



# 11th Annual Research Symposium Abstracts

**HENDERSON CAMPUS**

**Wednesday, February 19, 2025**

**ROSEMAN UNIVERSITY**  
OF HEALTH SCIENCES

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**ROSEMAN UNIVERSITY**  
OF HEALTH SCIENCES



# HENDERSON CAMPUS AGENDA

Wednesday, February 19, 2025 | 3 – 6pm (local time)

2:30 – 3PM	Registration and Presenter Check-In
3 – 4PM	Poster Session
4:00 – 4:15PM	Welcoming Remarks – <i>P1 Classroom</i>
4:15 – 5:15 PM	Keynote Speaker: Dr. Ajay P. Singh, PhD “Decoding cancer mechanisms: uncovering novel biomarkers and therapeutic targets” – <i>P1 Classroom</i>
5:15 – 5:30PM	Break with food provided
5:30 – 6:15 PM	Podium Presentations – <i>P1 Classroom</i>
6:15 – 6:30PM	Awards and Closing Remarks – <i>P1 Classroom</i>

# 2025 Keynote Speaker



## Decoding cancer mechanisms: uncovering novel biomarkers and therapeutic targets

*Presented by: Ajay P. Singh, PhD*

*Associate Director of Basic and Translational Research  
Cancer Center and Research Institute*

*Professor, Cell and Molecular Biology,  
University of Mississippi Medical Center*

Dr. Ajay Singh is a tenured Professor of Cell and Molecular Biology in the School of Medicine at the University of Mississippi Medical Center. He is also the Associate Director of Basic and Translational Research at the Cancer Center and Research Institute. Prior to joining UMMC, he was the Professor and Director of Research in the Department of Pathology, and the Cancer Biology program Leader for the Mitchell Cancer Institute at the University of South Alabama. His laboratory focuses on the identification of novel tumor-associated genes and their impact on the behavior of the tumor cells. His lab is also interested in understanding how tumor cells communicate with its surroundings to become more aggressive and therapy resistant and if targeting of these tumor-stromal interactions could be exploited for cancer prevention and therapy. Another focus of Dr.

Singh's lab is to understand the molecular dissimilarities in tumors from patients of different racial and ethnic backgrounds and investigate their roles in disparate clinical outcomes. He has published extensively, holds multiple US patents, and is a co-founder of a small Biotech company, Tatva Biosciences. He has received numerous honors and awards for his scientific and scholarly accomplishments both nationally and internationally. He has received funding from three major federal agencies, NIH, DOD, and NSF, as well as from the state health departments and private foundations. He has served and is currently serving as the external advisory board member of multiple state and federally funded research centers. He also actively serves on national and international grant study sections and is a member of the editorial boards of several scientific journals.

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## Podium Speakers

Time	Presentation
5:30 – 5:45 PM	<p data-bbox="480 300 1450 373"><b><i>“Environmental Parasite Contamination: A Study Evaluating Soil in Urban Dog Parks”</i></b></p> <p data-bbox="480 422 1138 489">Presented by Kelly Chung, PharmD Candidate 2027 Roseman University, College of Pharmacy</p>
5:45 – 6:00 PM	<p data-bbox="480 499 1357 573"><b><i>“Comparison of Minimally Invasive Treatment Modalities for Post-Orthodontic White Spot Lesions”</i></b></p> <p data-bbox="480 621 1032 688">Presented by Jeremy Kasik, DMD Roseman University, AEODO/Orthodontics</p>
6:00 – 6:15 PM	<p data-bbox="480 699 1417 772"><b><i>“Comparative Analysis of Buprenorphine and Buprenorphine-Naloxone treatment on adherence”</i></b></p> <p data-bbox="480 821 1117 877">Presented by Justin Sigmund, DO Candidate 2027 Touro University, College of Medicine</p>

**Poster Session**

<b>Basic Sciences</b>	<b>Poster Number</b>	<b>Title</b>	<b>Presenter</b>
	<b>1</b>	The benefits of probiotic and prebiotic use in the gastrointestinal tract primarily focused on Bacillus coagulans and $\beta$ -glucans for potential synergistic effects on beneficially modulating the GI tract and microbiome in humans.	Jennifer Bermudez <i>Roseman University – College of Graduate Studies</i>
	<b>2</b>	Investigating the Effects of the Combination of Doxorubicin and Paroxetine on MDA MD 231 Breast Cancer Cell Adhesion	Benjamin Barstow <i>Roseman University – College of Pharmacy</i>
	<b>3</b>	Exploring the Effects of Norepinephrine in Caenorhabditis Elegans- Function of G Protein Coupled Receptor Kinases	Coriana Matthews <i>Roseman University – College of Pharmacy</i>
	<b>4</b>	Utilizing Caenorhabditis Elegans as an Experimental Model to Study the Effects of G Protein Coupled Receptor Kinases on Behaviors Mediated by a Dopamine Transporter Inhibitor	Justin Kien Nguyen <i>Roseman University – College of Pharmacy</i>
	<b>5</b>	Comparing Octopamine and Norepinephrine Activity Using Caenorhabditis Elegans as an Experimental Model	Kayley Englund <i>Roseman University – College of Pharmacy</i>
	<b>6</b>	Monitoring the Effects of Co-Administration of Fluoxetine or Paroxetine with Doxorubicin on MDA MD 231 Breast Cancer Cell Activity- Death and Cell Number Over Time	Victoria Ehresman <i>Roseman University – College of Pharmacy</i>
	<b>7</b>	Identifying Mutations of G Protein Coupled Receptor Kinase 2 and Associated Proteins in Pancreatic Cancer Samples	Michelle Abkarian <i>Roseman University – College of Pharmacy</i>
	<b>8</b>	Using Caenorhabditis Elegans to Predict Beta Blocker Impact: Analysis of Carvedilol and Propranolol Effects on Egg Laying	Saifeldin Mohammed <i>Roseman University – College of Pharmacy</i>
	<b>9</b>	Identifying Mutations of Members of the GRK2- like Family in Skin Cancer- Mutations and Potential Clinical Significance	Leandro Laus <i>Roseman University – College of Pharmacy</i>
	<b>10</b>	Analysis of Female Oral Contraceptive (OC) on Adult Oral Health	Kertiandra Ginting <i>Roseman University – MBA program</i>
	<b>11</b>	Evaluating G Protein Coupled Receptor Kinase 4 Family Mutations in Stomach Cancer- Types and Clinical Significance	Chaninat Saengchan <i>Roseman University – College of Pharmacy</i>
	<b>12</b>	Investigating the Association between GRK2 and Mutations of Protein Markers for Melanoma	Aris Mazmanian <i>Roseman University – College of Pharmacy</i>
<b>13</b>	Exploring GRK Mutations in Colorectal Cancer and Predicting their Effects Using AlphaFold	Roy Franco <i>Roseman University – College of Pharmacy</i>	

<b>Basic Sciences</b>	<b>Poster Number</b>	<b>Title</b>	<b>Presenter</b>
	14	Investigating the Protein Expression Relationship between GRK2 and Biomarkers for Thyroid Cancer	Megan Chiongson <i>Roseman University – College of Pharmacy</i>
	15	The improvement of masticatory efficiency after Class III orthognathic surgery- A scoping review	Denise Ng <i>Roseman University - AEODO/Orthodontics</i>
	16	Treacher Collins Syndrome in Orthodontics	Hiral Rakholia <i>Roseman University - AEODO/Orthodontics</i>
	17	Dentofacial Effects of Radiotherapy on Pediatric Population with Retinoblastoma	Kristi Truong <i>Roseman University - AEODO/Orthodontics</i>
	18	Pierre Robin Sequence in Orthodontics	Ilan Kaboud <i>Roseman University - AEODO/Orthodontics</i>
	19	Regulation of Hematopoiesis by A Methylation-Phosphorylation Switch in PRC2/EZH2	Hui Zhang <i>UNLV-College of sciences Dept of Chemistry and</i>
	20	How do hormonal changes and the oral microbiome interact with periodontal and Alzheimer’s disease to influence chronic inflammation and cognitive decline?	Vanessa chavez-sinks <i>Roseman University – College of Graduate Studies</i>
	21	Evaluation of Immunotherapy in the Treatment of Hepatocellular Carcinoma	Elizabeth Bondurant <i>Roseman University – College of Pharmacy</i>
	22	Impact of Various Antidepressants on Neural Progenitor Cell Survival and Proliferation	Mathew, Jasnoor, Barber, Shergill <i>Roseman University –</i>
	23	Comparing Selective and Nonselective COX inhibitors in Reducing Ocular Inflammation	Elizabeth, Jasnoor, Bondurant, Shergill <i>Roseman University –</i>
	24	Primary Failure of Eruption, Mechanical Failure of Eruption, Ankylosis, and Their Orthodontic Implications	Dionysia Iliopoulos <i>Roseman University - AEODO/Orthodontics</i>
	25	Evaluating the Impact of Osteopathic Manipulative Medicine on Cytokine Modulation: A Pathway to Inflammatory Disease Management	Renee Chang <i>Touro University - College of Medicine</i>
26	Fecal Virome Transplantation as treatment for Metabolic Syndrome: A review of current literature	Giovanna Park <i>Touro University - College of Medicine</i>	

<b>Basic Sciences</b>	<b>Poster Number</b>	<b>Title</b>	<b>Presenter</b>
	<b>27</b>	Tales from the crypto: A cryptosporidial protease and implications for drug discovery	Gabrielle Brucker <i>Touro University - College of Medicine</i>
	<b>28</b>	Volumetric Normalization: Evaluating the Application of Residual and Proportional Adjustment in Neuroimaging	Sabah Islam <i>Touro University - College of Medicine</i>
	<b>29</b>	Unadulterated Antimycotics Targeting NAD Homeostasis in Candida	Syed Hamza Naqvi <i>Touro University - College of Medicine</i>

<b>Clinical</b>	<b>Poster Number</b>	<b>Title</b>	<b>Presenter</b>
	<b>30</b>	Pharmacist-led Education to Decrease Inappropriate Meropenem Usage at Valley Hospital Medical Center	Josef Stockdale <i>Valley Hospital Medical Center</i>
	<b>31</b>	Takotsubo Cardiomyopathy: A Case of the Broken Heart	Lilian Huynh <i>Roseman University - College of Pharmacy</i>
	<b>32</b>	N-acetylcysteine in non-acetaminophen induced acute liver failure (NAI-ALF): a retrospective analysis of outcomes and treatment efficacy	Maia Stokes <i>MountainView Hospital</i>
	<b>33</b>	Optimizing Anticoagulation: Enhancing Time to Therapeutic Levels in Acute Pulmonary Embolism Management	Yue Hu <i>MountainView Hospital</i>
	<b>34</b>	Evaluating the incidence of fungemia in acutely ill hospitalized patients receiving intravenous parenteral nutrition	Tien Le <i>MountainView Hospital</i>
	<b>35</b>	Evaluation of an Electrolyte Replacement Protocol in a Community Hospital	Dennis Rico <i>HCA MountainView Hospital</i>
	<b>36</b>	Assessment of condylar anatomy and degenerative changes in temporomandibular joint disorders – A scoping review	Huy Tran <i>Roseman University - AEODO/Orthodontics</i>
	<b>37</b>	Analysis of Overall Orthodontic Treatment Time When Using LightForce: A Literature Review	Lauren Tomlinson <i>Roseman University - AEODO/Orthodontics</i>
<b>38</b>	Hidden Pathologies: The diagnostic benefits of a CBCT on craniofacial diagnosis	Derrick Bush <i>Roseman University - AEODO/Orthodontics</i>	



Clinical	Poster Number	Title	Presenter
	39	Slow maxillary expansion in adult patient with Hyrax expander: A case report.	Benjamin Hostetter <i>Roseman University - AEODO/Orthodontics</i>
	40	The efficacy of temporary skeletal anchorage appliances in the correction of skeletal anterior open bite – A scoping review	Ryan Howard <i>Roseman University - AEODO/Orthodontics</i>
	41	Invisalign Effects of Gingival Health	Rea Ghodasra <i>Roseman University - AEODO/Orthodontics</i>
	42	Mini-Implant Success in Orthodontics: A Scoping Review	Ambrose Ha <i>Roseman University - AEODO/Orthodontics</i>
	43	Microabrasion for Post Orthodontic Discoloration	Jacob Schvaneveldt <i>Roseman University - AEODO/Orthodontics</i>
	44	Orthodontic Considerations for Children with Autism Spectrum Disorder: A Literature Review	Kelly Leftwich <i>Roseman University - AEODO/Orthodontics</i>
	45	Turner Syndrome: Dental and Orthodontic Treatment Modifications	Charles Pitts <i>Roseman University - AEODO/Orthodontics</i>
	46	Gingival Hyperplasia In Orthodontic Patients	Mohamed Ali Basha <i>Roseman University - AEODO/Orthodontics</i>
	47	Quantitative evaluation of mandibular asymmetry with the use of three-dimensional skeletal imaging techniques- A scoping review	Erinn Chang <i>Roseman University - AEODO/Orthodontics</i>
	48	Timing of Sedation Initiation Post-Intubation in the Emergency Department	Mariam Alebyan <i>Roseman University - College of Pharmacy</i>
	49	The Impact of N-Acetylcysteine in Non-Acetaminophen-Induced Acute Liver Failure: A Retrospective Analysis	Edward Ramirez <i>Roseman University - College of Pharmacy</i>
	50	Nager Syndrome in Orthodontics	Jordan Bretner <i>Roseman University - AEODO/Orthodontics</i>
	51	Effects of Mouth Breathing on Children and Adolescents	Stephanie Lee <i>Roseman University - AEODO/Orthodontics</i>
52	Three-Dimensional Cephalometric Landmark Annotation Demonstration on Human Cone Beam Computed Tomography Scans	Anna Adjei <i>Roseman University - AEODO/Orthodontics</i>	

Clinical	Poster Number	Title	Presenter
	53	Orthodontics and Obstructive Sleep Apnea	Eileen Shah <i>Roseman University - AEODO/Orthodontics</i>
	54	Antimicrobial methods for cleaning orthodontic thermoplastic appliances: A literature review	Hannah Jung <i>Roseman University - AEODO/Orthodontics</i>
	55	Management of Severe Gingival Hypertrophy in Orthodontic Patients	Kwame Achampong <i>Roseman University - AEODO/Orthodontics</i>
	56	Comparison of Minimally Invasive Treatment Modalities for Post-Orthodontic White Spot Lesions	Jeremy Kasik <i>Roseman University - AEODO/Orthodontics</i>
	57	A Comparison of Outcomes with Alteplase versus Tenecteplase at a Stroke Center: A Protocol	Alana Whittaker <i>Roseman University - College of Pharmacy</i>
	58	Single Stage Hinge Revision Total Knee Arthroplasty of a Chronically Infected Knee: A Case Report	Benjamin Huang <i>Touro University - College of Medicine</i>
	59	Constrained Condylar Knee vs. Hinge Implant: When to Decide	Benjamin Huang <i>Touro University - College of Medicine</i>
	60	Precision and accuracy in automated tracing software for neuroimaging	Austin Gibson <i>Touro University - College of Medicine</i>
	61	Quantifying the Impact of Circadian Rhythm on Cognitive Domains: An Objective Assessment	Christian McCormick <i>Touro University - College of Medicine</i>
	62	Circadian Rhythm and its Impact on Balance and Physical Performance	Angel Oliver <i>Touro University - College of Medicine</i>
	63	Investigating the Relationship between the Circadian Clock and Lifestyle and Aging	Samuel Park <i>Touro University - College of Medicine</i>
	64	Tracking the effects of time zone shift on an individual's circadian rhythm, a case study	Amaka Eziakonwa <i>Touro University - College of Medicine</i>
	65	Using variations in the circadian rhythm to identify optimal vaccination times in healthy adults who receive an influenza vaccine.	Payson Broome <i>Touro University - College of Medicine</i>
66	Can We Eliminate the Negative Consequences of Circadian Desynchronization Caused by Night Shift Work by using a Light Therapy Lamp to Simulate a Sunset?	Amega Nguyen <i>Touro University - College of Medicine</i>	

<b>Clinical</b>	<b>Poster Number</b>	<b>Title</b>	<b>Presenter</b>
	67	Comparative Analysis of Buprenorphine and Buprenorphine-Naloxone treatment on adherence	Justin Sigmund <i>Touro University - College of Medicine</i>
	68	A Review of Total Hip Arthroplasty Dual Mobility Constructs from Conception to Outcomes	Austin Mullaly <i>Touro University - College of Medicine</i>
	69	Evaluating the Comfort and Effectiveness of Different Ankle Immobilization Techniques	Samah Olomi <i>Touro University - College of Medicine</i>
	70	Role of dexmedetomidine in psychiatry- a literature review	Mehar Durah <i>Touro University - College of Medicine</i>
	71	GLP-1 Receptor Agonist Drugs: Diabetes, Weight Loss, and Beyond	Cole Davidson, MS <i>Touro University - College of Medicine</i>
	72	Dangerous pin migration in clavicular fixation - an unlearned lesson	Joshua Ahdout <i>Touro University - College of Medicine</i>
	73	The Effectiveness of Cochlear Implants on Cognitive Function in Children and Adolescents with Hearing Loss: A Systematic Review	Harshita Sarambale <i>Touro University - College of Medicine</i>
	74	Optimizing Knee Osteoarthritis Treatment Through Strengthening Surrounding Muscles for Better Function and Pain Reduction: A Systematic Review	Nicholas Saldevar <i>Touro University - College of Medicine</i>
	75	Investigating the Role of Extracorporeal Shock Wave Therapy (ESWT) in reducing pain and improving function in Achilles Tendinopathy: A Literature Review	Syed Hamza Naqvi <i>Touro University - College of Medicine</i>
	76	They're faking it! Diagnosing mTBIs using a Multimodal Approach	Dakota Muth <i>Touro University - College of Medicine</i>
	77	Variation of the Pulmonary Vasculature of Lung and Their Surgical Significance- A Case Study	Krystal Robinson <i>Touro University - College of Medicine</i>

<b>SoTL</b>	<b>Poster Number</b>	<b>Title</b>	<b>Presenter</b>
	78	Assessing the Effectiveness of Quality Improvement Approaches on Multiple-Choice Question Exams in Health Professions Education	Tanvirul Hye <i>Roseman University - College of Medicine</i>
	79	From AI to OSCE: Evaluating ChatGPT's Contributions to Medical Student Training	Samah Olomi <i>Touro University - College of Medicine</i>

<b>SoTL</b>	<b>Poster Number</b>	<b>Title</b>	<b>Presenter</b>
	<b>80</b>	United in Inquiry: Exploring Interprofessional Collaboration in Healthcare Research	Srinija Balabhadra <i>Touro University - College of Medicine</i>

<b>Public Health</b>	<b>Poster Number</b>	<b>Title</b>	<b>Presenter</b>
	<b>81</b>	Improving Educational Barriers for Unaccompanied Unhoused Youth through Collaboration	Julpohng "JP" Vilai <i>Roseman University - College of Medicine</i>
	<b>82</b>	Nutritional Deficiencies and Their Oral Signatures: A Scoping Review on Adolescent Health	Amy Blazejewski <i>Roseman University - AEODO/Orthodontics</i>
	<b>83</b>	Interdisciplinary education, models: incorporating oral health education into the nursing curriculum	Edgar Tilley <i>Roseman University - AEODO/Orthodontics</i>
	<b>84</b>	Immunotherapy for Melanoma: Disappointing or Promising?	Alexandra Orellana <i>Roseman University - College of Pharmacy</i>
	<b>85</b>	Silver Diamine Fluoride and Oral Health Equity: Clinical and Public Health Perspectives	Rheannon Ainsworth <i>Roseman University - College of graduate studies</i>
	<b>86</b>	Environmental Parasite Contamination: A Study Evaluating Soil in Urban Dog Parks	Kelly Chung <i>Roseman University - College of Pharmacy</i>
	<b>87</b>	Whole Brain DTI Analysis in Carbon Monoxide Exposure Patients	Yazan Al-Sanouri <i>Touro University - College of Medicine</i>
	<b>88</b>	Investigating the Impact of Shift Work on Circadian Rhythms and Health in Healthcare Workers	Dominique Gillette <i>Touro University - College of Medicine</i>
	<b>89</b>	Longitudinal analysis of the healthcare needs of Hispanic-Latinx population in Nevada and neighboring states	Micah Kwallek <i>Touro University - College of Medicine</i>
	<b>90</b>	The multifaceted impact of the COVID-19 pandemic on perceptions of overall health	Krystal Robinson <i>Touro University - College of Medicine</i>
	<b>91</b>	Disparities in Pap Smear Rates Among Diverse California Populations: A Data-Driven Analysis	Angela Nguyen <i>Touro University - College of Medicine</i>
<b>92</b>	NHPI Health of the Ninth Island	Sydney Unciano <i>Touro University - College of Medicine</i>	

<b>Public Health</b>	<b>Poster Number</b>	<b>Title</b>	<b>Presenter</b>
	93	Barriers in Dietary Approaches to Stop Hypertension (DASH): Acculturation and Adherence in Asian American Populations	Michelle Lee <i>Touro University - College of Medicine</i>
	94	The Impact of Teleophthalmology On Underserved Populations	Rutu Vyas <i>Touro University - College of Medicine</i>

<b>Others</b>	<b>Poster Number</b>	<b>Title</b>	<b>Presenter</b>
	95	Meeting Community Needs with the CVS Health Spanish Pathway Program	Marcelo Garcia <i>Roseman University - College of Pharmacy</i>
	96	Achondroplasia, Sleep Apnea, and Orthodontic Interventions: A Comprehensive Literature Review	Hayden McKay <i>Roseman University - AEODO/Orthodontics</i>
	97	Effects of Maxillary Expansion Techniques in Adults with Obstructive Sleep Apnea: A Review Article	Nader Karimi <i>Roseman University - AEODO/Orthodontics</i>
	98	Craniofacial effects of sickle cell anemia	Olivia Gangmark Strickland <i>Roseman University - AEODO/Orthodontics</i>
	99	Orthodontic management of single solitary central incisor syndrome	Kyle Cousineau <i>Roseman University - AEODO/Orthodontics</i>
	100	An Overview of Student Disability Services Offered by Medical Universities in Nevada and Hawaii	Trevor Hirata <i>Touro University - College of Medicine</i>
	101	Let's Cut to the Chase: Applying High-Stress Medical Training from Cut Suit Week	Victoria-Marie Berlandi-Short <i>Touro University - College of Medicine</i>

<b>High School</b>	<b>Poster Number</b>	<b>Title</b>	<b>Presenter</b>
	102	Leveraging Neural Networks for Early Detection of Breast Cancer	Aryan Singh <i>The Meadows School</i>
	103	Developing a NET-stimulated nanoparticle to target deep vein thrombi	Aakhus <i>Faith Lutheran High School</i>

<b>High School</b>	<b>Poster Number</b>	<b>Title</b>	<b>Presenter</b>
	<b>104</b>	Genetic screening and CRISPR editing of the RYR1 gene for patients with malignant hyperthermia suffering adverse reactions to anesthesia	Sophia Go <i>Faith Lutheran High School</i>
	<b>105</b>	Utilizing CRISPR to upregulate PCSK9 expression and reduce cholesterol levels as a therapeutic strategy for familial hypercholesterolemia	Chloe Kang <i>Faith Lutheran High School</i>



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