CURRICULUM VITAE

NAME: **Jin Kyu Lee**	Position Title: Lecturer (9-month, 100% instruction EFT) Recommended Title: Senior Lecturer (9-month, 100% instruction EFT)

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EDUCATION/TRAINING

INSTITUTION and LOCATION	**DEGREE**	**YEAR**	**FIELD OF STUDY**
Yonsei University, Korea	B.S.	1984	Biochemistry
Yonsei University, Korea	M.S.	1986	Biochemistry Dr. Yu Sam Kim's Lab
University of Georgia, USA	Ph.D.	1997	Biochemistry & Molecular Biology Dr. Michael Pierce' Lab
University of California at San Francisco	Postdoc	1997-2001	Immunology Dr. Steven Rosen's Lab

POSITIONS AND EMPLOYMENT:

- Senior Lecturer, Department of Biochemistry and Molecular Biology, University of Georgia, Aug 2024 – present
- Lecturer, Department of Biochemistry and Molecular Biology, University of Georgia, Aug 2018 – July 2024
- Assistant Professor – Limited Term, Department of Biochemistry and Molecular Biology, University of Georgia, Jan 2016 - Jul 2018
- Assistant Research Scientist, Complex Carbohydrate Research Center, University of Georgia, Apr 2001 - Dec 2017
- Part-time Instructor, Franklin College of Arts and Sciences - Division of Biological Sciences, University of Georgia, Aug 2003 - Dec 2003
- Postdoctoral Fellow, University of California, San Francisco, Immunology Program, April 1997 – March 2001
- Research Assistant. Department of Microbiology and Immunology, School of Medicine, Indiana University, Aug 1991 – Aug 1992
- Research Scientist, Mogam Biotechnology Research Institute, Seoul, Korea, Dec 1986 – Aug 1991
- Research Scientist, Doosan Research Center, Seoul, Korea, Dec 1985 – Dec 1986

University Teaching Experiences:

- At University of Georgia

Since the Fall 2002 semester, I have taught the following class sections:

Year	Course Title	Credit Hours	Enrollments
Summer	BCMB 3100: Introductory Biochemistry & Molecular Biology	4	24
Spring 2024	BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology - Honors section	4 4 4	72 49 19
Fall 2023	BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology	4 4 4	72 49 49
Spring 2023	BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology	4 4 4	72 49 49
Fall 2022	BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology	4 4 4	72 49 49
Spring 2022	BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology - Honors section	4 4 4	72 49 21
Fall 2021	BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology	4 4 4	72 49 49
Spring 2021	BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology	4 4 4	72 49 49
Fall 2020	BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology	4 4 4	72 49 49
Spring 2020	BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology - Honors section	4 4 4	72 49 18
Fall 2019	BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology	4 4 4	72 49 49
Spring 2019	BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology	4 4 4	72 49 49
Fall 2018	BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology BCMB 3100: Introductory Biochemistry & Molecular Biology	4 4 4	72 49 28
Spring 2018	BCMB 3100: Introductory Biochemistry & Molecular Biology	4	49
Spring 2017	BCMB 3100: Introductory Biochemistry & Molecular Biology	4	49
Fall 2016	BCMB 3100: Introductory Biochemistry & Molecular Biology	4	17
Spring 2003	BCMB 3100: Introductory Biochemistry & Molecular Biology	4	20
Fall 2002	BCMB 3100: Introductory Biochemistry & Molecular Biology	4	17

- At Yonsei University (1985): Responsible for teaching undergraduate students in Experimental Biochemistry and Molecular Biology, a semester taught in the spring semester. Spring 1985 Experimental Biochemistry & Molecular Biology, Yonsei University, 3 credit hrs. 40 students

Supervised:

2019 – 2021 2 undergraduate students summer research in Dr. Gerald Hart's Lab, Complex Carbohydrate Research Center, University of Georgia
2001 – 2018: ~100 Undergraduate students and 10 Graduate Students in Dr. Michael Pierce's Lab, Complex Carbohydrate Research Center, University of Georgia
2008 – 2011: Consultant in Adipogen Inc. Incheon, Korea (for production of recombinant adipocytokines) 2 weeks each over 4 summers
* Invited Instructor of Annual Workshops on "Purification Technologies of Glycoproteins"

Professional Development Activities:

2023 Workshop on "How Learning Works: Engage Your Students in Active Learning" at Center for Teaching and Learning, University of Georgia
2023 Workshop, Dossier Learning Community, University of Georgia, Center for Teaching and Learning – 4 times
2023 CTL Active Learning Workshop Series "CTL Active Learning 101" University of Georgia, Center for Teaching and Learning
2023 CTL Active Learning Workshop Series "Got it!? Assess Student Learning Just in Time" University of Georgia, Center for Teaching and Learning
2023 CTL Active Learning Workshop Series "Designing and Facilitating an Effective Learning Environment" University of Georgia, Center for Teaching and Learning
2023 The Active Learning Summit, University of Georgia, Center for Teaching and Learning
2022 Top Hat Engage, Conference, Braselton, GA
2022 Workshop, Dossier Learning Community, University of Georgia, Center for Teaching and Learning – 4 times
2022 Workshop on "Evaluating Student Knowledge: Creating Asset-Based Assessment" at Center for Teaching and Learning, University of Georgia
2021 Workshop on Trying, Failing, and Trying Again: Building Sustainable Resiliency Practices in the Classroom at Center for Teaching and Learning, University of Georgia
2021 Workshop on New Ideas for Student Peer Review at Center for Teaching and Learning, University of Georgia
2021 PLAdawg Program Workshop, University of Georgia
2020 PLAdawg Program Workshop, University of Georgia
2020 Workshop "Become a Critically Reflective Practitioner", Center for Teaching and Learning, University of Georgia
2019 Workshop "4 Principles of Cooperative Learning", Center for Teaching and Learning, University of Georgia
2019 Conference and workshop "ASCB Teaching Tomorrow's Scientists meeting", American Society for Cell Biology
2019 Workshop "Molecular CaseNet Pilot" Emory University
2019 Workshop "Active Learning Snapshot Survey" Center for Teaching and Learning, University of Georgia,

2018 Workshop “Biomolecular Visualization” Georgia Institute of Technology

Honors and Awards:

2019, 2020, 2022 Acknowledgement certificate from the Career Center at University of Georgia Each year as part of the UGA Career Outcomes Survey, the Career Center asks graduating students to identify UGA faculty and staff who have had a significant, positive impact on their career development and success. I have been recognized as such a person in the class of 2018, 2020, 2021 and 2022.

1997-2000	National Arthritis Foundation Postdoctoral fellowship
1997	Postdoc/junior faculty travel awards to attend GLYCO XIV, Zurich, Switzerland

Membership:

2021- present	Core Member of Scientist Engaged in Educational Research (SEER) Center, University of Georgia
2018- present	PLASMA Faculty Group: PLASMA (Peer Learning Assistants: Strategies, Management, & Application) is a faculty-lead community of practice dedicated to the study and promotion of using peer learning assistants in STEM courses.

2023-present BMB Diversity (DEI) Committee

Patents:

J. Michael Pierce, Maria Kamar, **Jin Kyu Lee**, and Mika Kaneco. U.S. Patent No. 7,670,815 B2 “N-acetylglucosaminyltransferase Vb coding sequence, recombinant cells and methods” Date of Patent: Mar. 2, 2010

Steven Rosen, Stefan Hemmerich and **Jin Kyu Lee** U. S. Patent No. 6,852,518 B1 "Glycosyl Sulfotransferases GST-4α, GST4β and GST-6" Date of Patent: Feb. 8, 2005

J. Michael Pierce, Kelley W. Moremen, and **Jin Kyu Lee.** U. S. Patent No. 6,146,849 "Lectins and coding sequences" Date of Patent: Nov. 14, 2003

Book Chapter:

Robinson, S., Dolan, E., Cornely, K., Medlock, A., **Lee, J.K.,** and Lemons, P. (2019) The development and use of case studies. in ***Biochemistry Education: From Theory to Practice*** (T. Bussey, K. Cortes, R. Austin, eds), ACS, Washington D.C.

Jin Kyu Lee and Michael Pierce **Animal Lectins: A Functional View** “X-Lectins: A New Family with Homology to the *Xenopus laevis* Oocyte Lectin XL-35” p449-464, 2009

Invited Oral Presentation

Jin Kyu Lee, Jonathan Viola, and J. Michael Pierce "Intelectins (X-type lectins) from human and *Xenopus laevis* display different pathogen glycan binding specificities" 24th International Symposium on Glycoconjugates, Jeju, Korea 2017

Jin Kyu Lee, Margreet Wolfert, Luciana Kohatsu, Linda G. Baum, Kelley W. Moremen and Michael Pierce "The X-lectins: a new family involved in pathogen surveillance as part of the innate immune system" *The 61st Annual Meeting 2004, From Molecules To System*, S10-7, 2004

RESEARCH SUPPORT:

Investigator, P41 National Center for Biomedical Glycomics (JM Pierce, P.I.); NIGMS; 8/1/01 – 7/31/18.

PUBLICATIONS:

1. Berger RP, Sun YH, Kulik M, **Lee JK**, Nairn AV, Moremen KW, Pierce M, Dalton S. **"ST8SIA4- Dependent Polysialylation is Part of a Developmental program Required for Germ Layer Formation from Human Pluripotent Stem Cells."** Stem Cells, 34(7):1742-1752, 2016

2. **Jin Kyu Lee**, Russell T. Matthews, Jae-Min Lim, Kiara Swanier, Lance Wells, and J. Michael Pierce **"Developmental expression of the neural-specific N-acetylglucosaminyltransferase Vb (GnT-Vb/IX), and identification of its in vivo glycan products in comparison to those of its paralog, GnT-V."** *Journal of Biological Chemistry,* 287, 28526-28536, 2012

3. Intaek Lee, Hua-Bei Guo, Maria Kamar, Karen Abbott, Karolyn Troupe, **Jin-Kyu Lee,** Gerardo Alvarez-Manilla, and Michael Pierce **"N-acetylglucosaminyltranferase VB expression enhances β1 integrin-dependent PC12 neurite outgrowth on laminin and collagen"** *Journal of Neurochemistry,* 97, 947-956, 2006

4. Alan D. Pemberton, Pamela A. Knight, John Gamble, William H. Colledge, **Jin Kyu Lee**, Michael Pierce, and Hugh R. P. Miller "**Innate BALB/c enteric epithelial responses to Trichinella spiralis: Inducible expression of a novel goblet cell lectin, and its natural deletion in C57BL/10 mice"** *Journal of Immunology*, 173, 1894-1901, 2004

5. **Jin Kyu Lee**, Linda G. Baum, Kelley Moremen and Michael Pierce **"The X-Lectins: a new family with homology to the *Xenopus laevis* oocyte lectin XL-35"** *Glycoconjugate Journal*, 21, 443-450, 2004.

6. Mika Kaneko 1, Gerardo Alvarez-Manilla, Maria Kamar, Intaek Lee, **Jin Kyu Lee**, Karolyn Troupe, Wei jie Zhang, Motoki Osawa, Michael Pierce**"A novel beta(1,6)-N-acetylglucosaminyltransferase V (GnT-VB) (1)"** *FEBS Letterst*, 554, 515-519, 2003

7. **Jin Kyu Lee**, Annette Bistrup, Annemieke van Zante, and Steven D. Rosen **"Activities and expression patterns of the carbohydrate sulfotransferase GlcNAC6ST-3 (I-GlcNAc6ST): functional implications**" *Glycobiology*, 13, 245-254, 2003

8. Stefan Hemmerich, Annette Bistrup, Mark S. Singer, Mieke van Zante, **Jin Kyu Lee**, Durwin Tsay, Meredith Peters, Janet L. Carminati, Thomas J. Brennan, Karen Carver-Moore, Michael Leviten, Maria E. Fuentes, Nancy R. Ruddle and Steven D. Rosen **"Sulfation of L-Selectin Ligands by an HEV-Restricted Sulfotransferase Regulate Lymphocyte Homing to Lymph Nodes"** *Immunity*, 15, 237-247, 2001

9. **Jin Kyu Lee**, Janet Schnee, Mabel Pang, Margreet Wolfert, Linda G. Baum, Kelley W. Moremen and Michael Pierce **"Human homologs of the Xenopus laevis oocyte cortical granule lectin XL35"** *Glycobiology*, 11, 65-73, 2001

10. Stefan Hemmerich, **Jin K. Lee**, Sunil Bhakta, Annette Bistrup, Nancy Ruddle, Steven D. Rosen **"Chromosomal Localization and Genomic Organization for the Galactose/N-acetylgalactosamine/N-acetylglucosamine-6-O-Sulfotransferase Gene Family"** *Glycobiology,* 11, 75-87. 2001

11. Sunil Bhakta, Alexander Bartes, Wei-Ming Kao, Irene Polsky, **Jin-Kyu Lee**, Brian Cook, Richard Bruehl, Kendra Bowman, Carolyn Bertozzi, Steve Rosen and Stefan Hemmerich **"Sulfation of N-Acetylglucosamine by Chondroitin 6-O-Sulfotransferase-2"** *Journal of Biological Chemistry,* 275, 40226-40234, 2000

12. **Jin Kyu Lee,** Sunil Bhakta, Steven D. Rosen, and Stefan Hemmerich **"Cloning and Characterization of a Mammalian *N*-Acetylglucosamin-6-sulfotransferase That is Highly Restricted to Intestinal Tissue"** *Biochemical and Biophysical Research Communications,* 263, 543-549, 1999

13. Annette Bistrup, Sunil Bhakta, **Jin Kyu Lee,** Yevgeniy C. Belov, Michael Dee Gunn, Feng-Rong Zuo, Chiao-Chain Huang, Kendra G. Bowman, Carolyn R. Bertozzi, Steven D. Rosen and Stefen Hemmerich **"Cloning of a sulfotransferases high restricted to high endothelial venules: Involvement in the biosynthesis of L-selectin ligands"** *Journal of Cell Biology*, 145, 899-910, 1999

14. **Jin Kyu Lee,** Phillip Buckhaults, Christopher Wilkes, Meredith Teilhet, Mary Lou King, Kelley Moremen, and Michael Pierce **"Cloning and expression of a *Xenopus laevis* oocyte lectin and characterization of its mRNA levels during early development"** *Glycobiology,* 7, 367-372, 1997

15. **Jin Kyu Lee** and Michael Pierce **"Purification and Characterization of Human Serum *N*-Acetylglucosamine-1-phosphodiester α-*N*-Acetylglucosaminidase"** *Archives of Biochemistry and Biophysics,* 319, 413-425, 1995

16. Zhen Zhou, Young-J. Kim, Karen Pollok, Jose Hurtado, **Jin K. Lee,** Hal E. Broxmeyer, and Boung S. Kwon **"Macrophage Inflammatory Protein-1α Rapidly Modulate Anti-CD3 mAb-Mediated Proliferation of T Lymphocyte"** *The Journal of Immunology,* 151, 4333-4341, 1993

17. **Jin Kyu Lee,** In Chul Kang, Sung Hee Park, Kwang Hoe Chung, and Hong Mo Moon **"Purification of Human Interferon-α2 from Recombinant *E. coli*"***Journal of Biochemistry and Molecular Biology,* 25, 73-78, 1992

18. **Jin Kyu Lee,** Seok Jae Lee, Moon Kee Choe, Kwang Hoe Chung, Kwang Soon Shin, and Sung Bok Paik **"Purification of Human Interferon-β from Recombinant *E. coli"*** *Journal of Biochemistry and Molecular Biology*, 23, 166-171, 1990.

19. Yu Sam Kim and **Jin Kyu Lee "Evidence That Two Covalent Intermediates, Phosphoryl and Malonyl Enzymes, Are Formed during Malonyl-Coenzyme A Synthetase Catalysis"** *Journal of Biological Chemistry* 261, 16295-16297,1986.

Abstracts and Presented as posters:

30 Abstracts has been published and 18 presented as Poster