H. Kung

B.S. Chemical Engineering, Virginia Tech, 1992
Summa Cum Laude, Commonwealth Scholar

HONORS & AWARDS

West Virginia University

Finalist in Biological and Health Science Category, Distinction in Graduate Mentoring Award, West Virginia University (May 2022)

2019 Richard Perham Award from editors of the Journal for the Federation of European Biochemical Societies (FEBS Journal) (April 2019)

Award for Excellence in Innovation, Mary Babb Randolph Cancer Center, West Virginia University School of Medicine (June 2017)

Elected as Eminent Engineer for Tau Beta Pi, West Virginia Alpha Chapter (April 2017)
Excellence in Research Award, Statler College of Engineering and Mineral Resources, West Virginia University (April 2017)
Award for Excellence in Innovation, Mary Babb Randolph Cancer Center, West Virginia University School of Medicine (June 2015)
Visiting Scholar in Quantitative Immunology at the Kavli Institute of Theoretical Physics, University of California at Santa Barbara (Nov 2012 - Dec 2012)
Undergraduate Faculty Travel Award, American Association of Immunologists (2012)
National Science Foundation CAREER Award (2011–2015)
Junior Faculty Travel Award *Vaccine Production: Potential Engineering Approaches to a Pandemic*, Sponsored by the National Academy of Engineering & The Institute of Medicine (2006)

Northwestern University

National Defense Science and Engineering Graduate Fellowship - Honorable Mention (1993)
Northwestern University Alumni Fellowship (1992)
Walter P. Murphy Fellowship (1992)

Virginia Tech

National Science Foundation Graduate Fellowship - Honorable Mention (1992)
DuPont PhD Fellowship (declined) (1992)
Gilbert and Lucille Seay Scholarship Award (1991)
Allied-Signal Scholarship Award (1991)
AIChE Scholarship Award (1991)

PROFESSIONAL MEMBERSHIPS

Society for Immunotherapy of Cancer, 2014 – Present

American Association of Immunologists, 2011 – Present

American Chemical Society, 2009 – Present

American Society for Engineering Education, 2006 – Present

American Institute of Chemical Engineers, 1992 – Present

Biomedical Engineering Society, 2006 – Present

PROJECT FUNDING

Current

- NIH T32GM133369-01, "Cell and Molecular Biology Training Program at West Virginia University," 07/01/19-6/30/24 Role: Co-investigator. $1,286,856.

Pending

- NIH R01CAXXXXXX, "Targeting Cell Communication Network factor 4 to enhance CD8 T cell-mediated anti-tumor immunity," 07/01/22-06/30/27 Role: PI. Impact Score: pending. $1,900,000.

Funding History

- NIH R01CA193473-01A1, "Integrated systems approach to identify local oncogenic modulation of the IL12 axis," 04/01/16-3/31/22 Role: PI. $1,740,960.
- WV-INBRE PUI Grant, "Effects of Therapies Involving an Anti-Nodal Antibody in

Metastatic Melanoma by Modeling & Simulation," 08/01/17-07/31/19 Role: Mentor, (Grant to Shepherd University, PI: Wang) $288,000.

- NSF 1644932, "EAGER: Biomanufacturing: Selecting an appropriate conceptual model for the phenotypic evolution of cytotoxic T lymphocytes," 09/01/16-08/31/19 Role: PI, $300,000.
- WV-INBRE PUI Grant, "Modeling & Stability Analysis of Mixed Immuno-chemotherapy of Tumors by Impulsive Control," 09/01/14-04/31/17 Role: Mentor, (Grant to Shepherd University, PI: Wang) $431,762.
- NSF 1053490, "CAREER: Interrogating Antagonistic Mechanisms of Signaling Cross-talk in Natural Killer Cells," 01/15/11-12/31/15 Role: PI, $539,479.
- WVU Research Corporation PSCoR, "Noncanonical signaling and Emergent Trastuzumab Resistance in Breast Cancer,," 01/01/14-12/31/14 Role: PI, $25,000.
- NIH R15CA132124-02, "Non-canonical signaling and Emergent Trastuzumab Resistance in Breast Cancer," 03/01/09-12/31/14 Role: PI, $660,260.
- WV-INBRE PUI Grant, "Modeling & Stability Analysis of Mixed Immuno-chemotherapy of Tumors by Impulsive Control," 05/01/12-04/31/14 Role: Mentor, (Grant to Shepherd University, PI: Wang) $223,928.
- WVU Research Corporation PSCoR, "Nature-inspired Design: Exosomes as Nature's Nanocarriers for Non-coding RNA," 01/01/13-12/31/13 Role: PI, $25,000.
- WVU Research Corporation PSCoR, "Validating Noncanonical signaling in breast cancer," 01/01/11-12/31/11 Role: PI, $29,920.
- NIH R56AI076221, "Dendritic Cell Heterogeneity in TLR4 Signaling: Concept Validation," 09/16/09-08/31/11 Role: PI, $219,750.
- NIH R15CA132124-S3, "Cell Heterogeneity and Emergent Trastuzumab Resistance in Breast Cancer: Concept Validation," 05/01/09-02/28/12 Role: PI (diversity supplement to support a student from an under-represented group), $51,890.
- NIH R15CA132124-S2, "Cell Heterogeneity and Emergent Trastuzumab Resistance in Breast Cancer: Concept Validation," 06/01/09-09/30/10 Role: PI (supplement to support undergraduate research experience), $39,496.
- PhRMA Foundation, "Interrogating Proteomic Profiles of Breast Cancer Using Reaction Pathway Analysis," 01/01/08-06/30/10 Role: PI (1 of 3 awards in Informatics annually), $60,000.
- NASA WV Space Grant Consortium, "Validating a Scaling Factor for radiation-induced DNA damage and repair," 05/16/09-05/15/10 Role: Mentor (grant directly to student), $12,000.
- WVU Research Corporation Start-Up Package, "Bioengineering Applications in Immunology and Cell Signaling," 01/01/06-12/31/08 Role: PI $208,200 (Allocated into Summer Salary $31,200; Graduate Research Assistant support $90,000; and Equipment, Supplies, Travel, Renovations $87,000) .

Summary (excluding start-up)

- Total Funding: $4,359,445 (External: $4,267,525; Internal $91,920)
- Funding as PI: $3,703,755 (External: $3,611,835; Internal $91,920)

TEACHING EXPERIENCE

Course Instructor [West Virginia University]

BIOL 236: Human Physiology: Quantitative Laboratory

Developed new lab course in conjunction with the Certificate Program in Biomedical

Engineering. Spring 2009 (12 students); Spring 2010 (24 students); Spring 2011 (24 students); Spring 2012 (14 students); Spring 2013 (18 students); Spring 2014 (16 students); Spring 2015 (33 students); Spring 2016 (33 students);

BMEG 601: Numerical and Statistical Methods for Biomedical Engineering
Fall 2021 (10 students); Fall 2022 (18 students);

BMS 777: Foundations for Contemporary Biomedical Research II
Responsible for 1 contact hours that cover professional development topics related to working in teams. Fall 2019 (29 students);

CCB 700: Special Topics in Cancer Cell Biology
Responsible for 3 contact hours that discuss the role of exosomes in intercellular communication. Fall 2016 (2 students); Fall 2017 (2 students); Fall 2018 (3 students); Fall 2019 (4 students);

CCB 701: Oncogenes and Signaling Networks
Responsible for 3 contact hours that cover computational methods used to infer how cancer cells make decisions. Fall 2011 (10 students);

CCB 730: Introduction to Cancer Cell Biology
Responsible for 3 contact hours that cover cancer immunology. Spring 2019 (9 students); Spring 2020 (9 students); Spring 2021 (9 students); Spring 2022 (9 students);

CHE 201: ChE Mass Balances
Fall 2015 (40 students); Fall 2016 (35 students);

CHE 315: ChE Transport Analysis
Spring 2011 (43 students); Spring 2012 (45 students);

CHE 325: Chemical Reaction Engineering
Spring 2006 (16 students); Spring 2007 (22 students); Spring 2009 (11 students); Spring 2010 (33 students); Spring 2016 (57 students); Spring 2018 (67 students); Spring 2019 (73 students); Spring 2020 (45 students); Spring 2021 (35 students)

CHE 381: Introduction to Biomedical Engineering
Developed new course as gateway course to the Certificate Program in Biomedical Engineering. Spring 2008 (8 students); Fall 2008 (6 students); Fall 2009 (16 students); Fall 2010 (17 students); Fall 2011 (23 students); Fall 2012 (9 students);

CHE 382: Introduction to Tissue Engineering
Spring 2013 (11 students);

CHE 450/CHE 451: Unit Operations Laboratory
Fall 2013 (20 students); Spring 2015 (22 students);

CHE 531: Mathematical Methods in Chemical Engineering
Fall 2013 (13 students);

CHE 593: Applications of Inverse Problem Theory
Fall 2014 (2 students);

CHE 796: Chemical Engineering Graduate Seminar
Fall 2006 (28 students); Spring 2007 (28 students); Fall 2021 (63 students);

MICB 785: Microbiology/Immunology Graduate Journal Club
Fall 2020 (14 students); Spring 2021 (14 students); Fall 2021 (18 students); Spring 2022 (18 students); Fall 2022 (10 students);

Guest Lecturer

Introduction to Physiological Modeling (BEH 103) – M.I.T., Cambridge, MA
December 2001 (50 students);

Research Experience Seminar (HONOR 494K) – WVU

Summer 2006 (30 students);

Teaching Assistant [Northwestern University]

CHE 211: Thermodynamics
CHE 341: Process Dynamics and Control
CHE 342: Chemical Engineering Laboratory
CHE 408: Chemical Engineering Kinetics and Reactor Design

MENTORING EXPERIENCE

Junior Faculty

- Qing Wang, Sept 2011 – Dec 2021. Mentor as part of WV-INBRE program. In 2011, Dr. Wang was an Assistant Professor and now she is at the rank of Full Professor; Dept of Computer Science, Mathematics, and Engineering; Shepherd University.

Post-doctoral Fellows

- Yogesh M. Kulkarni, "Proteomic Profiling of Breast Cancer Models Resistant to Molecularly Targeted Therapies", Aug 2008 – Aug 2011. Current: Assistant Professor, College of Pharmacy, Hampton University.
- Wentao Deng, "In vivo validation of Wnt-inducible signaling protein-1 as inducer of epithelial-mesenchymal transition", Sept 2014 – Dec 2020.
- Audry Fernandez Gomez, "Identifying mechanistic basis for Wnt-inducible signaling protein-1 as a suppressor of anti-tumor immunity", February 2017 – August 2019.
- Atefeh Razazan, "Identifying mechanistic basis for Wnt-inducible signaling protein-1 as a suppressor of anti-tumor immunity", July 2020 – March 2022.

Graduate Students

- Stacey Finley, Northwestern University, "Modeling IL-12 Signal Transduction and Receptor Trafficking", (joint with L. Broadbelt) Fall 2007 – June 2009. Ph.D. CHE *06/2009*. Current: Associate Professor, Dept of Biomed Eng, University of Southern California.
- Ning Cheng, "Identifying signaling cross-talk between cancer and immune cell: a study of IL-12 signaling in 2D6 cells", M.S. CHE, *5/2010*. Current: Ph.D. student, Auburn University.
- Santhoshi Dixit, "Determination of equilibrium binding constants for LPS interaction with TLR4", M.S. CHE, *7/2010*. Current: Industry.
- Huanling Liu, "Mathematical modeling in understanding NFκB signaling pathway", M.S. CHE, *12/2010*. Current: Cummins Corporation.
- Vivian Suarez, "Developing a cellular assay for screening inhibitors of STAT4 phosphorylation", M.S. CHE, *12/2010*. Current: Research Technician, Dept of Biology, West Virginia University.
- Jacob Kaiser, "Using Bayesian networks to identify control topology between cancer processes and immune responses via metagene constructs", M.S. Microbiology, Immunology and Cell Biology, *08/2014*. Current: Graduate student Statistics, West Virginia University.
- Yueting Wu, "Developing a phenotypic assay for tumor-mediated immunosuppression", Ph.D. CHE, *12/2015*. Current: Associate Professor, Lanzhou University, China.
- Christina Byrne-Hoffman, "Modulating Interleukin-12 signaling as a mechanism for microevolutionary control in melanoma", Ph.D. Basic Pharmaceutical Sciences, *05/2018*.
- Anika Coolbaugh Pikley, "", Ph.D. CHE, *05/2024*.
- Alanna Gould, "", Ph.D. CCB, *05/2025*.

- Habibolla Latifizadeh, "", Ph.D. Math, *05/2024*.
- Danielle Norman, "", M.S. BME, *05/2022*.

Honors B. S. Graduates

- Tirzah Mills, B.S. CHE (Honors Thesis), 5/2007. Current: Ph.D. graduate from University of Colorado, Boulder.
- Robin Glebes, B.S. CHE (Honors Thesis), 5/2007. Current: U.S. Army
- Bradley May, B.S. CHE (Honors Thesis), 5/2009. Current: Industry.
- Joseph Widmeyer, B.S. CHE (Honors Thesis), 5/2010. Current: Ph.D. student Biomedical Sciences West Virginia University.
- Jennifer M. Knipe, B.S. CHE (Honors Thesis), 5/2010. Current: Ph.D. graduate from University of Texas, Austin.
- Jason Ware, B.S. CHE (Honors Thesis), 5/2012. Current: Process Engineer, DuPont
- Thomas Athey, B.S. CHE (Honors Thesis), 5/2012. Current: Industry.
- Shannon Gribbons, B.S. CHE (Honors Thesis), 5/2012. Current: Industry.
- Tyler Browning, B.S. CHE (Honors Thesis), 5/2013. Current: Industry.
- Nicholas Horvath, B.S. CHE (Honors Thesis), 5/2014. Current: Ph.D. student Cornell University

Undergraduate Research Students

- Thomas Hardy, WVU, Summer 2006 – Spring 2007.
- Zack Schwertfeger, WVU, Summer 2006 – May 2008.
- Lucas Ellis, Cal Poly San Luis Obispo, Summer 2007.
- Deepti Gupta, Northwestern University, Summer 2007 – June 2008. Co-author on one paper.
- Jennifer Knipe, WVU, Spring 2007 – Spring 2010.
- Joseph Widmeyer, WVU, Summer 2008.
- Kristen Kief, WVU, Summer 2009.
- Joseph Widmeyer, WVU, Summer 2009.
- Sarah Lazur, WVU, Summer 2010.
- Jason Ware, WVU, Summer 2010. Co-author on one paper.
- Shannon Gribbons, WVU, Summer 2011.
- Nathan Mickinac, WVU, Summer 2011.
- Molly Callaghan, WVU, Summer 2012.
- Nicholas Horvath, WVU, Summer 2012 - Summer 2014. Co-author on one paper.
- Alex Abrahamian, WVU, Summer 2014.
- Melissa Hernandez, WVU, Summer 2014.
- Vanessa Cuppett, WVU, Summer 2014- Summer 2015. Co-author on one paper.
- Cassidy Bland, WVU, Summer 2015-Spring 2018. Co-author on two papers.
- Jonathan Hardy, Shepherd Univ, Summer 2015.
- Lindsey Bent, Shepherd Univ, Summer 2015.
- Adam Palmer, WVU, Summer 2016 - Summer 2017.
- Jennifer Korcsmaros, Shepherd Univ, Summer 2016.
- Jessica Amberman, Shepherd Univ, Summer 2016.
- Paraag Gupta, WVU, Spring 2017 - Spring 2019. Co-author on one paper.
- Benjamin Lanham, Shepherd Univ, Summer 2017.
- Taylor Fama, WVU, Fall 2017 - Spring 2019.
- Taylor Stump, WVU, Summer 2018.
- Meredith Montgomery, WVU, Summer 2018 - Spring 2019.

- Danielle Norman, WVU, Summer 2018 - Fall 2019.
- Cody Lemley, WVU, Fall 2018 - Fall 2019.
- Catherine VanMeter, WVU, Fall 2018 - Spring 2020.
- Alyssa Brashear, WVU, Fall 2018 - Spring 2020.
- Sarah Jenness, WVU, Fall 2018 - Spring 2020.
- Mena Mansy, WVU, Spring 2019 - Spring 2020.
- Thomas Ogershok, WVU, Summer 2019 - Spring 2020.
- Faith Myers, WVU, Fall 2019 - Spring 2020.
- Megan Denning, WVU, Fall 2019 - Spring 2020.

Student Honors and Awards

- Zack Schwertfeger received a Summer Undergraduate Research Experience (SURE) fellowship for summer 2006.
- Tirzah Mills received NSF Graduate Student Research Fellowship 2007.
- Zack Schwertfeger won third place at 2007 AIChE Mid-Atlantic Regional Conference, Bucknell University, PA, April 2007, for "Modeling the Onset of Type 1 Diabetes Mellitus".
- Zack Schwertfeger won second place at Science, Technology and Research Symposium, Morgantown, WV, September 2007, for "Modeling the Onset of Type 1 Diabetes Mellitus".
- Jennifer M. Knipe won honorable mention at Science, Technology and Research Symposium, Morgantown, WV, September 2007, for "Identifying the Differentiation Program in Dendritic Cells".
- Jennifer M. Knipe won first place in Food, Pharmaceutical and Biotechnology Division at American Institute of Chemical Engineers National Meeting, Undergraduate Poster Competition, Salt Lake City, UT, November 2007, for "Identifying the Differentiation Program in Dendritic Cells".
- Joseph Widmeyer received a Summer Undergraduate Research Experience (SURE) fellowship for summer 2008.
- Jennifer M. Knipe awarded a NASA Space Grant Scholarship for the academic year 2008-09.
- Jennifer M. Knipe won first place in Food, Pharmaceutical and Biotechnology Division at American Institute of Chemical Engineers National Meeting, Undergraduate Poster Competition, Philadelphia, PA, November 2008, for "Principal Component Analysis of the Differentiation of Dendritic Cells".
- Yogesh Kulkarni won first place in the Post-Doctoral Fellow Category at the Van Liere Research Day Poster Competition, Morgantown, WV, April 2010, for "Proteomics of Breast Cancer for Signal Pathway Profiling and Target Discovery".
- Jennifer M. Knipe received NSF Graduate Student Research Fellowship 2010.
- Jason Ware won second place at 2011 AIChE Mid-Atlantic Regional Conference, Penn State University, PA, April 2011, for "Identifying biochemical cues secreted by malignant melanocytes that promote escape from immunoediting".
- Alex Abrahamian received a Summer Undergraduate Research Experience (SURE) fellowship for summer 2014.
- Melissa Hernandez received a Summer Undergraduate Research Experience (SURE) fellowship for summer 2014.
- Yueting Wu won poster award in Food, Pharmaceutical and Biotechnology Division at American Institute of Chemical Engineers National Meeting, Atlanta, GA, November

2014.
- Nicholas Horvath received NSF Graduate Student Research Fellowship 2015.
- Cassidy Bland received a Summer Undergraduate Research Experience (SURE) fellowship for summer 2015.
- Catherine VanMeter received a WVU Cancer Institute Summer Undergraduate Research Experience (SURE) fellowship for summer 2019.
- Sarah Jenness received a Summer Undergraduate Research Experience (SURE) fellowship for summer 2019.

SERVICE

Editorial Activities

- **Editorial Board**, *Journal of Clinical and Cellular Immunology*, 2010 – 2016.
- **Editorial Board**, *PLoS ONE*, 2012 – 2014.
- **Editorial Board**, *Scientific Reports*, 2012 – 2019.

Proposal Review Panels (2007 – present)

DOD CDMRP Breast Cancer Research Program, July 2014.
NIH CSR Cancer immunopathology and immunotherapy (CII) study section, June 2016, June 2017, Oct 2018, June 2019, standing member July 2021 - June 2022.
NIH CSR Therapeutic Immune Regulation (TIR) study section, standing member July 2022 - June 2027.
NIH NCI Cancer Systems Biology, October 2016, December 2016.
NIH NCI Integrative Cancer Biology, November 2009.
NIH NCI Omnibus SEP-5, November 2015.
NIH NCI P01 Program Project Review, October 2012.
NIH NIAID Computational Models of Immunity, November 2019.
NIH NIAID Modeling Immunity for Biodefense, April 2010, December 2014.
NSF CDI February 2008, BME October 2009, BME December 2009, CBET May 2010, BME June 2010, BME January 2011, CDI April 2011, CDI/BME October 2011 (2), BME June 2012, BME January 2014, NRT October 2014, SSB February 2015, SSB March 2016, BBE February 2017, SSB March 2017, SSB March 2018, URoL/MCB March 2019, MCB Nov 2019, SSB Oct 2021.

Ad hoc Proposal Review (2007 – present)

NIH June 2016.
NSF April 2013, July 2013.
Netherlands Organization for Scientific Research (NWO) July 2010.
WVU Faculty: Y. Yang (CHE) July 2013, E. Bey (SOM) Dec 2013.
WVU: PSCoR proposals July 2015.

Ad hoc Journal Reviewer (2007 – present)

AIChE J, Analytica Chimica Acta, Annals of Biomedical Engineering, Biochemical Engineering Journal, Bioelectrochemistry, Bioengineering and Translational Medicine, BioMed Research International, Biophysical Journal, BioSystems, Biotechnology & Bioengineering, Biotechnology Progress, BMC Bioinformatics, BMC Cancer, BMC Immunology, BMC Systems Biology, Bulletin of Mathematical Biology, Cancer Informatics, Cancer Biology & Therapy, Cancer Research, Cancers, Cell Communication & Signaling, Computers & Chemical Engineering, CPT: Pharmacometrics & Systems Pharmacology, Cytokine, Entropy, Frontiers in Cellular and Infection Microbiology, IEEE Transactions

on Biomedical Engineering, Immunotherapy, Industrial & Engineering Chemistry Research, Integrative Biology, International Journal of Chemical Kinetics, JCI Insight, Journal for ImmunoTherapy of Cancer, Journal of Clinical Epidemiology, Journal of Dermatological Science, Journal of Immunological Methods, Journal of Mass Spectrometry, Journal of Mathematical Biology, Journal of the Royal Society Interface, Journal of Translational Medicine, Mathematical Biosciences, Melanoma Research, Molecular BioSystems, Molecular Membrane Biology, Molecular Systems Biology, Nature Communications, Nature Methods, Oncoimmunity, Oncoimmunology, Oncotarget, Pigment Cell and Melanoma Research, PLoS Computational Biology, PLoS ONE, Processes, PROTEOMICS, Science Signaling, Scientific Reports, Source Code for Biology and Medicine, Theoretical Biology and Medical Modeling, Transactions on Biomedical Engineering, WIREs Systems Biology and Medicine

National Professional Organizations

- AIChE National Annual Meeting, San Francisco, November, 2006. "Advances in Biocatalysis and Protein Engineering" Co-Chairs: A. Bommarius and D. J. Klinke.
- AIChE National Annual Meeting, San Francisco, November, 2006. "Computational Biology: Systems Modeling I" Co-Chairs: V. Hatzimanikatis and D. J. Klinke.
- AIChE National Annual Meeting, San Francisco, November, 2006. "Computational Biology: Systems Modeling II" Co-Chairs: V. Hatzimanikatis and D. J. Klinke.
- Biochemical Engineering XV: Engineering Biology from Biomolecules to Complex Systems; Quebec City, Canada, July, 2007. Poster Session Chair: D. J. Klinke.
- AIChE National Annual Meeting, Salt Lake City, November, 2007. "Systems Biotechnology" Co-Chairs: N. Lin and D. J. Klinke.
- AIChE National Annual Meeting, Salt Lake City, November, 2007. "Advances in Biocatalysis and Protein Engineering" Co-Chairs: D. J. Klinke and A. Bommarius.
- ACS Biotechnology Division (BIOT) Strategic Planning Meeting, Bethesda, MD, June, 2008.
- AIChE National Annual Meeting, Philadelphia, November, 2008. "Intracellular Processes I" Co-Chairs: Dacheng Ren and D. J. Klinke.
- AIChE National Annual Meeting, Philadelphia, November, 2008. "Intracellular Processes II" Co-Chairs: Dacheng Ren and D. J. Klinke.
- AIChE National Annual Meeting, Nashville, November, 2009. "Receptor-Mediated Phenomena" Co-Chairs: D. J. Klinke and K. Rege.
- AIChE National Annual Meeting, Minneapolis, MN, October, 2011. "Receptor-Mediated Phenomena" Co-Chairs: D. J. Klinke and Q. Song.
- AIChE National Annual Meeting, Minneapolis, MN, October, 2011. "Genomic Approaches to Systems Biology" Co-Chairs: J. Leonard and D. J. Klinke.
- AIChE National Annual Meeting, Pittsburgh, PA, November, 2012. "Quantitative Approaches to Disease Mechanisms & Therapies" Co-Chairs: D. J. Klinke and K. Neeves.
- ACS Spring National Meeting, New Orleans, LA, April, 2013. "Upstream Processes: Advances in Systems Biology" Co-Chairs: D. J. Klinke and N. Agarwal.
- AIChE National Annual Meeting, San Francisco, November, 2013 Division 15d/e Program 1st Vice Chair.
- AIChE National Annual Meeting, San Francisco, November, 2013. "Poster Session: Engineering Fundamentals in Life Science" Chair: D. J. Klinke.
- AIChE National Annual Meeting, 2014 Division 15d/e Program Chair.
- Translational Research Cancer Centers Consortium, Seven Springs, PA, February, 2016.

Organizing committee member. "Cell Therapies" Co-Chairs: John Frelinger and D. J. Klinke.

- Translational Research Cancer Centers Consortium, Seven Springs, PA, February, 2017. Organizing committee member. Symposium Chair: D. J. Klinke.
- Translational Research Cancer Centers Consortium, Seven Springs, PA, February, 2018. Main meeting organizing co-chairs: D.J. Klinke, R. Goldberg, L. Gibson.
- ACS Spring National Meeting, New Orleans, LA, April, 2018. "E.V. Murphree Award in Industrial and Engineering Chemistry" Co-Chairs: D. J. Klinke and H. Kung.
- Translational Research Cancer Centers Consortium, Seven Springs, PA, February, 2019. Organizing committee member. "Cell Therapies" Co-chairs: D.J. Klinke and T. Schell.
- 2019 Great Lakes Breast Cancer Research Symposium, Columbus, OH, May, 2019. "Tumor Microenvironment and Metastasis" Co-chairs: R. Watters and D.J. Klinke.
- AIChE National Annual Meeting, Orlando, FL, November, 2019. "Wilhelm Award Symposium in Reaction Engineering in Honor of Linda Broadbelt" Chair: D. J. Klinke and S. D. Finley.

College/University Committees

- Biomedical Engineering Task Force, Fall 2006
- Engineering Accreditation Committee, Fall 2008
- Computing Committee, Fall 2010 - present
- WVU Cancer Institute Science Exchange, Fall 2018 - present

Department Committees

- Ad hoc Committee for assessing a Biomedical Option, Spring 2006
- American Institute of Chemical Engineers Student Chapter Advisor, 2006 - 2013
- Research Faculty Recruitment Committee, Spring 2010
- Tenure-track Faculty Recruitment Committee, Fall 2010 - 2012
- Computer Committee, Fall 2010 - Spring 2016
- Promotion and Tenure Committee, Spring 2013 - Spring 2019
- Undergraduate Advisor, Fall 2013 - Spring 2016
- BME Faculty Recruitment Committee, Fall 2014 - Spring 2016
- MICB Faculty Recruitment Committee, Fall 2018 - Fall 2019
- CHE Faculty Recruitment Committee, Fall 2019 - Spring 2020

Dissertation / Thesis Committees

Student	Degree	Year	Primary Advisor	Dept/School
A. Pirkey	Ph.D.	05/2024	D. Klinke	CBE/CEMR
H. Snoderly	Ph.D.	06/2023	M. Bennwitz	CBE/CEMR
D. Norman	M.S.	05/2022	D. Klinke	CBE/CEMR
L. Mendis	Ph.D.	06/2022	P. Li	Chemistry/CAS
A. Durr	Ph.D.	06/2022	J. Hollander	ExPhys/SOM
G. Mirlekar	Ph.D.	05/2018	F. Lima	CHE/CEMR
C. Byrne-Hoffman	Ph.D.	05/2018	D. Klinke	BPS/SOP
Y. Wu	Ph.D.	12/2015	D. Klinke	CHE/CEMR
J. Kaiser	M.S.	06/2014	D. Klinke	MICB/SOM
C. Dong	Ph.D.	05/2014	C.Z. Dinu	CHE/CEMR
E. Rodgers-Melnick	Ph.D.	07/2013	S. DiFazio	BIOL/ECAS
A. Vamsi Krishna	M.S.	12/2010	R. Hissam	CHE/CEMR
V. Suarez	M.S.	12/2010	D. Klinke	CHE/CEMR
H. Liu	M.S.	12/2010	D. Klinke	CHE/CEMR
A. Siegel	M.S.	07/2010	R. Hissam	CHE/CEMR
R. Fecek	Ph.D.	07/2010	C. Cuff	MICB/SOM
S. Dixit	M.S.	08/2010	D. Klinke	CHE/CEMR
N. Cheng	M.S.	12/2009	D. Klinke	CHE/CEMR
F. A. Pino-Romainville	Ph.D.	12/2008	I. Celik	MAE/CEMR

DISSEMINATION OF RESEARCH

Refereed Publications (Google h-index: 25; Google i10-index: 46)

Listed after each article: {Number of cites as of 03/10/2022}[Journal impact factor 2015] # indicates undergraduate author

1. Klinke, D. J. and Broadbelt, L. J.; "Mechanism Reduction during Computer Generation of Compact Reaction Models", (1997) *AIChE J.* 43:1828-1837.{50}[2.0]
2. Klinke, D. J.; Wilke, S.; and Broadbelt, L. J.; "A Theoretical Study of Carbon Chemisorption on Ni(111) and Co(0001) Surfaces", (1998) *J. Catal.* 178:540-554.{77}[5.4]
3. Klinke, D. J. and Broadbelt, L. J.; "Construction of a Mechanistic Model of Fischer-Tropsch Synthesis on Ni(111) and Co(0001) Surfaces", (1999) *Chem. Eng. Sci.* 54:3379-3389.{55}[2.4]
4. Klinke, D. J.; Dooling, D. J.; and Broadbelt, L. J.; "A Theoretical Study of Methylidyne Chemisorption on Ni(111) and Co(0001) Surfaces"; (1999) *Surf. Sci.* 425:334-342.{21}[2.0]
5. Klinke, D. J. and Broadbelt, L. J.; "A Theoretical Study of Hydrogen Chemisorption on Ni(111) and Co(0001) Surfaces", (1999) *Surf. Sci.* 429:169-177.{67}[2.0]
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Other Publications

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66. Kelly, S.D.; Klinke, D.J.; Leong, C.; Lewis, A.K.; Okino, M.S.; Paterson, T.S.; Shoda, L.K.M.; Stokes, C.; Struemper, H.K.; "Method and apparatus for computer modeling of an adaptive immune response", US Patent Application 10/154,123 (2003).

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70. Klinke, D.J.; "Engineering a New Vision for Drug Discovery"; in *Proceedings of the Science, Technology, and Research Symposium*, Morgantown, WV, September 2007.

71. Defranoux, N.A.; Dubnicoff, T.B.; Klinke, D.J.; Lewis, A.K.; Paterson, T.S.; Ramanujan, S.; Shoda, L.K.M.; Soderstrom, K.P.; Struemper, H.K.; "Method and apparatus for computer modeling a joint", US Patent 7,472,050 (2008).

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73. Johnson, D.; Klinke, D.J.; Wang, Q.; Condon, M.; Wang, Z.; "Markov Chain Monte Carlo Analysis of Trophic Cascade in Yellowstone after Reintroduction of Wolves", Interdisciplinary Topics in Applied Mathematics, Modeling and Computational Science, Vol 117 in Springer Proceedings in Mathematics & Statistics (2014) 6 pages.

Invited Presentations

1. Stokes, C. L. and Klinke, D. J. (joint presentation); "An Integrative Mathematical Model of Asthma: From Biochemistry to Pathophysiology", Pacific Northwest National Laboratory, Richland, WA, August 4, 2000.

2. Klinke, D. J.; "Systems Biology and the Lung: A Mechanistic Modeling Perspective", Pacific Northwest National Laboratory, Richland, WA, January 2005.

3. Klinke, D. J.; "Systems Biology and Cancer: A Mechanistic Modeling Perspective", Department of Molecular Therapeutics, University of Texas M.D. Anderson Cancer Center, Houston, TX, May 2005.

4. Klinke, D. J.; "Systems Biology and Engineering: A Mechanistic Modeling Perspective", Department of Chemical Engineering, West Virginia University, Morgantown, WV, July 2005.

5. Klinke, D. J.; "Developing Predictive Detailed Chemical Kinetic Models of EGF Receptor Signaling", Translational Cancer Research Seminar, Mary Babb Randolph Cancer Center,

Robert C. Byrd Health Sciences Center, West Virginia University, Morgantown, WV, March 2006.

6. Klinke, D. J.; "IL-12 Bioactivity and Dendritic Cell Trafficking: Examples of Systems Biology in Immunology", Cell and Molecular Biology Seminar Series, Department of Microbiology, Immunology & Cell Biology, Robert C. Byrd Health Sciences Center, West Virginia University, Morgantown, WV, April 2006.
7. Klinke, D. J.; "Application of Engineering Analysis in Immunology and Drug Discovery", Department of Chemical Engineering, Virginia Tech, Blacksburg, VA, April 2007.
8. Klinke, D. J.; "Systems Biology by Example: Modulating the Dynamics of NF-kB Activation", Center for Respiratory Biology and Lung Disease, Department of Neurobiology and Anatomy, Robert C. Byrd Health Sciences Center, West Virginia University, Morgantown, WV, November 2007.
9. Klinke, D. J.; "R/Bioconductor - Analysis Tools for Flow Cytometry", Bioinformatics Interest Group, Department of Microbiology, Immunology & Cell Biology, Robert C. Byrd Health Sciences Center, West Virginia University, Morgantown, WV, December 2007.
10. Klinke, D. J.; "A Bayesian Perspective on Understanding Cell Signaling Pathways using Mathematical Models", Department of Chemical and Biochemical Engineering, University of Maryland, Baltimore County, Baltimore, MD, April 2009.
11. Klinke, D. J.; "A Bayesian Perspective on Understanding How Cancer Cells Escape from Immunotherapy", NSF Workshop on Advances in Breast Cancer Research, University of Arkansas, Fayetteville, AK, October 2010.
12. Klinke, D. J.; "A Bayesian Perspective on Understanding How Cells Make Decisions", Department of Chemical Engineering, Penn State University, State College, PA, January 2011.
13. Klinke, D. J.; "A Bayesian Perspective on Understanding How Cells Make Decisions", Joint CMU-Pitt Computational Biology Seminar Series, Carnegie-Mellon University/University of Pittsburgh, Pittsburgh, PA, February 2011.
14. Klinke, D. J.; "From signaling cartoons to model-based inference in cancer immunology: A contemporary view towards understanding how cells make decisions", Joint Mount Sinai School of Medicine-Yale Computational Biology Seminar Series, Mount Sinai School of Medicine, New York, NY, April 2011.
15. Klinke, D. J.; "Timescale Analysis of Rule-based Biochemical Reaction Networks", q-bio Conference - Rule-based Modeling Workshop, Santa Fe, NM, August 2011.
16. Kulkarni, Y.M.; Chambers, E.; McGray, A.J.R.; Ware, J.S.; Bramson, J.L.; **Klinke, D.J.**; "Tumor-derived Wnt-inducible Signaling Protein-1 (WISP1) exhibits paracrine immunosuppression by inhibiting cellular response to Interleukin-12", Roche / Nature Medicine Symposium: Cancer Immunology and Immunotherapy, Nutley, NJ, September 2011 (By invitation only).
17. Klinke, D. J.; "In silico model-based inference: a contemporary approach for hypothesis testing in cell signaling research", Department of Mathematics Biomathematics Seminar Series, West Virginia University, Morgantown, WV, October 2011.
18. Klinke, D. J.; "In silico model-based inference: a contemporary approach for hypothesis testing in systems pharmacology", Department of Chemical Engineering, University of Illinois Urbana-Champaign, Urbana, IL, August 2012.

19. Klinke, D. J.; "In silico model-based inference: a contemporary approach for hypothesis testing in systems pharmacology", Department of Chemical and Biomolecular Engineering, Vanderbilt University, Nashville, TN, September 2012.
20. Klinke, D. J.; "Engineering Analysis of Signal Transduction", Workshop on Multi-scale Modeling in Biology, Los Alamos National Laboratory, Los Alamos, NM, September 2012.
21. Invited faculty participant in "Quantitative Immunology: Experiments Meet Modeling", Kavli Institute for Theoretical Physics at University of California Santa Barbara, Santa Barbara, CA, November 26 - December 20 2012.
22. Klinke, D. J.; "In silico model-based inference: a contemporary approach for hypothesis testing in systems pharmacology", Department of Systems Biology, Harvard University, Boston, MA, November 2012.
23. Klinke, D. J.; "In silico model-based inference: a contemporary approach for hypothesis testing in systems pharmacology", Department of Chemical and Biomolecular Engineering, Northwestern University, Evanston, IL, November 2012.
24. Klinke, D. J.; "A Quantitative Systems Perspective on Cancer, Immunoevasion, and Somatic Evolution", Center for Quantitative Sciences, Vanderbilt University Medical Center, Nashville, TN, February 2013.
25. Klinke, D.J.; "Identifying local mechanisms for tumor-derived immunosuppression: An integrated phenotypic screening approach", Translational Research Cancer Centers Consortium, Seven Springs, PA, February 2014.
26. Klinke, D. J.; "A Quantitative Systems Perspective on Cancer, Immunoevasion, and Somatic Evolution", Department of Computer Science, Mathematics and Engineering, Shepherd University, Shepherdstown, WV, April 2014.
27. Klinke, D. J.; "A Quantitative Systems Perspective on Cancer, Immunoevasion, and Somatic Evolution", School of Pharmacy, West Virginia University, Morgantown, WV, September 2014.
28. Klinke, D. J.; "A Quantitative Systems Perspective on Cancer, Immunoevasion, and Somatic Evolution", Department of Chemical Engineering, University of Houston, Houston, TX, February 2015.
29. Klinke, D. J.; "Enhancing the Discovery and Development of Immunotherapies for Cancer Using Quantitative and Systems Pharmacology", School of Pharmacy and Clinical Translational Science Institute, West Virginia University, Morgantown, WV, February 2015.
30. Klinke, D. J.; "Identifying altered intercellular signaling networks associated with local immunosuppression in cancer: A quantitative and systems pharmacology approach", Biochemical and Molecular Engineering XIX, Puerto Vallarta, Mexico, July 2015.
31. Klinke, D. J.; "In silico model-based inference: a contemporary approach for hypothesis testing in systems pharmacology", Joint CMU-Pitt Computational Biology Seminar Series, Carnegie-Mellon University/University of Pittsburgh, Pittsburgh, PA, September 2015.
32. Klinke, D. J.,"Enhancing the discovery and development of immunotherapies for cancer using quantitative and systems pharmacology", Department of Chemical Engineering, University of California, Davis, Davis, CA, April 2016.

33. Klinke, D. J., "Identifying altered intercellular signaling networks associated with local immunosuppression in cancer: A quantitative and systems pharmacology approach", Bristol-Myers Squibb, Princeton, NJ, May 2016.
34. Klinke, D.J., "Identifying Altered Intercellular Signaling Networks Associated with Local Immunosuppression in Cancer", BME Seminar, University of Oklahoma, Norman, OK. March 7, 2017.
35. Klinke, D.J., "Modeling and simulation of T-Cell control of tumor growth", 3rd BioTX ADME Workshop @ University of Buffalo, Buffalo, NY. August 6, 2017.
36. Klinke, D.J., "Identifying Altered Intercellular Signaling Networks Associated with Local Immunosuppression in Cancer", Medical Grand Rounds, Roswell Park Cancer Institute, Buffalo, NY. June 9, 2017.
37. Klinke, D.J., "A QSP Perspective on Identifying Altered Intercellular Signaling Networks in Cancer", Quantitative Systems Pharmacology Symposium University of Buffalo, Buffalo, NY. October 7, 2017.
38. Klinke, D.J.; "Exosomes derived from B16F0 melanoma cells alter the transcriptome of cytotoxic T cells that impacts mitochondrial respiration.", FEBS Congress, Krakow, Poland, July 9, 2019.
39. Klinke, D.J.; "A View of Cancer Immunology through a Reaction Engineering Lens.", 2019 AIChE Annual Meeting, Orlando, FL, November 11, 2019.
40. Klinke, D.J.; "Data-driven Learning: How oncogenic gene expression locally alters heterocellular networks.", 2021 Great Lakes Breast Cancer Conference, Virtual Event, October 26, 2021.

Contributed Meeting Presentations (speaker in bold)

41. **Klinke, D. J.** and Broadbelt, L. J., "Computer-Generated Reaction Mechanisms of Pentadecylbenzene Pyrolysis: An Illustrative Example", AIChE Annual Meeting Student Poster Session, Chicago, IL, November 1996.
42. **Klinke, D. J.** and Broadbelt, L. J., "Computational Developments in Heterogeneously Catalyzed Reaction Modeling: Mechanistic Elucidation of Fischer-Tropsch Synthesis", AIChE Annual Meeting, Los Angeles, CA, November 1997.
43. **Klinke, D. J.** and Broadbelt, L. J., "Computational Developments in Heterogeneously Catalyzed Reaction Modeling: Mechanistic Elucidation of Fischer-Tropsch Synthesis", Catalysis Club of Chicago Spring Symposium, May 1998.
44. **Klinke, D. J.**; Bastasz, R.; and Allendorf, M.D.; "An Investigation into the Transient Behavior of Palladium Metal Based Hydrogen Sensors", 59th Annual Physical Electronics Conference, Berkeley, CA, July 1999.
45. **Klinke, D. J.**; Lewis, A. K.; Paterson, T.; Leong, C. C.; Defranoux, N.; and Stokes, C. L.; "Asthma PhysioLab: A Dynamic, Computer-based Mathematical Model of Atopic Asthma", Biomedical Engineering Society Annual Meeting, Seattle, WA, October 2000.
46. **Klinke, D. J.**; Lewis, A. K.; Wong, S.-P.; and Stokes, C. L.; "Airway Hyperresponsiveness: Exploration of Mechanisms Using a Dynamic, Computer-based Model of Asthma", American Thoracic Society Annual Meeting, San Francisco, CA, May 2001.

47. **Klinke, D. J.**; Lewis, A. K.; and Stokes, C. L.; "Contributions of Th2 Cytokines to Airway Hyperresponsiveness in Asthma", Keystone Symposia: "Rethinking the Pathogenesis of Asthma", Santa Fe, NM, Feb 2002.
48. **Klinke, D.J.**; "The Bioactivity of IL-12: There's More to the Story than P70 or P40"; Mathematical Biosciences Institute Workshop on Immunology Models: Cell Signaling and Immune Dynamics, Ohio State, OH, May 2003.
49. **Klinke, D. J.**; "The Bioactivity of IL-12: An Illustrative Example of Modeling Cytokine Causality", Biomedical Engineering Society Annual Meeting, Chicago, IL, October 2006.
50. **Klinke, D. J.**; "An Age-Structured Model of Dendritic Cell Trafficking in the Lung", Biomedical Engineering Society Annual Meeting, Chicago, IL, October 2006.
51. **Barnett, J. B.**; Ustyugova, I. V.; Klinke, D. J.; Brundage, K.; and Harty, T. M.; "Changes in IkB and NF- B activation in macrophages treated with dichloropropionaniline", The 7th International Conference on Systems Biology, Yokohama, Japan, October 2006.
52. **Klinke, D. J.**; "The Bioactivity of IL-12: There's More to the Story than P70 or P40", American Institute of Chemical Engineers Annual Meeting, San Francisco, CA, November 2006.
53. **Klinke, D. J.**; "Multi-scale Modeling of Dendritic Cell Trafficking in the Lung", American Institute of Chemical Engineers Annual Meeting, San Francisco, CA, November 2006.
54. **Schwertfeger, Z.**; Klinke, D. J.; "Modeling the Onset of Type 1 Diabetes Mellitus", 2007 AIChE Mid-Atlantic Regional Conference, Bucknell University, PA, April 2007 [**won third place**].
55. **Harty, T.**; Klinke, D. J.; "Quantifying the Dynamics of IL-12 Receptor Binding", 2007 AIChE Mid-Atlantic Regional Conference, Bucknell University, PA, April 2007.
56. **Klinke, D. J.**; Ustyugova, I. V.; Brundage, K.; and Barnett, J. B.; "Potentiation of early NF-κB activation in macrophages treated with dichloropropionaniline", Biochemical Engineering XV Engineering Biology from Biomolecules to Complex Systems, Quebec City, Canada, July 2007.
57. **Klinke, D. J.**; "Engineering a New Vision of Drug Discovery", Science, Technology and Research Symposium, Morgantown, WV, September 2007.
58. **Ellis, L.**; Walton, C.; Luo, J.; Barnett, J.; Klinke, D. J.; "Comparative Proteomic Analysis of Cellular Models of Breast Cancer using Differential in-Gel Electrophoresis", Science, Technology and Research Symposium, Morgantown, WV, September 2007.
59. **Schwertfeger, Z.**; Klinke, D. J.; "Modeling the Onset of Type 1 Diabetes Mellitus", Science, Technology and Research Symposium, Morgantown, WV, September 2007 [**won second place**].
60. **Knipe, J. M.**; Cuff, C. F.; Klinke, D. J.; "Identifying the Differentiation Program in Dendritic Cells", Science, Technology and Research Symposium, Morgantown, WV, September 2007 [**won honorable mention**].
61. **Klinke, D. J.**; Ustyugova, I. V.; Brundage, K.; and Barnett, J. B.; "Potentiation of LPS-induced early NF-κB activation in macrophages treated with DCPA", Biomedical Engineering Society Annual Meeting, Los Angeles, CA, September 2007.

62. **Klinke, D. J.**; "Towards Opening the Immune Loop: The Role of Dendritic Cells in Shaping Adaptive Immunity", Biomedical Engineering Society Annual Meeting, Los Angeles, CA, September 2007.

63. **Klinke, D. J.**; Ustyugova, I. V.; Brundage, K.; and Barnett, J. B.; "Quantifying Differential Activation of NF-κB-Response Genes by LPS in Macrophages Using 3,4-DCPA as a Molecular Probe", American Institute of Chemical Engineers Annual Meeting, Salt Lake City, UT, November 2007.

64. **Klinke, D. J.**; "A Multi-scale Model of Dendritic Cell Education and Trafficking in the Lung", American Institute of Chemical Engineers Annual Meeting, Salt Lake City, UT, November 2007.

65. **Klinke, D. J.**; "Revisiting Beta Cell Destruction at the Onset of Type 1 Diabetes Mellitus", American Institute of Chemical Engineers Annual Meeting, Salt Lake City, UT, November 2007.

66. **Knipe, J. M.**; Cuff, C. F.; Klinke, D. J.; "Identifying the Differentiation Program in Dendritic Cells", American Institute of Chemical Engineers National Meeting, Undergraduate Poster Competition, Salt Lake City, UT, November 2007 [**won first place in Food, Pharmaceutical and Biotechnology Division**].

67. **Klinke, D. J.**; "Validating a Dimensionless Number for Glucose Homeostasis in Humans", National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Diabetes Genes and Beta Cell Function: How can we assemble the puzzle?, Bethesda, MD, April 2008.

68. **Klinke, D. J.**; "Signal Transduction Networks in Cancer: Quantitative Parameters Influence Network Topology", Gordon Research Conference on Growth Factors and Cell Signaling, Oxford, UK, August 2008.

69. **Klinke, D. J.**; "Validating a Dimensionless Number for Glucose Homeostasis in Humans", Biomedical Engineering Society Annual Meeting, St. Louis, MO, October 2008.

70. **Klinke, D. J.**; "The Influence of Quantitative Parameters on the Topology of Signal Transduction Networks in Cancer", Biomedical Engineering Society Annual Meeting, St. Louis, MO, October 2008.

71. **Klinke, D. J.**; "Validating a Dimensionless Number for Glucose Homeostasis in Humans", American Institute of Chemical Engineers Annual Meeting, Philadelphia, PA, November 2008.

72. **Finley, S. D.**; Gupta, D.; Broadbelt, L. J.; Brundage, K. M.; Klinke, D. J.; "Dynamics and Regulation of IL-12 Receptor Signaling", American Institute of Chemical Engineers Annual Meeting, Philadelphia, PA, November 2008.

73. **Klinke, D. J.**; "Signal Transduction Networks in Cancer: Quantitative Parameters Influence Network Topology", American Institute of Chemical Engineers Annual Meeting, Philadelphia, PA, November 2008.

74. **Knipe, J. M.**; Cuff, C. F.; Klinke, D. J.; "Principal Component Analysis of the Differentiation of Dendritic Cells", American Institute of Chemical Engineers National Meeting, Undergraduate Poster Competition, Philadelphia, PA, November 2008 [**won first place in Food, Pharmaceutical and Biotechnology Division**].

75. Leski, T. A.; Caswell, C. C.; Klinke, D. J.; Pawlowski, M.; Bujnicki, M.; Hart, S. J.; **Lukomski, S.**; "*bcl*-gene Polymorphisms as Basis for Anthrax Detection and Fingerprinting", ASM Biodefense and Emerging Diseases Research Meeting, Baltimore, MD, February 2009.

76. **Lewis, T.L.**; Klinke, D. J.; Barnett, J.B.; "3,4-Dichloropropionaniline: Novel Inhibitor Of Calcium Sensor Protein Stromal Interaction Molecule-1 (Stim1)", Van Liere Research Day, West Virginia University, Morgantown, WV, April 2009.

77. Klinke, D. J.; "Inferring Relevant Control Mechanisms for Interleukin-12 Signaling within Naïve CD4+ T cells", Biochemical Engineering XVI: Past, Present, and Future of Biochemical Engineering, Burlington, VT, July 2009 [**oral presentation**].

78. **Widmeyer, J.**; Kulkarni, Y.; Klinke, D. J.; "Proteomics-Based Secretome Analysis for Cancer Cell Biomarker Assay", Biomedical Engineering Society Annual Meeting, Pittsburgh, PA, October 2009.

79. **Kief, K. D.**; Brundage, K. M.; Kulkarni, Y.; Klinke, D. J.; "Assessing the Signal-to-Noise Characteristics for Two Transcription Factor Assays", Biomedical Engineering Society Annual Meeting, Pittsburgh, PA, October 2009.

80. Cheng, N.; Finley, S. D.; **Klinke, D. J.**; "Inferring Relevant Control Mechanisms for Interleukin 12 Signaling within Naïve CD4+ T cells", Biomedical Engineering Society Annual Meeting, Pittsburgh, PA, October 2009.

81. **Kulkarni, Y.**; Suarez, V.; Klinke, D. J.; "Proteomics of Breast Cancer for Signal Pathway Profiling and Target Discovery", Biomedical Engineering Society Annual Meeting, Pittsburgh, PA, October 2009.

82. **Klinke, D. J.**; Finley, S. D.; Gupta, D.; "Inferring Relevant Control Mechanisms for Interleukin 12 Signaling within Naïve CD4+ T cells", American Institute of Chemical Engineers National Meeting, Nashville, TN, November 2009.

83. **Klinke, D. J.**; Kulkarni, Y.; Suarez, V.; "Profiling Signaling Pathways Using Comparative Proteomics: An Illustrative Example From Breast Cancer", American Institute of Chemical Engineers National Meeting, Nashville, TN, November 2009.

84. **Kief, K. D.**; Brundage, K. M.; Kulkarni, Y.; Klinke, D. J.; "Assessing the Signal-to-Noise Characteristics for Two Transcription Factor Assays", 2010 AIChE Mid-Atlantic Regional Conference, Johns Hopkins University, MD, April 2010.

85. **Kulkarni, Y.**; Suarez, V.; Klinke, D. J.; "Inferring Predominant Pathways in Cellular Models of Breast Cancer Using Limited Sample Proteomic Profiling", Van Liere Research Day, West Virginia University, Morgantown, WV, April 2010.

86. **Dolly, B.**; Klinke, D. J.; "A Timescale Analysis of the Interleukin-12 Signaling Pathway", Van Liere Research Day, West Virginia University, Morgantown, WV, April 2010.

87. **Ware, J**; Kulkarni, Y.; Klinke, D. J.; "Identifying biochemical cues secreted by malignant melanocytes that promote escape from immunoediting", West Virginia Science, Technology and Research Symposium, Huntington, WV, September 2010.

88. **Klinke, D. J.**; Chambers, E.; Cheng, N.; "Inferring Cross-talk Among Interleukin-12, Interferon-γ, and Tumor Necrosis Factor Signaling Pathways Within T Helper Cells", Biomedical Engineering Society Annual Meeting, Austin, TX, October 2010.

89. **Dolly, B.**; Klinke, D. J.; "Simplifying Rule-based Reaction Networks using Timescale Analysis: The Interleukin-12 Signaling Pathway as an Illustrative Example", Biomedical Engineering Society Annual Meeting, Austin, TX, October 2010.

90. **Ware, J**; Kulkarni, Y.; Klinke, D. J.; "Identifying biochemical cues secreted by malignant melanocytes that promote escape from immunoediting", American Institute of Chemical Engineers National Meeting, Salt Lake City, UT, November 2010.

91. **Kief, K. D.**; Brundage, K. M.; Kulkarni, Y.; Klinke, D. J.; "Assessing the Signal-to-Noise Characteristics for Two Transcription Factor Assays", American Institute of Chemical Engineers National Meeting, Salt Lake City, UT, November 2010.

92. Kulkarni, Y.; **Klinke, D. J.**; "Identifying Secreted Biomarkers for Immune Evasion in Cellular Models of Cancer", American Institute of Chemical Engineers National Meeting, Salt Lake City, UT, November 2010.

93. **Klinke, D. J.**; Chambers, E.; Cheng, N.; "Inferring Cross-talk Among Interleukin-12, Interferon-γ, and Tumor Necrosis Factor Signaling Pathways Within T Helper Cells", American Institute of Chemical Engineers National Meeting, Salt Lake City, UT, November 2010.

94. Dolly, B.; **Klinke, D. J.**; "Simplifying Rule-based Reaction Networks using Timescale Analysis: The Interleukin-12 Signaling Pathway as an Illustrative Example", American Institute of Chemical Engineers National Meeting, Salt Lake City, UT, November 2010.

95. **Ware, J**; Kulkarni, Y.; Klinke, D. J.; "Identifying biochemical cues secreted by malignant melanocytes that promote escape from immunoediting", 2011 AIChE Mid-Atlantic Regional Conference, Penn State University, PA, April 2011.

96. **Klinke, D. J.**; Chambers, E.; Cheng, N.; "Quantifying cross-talk among among Interferon-γ, Interleukin-12, and Tumor Necrosis Factor signaling pathways within a T_H1 cell model: A model-based inference approach", Biochemical and Molecular Engineering XVII: Emerging Frontiers, Seattle, WA, June 2011.

97. **Klinke, D. J.**; "Signaling cartoons to model-based inference: A contemporary view towards understanding how cells make decisions", Biochemical and Molecular Engineering XVII: Emerging Frontiers, Seattle, WA, June 2011.

98. **Gribbons, S**; Chambers, E.; Klinke, D. J.; "Suppressor of cytokine signaling (SOCS3) selectively regulates different branches in IL-12 signaling pathways", West Virginia University Summer Undergraduate Research Symposium, Morgantown, WV, July 2011.

99. **Mickinac, N.K.**; Chambers, E.; Klinke, D. J.; "Role of WISP-1 in the suppression of Interleukin-12 signaling in immune cells", West Virginia University Summer Undergraduate Research Symposium, Morgantown, WV, July 2011.

100. **Klinke, D. J.**; Chambers, E.; Cheng, N.; "Quantifying cross-talk among among Interferon-γ, Interleukin-12, and Tumor Necrosis Factor signaling pathways within a T_H1 cell model: A model-based inference approach", q-bio Conference, Santa Fe, NM, August 2011.

101. Kulkarni, Y.M.; Chambers, E.; McGray, A.J.R.; Ware, J.S.; Bramson, J.L.; **Klinke, D.J.**; "Tumor-derived Wnt-inducible Signaling Protein-1 (WISP1) exhibits paracrine immunosuppression by inhibiting cellular response to Interleukin-12", Cancer Immunology and Immunotherapy: Building on Success, Bethesda, MD, September 2011.

102. Kulkarni, Y.; **Klinke, D. J.**; "Inference of Predominant Pathways in Cancer: A Proteomic Study among Three Human Mammary Epithelial Cell Models", American Institute of Chemical Engineers National Meeting, Minneapolis, MN, October 2011.

103. **Klinke, D. J.**; Chambers, E.; Cheng, N.; "Quantifying cross-talk among among Interferon-γ, Interleukin-12, and Tumor Necrosis Factor signaling pathways within a T_H1 cell model: A model-based inference approach", American Institute of Chemical Engineers National Meeting, Minneapolis, MN, October 2011.

104. **Mickinac, N.K.**; Chambers, E.; Klinke, D. J.; "Role of WISP-1 in the suppression of Interleukin-12 signaling in immune cells", American Institute of Chemical Engineers National Meeting, Minneapolis, MN, October 2011.

105. Kulkarni, Y.M.; Chambers, E.; McGray, A.J.R.; Ware, J.S.; Bramson, J.L.; **Klinke, D.J.**; "B16 melanoma inhibits response to Interleukin-12 via multiple mechanisms including paracrine action of Wnt-inducible Signaling Protein-1", Translational Research Cancer Centers Consortium, Seven Springs, PA, February 2012.

106. **Alexander, K.**; Kulkarni, Y.M.; Wu, Y.; Kaiser, J.; Klinke, D.J.; "Characterizing and comparing secretome from breast cancer and normal human cell models", American Chemical Society Annual Meeting, San Diego, CA, March 2012.

107. Kulkarni, Y.M.; Chambers, E.; McGray, A.J.R.; Ware, J.S.; Bramson, J.L.; **Klinke, D.J.**; "Tumor-derived Wnt-inducible Signaling Protein-1 (WISP1) exhibits paracrine immunosuppression by inhibiting cellular response to Interleukin-12", American Academy of Immunology Annual Meeting, Boston, MA, May 2012.

108. **Schuweiler, M.B.**; Johnson, D.; Klinke, D.J.; Lidgerding, B.; Wang, Z.; Bramson, J.L.; Wang, Q.; "The Journey of CD8+ T Cells Through Blood, Lymph Nodes, and the Tumor Micro Environment & How They Interact with Tumor Cells", WV-INBRE Summer Research Symposium, Morgantown, WV, July 2012.

109. **Johnson, D.**; Schuweiler, M.B.; Klinke, D.J.; Lidgerding, B.; Wang, Z.; Bramson, J.L.; Wang, Q.; "Tumor Growth and Mixed Immuno-chemotherapy: Mathematical Modeling, Stability Analysis, and Numerical Experiments", WV-INBRE Summer Research Symposium, Morgantown, WV, July 2012.

110. Kulkarni, Y.M.; Chambers, E.; McGray, A.J.R.; Ware, J.S.; Bramson, J.L.; **Klinke, D.J.**; "Tumor-derived Wnt-inducible Signaling Protein-1 (WISP1) exhibits paracrine immunosuppression by inhibiting cellular response to Interleukin-12", q-bio Conference, Santa Fe, NM, August 2012.

111. **Klinke, D.J.**; "A Quantitative Systems Approach to Identify Paracrine Mechanisms That Locally Suppress Immune Response in Melanoma", American Institute of Chemical Engineering Annual Meeting, Pittsburgh, PA, October 2012.

112. **Wu, Y.**; Klinke, D.J.; "Improved Methods to Characterize and Preserve Exosomes", American Institute of Chemical Engineering Annual Meeting, Pittsburgh, PA, October 2012.

113. Kulkarni, Y.M.; Alexander, K.; Wu, Y.; **Klinke, D.J.**; "Inferring Tumor-Immune Interaction Networks via Unbiased Secretome Profiling", American Institute of Chemical Engineering Annual Meeting, Pittsburgh, PA, October 2012.

114. **Horvath, N.**; Klinke, D.J.; "A Comparison of Methods for Guiding Adaptive Markov Chain Monte Carlo Algorithms for in Silico Model-Based Inference", American Institute of Chemical Engineering Annual Meeting, Pittsburgh, PA, October 2012.

115. **Mickinac, N.K.**; Chambers, E.; Klinke, D. J.; "Role of WISP-1 in the suppression of Interleukin-12 signaling in immune cells", American Institute of Chemical Engineers National Meeting, Pittsburgh, PA, October 2012.

116. **Klinke, D.J.**; Wu, Y.; "Induction of Wnt-inducible signaling protein-1 correlates with invasive breast cancer transformation and reduced type 1 cell-mediated cytotoxic immunity", Translational Research Cancer Centers Consortium, Seven Springs, PA, February 2013.

117. **Klinke, D.J.**; Kaiser, J.; Wu, Y.; Byrne-Hoffman, C.N.; Wang, Q.; McGray, A.J.R.; Bramson, J.L.; "Systems identification approach to reveal the immune fitness landscape in cancer", American Chemical Society Annual Meeting, New Orleans, LA, April 2013.

118. **Klinke, D.J.**; Chambers, E.; Horvath, N.; "Interlocked control motifs regulate the adhesive pathway activity of beta-catenin", q-bio Conference, Santa Fe, NM, August 2013.

119. Wu, Y.; Chambers, E.; **Klinke, D.J.**; "Tumor Derived Exosomes As Local Modulators of Immunogenic Field Effects in Melanoma", American Institute of Chemical Engineers National Meeting, San Francisco, CA, November 2013.

120. **Klinke, D.J.**; "Quantitative Systems Perspective On Cancer, Immunoevasion, and Somatic Evolution", American Institute of Chemical Engineers National Meeting, San Francisco, CA, November 2013.

121. Wu, Y.; Chambers, E.; **Klinke, D.J.**; "Tumor Derived Exosomes As Local Modulators of Immunogenic Field Effects in Melanoma", American Chemical Society National Meeting, Dallas, TX, March 2014.

122. **Klinke, D.J.**; "Identifying Local Mechanisms for Tumor-derived Immunosuppression: An Integrated Phenotypic Screening Approach", Cancer Research Institute 22nd Annual International Cancer Immunotherapy Symposium, New York, NY, October 2014.

123. **Klinke, D.J.**; Horvath, N.; Cuppett, V.; Lal, N.; "Interlocked control motifs regulate the adhesive pathway activity of beta-catenin", American Institute of Chemical Engineers National Meeting, Atlanta, GA, November 2014.

124. **Wu, Y.**; Cuppett, V.; Klinke, D.J.; "Stabilities of exosomes derived from mammalian cells: nano particle morphology and functional RNAs", American Institute of Chemical Engineers National Meeting, Atlanta, GA, November 2014.

125. **Wu, Y.**; Chambers, E.; Lal, N.; Klinke, D.J.; "Cancer exosomes deliver extracellular mRNAs to suppress T lymphocyte function", American Institute of Chemical Engineers National Meeting, Atlanta, GA, November 2014.

126. **Klinke, D.J.**; "Identifying Local Mechanisms for Tumor-derived Immunosuppression: An Integrated Phenotypic Screening Approach", Society for the Immunotherapy of Cancer Annual Meeting, Baltimore, MD, November 2014.

127. **Wu, Y.**; Chambers, E.; Klinke, D.J.; "Cancer exosomes deliver extracellular mRNAs to suppress T lymphocyte function", Translational Research Cancer Centers Consortium, Seven Springs, PA, February 2015.

128. **Bland, C.**; Klinke, D.J.; "A bioinformatics approach to identifying negative regulators in the Interleukin-12 pathway", Summer Undergraduate Research Symposium, Morgantown, WV, July 2015.

129. **Bent, L.**; **Hardy, J.**; Deng, W.; Klinke, D.J.; "Towards developing a 3-D model for immune cell killing: Retroviral infection of B16F0 cancer cells to insert granzyme-B reporter FRET vector for use in analyzing immunotherapeutic techniques within a microfluidic device", 14th Annual WV-INBRE Summer Research Symposium, Huntington, WV, July 2015.

130. **Goff, E.**; Fenton, S.; Miller, J.; Warburton, R.; Klinke, D.J.; Wang, Q.; "Developing a three-dimensional cell culture assay to assess the effects of Paclitaxel on the human breast cancer cell line Hs578T", 14th Annual WV-INBRE Summer Research Symposium, Huntington, WV, July 2015.

131. **Hopkins, P.**; Shimer, C.; Wang, Q.; Wang, Z.; Klinke, D.J.; "Quantifying the Mifepristone induced liver-specific Interleukin-12 expression", 14th Annual WV-INBRE Summer Research Symposium, Huntington, WV, July 2015.

132. **Miller, J.**; Goff, E.; Wang, Q.; Wang, Z.; Klinke, D.J.; "A mouse model of metastatic liver cancer treated by a combination therapy", 14th Annual WV-INBRE Summer Research Symposium, Huntington, WV, July 2015.

133. **Muradova, Z.**; Poffenberger, J.; Wang, Q.; Wang, Z.; Klinke, D.J.; "Mathematical modeling and numerical analysis of an Ebola model", 14th Annual WV-INBRE Summer Research Symposium, Huntington, WV, July 2015.

134. **Shimer, C.**; Hopkins, P.; Wang, Q.; Wang, Z.; Klinke, D.J.; "A gene therapy model to treat liver-implanted tumors", 14th Annual WV-INBRE Summer Research Symposium, Huntington, WV, July 2015.

135. **Klinke, D.J.**; Wu, Y.; McGinley, E.; Deng, W.; "B16F0 melanoma exosomes deliver a unique and complex biological payload that includes PTPN11 to suppress T lymphocyte function", Society for the Immunotherapy of Cancer Annual Meeting, Baltimore, MD, November 2015.

136. **Deng, W.**; Klinke, D.J.; "WISP1 Stimulates Melanoma Cell Invasion by Promoting Epithelial-Mesenchymal Transition (EMT) Through Both Autocrine and Paracrine Signaling", Translational Research Cancer Centers Consortium, Seven Springs, PA, February 2016.

137. **Klinke, D.J.**; Wang, Q.; "In silico model-based inference: identifying network topology associated with $CD8^+$ T cell control of B16 tumor growth in vivo", Translational Research Cancer Centers Consortium, Seven Springs, PA, February 2016.

138. **Korcsmaros, J.**, Amberman, J.; McLaughlin, S.; Deng, W.; Klinke, D.J.; "Assaying the Impact of IL12RB2 and WISP1 on the In Vivo Growth of B16 Mouse Melanoma", 15th Annual WV-INBRE Summer Research Symposium, Morgantown, WV, July 2016.

139. **Amberman, J.**, Korcsmaros, J.; Deng, W.; McLaughlin, S.; Klinke, D.J.; "Using the CRISPR/Cas9 system to assay the importance of WISP1 and IL12RB2 in regulating anti-tumor immunity", 15th Annual WV-INBRE Summer Research Symposium, Morgantown, WV, July 2016.

140. **Deng, W.**; Klinke, D.J.; "WISP1 Stimulates Melanoma Cell Invasion by Promoting Epithelial-Mesenchymal Transition (EMT) Through Both Autocrine and Paracrine Signaling", Society for the Immunotherapy of Cancer Annual Meeting, Baltimore, MD. November 2016.

141. **Bland, C.**; Byrne-Hoffman, C.; Klinke, D.J.; "Identifying differential gene expression in cytotoxic T cells induced by B16F0 melanoma exosomes", AIChE Annual Meeting, San Francisco, CA, November 2016.

142. **Lanham, B.**; Fernandez, A.; Klinke, D.J.; "Characterizing the Production of Extracellular Vesicles over Time by LLC1, B16F0, and WISP1 KO B16F0 Cell Lines", 16th Annual WV-INBRE Summer Research Symposium, Huntington, WV, July 2017.

143. **Deng, W.**; Fernandez, A.; McLaughlin, S.L.; Palmer, A.*; Klinke, D.J.; "WISP1 Stimulates Melanoma Cell Invasion and Metastasis by Promoting Epithelial - Mesenchymal Transition (EMT)", International Pigment Cell Conference, Denver, CO. August 29, 2017.

144. **Klinke, D.J.**; "Identifying Altered Intercellular Signaling Networks in Cancer: Wnt-inducible Signaling Pathway Protein 1 (WISP1) as an Illustrative Example", 2017 BMES Annual Meeting, Phoenix, AZ. October 12, 2017.

145. **Gupta, P.R.***; Klinke, D.J.; "Refining Causal Networks Associated with Immune Cell Interactions in Cancer using Network Inference Algorithms and Expanded Metagene Constructs", 2017 BMES Annual Meeting, Phoenix, AZ. October 14, 2017.

146. **Fernandez, A.**; Deng, W.; McLaughlin, S.L.; Klinke, D.J.; "WNT1 Inducible Signaling Pathways Protein 1 (WISP1) modulates the intratumoral immune cell composition in a mouse melanoma model", Translational Research Cancer Centers Consortium, Seven Springs, PA, February 2018.

147. **Klinke, D.J.**; "From petrochemical reaction networks to intercellular networks in cancer: Developing ways to let reactive systems speak for themselves", American Chemical Society Annual Meeting, New Orleans, LA, March 2018.

148. **Crutchley B.**; Wang, Z.; Wang, Q.; Klinke, D.J.; "How to use R to generate Violin Plots to assist in sensitivity analysis of a cancer model", West Virginia Wesleyan College, April 7, 2018.

149. **Yao, Y.**; Wang, Z.; Wang, Q.; Klinke, D.J.; "Stability analysis of the high-tumor equilibrium of a tumor growth model in response to combination therapy involving 4-1BB and IL-12", West Virginia Wesleyan College, April 7, 2018.

150. **Gianniny, D.**; Wang, Z.; Wang, Q.; Klinke, D.J.; "Treatment strategy for responders in a combinatorial OXP and IL12 therapy based on a calibrated cancer model", 93rd Annual Meeting of WVAS, West Virginia Wesleyan College, April 7, 2018.

151. **Yao, Y.**; Wang, Z.; Wang, Q.; Klinke, D.J.; "Software development for data analysis using multiple-curve graphs through excel spreadsheets", 93rd Annual Meeting of WVAS, West Virginia Wesleyan College, April 7, 2018.

152. **Jarrell, B.**; Wang, Z.; Wang, Q.; Klinke, D.J.; "Treatment strategy for non-responders and partial-responders based on a calibrated cancer model in response to an immunochemotherapy", 93rd Annual Meeting of WVAS, West Virginia Wesleyan College, April 7, 2018.

153. **Yao, Y.**; Burns, C.; Wang, Z.; Wang, Q.; Klinke, D.J.; "Automating parameter change and data virtualization for simulations of a combinational cancer therapy", 93rd Annual Meeting of WVAS, West Virginia Wesleyan College, April 7, 2018.

154. **Yao, Y.**; Wang, Z.; Wang, Q.; Klinke, D.J.; "Software Development for Multiple-Curve Graph Generator Aiming at Large Data Collections in Biomedical Research Using C#", 2018 WV-INBRE Summer Symposium, West Virginia University, WV, July 31, 2018.

155. **Crutchley B.**; Wang, Q.; Wang, Z.; Klinke, D.J.; "Designing a Data Formatter for the Generation of Violin Plots with Applications to Tumor Growth Models", 2018 WV-INBRE Summer Symposium, West Virginia University, WV, July 31, 2018.

156. **Crow, M.**; Yao, Y.; Crutchley B.; Wang, Q.; Wang, Z.; Klinke, D.J.; "Treatment Strategies of a Combination Therapy Involving IL-12 & 4-1BB to Improve Tumor Control for Non-Responders", 2018 WV-INBRE Summer Symposium, West Virginia University, WV, July 31, 2018.

157. **Montgomery, M.; Norman, D.; Stump, T.**; Deng, W.; Bergeron, S.; Klinke, D.J.; "Exploring the oncogenic role of Wnt-inducible signaling protein 1 in zebrafish (Danio rerio)", 2018 WV-INBRE Summer Symposium, West Virginia University, WV, July 31, 2018.

158. **Fama, T.**; Klinke, D.J.; "Quantifying the Evolution in Diversity of Immune and Stromal Cell Subsets within B16 Mouse Melanoma Tumors.", 2018 WV-INBRE Summer Symposium, West Virginia University, WV, July 31, 2018.

159. **Gupta, P.R.**; Torang, A.; Klinke, D.J.; "Logistic Regression Model for Immunophenotyping the Tumor Microenvironment", 2018 BMES Annual Meeting, Atlanta, GA. October 18, 2018.

160. **Fama, T.**; Klinke, D.J.; "Quantifying the Evolution in Diversity of Immune and Stromal Cell Subsets within B16 Mouse Melanoma Tumors.", 2018 AIChE Annual Meeting, Pittsburgh, PA, October 29, 2018.

161. Klinke, D.J.; "Identifying altered intercellular signaling networks in cancer WNT-Inducible Signaling Pathway protein 1 (WISP1) as an illustrative example.", Systems Approaches to Cancer Biology, Woods Hole, MA, November 9, 2018.

162. Klinke, D.J.; "Cell Communication Network Factor 4 (CCN4/WISP1) Shifts Melanoma Cells from a Fragile Proliferative to a Resilient Metastatic State and Suppresses Immune Surveillance.", Biochemical and Molecular Engineering XXI, Montreal, CA, July 15, 2019.

163. **Mansy, M.**; Norman, D.; VanMeter, C.; Bergeron, S.; Klinke, D.J.; "Using Zebrafish To Identifying The Role Of Wisp1 In Melanoma Metastasis.", 2019 AIChE Annual Meeting, Orlando, FL, November 10, 2019.

164. **Pirkey, A.C.**; Deng, W.; Norman, D.; Razazan, A.; Klinke, D.J.; "Head-to-head comparison of CCN4, DNMT3A, PTPN11, and SPARC as suppressors of anti-tumor immunity", 24th Annual Translational Research Cancer Center Consortium meeting, Seven Springs, PA, June 7, 2022.

165. **Pirkey, A.C.**; Deng, W.; Norman, D.; Razazan, A.; Klinke, D.J.; "Head-to-head comparison of CCN4, DNMT3A, PTPN11, and SPARC as suppressors of anti-tumor immunity", 9th IFAC Conference on Foundations of Systems Biology in Engineering, FOSBE 2022, Boston, MA, August 30, 2022