

EXECUTIVE COMMITTEE

September 18, 2023 11:30 a.m.

Meeting via teleconference and streamed live at: https://www.tntech.edu/board/

AGENDA

- I. Call to Order
- II. Approval of Appointment of Vice President for Research
- III. Other Business
- IV. Adjournment



Agenda Item Summary

Date: Septem	ber 18, 2023					
Agenda Item:	Approval of App for Research	ointment of Dr. Zhanjia	ang (John) Liu to the position of Vice President			
Revie	w ×	Action	\square No action required			
PRESENTER(S): President Oldham						

PURPOSE & KEY POINTS:

The President is requesting the Executive Committee to approve the appointment of Dr. Zhanjiang (John) Liu to the position of Vice President for Research, effective October 1, 2023.

Curriculum vitae

Zhanjiang (John) Liu

Professor of Biology, Syracuse University, Syracuse NY 13244

EDUCATION

Ph.D. 1989	Cell and Developmental Biology, University of Minnesota, St. Paul, MN
M.S. 1985	Plant Pathology, University of Minnesota, St. Paul, MN
B.S. 1981	Plant Protection, Northwestern Agricultural University, Shaanxi Province, China

APPOINTMENTS

		2022
•	VP-International Strategy, and Professor of Biology, Syracuse University	2022-present
•	Interim Provost, and Professor of Biology, Syracuse University	2020-2021
•	Vice President for Research, and Professor of Biology, Syracuse University	2017-2019
•	Associate Provost and Associate Vice President for Research, and	2013-2017
	Distinguished Alumni Professor of Aquaculture, Auburn University	
•	Associate Dean for Research, College of Agriculture and Distinguished	2007-2013
	Alumni Professor of Aquaculture, Auburn University	
•	Distinguished Alumni Professor of Aquaculture and Cell and Molecular	2003-2007
	Biosciences, Auburn University	
•	Associate Professor of Aquaculture, Auburn University	1999-2003
•	Assistant Professor of Aquaculture, Auburn University	1995-1999
•	R&D Director, National Biosciences, Inc., Plymouth, Minnesota	1994-1995
•	Research Associate, Institute of Human Genetics, University of Minnesota	1991-1994
•	Postdoctoral Fellow, USDA-ARS Cereal Disease Laboratory, St. Paul, MN	1990-1991
•	Graduate Research and Teaching Assistant, University of Minnesota	1983-1989

SIGNIFICANT AWARDS

•	USDA National Institute of Food and Agriculture Hall of Fame	Inducted in 2022
•	Fellow, American Association for the Advancement of Science (AAAS)	Inducted in 2007
•	Fellow, World Aquaculture Society (WAS)	Inducted in 2017
•	Chancellor's Medal, Outstanding Leadership, Syracuse University	2021
•	Outstanding Achievement Award, University of Minnesota	2022
•	Significant Contribution to National Animal Genome Program, USDA CSREE	S 2009
•	Creative Research & Scholarship Award	2007

GRANT ACTIVITY

Research and academic efforts were continuously funded from 1995 through 2023, with a total of over 80 grants, totaling more than \$50 million, awarded by NIST, NSF, USDA, USAID, and various other federal and state funding agencies and industries.

SYNERGISTIC ACTIVITIES

- 1. Teaching and education: Taught *Molecular Genetics & Biotechnology*, and *Fish Genetics and Genetic Improvement*. Edited four books, two of which have been used as textbooks in aquaculture classes.
- 2. Student mentoring: Mentored 39 Ph.D. students, 10 master students, and 63 postdoctoral fellows or scholars serving as major professor, and additional 34 graduate students as committee member.

- 3. Editorial: Editor-in-Chief: Marine Biotechnology; Associate Editor: BMC Genomics; Aquaculture.
- 4. National leadership: USDA National Aquaculture Genome Coordinator, 2000-2017; Advisory Panel, Oceans and Human Health Initiative, NOAA, 2006-2012.
- 5. Published 349 journal articles and book chapters that have had over 19,000 citations.

SELECTED PUBLICATIONS

- Wang W, Yang Y, Tan S, Zhou T, Liu Y, Tian C, Bao L, Xing D, Su B, Wang J, Zhang Y, Liu S, Shi H, Gao D, Dunham R, Liu ZJ. 2022. Genomic imprinting-like monoallelic paternal expression determines sex of channel catfish. Science Advances 8: eadc8786. DOI: 10.1126/sciadv.adc8786
- 2. Liu ZJ, Liu S, Yao J, Bao L, Zhang J, Li Y, Jiang C, Sun L, Zhang Y, Zhou T, Zeng Q, Fu Q, Gao S, Li N, Wang R, Koren S, Jiang Y, Zimin A, Xu P, Phillippy AM, Geng X, Song L, Sun F, Li C, Wang X, Chen A, Jin Y, Yuan Z, Yang Y, Tan S, Peatman E, Lu J, Qin Z, Dunham R, Li Z, Sonstegard T, Feng J, Danzmann RG, Schroeder S, Scheffler B, Duke MV, Ballard L, Kucuktas H, Kaltenboeck L, Liu H, Armbruster J, Xie Y, Kirby ML, Tian Y, Flanagan ME, Mu W, and Waldbieser GC. 2016. The channel catfish genome sequence provides insights into evolution of scale formation in teleosts. Nature Communications 7:11757.
- 3. Zhang X, Yuan J, Sun Y, Li S, Gao Y, Yu Y, Liu C, Wang Q, Lv X, Zhang X, Ma KY, Wang X, Lin W, Wang L, Zhu X, Zhang C, Zhang J, Jin S, Yu K, Kong J, Xu P, Chen N, Zhang H-B, Sorgeloos P, Sagi A, Warren A, **Liu ZJ**, Wang L, Ruan J, Chu K, Liu B, Li F, and Xiang J. 2019. Penaeid shrimp genome provides insights into benthic adaptation and frequent molting. Nature Communications 10:356.
- 4. Zhou T, Li N, Jin Y, Zeng Q, Prabowo W, Liu Y, Tian C, Bao L, Liu S, Yuan Z, Fu Q, Gao S, Gao D, Dunham R, Shubin NH, and **Liu ZJ**. 2018. Chemokine C-C motif ligand 33 is a key regulator of teleost fish barbel development. Proceedings of the National Academy of Sciences 115 (22): e5018-e5027.
- 5. Waldbieser G, Liu S, Yuan Z, Older C, Gao D, Shi C, Bosworth B, Li N, Bao L, Kirby M, Jin Y, Wood M, Scheffler B, Simpson S, Youngblood R, Duke M, Phillippy A, Koren S, and **Liu ZJ**. 2023. Reference genomes of channel catfish and blue catfish reveal multiple pericentric chromosome inversions. BMC Biology 21: 67.
- 6. Bao L, Tian C, Liu S, Zhang Y, Elaswad A, Yuan Z, Khalil K, Sun F, Yang Y, Zhou T, Li Ning, Tan S, Zeng Q, Liu Y, Li Y, Gao D, Dunham R, Davis K, Waldbieser G, and **Liu ZJ**. 2019. The Y chromosome sequence of the channel catfish suggests novel sex determination mechanisms in teleost fish. BMC Biology 17: 6.
- 7. Xu P, Zhang X, Wang X, Li J, Liu G, Kuang Y, Xu J, Zheng X, Ren L, Wang G, Zhang Y, Huo L, Zhao Z, Cao D, Lu C, Li C, Zhou Y, **Liu ZJ**, Fan Z, Shan G, Li X, Wu S, Song L, Hou G, Jiang Y, Jeney Z, Yu D, Wang L, Shao C, Song L, Sun J, Ji P, Wang J, Li Q, Xu L, Sun F, Feng J, Wang C, Wang S, Wang B, Li Y, Zhu Y, Xue W, Zhao L, Wang J, Gu Y, Lv W, Wu K, Xiao J, Wu J, Zhang Z, Yu J, and Sun X. 2014. Genome sequence and genetic diversity of the common carp, Cyprinus carpio. Nature Genetics 6(11):1212-1219.
- 8. Wang S, Abernathy J, Waldbieser G, Lindquist E, Richardson P, Lucas S, Wang M, Li P, Thimmapuram J, Liu L, Vullaganti D, Kucuktas H, Murdock C, Small B, Wilson M, Liu H, Jiang Y, Lee Y, Chen F, Lu J, Wang W, Peatman E, Xu P, Somridhivej B, Baoprasertkul P, Quilang J, Sha Z, Bao B, Wang Y, Wang Q, Takano T, Nandi S, Liu S, Wong L, Kaltenboeck L, Quiniou S, Bengten E, Miller N, Trant J, Rokhsar D, Liu ZJ. 2010. Assembly of 500,000 inter-specific catfish expressed sequence tags and large scale gene-associated marker development for whole genome association studies. Genome Biology 11 (1): R8.
- 9. Li Y, Liu S, Qin Z, Waldbieser G, Wang R, Sun L, Bao L, Danzmann R, Dunham R, and **Liu ZJ**. 2015. Construction of a high-density high-resolution genetic map and its integration with BAC-based physical map in channel catfish. DNA Research 22:39-52.

- 10. Xu P, Wang S, Liu L, Thorsen J, Kucuktas H, and **Liu ZJ**. 2007. A BAC-based physical map of the channel catfish genome. Genomics 90:380-388.
- 11. Zeng Q, Fu Q, Li Y, Waldbieser G, Bosworth B, Liu S, Yang Y, Bao L, Yuan Z, Li N, and **Liu ZJ**. 2017. Development of a 690K SNP array in catfish and its application for genetic mapping of 250,000 markers and validation of the reference genome sequence. Scientific Reports 7: 40347.
- 12. Geng X, Sha J, Liu S, Bao L, Zhang J, Wang R, Yao J, Li C, Feng J, Sun F, Sun L, Jiang C, Dunham R, Zhi D, and **Liu ZJ**. 2015. A genome-wide association study in catfish reveals the presence of functional hubs of related genes within QTLs for columnaris disease resistance. BMC Genomics 16:196.

Position Number 418010

Working Title Vice President for Research

Job Title Vice President

Job Type Full-Time

Department Ofc VP Research & Economic Dev

To emerge TTU as a leading university for collaborative-interdisciplinary-innovative-creative-entrepreneur culture driven research and development in engineering and solving societal and industry problems of critical importance to Workforce and Economic Development of the Region and the State of Tennessee.

Tennessee Tech is an Equal Opportunity/Affirmative Action employer.

The Vice-President is responsible for enhancing the overall research stature of Tennessee Tech University and assisting the institution in fulfilling its mission to provide a strong and vibrant capacity for research, innovation, and economic development in the state of Tennessee and the Nation. This position carries administrative responsibility for a wide range of research programs and policies in cooperation with other University bodies; an important aspect of which is the College of Graduate Studies. This individual will play a major role in building relationships with government, industry, and community agencies to increase research funding and research opportunities for faculty and the University. Excellent communication and leadership skills, fostering an environment favorable to research and scholarly work; they must possess the ability to encourage research by the faculty members in Agriculture and Human Ecology, Arts and Sciences, Business, Education, Engineering, Fine Arts, Interdisciplinary Studies, Library Sciences, and Nursing.

Essential Functions

Job Purpose

This position is responsible for the stimulation, promotion, and coordination of faculty-led research, scholarship, and creativity across all disciplines ranging from single PI projects to large multidisciplinary teams. Familiarity and experience with research administration, including both pre-award and post-award; they will also have experience in research compliance and security, the management of shared resources and facilities, and overseeing intellectual property and technology transfer. They will have demonstrated success in executive leadership responsibilities, including the development of long-term strategic plans, prioritization of resources, as well as collaboration and consensus building from diverse groups when making strategic decisions. Finally, a successful candidate will possess a strong record of budgeting and fiduciary accountability, an innovative and entrepreneurial spirit, and a commitment to promoting diversity across all levels. It is also essential that they have the ability to interact effectively with academic colleagues, governance bodies, research agencies, business leaders, government, and the community.

Minimum Qualifications

An earned doctorate from an accredited university. Demonstrated success fostering a culture of research, scholarship, and/or creativity amongst faculty, staff, students. Demonstrated success in securing and managing grants and contracts. Experience promoting and developing research and scholarship across all disciplines. Experience fostering relationships among internal and external stakeholders. Record of progressively increasing levels of administrative responsibilities. Excellent communication skills.

Familiarity and experience with Pre-award grant administration (e.g. proposal development, budget development, proposal submission, award negotiation, acceptance). Familiarity with and ability to facilitate post-award grant administration (e.g. sub awards, financial compliance, facilities management, indirect funds distribution, project reporting, no-cost extensions, project close-outs). Familiarity and experience with Research Compliance (e.g. IRB, IACUC, biosafety, RCR). Familiarity and experience with managing shared resources, facilities, and infrastructure. Familiarity and experience with interacting with federal representatives and garnering resources. Familiarity and experience with intellectual property, technology development and transfer. Familiarity and experience with Security Issues (e.g. export control, ITAR). Strong personal record of research and scholarly activities, including individual and team activities. Familiarity with and appreciation of a faculty member's roles and responsibilities in teaching, research, and service. Strong personal record of advising undergraduate and graduate student researcher. Experience serving as an advisor for doctoral students. Demonstrated executive leadership skills including long-term visionary leadership and strategic thinking. Experience in delegation of appropriate responsibilities and accountability for decisions and actions. Ability to make difficult decisions in a timely manner to promote university performance. Strong record of budgeting, fiduciary accountability, transparency, and acumen necessary to facilitate the allocation of resources with strategic goals. Demonstrated success using collaboration and consensus building from diverse groups in making strategic decisions. Excellent interpersonal skills.

Demonstrated commitment to promoting diversity at all levels. Demonstrated innovative and entrepreneurial spirit. Commitment to community engagement and outreach. Demonstrated success facilitating multi-disciplinary research teams.

Preferred Qualifications

Typical hours are Monday-Friday, 8:00 a.m. – 4:30 p.m. Additional hours if/when **Work Hours** needed.

Compensation and Benefits

Salary Commensurate with education and experience; Administrative Pay Grade EX35

The University offers a competitive benefits package. Benefits include the accumulation of two vacation days per month and one sick leave day per month, and **Benefits Information** thirteen University holidays. Other benefits include medical and life insurance (shared cost with the university), retirement, optional 401k, and educational benefits.

Posting Details

Posting Date 12/20/2022

Screening Date 03/06/2023

Open Until Filled Yes

Applicants are required to electronically upload a letter of application, CV, copy of transcripts (official transcripts required upon hire), and complete contact information

for three references. References will be contacted at a later date. Submission of materials is the applicant's responsibility. Applications without all required materials are incomplete and will not be considered. Website to apply for this

position is https://jobs.tntech.edu.