## **CURRICULUM VITAE: Kyoungtae Kim**

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#### **EDUCATION:**

Post-Doc. 2005	Cell biology/Physiology, Washington University in St. Louis, MO.
Ph.D. 2001	Biology, Florida State University, Tallahassee, FL.
M.A. 1993	Biological Science, Kyungpook National University, Taegu, Korea.
B.A. 1988	Biological Science, Kyungpook National University, Taegu, Korea.

### **EMPLOYMENT (RESEARCH):**

2023-present	Roy Blunt Life Science Endowed Professor
2017-2021	Associate Dean, College of Natural and Applied Science.
2016-present	Professor, Missouri State University: "Endocytosis, membrane
	Trafficking, plasma membrane organization, and nanomaterial cytotoxicity."
2011-2016	Associate Professor, Missouri State University: "Endocytosis, membrane
	Trafficking, eisosome organization, and nanomaterial cytotoxicity."
2006-2011	Assistant Professor, Missouri State University: "Actin-based endocytosis and
	membrane organization" (Independent research).
2002-2005	Post-doctor, Cell Biology/Physiology, Washington University: "Structure and
	Function of Actin Capping Protein" (John Cooper Lab)
1996-2001	Ph.D., Biology, Florida State University: "Characterization of Titin-like
	protein in Smooth Muscle" (Thomas Keller lab).
1994-1995	Special Student, Biological Science, Florida State University: "The Function
	of Cellular Titin in Brush Border" (Advisor: Thomas Keller).
1990-1993	M.A., Biological Science, Kyungpook National University, Taegu, Korea.
	"The Effect of Transforming Growth Factor- $\beta_2$ on the Chondrogenesis and
	Expression of Fibronectin" (Thesis Advisor: Dr. Shinsung Kang).
	"The Regulatory Mechanism of Differentiation of Rat Monocytes to
	Macrophage" (Project Advisor: Dr. Shinsung Kang).
1988-1990	Army service, Korea (Specialty in Biochemical Service: Biochemical Gas).

### **EMPLOYMENT (TEACHING):**

	(I (IEACIIING).
2017-2021	Associate Dean, College of Natural and Applied Sciences.
2016-present	Professor, Missouri State University, MO
2011-2016	Associate Professor, Missouri State University, MO.
2006-2011	Assistant Professor, Missouri State University, MO.
2005-2006	Visiting Assistant Professor, Missouri State University, Springfield, MO.
2001	Teaching Assistant, Signal Transduction of Flagella Regeneration in Green
	algae Chlamydomonas (Lab, L. Keller), Florida State University (FSU).
2000	Teaching Assistant, Cell motility Lab Course (Dr. Thomas Roberts), FSU.
2000	Teaching Assistant, Cell Structure and Function (Dr. Thomas Keller), FSU.
1990-1993	Teaching Assistant, Animal Physiology (Dr. S. Kang), Kyungpook National

Univ. Korea

1987 Assistant Teacher, Biology, Pyunglee High School, Korea.

#### PROFESSIONAL ORGANIZATIONAL MEMBERSHIPS:

1998-present American Society of Cell Biology. 2008-present American Society of Microbiology. 2010-present National Academy of Science, MO.

2017-present Member of the Council of Colleges of Art & Science (CCAS)
2017-present National Professional Science Masters Association (NPSMA)

2023-present Society of Toxicology (SOT)

#### Administration-related positions or service

2021-present Assistant Departmental Chair

2017-2021 Associate Dean

#### **AWARD and HONORS**

2023, Faculty Excellence in Research (CNAS)

2023, Roy Blunt Life Science Professorship Award Recipient

2022, Certificate of Appreciation from the GREAT (Globally Responsive Edu and Teaching)
Program

2022, Professor Salary Incentive Award (MSU)

2022, CNAS Diversity Award

2021, Faculty Excellence in Teaching (CNAS)

2021, Nominee for CNAS Diversity Award (CNAS)

2021, Outstanding Thesis Advisor (MSU)

2021, Nominated, Curtis P. Lawrence Excellence in Advising Award (MSU)

2020, Faculty Excellence in Research (CNAS)

2020, Outstanding Graduate Mentor (MSU)

2020, Foundation Award for teaching (MSU)

2019, Student Award for Faculty Excellence (CNAS)

2019, Faculty Excellence in Service Award (CNAS)

2019, Grand Prize Teacher Award, Ozark Science and Engineering Fair (Regional)

2019, Ozark Science and Engineering Fair Teacher Award, senior division (Regional)

2019, Nominated, Curtis P. Lawrence Excellence in Advising Award (MSU)

2018, Atwood Research and Teaching Award (CNAS): highest honor in the college

2018, Foundation Award for Research (MSU)

2018, Faculty who has made an impact on Christopher Heye's life (MSU)

2017, KSMU Ozark Public Radio STEM spots with David Cornelison (STATE)

2017, Special Recognition, Mind's eye (MSU)

2017, Faculty Excellence in Research Award (CNAS)

2017, Governor's Award for Excellence in Education (STATE): highest honor in the state

2016, Faculty who has made an impact on Christopher Heye's life (2016)

2016, Faculty who has made a significant impact on Hannah Ingram's life (MSU)

2016, Governor's Excellence in Teaching Award (MSU)

2016, Excellence in Teaching Award (CNAS)

2016, Outstanding Graduate Mentor nominee (MSU)

- 2016, Foundation Award for Teaching (MSU)
- 2015, Outstanding Graduate Mentor Award (MSU)
- 2014, Student Award for Faculty Excellence (CNAS)
- 2014, Missouri State Outstanding Graduate Mentor Nominee
- 2014, Peer-selected CNAS Faculty Excellence Nominee
- 2013, Special Recognition for Exampling the Missouri State Experience through Student Engagement, Missouri State University
- 2012, Excellence in Teaching Award, College of Natural Applied Science
- 2008, Outstanding Member of the Faculty of Missouri State by Theta Chi Fraternity

#### **GRANT/Contract Awards**

2023	Course Development Funds (\$1,600)
2023-2024	Faculty Research Grant (\$7,500)
2023-2026	Roy Blunt Life Science Professorship (\$100,000)
2023-2024	Eighth round of Nanomaterial toxicity test funding from ERDC and Brewer
	Science. \$15,000
2023	Anticancer drug foundation fund (\$2,500) to support Prithvi Nagarajan
2023	Provost Equipment Funding (\$25,000) to acquire an Ultracentrifuge and rotors
2022	Seventh round of Nanomaterial toxicity test funding from ERDC and Brewer
	Science. \$90,499
2020-present	PSM student GA funds by Clinvest (yearly contract, started in 2020)- fully
	pay stipend and tuition for one PSM student
2021-2022	Faculty Assessment of Student learning grant: MNAS Exit Survey
	Assessment grant (\$500) with Tiglet Besara and Gate Breedlove
2021	MoLSAMP-participation grant (with Tayo Obafemi-Ajayi),
	(two undergrad students-stipend for one year). ~\$3,000.
2021	Sixth round of Nanomaterial toxicity test funding from ERDC and Brewer
	Science. \$15,000
2020	Fifth round of Nanomaterial toxicity test funding from ERDC and Brewer
	Science. \$15,000
2020	Faculty Research Grant-MSU. \$5,000
2020	MoLSAMP MoLSAMP-participation grant (with Tayo Obafemi-Ajayi),
	(two undergrad students-stipend for one year, one GA). ~\$ 20000.
2019	Thyroid Cancer project, Mercy. \$300
2019	MoLSAMP-participation grant (with Tayo Obafemi-Ajayi), ~\$20,000
	(summer Salary to Kim + one undergrad student stipend and one GA for one year)
2019	Thyroid Cancer project, Mercy. \$2,500
2019	MSU summer Faculty Fellowship. \$6,000
2019	BIO-matching for Curriculum grant to support a TA (\$2,700)
2019	Curriculum Innovation Grant (High Impact Practices in Cell Biology). \$4,000
2019-2020	Fourth round of Nanomaterial toxicity test funding from ERDC and Brewer
	Science. \$15,000
2018-2019	Atwood Faculty research/teaching award, \$2,500
2018	Mercy: Measuring levels of apoptosis in thyroid cancer cells treated with
	chlorotoxin-SAP, \$4,600

2018	Provost Funding "Solving 3-D structure of yeast dynamin", \$3,500.
2018	Mercy: Effect of Chlorotoxin on thyroid cancer, \$2,200.
2018	International Travel Fund. Keynote speaker at World Yeast Congress, \$1,987.
2017-2018	Third round of Nanomaterial toxicity test funding from ERDC and Brewer
	Science. \$15,000.
2017-2018	Faculty Research Grant. \$7,500
2017	Summer GA Fund grant (~\$3,000)
2016-2017	Second round of Nanomaterial toxicity test funding from ERDC and Brewer
	Science (\$10,000)
2016	MSU summer Faculty Fellowship. \$6,000.
2015-2016	Nanomaterial toxicity test funding from ERDC and Brewer Science. \$10,000
2015	International travel funding award (Sixteenth's International meeting of
	Carbon Nantotube, in Nagoya, Japan). \$3,500.
2015	MSU Provost's Research Incentive Funding. Acquisition of microfluidic
	perfusion system for long-term live imaging. \$25,000.
2014-2015	Faculty Research Grant. Investigation of dynamin in inner-cellular material
	transport systems. \$7,366
2014-2015	ERDC: Research Incentive Funding (Carbon Nanotube project). \$7,000
2013-2014	ERDC: Research Incentive Funding (Carbon Nanotube project). \$10,000
2012-2013	Faculty Research Grant. Implication of Vps1 in Membrane Recycling and its
	Interaction with Recycling Factors. \$7,370.
2011.	MSU summer Faculty Fellowship. Novel roles of Vps1 on endocytic and
	recycling traffics. \$6,000.
2010.	MSU Faculty Research Grant. The endocytic role of Dynamin-like protein
	Vps1 in Yeast \$7,500.
2009-2012.	MRI-RUI: Acquisition of a Spinning Confocal Microscope to Advance
	Interdepartmental Research and Training at Missouri State University
	(Proposal Number: 0923024). \$350,000.
2007-2009.	MSU Provost's Research Incentive Funding. Use of Real-Time PCR to
	Quantify Sources of Fecal Pollution in Ozark Streams: Participants (with
	John Steiert). \$77,000.
2007.	MSU Faculty Research Grant. Uncovering the Molecular Mechanisms of
	Endocytic Vesicle Motility in Yeast. \$7,500.
2007.	MSU Summer Faculty Fellowship. Molecular Binding Mechanism of
	Capping protein-phospholipid interaction. \$5,000.
2003-2005.	American Heart Association. Project Title: Structure and Functional
	Relationship of Actin Capping Protein. \$80,685.
	GRANTS APPLIED (since employment at MSU):
2023	NSF-RUI (Research Grant).
2022-2023	NSF-MRI with Siming Liu as the PI: Acquisition of GPU enabled
2010 2021	HPC for STEM Research Innovations
2018-2021	NSF-MRI
2014.	NSF-RUI (Research Grant).
2014.	NSF-REU (Research Training Grant).
2011.	NSF-RUI (Research Grant).

2010.	NSF-RUI (Research Grant).
2009.	Electron Microscopy Grant.
2009.	American Heart Association-SDG.
2009.	NSF-MRI.
2009.	MSU Faculty research Grant.
2008.	American Heart Association-GIA.
2008.	American Heart Association-SDG.
2008.	NIH AREA (R15).
2008.	CCSA full proposal submission.
2008.	MSU pre-NSF-MRI proposal for electron microscope.
2007.	MSU Provost's Research Incentive Funding (RT-PCR, with Jack Steiert).
2006.	American Heart Association-GIA.
2006.	American Heart Association-SDG.
2006.	MSU Provost's Research Incentive funding for 2007 (with Laszlo Kovacs).
2006.	MSU Faculty Research Grant.
2006.	MSU Summer Faculty Fellowship.

#### AWARDs RECEIVED by Students Mentored by Dr. Kim

2022 Student Employee Award: Nhi Le (MSU finalist, MASEA Regional Student Employment Association finalist, and one of the top 19 student employees in the nation)

OUTSTANDING Master's THESIS AWARDS by advisee students (Biology)

Name	Year	Title	
Cullen Horstmann	2021	Identifying and Comparing Transcriptome Alterations in	
		Saccharomyces cerevisiae Exposed to a Variety of Quantum Dots	
Hyoeun McDermott	2015	Novel physical interactions of Vps1 with major intracellular traffic	
		regulators	
Katelyn Bartlett	2014	TORC2 and eisosomes are spatially interdependent, requiring optimal	
		level of PI(4,5)P2 for their integrity	
Jacob Hayden	2012	Vps1's implication on late endosome-to-vacuole traffic	

#### OUTSTANDING TEACHING ASSISTANT AWARDS by Research advisees (Biology)

- Husref Rizvanovic. 2019
- Hyoeun McDermott. 2014
- Katelyn Bartlett. 2013
- Michelle Williams. 2013

#### OUTSTANDING RESEARCH ASSISTANT nominee by Research advisees (Biology)

• Jared Smothers. 2018

#### DISTINGUISHED TEACHING ASSISTANT AWARD by Research advisees (University)

- Midwest Regional Distinguished Teaching Assistant Nominee, 2014-15 (Hyoeun McDermott)
- MSU Distinguished Teaching Assistant Award, 2014-15 (Hyoeun McDermott)
- Midwest Regional Distinguished Teaching Assistant Nominee, 2013-14 (Katelyn Bartlett)
- MSU Distinguished Teaching Assistant Award, 2013-14 (Katelyn Bartlett)

# DISTINGUISHED THESIS AWARD by Research advisee (University) • Hyoeun McDermott (2015-2016)

OTHER AWARDS by advisees (69 awards): <u>56 presentation awards</u> and 13 other awards.

Year	Student Name	Award	Avenue
2023	Onyinye Okafor	Outstanding Poster Award, IDEF	MSU
	Nhi Le	Outstanding Poster Award, IDEF	MSU
	Emma Braun	First Prize, CNAS Symposium	CNAS, MSU
	Prithvi Nagarajan	MO Southern Regional Science Fair: 2 <sup>nd</sup>	Missouri Southern
	Timitiwagarajan	prize winner in Cellular, Molecular, and	Wilsouii Soulieii
		microbiology	
2022	Nhi Le	Outstanding senior award	Biology
2022	Seth Harris	CNAS symposium (first prize award)	CNAS, MSU
2022	Kimberly Nguyen	MSSU Science Fair awards (Outstanding	Missouri Southern State
2022	Killiberry Nguyen		
		Achievement in Science- 2nd place in	University Science and
		Microbiology Category	Engineering Fair
2021	Daniel S Kim	Honorable mention	Arkansas Biomedical INBRE
2021	Min Zhang	Honorable mention, at EIDF	MSU
2021	Nhi Le	First Prize at CNAS Symposium	CNAS, MSU
2020	Glory Ehie	Honorable Mention, CANS symposium	MSU
2020	Victoria Davenport	First Prize, CNAS symposium	MSU
2020	Kafayat Yusuf,	Outstanding Presentations at IDF	MSU
2020	Husref Rizvanovic	Outstanding Presentations at IDF	MSU
2020	Vy Nguyen	Outstanding Presentations at IDF	MSU
2020	Sravya Rallabandi	Outstanding Presentations at IDF	MSU
2020	Ehsan Suez	Outstanding Presentations at IDF	MSU
2020	Cullen Horstmann	ASBMB conference Travel award	Am. Soc of Bioch and Mol. Bi
2019	Kafayat Yusuf	First prize, MSU 3 M Thesis	MSU
2019	Ehsan Suez	Fourth place, CNAS 3M Thesis	CNAS, MSU
2019	Kafayat Yusuf	First prize, CNAS 3M Thesis	CNAS, MSU
2019	Daniel S Kim	Outstanding project in the biochemistry category in the 2019 ISEF, Arizona	International avenue
2019	Husref Rizvanovic	Outstanding Senior Student Award Winner	BIO
2019	Hanna Williams	First place in CNAS symposium	MSU
2019	Husref Rizvanovic	First place in CNAS symposium	MSU
2019	Husref Rizvanovic	Smith-Glen-Callaway Medical Foundation	MSU
		Premedical Scholarships	
2019	Husref Rizvanovic	Guy Callaway, Sr. Outstanding Senior	MSU
		Premedical Student Scholarship	
2019	Daniel S Kim	Grand prize at Ozark Sci & Eng Fair	MSU
2018	Husref Rizvanovic	Citizen Scholar	MSU
2018	Jared Smothers	First place in CNAS 3M thesis competition	CNAS at MSU
2018	Cullen Horstmann	First Place in undergraduate oral	American Society for
		presentation	microbiology (ASM), Kansas
2018	Mariel Delgado Cruz	Second place in graduate oral Presentation	ASM, Kansas
2017	Cullen Horstmann	Honorable mention in poster presentation	Arkansas IDeA Network of
			Biomedical Research Excellence
			(INBRE), Fayetteville

2017	John Short	Third place the MSU 3M Thesis competition	MSU
2017	Jared Smothers	Second place at CNAS undergraduate symposium	CNAS at MSU
2016	John Short	First Biology Undergraduate Poster Award	Arkansas INBRE, Fayetteville
2016	Mariel Delgado Cruz	Outstanding Senior Student Award Winner	Biology Department
2016	Mariel Delgado Cruz	First place in undergraduate student oral presentation	ASM, Springfield, MO
2016	Pelin Makaraci	First place in graduate student oral Presentation	ASM, Springfield, MO
2016	Pelin Makaraci	Fourth Place in 3MT presentation	CNAS at MSU
2016	Sara Woodman	First Prize in 3MT presentation	CNAS at MSU
2015	Justin Conover	Outstanding Senior Student Award Winner	Biology Department
2015	Sara Woodman	Outstanding Senior Student Award Winner	Biology Department
2015	Shiva Kumar Gadila	Outstanding Poster presentation award	IDF at MSU
2015	Sara Woodman	First prize in oral presentation	ASM Missouri Valley Meeting (Lincoln, Nebraska)
2014	Hyoeun Ahn	First place in poster presentation	CNAS at MSU
2014	Sara Woodman	Second place in poster presentation	CNAS at MSU
2014	Michelle Williams	Poster presentation award	IDF at MSU
2014	Hyoeun Ahn	Oral presentation award	IDF at MSU
2014	Hyoeun Ahn	First place in graduate oral presentation	Missouri Branch of ASM, Kansas,
2013	Joshua Lukehart	Poster presentation award	IDF at MSU
2013	Michelle Williams	Board of Governor's award for competitive academic achievement	MSU
2013	Katelyn Bartlett	Board of Governor's award for competitive academic achievement	MSU
2013	Katie Schmelzle	Board of Governor's award for competitive academic achievement	MSU
2013	Michelle Williams	First place in poster presentation	CNAS at MSU
2013	Katelyn Bartlett	First place in graduate oral presentation	Missouri Branch of ASM, Colombia
2013	Katie Schmelzle	First place in undergraduate oral presentation	MO Branch of ASM, Colombia,
2013	Michelle Williams	Second place in undergraduate oral presentation	MO Branch of ASM, Colombia, MO
2012	Brandon Tenay	Second place in oral presentation	MO Branch of ASM, St. Joseph, MO
2012	Alexis Brummett	First place in poster presentation	CNAS at MSU
2011	Erin Murphy	First place in oral presentation	MO Branch of ASM, St. Louis
2011	Jacob Hayden	Second place in oral presentation	MO Branch of ASM, St. Louis
2011	Joshua Lukehart	First place in poster presentation	CNAS at MSU
2010	Jacob Boxberger	Second winner in biology presentation	CNAS at MSU
2010	Chitra Kamble	Second winner in oral presentation	Missouri Branch of ASM
2010	Erin Murphy	First winner in oral presentation	Missouri Branch of ASM
2009	Sandhya Jain	Second winner in graduate oral presentation	Missouri Branch of ASM, St. Joseph, MO
2009	Erin Murphy	Second winner in undergraduate oral presentation	Missouri Branch of ASM, St. Joseph, MO
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## GRADUATE STUDENTS Mentored by Dr. Kim

# GRADUATE Advisees mentored by Dr. Kim (Thesis or non-thesis Committee Chair): 46 students (including Suzanne Agsunod and Israt Jahan)

Name	Year	Project	<b>Current position</b>
Srikant	06-08	Characterization of the role of Vps1p in	Oncologist at CoxHealth,
Nannapaneni		endocytosis in Saccharomyces Cerevisiae	Springfield
Sandhya Jain	08-09	Roles of Slm genes in eisosome organization	Project Manager at Sanmay
,		and endocytosis in Saccharomyces cerevisiae	Technologies Inc.
Daobing Wang	08-09	Vps1 on the dynamics of endocytic	Research Associate at City
		components and endocytic scission	of Hope National Med Ctr.
Christopher Burg	09-10	The functional synergy between yeast dynamin	Dentist
	0, 0	and key membrane recycling factors	
Chitra Kamble	09-10	Requirements of Slm proteins in eisosome	Analyst. Nashville,
	0, 0	organization, endosome	Tennessee.
		trafficking, and membrane recycling	
Erin Murphy	09-11	Pill, an eisosome organizer, plays an important	Scientist II at AbbVie,
Em warping	07 11	role in the recruitment of synaptojanins and	Mount Prospect, Illinois
		amphiphysins to facilitate receptor-mediated	into dillo i rospecti, illinois
		endocytosis	
Jacob Hayden	10-12	Vps1's implication on late endosome-to-	Physician, resident, MU.
Jacob Hayacii	10 12	vacuole traffic	inysician, resident, 1410.
Chad Highfill	08-11	Vps1's implication in early endosomal	PhD. Scientist 2 (Exicure,
Chad Highim	00 11	trafficking to the Golgi in Saccharomyces	Chicago) and Board
		cerevisiae	Advisor Biotech (Al Dyn)
Brandon Tenay	10-11	Inactivation of tor proteins affects the dynamics	Group leader, microbiology
Diandon Tenay	10-11	of endocytic proteins in early stage of	at Catalent Pharma
		endocytosis	Solution, Kansas
Joshua Lukehart	2011	Vps1, a novel recycling factor for the traffic of	Business Development
Joshua Lukchart	2011	early endosome to late Golgi	Manager II, Labcorp Drug
		carry endosome to fate Gorgi	Development
Katelyn Bartlett	12-14	TORC2 and eisosomes are spatially	Project Manager II, Viracor
Katelyli Dartiett	12-14	interdependent, requiring optimal	Eurofins BioPharma
		level of PI (4,5)P2 for their integrity	Eurorins Bior narma
Hyoeun	13-14	Novel physical interactions of Vps1 with major	Registered nurse at Mercy
McDermott	13-14	intracellular traffic regulators	Hospital
Michelle Williams	12-13	Yeast dynamin functions with clathrin at the	phD. Postdoctoral
Whenene Williams	12-13	Golgi	Researcher at McMaster
		Gorgi	University, Ontario.
Christopher	13-15	Functional connection between yeast dynamin	Research Technician II,
Trousdale	13-13	and retromer at the Endosome	Washington University in
Trousdate		and retromer at the Endosome	St. Louis.
Shiva Kumar Goud	13-15	Dynamin Association with clathrin and its	Tulane National Primate
Gadila Godd	13-13	physiological roles at the Golgi and targeting	Research Center
Guaria		mechanism to the Golgi	Research Center
Suzanne Agsunod	14-15	Mechanism of host and viral IL-10 suppressing	Lab Assistant at Mercy
Suzamie Agsunou	14-13	anti-viral cytokines IFN-α and IFN-β. A	Lab Assistant at Welcy
		student of Dr. Brian Weaver. Advised by Dr.	
		Kim for her thesis.	
Bryan Banh	14-16	Yeast dynamin functions with ESCRT-II at the	PhD candidate at University
Diyan Dann	14-10	endosome and potential roles with novel	of Illinois, Chicago
		binding partners	or minors, emeago
Uma Saimani	15-16	Yeast dynamin associated with the GARP	Research associate position
Onia Sannalli	13-10	tethering complex for	at Celgene Cellular
		endosome-to-Golgi traffic	Therapeutics
		Chaosome-to-Corgi traffic	Therapeutics

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Pelin Makaraci	15-18	Yeast dynamin and Ypt6 converge on the	Quality control tech, ThermoFisher.
Sara Woodman	15-17	GARP for endosome-to-Golgi Trafficking Yeast membrane lipid imbalance leads to	Sr. Research Senior
Sara Woodinan	13-17	trafficking defects toward the Golgi.	Scientist (JVIC)
Mariel Delgado	16-18	Understanding Vps1's role as a Golgi	Lead Lab scientist,
Cruz	10-18	membrane remodeling Protein	Springfield Green County
Cluz		memorane remodering rrotein	Health
Sravya Kottapalli	17-19	Yeast myosin II mediates for Snc1	TBA
Siavya Kottapam	17 17	trafficking towards the TGN	
John Short	17-	Carbon nanotubes and its effect on cells	Master Program at MSU
001111 201010	present		and JVIC Scientist
Jared Smothers	17-2019	In vitro reconstitution of membrane fusion	PhD. Uni. Of Texas
	1 - 1 - 1 - 1		Southwestern Medical
			center
Ryan Windish	18-2019	Ubiquitination of Vps1 and its effect on	Prep for medical school
<b>J</b>		membrane trafficking	Tr Control of the Con
Deborah Ehie	19-2020	Chitosan-derivatives on Hela cells	Prep for medical school
Vy Nguyen	18-2020	Myosin type V on vesicular trafficking	TBA, personal business
Ehsan Suez	18-2020	SNARE mutation on membrane fusion	PhD Program at Univ. of
			Georgia
Sravya Rallabandi	18-2020	Mutations of myo2 on vesicular trafficking	Attending Dental school
Anh May Ly	18-2019	In vivo membrane fusion assay	Pharmacy scientist
Kafayat Yusuf	19-2020	Effects of Pt (DECO) and Pd (DECO) on	PhD program, University of
•		cancer cells	Kansas Medical Center
Timophey Shishko	19-2020	Professional Science Master's program	Mercy
Husref Rizvanovic	19-2020	Alternative chemotherapeutic drugs against	PA school (Stephens
		human thyroid cancer	College)
Cullen Horstmann	19-2021	Manufactured Nanoparticle impact on yeast	Associate Scientist II,
			Eurofins Bio-Pharma
Min Zhang	20-2022	Quantum dots and their traffic dynamics in	PhD in Univ of Kentucky
_		cells	·
Leigh Cox	20-2021	Professional Science Master's program	KU Medical School
Victoria Davenport	20-21	InP/ZnS impact on mammalian cells	Eurofins Viracor scientist
Alyse Peters	21-23	ZnO-mediated cell cytotoxicity in ML-1 cells	BIO-MS, accelerated MS
Kathryn Monahan	21-22	Professional Science Master's program	MNAS-BIO accelerated
Dominic Meyer	21-23	Professional Science Master's program	MNAS-PSM
Israt Jahan	21-22	A former graduate student of Dr. Udan-now	PhD. Augusta University
istat sanan	21 22	thesis advisee of Dr. Kim	This ragusta oniversity
Nhi Le	22-	Red CdSe/ZnS interaction with Yeast	BIO-MS
Seth Harris	22-	Molecular mechanisms of nanoparticle-	MNAS-BIO
		mediated apoptosis	
Onyinye Okafor	22-	Quantum dots impact on eisosome and	BIO-MS
		endocytosis	
Siddak Dhaliwal	23-	Yeast dynamin targeting to the endosome	MNAS-BIO
	23-	·	BIO-MS
Siddak Dhaliwal Rakshya Bhatta	23- 23-		

Summary of Graduate Committees: a total of 134 Master's committees (106 thesis committees, 15 non-thesis committees, and 13 current graduate committees in progress)

## All Graduate Thesis Committees completed (106) since 2006. Chaired 33 theses (in Bold)

- 2006: Vinit Patil, Carrie Vause
- 2007: Lauren Langford, Stacy freeman

- 2008: Srikant Thalakoti, Srikant Damodaram, Filip Garret, Ryan Cady, Debra Deloach, Saraschand Vadlamudi, **Srikant Nannapaneni**
- 2009: Ashok Valluri, Amanda Herbster, Clark Mallory (Chemistry), Neal Van Asch, Sandhya Jain
- 2010: Brian Peterson, Melissa Reynolds, **Daobing Wang**, **Chris Burg**
- 2011: **Chad Highfill**, **Chitra Kamble**, **Erin Murphy**, Sarah Nicholas, Allison Overmyer, Jacob Norton Rhy, Joseph Kerwin, Zsofia Toth, Kael Smith, Kelli Hastings
- 2012: **Jacob Hayden**, Joseph Glenn, Darin Dieckhoff, Kelly Crowe, Joshua Hayden, Jordan Hawkins
- 2013: Tyler Smith, **Joshua Lukehart**, **Brandon Tenay**, Daniel Pap, Alyxandria Shibley (Chemistry), Richard Well, Zach Durham
- 2014: **Katelyn Bartlett**, **Michelle Williams**, Mohammed Alshahami, Chunling Cao (Chemistry), **Hyoeun McDermott**, Bernice Agana (Chemistry), Kaleb Pearson
- 2015 Nick Moore, David Miley, Xiaozheng Dou (Chemistry), Shannon Stiles, Brittany Twibell, Jennifer Denson, **Suzanne Agsunod**, **Chris Trousdale**, **Kumar Gadila**
- 2016: **Bryan Banh**, Lindsey Koop, Rachel Padget, Michelle Butts (Chemistry), Christopher Reynolds (Chemistry), **Uma Saimani**, Neva Agarwala (Physics)
- 2017: **Sara Woodman**, Taiaba Afrin, Neelima Chelliboina, Marshal Blank, Nicholas Mundt (chemistry), **Pelin Makaraci**
- 2018: Angeline Rodriguez, Hazzar Abysalamah, Jacob Blankenship, Mariel Delgado Cruz
- 2019: Jessica Cox, **Jared Smothers**, Meagan Rippee-Brooks, Jordan Jensen (BMS), Dani Joseph (MNAS), Natalie Smith, Abbi Mabary Brown,
- 2020: Blake Justis, Vy Nguyen (MNAS), Deborah Ehie (MNAS), Kafayat Yusuf, Husref Rizvanovic, Parris Mayhood, Sravya Rallabandi, Adjoa Adams (Chemistry), Ehsan Suez,
- 2021: Victoria Davenport, Cullen Horstmann,
- 2022: **Min Zhang, Israt Jahan,** Nayeon Son, Sophia Antonopoulos, Alex McMullen (CHM), Giselle Campos (Chemistry), Riley Nadler, **Alyse Peters**
- 2023: Catherine Rippe, Inyeong Lee, Autumn Pilarski (Chemistry), Rejeena Jha (PAMs)

## Non-thesis or Degree Committee completed: 15 times. Chaired 8 times (in bold)-Vy Nguyen completed both Thesis and Internship report

- 2018: Benjamin Parnell (PSM), Greg Illy (PSM), **Sravya Kottapalli** (MNAS-non-thesis),
- 2019: Bradley Culbertson (PSM), **Anh Mya Ly** (PSM), **Windish Ryan** (PSM), John Bledsoe (PSM),
- 2020: **Vy Nguyen** (PSM), **Timophey Shishko** (PSM), Jordan Fleetwood (PSM), Karina Sewell (PSM),
- 2021: **Leigh Cox** (PSM)
- 2022: **Kathryn Monahan** (PSM)
- 2023: Sijuade Otunomo (PSM), **Dominic Meyer** (PSM)

#### Current Thesis and Non-thesis Committees: 13 times. Current Chair 6 times (in bold)

• **John Short**, Brian Lanigan (chemistry), Olusegun Idowu (chemistry), Cody Turner (chemistry), **Seth Harris** (MNAS), **Nhi Le** (BIO), **Onyinye Okafor** (BIO), Matthew So (BIO), Clarissa

Krimmel (Chm), Zachery Lawrence (MNAS), Ashok Dubey (BIO), **Siddak Dhaliwal** (MNAS), **Rakshya Bhatta** (Bio)

## UNDERGRADUATE RESEARCH MENTORING by Dr. Kim

I mentored the following independent undergraduate research students: 83 students.

Name	Year	project	Current position
Adam Maysent	07-08	Vps1 on endocytosis	Production supervisor, TC
			Transcontinental Packaging
Pittsley Delilah	2008	Lipophilic dye internalization in Vps1 mutants	Senior quality engineer
•			(Zimmer)
Ryan McDowell	2008	Endocytic vesicle trafficking	CoxHealth, Physician, MO
Anne Reustle	2008	Endocytic vesicle trafficking	Faculty for Neosho County
			Community College in
			Chanute, KS
Erin Murphy	08-09	Pil1 role in eisosome organization	Scientist at AbbVie, Mount
			Prospect, Illinois
Blake Schroeder	08-09	Vps1 GTPase roles in yeast endocytosis	Pipeline Operator II,
			Southern Star Central Gas
			Pipeline
Wesley Brundridge	2008	Characterization the behavior of endocytic	Physician at San Antonio
		markers in Vps1 mutant cells	military medical center
Shawn Moulder	08-09	Statistical analysis of patch internalization	Physician, Trenton, MO
		behavior	
Chad highfill	08-10	Interaction between Vps1 and its binding partners	RNA biologist
Tiffany Whitney	2009	Interaction between Vps1 and its binding partners	TBA
Lisa Track	2009	Tetrad dissection of zygote formed via mating	Physician, Cox Family
		between Vps1- and Ypt6- lacking cells	Medical Care Center
Ryan Regelsperger	2009	Vps1 in endosome-to-Golgi traffic	Medical Lab Scientist at
			CoxHealth
Purav Trivedi	2009	Functional relationship between Yeast dynamin	Biotechnology Professional.
		and guanidine nucleotide exchange factors	Great New York city area
Mark Pence	2009	Study of localization of Vps1	DO. Professor, Kansas city
Jacob Boxberger	09-10	Eisosome organization	Doctor of Osteopathy D. O.
			Saint Luke's
Geoffrey Zahn	09-10	Pil1 functions in yeast endocytosis	phD Assistant professor at
			Utah Valley University
Jeff Sletto	09-10	Clathrin interaction with dynamin	Dentist (DDS)
Robert Colvin	2010	Connection between eisosome and endocytosis	Physician, Beaumont Health
			(Diagnostic Radiology)
Fred Loor	10-11	Tor1 and its function in endocytosis	TBA
Joshua Fakilahyel	10-11	Use Tor1 temperature sensitive mutants for yeast	MD, Cardiology fellow
(F. Samuel		endocytosis	(Henry Ford Hospital)
Mshelbwala)			
Douglas Gilliam	10-11	Actin cable formation in endocytic mutant cells	Science teacher
Elizabeth Kapustka	2010	Dynamic membrane behavior	Director of Operation at
	10		Juxly, LLC.
Brandon Tenay	10-11	Investigation of Tor proteins affecting dynamics	Catalent Pharma Solutions,
		of endocytosis	group leater
Sukje Lee	10-11	Eisosome protein Pil1 functions for membrane	Physical Therapist, KS
		phospholipid synthesizing proteins	
Joshua Lukehart	2011	Characterization of Vps1 as a novel recycling	Business Devel Manager II
		factor	(Labcorp)

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Ryan Windish	17-18	Ubiquitination of Vps1 and its effect on membrane trafficking	Searching for MD program
Paul Ballhorn	17-18	Myosin 2 for vesicular trafficking	Saving Sight (Springfield)
Onika Olson	18-20	In vitro reconstitution of membrane fusion	TBA
Olivia Horton	2018	Thyroid cancer project	Mercy-patient care associate
Husref Rizvanovic	18-19	Thyroid cancer project	Stephens Colle (PA school)
Deborah Ehie	2018	Chitosan-derivatives on Hela cells	MNAS program at MSU,
			now Gap year for Medical
			application
Hanna Williams	18-19	Thyroid cancer project	MSU PA program
Qiwen Dong	18	Chitosan-derivatives on Hela cells	Ph.D. program
Basant Hens	19-20	Cadmium effect on Human cancer cells	Ph.D. (Indiana University)
Julia Villarreal	19	Vps10-GFP patch motility in myosin mutant	JMARK-Client Success Specialist
Victoria Davenport	19-20	Palladium nanoparticle impact	Clinal lab scientist, Viracor
Glory Ehie	20	Myosin in vesicular trafficking	MSU Junior
Kirk Cameron	20-21	Myosin in vesicular trafficking	MSU-transferred to UMSL
Alyse Peter	20-21	Quantum dots and RTPCR	MSU Senior/BIO-MS
Kathryn Monahan	21	ZnO-mediated cell cytotoxicity	MSU MNAS program
Madeline Merrill	21	Chitosan derivatives as gene delivery vehicle	MSU sophomore-BMS
Nhi Le	21-22	CdSe/ZnS-COOH traffic in the budding yeast	MSU senior
Daniel S Kim	2021 Su	Subcellular localization of CdSeZnS in HeLa	Emory University
Nakaja Weaver	21-22	Mechanism of CuO and ZnO in toxicity	MSU sophomore
Seth Harris	21-22	Platinum-based chemotherapeutic agents	MSU senior
Jonathan Routh	21-22	Cd-based quantum dot traffic in the budding yeast	MSU Senior
Mitchell Kim	22 Su	Apoptosis protein level changes by engineered nanomaterials	MSU Junior
Ezoza	22	Research rotation in the lab	MSU Undergraduate
Hikmatillaeva Phrina Tran	22-	Research rotation in the lab	MSU Undergraduate
Mikayla	22-	Research rotation in the lab	MSU Undergraduate, JVIC
Scharnhorst	22	Research fotation in the lab	research assistant
Emma Braun	23-	Chitosan derivatives for gene therapy	MSU Undergraduate
Siddak Dhaliwal	23	Dynamin ubiquitination effects	MSU Undergraduate
Carly Crawford	23	Dynamin Ubiquitination effects	MSU Undergraduate
Abhishu Chand	23-	Cellular and molecular mechanism of nanotoxicity	MSU undergraduate
Mileah Metcalf	23-	TBA	MSU undergraduate

## **HIGH SCHOOL STUDENT RESEARCH: 8** students

- Rachel Choi (2010)
- Peter Liu (2011)
- Chase (2013)
- Daniel S Kim (2017-2020)
- Ivionna Spears (2019)
- Govind Nair (2021-2021)
- Nguyen Kim (2021-2022)
- Prithvi Nagarajan (2022-present)

### RESEARCH FUNDING by advisee students: a total of \$98,384

- A. Thesis (or Non-thesis) Research Grant: 37 (\$35,800)

  Srikant Nannapaneni (2007), Sandhya Jain (2008), Daobing Wang (2008).

  Christopher Berg (2009), Chitra Kamble (2009), Erin Murphy (2009), Chad Highfill (2010), Jacob Hayden (2010), Elizabeth Kapustka (2011), Joshua Lukehart (2011),

  Brandon Tenay (2011), Michelle Williams (2013), Katelyn Bartlett (2013), Shiva Kumar Gadila (2014), Hyoeun Ahn (2014), Christopher Trousdale (2014), Bryan Banh (2014),

  Pelin Makaraci (2015), Uma Saimani (2015), Sara Woodman (2016), Mariel Delgado Cruz (2016), John Short (2017), Jared Smothers (2017), Vy Nguyen (2018), Sravya Kottapalli (2018), Ehsan Suez (2018), Sravya Rallabandi (2019), Deborah Ehie (2019), Kafayat Yusuf (2019), Husref Rizvanovic (2019), Cullen Horstmann (2019), Victoria Davenport (2021), Min Zhang (2021), Nhi Le (2022), Alyse Peters (2022), Onyinye Okafor (2022), Seth Harris (2022)
- B. Topping Summer Research/teaching Fellowship: 20 (\$43,000) Sandhya Jain (2008), Delilah Pittsley (2008), Daobing Wang (2009), Chitra Kamble (2009), Erin Murphy (2009), Jacob Hayden (2011), Joshua Lukehart (2011), Michelle Williams (2013), Katelyn Bartlett (2013), Hyoeun McDermott (2014), Uma Saimani (2015), Mariel Delgado Cruz (2017), Jared Smothers (2017), Ehsan Suez (2018), Jared Smothers (2018), Husref Rizvanovic (2019), Sravya Rallabandi (2019), Nhi Le (2022), Alyse Peters (2022), Nhi Le (2023)
- C. Undergraduate Summer Research Fellowship: 7 (\$13,320) Jacob Boxberger (2010), Sara Woodman (2015), Chelsea Campbell (2017), Cullen Horstmann (2018 and 2019), Julia Villarreal (2019), Nakaja Weaver (2022), Jonathan Routh (2022)
- D. Graduate Student Travel grant awards (\$6,264)

  Srikant Nannapanneni (2007), Erin Murphy (2010), Joshua Lukehart (2012). Brandon Tenay (2012), Jacob Hayden (2012), Katelyn Bartlett (2013), Hyoeun Ahn (2014), Christopher Trousdale (2014), Kumar Gadila (2015), Sara Woodman (2015), Sara Woodman (2016), Vy Nguyen (2018), Mariel Delgado Cruz (2018), Jared Smothers (2018), John Short (2018), Mya Ly (2019), Ehsan Suez (2019), Deborah Ehie (2019), Kafayat Yusuf (2019), Husref Rizvanovic (2020), Victoria Davenport (2021), Min Zhang (2021),

## **Underrepresented Student or Pell-grant Student Advising:**

- 2016-2018: Mariel Delgado Cruz (URM)
- 2018-2020: Deborah Ehie (Pell Grant + MoLSAMP)
- 2019: Julia Villarreal (MoLSAMP)
- 2020: Glory Ehie (MoLSAMP)
- 2020: Hayley Revelle (MoLSAMP First Year Scholar advising)
- 2020-2021: Kirk Cameron (MoLSAMP)
- 2020-2021: Xaviera Ljunggren (MoLSAMP First Year Scholar advising)
- 2020-2021: Michelle Thomas (MoLSAMP First Year Scholar advising)
- 2021: Thelma DeLeon: (MoLSAMP First Year Scholar advising)

- 2021: Christopher Wells (MoLSAMP First Year Scholar advising)
- 2021-2022: Nakaja Weaver (MoLSAMP)
- 2022-present: Mikayla Scharnhorst (Pell grant)
- 2022: Felicity Watkins (MoLSAMP First Year Scholar advising)
- 2022-present: Onyinye Okafor (underrepresented minority)
- 2021-present: Nhi Le (first gen student)

## PEER-REVIEWED PUBLICATION: (\*Graduate Student; \*\*Undergraduate Student: \*\*\* high school student)

- 60. Seth Harris and **Kyoungtae Kim**. 2023. Apoptotic pathway protein expression variance in metal oxide and quantum dot treated HeLa cells. **Micropublication.** *In press*.
- 59. Nhi Le and **Kyoungtae Kim**. 2023. Current Advances in the biomedical applications of quantum dots: Promises and Challenges. In press.
- 58. Nhi Le, Jonathan M Routh, Cameron J Kirk, Qihua Wu, Rishi J Patel, Chloe E Keyes, **Kyoungtae Kim. 2023**. Red CdSe/ZnS QDs' Intracellular Trafficking and Its Impact on Yeast Polarization and Actin Filament. Cells, Feb 2;12(3):484. doi: 10.3390/cells12030484
- 57. Alyse N Peters, Nakaja A Weaver, Kathryn S Monahan, **Kyoungtae Kim. 2023**. Non-ROS-mediated cytotoxicity of ZnO and CuO in ML-1 and CA77 Thyroid cancer cell lines. International Journal of Molecular Sciences, 24, 4055. https://doi.org/10.3390/ijms24044055
- 56. Nhi Le, Min Zhang, and **Kyoungtae Kim**. **2022**. Quantum Dots and their Interaction with Biological Systems. Int. J. Mol. Sci. **2022**, *23*(18), 10763; <a href="https://doi.org/10.3390/ijms231810763">https://doi.org/10.3390/ijms231810763</a>
- 55. Min Zhang\*, Daniel S Kim\*\*, Rishi Patel, Qihua Wu, and **Kyoungtae Kim. 2022**. Intracellular Trafficking and Distribution of Cd and InP Quantum Dots in HeLa and ML-1 Thyroid Cancer Cells. Nanomaterials **2022**, 12, 1517.
- 54. Daniel S Kim\*\*, Min Zhang\*, Nhi Le\*\*, Seth Harris\*\*, and **Kyoungtae Kim. 2022**. Effects of platinum-based chemotherapeutic agents on ML-1 Thyroid cancer cells. Acta Scientific Microbiology. May 5 (5), 2022.
- 53. Quinton Wyatt\*, Alex McMullen\*, Deborah Ehie\*, **Kyoungtae Kim**, and Reza Sedaghat-Herati. **2021**. Exploring Phosphonium and ammonium Chitosan Polymers and their PEGylated analogs for high performance Gene Delivery. European Polymer Journal. V159, 5 October 2021, 110747
- 52. Husref Rizvanovic\* and **Kyoungtae Kim**. **2021**. Novel Cyanoximate Pt (DECO)<sub>2</sub> as an Anti-Cancer Drug using ML-1 Thyroid Cancer Cells. *Acta Scientific Microbiology*. June 11, 2021; Volume 4 Issue 7: 50-56.
- 51. Cullen Horstmann\*, Victoria Davenport\*, Min Zhang\*, Alyse Peters\*\*, and **Kyoungtae Kim**. **2021**. Transcriptome Profile Alterations with Carbon Nanotubes, Quantum Dots, and Silver Nanoparticles: A Review. *Genes* **2021**, *12*(6), 794; https://doi.org/10.3390/genes12060794
- 50. Vy Nguyen\*, Jared Smothers\*, Paul Ballhorn\*\*, Anh M Ly\*, Julia Villarreal\*\*, and Kyoungtae Kim. 2021. Myosin V-mediated transport of Snc1 and Vps10 toward the *trans*-Golgi network. *E. Journal of Cell Biology*. Volume 100, Issue 3, April 2021, 151143
- 49. Cullen Horstmann\* and **Kyoungtae Kim**. **2021**. Comparing Transcriptome Profiles of Saccharomyces Cerevisiae Cells Exposed to Cadmium Selenide/Zinc Sulfide and Indium Phosphide/Zinc Sulfide. *Genes*, 12(3), 428; https://doi.org/10.3390/genes12030428.
- 48. Kafayat A Yusuf\* and Kyoungtae Kim. 2021. Novel cyanoximates as chemotherapeutic

- candidates. Acta Scientific Microbiology. 4(4):119-134.
- 47. Victoria Davenport\*\*, Cullen Horstmann\*, Rishi Patel, Qihua Wu, and Kyoungtae Kim. **2021**. An assessment of InP/ZnS as potential anti-cancer therapy: quantum dot treatment induces stress on HeLa cells. *J. Nanotheranostics* **2021**, *2*(1), 16-32
- 46. Basant Hens\*\*, Jared Smothers\*, Husref Rizvanovic, Rishi Patel, Qihua Wu, and **Kyoungtae Kim**. 2020. The future of anticancer drugs: a cytotoxicity assessment study of CdSe/ZnS Quantum dots. *J. Nanotheranostics* **2020**, *I*(1), 19-38.
- 45. Husref Rizvanovic\*, Johnson Thomas, Daniel Pinheiro, and **Kyoungtae Kim.** 2020. Advances in Diagnosis and treatment of thyroid cancer. Archive of Cancer and Oncology, 1 (1): 1-5
- 44. Deborah Ehie\* and **Kyoungtae Kim**. 2020. Newer Developments in gene delivery using chitosan and its derivatives. Advances in Nanomedicine and Nanotechnology Research, 2(2):149-158.
- 43. Kafayat Yusuf\* and <u>Kyoungtae Kim</u>. 2020. Highlighting the Journey So Far With Cancer And Chemotherapy. Acta Scientific Microbiology, 3(6): 118-123.
- 42. Husref Rizvanovic\*, Daniel Pinheiro, <u>Kyoungtae Kim</u>, and Johnson Thomas. 2020. Chlorotoxin conjugated with saporin reduced the viability of ML-1 thyroid cancer cells in vitro. Journal of Biochemistry and Molecular Medicine, 2(2):107-112.
- 41. Cullen Horstmann\*\*, Daniel S Kim\*\*\*, Chelsea Campbell\*\*, **Kyoungtae Kim**. Transcriptome Profile Alteration with Cadmium Selenide/Zinc Sulfide Quantum Dots in *Saccharomyces cerevisiae*. *Biomolecules*. **2019**. *9*(11), 653; https://doi.org/10.3390/biom9110653 (registering DOI) 25 Oct 2019.
- 40. Mariel Delgado Cruz\*, and <u>Kyoungtae Kim</u>. **2019**. The Inner Workings of Intracellular Heterotypic and Homotypic Membrane Fusion Mechanisms. J of Bioscience. September, *44:91*.
- 39. Cullen Horstmann\*\*, Chelsea Campbell\*\*, Daniel S. Kim\*\*\*, and **Kyoungtae Kim. 2019.** Transcriptome profile with 20 nm silver nanoparticles. FEMS Yeast Research. Mar 1;19(2).
- 38. Pelin Makaraci\*, Mariel Delgado Cruz\*, Hyoeun McDermott\*, Vy Nguyen\*, Chad Highfill\*, and **Kyoungtae Kim**. **2019**. Yeast dynamin and Ypt6 function in parallel for the endosome-to-Golgi retrieval of Snc1. 2019 Oct;43 (10):1137-1151. doi:10.1002/cbin.11042 Cell Biol International.
- 37. **Kyoungtae Kim**. **2018**. Dynamin, emerging therapeutic targets for Alzheimer's disease. J of molecular and Cellular biology Forecast. Vol1, p1-2. March, 2018.
- 36. Sara Woodman\*, Christopher Trousdale\*, Justin Conover\*\*, and <u>Kyoungtae Kim</u>. 2018. Yeast Membrane Lipid Imbalance Leads to Trafficking Defects toward the Golgi. 2018 Jul;42(7):890-902. Cell Biology International.
- 35. Pelin Makaraci\* and <u>K. Kim</u>. **2018**. *trans*-Golgi network (TGN)-bound traffic. 2018 Apr;97(3):137-149. *E*. Journal of Cell Biology.
- 34. Sara Woodman\* and **Kyoungtae Kim**. **2018**; 3(1): 1016, p1-5 SM Journal of Biology. Membrane Lipids: Implication for diseases and Membrane Trafficking.
- 33. Christopher Trousdale\*, Mariel Delgado Cruz\*, Shiva Kumar Goud Gadila\*, Uma Saimani\*, and **Kyoungtae Kim**. 2017. The functional relationship between the retromer and yeast dynamin at the endosome. Vol 5 Issue 6, p12-23. International Journal of Science and Technology.
- 32. Uma Saimani\*, Pelin Makaraci\*, Jared Smothers\*\*, Hyoeun McDermott\*, and <u>Kyoungtae</u> <u>Kim</u>. **2017**. Yeast dynamin associates with the GARP tethering complex for endosome-to-

- Golgi traffic. Eur J Cell Biol. 2017 Sep;96(6):612-621.
- 31. Uma Saimani\* and **Kyoungtae Kim**. **2017**. Traffic from the endosome towards *trans*-Golgi Network. Eur J Cell Biol. 2017 Mar;96(2):198-205.
- 30. Shiva Kumar Goud Gadila\*, Michelle Williams\*, Uma Saimani\*, Mariel Delgado Cruz\*\*, Pelin Makaraci\*, Hyoeun McDermott\*, and **Kyoungtae Kim**. **2017**. Yeast dynamin Vps1 associates with clathrin to facilitate vesicular trafficking and controls Golgi homeostasis. Eur J Cell Biol. 2017 Mar;96(2):182-197.
- 29. Bryan T Banh\*, Hyoeun McDermott\*, Sara Woodman\*, Chris Trousdale\*, Shiva Kumar Goud Gadila\*, Uma Saimani\*, John CW Short\*\*, and **Kyoungtae Kim**. Dynamin interaction with ESCRT proteins at the endosome. **2017**. Cell Biol Int. 2017 Feb 9. doi: 10.1002/cbin.10738.
- 28. Bryan T Banh\*, Hyoeun McDermott\*, Michelle Williams\*, Shiva Kumar Goud Gadila\*, **Kyoungtae Kim**. Yeast two-hybrid library screen reveals novel binding partners of Vps1 and links Vps1 to a novel role in budding. **2016**. Vol4, Issue 9, P14-20. Int. Journal of Sci and Tech.
- 27. Shiva Kumar Goud Gadila\* and <u>Kyoungtae Kim</u>. Cargo trafficking from trans-Golgi network toward the endosome. **2016**. Vol108, Issue 8. P205-218. Biology of the Cell.
- 26. Sara Woodman\*\*, John Short\*\*, Shiva Kumar Goud Gadila\*, Hyoeun McDermott\*, Alexander Linan\*\*, Katelyn Bartlett\*, Katie Schmelzle\*\*, Adam Wanekaya and <u>Kyoungtae</u> <u>Kim</u>. Carbon Nanomaterials Alters Gene Expression Profiles. **2016.** Vol16, number 5. pp. 5207-5217. J. of Nanoscience and Nanotechnology.
- 25. Christopher Trousdale\* and <u>Kyoungtae Kim</u>. Retromer: Structure, Function, and Roles in Mammalian Disease. **2015**. Nov; 94(11):513-21. E Journal of Cell biology.
- 24. Hyoeun McDermott\* and <u>Kyoungtae Kim</u>. Molecular Dynamics at the Endocytic Portal and Regulations of Endocytic and Recycling Traffics. **2015.** Vol. 94, Issue 6, June, P235-48. E. Journal of Cell Biology.
- 23. Katelyn Bartlett\*, Shiva Kumar Goud Gadila\*, Brandon Tenay\*, Hyoeun McDermott\*, Brett Alcox\*\*, and **Kyoungtae Kim**. TORC2 and eisosomes are spatially interdependent, requiring optimal level of PI(4,5)P<sub>2</sub> for their integrity. **2015.** Vol.40, Issue 2, P299-311. Journal of Bioscience.
- 22. Michelle Williams\* and <u>Kyoungtae Kim</u>. From membranes to organelles: emerging roles for Dynamin-like proteins in diverse cellular processes. **2014**. Vol. 93, Issue 7, July, P267-277. E. Journal of Cell Biology.
- 21. Katelyn Bartlett\* and <u>Kyoungtae Kim</u>. Insight into Tor2, a budding yeast microdomain protein. **2014**. Volume 93, Issue 3, March, P87–97. E. Journal of Cell Biology.
- 20. Joshua Lukehart\*, Chad Highfill\*, and <u>Kyoungtae Kim</u>. Vps1, a Recycling Factor for the Traffic from Early Endosome to the Late Golgi. **2013**. Dec; 91(6):455-65. Biochemistry and Cell Biology
- 19. Tenay Brandon\*, Kimberlin Evin\*\*, Williams Michelle\*\*, Dennis Juliette\*\*, Joshua Fakilahyel\*\*, and <u>Kim Kyoungtae.</u> Inactivation of Tor proteins affects the dynamics of endocytic proteins in early stage of endocytosis. **2013**. 38(2), 351-361. Journal of Bioscience.
- 18. Alexis Brummett\*\*, Michelle Williams\*\*, Jacob Hayden\*, <u>Kyoungtae Kim</u>. Implication of yeast dynamin-related protein Vps1 in endocytosis and organelle fission. **2013**. V2 (1). The International Journal of Science and Technology.
- 17. Jacob Hayden\*, Michelle Williams\*\*, Ann Granich\*\*, Hyoeun Ahn\*\*, Brandon Tenay\*,

- Joshua Lukehart\*, Chad Highfill\*, Sarah Dobard\*\*, and <u>Kyoungtae Kim.</u> Vps1 in the late endosome-to-vacuole traffic. **2013**. 38(1), 73-83. Journal of Bioscience.
- 16. Erin Murphy\* and <u>Kyoungtae Kim</u>. Insights into eisosome assembly and organization. **2012**. V37(2), June, p 295-300. Journal of Bioscience.
- 15. Joseph Harvey\*, Lifeng Dong, <u>Kyoungtae Kim</u>, Jacob Hayden\*, and Jianjie Wang. Uptake of Single-Walled Carbon Nanotubes Conjugated with DNA by Microvascular Endothelial Cells. *2012*. doi:10.1155/2012/196189.Journal of Nanotechnology.
- 14. Erin R. Murphy\*, Jacob Boxberger\*\*, Robert Colvin\*\*, Suk Je Lee\*\*, Geoffrey Zahn\*\*, Fred Loor\*\*, and **Kyoungtae Kim**. Pil1, an eisosome organizer, plays a key role in the recruitment of synaptojanins and amphiphysins to facilitate receptor-mediated endocytosis in yeast. *Vol 90*, 825-833, **2011** (*October*). E Journal of Cell biology.
- 13. Daobing Wang\*, Jeff Sletto\*\*, Brandon Tenay\*\*, and **Kyoungtae Kim**. Yeast dynamin implicated in endocytic scission and the disassembly of endocytic components. *4:2*, *178-181; March/April*, *2011*. Communicative and integrative Biology.
- 12. Chitra Kamble\*, Sandhya Jain\*, Erin Murphy\*\*, and **Kyoungtae Kim**. Requirements of Slm proteins for proper eisosome organization, endocytic trafficking, and recycling. Vol *36(1)*, *March/April* **2011**, 79-96. Journal of Bioscience.
- 11. Nannapaneni Srikant\*, Wang Daobing\*, Jain Sandhya\*, Schroeder Blake\*\*, Highfill Chad\*\*, Reustle Lindsay\*\*, Pittsley Delilah\*\*, Maysent Adam\*\*, Moulder Shawn\*\*, McDowell Ryan\*\*, and **Kyoungtae Kim**. The yeast dynamin-like protein Vps1:*vps1* mutations perturb the internalization and the motility of endocytic vesicle and endosome via the disorganization of actin cytoskeleton. **2010**. Jul:89(7):499-508. E. Journal of Cell Biology.
- Kyoungtae Kim, Michelle E. McCully, Nandini Bhattacharya, Boyd Butler, David Sept and John A. Cooper. Structure/Function Analysis of the Interaction of PIP2 with Actin Capping Protein: Implication for how Capping Protein Binds the Actin Filament. 2007. *Journal Biological Chemistry*. 282, 5871-5879
- 9. Sarawit Bruck, Tobias Huber, Rob Ingham, **Kyoungtae Kim**, Hanspeter Niederstrasser, paul Allen, Tony Pawson, John Cooper, Andrey S. Shaw. **2006**. Identification of a Novel Inhibitory Actin-Capping Protein Binding Motif in CD2-associated Protein. *J. Biol. Chem. 2006*. Vol. 281, Issue 28, 19196-19203.
- 8. **Kyoungtae Kim**, Brian J. Galletta, Kevin O. Schmidt, Fanny S. Chang, Kendall J. Blumer and John A. Cooper. **2006**. Actin-based Motility during Endocytosis in Budding Yeast. *Molecular Biology of Cell.* 2006. Vol.17, 1354-1363.
- 7. David A. Canton, Mary Ellen K. Olsten, <u>Kyoungtae Kim</u>, Amanda Doherty-Kirby, Gilles Lajoie, John A. Cooper and David W. Litchfield. 2005. The Pleckstrin Homology Domain-Containing Protein CKIP-1 is Involved in Regulation of Cell Morphology and the Actin Cytoskeleton and Interactions with Actin Capping Proteins. *Molecular and Cellular Biology*. 2005. *May Vol* 25 (9);3519-3534.
- 6. Chi RJ, Olenych SG, <u>Kim KT</u>, Keller TC 3rd. 2005. Smooth Muscle alpha Actinin Interaction with Smitin. *Int J Biochem Cell Biol*. 2005. *Jul;37(7):1470-82*
- 5. **Kyoungtae Kim**, Peng Hou, Jerome L. Gorski, John A.Cooper. Effect of Fgd1 on Cortactin in Arp2/3 Complex-mediated Actin Assembly. 2004. *Biochemistry. Mar 9; 43(9): 2422-7.*
- 4. <u>Kyoungtae Kim</u>, Atsuko Yamashita, Martin A. Wear, Yuichiro Maeda, John A.Cooper. 2004. Capping Protein Binding to Actin in Yeast: Biochemical Mechanism and Physiological Relevance. *J Cell Biol. Feb 16*; 164(4): 567-80. Epub 2004 Feb 09.

- 3. Wear MA, Yamashita A, <u>Kim KT</u>, Maeda Y, Cooper JA. 2003. How Capping Protein Binds the Barbed End of the Actin Filament. *Curr Biol. Sep 2*; 13(17): 1531-7.
- 2. **Kyoungtae Kim** and Thomas C.S. Keller. 2002. Smitin, a Novel Smooth Muscle Titin-like Protein, Interacts with Myosin Filaments *in vivo* and *in vitro*. *J Cell Biol*. 156: 101-111.
- 1. Keller, T.C.S., K, Eilertsen, M, Higginbotham, S, Kazmierski, <u>K.T. Kim</u>, and M, Velichkova. 2000. Role of Titin in Non-muscle and Smooth Muscle Cells. *Adv Exp Med Biol*. 481: 265-77.

#### **TECHNICAL REPORT (Peer Reviewed)**

1. Chelsea Campbell, Cullen Horstmann, Al Kennedy and <u>Kyoungtae Kim</u>. Saccharomyces Cerevisiae (Budding yeast) Standard Operating Procedure Series: Toxicology. **2018** 

#### **TECHNICAL REPORT (non-Peer Reviewed)**

1. Kyoungtae Kim. Quantum dot-mediated cell cytotoxicity. 2021

#### **NON-PEER-REVIEWED PUBLICATION:** (\*\*Undergraduate Student)

1. Chad Highfill\*\* and <u>Kyoungtae Kim</u>. 2009. P25-31. *Vol2*. LOGOS (MSU). Vps1 functions in intracellular trafficking during endocytosis.

#### **INVITED Talks:** (\*Graduate Student; \*\*Undergraduate Student)

- Kyoungtae Kim. 2023. Quantum dots' impacts on actin dynamics and membrane trafficking. Symposium on World Cell and Molecular Biology (CMB2023), Singapore.
- Kyoungtae Kim 2023. QDs' Trafficking and Its Impact on Yeast Polarization and Actin Filament. The 2023 Cell and Experimental Biology. Texas.
- Kyoungtae Kim. 2022. Cytotoxic effects of Metal oxides and quantum dots in Mammalian cells and the budding yeast Saccharomyces cerevisiae. ERDC/JVIC Meeting. Vicksburg, MS (August 10).
- Kyoungtae Kim, Nhi Le, Jonathan Routh. 2022. Cadmium Selenide Zinc Sulfide Quantum Dots on Saccharomyces cerevisiae: Their traffic routes and impact on endocytosis and exocytosis as well as on actin dynamics. 4<sup>th</sup> World Nanotechnology Conference (April 25-27). Keynote speaker.
- Nhi Le and Kyoungtae Kim. 2021. An Investigation of the Intracellular Trafficking of Cadmium Selenide Zinc Sulfide Quantum Dots in Yeast Cells. The 2021 Arkansas Idea Network of Biomedical Research Excellence.
- Kyoungtae Kim. 2020. Study of Intracellular Traffics and assessment of anticancer therapeutics and engineered nanoparticles on cells. 2020. EFIGIE Talks (Virtual presentation, Brazil)
- Kyoungtae Kim. 2020. Inner cell traffic research and human disorders. English Language Institute. Missouri State University
- Cullen Horstmann and Kyoungtae Kim. 2019. What doesn't kill you makes you...develop acute health problems down the road. The German-American Science Slam. St. Louis, Missouri.
- Kyoungtae Kim. 2019. Study of intracellular traffics and assessment of anticancer therapeutics and engineered nanoparticles on cells. The CNAS undergraduate symposium. May 3, 2019
- Kyoungtae Kim. 2018. Yeast dynamin plays a key role in the endosome-to-Golgi Traffic. Keynote Speaker at World Yeast Congress. Montreal, Canada. May 14-15.
- Kyoungtae Kim, 2018. Functional upregulation of ribosome biogenesis in yeast treated with

- silver or CdSe/ZnS nanoparticles. Keynote speaker at World Yeast Congress. Montreal, Canada. May 14-15.
- Kyoungtae Kim. 2017. November 15. Study of Intracellular Traffic. Guest Speaker in the course "Biopsychological Aspects of Dementia"
- Kyoungtae Kim. 2017. August 29. Membrane trafficking. Talk at the MSU-ACS affiliates.
- Kyoungtae Kim. 2015. June 28. Carbon nanomaterials negatively affect cell viability and gene Expression. Talk at the Sixteenth International Conference on the Science and Application of Nanotubes, Nagoya, Japan.
- Kyoungtae Kim. 2014. Apr 7. Dynamin-like protein Vps1 in vesicular traffic. Wichita State University, Kansas.
- Katelyn Bartlett\*, Kyoungtae Kim, and Katie Schmelzle\*. 2013. Carbon nano tubes toxicity in yeast, Springfield, MSU.
- Kyoungtae Kim. 2012. Oct 31. Dynamin-like protein Vps1 in intracellular traffics. Williams Baptist College, Walnut Ridge, AK.
- Kyoungtae Kim. 2012. Oct 1. Implication of Dynamin-like Protein Vps1 in Endocytic and Recycling traffics. Department of Biology. Missouri Science and Technology, Rolla, MO
- Kyoungtae Kim. 2011, Oct 13. Yeast dynamin-like protein Vps1 in endocytic and recycling traffics. University of Missouri, Kansas City, MO
- Kyoungtae Kim, Daobing Wang\*, Jeff Sletto\*\*, Jacob Hayden\*, Brandon Tenay\*\*. 2010. Nov. Yeast dynamin in endosomal trafficking. The Department of Cell Physiology and Biophysics, University of Arkansas Medical School, Little Rock, Arkansas.
- Kyoungtae Kim, S. Nannapaneni\*, S. Jain\*, D. Pittsley\*\*, A. Maysent\*\*, and R. McDowell\*\*. 2008. New insights into the endocytic roles of yeast dynamin-like protein Vps1. The Department of Biochemistry, University of Kansas Medical School, KA.

## Conference Paper and PRESENTATIONS since employment at MSU: (\*Graduate Student; \*\* Undergraduate Student): 241 presentations

- Kyoungtae Kim. 2023. Quantum dots' impacts on actin dynamics and membrane trafficking. Symposium on World Cell and Molecular Biology (CMB2023, May), Singapore.
- Seth Harris and Kyoungtae Kim. 2023. Cytotoxicity assessment of quantum dot alternatives in hepatocellular carcinoma and immortalized liver cells. EIDF.
- Nhi Le and Kyoungtae Kim. 2023. The assessment of quantum dots' intracellular trafficking and their interaction with yeast proteins. EIDF.
- Onyinye Okafor and Kyoungtae Kim. 2023. Quantum Dots on membrane organization and endocytosis of budding yeast. EIDF
- Emma Braun, Nhi Le, and Kyoungtae Kim. 2023. Biochemical study of characterizing the Interaction between Quantum dots and actin. 2023 CNAS Undergraduate Symposium.
- Kyoungtae Kim 2023. QDs' Trafficking and Its Impact on Yeast Polarization and Actin Filament. The 2023 Cell and Experimental Biology (April). Houston, Texas.
- Seth Harris and Kyoungtae Kim. APOPTOTIC PATHWAY PROTEIN EXPRESSION VARIANCE IN METAL OXIDE AND QUANTUM DOT TREATED HELA CELLS. 2023 Missouri Academy of Science (MAS), Joplin, MO
- Onyinye Okafor and Kyoungtae Kim. THE EFFECT OF QUANTUM DOTS ON ENDOCYTOSIS, EISOSOME, AND VACUOLE ORGANIZATION. 2023 Missouri Academy of Science (MAS), Joplin, MO

- Nhi Le and Kyoungtae Kim. The intracellular trafficking of CdSe/ZnS QDs and its impact on yeast actin dynamics. 2023 Missouri Academy of Science (MAS), Joplin, MO
- Kyoungtae Kim, Siddak Dhaliwal, and Carly Crawford. THE MECHANISM OF YEAST DYNAMIN RECRUITMENT TO THE LATE ENDOSOME. 2023 Missouri Academy of Science (MAS), Joplin, MO
- Emma Braun, Nhi Le, and Kyoungtae Kim. Quantum Dot\_Protein Interactions. 2023 Missouri Academy of Science (MAS), Joplin, MO
- Prithvi Nagarajan. The Utilization of Prazosin, Haloperidol, and Chlorpromazine to Effectively Treat Hepatocellular Carcinoma. 2023 Missouri Junior Academy of Science (MAS), Joplin, MO

- Nhi Le and Kyoungtae Kim. Augmented actin cable fragmentation and slow turnover rate of Abp1-GFP with core-shelled quantum dots. 2022. American Society of Cell Biology (ASCB)
- Alyse Peters and Kyoungtae Kim. Effects of ZnO and CuO NPs on human thyroid cancer cells (ML-1) s Rat Medullary thyroid carcinoma (CA77). 2022 ASCB.
- Nhi Le and Kyoungtae Kim. Cadmium Quantum Dots Affect Receptor Mediated Endocytosis and Cell Polarity. Yeast Genetics Meeting 2022. UCLA, California.
- Min Zhang, Daniel S. Kim, and Kyoungtae Kim. Intracellular Trafficking and Distribution of Cd and InP Quantum Dots in HeLa and ML-1 Thyroid Cancer Cells. EIDF. May 7. 2022
- Alyse Peters, Nakaja Weaver, Kayti Monahan, and Kyoungtae Kim. EFFECTS OF ZnO AND CuO NPS ON HUMAN THYROID CANCER CELLS (ML-1) VS RAT MEDULLARY THYROID CARCINOMA (CA77). EIDF. May 7. 2022
- Nhi Le, Jonathan Routh, Cameron Kirk, and Kyoungtae Kim. An Investigation of the Impact of Cadmium Selenide Zinc Sulfide Quantum Dots on Saccharomyces cerevisiae. CNAS Research symposium. May 5. 2022
- D. S. Kim, M. Zhang, N. Le, S. Harris, and K. Kim. ML-1 THYROID CANCER CELLS ARE MORE RESISTANT TO PLATINUM-BASED CHEMOTHERAPEUTIC AGENTS. CNAS Research symposium. May 5. 2022
- Alyse Peters, Nakaja Weaver, Kayti Monahan, and Kyoungtae Kim. EFFECTS OF ZnO AND CuO NPS ON HUMAN THYROID CANCER CELLS (ML-1) VS RAT MEDULLARY THYROID CARCINOMA (CA77). CNAS Research symposium. May 5. 2022
- Min Zhang\*, Daniel S Kim\*\*, and Kyoungtae Kim. Intracellular Distribution of Cd and InP Quantum Dots in HeLa and ML-1 Thyroid Cancer Cells. Missouri Academy of Science. April 23, 2022. Fayette, MO 65248.
- Alyse Peters\*, Kathryn Monahan\*, Nakaja Weaver \*\*, and Kyoungtae Kim. Effects of ZnO and CuO NPs on human thyroid cancer cells (ML-1) vs rat medullary thyroid carcinoma (CA77). Missouri Academy of Science. April 23, 2022. Fayette, MO 65248.
- Daniel S Kim\*\*, Min Zhang\*, Nhi Le\*\*, Seth Harris\*\*, and Kyoungtae Kim. ML-1 thyroid cancer cells are more resistant to platinum-based chemotherapeutic agents. Missouri Academy of Science. April 23, 2022. Fayette, MO 65248.
- Nhi Le\*\*, Jonathan Routh\*\*, and Kyoungtae Kim. An Investigation of the Impact of Cadmium Selenide Zinc Sulfide Quantum Dots on *Saccharomyces cerevisiae* Yeast Cells. Missouri Academy of Science. April 23, 2022. Fayette, MO 65248.

- D. S. Kim\*\*, M. Zhang\*, N. Le\*\*, S. C. Harris\*\*, K. Kim. Effects of platinum-based chemotherapeutic agents on ML-1 Thyroid cancer cells. ASCB conference, December 1-10
- M. Zhang\*, D. S. Kim\*\*, and K. Kim. Intracellular trafficking of Cd and InP quantum dots on their toxicity profile in HeLa and ML-1 thyroid cancer cells. ASCB conference, December 1-10
- K. Kim, R. Sedaghat-Herati, A. McMullen\*, D. Ehie\*, Q. Wyatt\*. Phosphonium and ammonium Chitosan Polymers for high performance Gene Delivery. ASCB conference, December 1-10
- N. Le\*\*, C. Kirk\*\*, and K. Kim. The investigation of cadmium selenide zinc sulfide quantum dot's trafficking in budding yeast cells. ASCB conference, December 1-10
- A. Peters\*, N. Weaver\*\*, K. Monahan\*, and K. Kim. Effects of zinc oxide and copper oxide nanoparticles on human thyroid cancer cells. ASCB conference, December 1-10
- Nhi Le\*\* and Kyoungtae Kim. 2021. An Investigation of the Intracellular Trafficking of Cadmium Selenide Zinc Sulfide Quantum Dots in Yeast Cells. The 2021 Arkansas Idea Network of Biomedical Research Excellence.
- Daniel S Kim\*\*, Min Zhang\*, Nhi Le\*\*, and K Kim. 2021. ML-1 Thyroid Cancer Cells are more resistant to platinum-based chemotherapeutic agents over HeLa Cervical Cancer Cells. The 2021 Arkansas Idea Network of Biomedical Research Excellence.
- Min Zhang\* and Kyoungtae Kim. 2021. Is Human Cervical Cancer More Sensitive to Cd and InP Quantum Dots Compared to Human Thyroid Cancer Cell? EIDF. May 1, 2021.
- Victoria Davenport\* and Kyoungtae Kim. 2021. InP/ZnS Quantum dots: lighting the way to innovative cancer treatment. EIDF. May 1, 2021.
- Cullen Horstmann\* and Kyoungtae Kim. 2021. Comparing the Toxicity of CdSe/ZnS and InP/ZnS Quantum Dots in Saccharomyces cerevisiae. EIDF. May 1, 2021.
- Kathryn Monahan\*\*, Cullen Horstmann, and Kyoungtae Kim. 2021. Investigating the potential toxicity of engineered nanomaterials on Saccharomyces cerevisiae. CNAS Undergraduate Research Symposium. April 27-May 3, 2021
- Nhi Le\*\*, Cameron Kirk\*\*, and Kyoungtae Kim. 2021. Kinetic analysis of cadmium quantum dot's traffic. CNAS Undergraduate Research Symposium. April 27-May 3, 2021
- Madeline Merrill\*\*, Victoria Davenport\*, and Kyoungtae Kim. 2021. A look at chitosan derivatives and how they could potentially be applied in biomedical body processes. CNAS Undergraduate Research Symposium. April 27-May 3, 2021
- Alyse Peters\*\* and Kyoungtae Kim. 2021. Nanoparticle effects on Human Thyroid cancer cells. CNAS Undergraduate Research Symposium. April 27-May 3, 2021
- Victoria Davenport\* and Kyoungtae Kim. 2021. An assessment of InP/ZnS as potential anticancer therapy: Quantum dot treatment induces stress on HeLa cells. EXPERIMENTAL BIOLOGY 2021 (International conference) April 27-30, 2021
- Cullen Horstmann\* and Kyoungtae Kim. 2021. Comparing Transcriptome Profiles and Relative Toxicity of CdSe/ZnS and InP/ZnS Quantum Dots in *Saccharomyces cerevisiae*. EXPERIMENTAL BIOLOGY 2021 (International conference) April 27-30, 2021
- Alyse Peters\*\* and Kyoungtae Kim. 2021. Nanoparticle Effects on Human Thyroid cancer cells. Missouri Academy of Science, Columbia, MO (State) April 23-24, 2021.
- Victoria Davenport\*, Madeline Merrill\*\*, and Kyoungtae Kim. 2021. A comparison of chitosan derivatives and their potential for biomedical applications of intra-cellular delivery. Missouri Academy of Science, Columbia, MO (State) April 23-24, 2021.

- Cullen Horstmann\* and Kyoungtae Kim. 2021. An Investigation on Transcriptome Profile Alterations and Toxicity of CdSe/ZnS and InP/ZnS Quantum Dots in Baker's Yeast. Missouri Academy of Science, Columbia, MO (State) April 23-24, 2021.
- Min Zhang\* and Kyoungtae Kim. 2021. Cd and InP Quantum Dot's Impacts on ML-1 Thyroid and HeLa Cells and Their Inner Traffics. Missouri Academy of Science, Columbia, MO (State) April 23-24, 2021.

- Victoria Davenport\*\* and Kyoungtae Kim. 2020. An assessment of InP/ZnS as potential anticancer therapy: quantum dot treatment induces stress on HeLa cells. CNAS undergraduate research symposium
- Glory Ehie\* and Kyoungtae Kim. 2020. Myosin 2's effect on Vps10 and Snc1 traffic. CNAS undergraduate research symposium
- Cullen Horstmann\* and Kyoungtae Kim. 2020. Comparing Transcriptome Profiles of Cadmium Selenide/Zinc Sulfide and Indium Phosphide/Zinc Sulfide in *Saccharomyces cerevisiae*. 2020 Virtual American Society for Cell Biology/EMBO meeting
- Cullen Horstmann\*, Daniel S Kim\*\*, Chelsea Campbell\*, and Kyoungtae Kim: Transcriptome Profile Alteration with Cadmium Selenide/Zinc Sulfide Quantum Dots in *Saccharomyces cerevisiae*. 2020 Virtual American Society for Cell Biology/EMBO meeting
- Victoria Davenport\*\*, Basant Hens\*\*, Jared Smothers\*, Kyoungtae Kim, Rishi Patel. The Future of Anticancer Drugs: A Cytotoxicity Assessment Study of CdSe/ZnS and InP/ZnS Quantum Dots. 2020 Virtual American Society for Cell Biology/EMBO meeting
- Husref Rizvanovic\*, Kafayat Yusuf\*, and Kyoungtae Kim. 2020. Cytotoxic assessments and RNAseq interpretation of Cyanoximate-treated cancer cells. 2020 Virtual American Society for Cell Biology/EMBO meeting
- Vy Nguyen\*, Jared Smothers\*, Paul Ballhorn\*\*, S. Kottapalli, Anh Ly\*, Julia Villarreal\*\*, and Kyoungtae Kim. 2020. Trans-membrane protein traffics by loss of yeast type V myosin. 2020 Virtual American Society for Cell Biology/EMBO meeting
- Glory Ehie\*, Vy Nguyen\*, and Kyoungtae Kim. 2020. Myosin 2's effect on Vps10 and Snc1 traffic. Arkansas INBRE, Fayetteville, AK. November.
- Victoria Davenport\*, Kyoungtae Kim. 2020. Induction of Stress on HeLa Cells from InP/ZnS Quantum Dot Treatment Arkansas INBRE, Fayetteville, AK. November
- Glory Ehie\*, Vy Nguyen\*, and Kyoungtae Kim. 2020. Analyzing myosin's role in sorting Vps10 and in transporting Snc1. MOLSAMP virtual PPT presentation
- Cameron Kirk\*\*, Vy Nguyen\*, and Kyoungtae Kim, 2020. Myosin 2 transportation of Vps10 cargo and Cps1-GFP vesicle entry via point mutated Myo2. MOLSAMP virtual PPT presentation
- Husref Rizvanovic\* and Kyoungtae Kim. 2020. Effects of alternative chemotherapeutic agents on thyroid cancer cell line ML-1. IDF, MSU. May 2.
- Vy Nguyen\*, Jared Smothers\*, Anh Ly\*, Julia Villarreal\*\*, and Kyoungtae Kim. 2020. Yeast myosin for the traffic bounds towards the trans-Golgi network. IDF, MSU. May 2.
- Kafayat Yusuf\* and Kyoungtae Kim. 2020. Effects of newly synthesized cyanoximates as an alternative cancer therapeutic agent. IDF, MSU. May 2.
- Ehsan Suez\* and Kyoungtae Kim. 2020. Effects of dose-dependent Vps1 on membrane fusion dynamics. IDF, MSU. May 2.
- Sravya Rallabandi\* and Kyoungtae Kim. 2020. Effect of AgNP and CdSe/ZnS QDs on

- endocytosis and protein recycling in yeast. IDF, MSU. May 2.
- Cullen Horstmann\* and Kyoungtae Kim. 2020. Comparing Transcriptome Profiles of Silver, Cadmium Selenide/Zinc Sulfide, Indium Phosphide/Zinc Sulfide, and Palladium Quantum Dots in *Saccharomyces cerevisiae*. April, 2020. American Society for Biochemistry and Molecular Biology (abstract published).
- Julia Villarreal\*\*, Anh M Ly\*, Vy Nguyen\*, and Kyoungtae Kim. 2020. Myosin V-mediated cargo traffic toward the trans-Golgi network and Myosin V implication in Sinc1 exocytosis. February, 2020. Emerging Researchers National Conference, February 2020.
- Deborah Ehie\* and Kyoungtae Kim. 2020. TEPB-CS and TEAB-CS: Gene therapy alternatives. February, 2020. Emerging Researchers National Conference, February 2020.

- Ehsan Suez\*. 2019. CNAS 3M Thesis competition: Tiny bubbles: explaining membrane fusion dynamics. MSU. November.
- Kafayat Yusuf\*. 2019. CNAS 3M Thesis competition: Novel Chemotherapeutic agents for fighting cancer. MSU. November.
- Ehsan Suez\*, Sravya Rallbandi\*, and Kyoungtae Kim. 2019. Novel function of Vps1 on membrane fusion. The 12<sup>th</sup> Annual Midwest Yeast conference. Chicago, IL. Oct 5.
- Onika Olson\*\*, Ehsan Suez\*, Sravya Rallabandi\*, and <u>Kyoungtae Kim</u>. 2019. Dynamin-Assisted Proteoliposome Fusion. The 12<sup>th</sup> Annual Midwest Yeast conference. Chicago, IL. Oct 5.
- Onika Olson\*\*, Ehsan Suez\*, Sravya Rallabandi\*, and <u>Kyoungtae Kim</u>. 2019. Dynamin GTPase, a Facilitator of Proteoliposome Fusion Arkansas INBRE, Fayetteville, AK. October.
- Vy Nguyen\*, Juia Villarreal\*\*, Mya Ly\*, and <u>Kyoungtae Kim</u>. 2019. Traffic of Snc1 and Vps10 via myosin-based motility. The 12<sup>th</sup> Annual Midwest Yeast conference. Chicago, IL. Oct 5.
- Husref Rizvanovic\*, Daniel Pinheiro, <u>Kyoungtae Kim</u>, and Johnson Thomas. 2019. Chlorotoxin conjugated with saporin reduces viability of ML-1 thyroid cancer cells in vitro. The 89<sup>th</sup> Annual Meeting of the American Thyroid association. Oct30-Nov 3, 2019
- Ryan Windish\*, Wes Short\*, and <u>Kyoungtae Kim</u>. 2019. Assessment of Vps1 Targeting and Effects of Ubiquitin-Binding Residue Mutations in Vps1. The 12<sup>th</sup> Annual Midwest Yeast conference. Chicago, IL. Oct 5.
- Basant Hens\*\* and <u>Kyoungtae Kim</u>, 2019. Assessment of quantum dots on cell toxicity. Arkansas INBRE, Fayetteville, AK. October.
- Cullen Horstmann\*, Daniel S Kim, Chelsea Campbell\*\*, and <u>Kyoungtae Kim</u>. 2019 Transcriptome Profile Analysis with Various Nanomaterial in *Saccharomyces cerevisiae*. Midwest Yeast Conference. Chicago. IL. October.
- Cullen Horstmann\* and <u>Kyoungtae Kim</u>. 2019. What doesn't kill you makes you...develop acute health problems down the road. the German-American Science Slam. St. Louis, Missouri. November.
- Deborah Ehie\* and <u>Kyoungtae Kim</u>. 2019. TEAB and TEPB: gene therapy alternatives. IDF (May 4).
- <u>Kyoungtae Kim. 2019</u>. Study of intracellular traffics and assessment of anticancer therapeutics and engineered nanoparticles on cells. The CNAS undergraduate symposium. May 3, 2019
- Julia Villarreal\*\*, Mya Ly\*, and Kyoungtae Kim. 2019. Myosin-V mediated cargo traffic toward the trans-Golgi network. 2019 CNAS symposium. May.
- Husref Rizvanovic\*\*, Hanna Williams\*\*, and Kyoungtae Kim. 2019. Effects of alternative

- chemotherapeutic agents on thyroid cancer. 2019 CNAS symposium. May.
- Onika Olson\*\* and Kyoungtae Kim. 2019. Dynamin-assisted proteoliposome fusion. 2019 CNAS Symposium. May.
- Cullen Horstmann\*\*, Daniel Kim, and Kyoungtae Kim. 2019. A comparison of the effects of silver and cadmium nanomaterials on baker's yeast. 2019 CNAS symposium. May.
- Basant Hens\*\* and Kyoungtae Kim. 2019. Can quantum dots inhibit the growth of cancer cells. 2019 CNAS symposium. May.
- Husref Rizvanovic\*\*, Hanna Williams\*\*, Daniel Pinhero, Kyoungtae Kim, and Johnson Thomas. 2019. Chlorotoxin Conjugated with Saporin Reduces Viability of ML-1 Thyroid Cancer Cells In Vitro. The 89th Annual Meeting of the American Thyroid Association in Chicago, Illinois. November
- Ehsan Suez\*, Jared Smothers\*, Onika Olson\*\*, and Kyoungtae Kim. 2019. Novel function of Vps1 in membrane fusion. Missouri Academy of Science, Maryville, MO (April12-13).
- Kafayat Yusuf\* and Kyoungtae Kim. 2019. The use of palladium and platinum cyanoximates in the treatment of cancer cells, initiating a new approach to cancer chemotherapy. Missouri Academy of Science, Maryville, MO (April12-13)
- Mya Ly\*, Vy Nguyen\*, Jared Smothers\*, Sravya Kottapalli\*, Julia Villarreal\*\*, and Kyoungtae Kim. 2019. Type 5 myosin for trafficking of snc1 and vps10 cargo. Missouri Academy of Science, Maryville, MO (April12-13)
- Cullen Horstmann\*\*, Daniel S Kim, and Kyoungtae Kim. 2019. An investigation and comparison of the effects of silver and cadmium nanoparticles on baker's yeast. Missouri Academy of Science, Maryville, MO (April12-13)
- Deborah Ehie\* and Kyoungtae Kim. 2019. TEAB and TEPB: gene therapy alternatives. Missouri Academy of Science, Maryville, MO (April12-13)
- Onika Olson\*\*, Jared smothers\*, Ehsan Suez\*, Sravya Rallabandi\*, and Kyoungtae Kim. 2019. Dynamin-assisted proteoliposome fusion. Missouri Academy of Science, Maryville, MO (April12-13)
- Julia Villarreal\*\*, Vy Nguyen\*, Jared Smothers\*, Mya Ly\*, and Kyoungtae Kim. 2019. Yeast myosin and the Trans Golgi Network. MoLSAMP meeting, Jefferson, MO. March 9.

- Deborah Ehie\*\*, Jared Smothers\*, and Kyoungtae Kim. 2018. CdSe/ZnS and InP/ZnS QDs effect on HeLa cell regulation mechanisms. Midwest Yeast Conference, Northwestern University. Evanston, IL.
- Cullen Horstman\*\* and Kyoungtae Kim. 2018. A Transcriptomic Assessment of the Effects of CdSe/ZnS and InP Quantum Dots on Baker's Yeast. Midwest Yeast Conference, Northwestern University. Evanston, IL.
- Vy Nguyen\*, Jared Smothers\*, Mya Ly\*, Sravya Kottapalli\*, and Kyoungtae Kim. 2018. Yeast myosin for the traffic bound towards the trans Golgi network (TGN). Midwest Yeast Conference, Northwestern University. Evanston, IL.
- Jared Smothers\*, Onika Olson\*\*, Ehsan Suez\*, and Kyoungtae Kim. 2018. Endosome-to-Golgi SNARE Mediation of Liposome Fusion. Midwest Yeast Conference, Northwestern University. Evanston, IL.
- Onika Olson\*\*, Jared Smothers\*, and Kyoungtae Kim. 2018. Endosome-to-Golgi SNARE mediation of liposome. Arkansas INBRE Research Conference. Fayetteville, AK. November

- 2-3.
- Ryan Windish\*\* and Kyoungtae Kim. 2018. Site-directed mutagenesis of known Vps1 ubiquitination sites. Arkansas INBRE Research Conference. Fayetteville, AK. November 2-
- Cullen Horstmann\*\* and Kyoungtae Kim. 2018. A Genomic assessment of the effects of CdSe/ZnS and InP quantum dots on baker's yeast. Arkansas INBRE Research Conference. Fayetteville, AK. November 2-3.
- Husref Rizvanovic\*\*, Olivia N. Horton\*\*, Cullen Horstmann\*\*, and Kyoungtae Kim.

  Determining The Exact Fold Changes Of Target Genes With Primer Efficiency Tests. CNAS
  Undergraduate Symposium.
- Cullen Horstmann\*\*, Husref Rizvanovic\*\*, Olivia Horton\*\*, and Kyoungtae Kim. Analysis of Nanoparticle-mediated Gene Expression to determine underlying mechanisms of cell stress. CNAS Undergraduate Symposium.
- Kyoungtae Kim. 2018. Yeast dynamin plays a key role in the endosome-to-Golgi Traffic. Montreal, Canada. May 14-15.
- Kyoungtae Kim, 2018. Functional upregulation of ribosome biogenesis in yeast treated with silver or CdSe/ZnS nanoparticles. Montreal, Canada. May 14-15.
- John Short\* and Kyoungtae Kim. 2018. Investigating the protein recruitment mechanism of dynamin-like Vps1. IDF, May 5, 2018
- Mariel Delgado Cruz\* and Kyoungtae Kim. 2018. Exploring the potential role of Vps1 as a Golgi fusion protein. IDF, May 5, 2018
- Kyoungtae Kim, Pelin Makaraci\*, Uma Saimani\*, and Jared Smothers\*\*. 2018. Yeast dynamin for membrane fusion. Missouri Academy of Science, Rolla, MO. April 27-28.
- Cullen Horstmann\*\* and Kyoungtae Kim. 2018. Silver nanoparticles on yeast viability with bioinformatics analysis. Missouri Academy of Science, Rolla, MO. April 27-28.
- Paul Ballhorn\*\*, Jared Smothers\*, Vy Nguyen\*, and Kyoungtae Kim. 2018. Yeast myosin 2 for the traffic bound to the trans-Golgi network (TGN). Missouri Academy of Science, Rolla, MO. April 27-28.
- Jared Smothers\*, Paul Ballhorn\*, Vy Nguyen\* and Kyoungtae Kim. 2018. Myosin mediates protein recycling toward the Golgi. Annual Joint Meeting of the Missouri and Missouri Valley Branches of the American Society of Microbiology, March 9-10, 2018, Kansas.
- John C. (Wes) Short (Masters)\*, Shiva Kumar Goud Gadila\* and Kyoungtae Kim. 2018. Searching for Recruitment Domains and Residues of Vps1 to Target Membrane. Annual Joint Meeting of the Missouri and Missouri Valley Branches of the American Society of Microbiology, March 9-10, 2018, Kansas.
- Cullen Horstmann\*\* and Kyoungtae Kim. 2018. Silver Nanoparticles on Yeast Viability with Bioinformatics Analysis. Annual Joint Meeting of the Missouri and Missouri Valley Branches of the American Society of Microbiology, March 9-10, 2018, Kansas.
- Ryan Windish\*\* and Kyoungtae Kim. 2018 Site Directed Mutagenesis of Known Vps1 Ubiquitination Sites. Annual Joint Meeting of the Missouri and Missouri Valley Branches of the American Society of Microbiology, March 9-10, 2018, Kansas.
- Mariel Delgado Cruz\* and Kyoungtae Kim. 2018 Exploring the Potential Role of Vps1 as a Fusion Protein. Annual Joint Meeting of the Missouri and Missouri Valley Branches of the American Society of Microbiology, March 9-10, 2018, Kansas.

#### 2017

Jared Smothers\*, Paul Ballhorn\*\*, and Kyoungtae Kim. 2017. Myosin mediates protein

- recycling towards the Golgi. Arkansas InBre, Oct 27-28.
- Cullen Horstmann\*\*, Chelsea Campbell\*\*, and Kyoungtae Kim. 2017. The Effect of Silver and Cadmium on Gene Expression. Arkansas InBre. Oct 27-28.
- Pelin Makaraci\*, Uma Saimani\*, Jared Smothers\*\*, and Kyoungtae Kim. 2017. Yeast dynamin and Ypt6 converge on the GARP for tethering/fusion at the TGN. Midwest Yeast Conference. Northwestern University, Evanston IL, October, 2017.
- Cullen Horstmann\*\*, Chelsea Campbell\*\*, and Kyoungtae Kim. 2017. Global gene expression patterns with silver and cadmium nanoparticles in yeast. Midwest Yeast Conference. Northwestern University, Evanston IL, October, 2017.
- Jared Smothers, Uma Saimani, and Kyoungtae Kim. 2017. Dynamic dynamin interacts with the tether GARP. CNAS Undergraduate Research Symposium. April, 2017
- Chelsea Campbell, Daniel S Kim, and Kyoungtae Kim. 2017. Differential Gene Expression profile Saccaromyces cerevisiae exposed to Ag and CdSe/ZnS nanoparticles. CNAS Undergraduate Research Symposium. April, 2017
- Sara Woodman, Justin Conover, Chris Trousdale, Kyoungtae. Endosome to Golgi trafficking requires optimal levels of lipids. 2017 ASM Branch meeting. Springfield, MO.
- John Short, Kyoungtae Kim. Dull-length Vps1 targets Golgi and endosomes, not endocytic sites. 2017 ASM Branch meeting. Springfield, MO.
- Pelin Makaraci, Kyoungtae Kim, Hyoeun McDermott. Yeast dynamin and Ypt6 in parallel pathways during protein recycling from the early endosomes to the late Golgi. 2017 ASM Branch meeting. Springfield, MO.
- Jared Smothers, Uma Saimani, Kyoungtae Kim. The Golgi organizer, Vps1, functions together with the tethering GARP. 2017 ASM Branch meeting. Springfield, MO.
- Mariel Delgado Cruz, Shiva Kumar Goud Gadila, Uma Saimani, John short, Hyoeun McDermott, Kyoungtae Kim. Yeast dynamin Vps1 association with clathrin: an important interaction for Golgi homeostasis. 2017 ASM Branch meeting. Springfield, MO.
- Chelsea Campbell, Julie Curless, Daniel Kim, Kyoungtae Kim. Investigating the effects of nanomaterials in yeast. 2017 ASM Branch meeting. Springfield, MO.

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- Pelin Makaraci\*, Hyoeun McDermott\*, Mariel Delgado Cruz\*, Kyoungtae Kim. Yeast dynamin for the fusion of endosome-derived vesicles at the Golgi. American Society of Cell Biology, 2016. San Francisco, CA.
- Uma Saimani\*, Jared Smothers\*\*, Kyoungtae Kim. Vps1 functions with the GARP tethering complex for endosome-to-Golgi traffic. American Society of Cell Biology, 2016. San Francisco, CA.
- Sara Woodman\*, Justin Conover\*\*, Chris Trousdale\*, Kyoungtae Kim. Yeast membrane lipid imbalance leads to trafficking defect toward the Golgi. American Society of Cell Biology, 2016. San Francisco, CA.
- Shiva Gadila\*, Uma Saimani\*, M.A. Williams\*, M. Delgado Cruz\*\*, P. Makaraci\*, Kyoungtae. Kim. Yeast dynamin association with clathrin and its physiological roles. American Society of Cell Biology, 2016. San Francisco, CA.
- Mariel Delgado Cruz\*, Shiva Kumar Goud Gadila\*, Uma Saimani\*, Michelle Williams\*, Pelin Makaraci\*, and Kyoungtae Kim. Yeast dynamin Vps1 associates with clathrin to facilitate vesicular trafficking and controls Golgi homeostasis. Arkansas INBRE research Conference, 2016, Fayetteville, AR

- Uma Saimani\*, Jared Smothers\*\*, and Kyoungtae Kim. Vps1 functions with the GARP tethering complex for endosome -to- Golgi traffic. Arkansas INBRE research Conference, 2016, Fayetteville, AR
- Pelin Makaraci\* and Kyoungtae Kim. Yeast dynamin for the fusion of endosome-derived vesicles at the Golgi. Arkansas INBRE research Conference, 2016, Fayetteville, AR
- Sara E. Woodman\*, Justin Conover\*\*, Chris Trousdale\*, and Kyoungtae Kim. Yeast Membrane Lipid Imbalance Leads to Trafficking Defects toward the Golgi. Arkansas INBRE research Conference, 2016, Fayetteville, AR
- John Short\*\* and Kyoungtae Kim. Subcellular Targeting and Physiological Significance of Dynamin-like Protein, Vps1. Arkansas INBRE research Conference, 2016, Fayetteville, AR
- Pelin Makaraci\* and Kyoungtae Kim. Yeast dynamin GTPase for the fusion of endosomederived vesicles at the Golgi. 2016. IDF, MSU.
- Uma Saimani\* and Kyoungtae Kim. Functional connection between Vps1 and GARP Vps51 at the Golgi in budding yeast. 2016. IDF, MSU.
- Sara Woodman\* and Kyoungtae Kim. Membrane lipid imbalance in Saccharomyces cerevisiae leads to trafficking defects toward the Golgi. 2016. IDF, MSU.
- Mariel Delgado Cruz\*\*, Chris Trousdale\*, and Kyoungtae Kim. Understanding the functional relationship between the retromer complex and Vps1. CNAS Symposium, April. 2016.
- John Short\*\* and Kyoungtae Kim. Subcellular localization and function of truncated Vps1 informs physiological significance of dynamin-like proteins. CNAS Symposium, April. 2016.
- Mariel Delgado Cruz\*\*, Chris Trousdale\* and Kyoungtae Kim. Understanding the functional relationship between the retromer complex and Vps1. Annual Meeting of the Missouri Valley Branch and The Missouri Branch of the American Society of Microbiology (March, 2016).
- Bryan Banh\*, Hyoeun McDermott\*, Shiva Kumar Goud Gadila\*, and Kyoungtae Kim Characterization of Vps1 Domain Interaction with ESCRT Subunits. ASM. Kansas.
- Uma Saimani\*, Ashley Smock\*\* and Kyoungtae Kim. Functional Connection between Vps1 and GARP Vps51 at the Golgi in Budding Yeast. ASM. Kansas.
- Pelin Makaraci\*, Aria H. McDermott\*, and Kyoungtae Kim. Dynamin Acts Downstream of Ypt6 for Membrane Fusions. ASM. Kansas.
- Sara Woodman\*, Justin Conover\*\*, Chris Trousdale\*, and Kyoungtae Kim. Membrane Lipid Imbalance in *Saccharomyces cerevisiae* Leads to Trafficking Defects toward the Golgi. ASM. Kansas.
- John Short\*\*, Shiva Kumar Goud Gadila\*, and Kyoungtae Kim. Hitting the Target: Biochemical Interaction of Vps1 and the Golgi. ASM. Kansas.
- John Short\*\* and Kyoungtae Kim. Fullerenols alter growth and gene expression of yeast cells. JVIC-CNAS Symposium, February 24, 2016. Jordan Valley Innovation Center.

- Bryan Banh\*, Hyoeun McDermott\*, Shiva Kumar Goud Gadila\*, and Kyoungtae Kim. 2015. Yeast dynamin interacts with subunits of ESCRT complexes and with novel binding proteins. *Arkansas InBre. Fayetteville, AK*.
- Shiva Kumar Goud Gadila\*, Michelle Williams\*, Hyoeun McDermott\*, John short\*\*, Mariel Delgado Cruz\*\*, and Kyoungtae Kim. 2015. Physical interaction between the scission protein dynamin and the coat protein clathrin at the TGN in *Saccharomyces cerevisiae*.

- Arkansas InBre. Fayetteville, AK.
- Sara Woodman\*, Justin Conover\*\*, Chris Trousdale\*, and Kyoungtae Kim. 2015. Lipid Homeostasis required for proper protein recycling. *Arkansas InBre. Fayetteville, AK*.
- Pelin Makaraci\*, Hyoeun McDermott\*, and Kyoungtae Kim. 2015. Rab GTPase and dynamin function together at the late Golgi in Yeast. *Arkansas InBre. Fayetteville, AK*.
- Uma Saimani\*, Ashley Smock\*\*, and Kyoungtae Kim. 2015. Physical interaction between Vps1 and GARP Vps51 at the Golgi in *Saccharomyces cerevisiae*. *Arkansas InBre. Fayetteville*, *AK*.
- Kyoungtae Kim, Sara Woodman\*\*, and Short John\*\*. Carbon nanomaterials negatively affect cell viability and gene Expression. 2015. The Sixteenth International Conference on the Science and Application of Nanotubes, Nagoya, Japan.
- John short\*\* and Kyoungtae Kim. Fullerenol induced changes in mRNA and growth of yeast cells. 2015. MSU nano research workshop.
- Sara Woodman\*\* and Kyoungtae Kim. The effect of carbn nanotubes on yeast growth and gene expression. 2015. MSU nano research workshop.
- Chris Trousdale\*, Hyoeun Mcdermott\*, Katie Schmelzle\*\*, Katelyn Bartlett\*, and Kyoungtae Kim. Functional connection between yeat dynamin and retromer at the endosome. 2015. IDF, MSU
- Bryan Banh and Kyoungtae Kim. Novel yeast dynamin binding proteins. 2015. IDF, MSU Shiva Kumar Goud Gadila\*, Michelle Williams\*, Hyoeun McDermott\*, and Kyoungtae Kim. Yeast dynamin and clathrin interaction. 2015. IDF, MSU (Outstanding poster presentation Award)
- Pelin Makaraci\*, Hyoeun McDermott\*, and Kyoungtae Kim. Vps1 in action with the membrane fusion machinery at the late Golgi. 2015. IDF, MSU
- Uma Saimani\*, Pelin Makaraci\*, and Kyoungtae Kim. Interaction study of Vps1 with GARP Vps51. 2015. IDF, MSU
- Justin Conover\*\*, Chris Trousdale\*, and Kyoungtae Kim. Changes in membrane lipid composition disrupt yeast protein recycling. 2015. CNAS symposium, MSU
- John, C. W\*\*. Short and Kyoungtae Kim. Fullerenols alter growth and protein activity in yeast cells. 2015. CNAS symposium, MSU
- Sara E. Woodman\*\* and Kyoungtae Kim. Toxicity of carbon nanotubes t budding yeast. 2015. CNAS symposium, MSU
- Pelin Makaraci\* and Kyoungtae Kim. Vps1 and Cytosolic Protein Interactions During Protein Recycling. 2015. ASM Missouri Valley. Lincoln, Nebraska
- Bryan Banh\*, Hyoeun McDermott\*, Shiva Kumar Goud Gadila\*, and Dr. Kyoungtae Kim. Novel yeast dynamin binding proteins. 2015. ASM Missouri Valley. Lincoln, Nebraska
- Shiva Kumar Goud Gadila\*, Michelle Williams\*, Hyoeun McDermott\*, and Kyoungtae Kim. Yeast dynamin and Clathrin interaction. 2015. ASM Missouri Valley. Lincoln, Nebraska
- John Short\*\*, Sara Woodman\*\*, and Kyoungtae Kim. Fullerenols Impact Cell Growth and Gene Expression of *Saccharomyces cerevisiae*. ASM Missouri Valley. Lincoln, Nebraska
- Sara E. Woodman\*\* and Kyoungtae Kim. The Effects of Carbon Nanotube Exposure on Cell Growth and Gene Expression of *Saccharomyces cerevisiae*. 2015. ASM Missouri Valley. Lincoln, Nebraska (Won First prize award in undergraduate oral presentation)
- Christopher R. Trousdale\* and Kyoungtae Kim. Functional Connection between Yeast Dynamin and Retromer at the endosome. 2015. ASM Missouri Valley. Lincoln, Nebraska

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#### 2014

- Hyoeun McDermott\* and Kyoungtae Kim. Novel Physical Interaction of Vps1 with Major Intracellular Traffic Regulators. 2014. *Arkansas InBre. Fayetteville, AK*.
- Christopher Trousdale\*, Katie Schmelzle\*\*, Hyoeun McDermott\*, and Kyoungtae Kim. Retrograde transport: Defining the Relationship and Recruitment of the Retromer Complex and Vps1 in Saccaromyces cerevisiae. 2014. *Arkansas InBre. Fayetteville, AK*
- Bryan Banh\*, Hyoeun McDermott\*, Kumar Gadila\*, and Kyoungtae Kim. Yeast Two-Hybrid Screen for VPS1 Protein Interactions. 2014. *Arkansas InBre. Fayetteville, AK*
- Kumar Gadila\*, Michelle Williams\*, Hyoeun McDermott\*, and Kyoungtae Kim. Assessment of Functional Relationship between *VPS1* and Clathrin. 2014. *Arkansas InBre. Fayetteville*, *AK*
- Sara Woodman\*\*, Katelyn Bartlett\*, and Kyoungtae Kim. Examining Cytotoxicity and Gene Expression Effects of Carbon Nanotubes on Saccahromyces Cerevisiae. 2014. *Arkansas InBre. Fayetteville, AK*
- Sara Woodman\*\*, Hyoeun McDermott\*, John short\*\*, and Kyoungtae Kim. Effect of Fullerenols on Growth and Gene Expression in Saccharomyces cerevisiae. 2014. *Arkansas InBre. Fayetteville, AK*
- Sara Woodman\*\*, Katie Schmelzle\*, Katelyn Bartlett\*, and Kyoungtae Kim. Examining the Effect of Carbon Nanotubes on *Saccharomyces cerevisiae* Cell Growth and Gene Expression. 2014. 2014. CNAS symposium. (Second prize winner in undergrad student poster presentation).
- HyoEun Ahn\*, Michelle Williams\*, and Kyoungtae Kim. Elucidation of Vps1 Action Mode via Its Physical Interactions. 2014. 2014. IDF. Missouri State Univ. (First prize winner in graduate student oral presentation).
- Michelle Williams\*, Hyoeun Ahn\*, Courtney Hofstetter\*, and Kyoungtae Kim. Yeast dynamin-like protein Vps1 functions with clathrin at the Golgi. 2014. IDF. Missouri State Univ. (received poster presentation award).
- Katelyn Bartlett\*, Brandon Tenay\*, Brett Alcox\*\*, and Kyoungtae Kim. TORC2 and eisosomes are spatially interdependent requiring optimal level of PIP2. 2014. IDF. Missouri State Univ.
- Hyoeun Ahn\*\* and Kyoungtae Kim. 2014. Elucidation of Vps1 action mode via its physical interaction. 2014. CNAS symposium. (First prize winner in undergrad poster presentation).
- Hyoeun Ahn\*, Michelle Williams\*, and Kyoungtae Kim. Study of Vps1 Action Mode via Genetic and Physical Interactions. Missouri Branch of American society of microbiology. Apr 4-5, Kansas, MO. (First prize winner in graduate student oral presentation)
- Shiva Kumar Goud Gadila\*, Kyoungtae Kim. Assessment of Functional Connection Between ESCRT Proteins and Vps1 on Ste2-GFP Trafficking from Endosome to Vacuole. Missouri Branch of American society of microbiology. Apr 4-5, Kansas, MO.
- Christopher R. Trousdale\*, Katie Schmelzle\*, Kyoungtae Kim. Retrograde Transport: Defining the Relationship and Recruitment of the Retromer Complex and Vps1 in *Saccharomyces cerevisiae*. Missouri Branch of American society of microbiology. Apr 4-5, Kansas, MO.
- Sara Woodman\*\*, Katie Schmelzle\*, Katelyn Bartlett\*, and Kyoungtae Kim. Examining Cytotoxicity of Carbon Nanotubes on *Saccharomyces cerevisiae*. Missouri Branch of American society of microbiology. Apr 4-5, Kansas, MO.

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- Katie Schmelzle\*, Brandon Tenay\*, Joshua Lukehart\*, Katelyn Bartlett\*, Michelle Williams\*, Courtney Hofstetter\*\*, and Kyoungtae Kim. Tentative Functional Relationship between Retromer and Vps1. *Arkansas InBre. Fayetteville, AK*
- Michelle Williams\*, Hyoeun Ahn\*\*, Courtney Hofstetter\*\*, and Kyoungtae Kim. A functional role for Dynamin-like protein Vps1 at the Golgi. *Arkansas InBre. Fayetteville, AK*
- Katelyn Bartlett\*, Brandon Tenay\*, Erin Murphy\*, Kyoungtae Kim. An Interdependent Relationship between Microdomains in the Plasma Membrane of Budding Yeast. *Arkansas InBre. Fayetteville, AK*
- Hyoeun Ahn\*\*, Michelle Williams\*, and Kyoungtae Kim. Searching for Vps1 binding partners. *Arkansas InBre. Fayetteville, AK*
- Brittany Stufflebeam\*, Katelyn Bartlett\*, Katie Schmelzle\*, Kyoungtae Kim, and Paul Schweiger. Examination of the cytotoxicity of carbon nano tubes on Escherichia coli and Saccharomyces cerevisiae. *Arkansas InBre. Fayetteville, AK*
- Joshua Lukehart\* and Kyoungtae Kim. Recycling traffic passing Golgi requires functional VPS1 protein (IDF, poster presentation winner)
- Brandon Tenay\*, Evin Kimberlin\*\*, Michelle Williams\*, Juliette Denise\*\*, Joshua Fakilahyel\*\*, and Kyoungtae Kim. Inactivation of Tor proteins affects the dynamics of endocytic proteins in early stage of endocytosis (IDF)
- Michelle Williams\*, Hyoeun Ahn\*\*, Courtney Hofstetter\*\*, Jeff Sletto\*\*, and Kyoungtae Kim. Potential Functional Connection Between Dynamin and the Coat Protein Clathrin (CNAS Symposium, First prize winner)
- Katie Schmelzle\*\*, Brandon Tenay\*, Josh Lukehart\*, and Dr. Kyoungtae Kim. Investigation of Vps1 for the assembly of retromer implicated in the pathology of Alzheimer's disease (CNAS Symposium)
- Katelyn Bartlett\*, Brandon Tenay\*, Erin Murphy\*, and Kyoungtae Kim. Reassessment of microdomains in budding yeast (First prize winner in graduate student oral presentation). Missouri Branch of American society of microbiology. March 22-23, 2012. Columbia, MO.
- Katie Schmelzle\*\*, Brandon Tenay\*, and Kyoungtae Kim. The functional cooperation between Vps1 and the retromer for endosome-to-Golgi recycling (First prize winner in undergraduate student oral presentation). Missouri Branch of American society of microbiology. March 22-23, 2012. Columbia, MO.
- Michelle Williams\*, Hyoeun Ahn\*\*, Jeff Sletto\*\*, and Kyoungtae Kim. Vps1 at the trans Golgi Network and functions with clathrin (Second prize winner in undergraduate student oral presentation). Missouri Branch of American society of microbiology. March 22-23, 2012. Columbia, MO.

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- Michelle Williams\*\*, Ann Granich\*\*, Jacob Hayden\*, Joshua Lukehart\*, Brandon Tenay\*, Kyoungtae Kim. Vps1 in the traffic of endocytosed materials toward the vacuole. Arkansas InBre, Oct 5-6, 2012. Springdale, Arkansas
- Tenay, Brandon\*, Kimberlin, Evin\*\*, Williams, Michelle\*\*, Dennis, Juliette\*\*, Fakilahyel, Josh\*\*, Kim, Kyoungtae. Tor proteins are required for efficient endocytosis. Arkansas InBre, Oct 5-6, 2012. Springdale, Arkansas
- Joshua Lukehart\*, Chad Highfill\*, and Kyoungtae Kim.Vps1, a Recycling Factor for the Traffic from Early Endosome to Golgi. Arkansas InBre, Oct 5-6, 2012. Springdale, Arkansas Katelyn Bartlett\*, Brandon Tenay\*, Erin Murphy\*, and Kyoungtae Kim. Spatial relationship

- between eisosome and a subdomain called MCT. Arkansas InBre, Oct 5-6, 2012. Springdale, Arkansas
- Jacob Hayden\*, Chad Highfill\*, Joshua Lukehart\*, Brandon Tenay\*, Sarah Dobard\*\*, and Kyoungtae Kim. The membrane pinching-off protein, Vps1, on the cellular garbage disposal traffic. Missouri Academy of Science, April, 2012. Columbia, MO
- Sukje Lee\*\*, Erin Murphy\*, Brandon Tenay\*, Joshua Fakilahyel\*, and Evin Kimberlin\*, and Kyoungtae Kim. Optimal level of phosphatidylinositol 4, 5-bisphosphate is required for proper organization of the membrane compartment eisosome. April, 2012. CNAS undergraduate symposium, Missouri State University.
- Kimberlin Evin\*\*, Brandon Tenay\*, and Fakilahyel Josh\*\*, and Kim Kyoungtae. Tor protein kinases affect recruitments of endocytic proteins and endocytic scission efficiency. April, 2012. CNAS undergraduate symposium, Missouri State University.
- Alexis Brummett\*\*, Hyoeun Ahn\*\*, Jacob Hayden\*, Joshua Lukehart\*, and Chad Highfill\*, and Kyoungtae Kim. Vps1 localizes at cellular recycling and degradation centers. April, 2012. CNAS undergraduate symposium, Missouri State University.
- Joshua Lukehart\*, Chad Highfill\*, and Kyoungtae Kim. A novel role for Vps1 in early endosome to Golgi trafficking. 2012. Missouri Branch of American society of microbiology, St. Joseph, MO.
- Brandon Tenay\*, Kimberlin Evin\*\*, Fakilahyel Josh\*\*, and Kim Kyoungtae. 2012. Survey novel roles of Tor protein kinases on endocytosis. Missouri Branch of American society of microbiology, St. Joseph, MO.

- Joseph Harvey\*, Lifeng Dong, Kyoungtae Kim, Jacob Hayden\*, Jianjie Wang. 2011. Uptake of single-walled carbon nanotubes conjugated with DNA by microvascular endothelial cells. Arkansas INBRE Research Conference, Fayetteville, Arkansas.
- Jacob Hayden\*, Chad Highfill\*, Brandon Tenay\*, Sarah Dobard\*\*, Kyoungtae Kim. 2011. Localization of the dynamin-like protein Vps1 and its implication in endosomal trafficking. Arkansas INBRE Research Conference, Fayetteville, Arkansas.
- Joshua Lukehart\*, Jacob Hayden\*, Chad Highfill\*, and Kyoungtae Kim. 2011. Disruption of Snc1 recycling via Vps1 mutations and search for Vps1 binding partners in membrane recycling pathway. Arkansas INBRE Research Conference, Fayetteville, Arkansas.
- Brandon Tenay\*, Evin Kimberlin\*\*, Fakilahyel Joshua\*\*, Kyoungtae Kim. 2011. Tor proteins are required for the integrity of eisosome and endocytosis. Arkansas INBRE Research Conference, Fayetteville, Arkansas.
- Elizabeth Kapustka\*, Erin Murphy\*, Brandon Tenay\*, Fakilahyel Joshua\*\*, Evin Kimberlin\*\*, Kyoungtae Kim. 2011. Membrane lipids on the organization of eisosome and spatial relationship between eisosome and membrane compartments. Arkansas INBRE Research Conference, Fayetteville, Arkansas.
- Jacob Hayden\*, Chad Highfill\*, Brandon Tenay\*\*, Kyoungtae Kim. 2011. Vps1's role in endosomal trafficking. The Missouri branch of American Society of Microbiology Conference, St. Louis, MO.
- Chad Highfill\*, Joshua Lukehart\*\*, Brandon Tenay\*\*, and Kyoungtae Kim. 2011. Vacuolar sorting protein one is implicated in early endosome to Golgi trafficking. The Missouri branch of American Society of Microbiology Conference, St. Louis, MO.
- Erin Murphy\*, Elizabeth Kapustka\*, Sukje Lee\*\*, Douglas Gilliam\*\*, and Kyoungtae Kim.

- 2011. Disruption of plasma membrane components affects eisosome organization. The Missouri branch of American Society of Microbiology Conference, St. Louis, MO.
- Brandon Tenay\*\*, Jeff Sletto\*\*, Daobing Wang\*, and Kyoungtae Kim. 2011. Yeast dynamin implicated in endocytic scission and the disassembly of endocytic component. CNAS undergraduate research symposium at MSU.
- Joshua Lukehart\*\*, Chad Highfill\*, Jacob Hayden\*, and Kyoungtae Kim. 2011. Vps1's involvement in protein recycling from early endosome to late Golgi. CNAS undergraduate research symposium at MSU.

- Erin Murphy\*, Jacob Boxberger\*\*, Robert Colvin\*\*, Sukje Lee\*\*, Fred Loor\*\*, Geoffrey Zahn\*\*, and Kyoungtae Kim. 2010. The Eisosome Protein Pil1 Plays a Role in the Recruitment of Endocytic Components via Regulating Membrane PIP<sub>2</sub> Levels. The American Society for Cell Biology, Philadelphia, PA
- C. Kamble\*, S. Jain\*, E. Murphy\*\*, K. Kim. 2010. Requirements of Slm proteins for proper eisosome organization, endocytic trafficking, and recycling. The American Society for Cell Biology, Philadelphia, PA
- D. Wang\*, C. Highfill\*, K. Kim. 2010. The yeast dynamin-like protein Vps1:vps1 mutations perturb the internalization and the motility of endocytic vesicle and endosome via the disorganization of actin cytoskeleton The American Society for Cell Biology, Philadelphia, PA
- Daobing Wang\*, Jeff Sletto\*\*, Chad Highfill\*, and <u>Kyoungtae Kim</u>. 2010. Yeast dynamin on receptor mediated endocytosis. Arkansas INBRE Research conference.
- Chitra Kamble\*, Sandhya Jain\*, Erin Murphy\*\*, and <u>Kyoungtae Kim</u>. 2010. The phosphoinositide binding Slm proteins implicated in eisosome organization and endocytic trafficking. Arkansas INBRE Research conference.
- Erin Murphy\*, Suk Je Lee\*\*, Jacob Boxberger\*\*, Robert Colvin\*\*, Elizabeth Kapustka\*\*, Douglas Gilliam\*\*, and <u>Kyoungtae Kim</u>. 2010. Disruption of plasma membrane components affects eisosome localization. Arkansas INBRE Research conference.
- Erin Murphy\*, Jacob Boxberger\*\*, Robert Colvin\*\*, Suk Je Lee\*\*, Fred Loor\*\*, Geoffrey Zahn\*\*, and <u>Kyoungtae Kim</u>. 2010. Pil1's Role on Regulating Membrane PIP<sub>2</sub> Levels. Arkansas INBRE Research conference.
- Chad Highfill\*, Chitra Kamble\*, and <u>Kyoungtae Kim</u>. 2010. Potential proteins involved with Vps1 in recycling. Arkansas INBRE Research conference.
- Chad Highfill\*\* and <u>Kyoungtae Kim</u>. 2010. Perturbed endosome motility in vps1 mutants. National Academy of Science conference, MO.
- Kamble Chitra\*, Jain S\*, Murphy E\*\*, and <u>Kim K</u>. 2010. Implication of *SLM* Genes in endocytosis and the organization of eisosome. American Society of Microbiology Conference, Springfield, MO.
- Berg Christopher\* and Kim, K. 2010. The Functional Synergy between Yeast Dynamin and Key Membrane Recycling Factors. American Society of Microbiology Conference, Springfield, MO.
- Wang Daobing\* and <u>K. Kim</u>. 2010. The C-terminal GTPase effector domain of yeast dynamin plays an important role in early endocytosis and interacts genetically with amphiphysin. American Society of Microbiology Conference, Springfield, MO.
- Murphy, E.\*, Boxberger, J.\*\*, Zahn, G.\*\*, Loor, F.\*\*, and Kim, K. 2010. Loss of Pill Disrupts

- Cell-eating Ability. American Society of Microbiology Conference, Springfield, MO.
- Chad Highfill\*\* and <u>Kyoungtae Kim</u>. 2010. Perturbed endosome motility in vps1 mutants. CNAS undergraduate research symposium at MSU.
- Jeff Sletto\*\*, Daobing Wang\*, and Kyoungtae Kim: Genetic interaction between Vps1 and Chc1 genes investigated by tetrad analysis. 2010. CNAS undergraduate research symposium at MSU.
- Jacob Boxberger\*\*, Fred Loor\*\*, Geoffrey Zahn\*\*, Erin Murphy\*, and <u>Kyoungtae Kim</u>. 2010. Cell eating disorder by loss of Pil1. CNAS undergraduate research symposium at MSU

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- Erin Murphy\*\*, Sandhya Jain\*, and <u>Kyoungtae Kim</u>. 2009. The role of Pil1 and Slm1 targeting to the eisosome and its interaction with Slm1. Missouri Branch of American Society for Microbiology & Midwest Microbiology Educators joint meeting. Columbia, MO.
- Daobing Wang\*, Blake Schroeder\*\*, and <u>Kyoungtae Kim</u>. 2009. The yeast dynamin and its role in early endocytosis. Missouri Branch of American Society for Microbiology & Midwest Microbiology Educators joint meeting. March 27-28, 2009. Columbia, MO.
- Sandhya Jain\*, Erin Murphy\*\*, and <u>Kyoungtae Kim</u>. 2009. Characterizing the role of Slm1 in endocytosis. Missouri Branch of American Society for Microbiology & Midwest Microbiology Educators joint meeting. March 27-28, 2009. Columbia, MO.
- Chitra Kamble\*, Sandhya Jain\*, Christopher Berg\*, and <u>K. Kim</u>. 2009. Roles of Slm1 proteins in endosytosis. Arkansas IDeA Network of Biomedical Research Excellence (InBRE), Arkansas University, AK
- Erin Murphy\*, Geoffrey Zahn\*\*, and <u>K. Kim</u>. 2009. Endocytic roles of Pil1, the main organizer of eisosomes. Arkansas IDeA Network of Biomedical Research Excellence (InBRE), Arkansas University, AK
- Daobing Wang\* and K Kim. 2009. The yeast dynamin and its roles in early endocytosis.

  Arkansas IDeA Network of Biomedical Research Excellence (InBRE), Arkansas University,

  AK

- Srikant Nannapaneni\*, Blake Schroeder\*\*, Adam Maysent\*\*, Sandhya Jain\*, Daobing Wang\*, Delilah Pittsley\*\*, Lindsay Reustle\*\*, and <u>K. Kim</u>. 2008. The Yeast Dynamin-related protein Vps1 Function in Endocytic Vesicle Assembly and Internalization. American Society of Cell Biology. San Francisco, CA.
- Sandhya Jain\*, Srikant Nannapaneni\*, Ryan McDowell\*\*, Chad Highfill\*\*, Erin Murphy\*\*, Delilah Pittsley\*\*, and <u>Kyoungtae Kim</u>. 2008. The effect of Vps1 loss on the intracellular motility of membrane-derived endocytic vesicles. American Society of Cell Biology. San Francisco, CA.
- Blake Schroeder\*\*, Adam Maysent\*\*, Daobing Wang\*, Delilah Pittsley\*\*, Lindsay Reustle\*\*, and <u>K. Kim</u>. 2008. The yeast dynamin-related protein Vps1p functions in endocytic patch assembly/maturation and internalization. Arkansas IDeA Network of Biomedical Research Excellence (InBRE), Arkansas University, AK
- Srikant Nannapaneni\* and <u>Kyoungtae Kim</u>. 2008. The Yeast Dynamin-related protein Vps1 Function in Endocytic Vesicle Assembly and Internalization. Interdisciplinary Forum at MSU.

#### 2007

Srikant Nannapaneni\* and <u>Kyoungtae Kim</u>. 2007. The role of Vps1p during endocytosis in Saccharomyces cerevisiae. American Society of Cell Biology. Washington D.C.

#### 2006

Kyoungtae Kim, Michelle E. McCully, Nandini Bhattacharya, Boyd Butler, David Sept and John A. Cooper. 2006. Structure/Function Analysis of the Interaction of Phosphatidylinositol-4,5-bisphosphate (PIP2) with Actin Capping Protein. American Society of Cell Biology, San Diego.

<u>Kyoungtae Kim.</u> 2006. Actin Capping Protein: Biochemical mechanism of capping actin and biological role in actin dynamics in yeast at MSU

#### PRESENTATIONS before employment at MSU:

- Kyoungtae Kim, A. Yamashita, M. A. Wear, Y. Maeda, J. A. Cooper. 2004. Capping Protein Binding to Actin in Yeast: Biochemical Mechanism and Physiological Relevance. FEBS Special Cytoskeleton Meeting. Helsinki, Finland.
- M. A. Wear, A. Yamashita, <u>K. Kim</u>, Y. Maeda, J. A. Cooper. 2003. How Capping Protein Binds the Barbed End of the Actin Filament. American Society of Cell Biology. SF.
- <u>Kyoungtae Kim</u>, P. Hou, J. L. Gorski, J. A. Cooper. 2002. Effect of Fgd1 on Cortactin in Actin Polymerization. American Society of Cell Biology. SF.
- R. J. Chi, <u>K. Kim</u>, S. G. Olenych, T. C. Keller. 2002. Smitin, a Titin-like Component of the Smooth Muscle Contractile Apparatus, Interacts with α-actinin. American Society of Cell Biology. SF.
- <u>Kyoungtae Kim</u> and Tom Keller. 2000. Smooth Muscle Titin Localization and Interaction with Myosin II and  $\alpha$ -actinin. American Society of Cell Biology. SF.
- <u>Kyoungtae Kim</u> and Tom Keller. 1999. Smooth Muscle Titin Interaction with Myosin II and Localization *in vivo*. American Society of Cell Biology. WA.D.C
- <u>Kyoungtae Kim</u> and Tom Keller. 1998. Smooth Muscle Titin Identification and Interaction with Myosin. American Society of Cell Biology. SF. CA

#### **Editorial and Review Activities (since 2017)**

- Invited reviewer, A review: In vivo toxicity of quantum dots on targeted organs in animals, Journal of Hazardous Materials advances, July 28.
- Invited reviewer, "Isolation and detection of exosomal mir210 using carbon nanomaterial-coated magnetic beads", July 2023. Journal of Functional Biomaterials.
- Invited reviewer, "Transcriptome research on differentially expressed genes in a thermotolerant yeast strain from *Daqu* of Luzhou-flavor liquors", July 2023, International Journal of Food Properties.
- Invited reviewer, "Anti-metastatic Drug Development, Overview and Perspectives", May 2023. Bentham
   Science.
- Invited reviewer, "Features of copper and gold nanoparticles translocation in Petroselinum crispum segments". May 2023, Nanomaterials.
- Invited reviewer, "Invited reviewer, "Naringenin Induced HepG2 Cells Apoptosis through 2 ROS-Mediated JAK-2/STAT-3 Signaling Pathways", May 2023, Nanomaterials.
- Invited reviewer, "Naringenin Induced HepG2 Cells Apoptosis through 2 ROS-Mediated JAK-2/STAT-3 Signaling Pathways", April 2023, Biomolecules.

- Invited reviewer, "Effect of metal nanomaterials on cell energy metabolism under the sublethal concentration", March 2023, Toxics.
- Invited reviewer, "Exposure to Cadmium Telluride Quantum Dots and Gene Expression Profile of Huh-7 Hepatocellular Carcinoma Cell Line", March 2023. Dose-Response.
- Invited reviewer, "OBHS-remodeled Abnormal Glycometabolism Exerts Anti-cancer Effect via the Akt/mTOR-GLUT1 Pathway in Breast Cancer", March 2023. IJMS.
- Invited MS reviewer, "Quantum Dots: Opportunities & Challenges in Cancer Therapy'. February 2023 (Pharmaceutics)
- Invited MS reviewer, "Effect of CdSTe QDs crystal size on viability and cytochrome P450 activity of CHO-K1 and HEP-G2 cells'. January 2023 (Micro)
- Invited MS reviewer, "Cerium Oxide Nanoparticles, Physical and Chemical Properties, Applications and Toxicological Implications: A review". January 2023 (Current Nanoscience)
- Invited MS reviewer, "A Novel Perspective of Quantum Dots in Biotechnology: An Absolute Review". January 2023
   (Biotechnology and Genetic Engineering Reviews)
- Invited MS reviewer, "Chemical element mixtures and kidney function in mining and non-mining settings in northern Colombia". January 2023 (International Journal of Environmental Research and Public Health)
- Invited MS reviewer, "Green synthesis, characterization, and biomedical applications of Cu/CuO nanoparticles of Plant Origin". December 2022 (Current Drug Therapy)
- Invited MS reviewer, "Resubmitted-Improving Crossing of Multiple Bio-delivery Barriers By a Novel Bio-interface Design Based On Hydrophobic Nanoparticle Surface". December 2022
- Invited MS reviewer, "Fungal Hal3 (and Cab3) as moonlighting proteins". October 2022, J of Fungi.
- Invited MS reviewer, "Improving Crossing of Multiple Bio-delivery Barriers By a Novel Bio-interface Design Based On Hydrophobic Nanoparticle Surface". September 2022, J of Materials Chemistry B.
- Invited MS Reviewer, "Investigation of signaling pathways-induced by pegylated diethylaminoethyl-chitosan nanoparticles: are TLR-4 and C-type lectin receptors involved?, Nanomaterials (Aug 2022)
- Invited Manuscript Reviewer, "Metabolic alteration of Tetrahymena thermophila exposed to CdSe/ZnS quantum dots to respond to oxidative stress and lipid damage", BBA (July 2022)
- Invited Manuscript Reviewer, "The binding ability of Mercury (Hg) to Photosystem I and II explained the difference of its toxicity to the two photosystems", MDPI-Toxics (June 2022)
- Invited Manuscript Reviewer, "Cadmium sulfide quantum dots adversely affect gametogenesis 2 in Saccharomyces cerevisiae," Nanomaterials, International, Papers. (June 2022).
- Invited Manuscript Reviewer, "Pectinases secretion by Saccharomyces cerevisiae: optimization in solid state fermentation and identification by shotgun proteomics approach," MDPI-Biomolecules, International, Papers. (May 2022).
- Invited Manuscript Reviewer, "Free-Standing Liquid Membranes as a Non-Fouling Filter for the Removal of Micro-Plastics from Water," LOGOS, Regional, Papers, Elected. (April 2022 Present).
- Ad Hoc Reviewer, "Development of a Simple Shear Impact Device for Evaluating Cellular Traumatic Brain Injury,"
   Midwestern Association of Graduate School (MAGS) Thesis Reviewer, Regional, Appointed. (2021).
- Invited Manuscript Reviewer, "When virus meets retromer," Frontiers in Microbiology, section Virology, International, Papers. (October 2021).
- Invited Manuscript Reviewer, "Exocytosis, endocytosis and recycling of secretory vesicles in neuroendocrine cells, and its
  regulation by cortical actin" contains two main topics, actin filament roles in endocytic and exocytic processes,"
  International, Papers, Appointed. (September 2021).
- Invited Manuscript Reviewer, "From Microspikes to Stress Fibers: Actin Remodeling in Breast Acini Drives Myosin II-Mediated Basement Membrane Invasion," Cells-MDPI, International, Papers. (July 2021).
- Invited Manuscript Reviewer, "Development of a Simple Shear Impact Device for Evaluating Cellular Traumatic Brain Injury," MAGS, Regional, Papers. (June 2021).
- MAGS Outstanding thesis review
- Invited Manuscript Reviewer, "Actin Binding Protein nPIST Regulates Golgi Integrity," Experimental Cell Research, International, Papers, Appointed. (March 2021).
- Invited Manuscript Reviewer, "Apoptosis and Cell Cycle Analysis of Human Cancer Cell Lines MCF7, LS-174T and HePG2 in Response to Methanolic and Butanolic Extracts of Prosopis juliflora Leaf Tissue," MDPI-Biomolecules, International, Papers, Appointed. (March 2021).
- Invited Manuscript Reviewer, "CdSe Quantum Dots in human models derived from ALS patients: characterization, nuclear penetration studies and multiplexing," MDPI-Nanomaterials, International, Papers. (February 2021).
- Invited Manuscript Reviewer, "Cytotoxicity and transcriptome changes triggered by CuInS2/ZnS quantum dots in human glial cells," International, Papers. (February 2021).

- "ELE 438 Virtual Exchange: Teaching for Global Understanding," the GREAT program Advisory Board, Local, Grant Proposals. (February 2021).
- Invited Manuscript Reviewer, "revised-Essential role of the endocytic site-associated protein Ecm25 in stress-induced cell elongation," Cell Reports, International, Papers. (February 2021).
- Invited Manuscript Reviewer, "VPS34 Regulates Dynamin to Determine Endocytosis of Mitochondria-targeted Zinc Oxide Nanoparticles in Human Osteosarcoma Cell," Journal of Materials Chemistry B, International, Papers. (February 2021).
- Invited Manuscript Reviewer, "Antifungal activity of Capridine b as a consequence of its biotransformation into metabolite affecting yeast topoisomerase II activity," Pathogens (MDPI), International, Papers. (January 2021).
- Invited Manuscript Reviewer, "Revised-Transcriptome analysis and expression profiling of molecular responses to Cd toxicity in *Morchella spongiola*," FEMS Microbiology letters, Papers. (January 2021).
- Invited Manuscript Reviewer, "Effects of DNA-binding and forkhead-associated domains of Fkh1 and Fkh2 on nuclear localization, genetic interaction with Ndd1, yeast cell morphology and transcription of their own genes," International, Papers. (2020).
- Invited Manuscript Reviewer, "REVISITING THE CLINICAL USEFULNESS OF C-REACTIVE PROTEIN IN THE SET OF CANCER CACHEXIA," International, Papers. (2020).
- Invited Manuscript Reviewer, "Enhanced Immune Response by Vacuoles isolated from Saccharomyces cerevisiae in RAW 264.7 Macrophages," MDPI, International, Papers. (November 2020).
- Invited Manuscript Reviewer, "Transcriptome analysis and expression profiling of molecular responses to Cd toxicity in Morchella spongiola," International, Papers. (November 2020).
- Invited Manuscript Reviewer, "The N-terminal region of yeast protein phosphatase 3 Ppz1 is a determinant for toxicity," International, Papers. (September 2020).
- Invited Manuscript Reviewer, "Non-muscle Myosin 2A (NM2A): Structure, Regulation and Function," MDPI, International, Papers, Appointed. (May 2020).
- Invited Manuscript Reviewer, "UV-C LIGHT EXPOSURE AS A POSSIBLE TREATMENT METHOD AGAINST PSEUDOGYMNOASCUS DESTRUCTANS ON SUSCEPTIBLE BAT SPECIES," MISSOURI STATE UNIVERSITY, Local, Papers, Appointed. (May 2020).
- Invited Manuscript Reviewer, "Essential role of the endocytic site-associated protein Ecm25 in stress-induced cell shape change," Cell Reports, International, Papers, Appointed. (April 2020).
- Ad Hoc Reviewer, "RNA-Seq and pathway analyses reveals mechanistic insights into the inhibitory action of silver nanoparticles on Phytophthora parasitica.," BMC, International, Papers, Appointed. (April 2020).
- Ad Hoc Reviewer, "Sphingolipid-enriched domains and membrane compartments in yeast: role of mannosyldiinositolphosphorylceramide," MDPI, International, Papers, Appointed. (April 2020).
- Ad Hoc Reviewer, "Acidic-basic properties of arginine-rich peptide fragments derived from human Pin1 protein," MDPI, International, Papers, Appointed. (January 2020).
- Invited Manuscript Reviewer, "GARP, a Putative Potential Molecule in Tumor Immunosuppressive Environment," Journal
  of Cancer Treatment and Diagnosis, International. (2019).
- Invited Manuscript Reviewer, "Interaction of a polyarginine peptide with membranes 2 of different mechanical properties.,"
   MDPI, International. (2019).
- Invited Manuscript Reviewer, "Mutation of key lysine residues in the insert B region of the yeast dynamin Vps1 disrupts lipid binding and causes defects in endocytosis," PLOS ONE, International, Papers. (2019).
- Invited Manuscript Reviewer, "Role of MCC/eisosome in fungal lipid homeostasis," MDPI, International. (2019).
- Invited Manuscript Reviewer, "Distinct mechanisms enable inward or outward budding from late endosomes/multivesicular bodies," Experimental Cell Research, International. (2018).
- Invited Manuscript Reviewer, "Live-cell imaging of early coat protein dynamics during clathrin-mediated endocytosis," BBA, International. (2018).
- Invited Manuscript Reviewer, "SIMPLE binds specifically to PI4P through SIMPLE-like domain and participates in protein trafficking at trans-Golgi network and/or recycling endosomes," PLOS, International. (2018).
- Invited Manuscript Reviewer, "Two eisosome proteins play opposite roles in autophagic control and sustain cell integrity, function and pathogenicity," Environmental Microbiology and Environmental Microbiology Reports, International. (2017).

#### **INTERVIEWS**

- The Standard News (MSU Journal), "Everyday cells can become cancerous" (2022)
- The Standard News (MSU Journal), "New Jersey high school students develop rare brain tumor" (2022)

#### **PUBLIC PRESENTATIONS:**

- 2007. Cell Structure and Function. The ELI (English Language Institute) at MSU.
- 2008. Cancer cell. The ELI (English Language Institute) at MSU.
- 2009. Fighting Cancer. The ELI (English Language Institute) at MSU
- 2020. Graduate education at MSU. Membrane trafficking (April 2, 2020)

#### OFF-CAMPUS PROFESSIONAL DEVELOPMENT

- 2020 Watermark seminar on "How to accelerate faculty activity reporting": July 30.
- 2020 Handshake Virtual Career Fair Launch Webinar: August 6
- 2021 MAGS Conference (New Graduate Administrators workshop), (what comes next? Graduate Education for a Post-Pandemic World)

#### **OFF-CAMPUS TEACHING WORKSHOP:**

- 2007. McGraw-Hill Biology San Diego Symposium, held Oct 25-28. Non-Major Biology Instructor Conference.
- 2008. AACU (Association of American Colleges and Universities) meeting. "Engaging Science, Advancing Learning" Conference, held November 6-8.
- 2016 American Society for Cell Biology Cancer Door Meeting, San Francisco, 2016
- 2017. The NPSMA (National Professional Science Master Association) conference, Phoenix, AZ (Nov 7-10).
- 2018. NPSMA Webinar: Engaging academic to PSM programs (Jan 25, 2018)
- 2018. NPSMA Webinar: Engaging small businesses to PSM (Feb, 2018)
- 2018. The NPSMA (National Professional Science Master Association) conference, Arlington, VA (Nov 7-9).
- 2018 CCAS 2018 Annual Meeting, Chicago, IL (November 14-17).
- the 2019 ERN (Emerging Researchers National) conference, Washington DC (Feb 21-23).
- 2019 MOLSAMP Missouri STEM workshop (Jefferson city, MO)
- 2019. The NPSMA (National Professional Science Master Association) conference, Salt Lake city, Utah (Nov 6-8).
- 2019. STEM Institute for Improving Student Engagement and outcomes
- 2020. the 2020 ERN (Emerging Researchers National) conference, Washington DC (Feb 6-8)
- 2020 Handshake Career EXPO Webinar on "The next Generation Virtual Fair" (May 6, 2020)
- 2020 MSU online Boot camp (May 4-May 15)
- 2020 ForagerOne-CNAS virtual Research Symposium Workshop (June 11, 2020)
- The next generation virtual fair: product demonstration: June 18, 2020
- Discussion for Chairs & Heads: STEM Disciplines in the time of COVID-19 and Planning for Fall
- 2020 Anti-racism messaging for colleges (June 30)-CCAS, leadership training.
- Discussion for Associate & Assistant Deans, Planning for Fall (July 9)-CCAS, leadership training
- 2020 Teaching loads in the time of Covid-19, CCAS
- 2021 Mizzou Medicine-MSU Premed Committee
- 2021 Ask NPSMA: Long-Term Lessons learned from remote learning
- 2021 MAGS Conference: New Graduate Administrators Workshop (March 24-26)

Media and Assessments for cell biology in MacMillan's Achieve Platform (August 3, 2021)

#### **OFF-CAMPUS GRANT WRITING WORKSHOP:**

- 2007. National Scientific Foundation, Oklahoma City, held March 19-20. Discussion of NSF proposal and award policies and procedures.
- 2021. Mid-Scale Research Infrastructure (MID-scale RI-2) grant workshop

#### **ON-CAMPUS TEACHING WORKSHOP:**

- 2016. 31<sup>st</sup> Showcase on Teaching and Learning
- 2018. 33<sup>rd</sup> Showcase on Teaching and Learning
- 2019. MOLSAMP Graduate School workshop-Served as a Panelist
- 2019. Handshake Job Search Portal Session Organizer
- 2019. Teaching class-Scale up workshop
- 2019. SGA& the Honors College-Undergraduate Research Fair-Faculty Panelist
- 2019. 34<sup>th</sup> Showcase on Teaching and Learning
- 2019. Agilent Rep Visit-Job Market trend: organizer
- 2020. STEM Employer Panel: organizer and moderator
- 2020. GREAT (Globally Responsive Education and Teaching Program) panelist: Understanding International Students
- 2020. GREAT Panel discussion on global Online Teaching, Panelist. (May 11-16): production of 10 videos.
- 2020. Online Boot Camp (May 4-May 15, 2020)
- 2020. 35<sup>th</sup> Showcase on Teaching and Learning Virtual Event (August 12)
- 2020. Introduction to Zoom classroom (in person) in TEM 143 (August 13)
- 2021. Tenue and Promotion guide for Assistant Professor
- 2021. The 1921 Tulsa Race Massacre: Lessons and Legacies
- 2021. Facing Racism Training (May 7)
- 2021. PSM advisory board meeting (Nov 3)
- 2021. The GREAT teaching conference (Nov 19): moderator for a session
- 2022. 37<sup>th</sup> Showcase on Teaching and Learning (August 17)
- 2022. 2<sup>nd</sup> GREAT (Globally Responsive Education and Teaching Program) conference
- 2022. PSM advisory board meeting (Nov 9)

#### **SERVICE:**

All leadership positions are indicated in bold (23 times, including committee chair positions and program director)

#### **COMMITTEES:**

- A. Department
  - 1. Microbiology Visiting Assistant Professor Search Committee (2023)
  - 2. Developmental Biologist Search Committee Chair (2021-2022)
  - 3. CNAS Atwood Award nomination committee **Chair** (2021-2022)
  - 4. <u>Temple BIO Equipment Room (Room 262) Maintenance Committee Chair (2018-present)</u>
  - 5. Departmental the Micro/Biotech curriculum committee Chair (2013-present)

- 6. Graduate Committee, 2007-Present
- 7. 3+1 program with Hainan Normal University: participant (2021-present)
- 8. Faculty personnel committee, 2012, 2016, 2019-present
- 9. Invite BIO seminar speaker (2022)
- 10. Geneticist Search Committee, 2009-2010
- 11. Departmental Equipment Committee, 2009 and 2017
- 12. Faculty Compensation Evaluation Committee, 2010, 2017, 2018
- 13. Course time change committee (Sep 2013)
- 14. Developmental Biology Search Committee Chair, 2013-2014
- 15. Microbiology/immunology visiting professor search committee, 2014.
- 16. Microbiologist Search Committee, 2016-2017
- 17. Genetics Post-doctoral search committee, 2019
- 18. Microbiology Instructor search committee, 2019

#### B. College

- 1. CNAS Personal Committee, 2019-present
- 2. CNAS Equity and Inclusion group, 2020
- 3. CNAS Master Plan/Space Executive Committee, 2019-2020
- 4. MNAS (Master of Natural and Applied Science)-**BIO coordinator** (2017-2019, 2021-present)
- 5. MNAS **Director** (2018-2021)
- 6. CNAS Undergraduate Research symposium organization (2017-2021)
- 7. Undergraduate Research Activity Day CNAS Committee (2010-2012)
- 8. CNAS Budget committee (2015-2018)
- 9. PSM (Profession Science Masters) track **Director** (2017-2021)
- 10. PSM Executive Committee (2017-2021)
- 11. CNAS Associate Dean search **Chair** (2018-2019)
- 12. CNAS Administrative Assistant II Search Committee (2019)
- 13. HHMI IE3 Grant preparation committee: 2019-2020
- 14. 3M Thesis organization work with CNAS Dean (2017-2020)
- 15. CNAS STEM Career EXPO Organization Committee (2017-2020)
- 16. CNAS Student Scholarship Committee, 2020-2021

#### C. University

- 1. Faculty Research Focus Group (2023- present)
- 2. Realignment Working Group: Pre-Med/Health (2023-present)
- 3. AD hoc Committee on thesis Issues (2022-2023)
- 4. Faculty **Advisory Board** for the GREAT program, 2020-present
- 5. English Proficiency Exam Committee, 2006-present
- 6. Faculty Concerns Committee, 2007-2015
- 7. **Pre-dental Advisor**, 2007-Present
- 8. Pre-medical Committee, 2011-present
- 9. Graduate Council Committee, 2016-2018
- 10. Graduate Council Executive Committee, 2016-2018
- 11. Graduate Council Scholarship Selection Committee Chair, 2016-2018
- 12. Premed Scholarship Committee (2016-present)
- 13. Foundation Scholarship Committee (2016-present)
- 14. Institutional Biosafety Committee **Chair** (2017-Present)

- 15. Career Center CAS Internal Review Committee (2018-2019)
- 16. MoLSAMP grant program advisor (2018-present)
- 17. Future Professional Doctorate Committee (2019-2020)
- 18. Digital Measure Committee (2017-2021): CNAS Digital Measure Representative (2017-2021)
- 19. MSU-Advance Catalyst Project to Promote Gender Equity (2020)
- 20. Search Committee for Career Resources Specialist (2020-2121)

#### OTHER:

#### A. Departmental

- 1. Assistant Departmental Chair (2021-Present)
- 2. Management officer for Day Ligon's Grant (2019-present)
- 3. Major Fair Representative, 2006-Present
- 4. Graduate Program Representative, 2010
- 5. Recruitment Fair Representative, 2007, 2019 (MoLSAMP)
- 6. Graduate Student Recruitment Travel, 2007
- 7. International Student Speaking Test Judge, 2007-2015
- 8. Invite Katie Shannon for Departmental Seminar (March 2013) Invite Melanie Mormile for Departmental Seminar (March 2013)
- B. University and Community
  - 1. Convoy of Hope (May 24, May 31, July 19, July 26, Aug9, Aug16 2022)
  - 2. Clean Green Springfield Event (May 8, 2021)
  - 3. CNAS Search Training with Dean Jahnke (October 2021)
  - 4. Conducting a Legal and Effective Search Briefing (October 2021)
  - 5. ATS-Hiring Approvers Training (October 2021)
  - 6. New Academic Administrators Training: 2019-2020
  - 7. Provost Academic Leadership Program Training: 2019-2020
  - 8. Professional Doctorate Committee, 2019-2020
  - 9. External reviewer for Faculty Tenure and Promotion, 2019-present (3 times so far)
  - 10. AAA (Academic Administrators Assembly) meetings:2017-2020
  - 11. CNAS leadership meetings: 2017-2021
  - 12. World Yeast Congress: **Organizing Committee**, 2018, Montreal, Canada.
  - 13. World Yeast Congress: **Session Chair**, May 14 2018. Montreal, Canada.
  - 14. Symposium on World Cell and Molecular Biology 2023: **Organizing Committee**.
  - 15. Guest Editor (2023): International Journal of Molecular Sciences
  - 16. World Nano 2024: **Organizing committee** (2023-2024)
  - 17. World Nano 2024: Session Chair (2023-2024)
  - 18. 4<sup>th</sup> World Nanotechnology Conference: **Organizing Committee**, 2022.
  - 19. Member of the editorial board of "international journal of research studies in bioscience (IJRSB)"
  - 20. <u>Editorial Board Member for Journal of Biochemistry and Molecular Biology</u> Research
  - 21. Editorial Board Member for Journal of Molecular Signaling Update
  - 22. The Reviewer Panel of Current Molecular Medicine
  - 23. Judge at Interdisciplinary Forum, 2007-Present
  - 24. Judge at Ozark Science Fair, 2006-Present

- 25. Judge at American Society of Microbiology, 2007-2009. 2016.
- 26. Judge at the Arkansas INBRE conference (2021)
- 27. Judge at the ERN conference (2019-present)
- 28. Judge at the MOLSAMP conference (2019-present)
- 29. Judge at International Science and Engineering Fair (2019)
- 30. SGA Undergraduate Research Fair **Faculty Panelist** (2019)
- 31. Reviewer of textbook (Krogh 5<sup>th</sup> Edition), 2008, 2011, 2014. Reviewer of textbook (biology for the informed citizen 1<sup>st</sup> edition). 2013.
- 32. Reviewer of a manuscript submitted to the MSU Journal LOGOS, 2009
- 33. Reviewer of manuscripts submitted to peer-reviewed Journals, 2012-present.
- 34. Attended MSU Teaching Showcase, 2006-Present.
- 35. Attended Internal Grant Workshops
- 36. Master Advisor (renew every year)
- 37. RESPOND Certificate (2019)
- 38. Regular Graduate Program Director Meetings (2017-2021)
- 39. Attended Tenure/Promotion Workshops (2010, 2015, 2021)
- 40. Attended a seminar entitled "General perspectives and specific suggestions about a campus shooting case
- 41. Attended a seminar entitled "Best practices in mentoring faculty (Sep 2013)
- 42. Attended CNAS college council meeting (Nov 2013)
- 43. Attended Green-Dot Training (2016, 2017): CNAS.
- 44. **SOAR-Presentation** (2017-2020): every summer
- 45. Frequent Student tour (2017-2020): Admitted student day.
- 46. Attend SCALE UP workshop, 2019, Oct 29 (9-10:30 and 2-3:30): Jill Sibel from Virginia Tech