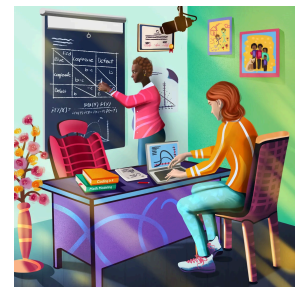
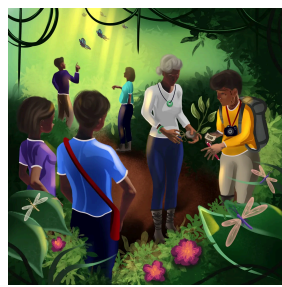


# **HAMLINE SPRING SHOWCASE 2026**

## **Student Research and Creative Inquiry in the Classroom**



**Tuesday, April 28, 2026 - 11:30 AM**  
**Klas Center**

## STUDENT PRESENTERS (with poster numbers)

Abdi, Hanan	51, 53	Caire, Hannah	46
Abdisalam, Riyan	22	Campbell, Jordyn	52
Abdulahi, Khadra	67	Canseco-Voigt, Ethan	3
Abrahamson, Ashlyn	64	Carlson, Savannah	72
Abrahamson, Zach	65	Chan, Cinnia	32, 35
Acosta, Alynna	60	Chang, Sean	68
Aguillon, Radiance	12, 49	Combs, Lexi	19
Ahmed, Bahja	12	Conway, Luke	49
Ahmed, Manaal	53	Curry, Wynter	47
Ali, Aisha	57	DeClue, Corey	32
Allen, Kristen	19	Echeverria, Jess	31
Alomari, Vito	14	Eggleston, Colten	26
Amel, Remy	15	Encinas Ochoa, Kayla	5
Anderson, Blake	57	Erickson, Helena	13
Aragon, Ava	63	Erickson, Henry	41
Arellano, Rigo	34	Erickson, Sky	25
Atakora, Solange	46	Esser-Domnitz, Zoe	49
Athmann, Cal	42	Falkowski, Tristan	59
Barmore, Jacob	44	Farias, Naydelin	49
Barrett, Addyson	26	Fernandez Molina, Joseph	66
Belisle, Maddy	36	Fish, Matthew	33
Benson, Millicent	76	Freer, Kayla	20
Boston, Ana	21	Freese, Audri	23
Boynton, Allison	3	Froloff, Katerina	24
Bradford, Alias	38	Frost, Ashton	65
Bramstedt, Samara	18	Gadea Escobar, Ashley	4
Brown, Alayja	30	Garcia Martinez, Carlos	20
Brown, Malina	5	Garibay, Amaya	15
Broyles, Chris	59	Gebhardt, Brynn	6
Budna, Devin	73	Goggin, Lucas	69
		Gorden, Nalania	16
		Greniuk, Joe	61
		Gries, Julia	50

Halverson, Morgan	73	Larson, Allison	39, 62
Halweg, Emma	28	Lathrop, Carter	27
Hansel, Natasha	23	Lawia, Eve	68
Hansen, Willow	61	Leary, Alvin	5
Hanson, Katie	16	Lee, Metadel	60
Hasani, Aqsa	11	Leith, Denaya	4
Hasani, Hosna	31	Lemon, Hannah	56
Hashmi, Taha	78	Leng, Clinton	24
Heath, Austin	19	Leon, Niko	77
Heil, Lorna	44	Levis, Cal	61
Her, Aimee	43	Llapa, Heidi	12
Hernandez Sanchez, Edith	18	Lohmuller, Annabell	11
Hibbard, Ava	15	Lopata, Ellie	8
Hillmyer, Fred	67	Lopez Serrano, Pricilla	52
Hodson, Owen	1	Loyd, Raziah	3
Hoffman, Grace	17	Ludzack, Valerie	42
Hopp, Ryann	8	Lundeen, Natalynn	25
Htoo, Ler	3	Malone, Noa	69
Ibrahim, Araksan	8, 56	Martin, Averie	29
Intavong, Alan	80	Martinez, Angel	32
Jaspers, Aerial	72	May-Robinson, Tristen	68
Johnson, Kara	37	McKay, Daviney	29
Johnson, Mikenna	63	Medel-Aguilera, Stephanie	50
Jones, Leo	34	Mehta, Annabel	71
Jumani, Zarmeen	69	Mexicano, Dulce	22
Kavalenka, Angelina	41	Miller, Avery	63
Keiffer, Riley	31	Mills, Max	73
Kendle, Sonja	5	Mohamoud, Sundus	54
Klemz, Brooke	29	Molel, Shaadia	54
Knudsvig, Dylan	9	Moore, Asher	82
Kohner, Elanna	41	Morrison, Robert	33
Kurtz, Delaina	75	Muhammad, Aaliyah	48
Ladna, Abdi	30	Munoz, Gabby	72
Lamppa, Emma	47	Myers, Jessica	72
Langeberg, Michael	40	Namie, Leila	22

Narain, Keira	29	Ramstorf, Emma	36
Nealey, Sanaya	24	Raymond, Laurel	9
Nelson, Alex	25	Reisenauer, Tess	3
Nguyen, Christine	14	Rezk, Noura	19
Nhean, Ellie	2	Rheineck, Jack	27
Nitzel, Ezra	32	Richardson, Bella	71
Noriega Tapia, Betsabe	24	Riera Velez, Mike	59
O'hAodha, Rowan	48	Rivera, Manny	71
Olsen, Katie	25	Robinson, Ozzie	6
Omar, Siham	55	Robran, Aliyah	57
Oo, Khin Mar	17	Rodriguez Uranda, Jasmin	2, 21
Osman, Halima	20	Ruiter, Makayla	44
Ovalle, Natasha	39	Russell, Sarah	62
Owens, Magenta	1	Sackgavong, Penie	70
Parcon, Ethan	23	Sanchez, Alan	47
Parsons, Sienna	29	Sanna, Erwin	23, 74
Passe, Connor	18	Satele, Micah	69
Paxton, Alan	81	Savell, Ashley	67
Peltier, Grant	33	Schank, Makenna	43
Peltier, Grant	34	Schlauderaff, Maya	21
Peterson, Calie	22	Schmitz, Peter	44, 59
Peterson, Cole	35	Schoenborn, Levi	4
Peterson, Hannah	27	Schoenfelder, Emma	19
Peterson, Macy	64	Segura Caudana, Rosario	42
Peterson, Victoria	17	Setterberg, Alec	65
Pfister, Nora	5	Sheridan, Emma	13, 58
Pierce, Micah	9	Siems, Claire	48
Pineda Moreno, Arely	6	Simonson, Ali	6
Pinedo Garcia, Natali	20	Skokan, Sebastian	60
Pinnow, Makayla	17	Smith, Anya	71
Pobuda, Nadia	11	Snow, Laura	14
Powell, Harper	64	Soukdavong, Raddany	2
Prodfuang, Leilani	55	Spoden, Elle	21
Rampersaud, Sahil	21	Stanley, Ezra	70
Ramsdell, Lily	10	Steffen, Landon	20

Stenson, Layla	40	Wlejle, AJ	15
Strom, Jada	25	Woodson, Neva	24
Sugden, Anya	45	Xiong, Michael	73
Sullivan, Brady	23	Yisak, Betel	46
Svajgl, Lily	28	Zapf, Riley	31
Swanstrom, Eva	45	Zeis, Aurora	22, 52
Tar, Naw	1	Zelaya Velasquez, Jorge	66
Tepozteco Vazquez, Orion	15	Ziegler, Elsa	30
Thao, Shayla	23		
Thompson, AJ	26		
Thorvilson, Taylor	67		
Toal, Cate	62		
Tobin, Madeline	30		
Toilolo, Kylie	50		
Topliff, Annabella	51, 55		
Torres , Gabby	40		
Torres, Gisselle	1		
Truchon, Elise	4		
Turnbaugh, Jaz	79		
Vaillant, Noah	18, 39		
Vanek, Kyle	56		
Vang, Caylie	68		
Vezina, Colleen	45		
Villegas Rojas, Marcello	83		
Vo, Jessica	13, 54		
Wachaga, Emmanuel	43		
Wagner, McKenzie	35		
Wah, Eh	6		
Wall-Atim, Ethan	43		
Wallraff, Evan	66		
Watson, Kate	13		
White, Aella	4		
Williams, Michael	31		
Wilson, Mitchell	2		
Witterstaetter, Emma	53		

**INSTRUCTORS**  
**(with poster numbers)**

Appleby, Jacob	<b>58</b>
Basford, Letitia	<b>36-38</b>
Burleson, Kathy	<b>74</b>
Dong, Lifeng	<b>31-35</b>
Goldberg, Jodi	<b>39-50</b>
Hawley, Erin	<b>75-83</b>
Jacques-Fricke, Bridget	<b>8-14</b>
Martinez-vaz, Betsy	<b>51-57</b>
Ploger, Bonnie	<b>15-21</b>
Schuster, Michael	<b>22-30</b>
Snyder Cakir, Samantha	<b>66-73</b>
Stegall, Lisa	<b>59-65</b>
Steinbach, Susie	<b>1-7</b>

## PRESENTATIONS BY NUMBER

- |    |   |                           |   |
|----|---|---------------------------|---|
| 1  | Naw Tar, Gisselle Torres,<br>Magenta Owens, Owen<br>Hodson                            | Susie Steinbach           | <b>Kent State: When Protest Turns into Tragedy</b>  |
| 2  | Mitchell Wilson, Ellie Nhean,<br>Raddany Soukdavong, Jasmin<br>Rodriguez Uranda       | Susie Steinbach           | <b>Orangeburg Massacre</b>  |
| 3  | Ethan Canseco-Voigt, Tess<br>Reisenauer, Raziah Loyd, Ler<br>Htoo, Allison Boynton    | Susie Steinbach           | <b>1919 Chicago Race Riot</b>   |
| 4  | Elise Truchon, Denaya Leith,<br>Ashley Gadea Escobar, Levi<br>Schoenborn, Aella White | Susie Steinbach           | <b>The Detroit Riot of 1967</b>   |
| 5  | Sonja Kendle, Malina Brown,<br>Alvin Leary, Nora Pfister,<br>Kayla Encinas Ochoa      | Susie Steinbach           | <b>The Rise and Fall of Alcatraz</b>  |
| 6  | Ozzie Robinson, Brynn<br>Gebhardt, Ali Simonson,<br>Arely Pineda Moreno, Eh Wah       | Susie Steinbach           | <b>Watts Riot and the Effects on Policing in LA</b>   |
| 7  |   |                           |   |
| 8  | Araksan Ibrahim, Ellie<br>Lopata, Ryann Hopp  | Bridget<br>Jacques-Fricke | <b>The Effects of Perfluorohexanesulfonic Acid<br/>on Trunk Neural Crest Cell Migration</b> |
| 9  | Laurel Raymond, Dylan<br>Knudsvig, Micah Pierce                                       | Bridget<br>Jacques-Fricke | <b>Does MDMA Affect Neural Crest Cell<br/>Migration</b>                                     |
| 10 | Lily Ramsdell   | Bridget<br>Jacques-Fricke | <b>ABA Program</b>  |
| 11 | Aqsa Hasani, Annabell<br>Lohmuller, Nadia Pobuda                                      | Bridget<br>Jacques-Fricke | <b>Impact of O-PhenylPhenol on Trunk Neural<br/>Crest Migration</b>                         |
| 12 | Heidi Llapa, Radiance<br>Aguillon, Bahja Ahmed  | Bridget<br>Jacques-Fricke | <b>Effects of perfluorooctanic PFOA on neural<br/>crest cell migration</b>                  |
| 13 | Helena Erickson, Emma<br>Sheridan, Jessica Vo, Kate<br>Watson                         | Bridget<br>Jacques-Fricke | <b>Investigating the effects of the Malathion<br/>pesticide in chicken model embryos</b>    |

<b>14</b>	Vito Alomari, Laura Snow, Christine Nguyen	Bridget Jacques-Fricke	<b>Modulation of Trunk Neural Crest Cell Motility by Lithium Chloride in Vitro</b>
<b>15</b>	Orion Tepozteco Vazquez, Amaya Garibay, Ava Hibbard, Remy Amel, AJ Wlejte	Bonnie Ploger	<b>Gene Flow in earthworms</b>
<b>16</b>	Nalania Gorden, Katie Hanson	Bonnie Ploger	<b>Gene Flow in Itasca and St. Paul Earthworms</b>
<b>17</b>	Khin Mar Oo, Grace Hoffman, Victoria Peterson, and Makayla Pinnow	Bonnie Ploger	<b>Genetic Consequences of Isolation</b>
<b>18</b>	Noah Vaillant, Connor Passe, Samara Bramstedt, Edith Hernandez Sanchez	Bonnie Ploger	<b>Fitness of Defensive Inducible Daphnia pulex in Predatory Environments</b>
<b>19</b>	Emma Schoenfelder, Austin Heath, Lexi Combs, Noura Rezk, Kristen Allen	Bonnie Ploger	<b>Daphnia Gene Flow</b>
<b>20</b>	Landon Steffen, Kayla Freer, Carlos Garcia Martinez, Halima Osman, Natali Pinedo Garcia	Bonnie Ploger	<b>Cure Research Presentation</b>
<b>21</b>	Maya Schlauderaff, Elle Spoden, Jasmin Rodriguez Uranda, Ana Boston, Sahil Rampersaud	Bonnie Ploger	<b>Genetic Distance Between Connected and Disconnected Populations of Daphnia</b>
<b>22</b>	Riyan Abdisalam, Aurora Zeis, Dulce Mexicano, Calie Peterson, Leila Namie	Michael Schuster	<b>Influence of Lake Depth Zones on Daphnia Genetic Variation</b>
<b>23</b>	Erwin Sanna, Audri Freese, Natasha Hansel, Brady Sullivan, Ethan Parcon, Shayla Thao	Michael Schuster	<b>Earthworm Genetic Variation From Hardy-Weinberg Model</b>
<b>24</b>	Betsabe Noriega Tapia, Sanaya Nealey, Katerina Froloff, Clinton Leng, Neva Woodson	Michael Schuster	<b>Population Genetics of Earthworms</b>

25	Alex Nelson, Jada Strom, Katie Olsen, Natalynn Lundeen, Sky Erickson	Michael Schuster	<b>Earthworm Population Genetics</b>
26	Addyson Barrett, Colten Eggleston, AJ Thompson	Michael Schuster	<b>Earthworm Heterozygosity vs. Human Population Density</b>
27	Hannah Peterson, Jack Rheineck, Carter Lathrop	Michael Schuster	<b>Earthworms and Genetic Drift</b>
28	Lily Svajgl, Emma Halweg	Michael Schuster	<b>Genetic Similarities of Daphnia Between Lake Clusters</b>
29	Daviney McKay, Averie Martin, Brooke Klemz, Sienna Parsons, Keira Narain	Michael Schuster	<b>Effects of Lake Depth on the Heterogeneity of Daphnia</b>
30	Abdi Ladna, Madeline Tobin, Elsa Ziegler, Alayja Brown	Michael Schuster	<b>Cure Project</b>
31	Riley Keiffer, Riley Zapf, Jess Echeverria, Hosna Hasani, Michael Williams	Michael Schuster	<b>Evidence of Population Bottleneck in Aporectodea Earthworms</b>
32	Angel Martinez, Cinnia Chan, Ezra Nitzel, Corey DeClue	Lifeng Dong	<b>Investigating Affordable Options to Upgrade Hamline's Power Systems: Geothermal and Solar Energy</b>
33	Matthew Fish, Robert Morrison, Grant Peltier	Lifeng Dong	<b>Renewable Energy Solutions for a Carbon-Zero Lamar Colorado</b>
34	Grant Peltier, Rigo Arellano, Leo Jones	Lifeng Dong	<b>Developing a Cone-Shaped Hydrocyclone for Microplastic Separation in Lake Water</b>
35	Cole Peterson, McKenzie Wagner, Cinnia Chan	Lifeng Dong	<b>Exploring the Electrodeposition of Bismuth Thin Films for Voltammetric Lead Ion Detection in Drinking Water</b>
36	Maddy Belisle, Emma Ramstorf	Letitia Basford	<b>Importance of Active Learning</b>
37	Kara Johnson	Letitia Basford	<b>Critical Issues in Education</b>
38	Alias Bradford	Letitia Basford	<b>LGBTQIA History and Texts in Schools: Should educators teach about LGBTQIA history and use texts with LGBTQIA representation when some parents may legally opt their children out?</b>
39	Allison Larson, Natasha Ovalle, Noah Vaillant	Jodi Goldberg	<b>Assessment of Cell Replication Suppression by Vanillin</b>

40	Gabby Torres, Michael Langeberg, Layla Stenson	Jodi Goldberg	<b>Mushroom Madness: Chaga Mushrooms and it's Impact on Cancer Proliferation</b>
41	Elanna Kohner, Henry Erickson, Angelina Kavalenka	Jodi Goldberg	<b>In Vitro Analysis of Camellia Sinensis on Viability and Growth in Colorectal Cancer Cells</b>
42	Cal Athmann, Rosario Segura Caudana, Valerie Ludzack	Jodi Goldberg	<b>Effect of Catharanthus roseus on colon cancer cell lines</b>
43	Ethan Wall-Atim, Makenna Schank, Aimee Her, Emmanuel Wachaga	Jodi Goldberg	<b>Using Ginger root extract to impact the growth of the HCT-116 cancer cell line</b>
44	Jacob Barmore, Lorna Heil, Makayla Ruitter, Peter Schmitz	Jodi Goldberg	<b>The Effects of Saffron Extract on HCT 116 and DLD-1 Colorectal Cancer Cell Lines</b>
45	Eva Swanstrom, Colleen Vezina, Anya Sugden	Jodi Goldberg	<b>Examining the Effects of Turkey Tail on Human Colon Cell Lines</b>
46	Solange Atakora, Hannah Caire, Betel Yisak	Jodi Goldberg	<b>Investigating The Effects of Aqueous Red Clover On Colon Cancer Cells</b>
47	Emma Lamppa, Alan Sanchez, Wynter Curry	Jodi Goldberg	<b>Examining the Effects of Ginseng Root Extract on Human Cancer Cell Line HCT-116</b>
48	Claire Siems, Aaliyah Muhammad, Rowan O'hAodha	Jodi Goldberg	<b>Effect of Green Tea Extract on Human Colon Cancer Cell Metabolism</b>
49	Radiance Aguillon, Naydelin Farias, Zoe Esser-Domnitz, Luke Conway	Jodi Goldberg	<b>The Effect of Powdered Dandelion Root on the DLD-1 colon cancer cell line</b>
50	Kylie Toilolo, Stephanie Medel-Aguilera, Julia Gries	Jodi Goldberg	<b>The Effect of Punica Granatum Extract on the HTC116 Colorectal Cancer Cell Line</b>
51	Annabella Topliff, Hanan Abdi	Betsy Martinez-Vaz	<b>Antibiotics and One Health: Investigating Awareness in the Hamline Community</b>
52	Pricilla Lopez Serrano, Jordyn Campbell, Aurora Zeis	Betsy Martinez-Vaz	<b>Urban Runoff, Microbial Payoff: Finding Antibiotic Producers in Storm Drains</b>
53	Hanan Abdi, Manaal Ahmed, Emma Witterstaetter	Betsy Martinez-Vaz	<b>Antibiotic-Producing Microbes in Roadside &amp; Pothole Environments</b>
54	Jessica Vo, Sundus Mohamoud, Shaadia Molel	Betsy Martinez-Vaz	<b>Exploring Ginger-root Associated Soil as a Source of Antibiotic Producers Against ESKAPE Related Pathogens</b>

55	Annabella Topliff, Leilani Prodfuang, Siham Omar	Betsy Martinez -Vaz	<b>Microbial diversity and antibiotic-producing potential of bacteria isolated from a heated cattle water tank</b>
56	Araksan Ibrahim, Hannah Lemon, Kyle Vanek	Betsy Martinez-Vaz	<b>Tiny Earth Project: Fighting Antibiotic Resistance with Locally-Sourced Microbes</b>
57	Aliyah Robran, Blake Anderson, Aisha Ali	Betsy Martinez-vaz	<b>Isolation and analysis of microbes in wet soil collected near a pond from the Reservoir Woods for antibiotic production</b>
58	Emma Sheridan,	Jacob Appleby	<b>Problematic Pornography Use and Its Impact</b>
59	Tristan Falkowski, Chris Broyles, Peter Schmitz, Mike Riera Velez	Lisa Stegall	<b>Comparing Stress Levels in Division III Students based on Physical Activity</b>
60	Sebastian Skokan, Metadel Lee, Alynna Acosta	Lisa Stegall	<b>An Examination of Brief Daily Practices and Stress Levels in Hamline University Students</b>
61	Joe Greniuk, Cal Levis, Willow Hansen	Lisa Stegall	<b>The Effects of Different Energy Drinks on Athletic Performance</b>
62	Allison Larson, Cate Toal, Sarah Russell	Lisa Stegall	<b>Fitness Tracker Effects on Overall Wellbeing of Collegiate Athletes</b>
63	Ava Aragon, Mikenna Johnson, Avery Miller	Lisa Stegall	<b>Examining the Use of Caffeine in Female Division III College Student Athletes.</b>
64	Harper Powell, Ashlyn Abrahamson, Macy Peterson	Lisa Stegall	<b>Rest, Recover, Perform: Recovery Strategies and How They Affect Performance Perceptions in Hamline University Collegiate Athletes</b>
65	Ashton Frost, Alec Setterberg, Zach Abrahamson	Lisa Stegall	<b>Effects of Diaphragmatic Breathing on Daily and General Emotional Well-Being</b>
66	Joseph Fernandez Molina, Evan Wallraff, Jorge Zelaya Velasquez	Samantha Snyder Cakir	<b>Hungry for Answers: The link between cost per meal and food insecurity</b>
67	Taylor Thorvilson, Ashley Savell, Fred Hillmyer, Khadra Abdulahi	Samantha Snyder Cakir	<b>Swiping for Stability: Education Gaps and Marriage Trends</b>
68	Sean Chang, Tristen May-Robinson, Eve Lawia, Caylie Vang	Samantha Snyder Cakir	<b>Racial Disparities in Access to Third Spaces and Their Impact on Social Capital in the United States</b>
69	Micah Satele, Lucas Goggin, Zarmeen Jumani, Noa Malone	Samantha Snyder Cakir	<b>The Truth About Cost of Living and Debt</b>

70	Ezra Stanley, Penie Sackgavong	Samantha Snyder Cakir	<b>Is there a relationship between economic growth and innovation?</b>
71	Bella Richardson, Anya Smith, Annabel Mehta, Manny Rivera	Samantha Snyder Cakir	<b>The Hidden Cost of Resource Booms!</b>
72	Jessica Myers, Savannah Carlson, Aerial Jaspers, Gabby Munoz	Samantha Snyder Cakir	<b>Third Places, Safer Spaces?</b>
73	Max Mills, Devin Budna, Morgan Halverson, Michael Xiong	Samantha Snyder Cakir	<b>If your teachers lack the experience to guide the class, why do you expect students to thrive?</b>
74	Erwin Sanna	Kathy Burleson	<b>AI in the Environment</b>
75	Delaina Kurtz	Erin Hawley	<b>OCD Infographic</b>
76	Millicent Benson	Erin Hawley	<b>Bipolar Disorder</b>
77	Niko Leon	Erin Hawley	<b>Mental Health: PTSD</b>
78	Taha Hashmi	Erin Hawley	<b>Mental Health and Schizophrenia</b>
79	Jaz Turnbaugh	Erin Hawley	<b>Anxiety</b>
80	Alan Intavong	Erin Hawley	<b>Dissociative Identity Disorder</b>
81	Alan Paxton	Erin Hawley	<b>Chronic Traumatic Encephalopathy</b>
82	Asher Moore	Erin Hawley	<b>ODD Infographic</b>
83	Marcello Villegas Rojas	Erin Hawley	<b>Complex PTSD and Mental Health</b>