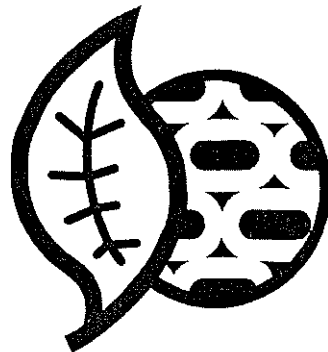
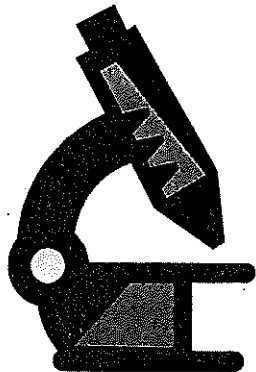


**Northern Virginia Regional
Science & Engineering Fair**

**Category Awards
2019**



Aaron Manka
Category Judge Coordinator

Dat Le
Fair Director

Michele Lombard
Assistant Fair Director

NORTHERN VIRGINIA REGIONAL SCIENCE & ENGINEERING FAIR

March 17, 2019

CATEGORY AWARDS

First Place Awardees.....	1-5
Second Place Awardees	6-11
Third Place Awardees.....	12-16
Honorable Mention Awardees	17-21
Broadcom MASTERS Nominees	22-23
Virginia State Science Fair Nominees	24
Best of Fair Awardees.....	25

Project Number	Name	School
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1st Place

Animal Sciences

7 AS	102	Albaugh, Tucker; Green, Felix	Mary Ellen Henderson
10 AS	106	Bell, Sydney	T.C. Williams
12 AS	107	Naughton-Rockwell, Tessa	T.C. Williams

Behavioral and Social Sciences

7 BE	200	Savarie, Lucy	George Washington
7 BE	201	Snyder, Kathryn	Mary Ellen Henderson
7 BE	205	Gil-Reynolds, Lucia; Sirois, Evelyn	George Washington
8 BE	216	Winston, Erik; Hughes, Elijah; Thomas, Kaeden	Gunston
9 BE	219	Singer, Jacob	H-B Woodlawn
10 BE	222	McCormack, Michaela	T.C. Williams

Biochemistry

7 BI	300	Christino, Ruth	George Washington
7 BI	301	Silva, Leila	Williamsburg
10 BI	308	Baker-Rosenberg, Raynie	Washington-Lee

Project Number	Name	School
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1st Place

Chemistry

7 CH 403	Gallagher, Ketevan	Mary Ellen Henderson
7 CH 406	Olson, Freya	Williamsburg
8 CH 425	Vaughan, Kathleen	Gunston
8 CH 426	Bailey, Caroline; Wayman, Elizabeth	Williamsburg
12 CH 445	Lytle, Leslie	T.C. Williams

Engineering

8 EN 512	Chenoweth, William	Williamsburg
8 EN 517	Sanchez, Raphael	Jefferson
11 EN 536	Stocks, Allison	Yorktown
11 EN 537	Doney, Brendan; Cardwell, Owen	T.C. Williams

Project Number	Name	School
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1st Place

Environmental and Earth Sciences

7 EV	600	Chu, Elaine	Jefferson
7 EV	605	Vaile, Natalie	George Washington
8 EV	610	Estevao, Rebecca	Swanson
8 EV	613	Goldstein, Catherine	George Washington
8 EV	618	Morrison, Aidan	Gunston
8 EV	619	Pinkowski, Shota	George Washington
8 EV	620	Rai, Kritika	Jefferson
8 EV	628	Wellons, Lilly; Stephens, Gianna	Gunston
10 EV	632	Akhtar, Ansah	Washington-Lee
10 EV	634	Hartmann, Elyse	Washington-Lee
10 EV	635	Johnson, Riley	Washington-Lee
10 EV	638	Licato, James	Washington-Lee
10 EV	643	Donnellan, Katherine; Kosinski, Nikolai	T.C. Williams
10 EV	644	Feist, Haylee; Bernhardt, Will	Yorktown
12 EV	649	Byers, Jessica	Washington-Lee

Mathematics and Computer Science

8 MC	703	Huddleston, Joshua	H-B Woodlawn
11 MC	710	Cunningham, Caroline	Washington-Lee

Project Number	Name	School
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1st Place

Medical and Health Sciences

8 ME	802	Walsh, Elizabeth; Yingling, Helen	H-B Woodlawn
11 ME	806	Atkinson, Morgan	Washington-Lee

Microbiology

8 MI	903	Blackburn, Isabel	Hammond
8 MI	905	Johnson, Phillip	Williamsburg
8 MI	907	Papacosma, Charlotte	Gunston
9 MI	908	Crosby, Torin	Yorktown
9 MI	909	Koumans, Elizabeth	Yorktown
9 MI	912	Lewis, Spencer; Foster, Jacob	Washington-Lee
10 MI	915	McDonald, Alexandra	Yorktown
11 MI	916	Shafiq, Hamna	Washington-Lee

Physics and Astronomy

7 PH	1000	Flannigan, Noah	Mary Ellen Henderson
7 PH	1001	Gowdy, Scott	Jefferson
7 PH	1003	McBride, Maegan	H-B Woodlawn
8 PH	1007	Artiedamarin, Nicholas	Mary Ellen Henderson
8 PH	1013	Sartori, Colin	Williamsburg

Project Number	Name	School
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1st Place

Plant Sciences

7 PS 1101	Gerardi, Mara	Williamsburg
7 PS 1104	Scally, Evelyn	Williamsburg
8 PS 1109	Brodsky, Julia	H-B Woodlawn
8 PS 1111	Goeke, Madi	Swanson
8 PS 1112	Gookin, Eleanor	Jefferson
8 PS 1113	Islam, Nabiha	Jefferson
8 PS 1115	Portner, Benjamin	Williamsburg
9 PS 1121	Bream, Taylor	Yorktown
10 PS 1126	Portner, Noah	Washington-Lee

Project Number	Name	School
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2nd Place

Animal Sciences

7 AS	100	Hanna, Andrew	Mary Ellen Henderson
7 AS	101	Pick, Casey	H-B Woodlawn
7 AS	103	Howard, Emilia; Rodriguez, Mia	Mary Ellen Henderson
7 AS	104	Kappler, Rachel; Gehrke, Kathryn	H-B Woodlawn
8 AS	105	Porter, Sarah	George Washington

Behavioral and Social Sciences

7 BE	202	Teague, James	Mary Ellen Henderson
7 BE	207	Rotherham, Susan; Baroody, Marin	Mary Ellen Henderson
8 BE	209	Anderson, Maddie	George Washington
8 BE	213	Yang, Nina	Hammond
8 BE	215	Tenorio Guzman, Jhon; Lynn, Daniel; Siles, Mark	Gunston
9 BE	218	Boston, Ava	Yorktown
10 BE	224	Vaughan, Abigail	Arlington Tech
10 BE	225	Rivero, Alissa; Finkelstein, Sophie	Washington-Lee

Biochemistry

9 BI	304	Carleton, Elizabeth	Yorktown
9 BI	306	Koury, Kelly	T.C. Williams

Project Number	Name	School
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2nd Place

Chemistry

7 CH	402	Fern, Caroline	Kenmore
8 CH	412	Al-Hadhrami, Sarah	Hammond
8 CH	420	Licato, Anne	Swanson
9 CH	432	Tripathi, Anika	Washington-Lee
9 CH	433	Williams, Robert	T.C. Williams
10 CH	439	Sartori, Lauren	Washington-Lee

Engineering

8 EN	511	Buckley, Ford	Williamsburg
8 EN	513	Jones, Amelia Rose	George Washington
8 EN	523	Souders, Elle; Lawler, Greta	Williamsburg
10 EN	532	Mukhtar, Zeinab	Wakefield
11 EN	535	Fried, Ellie	H-B Woodlawn

Project Number	Name	School
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2nd Place

Environmental and Earth Sciences

7 EV	601	Dhakal, Richa	Jefferson
7 EV	604	Klapper, Cheyenne	Jefferson
8 EV	609	Basloe, Aidan	Swanson
8 EV	612	Fireison, Abigail	George Washington
8 EV	617	Leland, Erin	Jefferson
8 EV	621	Sherlick, Maya	Jefferson
8 EV	622	Anderson, Lucy; Chisholm, Anna; Thomasbeer, Skye	Gunston
8 EV	624	Kinzer, Allison; Critchfield, Whitney	Williamsburg
8 EV	627	Sughrue, Margaret; Kivi, Olivia; Walyus, Evelyn	Gunston
9 EV	631	Thomas, James	Arlington Tech
10 EV	633	Dillard, Abigail	Yorktown
10 EV	637	Kilkenny, Erin	Yorktown
10 EV	639	Little, Katherine	Yorktown
10 EV	640	Mendelsohn, Alexandra	Yorktown
11 EV	646	Raack, Corinna	T.C. Williams
11 EV	647	Robinson, Lucy	Washington-Lee
11 EV	648	Zavala-Diaz, Kelvin	T.C. Williams

Project Number	Name	School
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2nd Place

Mathematics and Computer Science

7 MC	701	Togans, Calvin	Hammond
8 MC	704	Lyons, Mark	George Washington
9 MC	705	Jones, Wyatt	Yorktown
10 MC	708	Buchholz, Adrian; Crisafulli, Francesco; Green, Andrew	Arlington Tech
12 MC	713	Henrich, Caden	Washington-Lee

Medical and Health Sciences

7 ME	800	Shumsky, Abbey; Buchholz, Claire	Swanson
10 ME	804	Smith, Sadie	H-B Woodlawn

Microbiology

7 MI	900	Gibson, Adam	Williamsburg
7 MI	901	Harris, Nikolas	H-B Woodlawn
7 MI	902	Tudorache, Demetra Aurora	Swanson
8 MI	906	Kassi, Mariska	Williamsburg
10 MI	913	Kysilko, Madeleine	T.C. Williams
10 MI	914	Long, Meghan	Washington-Lee

Project Number	Name	School
2nd Place		
<u>Physics and Astronomy</u>		
7 PH 1002	Holland, Luke	Kenmore
7 PH 1004	Sharrer, Kate	Mary Ellen Henderson
7 PH 1005	Carestio, Isabella; Kesteloot, Kalee	Kenmore
7 PH 1006	Shipley, Alexander; Blaha, Mitchell	H-B Woodlawn
8 PH 1009	Krohl, Brady	Kenmore
8 PH 1016	Woodworth, Jason	Kenmore
8 PH 1017	Aniss, Lina; Bain, Angelica	Swanson
8 PH 1018	Boudjemaa, Farouk; Gleaton, Cameron	Swanson
9 PH 1020	Corral, Rebecca	Yorktown
9 PH 1021	Hsu, Jason	Washington-Lee
9 PH 1022	Kusel, David	Yorktown
10 PH 1023	Bass, Dillon	Yorktown
10 PH 1024	Sokol, Josh	Yorktown
10 PH 1025	Toaso, Jr., Nicholas	T.C. Williams
10 PH 1026	Tojjeva, Shokhinabonu	Wakefield
11 PH 1027	Klug, Ryan	Wakefield

Project Number	Name	School
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2nd Place

Plant Sciences

7 PS 1100	Audi, Maya	H-B Woodlawn
7 PS 1103	Rowley, Travis	Hammond
7 PS 1105	Stewart, Samantha	Jefferson
7 PS 1107	McKinnon, Jr., Semaj; Myles, Carsen	Hammond
8 PS 1116	Stoller, Gillian	Swanson
8 PS 1118	Watson, Ivy	Kenmore
8 PS 1120	Schumann, Lydia; Wetmore, Celeste	Swanson
9 PS 1124	Voigt, Will	Yorktown
9 PS 1125	Alvarado, Vivian; Franco, Jhandira	Wakefield
10 PS 1127	Yokitis, Grace	T.C. Williams
11 PS 1128	Keough, Savannah	T.C. Williams

Project Number	Name	School
3rd Place		
<u>Behavioral and Social Sciences</u>		
7 BE 204	Cheek, Lily; Cheek, Owen	H-B Woodlawn
8 BE 210	Ermovick, Ryan	Kenmore
8 BE 211	Funk, Alexandra	Mary Ellen Henderson
8 BE 214	Crum, Grace; Niemi, Alexis	Mary Ellen Henderson
9 BE 217	Berry, Colin	Yorktown
10 BE 220	Dhakal, Abby	Arlington Tech
<u>Biochemistry</u>		
7 BI 302	Talka, Jon; Contessa, Gabe	Mary Ellen Henderson
9 BI 305	Futrell, Sophia	Yorktown
9 BI 307	Zurita, Persia	Wakefield
<u>Chemistry</u>		
7 CH 405	Moret, Zoe	Kenmore
8 CH 413	Barua, Dhruva	Jefferson
8 CH 416	Cunningham, Charlotte	Swanson
8 CH 422	Negussie, Yabsera	Jefferson
9 CH 429	Guthrie, Tyler	Arlington Tech
9 CH 431	Taylor, Jamison	T.C. Williams
9 CH 434	Zymowski, Tyler	Arlington Tech
11 CH 442	Chen, Yiming	Yorktown

Project Number	Name	School
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3rd Place

Engineering

7 EN	500	Ellinwood, John	Kenmore
7 EN	501	Frank, Spencer	Kenmore
7 EN	504	Sao, Lamine	Swanson
7 EN	505	Savage, William	H-B Woodlawn
9 EN	526	Williams, Dilin	Washington-Lee
10 EN	530	Dugan, Anna	T.C. Williams
12 EN	538	Lustig, Matthew	T.C. Williams

Project Number	Name	School
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3rd Place

Environmental and Earth Sciences

7 EV	602	Dickerson, Anastasia	Williamsburg
7 EV	603	Fischer, Ava	Jefferson
7 EV	606	Try, Lillian; Ballantine, Harriet	Jefferson-Houston
8 EV	607	Aramendia, Caroline	Kenmore
8 EV	616	King, Ellarose	Williamsburg
8 EV	623	Honaker, Carolina; Jamison, Caroline; Solis, Maya	Gunston
8 EV	625	Kruse, Nicholas; Dellaria, Anais	Hammond
8 EV	626	Sammis, Maura; Rackauskas, Maddy	Gunston
9 EV	629	Mukhtar, Suheila	Wakefield
9 EV	630	Nemirow, Devin	Washington-Lee
10 EV	636	Kelly, Joseph	Wakefield
10 EV	641	Peale, Kayla	Yorktown
10 EV	642	von Eckartsberg, Rose	Yorktown

Mathematics and Computer Science

8 MC	702	Akhtar, Afrin	Kenmore
10 MC	706	Powers, Zoe	Washington-Lee
10 MC	709	Rahman, Mahia; Tesfaye, Belen	Washington-Lee
11 MC	711	Khan, Noah	T.C. Williams

Project Number	Name	School
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3rd Place

Medical and Health Sciences

8 ME	801	Reyes, Sofia	Swanson
10 ME	803	Gibson, Julie	Bishop O'Connell
11 ME	805	Alleyne, Kristen	Washington-Lee

Microbiology

8 MI	904	England, Riley	Jefferson
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Physics and Astronomy

8 PH	1010	McCormack, Maxwell	George Washington
8 PH	1011	Olic, Aleksandar	Williamsburg
8 PH	1012	Pericak, Emma	Swanson
8 PH	1014	Shoji, Flynn	Swanson
8 PH	1015	Stanley, John	Hammond
9 PH	1019	Block, Joy	Arlington Tech

Project Number	Name	School
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3rd Place

Plant Sciences

7 PS 1102	Morse, Allan	Jefferson
7 PS 1106	Greco, Lucy; Vazquez, Sofia	H-B Woodlawn
8 PS 1110	Fanning, Lily	Jefferson-Houston
8 PS 1114	Lindsay, Naomi	Gunston
8 PS 1117	Terefe, Elfrata	Jefferson
8 PS 1119	Krai, Max; Gabbay, Ned	H-B Woodlawn
9 PS 1122	Hall, Atiya	Yorktown
9 PS 1123	Hicks, Hunter	George Mason

<u>Project Number</u>	<u>Name</u>	<u>School</u>
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Honorable Mention

Behavioral and Social Sciences

7 BE	203	Anderson, Katherine; Way, Phoebe	Mary Ellen Henderson
7 BE	206	Keelen, Madison; Lindly, Abby	Mary Ellen Henderson
8 BE	208	Alexander, Helen	H-B Woodlawn
8 BE	212	Lucier, Maxwell	H-B Woodlawn
10 BE	221	Gaylord, Charlie	Yorktown
10 BE	223	Terry, Claire	Yorktown

Biochemistry

8 BI	303	Godwin, Nathan	Kenmore
10 BI	309	Murray, Andrew	Yorktown
12 BI	310	Ferguson, Garrett	Yorktown

Project Number	Name	School
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Honorable Mention

Chemistry

7 CH 400	Ahmad, Kamran	Kenmore
7 CH 401	Beauvais, Cyrus	Gunston
7 CH 404	Hogan, Abigail	Kenmore
7 CH 407	Roman, Vivian	Jefferson-Houston
7 CH 408	Roman, Zachary	Jefferson
7 CH 409	Zambrano-Argueta, Victoria	Hammond
7 CH 410	Scheffel, Riley; McLaughlin, Anna	H-B Woodlawn
7 CH 411	Sokolove, Charles; Schmauder, Logan	Jefferson-Houston
8 CH 414	Bolles, Sarah	Gunston
8 CH 415	Bungar, Romeo	Gunston
8 CH 417	Gordon, Alexandra	Swanson
8 CH 418	Haukedahl, Haley	George Washington
8 CH 419	Hystad, Anna	H-B Woodlawn
8 CH 421	Mason, Liam	Swanson
8 CH 423	Schimenti, Jenna	Williamsburg
8 CH 424	Snyders, Ella	Kenmore
8 CH 427	Middleton, Sarah; Denton, Genevieve; Hay, Elizabeth	Gunston
8 CH 428	Moir, Libby; Dooley, Megan	Swanson

Project Number	Name	School
<i>Honorable Mention</i>		
9 CH 430	McArdie, Owen	Yorktown
9 CH 435	Jones, Jill; Peters, Kaitlin	T.C. Williams
10 CH 437	Olcott, Kyle	Yorktown
10 CH 438	Penn, Talia	Arlington Tech
10 CH 440	Youkeles, Samuel	Yorktown
11 CH 441	Ambellu, Galilee	Washington-Lee
11 CH 443	Ege, Tyler	Yorktown
11 CH 444	Ishaq, Ishaq	Wakefield

Project Number	Name	School
<i>Honorable Mention</i>		
<u>Engineering</u>		
7 EN 502	Hernandez, Lester	George Washington
7 EN 503	Kalhoro, Marium	Hammond
7 EN 506	Smialowicz, Henry	Kenmore
8 EN 507	Andersen, Caroline	George Washington
8 EN 509	Bradley, Lauren	H-B Woodlawn
8 EN 510	Brown, Tenagne	Hammond
8 EN 514	Lawrence, Jake	Swanson
8 EN 515	Marquis, Sofia	Gunston
8 EN 516	Ramaswamy, Harini	Swanson
8 EN 518	Suliman, Fatima	Hammond
8 EN 519	Black, Kyle; Behrens, Aleksander	H-B Woodlawn
8 EN 520	Connor, Asher; Andress, Oliver	H-B Woodlawn
8 EN 521	Kuhse, Finnegan; Buehlmann, Patrick	Williamsburg
8 EN 522	Safi, Sabrina; Kruse, Olivia	Hammond
9 EN 524	Smalls, Amari	T.C. Williams
9 EN 525	Torg, William	H-B Woodlawn
9 EN 527	Gascon, Neil; Gonzalez, Alan	T.C. Williams
10 EN 531	Lunati, Mia	T.C. Williams

Project Number	Name	School
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Honorable Mention

10 EN 533	Stearns, Oliver	H-B Woodlawn
11 EN 534	Cambridge, Gavriel	T.C. Williams

Environmental and Earth Sciences

8 EV 614	Gross, Miracle	Hammond
8 EV 615	Haywood, Zoe	Williamsburg
11 EV 645	Durham, Annie	Yorktown

Medical and Health Sciences

11 ME 807	Cocke, Townson	T.C. Williams
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Microbiology

9 MI 911	Gutshall, Ava; Barclay, Lina	Arlington Tech
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Physics and Astronomy

8 PH 1008	Carlson, Isla	Gunston
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2019 BROADCOM MASTERS NOMINEES

PROJECT	NAME	SCHOOL
7 AS 102	Tucker Albaugh & Felix Green	Mary Ellen Henderson
7 BE 200	Lucy Savarie	George Washington
7 BI 301	Leila Silva	Williamsburg
7 CH 403	Ketevan Gallagher	Mary Ellen Henderson
8 CH 425	Kathleen Vaughan	Gunston
8 EN 512	William Chenoweth	Williamsburg
8 EN 517	Raphael Sanchez	Jefferson
8 EV 610	Rebecca Estevao	Swanson
8 EV 618	Aidan Morrison	Gunston
8 EV 619	Shota Pinkowski	George Washington
8 MC 703	Joshua Huddleston	H-B Woodlawn
8 ME 802	Elizabeth Walsh & Helen Yingling	H-B Woodlawn
8 MI 907	Charlotte Papacosma	Gunston
7 PH 1001	Scott Gowdy	Jefferson

**2019 BROADCOM MASTERS
NOMINEES (con't)**

PROJECT	NAME	SCHOOL
8 PH 1007	Nicholas Artiedamarin	Mary Ellen Henderson
8 PS 1111	Madi Goeke	Swanson
8 PS 1112	Eleanor Gookin	Jefferson
8 PS 1115	Benjamin Portner	Williamsburg

**RECOMMENDATIONS FOR VIRGINIA STATE
SCIENCE & ENGINEERING FAIR
2019**

PROJECT	NAME	SCHOOL
10 AS 106	Sydney Bell	T.C. Williams
12 AS 107	Tessa Naughton-Rockwell	T.C. Williams
9 BE 219	Jacob Singer	H-B Woodlawn
10 BE 222	Michaela McCormack	T.C. Williams
10 BI 308	Raynie Baker-Rosenberg	Washington-Lee
12 CH 445	Leslie Lytle	T.C. Williams
11 EN 536	Allison Stocks	Yorktown
11 EN 537	Brendan Doney & Owen Cardwell	T.C. Williams
10 EV 638	James Licato	Washington-Lee
12 EV 649	Jessica Byers	Washington-Lee
11 MC 710	Caroline Cunningham	Washington-Lee
11 ME 806	Morgan Atkinson	Washington-Lee
9 MI 912	Spencer Lewis & Jacob Foster	Washington-Lee
10 MI 915	Alexandra McDonald	Yorktown
11 MI 916	Hamna Shafiq	Washington-Lee
10 PS 1126	Noah Portner	Washington-Lee

BEST OF FAIR 2019

GRADES 7 & 8

Charlotte Papacosma
Gunston

The Effect of Type of Vinegar on Zone of Inhibition

GRAND PRIZE AWARDEES

Caroline Cunningham
Washington-Lee

*Investigating Cancer Mutations:
Improving the Analysis of Cancer Data with Software*

and

James Licato
Washington-Lee

*Optimizing Metformin Removal: Utilizing Molecular Sieves and
Absorbents Within Sand Filtration Units*

ALTERNATE AWARDEE

Leslie Lytle
T.C. Williams

*Developing a Biodegradable Bioplastic for Consumer Safety
and Commercial Applications*