

NEWSLETTER

FALL KICKOFF





IN MEMORY OF DR. GAIL GALASKO

Dr. Gail T. Galasko was a distinguished pharmacologist and professor whose research on insulin signaling and decades of teaching shaped medical and dental education. As a scientist, educator, and mentor, she dedicated her career to advancing our understanding of cellular signaling mechanisms while inspiring generations of students through her commitment to excellence in teaching and scholarship. A founding faculty member of the Florida State University College of Medicine, Dr. Galasko helped build and strengthen educational programs that continue to impact future healthcare professionals. Her legacy of discovery, mentorship, and service will be remembered with deep respect and gratitude. Dr. Galasko will live on through the many students, educators, and scientists whose lives she touched through her mentorship and example.



The **Department of Biomedical Sciences** is a vibrant academic community committed to educating future physicians and scientists. Our faculty are shaping the future of medicine through bold, student-centered education and cutting-edge research. By fostering collaboration, encouraging curiosity, and embracing the latest technological advances, we're preparing tomorrow's healthcare professionals to lead with knowledge, innovation, and compassion.

Supporting Your Growth

We are dedicated to nurturing the success of our students, postdocs, and faculty by offering a wide range of professional development and engagement opportunities. From hands-on workshops and national conferences to funding sources and academic awards, our resources are here to help you grow, connect, and thrive.

What We Offer:

- A dynamic Ph.D. program with personalized mentorship, innovative research opportunities, and active journal clubs
- Access to high-impact professional development tools and events featuring world-renowned speakers
- A collaborative environment that champions teamwork, transparency, and open communication

We encourage you to make the most of these opportunities—whether by participating in events, collaborating on groundbreaking research, or sharing your ideas with the community.

Let's keep the momentum going and continue to make FSU Biomedical Sciences a hub where great minds, fresh thinking, and meaningful breakthroughs come together!





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SEMINARS



AUGUST 19, 2026

**Preclinical Evaluation of Monoclonal
Antibodies and Vaccine Candidates against
Pneumoviruses**

Ahmed Khalil, PhD

*Postdoctoral Scholar
Department of Biomedical Sciences
College of Medicine*

AUGUST 26, 2026

**Muse cells; a new paradigm in regenerative
medicine and cell therapy**

Mari Dezawa, MD, PhD

*Department of Stem Cell Biology & Histology
Tohoku University Graduate
School of Medicine
Sendai, Japan*



SEPTEMBER 2, 2026

**Specialized Ribosomes and Translational
Control Promote the Efficient Transmission
of Malaria Parasites**

Scott E. Lindner, PhD

*Associate Professor
Biochemistry and Molecular Biology
Pennsylvania State University*



SEPTEMBER 16, 2026

**Atherosclerosis in the Vaping Era:
Dissecting Non-Nicotine Effects on Plaque
Burden**

Gloria Salazar, PhD

*Professor of Nutrition
Department of Health, Nutrition, and Food Sciences
Florida State University*



DEPARTMENT OF BIOMEDICAL SCIENCES ANNUAL RETREAT & SCIENTIFIC SYMPOSIUM

AUGUST 20TH, 2026
FSU CHAMPIONS CLUB



ANOTHER SUCCESSFUL YEAR!

Special thanks to the third-year class Hyeje Sumajit, Pilar Toledo, Quill Thomas & Ron Chastain for hosting this year's Department of Biomedical Sciences Annual Retreat & Scientific Symposium! Extended thanks to all participants including members of BSGSA, our graduate students, faculty and staff!

DEPARTMENT OF BIOMEDICAL SCIENCES

THE ANNUAL BMS RETREAT

2026 Award Winners

We're excited to celebrate our remarkable 2026 Award Winners at this year's Annual BMS Retreat! These individuals have demonstrated excellence, innovation, and leadership in their work, setting a high standard for our community.



From left to right: **Pilar Toledo** was awarded 1st place for the 3-minute Thesis (3MT[®]), **Michael DiSabato** was awarded Fan Favorite for the 3-Minute Thesis (3MT[®]) and 2nd place for the 3-minute Thesis (3MT[®]), **Nina Zamani** was awarded People's Choice Best Poster Award, and **Sima Sabbagh** was awarded People's Choice Best Poster Award.



From left to right: **Hyeje Sumajit** was awarded the Junior Randolph Rill Award, **Emily Ehle** was awarded the Senior Randolph Rill Award, **Daniel Betancourt** was awarded the Senior Randolph Rill Award, and **Amhed Khalil** was awarded the Postdoc Scholarly Award.

DEPARTMENT OF BIOMEDICAL SCIENCES

THE ANNUAL BMS RETREAT

Biomedical Sciences Graduate Student
Association (BSGSA) at Florida State
University
LinkedIn Group



The FSU College of Medicine BSGSA has launched a LinkedIn group to help students, alumni, faculty, and friends stay connected. Join the community by scanning the QR code or visiting:
<https://www.linkedin.com/groups/36170001/>

Three Minute Thesis (3MT®) Presentation Session

One major highlight from is the Three Minute Thesis (3MT®) session where four of our graduate students demonstrated the importance of effectively communicating science a diverse audience while highlighted the depth and breadth of research being conducted within their labs.



Top left to right: **Michael DiSabato**: *"GPNMB Negatively Regulates Osteoclast Differentiation and Function"* & **Pilar Toledo**: *"Same Stress, Different Response: Why Sex Matters In Diabetes"*.

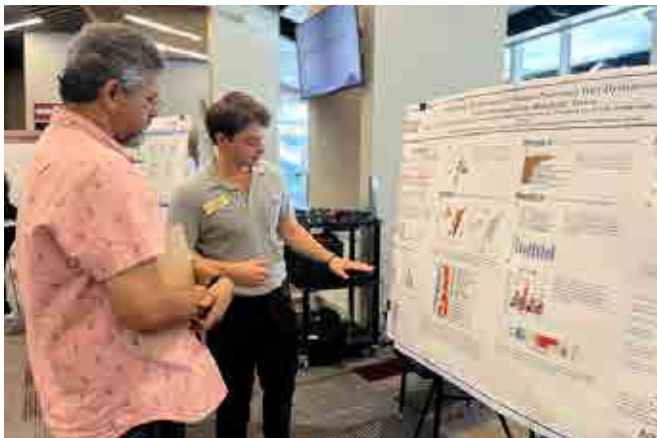
Bottom left to right: **Steven Muti**: *"Making Chemo Kind"* & **Ron Chastain**: *"We Be Jammin': An Investigation into Treatment of Genetic Cardiomyopathies via Mytrope Activators in Jam"*

DEPARTMENT OF BIOMEDICAL SCIENCES

THE ANNUAL BMS RETREAT



EVENT SNAPSHOT



DEPARTMENT OF BIOMEDICAL SCIENCES

THE ANNUAL BMS RETREAT

2026 NEW GRADUATE STUDENT CLASS



Jordan Attebery



James Avaala



William Bartenslager



Rakshya Bhatta



Mario Castillo



Tiffany Daugherty



Gabriela De Jesus



Fiona Diner



Michael DiSabato



Malak Fadlou-Allah



Jyoti KC



Jackson Mast



Lauren Saenz



Derek Savoie



Gejla Toromani

GRADUATE STUDENT NEWS

FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY CONFERENCE



SOPHIA OWUTEY

Sophia Owutey attend the **Cell Cycle Regulation in Health and Disease FASEB Science Research Conference**, where she spoke on ***"PolySUMOylation promotes sister chromatid separation"***. The FASEB conference was held in Niagara Falls, NY at the Niagara Falls Convention Center/Sherton Hotel from July 27th - July 29th. FASEB, the Federation of American Societies for Experimental Biology, is considered the nation's largest biomedical coalition serving leading biological and biomedical researchers.

TIPS SEPTEMBER 2026 ISSUE | MEET THE FIRST AUTHORS FEATURE



ANDREA VILLATORE, MD

Meet the First Authors is a feature series by **Trends in Pharmacological Sciences** that spotlights lead authors behind Review and Opinion articles. **Andrea Villatore, MD**, a visiting scholar in Dr. Stephen Chelko's lab, was featured due to his first authorship of the journal article, ***"Elamipretide: a mitochondria-targeting drug for Barth syndrome"***.

GRADUATE STUDENT NEWS

CONGRATULATIONS DR. TOMIWA LAWAL



Tomiwa Lawal is a former graduate student in Dr. Robert Tomko's lab and has successfully defended his Dissertation Defense on Tuesday, September 1st. **Let us congratulate Dr. Tomiwa Lawal!**

UPCOMING DISSERTATION DEFENSE

SEPTEMBER 23, 2026
Room 1303 | 10am-11am

Divergent Remodeling From Adjacent Tnnc1 N-Terminal Variants: Mechanistic Insight Into Sarcomere Dysfunction In Inherited Cardiomyopathies

Paula Nieto Morales

PhD. Candidate

Dr. Jose Pinto's Lab

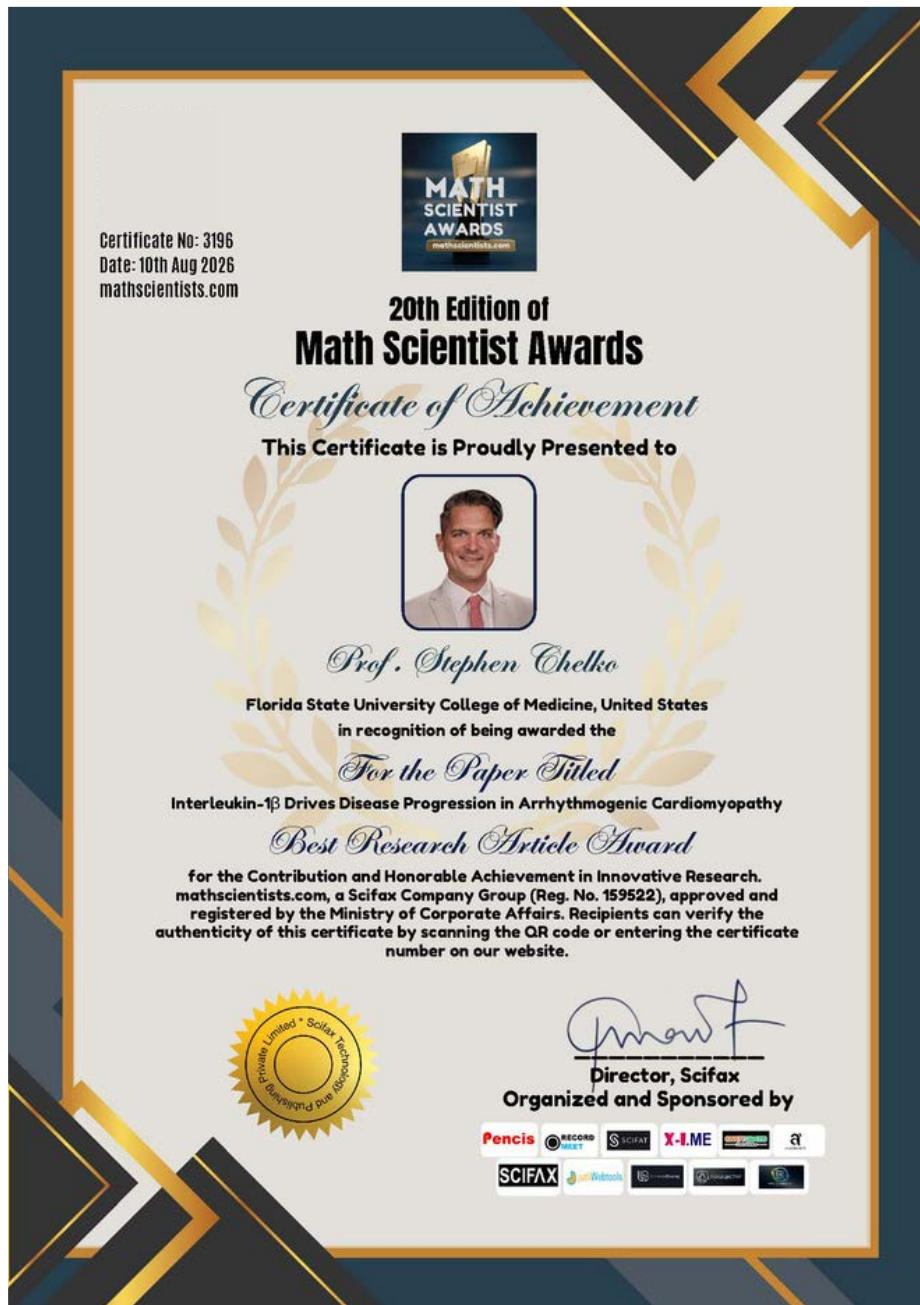
Department of Biomedical Sciences

College of Medicine

Florida State University



FACULTY NEWS



Dr. Stephen Chelko recently won the "Best Research Article Award" for 2026. Dr. Chelko would like to specifically thank Dr. Lavine, Dr. Saffitz, and Dr. Penna for their contributions to, "**Interleukin-1 β Drives Disease Progression in Arrhythmogenic Cardiomyopathy**" that was recently published in the JACC.

PUBLICATIONS



Immature and mature myocardium in the pathophysiology of hypertrophic cardiomyopathy

Federspiel, JM., Medarev, SL., Pfeifer, J., Jani, V.P., Pinto, J.R., Landim-Vieira, M. ***Immature and mature myocardium in the pathophysiology of hypertrophic cardiomyopathy.*** J Mol Cell Cardiol Plus. 2026 Jul 31;17:100859. doi: 10.1016/j.jmccpl.2026.100859. PMID: 42602957.



Elamipretide: a mitochondria-targeting drug for Barth syndrome

Villatore, A., Ehle, E., Chelko, S., ***Elamipretide: a mitochondria-targeting drug for Barth syndrome.*** Trends in Pharmacological Sciences. 2026 July 14. doi: 10.1016/j.tips.2026.06.011



Zika Virus NS3 Drives the Assembly of a Replication Compartment-like Structure That Exerts the Structural and Physiological Functions of the Viral Replication Compartment

Sultana, T., Zheng, C., Jones, J., Zamani, N., Toledo, M. P., Morton, G. M., Wang, Y. J., & Megraw, T. L. (2026). ***Zika Virus NS3 Drives the Assembly of a Replication Compartment-like Structure That Exerts the Structural and Physiological Functions of the Viral Replication Compartment.*** Viruses, 18(8), 834. <https://doi.org/10.3390/v18080834>



Mapping Interaction of Assembly factor Rpn14 with the proteasome base reveals a bipartite interface and implies ordered remodeling of intersubunit contacts during proteasome biogenesis

Quill, T., Sterling, M., Carnley, L. G., Betancourt, D., Blount, T. A., Bitter, D. J., Jiao, F., Huang, L., Nemec, A. A., & Tomko, R. J. (2026). ***Mapping Interaction of Assembly Factor Rpn14 With the Proteasome Base Reveals a Bipartite Interface and Implies Ordered Remodeling of Intersubunit Contacts During Proteasome Biogenesis.*** Journal of Molecular Biology, 438(21), 169978. <https://doi.org/10.1016/j.jmb.2026.169978>

PUBLICATIONS



SNCA-targeted transcriptional repression therapy alleviates pathological and behavioral perturbations in a Parkinson's disease mouse model

O'Donovan, B., Rittiner, J., Upadhyaya, S., Hodgson, D., Kantor, B., & Chiba-Falek, O. (2026). *SNCA-targeted transcriptional repression therapy alleviates pathological and behavioral perturbations in a Parkinson's disease mouse model*. *Neurotherapeutics: the journal of the American Society for Experimental NeuroTherapeutics*, 23(5), e01049. Advance online publication. <https://doi.org/10.1016/j.neurot.2026.e01049>



CRISPR-Cas editing technologies for viral-mediated gene therapies of human diseases: Mechanisms, progress, and challenges

Kantor, B., Duke, L., & Bhide, P. G. (2025). *CRISPR-Cas editing technologies for viral-mediated gene therapies of human diseases: Mechanisms, progress, and challenges*. *Molecular therapy. Nucleic acids*, 37(1), 102786. <https://doi.org/10.1016/j.omtn.2025.102786>

nature metabolism

Cell-specific DNA methylation in human alpha and beta cells regulates gene expression in type 2 diabetes

Ofori, J. K., Ruhrmann, S., Lindström, A., Perfilyev, A., Martin, M., Karagiannopoulos, A., Scisciola, L., Kost, K., Jönsson, J., Nilsson, Å., Kantor, B., Dudenhöffer-Pfeifer, M., Rots, M. G., Wendt, A., Rönn, T., Eliasson, L., Bacos, K., & Ling, C. (2026). *Cell-specific DNA methylation in human alpha and beta cells regulates gene expression in type 2 diabetes*. *Nature metabolism*, 8(4), 957–980. <https://doi.org/10.1038/s42255-026-01498-9>



A Rapid Poly(ethylene glycol)-Assisted Magnetic Isolation Approach for High-Throughput Extracellular Vesicle Isolation and Subsequent Biomarker Analysis

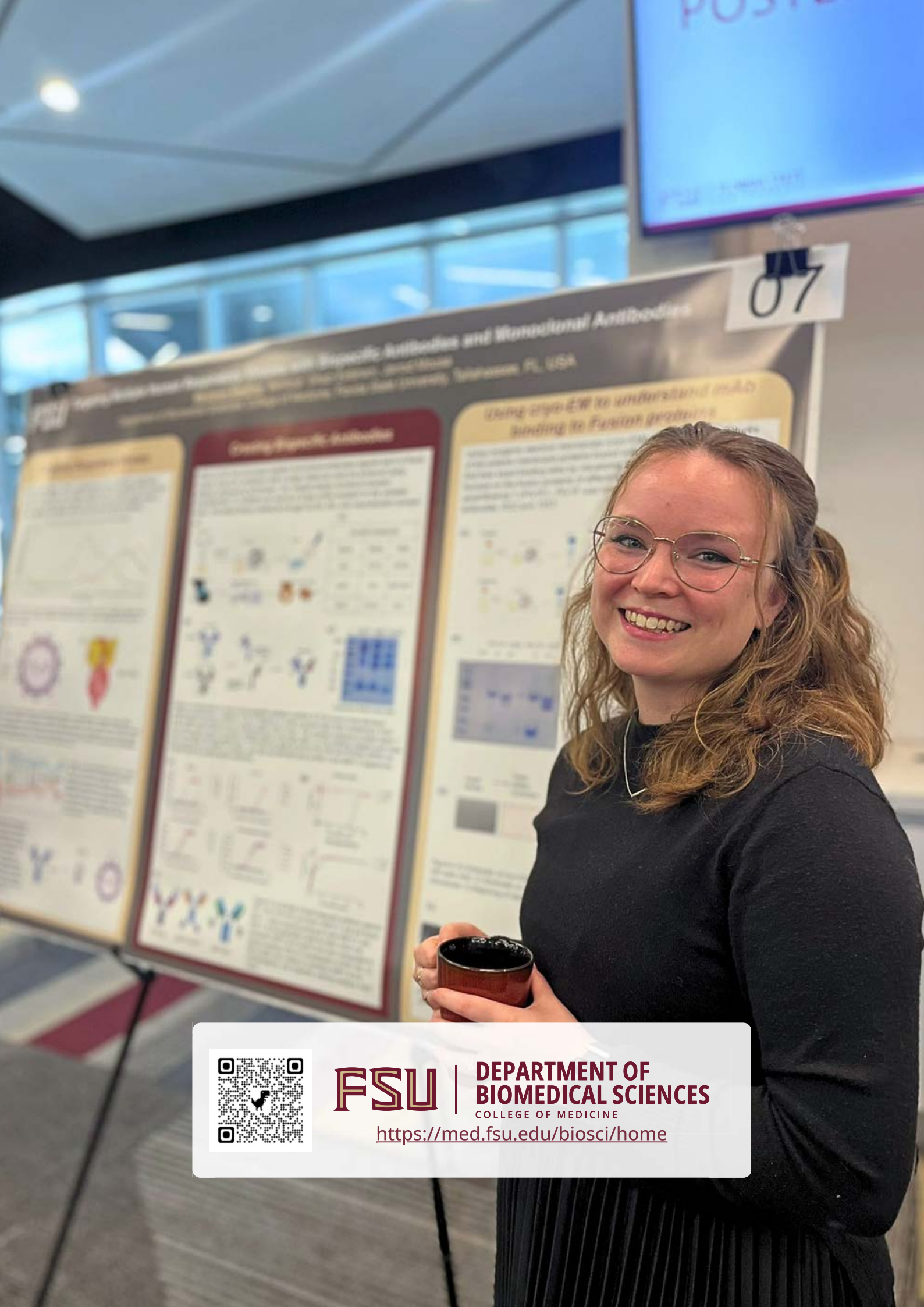
Sun, L., Duke, L., Vied, C., Hammel, G., Pate, B., Wang, J., Zhang, Y., Tian, D., Fan, J., Ren, Y.: *A Rapid Poly(ethylene glycol)-Assisted Magnetic Isolation Approach for High-Throughput Extracellular Vesicle Isolation and Subsequent Biomarker Analysis*. *ACS Nano* 8 September 2026; 20 (35): 24492–24511. <https://doi.org/10.1021/acsnano.6c09351>

PATENTS, GRANTS & AWARDS

Dr. Eric Holmes & Dr. Gary K. Ostrander | Large Scale Purification of Castanospermine (U.S. Patent 11,518,76) has been licensed to 60-Degrees Pharmaceuticals for development and marketing of their Castanobost® product which has antiviral and immune suppression applications.

Connor Clark | MS2 in College of Medicine and BMS Summer Research Fellow in Dr. Ostrander's lab has submitted an Invention Disclosure to FSU Commercialization related to analysis and quantification of immunohistochemical antibody staining data

Dr. Stephen Chelko | Winner of the Innovative Research Award at the 26th Edition of the International Invention Awards (INV 2026) | International Invention Awards | Domain: Toxicology and Pharmaceutical Science



FSU

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<https://med.fsu.edu/biosci/home>