

2024 Research Symposium Student Posters										
GSBSE students listed first, by last name										
Poster number	Session	Topic area	First name	Last name	What is your role?	GSBSE student?	Organization/Affiliation	email	Abstract Title	Judging notes
230	Basic and Applied Research in Biological Sciences	Molecular Biology	Omodasola	Adekeye	Graduate Student	✓	University of Maine	omodasola.adekeye@maine.edu	Protein Tyrosine Phosphatase Receptor Type Q (Ptrpq) is involved in the maintenance of glomerular filtration barrier integrity	yes
205	Basic and Applied Research in Biological Sciences	Biology	Ahmed	Almaghasilah	Graduate Student	✓	University of Maine	ahmed.almaghasilah@maine.edu	Assessing nuclear architecture in zebrafish Duchenne muscular dystrophy model	yes
241	Basic and Applied Research in Biological Sciences	Neuroscience	Felix Gershon	Anim	Graduate Student	✓	University of Maine/The Jackson Laboratory	gershon.anim@maine.edu	Investigation of the expression pattern of eEF1A and its role in early onset motor neuron disease	yes
262	Biomedical Engineering & Medical Physics	Materials	Zach	Applebee	Graduate Student	✓	University of Maine	zachary.applebee@maine.edu	Multi-Component Liquid-Infused Systems: A New Approach to Functional Coatings for Biomaterials	yes
214	Basic and Applied Research in Biological Sciences	Biology/ Molecular Biology	Mary	Astumian	Graduate Student	✓	GSBSE, University of Maine	mary.astumian@maine.edu	The Localization of Dystroglycan and Integrin Proteins Within Muscle Cell Membranes	yes
271	Health and Social Sciences	Other/Genomics, Pathology, and Oncology	Michael	Babcock	Graduate Student	✓	University of Maine GSBSE	mbabco51@maine.edu	Improving Cancer Patient Access to Precision Medicines: Maximizing Tissue for Molecular Profiling	yes
259	Basic and Applied Research in Biological Sciences		Bailey	Blair	Graduate Student	✓	GSBSE	bailey.blair@maine.edu	Uncovering C. albicans Factors that Modulate the Host Immune Response	yes
231	Basic and Applied Research in Biological Sciences	Molecular Biology	Arad	Bustan	Graduate Student	✓	JAX	arad.bustan@jax.org	Investigating the Role of KRAB Zinc Finger Proteins (KZFPs) in Mitigating Non-syndromic Cleft Lip and Palate (CLP) in A/WySn Mice	yes
212	Basic and Applied Research in Biological Sciences	Biology/ Computer Data	John	Butts	Graduate Student	✓	GSBSE	john.butts@maine.edu	PRIORITIZATION OF NON-CODING CANCER DRIVERS USING MPRA	yes
211	Basic and Applied Research in Biological Sciences	Biology, Molecular Biology	Samantha	Costa	Graduate Student	✓	GSBSE/MHIR	samantha.costa@maine.edu	PD-L1 Expressing Myeloid Cells Promote Bone Marrow Immunosuppression and Osteoclastogenesis with Diet-induced Obesity	yes
224	Basic and Applied Research in Biological Sciences	Microbiology/Virology	Sophie	Craig	Graduate Student	✓	GSBSE/University of Maine	sophie.craig@maine.edu	Cell-type specific mechanisms of JC polyomavirus infection	yes
275	Basic and Applied Research in Biological Sciences	Biology	Shawn	David	Graduate Student	✓	University of Maine	shawn.david@maine.edu	Role of T cells in Clonal hematopoiesis of indeterminate potential (CHIR)	yes
242	Basic and Applied Research in Biological Sciences	Neuroscience	Cory	Diemler	Graduate Student	✓	University of Maine	cory.diemler@jax.org	Microglia Depletion Results in Increased Susceptibility to Ocular Hypertension-Dependent Glaucoma	yes
254	Basic and Applied Research in Biological Sciences	Other/Biomedical science	Logan	Douglas	Graduate Student	✓	Maine Health Research Institute/ GSBSE	logan.douglas@maine.edu	Effects of Developmental Thyrotoxicosis on Brain Gene Expression and Behavior	yes

264	Biomedical Engineering & Medical Physics	Materials	Adeola	Fadahunsi	Graduate Student	✓	University of Maine	adeola.fadahunsi@maine.edu	Cellulose Nanofibril (CNF) Composite for Osseointegration and Bone regeneration	yes
234	Basic and Applied Research in Biological Sciences	Molecular Biology	Remi	Geohegan	Graduate Student	✓	Graduate School of Biomedical Sciences UMaine Orono	remi.geohegan@maine.edu	Characterizing the Effects of Aging on Nuclear Transport in Yeast	yes
243	Basic and Applied Research in Biological Sciences	Neuroscience	Brianna	Gurdon	Graduate Student	✓	UMaine GSBSE/JAX	briannagurdon@gmail.com	Mapping genetic modifiers of Alzheimer's disease neuropathology endophenotypes in the AD-BXD panel	yes
260	Biomedical Engineering & Medical Physics	Diagnostics/Optical & Non-Optical Image Analysis	Joshua	Hamilton	Graduate Student	✓	University of Maine	joshua.hamilton@maine.edu	Multiscale Computational Analysis of Anisotropic Signatures in the Breast Tumor Microenvironment	yes
244	Basic and Applied Research in Biological Sciences	Neuroscience	Sarah	Holbrook	Graduate Student	✓	GSBSE	holbrook.sarah@maine.edu	AAV9-Ighmbp2 gene therapy significantly improves motor performance in severe SMARD1-like mouse model, nmdem3, and CMT2S mouse model, nmdem5	yes
226	Basic and Applied Research in Biological Sciences	Microbiology/Virology	Lola	Holcomb	Graduate Student	✓	University of Maine	lola.holcomb@maine.edu	Early life exposure to broccoli sprouts confers stronger protection against enterocolitis development in an immunological mouse model of inflammatory bowel disease.	Yes
206	Basic and Applied Research in Biological Sciences	Biology	Amanda	Ignacz	Graduate Student	✓	University of Maine	amanda.ignacz@maine.edu	DPM3 functions in both dystroglycan-dependent and independent roles in neuromuscular disease progression	yes
219	Basic and Applied Research in Biological Sciences	Biology/ Molecular Biology/ Other/ Regeneration	Gabriela	Johnson	Graduate Student	✓	University of Maine and M.D.I. Biological Laboratory	gjohnson@mdibl.org	Development of two mechanistically distinct transgenic in vivo axolotl cell-ablation systems at various life stages	yes
235	Basic and Applied Research in Biological Sciences	Molecular Biology	Audrie	Langlais	Graduate Student	✓	MaineHealth Institute for Research	audrie.langlais@maine.edu	Morphine-induced Bone Loss is Associated with altered Bone miRNA Expression in Male C57BL/6J Mice	yes
236	Basic and Applied Research in Biological Sciences	Molecular Biology	Marissa	McGilvrey	Graduate Student	✓	MaineHealth	Marissa.mcgilvrey@maine.edu	Essential for cell survival: optimizing an in vitro model of methionine restriction	yes
207	Basic and Applied Research in Biological Sciences	Biology	Hannah	Megathlin	Graduate Student	✓	University of Maine	hannah.megathlin@maine.edu	Removal of mouse FcγRI in NSG mouse strain increased IgG1 survival in serum	yes
237	Basic and Applied Research in Biological Sciences	Molecular Biology	Monique	Mills	Graduate Student	✓		monique.mills@maine.edu	The Role and Regulation of TRP53 in the oocyte's response to radiation-induced damage	yes
216	Basic and Applied Research in Biological Sciences	Biology/ Molecular Biology	Michayla	Moore	Graduate Student	✓	MHIR	michayla.moore@maine.edu	ALK1 Coordinates Pro-Angiogenic Sclerostin, CD105, and IGF1 Secretion Following Preconditioning with BMP9 in Human Cardiac Progenitor Cells	yes
245	Basic and Applied Research in Biological Sciences	Neuroscience	Madison	Mueth	Graduate Student	✓	University of New England	madison.mueth@maine.edu	CUGBP Elav-like family member 4 (CELF4) acts as a negative regulator of nociceptor excitability and hyperalgesia in mice	yes
238	Basic and Applied Research in Biological Sciences	Molecular Biology	Connor	Murphy	Graduate Student	✓	University of Maine/MaineHealth Institute for Research	connor.s.murphy@maine.edu	Pharmacological Inhibition of the Long-chain Acyl-CoA Synthetase Isozymes with Triacsin C Impairs Multiple Myeloma Cell Proliferation, Survival and Mitochondrial Function	yes
217	Basic and Applied Research in Biological Sciences	Biology/ Molecular Biology	Madeleine	Nowak	Graduate Student	✓	MaineHealth Institute for Research/GSBSE	madeleine.nowak@maine.edu	Potential Liver-Adipose Crosstalk in the Regulation of Adipose Mest and Obesity	yes

213	Basic and Applied Research in Biological Sciences	Biology/ Molecular Biology	Olaleye	Olajuyin	Graduate Student	<input checked="" type="checkbox"/>	University of Maine	olaleye.olajuyin@maine.edu	Exploring Inflammatory Stimulation for Neo-Nephron Regeneration in Adult Zebrafish Kidneys	yes
239	Basic and Applied Research in Biological Sciences	Molecular Biology	Hilda	Opoku Frempon	Graduate Student	<input checked="" type="checkbox"/>	The university of Maine and the Jackson Laboratory	hilda.opoku@maine.edu	Karyotyping 6 Strains of Wild-derived Inbred Mice	yes
246	Basic and Applied Research in Biological Sciences	Neuroscience	Andrew	Ouellette	Graduate Student	<input checked="" type="checkbox"/>	The University of Maine	andrew.ouellette@maine.edu	Investigating Dendritic Spine Morphology as a Mediator of Cognitive Outcomes in Aged Diversity Outbred Mice	?
220	Basic and Applied Research in Biological Sciences	Biology/ Molecular Biology/Physiology /Pathophysiology	Rebecca	Peters	Graduate Student	<input checked="" type="checkbox"/>	University of Maine	rebecca.peters@maine.edu	Osteoclast-specific Deletion of β 2-Adrenergic Receptor Limits Trabecular and Cortical Bone Acquisition in Male but not Female Mice	yes
272	Computational Biology	Modeling	Rajat	Rai	Graduate Student	<input checked="" type="checkbox"/>	Graduate Studies in Biomedical Engineering and Sciences	rajat.rajat@maine.edu	Retinal Venous Vulnerability in Primary Open Angle Glaucoma: Effects of Intraocular Pressure and Blood Pressure	yes
240	Basic and Applied Research in Biological Sciences	Molecular Biology	Kodey	Silknitter	Graduate Student	<input checked="" type="checkbox"/>	Graduate School of Biomedical Science and Engineering, University of Maine	kodey.silknitter@maine.edu	Characterizing dystroglycanopathy in novel zebrafish models; the need of glycosylation for muscle and motor neuron development	yes
247	Basic and Applied Research in Biological Sciences	Neuroscience	Megan	Tomasch	Graduate Student	<input checked="" type="checkbox"/>	University of Maine	megan.tomasch@maine.edu	The impact of neonatal pain on the development and cellular physiology of the central nucleus of the amygdala	I will have a poster but do not wish to be judged.
208	Basic and Applied Research in Biological Sciences	Biology	Courtney	Willey	Graduate Student	<input checked="" type="checkbox"/>	JAX	courtney.willey@maine.edu	NBL1 Correlates with Kidney Disease in Alport Syndrome	yes
276	Basic and Applied Research in Biological Sciences	Biology	Chenhao	Yang	Graduate Student	<input checked="" type="checkbox"/>	University of Maine	chenhao.yang@maine.edu	Notch signaling regulates PVAT phenotype and function	yes
209	Basic and Applied Research in Biological Sciences	Biology	Caryl	Young	Graduate Student	<input checked="" type="checkbox"/>	University of Maine	caryl.young@maine.edu	Mybl2 regulates cell cycle progression and genomic stability in sensory progenitors.	yes
274	Basic and Applied Research in Biological Sciences	Physiology/Pathophysiology	Mohamad	Zaid	Graduate Student	<input checked="" type="checkbox"/>	University of Maine	Mohamed.zaid1@maine.edu	Sex-based differences in ophthalmic and central retinal artery velocity: From the heart to the eye analysis	yes
204	Basic and Applied Research in Biological Sciences	Biology	Tayo	Adekeye	Graduate Student	<input type="checkbox"/>	University of Maine	tayo.adekeye@maine.edu	MyIpf dosage controls myofibril growth in fast twitch skeletal muscle	Yes Unable to attend
261	Biomedical Engineering & Medical Physics	Materials	Cameron	Andrews	Graduate Student	<input type="checkbox"/>	The University of Maine	cameron.andrews@maine.edu	Scalable Cross-Linking to Reduce the Plasticity of Rehydrated Cellulose Nanofibril Composites	Yes
222	Basic and Applied Research in Biological Sciences	Microbiology/Virology	Nnamdi	Baker	Graduate Student	<input type="checkbox"/>	The University of Maine	nnamdi.baker@maine.edu	Using intravital imaging in zebrafish to understand signaling underlying innate immune response to C. albicans infection.	Yes
253	Basic and Applied Research in Biological Sciences	Neuroscience/ Instrumentation/ Systems Development	Kailey	Bell	Graduate Student	<input type="checkbox"/>	The University of Maine	kailey.bell@maine.edu	Engineering Neuromuscular Circuitry On-Chip	Yes
201	Basic and Applied Research in Biological Sciences	Biochemistry/ Microbiology/Virology/ Molecular Biology	Lucas	Bennett	Graduate Student	<input type="checkbox"/>	University of Maine	Lucas.bennett@maine.edu	Probing the Role of Serotonin Receptors in the JC Polyomavirus Infectious Cycle	Yes

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100	Basic and Applied Research in Biological Sciences	Biology/Neuroscience	Peter	Caradonna	Core Staff	University of N	Histology & Imaging Core Manager	pcaradonna@une.edu	UNE COBRE Histology & Imaging Core Services
111	Health and Social Sciences	Other/Oncology	Lory	Gaitor	Senior Clinical Research Coordinator	The Jackson La	Senior Clinical Research Coordinator	lory.guerrette@jax.o	Enhancing Oncology Research Engagement: A Comparative Analysis of Remote and Traditional Study Conduct in a Multi-site, Multi-cohort Observational Study
105	Health and Social Sciences	Nursing	Colleen	Marzilli	Faculty	University of M	Professor of Nursing and Graduate Nursing Program Coordinator	colleen.marzilli@maine.edu	Be A JEDI Pro
106	Basic and Applied Research in Biological Sciences	Biochemistry/Other/Toxicology	Jennifer	Newell	Faculty	University of M	Senior Lecturer of Biochemistry	jennifer.newellcaito@maine.edu	Antioxidant Effects of Partridgeberry Leaf Extract
114	Basic and Applied Research in Biological Sciences	Physiology/Pathophysiology	Anastasia	Paulmann	Postdoctoral Researcher	Mount Desert I	Postdoctoral Researcher	apaulmann@mdibl.org	The African Turquoise Killifish (Nothobranchius furzeri): A Novel Model for Investigating Vascular Aging
113	Biomedical Engineering & Medical Physics	Other/Medical Device Development and Testing	Suzanne	Wendelken	Research Staff	The Roux Instit	Research Scientist	s.wendelken@north	A Novel, Non-invasive Airway Device for Bag-mask Ventilation and Rescue Breathing
2024 MERGE Posters									
120	“Bridging the Gap: accessing mental healthcare in Lincoln County” Authors: Robert Krulee OMS-II 1 , James W Jarvis, MD, FAAFP 2								
121	“Improving Dermatological Care in Kennebec County: Reducing The Disparity of Rural Healthcare” Authors: Tyler Nussinow OMS II, Thomas Gearan MD								
122	“Expanding Perinatal Support for Individuals with Opioid Use Disorder in Washington County” Author: Abigail DeSchiffart								
123	“Rural Mental Health: A Look at Available Local Data and Community Perspectives” Authors: Ryan Hibbs, OMS-II, Annie Derthick, PhD								
124	“Developing a Rural Learning Platform in Maine” Authors: Madeleine McCormick, David McLellan MBA, Kneka Smith EdD, MPH, Kalli Varakiis MD, MSEd								