

**Gretchen E. Potts, Ph.D.**  
**Student Mentorship in Research**  
**2002-Spring 2021**

By the numbers: 31 students, 21 females (67.7%), 7 minority (22.6%), 11 honors theses (35.4%), 21 conference presentations (67.7%), 7 published papers (22.6%), 10 earned professional degrees (32.2%), 6 earned graduate degrees (19.4%)

Additional students (9): Peyton Scott (spring 2017), Lamar Houston (spring 2017), Jay Patel (spring 2015 – fall 2015), German Morera (spring 2008), Holly Lynch (fall 2007), Chris Randolph (fall 2007), Shanelle Newton (summer 2006), Janet Jones (fall 2006), Deana Goods (fall 2005)

Student	Year	Project(s)/Honors	Publication(s)/Presentations/Grant Awards	Current Position
<b>22. Mitchell Lutey</b>	2021-present	<ul style="list-style-type: none"> <li>Detection of pesticides in CBD products</li> </ul>		<ul style="list-style-type: none"> <li>Current student</li> </ul>
<b>21. Robert Donaldson</b>	2020-present	<ul style="list-style-type: none"> <li>Detection of heavy metals in Tennessee Cannabidiol Products: An Emerging and Unregulated Market</li> </ul>	<ul style="list-style-type: none"> <li>Received a SEARCH Award (\$927)</li> </ul>	<ul style="list-style-type: none"> <li>Spring 2021 graduate, internship with TDEC</li> </ul>
<b>20. Alivia Fann</b>	2020-present	<ul style="list-style-type: none"> <li>Determination of OGSR collected from silicone bracelets worn by actual shooters</li> </ul>	<ul style="list-style-type: none"> <li>Received a SEARCH Award (\$977)</li> </ul>	<ul style="list-style-type: none"> <li>Spring 2021 graduate, matriculated at Texas A&amp;M</li> </ul>
<b>19. Samantha Sweck</b>	2019-2020	<ul style="list-style-type: none"> <li>HPLC for separation and detection of OGSR extracted from silicone PPSD</li> </ul>	<ul style="list-style-type: none"> <li>Received a SEARCH Award (\$933)</li> <li>Zuy, Yelyzaveta; Sweck, Samantha O.; Dockery, Christopher R.; and *Potts, Gretchen E. HPLC Detection of Organic Gunshot Residues Collected Through Passive Sampling with Silicone Wristbands, Royal Society of Chemistry: Analytical Methods, 2019, 21, 85-90. DOI: 10.1039/C9AY02305D.</li> </ul>	<ul style="list-style-type: none"> <li>Fall 2020 graduate, taking a gap year and applying to graduate schools</li> </ul>
<b>18. Elizabeth Zuy</b>	2018-2020	<ul style="list-style-type: none"> <li>HPLC for Separation and Detection of OGSR Extracted from Silicone PPSD</li> <li>Successfully defended honors thesis in chemistry and graduated highest honors from UTC</li> </ul>	<ul style="list-style-type: none"> <li>Zuy, Yelyzaveta; Sweck, Samantha O.; Dockery, Christopher R.; and *Potts, Gretchen E. HPLC Detection of Organic Gunshot Residues Collected Through Passive Sampling with Silicone Wristbands, Royal Society of Chemistry: Analytical Methods, 2019, 21, 85-90. DOI: 10.1039/C9AY02305D.</li> <li>Presented at regional ACS meeting in Nashville, TN in November 2018</li> </ul>	<ul style="list-style-type: none"> <li>Spring 2020 graduate, matriculated at MTSU Fermentation Program</li> </ul>
<b>17. Cintly Guzman-Hernandez</b>	2017-2018	<ul style="list-style-type: none"> <li>A statistical study of leached elements in fresh water and saltwater</li> <li>Successfully defended honors thesis in chemistry and graduated highest honors from UTC</li> </ul>	<ul style="list-style-type: none"> <li>Presented at regional ACS meeting in Nashville, TN in November 2018</li> </ul>	<ul style="list-style-type: none"> <li>Spring 2019 graduate, works in local industry</li> </ul>
<b>16. Myranda DeMailly</b>	2016	<ul style="list-style-type: none"> <li>Analysis leachates from cigarette butts in seawater</li> </ul>	<ul style="list-style-type: none"> <li>*Potts, Gretchen E.; DeMailly, Myranda; Thompson, Emily. Undergraduate Research Problem Solving: Using 3D Printing to Extend and Expand Equipment Use, J. Underg. Chem. Res. 2018, 17, 17-19.</li> <li>Presented at regional ACS meeting in Columbia, SC in October 2016</li> </ul>	<ul style="list-style-type: none"> <li>Spring 2017 graduate, works in industry in Wisconsin (Thermo Fisher)</li> </ul>

<b>15. Katherine Adorati</b>	2015	<ul style="list-style-type: none"> <li>• Cigarette Butts in Coastal Waters: An Elemental Analysis of Seawater from St. Simon's Island</li> <li>• Successfully defended honors thesis and graduated highest honors from UTC</li> </ul>	<ul style="list-style-type: none"> <li>• Received a Provost Student Research Award (\$968)</li> </ul>	<ul style="list-style-type: none"> <li>• Spring 2016 graduate, matriculated at South Pharmacy College, earned PharmD in 2019, Pharmacist at Cigna</li> </ul>
<b>14. Veronica Hubble</b>	2014	<ul style="list-style-type: none"> <li>• E-cigarette filling solutions: HPLC optimization and analysis of tobacco alkaloids</li> </ul>	<ul style="list-style-type: none"> <li>• Presented at regional ACS meeting in Nashville, TN in October 2014</li> </ul>	<ul style="list-style-type: none"> <li>• Ph.D. at Notre Dame, Post-doc with Dr. Brian Stoltz group at CalTech</li> </ul>
<b>13. Jessica Murray</b>	2013-2014	<ul style="list-style-type: none"> <li>• Nicotine and What Else?: HPLC Elution Optimization for the Analysis of Alkaloids Found in Electronic Cigarettes</li> <li>• Successfully defended honors thesis in chemistry and graduated highest honors from UTC</li> </ul>	<ul style="list-style-type: none"> <li>• Received a Provost Student Research Award (\$968)</li> <li>• Presented at a regional ACS meeting in Atlanta, GA in November 2013</li> <li>• Presented at Southern Regional Honors Council Conference, Savannah, GA, March 2014</li> </ul>	<ul style="list-style-type: none"> <li>• Earned Pharm.D. at Lipscomb University working on Ph.D. at Duke</li> </ul>
<b>12. Joshua Justice</b>	2012-2013	<ul style="list-style-type: none"> <li>• Analysis of Nicotine Concentrations in Electronic Cigarette Filling Solutions by Three Instrumental Methods</li> <li>• Successfully defended honors thesis in chemistry and graduated highest honors from UTC</li> </ul>	<ul style="list-style-type: none"> <li>• Received a Provost Student Research Award (\$905)</li> <li>• Presented at a regional ACS in Raleigh, NC, November 2012.</li> </ul>	<ul style="list-style-type: none"> <li>• MD, University of Tennessee Health Science Center, 2018</li> </ul>
<b>11. Katherine Thurman</b>	2011-2012	<ul style="list-style-type: none"> <li>• Plants Grown in an Ash Tray: Bioaccumulation of Metals in Bean Plants</li> <li>• Successfully defended honors thesis in chemistry and graduated highest honors from UTC</li> </ul>	<ul style="list-style-type: none"> <li>• Received a Provost Student Research Award (\$950)</li> <li>• Presented at the Pittsburgh Conference in Orland, FL, March 2012.</li> </ul>	<ul style="list-style-type: none"> <li>• MD, University of Tennessee Health Science Center, 2016</li> </ul>
<b>10. Amy Balestrino</b>	2011-2012	<ul style="list-style-type: none"> <li>• An Analysis of Electronic Cigarettes by GC-MS and ICP-OES</li> <li>• Successfully defended honors thesis in chemistry and graduated highest honors from UTC</li> </ul>	<ul style="list-style-type: none"> <li>• Received a Provost Student Research Award (\$950)</li> <li>• Presented at the Pittsburgh Conference in Orland, FL, March 2012.</li> </ul>	<ul style="list-style-type: none"> <li>• DDS, University of Tennessee Health Science Center, 2015</li> </ul>
<b>9. Samantha Hughey</b>	Spring 2011	<ul style="list-style-type: none"> <li>• Development of CV lab for Instrumental Analysis Lab, Quantitative analysis of substituted benzoquinones by CV</li> </ul>	<ul style="list-style-type: none"> <li>• Research presented by Dr. Potts at Pittcon 2012</li> <li>• Lab currently in use in Instrumental Lab</li> </ul>	<ul style="list-style-type: none"> <li>• DDS, University of Tennessee Health Science Center, 2014</li> </ul>
<b>8. Matthew Stephens</b>	2010-2011	<ul style="list-style-type: none"> <li>• More Than Just Litter: Quantification of Organic Compounds Leached from Cigarette Butts</li> </ul>	<ul style="list-style-type: none"> <li>• Received a Provost Student Research Award (\$975)</li> <li>• Presented at the Pittsburgh Conference in Atlanta, GA, March 2011.</li> </ul>	<ul style="list-style-type: none"> <li>• Ph.D. NC State University, 2016</li> </ul>
<b>7. Daniel Burriss</b>	2009-2010	<ul style="list-style-type: none"> <li>• Turning An Eyesore Into Art: Analysis of Organic Compounds Leached From Cigarette Litter</li> </ul>	<ul style="list-style-type: none"> <li>• Received a Provost Student Research Award (\$925)</li> <li>• Presented at a regional ACS meeting in San Juan, Puerto, Rico, October 2009.</li> </ul>	<ul style="list-style-type: none"> <li>• Ph.D. University of Kentucky in Atwood Research Lab</li> </ul>
<b>6. Jessica Woods Moerman</b>	2007-2009	<ul style="list-style-type: none"> <li>• Analysis of Elements Leached from Cigarette Litter</li> <li>• Successfully defended honors thesis in chemistry and graduated highest honors from UTC</li> </ul>	<ul style="list-style-type: none"> <li>• Received a Provost Student Research Award (\$900)</li> <li>• *Moerman, Jessica W.; Potts, Gretchen E. Analysis of metals leached from smoked cigarette litter, <i>Tobacco Control</i>, <b>2011</b>, 20 (Suppl 1) i30-i35.</li> <li>• Presented at a regional ACS meeting in Nashville, TN, November 2008.</li> </ul>	<ul style="list-style-type: none"> <li>• Post-doctoral fellow at Smithsonian Museum of Natural History</li> <li>• Ph.D. Georgia Tech, 2016</li> </ul>
<b>5. Sarah Easparam Hensley</b>	2005-2008	<ul style="list-style-type: none"> <li>• Characterization of Lead (II) Complexes by Spectroscopic Analysis</li> <li>• Analysis of Shiitake Mushrooms by ICP-OES</li> <li>• Successfully defended honors thesis in chemistry and graduated highest honors from UTC</li> </ul>	<ul style="list-style-type: none"> <li>• Hensley, Sarah A. and Potts, Gretchen E. Stoichiometric determination of 1-(2-pyridylazo)-2-naphthol complexation with Pb(II) by mass spectrometry, <i>J. Underg. Chem. Res.</i> <b>2014</b>, 13, 74 – 76.</li> <li>• Easparam, Sarah; Potts, Gretchen E. Elemental Analysis of Shiitake Mushrooms by ICP-OES. <i>J. Underg. Chem. Res.</i> <b>2006</b>, 5, 83 – 87.</li> </ul>	<ul style="list-style-type: none"> <li>• Works as MD in North Carolina</li> <li>• Anesthesiology Resident, University of Cincinnati College of Medicine</li> <li>• M.D., Quillen College of Medicine, 2012</li> </ul>

			<ul style="list-style-type: none"> <li>Received two Provost Student Research Awards (\$1800)</li> <li>Presented at two regional ACS meetings and won an award.</li> </ul>	
<b>4. Tim Brooks</b>	2005-2006	<ul style="list-style-type: none"> <li>Answer in Ashes: Elemental Analysis of Cremains by ICP-OES</li> <li>Successfully defended honors thesis in chemistry and graduated highest honors from UTC</li> </ul>	<ul style="list-style-type: none"> <li>Brooks, Timothy; Bodkin, Tom E.; Potts, Gretchen E. and Stephanie A. Smullen. Elemental Analysis of Human Cremains Using ICP-OES to Classify Legitimate and Contaminated Cremains. <i>J. For. Sci.</i> <b>2006</b>, 51, 967 – 973.</li> <li>Received a Provost Student Research Award (\$875)</li> <li>Presented at National ACS in Atlanta, GA, March 2006</li> </ul>	<ul style="list-style-type: none"> <li>General Medical Officer, US Navy</li> <li>M.D., Quillen College of Medicine, 2011</li> </ul>
<b>3. Kira Shurtz</b>	2004-2005	<ul style="list-style-type: none"> <li>Analysis of toxic metals in <i>Lentinus edodes</i> by atomic absorption spectroscopy</li> </ul>	<ul style="list-style-type: none"> <li>Received a Provost Student Research Award (\$875)</li> </ul>	<ul style="list-style-type: none"> <li>Physical Therapist in San Diego, CA</li> <li>D.P.T., University of Pittsburgh, 2014</li> </ul>
<b>2. Jane Dickerson</b>	2003-2005	<ul style="list-style-type: none"> <li>Biomonitoring: An Analysis of Plants for Metals Using ICP-AES</li> <li>Successfully defended honors thesis in chemistry and graduated highest honors from UTC</li> </ul>	<ul style="list-style-type: none"> <li>Received a Provost Student Research Award (\$875)</li> <li>Presented at the Pittsburgh Conference, Chicago, IL, March 2004.</li> </ul>	<ul style="list-style-type: none"> <li>Co-Director, Chemistry, Department of Laboratories at Seattle Children's Hospital</li> <li>Ph.D., University of Washington, 2010</li> </ul>
<b>1. Chanda Cooper</b>	2004	<ul style="list-style-type: none"> <li>Analysis of soils from the Chattanooga Creek Superfund Site</li> <li>UTC Graduate</li> </ul>		<ul style="list-style-type: none"> <li>Senior Program Manager of Capacity Planning at the Tennessee Valley Authority</li> </ul>