20th Annual Student Research and Creative Activities Symposium

Friday, April 28, 2017
Student Commons Building
Happy Birthday, RaCAS, which turns 20 today! Congratulations to the dedicated faculty of CU Denver who for two decades have given their time, knowledge, and care to mentor students in research and creative activities. And congratulations to the students who have undertaken the challenging and rewarding work of apprenticing themselves in order to learn and prepare for future work and life. Yay, RaCAS!

RaCAS is a truly multidisciplinary event that honors undergraduate and graduate student scholarly activities of all types from all disciplines. With representation from the College of Engineering and Applied Sciences and College of Arts and Media through the School of Medicine and the Colorado School of Public Health, this year’s symposium continues to attract participants from CU Denver and CU AMC, celebrating all student research, creative, and other scholarly activities.

Today, RaCAS will showcase the scholarly work of over 200 undergraduate and graduate students delivering over 150 presentations in an increasingly professionally relevant setting. This year, students will be communicating their scholarly activities through oral presentations, moderated panel discussions, films, posters, and other exhibits. RaCAS provides students who present with an opportunity to taste what it’s like to be a professional in the discipline, while providing other students with an opportunity to become inspired, connect with a mentor, and start toward presenting at next year’s symposium.

RaCAS depends this year, as in previous years, on the support of Dr. Richard J. Traystman, Distinguished University Professor and Vice Chancellor for Research. We also thank Provost Roderick Nairn, whose support has been unwavering, Chancellors Horrell and Elliman, who funded the Award for Outstanding Mentoring of Student Research and Creative Activities, and the staff of the Experiential Learning Center — they have been instrumental in making RaCAS happen. Finally, we thank the faculty who mentor our students in these High-Impact Practices (HIPs), experiences through which student learning is accelerated by engaging with real-world problems and opportunities. RaCAS truly celebrates Learning with Purpose, the CU Denver way. Together we are continuing to make RaCAS one of the most exciting annual events on the University calendar.

That excitement will culminate this afternoon in the awarding of approximately $4000 to students whose preparation and presentation are judged to be outstanding. That includes up to four awards totaling $400 from the College of Liberal Arts & Sciences (CLAS) Math and Science Learning and Education Signature Area; four awards totaling $2000 for students representing the four CLAS disciplinary divisions; four awards totaling $500 from the CLAS Interdisciplinary Directors’ Council and the CLAS Council On Diversity and Inclusion; and two grand prizes of $500 from RaCAS. Stick around for the award presentations, and if you see Dean Pamela Jansma of CLAS or Dr. Traystman, please thank them for funding these awards.

Let’s spend today learning, critiquing, admiring, questioning, and marveling at the work that our students, and the faculty members who mentor them, have accomplished. RaCAS shows us what is possible, what the future promises, and what the fruits of university learning look like at their best.

Dr. Leo P. Bruederle
Director of Undergraduate Research and Creative Activities

Dr. Jeff Franklin
Associate Vice Chancellor for Undergraduate Experiences
## Welcome to the 20th Annual Research and Creative Activities Symposium

### Symposium Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>9:00 – 10:00</td>
<td>Check-in, Set-up, Support Lynx Desk, Student Commons Building (SC)</td>
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<td>Registration is not necessary this year; support staff will be available to answer questions.</td>
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<td>10:00 – 12:00</td>
<td>Poster Sessions</td>
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<td>Session 1: Presentations 1001-1099, odd-numbers</td>
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<td>Student Commons 1st floor hallways</td>
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<td>Session 3: Presentations 2001-2099, odd-numbers</td>
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<td>Session 2: Presentations 1001-1099, even-numbers</td>
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<td>10:00 – 11:00</td>
<td>Session I: Ecology and the Environment (1101-1107)</td>
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<td>Students will deliver oral presentations showcasing their scholarly activities during Sessions I-VIII.</td>
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<td>10:00 – 11:30</td>
<td>Session V: Education (2111-2116)</td>
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<td>Session VI: Cell, Molecular, &amp; Developmental Biology (2121-2125)</td>
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<td>10:00 – 11:30</td>
<td>Session VIII: Art History (2141-2146)</td>
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<td>12:00 – 1:00</td>
<td>Session II: History Panel: Denver's Liberal Turn (1111-1114)</td>
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<td>11:30 – 12:45</td>
<td>Session VI: Cell, Molecular, &amp; Developmental Biology (2126-2130)</td>
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<td>12:15 – 2:15</td>
<td>Session IV: Social Sciences (2101-2108)</td>
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<td>1:00 – 2:15</td>
<td>Session VII: Human Biology &amp; Public Health (2131-2135)</td>
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<td>1:15 – 2:15</td>
<td>Session III: History Panel: Constructing Racial Identity (1121-1124)</td>
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<td>2:30 – 3:30</td>
<td>Convened Session Associate Vice Chancellor Jeff Franklin</td>
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<td>3:30 – 5:30</td>
<td>Wonder Women of STEM Panel of STEM professionals each describing her career path and experiences that have helped them to succeed in their careers. Sponsored by CU Denver WiSTEM student organization.</td>
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</tbody>
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**Welcome**  
Vice Chancellor Richard J. Traystman, Office of Research

**Mentor Award**  
Chancellor Don Elliman, CU Anschutz Medical Campus

**LYNx Talk**  
Students and Mentors Co-Navigating 21st Century Challenges in Digital and Mobile Solutions to Promote Health  
Dr. Sheana Bull, Community and Behavioral Health, Colorado School of Public Health

**Awards**  
Associate Vice Chancellor Jeff Franklin, Office of Undergraduate Experiences; Dean Pamela Jansma, College of Liberal Arts and Sciences;  
Associate Dean Marjorie Levine-Clark, CLAS
RaCAS Participants

Adams, Lindsay C 1001
Armenta, Alejandra 2102
Avent, Christin 1113
Barron, Genevieve 1009
Beem, Kade G 2057
Bender, Alexander K 1036
Blackburn, Marianne E 1007
Boddicker, Andrew 1005
Bowland, Lucyna A 1011
Brown, Chelsey 1013
Buck, Vanessa 2056
Cabeza de Baca, Emilia 1037
Cable, Katrina 2129
Campbell, Rose 1121
Carr, Alaina L 2135
Carver, Amber R 1107
Chon, Nara L 2127
Costie, Daniel 2108
Cruce, Micaela 1122
Dawud, Lamya’a M 1015
Duster, Adam 1019, 1033
Elton, Nihal A 1027
Ferrell, Anita 2116
Fikes, Robert 2044
Fischer, William L 1021
Foster, Kelsey 1031
Fox, Thomas 1025
Francis, Andrew J 1039
Gabehart, Kayla 1111
Galindo, Alex 2001
Garcia, Nancy 2101
Garimella, Sanju 2035
Garza, Christina M 2121
Gillespie, Ryan 1043
Grassie, Chelsey Lee 2031
Haddad, Natalie M 2005
Haileselassie, Siewasew 2007
Hamilton, Desmond J 2122
Harris, Michael D 2009
Herbert, Cassandra C 2011
Herbst, Sam 1112
Hollmann, Rebecca E 1104
Hosseini, Poorya 1023
Huner, Brittany A 1035
Irving, Samuel 1124
Iyer, Mallika R 2126
Jirsarai, Robert 2013
Joern, Emily L 2141
Jones, Elena K 2142
Jordan, Sarah R 1041
Kang, Harmanpreet K 2015
Kaur, Rupinder 2123
Kennedy, Cayla D 1103
Kenney, Steven 2017
Ketcham, Katherine C 2039
Khan, Tassawwar A 2033
Khong, Alexandra 2025
Khouqeer, Abraheem F 2027
Kingsley, Shadi Rashad M 2029
Klaus, Rachel 2113
Lagasse, Benjamin 1105
Lam, Aimee 1003
Lamari, Micaela B 2014
Le, Bonnie 1004
Le, Paul T 2114
Lee, Yoo (Jasmine) 2003
Leitner, Selena K 2053
Lloyd, Brian A 1006
Lopez, Chelsi N 1030
Mahalingam, Vikasini 2023
Mastin, Jared E 1012
Maxworth, Ashanthi 2019
McDevitt, Andrew L. 2049
McGill, Damarcus 2047
Meacham, Marina 1114
Michels, Tyler J 2051
Miliar, Andrew 2111
Miller, Danielle E 2045
Miller, Kiki 2105
Morton, Shelley 1014
Nelsen, Michelle K 2041
Nguyen, Brigitte 1016
Nguyen, Khoa 2143
Nielsen, Aaron 1026
Niemiec, Sierra S 1032
Nikulkova, Maria 1008
Odenheimer, Katelyn E 2144
Okpara, Chinere 1024
Olson, Amber G 2142
Osborn, Jackson T 1028
Osnes, Melisande I 2036
Ozanic, Mary P 1017
Pagano, Angela 2037
Papazian, Lucine A 1018
Parker, Ryan A 1106
Passman, Samantha E 1010
Patihak, Surakshya 1038
Pelowich, Krysta A 2132
Pendrell, Frank G 2002
Pepe, Ariana 1034
Peterson, Cody 2042
Phung, Hue 2103
Pillsbury, Wilbur 2052
Pitsch, Chloé E 2006
Prescott, Arynn J 1022
Rakowski, Dylan R 2008
Ramirez, Neil 1123
Ransom, Claire 1101, 1102
Rathi, Hinal 2010
Rauff, Adam 2012
Rauniyar, Abhishek 1040
Renick, Chad 1020
Roberts, Jonté B. 1044
Romero, Alex D 2004
Romero, Jessica L 2016
Rosales, Joseph F 2018
Rosenthal, Jessica M. 2107
Rossi, Kara 2145
Saez, Matias G 2022
Salagovic, Cailey A 2020
Sanders, Erin J 2024
Sarker, Sandeep R 2000
Sauerland, Hunter 2034
Schutt, David 2026
Shapland, Dorothy L 2115
Siry, Bonnie J 2106
Spotts, Timothy A 2038
St. Onge, Sarah 2028
Stedman, Jamie L 2030
Stobbaugh, Hannah K 2054
Syed, Adnan S 2131
Tanner, Margaret K 2032
Tekelidasik, Kirubel 2112
Than, Phil K 2146
Tran, Sherleen 2055
Trumpie, Ashley M 1029
Undis, Grace H 2133
van den Broek-Altenburg, Eline M 2134
Volpe, Ross H 2130
Walker, Bethany A 2046
Warp, Emily Ann 2125
Warren, Grant 2050
Wengryn, Derek M 1002
Xiong, Sheng 2048
Yeager, Alexandra 2104
Zarecki, MacKenzie 2040
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<th>Time</th>
<th>Session 1 &amp; 3 (1001-1099)</th>
<th>Session II</th>
<th>Session III</th>
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**RaCAS Schedule**

9:00 **Refreshments for Presenters**

Lynx Desk - Support for Presenters and Attendees

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<tr>
<th>1st &amp; 2nd Floor Hallways</th>
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<tr>
<td>Posters / Exhibits</td>
<td>Panels, Mini-Symposia, and other Oral Presentations</td>
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10:00 **Session 1 & 3** (1001-1099) 

10:15 **Session II**

10:30 **Session III**

10:45 **Session IV Social Sciences (2101-2108)**

11:00 **Special Time**

11:15 **Session V Education (2111-2116)**

11:30 **Session VI Cell, Molecular and Developmental Biology (2121-2125)**

11:45 **Session VI (cont) Cell, Molecular and Developmental Biology (2126-2130)**

12:00 **Session VII Human Biology and Public Health (2131-2135)**

**Welcome**: Vice Chancellor Richard J. Traystman, Office of Research

**Outstanding Mentor Award**: Chancellor Don Elliman, CU Anschutz Medical Campus

**LYNX Talk**: Dr. Sheana Bull, Colorado School of Public Health

**Awards**: Associate Vice Chancellor Jeff Franklin, Office of Undergraduate Experiences; Dean Pamela Jansma, College of Liberal Arts and Sciences, Associate Dean Marjorie Levine-Clark, CLAS

**Welcome**:

**WiSTEM Wonder Women in STEM Panel Discussion**

CU Denver WiSTEM

SC 2500

RaCAS People’s Choice Awards 2017

Vote once each for 1 Undergraduate Student Presentation and 1 Graduate Student Presentation for the RaCAS Peoples’ Choice Awards!

To vote, scan the QR code!

Or, use this link: https://ucdenver.co1.qualtrics.com/jfe/form/SV_bHMeetL7byWrhPv
SAVE THE DATE!
21st Annual Student Research and Creative Activities Symposium
Friday, April 27th, 2018