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Curriculum Vitae

Kenneth L. Kramer
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ACADEMIC DEGREES

1991-1997	PhD, Department of Cell Biology, Neurobiology, and Anatomy, University of Cincinnati; Cincinnati, OH
1987-1991	BS, Biology, University of Dayton; Dayton, OH

PROFESSIONAL APPOINTMENTS

2018-present	M1 Component Director, Creighton University School of Medicine; Omaha, NE
2018-present	Graduate Program Director, MS in Clinical Anatomy, Creighton University; Omaha, NE
2018-present	Associate Professor, Department of Medical Education, Creighton University; Omaha, NE
2018-present	Associate Professor, Department of Biomedical Sciences, Creighton University; Omaha, NE
2017-2018	Assistant Professor, Department of Medical Education, Creighton University; Omaha, NE
2011-2018	Assistant Professor, Department of Biomedical Sciences, Creighton University; Omaha, NE
2010	Visiting Instructor, Department of Neurobiology and Anatomy, University of Maryland; Baltimore, MD
2004-2011	Investigator, Genetics and Developmental Biology Center, National Heart, Lung, and Blood Institute, National Institutes of Health; Bethesda, MD
1998-2004	Postdoctoral Fellow, Huntsman Cancer Institute, University of Utah; Salt Lake City, UT
1995-1996	Adjunct Instructor, Department of Biology, Raymond Walters College, University of Cincinnati; Cincinnati, OH

PROFESSIONAL AFFILIATIONS

2017	Public Responsibility in Medicine and Research
2001-2004	Society for Developmental Biology
1999-2013	Society for Glycobiology
1998-present	American Association of Anatomists

PROFESSIONAL ACTIVITIES: INTERNATIONAL, NATIONAL, STATE

2019	Representative, FASEB Capitol Hill Day, Washington, DC
2018-2019	Grant Awards Task Force, American Association of Anatomists
2018	Platform Chair, “Stem Cells, Regeneration and Tissue Engineering”, Experimental Biology, San Diego, CA
2017-present	Nebraska State Anatomical Board
2017	Plenary Symposium Chair, “Organoids: Recapitulating Anatomy in a Dish”, Experimental Biology, Chicago, IL
2016	Symposium Chair, “Tissue Generation & Transplantation” Experimental Biology, San Diego, CA
2016	Symposium Chair, “Molecular Mechanisms of Tissue Dynamics”, Experimental Biology, San Diego, CA
2015	Symposium Chair, “Endothelial-to-Mesenchymal Transition”, Experimental Biology, Boston, MA
2014	Symposium Chair, “Stem Cells and Tissue Injury”, Experimental Biology, San Diego, CA

2013-present	Presenter, Nebraska Science Festival
2011-2017	Creator, BioEYES Omaha (an outreach program using zebrafish to help teach genetics in the Omaha Public Schools)
2011-present	Judge, Midwest Student Biomedical Research Forum
2010-2017	Program Committee, American Association of Anatomists
2010	Symposium Chair, "Sweet Cells: Glycans in Evolution, Development & Disease", Experimental Biology, Anaheim, CA
2008	Nominating Committee Task Force, American Association of Anatomists
2004-2006	Chair, Advisory Committee for Young Anatomists, American Association of Anatomists

PROFESSIONAL ACTIVITIES: UNIVERSITY, SCHOOL, DEPARTMENT

2019-present	Course Director, Clinical Rotations, Creighton Univ Graduate School
2018-present	Co-Chair, Curriculum Assessment Work Group, Creighton University School of Medicine
2018-present	Medical Education Management Team, Creighton University School of Medicine
2018-present	Student Advancement Committee, Creighton University School of Medicine
2018	Course Director, Pre-Medical Anatomy, Creighton University Health Sciences
2017-2018	Physician Assistant Curriculum Committee, Creighton University School of Medicine
2017-present	Course Director, Teaching Practicum in Medical Anatomy, Creighton Univ Graduate School
2017-present	Course Director, Current Topics in Clinical Anatomy (G2), Creighton University Graduate School
2017	Chair, Curriculum Keyword Work Group, Creighton University School of Medicine
2017-present	Accreditation and Quality Improvement Work Group, Creighton University School of Medicine
2017-2018	Admission's Committee, Clinical Anatomy Program, Creighton University School of Medicine
2017-2018	Anatomy Faculty Search Committee, Creighton University Department of Medical Education
2017-2018	Course Director, Medical Anatomy, Creighton University School of Medicine
2017-2018	M1-M2 Curriculum Revision Council, Creighton University School of Medicine
2017-2019	Institutional Animal Care and Use Committee, Creighton University
2016-present	Course Co-Director, Research Methods, Creighton University Graduate School
2016	Associate Course Director, Medical Anatomy, Creighton University School of Medicine
2016-present	Faculty Advisory Committee to the Dean, Creighton University School of Medicine
2016-present	Student Research and Scholarly Activity Committee, Creighton University School of Medicine
2016-present	Graduate Program Committee, Creighton Biomedical Sciences Department
2016	Judge, Honor's Program, Creighton University
2015-2016	Reviewer, Summer Undergraduate Research Fellowships, Creighton University
2014-present	Educational Policy Committee, Creighton University School of Medicine
2014	Comparative Anatomist Faculty Search Committee, Creighton University Biology Department
2013-2014	Graduate School Internal Review Committee, Creighton University School of Medicine
2013-present	Judge, St. Albert's Research Day, Creighton University
2010-2011	Organizing Committee, NIH Glycobiology Interest Group
2009-2010	NIH Electronic Lab Notebook Committee
2005-2010	Co-Chair, NHLBI DIR Seminar Series

COMMUNITY SERVICE (Primary roles last 3 years)

2017	Co-Chair, Angel Flight (school's primary fundraising event), Skutt Catholic High School
2016-2018	Chairman, Troop Committee, Boy Scout Troop 448
2016-present	Timer, Nebraska High School State Swimming Championships
2016-present	Sacristan, St Stephen the Martyr Catholic Church
2015-present	Co-Director, Skutt Catholic High School Swimming Invitational

AWARDS/FELLOWSHIPS

2019	Nomination, Teaching for Tomorrow Faculty Award, Creighton University

2018	Course/Clerkship Director Award, Creighton University
2018	Dedicated Teaching Award, Creighton University
2015	Basic Science Teaching Scholar Award, Creighton University
2005-2011	NIH Intramural Grant, National Heart, Lung, and Blood Institute: The role of proteoglycans in zebrafish development (HL005201)
2005	NIH Intramural Grant, Imaging Probe Development Center: Cell-specific tools for imaging glycans
2004	Susan Cooper Jones Memorial Research Award (Outstanding Postdoctoral Fellow), Huntsman Cancer Institute
2003-2004	NIH/NHLBI Cardiology training grant (HL07576)
2000-2003	NIH/NHLBI Individual NRSA: Molecular Role of Syndecans in Heart Development (HL10382)

TEACHING EXPERIENCE

2018-present	Instructor, Pre-Medical Anatomy, Creighton University Health Sciences
2017-present	Instructor, Current Topics in Clinical Anatomy, Creighton University Graduate School
2017-present	Instructor, Research Methods, Creighton University Graduate School
2017-present	Instructor, Endocrine/Reproductive System, Creighton University School of Medicine
2016-present	Instructor, Advanced Cell and Molecular Biology, Creighton University Graduate School
2015-present	Instructor, Neurosciences, Creighton University School of Medicine
2014	Instructor, Bioinformatics, Creighton University Graduate School
2013	Lab Instructor, Developmental Biology, Creighton University School of Medicine
2012-2018	Instructor, Molecular and Cellular Biology, Creighton University School of Medicine
2012-2018	Instructor, Medical Anatomy, Creighton University
2012-2018	Lab Instructor, Medical Anatomy, Creighton University
2010	Instructor, Structure and Development, Univ of Maryland
2010	Lab Instructor, Structure and Development, Univ of Maryland
2010	Instructor, Developmental Biology, FAES Graduate School at NIH
1996	Lab Instructor, Human Physiology and Anatomy, Raymond Walters College, Univ of Cincinnati
1995-1996	Instructor, Human Sectional Anatomy, Raymond Walters College, Univ of Cincinnati
1995	Lab Instructor, Fundamentals in Biology, Raymond Walters College, Univ of Cincinnati
1994	Instructor, Human Physiology and Anatomy, Raymond Walters College, Univ of Cincinnati
1993	Instructor, Basics of Cell Biology, College of Medicine, Univ of Cincinnati
1992-1994	Teaching Assistant, Human Gross Anatomy, College of Medicine, Univ of Cincinnati

GRANT ADVISORY COMMITTEE/PANELS

2011	Early Career Reviewer (Inaugural), Intracellular Interactions Study Section, NIH
2010-2014	Research Outreach Grant Committee, American Association of Anatomists
2008-2010	Advisor, NHLBI RFA Initiative 0165, "Roles of Glycans in Heart, Lung and Blood Diseases"

ONGOING RESEARCH SUPPORT

Health Science Strategic Investment Fund — Shibata (PI) — 7/1/18 – 6/30/20

Role of long non-coding RNA in regulating immune responses in the brain.

The long-term goal of our work is to understand the contribution of long chain fatty acid β-oxidation to neurodevelopment by combining analyses in clinical psychiatry with zebrafish cell biology.

Role: Collaborator — $50,000

Bellucci DePaoli Foundation — Kramer (PI) — 1/1/18 – 12/31/19

Kinocilia-Specific Proteins in Hair Cell Stability and Function

As part of a collaborative Hair Cell Restoration Group at Creighton, this project aims to supports joint research projects with the labs of Drs David He and Garrett Soukup.

Role: PI $33,000

COMPLETED RESEARCH SUPPORT

Health Science Strategic Investment Fund Kramer (PI) 7/1/16 – 6/30/18
Role of Kinocilia-Specific Proteins in Zebrafish Vestibular Function
This project supports investigations into how the proteins Kinocilin and Stereocilin mediate zebrafish hearing and balance. Since these proteins are uniquely expressed in sensory hair cell kinocilia, we hypothesize that they have specific roles in mediating hair cell function.
Role: PI $50,000

CURAS Faculty Research Fund Kramer (PI) 6/1/16 – 5/31/17
Role of gpc3 *in Xenopus tropicalis Fear Behavior*
This Creighton Center for Undergraduate Research and Scholarship (CURAS) grant supports undergraduate research in my lab that is focused on determining if a proteoglycan that is associated with behavior deficits in humans (*gpc3*) has a conserved role in mediating fear behaviors during vertebrate evolution.
Role: PI $5,000

State of NE LB-692 Kramer (PI) 7/1/11 – 6/31/16
Role of Glycosaminoglycans in Zebrafish Development
This project provided seed funding to support investigations into how structurally similar carbohydrates mediate both zebrafish blood vessel and ear development. Specifically, this work developed novel tools for directly imaging the carbohydrates.
Role: PI $300,000

NCCR 5P20RR018788/NIGMS 8P20GM103471 Smith (PI) 8/4/11 – 8/31/16
Nebraska Center for the Molecular Biology of Neurosensory System
This NIH Center of Biomedical Research Excellence project provided mentoring, seed funding, and core facilities for junior faculty working toward attaining their first NIH R01 grant.
Role: PI on sub-project "Role of Keratan Sulfate in Zebrafish Ear Development". $185,416

Haddix President's Research Fund Bruce (PI) 3/1/15 – 2/28/16
Gene Regulation of Fear Behaviors: Creating Mutant Zebrafish Models
This project aimed to better understand the evolution of fear. We are focused on specific subset of zebrafish amygdalar neurons that are hypothesized to be essential for fear behaviors. Using genetic approaches, we specifically eliminated these amygdalar neurons in the zebrafish, created zebrafish mutant gene knockout lines, and determined their roles in fear behaviors.
Role: Co-PI $5,000

President's Faculty Research Fund Kramer (PI) 3/1/12 – 2/28/13
ZOIC-Zebrafish in Omaha Inner City Classrooms
This project supported hands-on science projects for Omaha public high school and middle school students.
Role: PI $5,000

EPSCoR First Award Kramer (PI) 5/15/2013-5/14/2014
Direct Analysis of Glycans During Zebrafish Development
This NSF-supported project investigated how the glycan keratan sulfate mediates zebrafish ear development, growth, and function using a novel chemoenzymatic approach.
Role: PI $20,000

GRANTS SUBMITTED BUT NOT FUNDED

NIBIB R21 Zhang (PI) Submitted 2/16/18
Real time monitoring of Epstein-Bar virus infection and transformation in vivo.
This project attempted to establish an in vivo Epstein Barr virus (EBV) infection and transformation model in zebrafish using human hematopoietic cells xenografts.
Role: Co-PI

Macy Faculty Scholar Program Kramer (PI) Submitted 2/14/18
The First Patients in a Fully Integrated Anatomy Curriculum
The overall objective of this proposal was to initiate and evaluate peer-assisted and individualized learning strategies that enable medical students to apply anatomy to clinical disciplines.
Role: PI

NE-INBRE Developmental Research Project Program Ekpenyong (PI) Submitted 1/17/17
Mechanotransduction in Leukocytes in vitro *and* in vivo
Role: Co-PI

NSF-IOS Preliminary Proposal Bruce (PI) Submitted 1/14/15
Fear Development: Evolution of Genes, Neurons and Behavior
Role: Co-PI

NSF-IOS Preliminary Proposal Bruce (PI) Submitted 1/14/14
Evolution of Amygdalar Neurons in the Regulation of Fear
Role: Co-PI

NSF-IOS Preliminary Proposal Bruce (PI) Submitted 1/18/13
Fear Development: Evolution of Genes, Neurons and Behavior
Role: Co-PI

NSF-IOS Preliminary CAREER Proposal Kramer (PI) Submitted 1/18/13
Direct Analysis of Glycans During Zebrafish Otolith Development
Role: PI

JOURNAL REFEREE

Anatomical Record	*Biology Open*	*Developmental Dynamics*
Experimental Neurology	*genesis*	*Journal of Visualized Experiments*

PUBLICATIONS

14. KD Thiessen, SJ Grzegorski, LN Higuchi, JA Shavit, and **KL Kramer** (2019) Zebrafish Otolith Biomineralization Requires Polyketide Synthase. Submitted.
13. CL Barta, H Liu, L Chen, Y Li, KP Giffen, **KL Kramer**, KW Beisel, DZ He. (2018) RNA-seq transcriptomic analysis of adult zebrafish inner ear hair cells. Scientific Data 5: 180005.
12. C Inserra and **KL Kramer**. (2015) Visualization of Stereocilin in the Developing Zebrafish Ear. The Medical Student Press Journal, *2(2)*.
11. MV Galanternik, KL Kramer, T Piotrowski. (2015). Heparan Sulfate Proteoglycans regulate Fgf signaling, ligand diffusion and cell polarity during collective cell migration. Cell Reports *10(3)*: 414–428.
10. YW Lundberg, Y Xu, KD Thiessen, and **KL Kramer.** (2015) Mechanisms of otoconia and otolith development. Developmental Dynamics *244(3)*: 239-53.

9. B Gorsi, F Liu, X Ma, TJ Chico, A Srinivasan, **KL Kramer**, E Bridges, R Monteiro, AL Harris, R Patient, and SE Stringer. (2014). The heparan sulfate editing enzyme Sulf1 plays a novel role in zebrafish VegfA mediated arterial venous identity. Angiogenesis *17(1)*: 77-91.
8. ST Gee, SL Milgram, **KL Kramer**, FL Conlon, and SA Moody. (2011). Yes-Associated Protein 65 (YAP) Expands Neural Progenitors and Regulates Pax3 Expression in the Neural Plate Border Zone. PLoS ONE *6(6)*: e20309.
7. **KL Kramer.** (2010). Specific sides to multifaceted glycosaminoglycans are observed in embryonic development. Semin Cell Dev Biol *21(6)*; 631-7.
6. Z Zhang, D Alpert, R Francis, B Chatterjee, Q Yu, T Tansey, SL Sabol, C Cui, Y Bai, M Koriabine, Y Yoshinaga, JF Cheng, F Chen, J Martin, W Schackwitz, TM Gunn, **KL Kramer**, PJ De Jong, LA Pennacchio, and CW Lo. (2009). Massively parallel sequencing identifies the gene Megf8 with ENU-induced mutation causing heterotaxy. Proc Natl Acad Sci *106*:3219-24.
5. **KL Kramer**, and HJ Yost. (2003). Heparan sulfate core proteins in cell-cell signaling. Annu Rev Genet *37*: 461-84.
4. **KL Kramer**, and HJ Yost. (2003). Cardiac left-right development: Are the early steps conserved? In Cold Spring Harb Symp Quant Biol *67*: 37-44
3. **KL Kramer**, JE Barnette, and HJ Yost. (2002). PKCγ regulates syndecan-2 inside-out signaling during *Xenopus* left-right development. Cell *111(7)*: 981-90.
2. **KL Kramer** and HJ Yost. (2002). Ectodermal syndecan-2 mediates left-right axis formation in migrating mesoderm as a cell-nonautonomous Vg1 cofactor. Developmental Cell *2(1)*: 115-24.
1. **KL Kramer**, BF Giffin, JW Fox, and RL Drake. (1999). Insulin replacement therapy in diabetic rats using an osmotic pump normalizes expression of enzymes key to hepatic carbohydrate metabolism. Archives of Biochemistry and Biophysics *368(2)*: 291-7.

STUDENT-BASED PRESENTATIONS

50. KD Thiessen, EM Supe, and **KL Kramer**. (2019). Otol1a as a Biomarker for Vestibular Dysfunction in Zebrafish. Poster at Midwest Student Biomedical Research Forum.
49. AJ Blanck and **KL Kramer**. (2019). Characterizing the Role of Kinociliin in the Zebrafish Inner Ear. Poster at Midwest Student Biomedical Research Forum.
48. CJ Altfillisch and **KL Kramer**. (2019). The Role of Stereocilin-B in Otolith Attachment. Poster at Midwest Student Biomedical Research Forum.
47. KP Giffen, H Liu, **KL Kramer**, and DZ He. (2019). Characterizing the Role of Kcnq5a in Zebrafish Inner Ear Hair Cells. Poster Presentation at Experimental Biology Annual Meeting.
46. LL Bruce, E Dorchuck, BN Hassman, A Mezher, O Olucha, and **KL Kramer**. (2018). The role of grp and grpr in the extinction of cued fear memory in zebrafish. Poster Presentation at Society for Neuroscience.
45. KD Thiessen, EM Supe, and **KL Kramer**. (2018). Zebrafish Otolith Biomineralization Requires Polyketide Synthase. Poster presentation at International Zebrafish Society Conference.
44. KD Thiessen, EM Supe, and **KL Kramer**. (2018). Otolin-1a as a Biomarker for Vestibular Dysfunction Following Microgravity Exposure in Zebrafish. Poster presentation at COBRE Annual Meeting.
43. KD Thiessen, EM Supe, and **KL Kramer**. (2018). Otolin-1a as a Biomarker for Vestibular Dysfunction Following Microgravity Exposure in Zebrafish. Oral presentation at Nebraska Academy of Sciences Annual Meeting.
42. KD Thiessen, EM Supe, and **KL Kramer**. (2018). Zebrafish as a Model for Benign Paroxysmal Positional Vertigo. Poster Presentation at Experimental Biology Annual Meeting.
41. B Hassman, E Dorchuck, C Prince, K Reidelberger, **KL Kramer**, and LL Bruce. (2018). Comparison of behavioral tests to assess fear and anxiety in a teleost, *Danio rerio*, and an amphibian, *Xenopus tropicalis*. Poster Presentation at Creighton's St Albert's Day.
40. E Supe, KD Thiessen, and **KL Kramer**. (2018). Zebrafish as a Model for Benign Paroxysmal Positional Vertigo. Poster Presentation at Creighton's St Albert's Day.

39. KP Giffen, H Liu, L Chen, ST Stringham, **KL Kramer**, KW Beisel, and DZ He. (2018). Unique Expression of Gene Orthologs in Zebrafish and Mouse Non-sensory Supporting Cell Populations of the Inner Ear. Poster at Midwest Student Biomedical Research Forum.
38. ST Stringham, KP Giffen, H Liu, **KL Kramer**, and DZ He. (2018). Enrichment of Glutamate Transporter *slc1A3* Orthologs in Zebrafish and Mouse Hair Cells of the Inner Ear. Poster at Midwest Student Biomedical Research Forum.
37. A Mezher, LL Bruce, **KL Kramer.** (2018). Evolution of Genetic Networks Regulating Fear Behaviors. Poster at Midwest Student Biomedical Research Forum.
36. H Liu, L Chen, KP Giffen, Y Li, **KL Kramer**, KW Beisel, and DZ He. (2018). Molecular Mechanisms Underlying Differences Between Zebrafish and Mouse Hair Cell Specializations. Poster Presentation at the Association of Research Otolaryngology Annual Meeting.
35. KP Giffen, H Liu, L Chen, ST Stringham, **KL Kramer**, KW Beisel, and DZ He. (2018). Unique Expression of Gene Orthologs in Zebrafish and Mouse Non-sensory Supporting Cell Populations of the Inner Ear. Poster Presentation at the Association of Research Otolaryngology Annual Meeting.
34. B Hassman, E Dorchuck, C Prince, K Reidelberger, **KL Kramer**, and LL Bruce. (2017). Comparison of behavioral tests to assess fear and anxiety in a teleost, *Danio rerio*, and an amphibian, *Xenopus tropicalis*. Poster Presentation at Society for Neuroscience.
33. CJ Altfillisch, DB Nerland, CJ Inserra, MF Chlopek, and **KL Kramer**. (2017). Stereocilin-b Tethers the Zebrafish Otolith to Sensory Hair Cell in the Inner Ear. Poster at Experimental Biology Annual Meeting.
32. KD Thiessen, LN Higuchi, and **KL Kramer**. Polyketide Synthase is Required for Zebrafish Otolith Biomineralization. (2017). Poster Presentation at Experimental Biology Annual Meeting.
31. B Hassman, E Dorchuck, **KL Kramer**, and LL Bruce. (2017). Behavioral Tests for Assessing Learning in *Xenopus Tropicalis*. Oral Presentation at the Nebraska Academy of Sciences Annual Meeting.
30. CL Harrison and **KL Kramer**. Characterization of Specific Glycans in the Zebrafish Inner Ear. (2017). Poster Presentation at Creighton Honors Day.
29. SH Byer, LL Bruce, and **KL Kramer**. Understanding the Role of Amygdalar Proteoglycan Glypican-3 in Zebrafish Aversive Behavior Response. (2017). Poster Presentation at Creighton Honors Day.
28. CJ Altfillisch, DB Nerland, CJ Inserra, MF Chlopek, and **KL Kramer**. (2017). Stereocilin-b Tethers the Zebrafish Otolith to Sensory Hair Cell in the Inner Ear. Poster Presentation at Creighton's St Albert's Day.
27. E Supe, KD Thiessen, and **KL Kramer**. (2017). Zebrafish as a Model for Benign Paroxysmal Positional Vertigo. Poster Presentation at Creighton's St Albert's Day.
26. HJ Lang, and **KL Kramer**. (2017). Investigation of Enhancers that Drive Specific Expression in the Amygdala. Poster Presentation at Creighton's St Albert's Day.
25. CL Harrison and **KL Kramer**. (2017). Characterization of Specific Glycans in the Zebrafish Inner Ear. Poster Presentation at Creighton's St Albert's Day.
24. KD Thiessen, LN Higuchi, and **KL Kramer**. (2017). Polyketide Synthase is Required for Zebrafish Otolith Biomineralization. Poster Presentation at Midwest Student Biomedical Research Forum.
23. JE Marvin and **KL Kramer**. (2017). The glycosyltransferase Loki uses a high-energy donor to indirectly transglycosylate methylumbelliferone. Poster at Midwest Student Biomedical Research Forum.
22. JH Werner, **KL Kramer**, and LL Bruce. (2017). Localizing Homologs of Gene-Specific Amygdalar Neurons in the Chicken Brain, *Gallus Gallus Domesticus*. Poster at Midwest Student Biomedical Research Forum.
21. B Timm, **KL Kramer**, and LL Bruce. (2016). Localizing homologs of gene specific amygdalar areas in embryonic chick brain Gallus gallus domesticus. Poster Presentation at Annual Biomedical Research Conference for HS-MACA students.
20. C Barta, H Liu, **KL Kramer**, KW Beisel, DZ He. (2016). Transcriptome Characterization of Adult Zebrafish Inner-Ear Hair Cells. Poster Presentation at the Association of Research Otolaryngology Annual Meeting.
19. KD Thiessen and **KL Kramer**. (2016). The Otolithic Membrane Mediates Otolith Organization. Poster Presentation at Experimental Biology Annual Meeting.

18. CN Kral and **KL Kramer**. (2016). Proteins Necessary for Hearing in Zebrafish. Poster Presentation at Creighton Honors Day.
17. A Tu, **KL Kramer**, and LL Bruce. (2015). Comparison of amygdalar-like structures in mammals, birds, and fish. Poster Presentation at Annual Biomedical Research Conference for HS-MACA students.
16. EW Villanueva and **KL Kramer**. (2015). Age-Related Changes in the Inner Ear of the Adult Zebrafish (*Danio rerio*). Poster, Creighton Honors Day.
15. CJ Altfillisch, K Arnold, L Higuchi, **KL Kramer**, MG Nichols, and HC Jensen Smith. (2015). Differences in Aminoglycoside Entry and Mitochondrial Metabolism in Regenerative and Non-Regenerative Sensory. Poster Presentation at St. Albert's Day.
14. K Arnold, C Altfillisch, L Higuchi, **KL Kramer**, MG Nichols, HC Jensen Smith. (2015). Differences in Mitochondrial Metabolism in Regenerative and Non-Regenerative Sensory. Poster Presentation at St. Albert's Day.
13. KD Thiessen and **KL Kramer**. (2015). Endolymph Facilitates Otolith Nucleation in Early Zebrafish Inner Ear Development. Poster at Midwest Student Biomedical Research Forum.
12. CJ Inserra and **KL Kramer**. (2015). Visualization of Stereocilin in the developing zebrafish ear. Poster Presentation at Midwest Student Biomedical Research Forum.
11. KD Thiessen and **KL Kramer**. (2015). Otolith Organization is Mediated by Otogelin-like. Oral Presentation at the Association of Research Otolaryngology Annual Meeting.
10. EW Villanueva and **KL Kramer**. (2014). Analysis of Cochlin mutations in zebrafish inner ear development. Poster Presentation at Ferlic Summer Scholar Poster Showcase.
9. KD Thiessen and **KL Kramer**. (2014). Otogelin in Zebrafish Otolith Attachment and Organization. Poster Presentation at Experimental Biology Annual Meeting.
8. Y Kee, H Choi, N Pierce, and **KL Kramer**. (2014). Gene Loss, Duplication, and Expression Divergence in Vertebrate Glypicans. Poster Presentation at International Conference on Zebrafish Development and Genetics.
7. CR DeVries, **KL Kramer**, and LL Bruce. (2013). Expression of glypican 3 in homologous amygdala-like regions of diverse vertebrates. Poster Presentation at Society for Neuroscience.
6. KD Thiessen and **KL Kramer**. (2013). Keratan sulfate mediates zebrafish otolith growth. Poster Presentation at Society for Glycobiology Annual Meeting.
5. AE James, KD Thiessen, and **KL Kramer**. (2013). The Role of *Alpha-Tectorin* in Zebrafish Inner Ear Development. Poster Presentation at Creighton's St Albert's Day.
4. KD Thiessen and **KL Kramer**. (2013). ILDR1B Mediates Calcium Concentrations in Early Ear Development. Oral Presentation at Midwest Student Biomedical Research Forum.
3. AE James, KD Thiessen, and **KL Kramer**. (2013). *Alpha-Tectorin* Mediates Auditory Hair Cell Attachment to Zebrafish Otoliths. Poster Presentation at Midwest Student Biomedical Research Forum.
2. KD Thiessen and **KL Kramer**. (2013). Keratan sulfate mediates zebrafish ear development. Poster Presentation at the Association of Research Otolaryngology Annual Meeting.
1. MJ Chlopek and **KL Kramer**. (2012). Otoancorin and its Role in Otolith Formation and Function. Oral Presentation at INBRE Annual Meeting.

GRADUATE STUDENTS

2018	Aaron J Blanck, M1 summer research fellow
2018	Charles J Altfillisch, M1 summer research fellow
2017-2018	Sarah R Crews, PhD thesis committee
2016-present	Kimberlee P Giffen, PhD thesis committee
2016	Joseph E Marvin, M1 summer research fellow
2015-2016	Benjamin F Kopecky, MS clinical anatomy, currently an osteopathic student at Marian University
2014	Christopher J Inserra, M1 summer research fellow, currently a resident in Physical Medicine and Rehabilitation at the University of Pennsylvania

2013-present	Kevin D Thiessen, Primary PhD Advisor
2013-2016	Travis L McCumber, PhD thesis committee, currently an Assistant Professor at the University of Nebraska Medical Center

UNDERGRADUATE STUDENTS

2018-present	Alyssa Yuen
2017-present	John E Kral
2017-present	Luke D Heiland
2017-present	Dillon B Nerland
2016-2018	Emily M Supe
2016-2017	Kaleolani S Ogura
2016-2017	Carina L Harrison, currently a graduate student at Creighton University
2015-2017	Harrison J Lang, currently a medical student at University of Nebraska Medical Center
2015-2017	Charles J Altfillisch, currently a medical student at Creighton University
2015-2017	Stefano H Byer, currently a graduate student at University of Missouri - Kansas City
2014-2016	Catharine N Kral, currently an osteopathic student at Kirksville College
2014-2015	Lisa N Higuchi, currently a medical student at Creighton University
2012-2014	Anne E (James) Obradovich, currently a research technician at Creighton University
2012-2014	Stephen J Statz, currently a medical student at Loyola University
2012-2014	Tess E Starman, currently a Data and Match Support Specialist at TeamMates Mentoring Program
2012-2013	David J Wessling, currently a medical student at Creighton University
2012	Mitchell Chlopek, currently a medical student at University of Nebraska Medical Center

UNDERGRADUATE HONORS ADVISOR

2019	Dillon B Nerland	Using Microphonic Assays to Analyze Otolith Attachment in Zebrafish
2017	Carina L Harrison	Characterization of Specific Glycans in the Zebrafish Inner Ear
2017	Stefano H Byer	Understanding the Role of Amygdalar Proteoglycan Glypican-3 in Zebrafish Aversive Behavior Response
2016	Catharine N Kral	Proteins Necessary for Hearing in Zebrafish
2015	Eric W Villanueva	Age-Related Changes in the Inner Ear of the Adult Zebrafish

FELLOWSHIPS AND AWARDS TO STUDENTS

2018	Aaron Blanck, Fellowship, M1 Summer Research Program
2018	Charles Altfillisch, Fellowship, M1 Summer Research Program
2018	Luke Heiland, Dr. and Mrs. Randolph Ferlic Summer Undergraduate Research Fellowship
2018	John Kral, Dean's Summer Undergraduate Research Scholarship
2017	Kevin Thiessen, Recipient, NASA Nebraska Space Grant Fellowship
2017	Carina Harrison, Finalist, Dean's Award for Research
2017	Harrison Lang, Big East Michael Tranghese Postgraduate Leadership Award
2017	Kevin Thiessen, Full Scholarship, Marine Biological Laboratory course in Embryology: Concepts and Techniques in Modern Developmental Biology
2017	Andrew Mezher, Yamaguchi scholar, M1 Summer Research Program (Co-Mentor)
2017	Kevin Thiessen, Finalist, AAA Graduate Student Poster Presentation Award
2016	Joe Marvin, Yamaguchi scholar, M1 Summer Research Program
2014	Eric Villanueva, Fellowship, Ferlic Summer Research
2014	Chris Inserra, Fellowship, M1 Summer Research Program