

9th annual

*Lyman Briggs
Research Symposium
Supported by MSUFCU
April 27-30, 2015*



Complete Schedule



LYMAN BRIGGS
COLLEGE

MICHIGAN STATE
UNIVERSITY

Classes Participating

| Room | Specific Time | Class | Title |
|----------------------------------|---------------|-----------------|----------------------------|
| Monday Oral Presentations | | | |
| C7 | 3:00-5:50pm | LB 172L 007 | Chemistry 2 Lab |
| C-103 | 3:00-4:50pm | LB 335 | Humans and the Environment |
| C7 | 3:00-5:50pm | LB 172L 001 | Chemistry 2 Lab |
| W40 | 4:10-6:00pm | LB 492 | Evolutionary Medicine |
| C7 | 7:00-9:50pm | LB 172L 002, 15 | Chemistry 2 Lab |

Both
Lounges

Monday Poster Presentations

| | | |
|---------------|--------|-------------------------------|
| 9:10-10:00am | LB 172 | Chemistry and Our Environment |
| 10:10-11:00am | LB 172 | Chemistry and Our Environment |
| 12:40-1:30pm | LB 172 | Chemistry and Our Environment |
| 1:50-2:40pm | LB 171 | Double Edged Chemicals |
| 3:00-3:50pm | LB 172 | Chemistry and Our Environment |
| 4:10-6:00pm | LB 492 | Evolutionary Medicine |
| 6:00-8:00pm | LB 492 | Science Communication |

6-8pm

MSUFCU General Poster Session

Tuesday Oral Presentations

| | | | |
|-------|---------------|------------------|---|
| C7 | 8:00-10:50am | LB 172L 003 | Chemistry 2 Lab |
| W40 | 10:20-12:10pm | LB 492 | DNA Sequencing |
| C-102 | 10:20-12:10pm | LB 331 | Reproductive Technology |
| C7 | 11:30a-2:20pm | LB 172L 004 | Chemistry 2 Lab |
| C-106 | 12:40-2:30pm | LB 145 | Bio Core research projects |
| C-102 | 12:40-2:30pm | LB 133 | Influential Scientist of the 21st Century |
| C7 | 3:00-5:50pm | LB 172L 005 | Chemistry 2 Lab |
| C7 | 7:00-9:50pm | LB 172L 006, 018 | Chemistry 2 Lab |

Classes Participating

| Room | Specific Time | Class | Title |
|-------------------------------------|---------------|-------------------------------|---|
| Both Lounges | | | |
| Tuesday Poster Presentations | | | |
| | 10:20-12:10pm | LB 492 | DNA Sequencing |
| | 10:20-11:40am | LB 144 | 25 presentations |
| | 2:30-4:00pm | LB 145 | Molecular Biology Research |
| | 3:00-5:50pm | LB 492 | Sociological Research in a Hospital Setting |
| | 6:00-8:00pm | MSUFCU General Poster Session | |

Wednesday Oral Presentations

| | | | |
|-----|-------------|------------------|-----------------------|
| C7 | 3:00-5:50pm | LB 172L 009, 019 | Chemistry 2 Lab |
| W40 | 4:10-6:00pm | LB 492 | Evolutionary Medicine |
| C7 | 7:00-9:50pm | LB 172L 010 | Chemistry 2 Lab |

Thursday Oral Presentations

| | | | |
|-----|---------------|------------------|-----------------|
| C7 | 8:00-10:50am | LB 172L 011, 021 | Chemistry 2 Lab |
| W40 | 10:20-12:10pm | LB 492 | DNA Sequencing |
| C7 | 11:30a-2:20pm | LB 172L 012, 022 | Chemistry 2 Lab |
| C7 | 3:00-5:50pm | LB 172L 013 | Chemistry 2 Lab |
| C7 | 7:00-9:50pm | LB 172L 014, 024 | Chemistry 2 Lab |

| | | | |
|--------------------------------------|---------|---------|-----------------------------------|
| East Lounge | | | |
| Thursday Poster Presentations | | | |
| | Evening | BS 191H | Honors Molecular Biology Research |

Monday Oral Presentations

| Room | Specific Time | Title | Presenter(s) (Class) |
|--------------|------------------------|--|---|
| C7 | 11:30-2pm | | LB 172L 007 |
| | | 1 Vitamin Lab with Gatorade and Liquid Vitamin | Enxhi Lalo, Ben Wurst, Evan Tazzia - |
| | | 2 Synthesis Lab + Coordination Compounds | Mercedes Barends, Ryan Matthews |
| | | 3 Further applications of ferrofluids | Sam Smyk, Matt McBride, Collin Stickel - |
| | | 4 Chemistry + Energy | Marilyn Werner, Elizabeth Lyons - |
| | | 5 Mechanisms, Drugs, and Intermediates | Megan Wudkewych, Kora Pernia - |
| C-103 | 10:30am-12:20pm | Humans and the Environment | LB 335 |
| | | Multiple presentations; TBD | |
| C7 | 3:00-5:50 | | LB 172L 001 |
| | | 1 Cation Exchange in Soils | Jill Solomon, Katheryne Johnston, and Lucy Schroeder |
| | | 2 Comparing Vitamin C Brands | Janelle Logan, Sara Barnett, and Chris Tremblay |
| | | 3 Partition Coefficients Relating to Molecular Biology | Nate Kauffman, Joe Hostnik, and Kristian Wilks |
| | | 4 Use of Ferrofluids in Chemistry and the Technological World | Zayd Ahmed and Lisa Lesneski |
| | | 5 Vitamin Use in Pharmaceutical Drugs | Haley Mae Danks, Adram Krause, and Paige Nodus-Rydahl |
| | | 6 Complexities of Vitamins in the Body | Ankit Naik, Elaina Wargo, and Ishi Nalamolu |
| | | 7 Effects of High Altitudes on LEDs | Emmett McConnell, Blake Feighner, and Michael Roosa |
| W40 | 4:10-6:00 | Evolutionary Medicine | LB 492 |
| | 4:10 | An Investigation of Women's Health Issues through the Perspective of the Evolution of Sex | Meranda Fairchild |
| | 4:23 | How the Medicalization of Birth Affects the Evolution of Birth The Evolution of the Human Ability to Outlive Reproductive Capacity | Tori Balogh |
| | 4:36 | Cognitive Enhancers: Societal or Evolutionarily Established | Raven Batshon |
| | 4:49 | Addiction | Andrew Benner |
| | 5:02 | Is our clean society fueling drug abuse? | James Conwell |

Note: Posters associated with this class will be displayed from 4:10 - 6:00 pm; poster presenters will be present from 5:15 - 6:00 pm

Monday Oral Presentations

| Room | Specific Time | Title | Presenter(s) (Class) |
|-----------|-------------------|--|---|
| C7 | 7:00-9:50p | | LB 172L 002, 15 |
| | | 1 Green Tea Lotion | Damon Plasencia, Megan Heil, Paige Larner |
| | | 2 Analysis of Commercial Antacid | Emily Wong, Sanchita Meda, Kevin Xu |
| | | 3 Soap Making | Maddie Mcintosh, Rachel Loken, Khrystyna Myndzar |
| | | 4 Keeping It Clean: Water Filtration via Cation Exchange Resin | Colin McCornack, Cody Paul, David Lawlor, Daniel Vacketta |
| | | 5 River Water vs. Tap Water | Arden Aiello, Josh Essensa, Brandon Praet |
| | | 6 Health Benefits of Vitamin Drinks | Jacqui Kozlowski, Abby Sulesky, Maddie Dutcher |
| | | 7 Applications of Cation Exchange Resin | Maggie Goeman, Micah Swanson, & Vixey Silva |
| | | 8 It's Not Easy Being Green | Tyler Ekizian, Kelli Broessel, & Mehma Singh |
| | | 9 Sialic Acid and Petroleum | Ian Fitzgerald, Neil Patel-Murray, & Matt Oxie |
| | | 10 Ferrofluids in the Medical Field | Alexa Calas, John Haadsma, & Halle Zielinski |

Monday Poster Presentations in East/West Lounges

| Displayed Timeslot | Presenter at Poster | Title | Presenter(s) (Class) | East/West |
|---------------------|----------------------|--|---|-----------|
| 9:00-11:10am | 9:10-10:00am | | <i>LB 172 Presentations</i> | East Only |
| | | A New Look at Green Energy | Josilyn Clark, Tyler Ekizian, Katie Nitschke, Halle Zielinski, Kara Ernst | E(1) |
| | | Oil Dispersants | Meghan Morrow | E(3) |
| | | BPA | Kyle Rau, Olivia Demarest, Haley Mae Danks, Kristen Lidwell, Wonyi Choi | E(5) |
| | | Environmental impacts of hydro fracking | Ludovic Clavette-Lachapelle , Elizabeth Rau, Elizabeth Pepper, Kamren , Olivia La Zar | E(7) |
| | | Factory Farming | Lauren Bedro, Megan Wudkewych, Jessica Porter, Jessie Vanderlaan, Mercedes Barends | E(9) |
| | | Environmental Impact of Cement Kiln Dust | Katheryne Johnston, Jill Solomon, Eliana Small | E(11) |
| | | Greenhouse Effect | Hyunji Shim, Kacey Joseph, Katherine Cooney, Jillian Mutchler | E(13) |
| | | Nuclear Waste Recycling | Adam Krause, Daniel Vacketta, Grace Fish, Collin Roberts | E(15) |
| | | LB172 Environmental Chemistry Proje | Maximilian Volk, Tyler Hendricks, Micheal Elluru, Kunj Goenka, Collin Love | E(17) |
| | | Enviromental Analysis of Methylene Chloride | Harold Hersback, Mitchell Collins, Brian Pickwick | E(19) |
| | | Biofuels | Showlin Salam, Jessica Hynes, Rachel Loken, Sarah Dettloff | E(21) |
| | | The Effect of Phosphate Runoff on the Environment | Erich Umbarger, Madison Cribbs, Mason Rozgowski, Raechel Ogne | E(23) |
| | | Dioxin | Matthew Shields, Jody Kremer, Gaurav Gadgeel | E(25) |
| | 10:20-11:10am | | <i>LB 172 Presentations</i> | |
| | | PVC: Piping in Poison? | Elizabeth Lyons, Lucy Schroeder, Elizabeth Porell | E(2) |
| | | Bioaccumulation and Concentration | Anna Fedoronko, Sam Messer, Emily Gauchi, Kristian Wilks | E(4) |
| | | Bioplastics | Ryan Mathews, Kendall Huizenga, Max Paluska | E(6) |
| | | Pesticides | Kelli Broessel, Noah Thompson, Cali Lowe, Karoline Knedgen | E(8) |
| | | Acid Rain | Alexandria Liska, Julie Pearson, David Liu, Cayla Smigielski, Sanchitha Meda | E(10) |
| | | Environmental Effects of Oil Spills | Haley Simpson, Tasnim Choudhury, Sarah Babijaev | E(12) |
| | | Birth Control and the Environment | Alexa Calas, McKenzie Miller, Batoul Sadek | E(14) |
| | | Advanced Hydrocarbon Recovery by Underground Coal Gasification | Bradley Doherty, Josh Raptis, Emmanuel Ashame | E(16) |

Monday Poster Presentations in East/West Lounges

| Displayed Timeslot | Presenter at Poster | Title | Presenter(s) (Class) | East/West |
|-----------------------|---------------------|---|---|-----------|
| | | Fracking | Emily Muhich, Wanda Sankey, Micheal Roosa, Jill Salloum, Shishu Alamgir | E(18) |
| | | Stratospheric Sulfate Aerosols | Anna Thomas, Madi Kraus, Kelby Walby, Kora Pernia Pernia | E(20) |
| | | Nuclear Energy | Adam Fine, Mike Hinnawi, Mitchell Isaacs, Liam Tiernan | W(1) |
| | | Ethanol as an alternative fuel | Paige Nodus-Rydahl, Angela Shermetato, Ankit Naik, Graham Wellens, Udoka Ndukwe, McKenzie Kosiara | W(3) |
| | | Allelopathy | Robin Miller, Erin DeRubeis, Neil Prakash, Rakesh Reddy | W(5) |
| | | Mercury in our Waters | Henry Apwisch, Liam Clink, RuthAnn Gregory, Karissa Renberg | W(7) |
| | | Neonicotinoids | Camille Makowski, Olga Panagos, Allison Fly | W(9) |
| | | Cadmium: The Effects of Battery Acid on the Environment | Alex Croff, Kathryn Buckbeek, Maddie McIntosh, Arth Patel, Vraj Tripathi | W(11) |
| | | The Hazards of Cyanide in the Environment | Steffen Mammen, Daniel MacAskill, Nathan Bagnall | W(13) |
| | | Ocean Acidification | Parul Gupta , Kaylee Ruthig , Jane Sirigiri, Johanna Becker | W(15) |
| | | Solar Power | Marilyn Werner, Ashleigh Engle, Riley Keehn, Sydney Whitmore | W(17) |
| 12:40pm-2:40pm | 12:40-1:30 | | <i>LB 172 Presentations</i> | |
| | | Oil Spills | Emily Bailey, Megan Bolger, Sara Simonte, Matthew Oxie | E(1) |
| | | Blue: How Do We Replicate Natures Most Fascinating Color? | Anika Sasinski, Mehma Singh, Abby Shotwell, Hannah Weatherford, Emma Freeland, Morgan Davis | E(3) |
| | | Mercury | Emily Emerick, Madison Young, Daniel Nguyen-Tran, Megan Peterson, Sabrina Mckenzie | E(5) |
| | | The Impact of Atrazine | Cody Paul, Mike Gieselman, Mike Schauer, Bri Ferman, Jamie Hanson, Jake Vieau | E(7) |
| | | Anaerobic Digester | Isabelle Correia, Kim O'Connell, Gabi O'Neil-Martin, Isabella Napela | E(9) |
| | | The Ozone Hole | Allison Shinouskis, Ben Sims, Chris Amundsen, Maddy Valentine, Katie Kerr, Arielle Farhi | E(11) |
| | | Nuclear Fallout | Ariel Amman, Katie Demming , Justin Ingram, Rohan Garg , Chris Tremblay, Kevin Turnbull | E(13) |
| | | Cadmium: Helping or Hurting? | Brittany Ladson, Sidney Thigpen, Amanda Washnock, Claudia Fuderer, Ishi Nalamolu | E(15) |
| | | Environmental Chemistry of Bioplastics | Sara Barnett, Taylor Dressel, Delaney McPhail, Jacqui Kozlowski | E(17) |

Monday Poster Presentations in East/West Lounges

| Displayed Timeslot | Presenter at Poster | Title | Presenter(s) (Class) | East/West |
|--------------------|---------------------|---|---|-----------|
| | | The Removal of Oil from Water | Rachael Weisbrod, Brett Dziedzic, Dajon Hyatt, Kaleb Howard, John Janelle Logan, Youa Yang, Maura Easton, Maddie Meade, | E(19) |
| | | Atrazine | Brandon Praet, Lisa Drew | E(21) |
| | | Dioxins | Jennifer Pevarnek, Carolyn Bussineau, Shayla McMahon, Julia Dupke, Jalpa Patel | E(23) |
| | | Light Emitting Diodes (LED's) a "green" alternative | Sarah VanWynen, Shayda Soraya, Isabella Colasanti, Saba Wagaw, Macee Tadgerson, Katy McCarthy | W(1) |
| | | CATA Bus Emissions | Stephanie Hosko | W(3) |
| | | Endosulfan, it is in our food | Marco Lin, Brooke Sommerfeld , Maddie Dutcher, Collin Richtarcik , Ryan McAnelly, Holli Greenacre | W(5) |
| | | Methane production from cows | Parker Cuthbert, Kevin Dagenais, Vixey Silva, Polo Kostecki, Yaman Dalati, Khrystyna Myndzar | W(7) |
| | | Nuclear Power | Sanjeet Subramanian, Jeff Nader, Sean Pieper, Alex Martin, Belle Sliva | W(9) |
| | | Methane Emissions | Emma Kennedy, Sheel Vaniawala, Trevor Larson, Sarah Provencher, Elaina Wargo | W(11) |
| | | The effects of Oil Spills on the River Ecosystem | Chineze Mbanugo, Samuel Tibebe, Emmett McConnell , Elyse Goran, Paige Lerner | W(13) |
| | | Increase in the CO2 levels and its effects on marine life and its inhabitants | Karam Gagi, Alexis Parenti, Anastasia Williams, Hannah Guider, Nate Kauffman | W(15) |
| | | Converting Plastic to Energy | Kathrine Ruhl, Blake Feighner, Greg Gudziak, Lucas Tobin, Eli Wass | W(17) |
| | | CFCs | Benjamin Arney, Lauren Blais, Owen McMahon, Josh Essersa, Tim Faass | W(19) |
| | | Effects of Nuclear Technology on the Environment | Hemanth Panditi, Madi Whyte, Katie Brown, Lonsani Kabba, Nina Li | W(21) |

Monday Poster Presentations in East/West Lounges

| Displayed Timeslot | Presenter at Poster | Title | Presenter(s) (Class) | East/West |
|--------------------|---------------------|---|---|-----------|
| 12:40pm-2:40pm | 1:50-2:40pm | | <i>LB 171 Presentations</i> | |
| | | Is Isotretinoin worth clear skin? | Rebecca Wildt, Tiffany Nguyen , Justin Hudson | E(2) |
| | | Ammonium Nitrate: For Food or For Fighting? | Alysha Machuta, Spencer Kitchen , James Jurcak | E(4) |
| | | Double Edge Chemical DDT | Courtney Simpson, Ariana Hernandez , Jordan Stern, Rachael Rocktoff | E(6) |
| | | Double Edged Chemical: Nicotine | Sean Egelston, Noah Singman, Madelyn Karoub, Pilar Anderson | E(8) |
| | | Road Salts | Brandie Windel, Saige Tomczak , Hailey Cockerill | E(10) |
| | | The Uses and History of Silicon | Chase Strickland, Gabriel Ramirez, Klea Doko, Ben Luttenin | E(12) |
| | | Cisplatin | Marissa Lubarski, Madison Vens, Amanda Hardwick, Zoe Russell | E(14) |
| | | Capsaicin | Sarah Maslauski, Jill Lubinger, Cheyenne Calderon, Alexandra Spilson, Caroline Kane | E(16) |
| | | Dinitrophenol | Diontae Matthews, Habeeb Salimon | E(18) |
| | | Prozac | Michaela Carter, Kristen Kaled, Devon McCoy | E(20) |

Monday Poster Presentations in East/West Lounges

| Displayed Timeslot | Presenter at Poster | Title | Presenter(s) (Class) | East/West |
|--------------------|---------------------|------------------------------------|--|-----------|
| 3:00-5:00 | 3:00-3:50pm | | <i>LB 172 Presentations</i> | |
| | | Here Comes the Sun | Sabrina Fowler, Christian Huber, Jordan Richardson, John Haadsma, Jake Vinton | E(1) |
| | | Biodegradable plastics | Chelsea Zielinski, Connor Crombez, Kenzie Hansen, Kaysie Hook | E(3) |
| | | DDT and the Environment | Joe Cywinski, Samantha Smyk, azza kineish, Crystal Lewis, Stephen Ruemenapp, Leah Pilarski | E(5) |
| | | Nuclear Power | Melody Marzjarani , Kate Kretzschmer, Chloé Bova , Ian Fitzgerald , Morgan Martin | E(7) |
| | | Nuclear Power | Damon Plasencia, Elizabeth McCormick, Curtis Eberline, Sydney Miller, Chloe Page, Matt McBride | E(9) |
| | | Photochemical Smog | Taryn Withers, David Lawlor, Sharod Williams, Grant Vinson, Margaret Goeman | E(11) |
| | | The Nitrogen Cycle in Oceans | Brenna Kizer, Alexis Hennessy, Angela Ash, Zac Guthrie | E(13) |
| | | Agent Orange | Hannah Yacoub, Magie Williams, Aj Howaniec, Arden Aiello, Lydia Ross, Colin Stickel | E(15) |
| | | Biobutanol | Alec Maddalena, Mannar Dalal, Max Jueckstock, Dhatri Nandyala, | E(17) |
| | | Acid Rain | John Italiano, Drew Vigés, Stacey Hannula | E(19) |
| | | Hydrogen Fuel Cells | Ashley Garvin, Damini Patel, Lilly Boufakhreddine, Carissa , Megan Heil | E(21) |
| | | Environmental Effects of Cadmium | Abby Sulesky, Kayla McIntyre, Daltan White, Emily Wong, Kevin Xu | E(23) |
| | | Cadmium | Andrea Luna Romero, Dhara Patel, Hinal Patel, Nikki Ghazimorad, Ian Woodburn | E(25) |
| | | Coral Reef Pollution | Shwan Al-Howrami, Julianna Hanna, Alissa Mossbarger, Devin Lake, Caylor Sims, Courtney Kelterborn | W(1) |
| | | What the Frack? | Natalie Whise, Amit Talukder, Donvee Burks, Kody Alexandersen | W(3) |
| | | PCBs | Kimberly Forbush, Meghan Shelton , Marina Goulas, Nick Murphy | W(5) |
| | | Pesticides Project | Christopher Quashnie, David Butts, Lauren Jarzembowski, Mitch Katkic, Colin Brannagan, Abdol Karmach | W(7) |
| | | Nuclear Energy and the Environment | Evan Barfuss, Maya Denslow, Evan Tazzia, Kyle Kirchmeier, | W(9) |
| | | Agent Orange | Hanna Martinez, Audrey St Germain Kamie Powell, Emily Spoeri, Billal Hammoud, Alex Kokesh | W(11) |

Monday Poster Presentations in East/West Lounges

| Displayed Timeslot | Presenter at Poster | Title | Presenter(s) (Class) | East/West |
|--------------------|---------------------|--|---|-----------|
| | | Nitrates | Jacob Wright, Josh Paavola, Spencer Miller, Nathan Rutila, Norman Beauchamp | W(13) |
| | | Asbestos | Snehkumar Patel, Joey Whall, Shais Raza, Dilan Varghese, Michael Kuhn | W(15) |
| | | Cadmium's Effect on the Environment | Benjamin Wurst, Dan | W(17) |
| | | The Effects of Algae Blooms on the Environment | Grace Nagle, Mariam Gesler, Andrew Sagante, Danielle Hawkins, Tyler Weiss | W(19) |
| | | Mercury Pollution | Josh Gira, Bich-Tam Nguyen, Sydney Gwinn, Harmanjot Kaur, Meghan Latouf | W(21) |
| | | Triclosan | Christian Burks, Travis McNally, Robert Miholland, Neil Patel-Murray | W(2) |

| 4:00-6:00pm | 5:15-6:00pm | LB 492 - Evolutionary Medicine | | |
|--|-------------|---|----------------|------|
| | | The Evolutionary Advantage of Sleep | Alex Armada | W(2) |
| | | A Disease Without a Cure: Crohn's Disease From an Evolutionary Medicine Perspective | Justin Jabara | W(4) |
| | | The role of epigenetics in autism | Arjun Kalra | W(6) |
| | | Headaches, Migraines, and Epilepsy: An Evolutionary Standpoint | Lauren Mamaril | W(8) |
| Note: Oral presentations associated with this class will occur from 4:10 - 5:15 pm in W40. | | | | |

Monday Poster Presentations in East/West Lounges

| Displayed Timeslot | Presenter at Poster | Title | Presenter(s) (Class) | East/West |
|--------------------|---------------------|--|---|-----------|
| Evening 6-8pm | | |  | |
| | | | MSUFCU Poster Session | |
| | | Association of Blood Fatty Acids and Growth in Tanzanian Children 2-6 Years of Age | Samantha Hahn, Theresia Jumbe, William Harris, Joyce Kinabo, Jenifer Fenton | E(1) |
| | | To Sting Or Not To Sting? Analysis Of Cross-Species And Cross-Sex Stinging Defensive Behavior In Scorpions | Dylan Miller | E(2) |
| | | Using Community Weighted Means To Understand Compositional Changes Over Time In Restored Southwest Michigan Prairies | Madeleine Cleary, Chad Zirbel | E(3) |
| | | Developing a Quantitative Western Blot Procedure for Chromatin-Associated Proteins | Tyler Miksanek | E(4) |
| | | Anesthetics | Nicholas Murphy | E(5) |
| | | Antiganglioside IgG Autoantibodies In Peripheral Nerves Of C. jejuni Infected Mice | Christopher Bejcek, Jean Brudvig, Ankit Malik, Julia Bell, Barbie Gadsden , Linda Mansfield | E(6) |
| | | Innovation and Controversy of Biofuels | Elena Michel, Rebecca Tauscher , Joey Riedy | E(7) |
| | | Antibiotic and Immune System Persistence in Group B Streptococcus | Clare Laut | E(8) |
| | | Group B Streptococcus Capsular Polysaccharide Distribution In Nigeria | Jessica Plemmons | E(9) |
| | | Socially Responsible Innovation in the United States Health Care System | Brian Batayeh | E(10) |
| | | The Apprehensive Student: How Communication Impacts Subject Disdain | Kenneth Plackowski, Sean Fazio, Caitlin Bouchey | E(11) |

Tuesday Oral Presentations

| Room | Specific Time | Title | Presenter(s) (Class) |
|-------------|----------------------|---|--|
| C7 | 8:00-10:50a | | LB 172L 003 |
| | 1 | Real World Applications of Ferrofluids | Josh Gira, Vraj Tripathi |
| | 2 | Ideal Gasses Revisited | Emily Muhich, Kim Forbush |
| | 3 | LED Science and Efficiency | Sarah Vanwynen, Grace Nagle, Jake Vinton |
| | 4 | Ferrofluids | Nick, Kara, Amanda |
| | 5 | Vitamin Lab | Shwan, Erich, Jake |
| | 6 | New Lab | Angela, Alexis, Mitchell |
| | 7 | Red Cedar | Jesse, James, Connor |
| | 8 | Biodiesel | Matt, Kacey, Connor |
| W25E | 10:20-12:10pm | DNA Sequencing | LB 492 |
| | 10:20 | No Guts, No Glory: How Your Gut Microbiome Impacts Your Daily Life | Kevin Baker |
| | 10:33 | One Size Does Not Fit All: Cancer Treatment is Personalized | Ali Fadel |
| | 10:46 | Genomics of Mental Diseases | Jordan Gebhardt |
| | 10:59 | The Application of Advanced Genetic Technologies to Understand Your DNA: Are You Genetically Predisposed for Major Depression and other Psychological Diseases? | Eden Erxleben |

Note: Posters associated with this class will be displayed from 10:20 am - 12:10 pm; poster presenters will be present from 11:10 - 12:10 pm

Tuesday Oral Presentations

| Room | Specific Time | Title | Presenter(s) (Class) |
|--------------|----------------------|---|--|
| C-102 | 10:20-12:10pm | | LB 331 |
| | | Reproductive Technology | |
| | | Reproductive Technology | |
| C7 | 11:30a-2:20p | | LB 172L 004 |
| | | 1 Are There Vitamins in Vitamin Water? | Showlin Salam, Maya Denso |
| | | 2 (Iron)ic Medical Practices | Melody Marzjarani, Ellen Balanecki, Stephanie Hosko |
| | | 3 Shining the Light on LEDS | Wanda Sankey, Elizabeth Porell, Julia Dupke |
| | | 4 Women's Daily Vs. Men's Daily Vitamins | Shayla McMahan, Katy McCarthy, Dhara Patel |
| | | 5 Cation Exchange Capacity in Varying Climates | Katie Brown, Maura Easton, Christian Burks |
| | | 6 LED Lights | Nikki Ghazimorad, Josh Raptis |
| | | 7 If Great Turns Weak | Maddie Meade, Taylor Horton |
| C-106 | 12:40-2:30pm | | LB 145 |
| | | Successful Genotypic Cloning via PCR of the SOD1 Gene Using S9 Homo Sapien Cells for ALS Research | George Hyde, David Rauch, Jennifer Shields, Zachary Sundin |
| | | Isolation of HTT gene via PCR assay and gel electrophoresis | Linda Chen, Kealan Millies-Lucke, Hayden Stoub, Mellissa Ungkuldee |
| | | Trials of Amplification of the HEXA gene in human and turdus migratorius DNA determined by PCR and Gel Electrophoresis | Xavier Brandon, Mckenzie Farthing, Rachel Rick |
| | | Identification of Wild-Type PSEN1 Gene in Human IB3 Cell Lines and Predicted Avian Homologs Through Exon Specific PCR Amplification | Thomas Coon, Angela Ferrara, Samantha Leacher, Alana Omara |
| | | Amplification of CFTR Gene Exon 20 in Homo sapien through DNA purification, PCR, Gel Electrophoresis, and study of homologs in Mus musculus and Corvus brachyrhynchos | Jeffrey Bond, Marie-Louise Henry, Alex Strohm |

Tuesday Oral Presentations

| Room | Specific Time | Title | Presenter(s) (Class) |
|--------------|---------------------|---|---|
| C-102 | 12:40-2:30pm | LB 133 | |
| | | Most Influential Scientist of the 21st Century | |
| | | Most Influential Scientist of the 21st Century | |
| | | Most Influential Scientist of the 21st Century | |
| C7 | 3:00-5:50p | LB 172L 005, 017 | |
| | 1 | Manufacturing Soaps | Claudia Fuderer, Shayda Soraya, Andrew Vigas |
| | 2 | LED efficiency versus CFL efficiency | Jessica Hynes, Ruthann Gregory |
| | 3 | Biodiesel efficiency | Isabella Colasanti, Taryn Withers, Elizabeth McCormick Katherine Cooney, Mitchell Isaacs, Georgina Pike, |
| | 4 | Ferrofluids in Technology | Daniel Nguyen-Tran |
| | 5 | Vitamins on the Market | Madi Kraus, Hannah Yacoub, Rakesh Reddy |
| | 6 | Environmental Aspect of Partition Coefficient: Oil Spills | Miah Turke, Gaurav Gadgeel, Kaysie Hook |
| | 7 | Ferrofluids in Space: And Other Applications | Madison Young, Demo Thompson, Leah Pilarski |
| | 8 | Go Green! Go Chemistry! | AJ Howaniec, Kim Oconnell, Nina Li |
| | 9 | Worldly Applications of Partitian Coefficients | Alexandria Liska, Andrea Luna-Romero, Brett Dziedzic |
| | 10 | Verifying Vexing Vitamins | Kristen Lidwell, Jake Beauchamp, Steffen Mammen |
| | 11 | Exploration of the Red Cedar Watershed | Damini Patel, Sarah Provencher, Liam Tiernan |
| | 12 | Farming for Ions | Rachael Weisbrod, Neil Prakash |
| | 13 | Soaper-Duper | Josh Paavola, David Butts, Caylor Sims |

Tuesday Oral Presentations

| Room | Specific Time | Title | Presenter(s) (Class) |
|-----------|----------------|--|--|
| C7 | 7-9:50p | | LB 172L 006, 018 |
| | | 1 The Effect of Surfactants on Ferrofluids | Lillian Boufakhreddine, Tyler Weiss, Brian Pickwick |
| | | 2 Applications of Inorganic Synthesis | Emma Freeland, Harold Hersback, Ammanuel Ashame |
| | | 3 Superconductors "As Cool as Absolute Zero" | Kamren Huizenga, Noah Thompson, Greg Gudziak |
| | | 4 Soil Squad: Cation Exchange in Soil | Brooke Sommerfeld, Trevor Larson, Hannah Weatherford |
| | | 5 Rejections of Vitamins by the FDA | Kunj Goenka, Stephen Ruemenapp, Dhatri Nandyala |
| | | 6 Titration and Absorbance | Gabi Oneil-Martin, Bella Nalepa |
| | | 7 On the Banks of the Red Cedar | Amit Talukder, Abby Shotwell, Iszy Correia, Lexi Parenti |
| | | 8 Fun with Soap and Biodiesel | Marco Lin, Bri Ferman, Danielle Hawkins, Alajjah Bashi |
| | | 9 Partition Coefficient of Common Chemicals | Jimmy Stathakios, Sonia Kaur, Jamie Hanson |

Tuesday Poster Presentations

| General Timeslot | Presenter with Poster | Title | Presenter(s) | Location |
|---|-----------------------|---|--------------------------------------|-------------------------|
| 10:20-12:20pm | 11:15-12:20pm | DNA Sequencing | | LB 492 West Only |
| | | Applications of E.coli in Cancer Treatments | Erik Blackowicz | W(1) |
| | | Living With Leber's | Mike Ganzhorn | W(3) |
| | | Conquerers of Cancer: the Naked Mole Rat | Dalton George | W(5) |
| | | Can DNA sequencing Cure Cancer | Nick Mazur | W(7) |
| | | The Perfect Crime? Fabricating DNA Evidence | Emily Pawlowski | W(9) |
| | | The genetics behind being successful in college | Nicole Rando | W(11) |
| | | De-Extinction: why we should bring species back from the dead | Jake Schaub | W(13) |
| Note: Oral presentations from this calls will occur from 10:20 to 11:20 in W40. | | | | |
| 10:20-11:40am | 10:20-11:40am | | | LB 144 East Only |
| | | 25 poster presentations | Organizmal Biology Research Projects | E(1) |
| | | | | through |
| | | | | E(25) |


Tuesday Poster Presentations

| General Timeslot | Presenter with Poster | Title | Presenter(s) | Location East/ West |
|------------------|-----------------------|---|---|-------------------------|
| 2:30-4:00pm | 2:30-4:00pm | | | LB 145 East Only |
| | | Increased transmission of antibiotic resistant bacteria based on improper handwashing technique | Katy McCarthy, Emily Joseph , Alex McLaren, Christian Burks | E(1) |
| | | Bacteria and Antibiotic Resistance in Raw and Improperly Stored Pasteurized Milk | Jordan Gardiner, Sara Barnett, Blake Feighner, Josh Raptis | E(2) |
| | | Characterizing Antibiotic Resistant Bacteria in Wild Caught versus Farm Raised Salmon | Lauren Isopi, Kyle Pyeatt, Van Tran, Sydney Berger | E(3) |
| | | Which Came First? The chicken, the egg, or bacteria? | Brittany Losey, Michael Herman, Chelsea Zielinski, Jarryd Calhoun | E(4) |
| | | Prevalence of Bacteria and Antibiotic Resistance in Organic and Inorganic Spinach | Kaylee Confer, Sydney Davis, Terra Lomber, Kevin Yi | E(5) |
| | | Characterization of Antibiotic Resistant Bacteria from Cross-Contaminated Food Surfaces | Kelly Jones, Emily Widzinski, John Staeb, Zak Timmerman | E(6) |
| | | Prevalence of Antibiotic Resistant Bacteria in Farmed versus Wild-caught Salmo Salar | Danielle Hebert, Jake Markovicz, Jake Paciorek, Kenzie Hansen | E(7) |
| | | Sansu vs Meijer Sushi | Belle Sliva, Jaclyn Kyko, Praheetha Muthuvinayagam , Kate Bailey | E(8) |
| | | A Comparison of the Antibiotic Resistant Bacteria Found In Non organic Versus Organic Poultry | Kathryn Buckbee, Pamela Perez, Arathi Arumanla , Beelal Fakhouri | E(9) |
| | | Bacteria Prevalence and Antibiotic Resistance in Regular, Greek, and Probiotic Yogurt | Luke Schichtel , Casey Turney, Kaitlyn Richter, Cassidy Hines | E(10) |
| | | The Effect of Time on the Amount of Antibiotic Resistant Bacteria found in Bananas and the Characterization of the Bact | Sarah VanWynen, Sydnee Wargo, Cody Parent, Sharod Williams | E(11) |
| | | Antibiotic Resistant Bacteria in Grocery Store and Salad Bar Greens | Melanie Mermiges, Nick Nicoletti, Mehar Brar, Ariel Jordan | E(12) |
| | | A Comparison of Antibiotic Resistant Bacteria Between Organic and Non-Organic Chicken Breasts | Benjamin Tacia, Joseph Leider, Keenan Scribner, Traverse Cottrell | E(13) |
| | | Antibiotic resistance and density of bacteria in Solanum lypopersicum | Nicole Springstead, Kendra Wekenman, John Kaschalk , Jake Hare | E(14) |
| | | Antibiotic Resistant Bacteria Found in Chicken Nuggets vs. Vegetarian Nuggets | Jamie Kracko, Jake Fielder, Jake Huneau, Lisa Drew | E(15) |
| | | Is Your Method of Thawing Raw Meat Increasing Bacterial Contamination? | Amanda Kucharzyk, Victoria Marinas, Kali Young, Alex Wu | E(16) |

Tuesday Poster Presentations

| General Timeslot | Presenter with Poster | Title | Presenter(s) | Location East/West |
|------------------|-----------------------|---|--|-------------------------|
| | | Antibiotic Resistant Bacteria in Dipping Food Environments | Dillon Jarbo, Julia Blumenshine, Katie Horn, Kenzie Mogridge | E(17) |
| | | Shocking Sushi Selections | Justin Grenn, Lydia Kurin, Gursimran Singh, Kylie Ayers | E(18) |
| | | Density and Antibiotic Resistance of Bacteria Found on Carrots | Kayla Rolling, Julianna DiMichele, Sage Stuart, Brandon Dembs | E(19) |
| | | Comparison and Characterization of Antibiotic Resistant Bacteria from Organic and Conventional Yogurt | Karissa Gorr, Faith Trainor, Nick Laubach, Jacob Hutchinson | E(20) |
| | | Bacteria concentrations and antibiotic resistance in unripe banana peels vs. overripe banana peels | Dalia Khader, Caity Wysocki, Ben Robinson, Rachel DeShambo | E(21) |
| | | Comparison and Characterization of Antibiotic Resistant Bacterial Densities Found on Fresh and Expired Meat | Brian Powers, Morgan Kiryakoza, Nolan Jahn, Brittany Stecker | E(22) |
| 3:00-4:50 | 3:00-4:50pm | Sociological Research in a Hospital Setting | | LB 492 East Only |
| | | Humor in the ER | Evan Cassar, Paul Leveille, Jenna Carter, Michelle Walls | E(23) |
| | | An Analysis of Patient Complaints at Sparrow Hospital | Brynn Peterson, Kosta Vergos, Megan Penzkofer | E(24) |
| | | Institutional Policies and Compliance in the Wound Clinic | Olivia Giacona, Mike Sterner, Allie Lamie, Lekha Babu | E(25) |
| | | The Orthopedic Patient Experience at Sparrow | Shealin Easton, Matt Lipphardt, Danielle Goodsell, Ojie Alofoje, Philip Chacko | E(26) |

Tuesday Poster Presentations

| General Timeslot | Presenter with Poster | Title | Presenter(s) | Location East/ West |
|------------------------|-----------------------|--|---|------------------------|
| Evening 6:00-8:00pm | | |  MSUFCU Poster Session East Only | |
| | | The Neuroscience of Reading: an fMRI Study of Natural Reading | Lana Grasser | E(1) |
| | | Structural Chemistry of Copper and Cadmium Coordination Polymers Containing 3-Pyridylmethylnicotinamide | Maria Torres Salgado, Robert LaDuca | E(2) |
| | | Repurposing an Aminomutase from Taxus Plants | Olivia Goethe, Dilini Ratnayake, Kevin Walker | E(3) |
| | | A Historical Analysis Of Women In Physics: Where Are They? | Aubrey Chartier | E(4) |
| | | Functional characterization of a lipid translocator in Chlamydomonas reinhardtii | Elena Michel | E(5) |
| | | Quantifying a Reduction in Prominence of Antivaccination Websites from 2002-2015 | Allison Fedewa | E(6) |
| | | and perceptions of vaccines and where they get their | Jenna Mellerowicz | E(7) |
| | | Patterns of Teaching in Introductory Science Courses | Keenan Noyes | E(8) |
| | | Comparing Acylsucrose Acyltransferase-2 (ASAT2) Activity in Wild Tomato Species | Abigail Miller, Pengxiang Fan, Robert Last | E(9) |
| | | Understanding the role of the Retinoblastoma-like family protein in regulation of the Insulin Receptor in Drosophila using CRISPR-Cas9 mutagenesis | Andrew Ingersoll | E(10) |
| | | Mapping Characters from the 28S Ribosomal RNA Gene informs Rhagoletis Phylogeny | Morgan Potter, Sydney Barosko | E(11) |

Wednesday Oral Presentations

| Room | Class order | Title | Presenter(s) |
|------------|--------------------|--|--|
| C7 | 11:30-2:20p | | LB 172L 008 |
| | 1 | Fantastic Fun with Ferrofluids | Colin Brannagan, Tristan Rojeck, Meghan Latouf |
| | 2 | The Nutritional Values of Vitamins | John Italiano, Stacey Hannula, Liv Lazar |
| | 3 | Partition Coefficients in Modern Medicine | Kathryn Buckbee, Sarah Babijaev, Mason Rozgowski |
| | 4 | Chemistry of the Red Cedar and Other Water Sources | Johanna Becker, Raechel Ogne, Anna Fedoronko |
| | 5 | Spectroscopy in Science | Dilan Varghese, Kamie Powell, Bich-Tam Nguyen |
| C7 | 3-5:50p | | LB 172L 009, 019 |
| | 1 | Vitamin Lab | Owen, Lauren, Sara, Parker |
| | 2 | Gas Laws | John, Erin, Ashleigh |
| | 3 | Ferrofluids | Collin R, Kendall, Delaney |
| | 4 | Ferrofluids | Collin L, Mace, Carolyn |
| | 5 | Partition Coefficient | Anika, Ariel, Ben |
| | 6 | Vitamin Lab | Mike, Jennifer, Jessica |
| W40 | 4:10-6:00 | Evolutionary Medicine | LB 492 |
| | | The Evolutionary Advantages of Variations in Skin | |
| | 4:10 | Color Across the World | Angela Amaniampong |
| | | The role of environment in mental disorders such as | |
| | 4:23 | anxiety and depression | Brianna Marzolf |
| | 4:36 | Evolutionary Medicine: A Physician's Tool | Ryan Owen |
| | 4:49 | Anxiety in Modern Society | George Park |
| | 5:02 | The Evolution of Sleep | Jay Patel |
| | 5:15 | Bigger on the Inside: The Evolution of Consciousness | Humphrey Peterson-Jones |
| | | Modern Humans and Their Closest Relatives Genetic | |
| | 5:28 | Gap: Not As Far As One Might Think | Collin Stapleton-Reinhold |

C7 **7-9:50p**

LB 172L 010, 020

| | | |
|----|--|---|
| 1 | Birth Control in the Environment | Shias Raza, Batoul Sadek, Sydney Gwinn |
| 2 | The distribution of medicine in the body | Azza Kineish, Parul Gupta, Sydney Miller |
| 3 | simvastatin development and its application in the medical world | Ludovic Clavette-Lachapelle, Karam Gagi, Omar Abbas |
| 4 | LED metal composition | Chloe Bova, Spencer Miller, Brenna Kizer |
| 5 | From Microalgae to biodiesel production | Sharod Williams, Sydney Whittmore, Tyler Hendricks |
| 6 | Partition Coefficient of Alcohol in the Body - the Science Behind Saturday Night | Madison Valentine, Julianna Hanna, Maria Sliva |
| 7 | Mixing Ferrofluids and Superconductors - The Super Fluids | Magie Williams, Julie Pearson, Tasnim Choudhury |
| 8 | What's liquid, spiky, and magnetic all over? | Sabrina Fowler, Christian Huber, Jordan Richardson, & Chelsea Zielinski |
| 9 | Ferrofluid and Art | Kevin Dagenais, Michael Elluru, Dajon Hyatt |
| 10 | The ABC's of Vitamin Partitioning | Mannar Dalal, Anthony Rotondo, Olivia Favor |
| 11 | The Partition Coefficient and You | Mike Hinnawi, Lizzie Peppers, Saba Wagaw, Megan Peterson |

Thursday Oral Presentations

| Room | Class order | Title | Presenter(s) |
|-------------|----------------------|--|--|
| C7 | 8:00-10:50a | | LB 172L 011, 021 |
| | 1 | Vitamin Lab | Courtney Kelterborn, Grace Fish, Alissa Mossbarger |
| | 2 | Ferrofluids Lab | Taylor Dressel, Arielle Farhi |
| | 3 | Capstone Lab | Nathan Bagnall, Madison Whyte, Cayla Smigielski |
| | 4 | LED Lab | Julia Hage, Eli Wasserman |
| | 5 | Ferrofluids: The chemistry behind them and where they can be found in everyday "stuff" | Riley Keehn, Lonsani Kabba, Karissa Renberg |
| | 6 | Titration: An Important Quantitative Analysis Technique | Alec Maddalena, Anna Thomas, Emily Bailey |
| | 7 | Ferrofluids in Chemistry | Elyse Goran, Udoka Ndukwe, Devin Lake |
| | 8 | The Ideal Gas Law in real life | Olivia Demarest, Hemanth Panditi, Hinal Patel |
| W25E | 10:20-12:10pm | DNA Sequencing | LB 492 |
| | 10:20 | Designer Babies | Zack Johnson |
| | 10:33 | Genetic Engineering with Respect to Athletic Performance | Richard Lastomirsky |
| | 10:46 | The Genetics of Autism: Unraveling the mystery of an elusive neurodevelopmental disorder | Frank Loomis |
| | 10:59 | Tackling Obesity | Lokesh Pagadala |
| | 11:12 | Advances in Genome Sequencing as Applied to Plant Biotechnology | Erik Velkme |
| C7 | 11:30-2:20p | | LB 172L 012, 022 |
| | 1 | Vitamin Cation Exchange | Natalie Whise, Michael Schauer, Shishu Alamgir |
| | 2 | The Truth Behind Octane | Chris Quashnie, Jill Salloum, Donvee Burks |
| | 3 | Drugs: Partition Coefficient | Audrey St. Germain, Kayla Mcintyre, Sneh Patel |
| | 4 | Alternative Artisan Soap | Ashley Garvin, Liz Rau, Zac Guthrie |
| | 5 | Synthetic versus Natural Cation Exchange | Peter Kristl, Carissa Blackledge, Alex Croff |
| | 6 | Purifying Drugs with Andy and Lauren | Andy Sagante, Lauren Jarzembowski |
| | 7 | Ferrofluids | Sydney, Chloe, Ben |
| | 8 | Vitamin Lab | Callie, Chrissy, Katie |
| | 9 | Ferrofluids | Emily, Yaman |
| | 10 | Biodiesel | Emma, Grant |

Thursday Oral Presentations

| Room | Class order | Title | Presenter(s) |
|-----------|----------------|---|--|
| C7 | 3-5:50p | | LB 172L 013, 023 |
| | 1 | Ferrofluids | Hunter Montrose, Collin Roberts |
| | 2 | More on Ferrofluids | Jeff Nader, AlexMartin, and Kate Kretzschemer |
| | 3 | Experimental Design | Evan Barfuss, Emily Emerick, and Sabrina McKenzie |
| | 4 | More on LEDs | Billal Hammoud, Anastasia Williams, and Kendahl Yamarino |
| | 5 | Ferrofluids and their use in the real world | Karoline Knegden, Crystal Lewis, and Jalpa Patel |
| | 6 | Real world applications of the Vitamin Lab | Sanjeet Subramanian, Chineze Mbanugo, and Eliana Small |
| | 7 | Liquid Magnets | Meghan Morrow, Marina Goulas, and Joseph Whall |
| | 8 | Oseteoporosis and Calcium Vitamins | Katie Deming, Kaylee Ruthig, Abdol Karmach |
| | 9 | Efficiency of Synthesis | Josilyn Clark, Jordan Agnew, Olga Caruso |
| | 10 | Application of ferrofluid in medicine | Hyunji Shim, Camille Makowski, Lauren Blais |
| | 11 | Cation Exchange Using Different Soil Types | Mitch Katkic, Sam Messer, Emily Juzwiak |
| | 12 | Chemical Kinetics in the Human Body | Sean Pieper, Daniel Praet, Nathan Rutila |
| | 13 | Sodium defficiencies | Dominic Thorley, Morgan Martin, Max Paluska |
| C7 | 7-9:50p | | LB 172L 014, 024 |
| | 1 | Chemical Kinetics in Medicine | Emily Spoeri, Morgan Davis, Jillian |
| | 2 | Nanoparticles and Cancer Research | McKenzie Miller, Michael Kuhn, Ian Woodbrun |
| | 3 | Testing the Waters | Lydia Ross, Meghan Shelton, Dante Scott |
| | 4 | Ferrofluid Uses and Applications | Kyle Rau, Sheel, Kevin Turnbull |
| | 5 | Light Emitting Diodes | Hank Apwisch, Kody Alexandersen, Alex Kokesh |
| | 6 | Vitamin Determination Lab | Daltan White, Robert Milholland, Joe Cywinski |
| | 7 | Shells | Jacob Wright, Rohan Garg |
| | 8 | Acid/Base Titration Lab | |
| | 9 | Resin and Soil Chemistry | Amanda Anguiano, Travis McNally, Youa Yang |

Thursday Poster Presentations

| General Timeslot | Presenter with Poster | Title | Presenter(s) | Location East/ West |
|------------------|-----------------------|---|--------------|--------------------------|
| 6:00-8:00pm | 6:00-8:00pm | DNA Sequencing | | BS 191H East Only |
| | | Multiple Honors biology research projects | | |