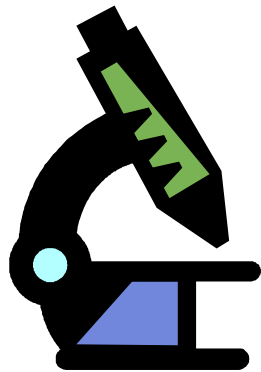


Northern Virginia Regional Science & Engineering Fair

Category Awards 2025



Holly Krull
Category Judge Coordinator

Dat Le
Fair Director

Michele Lombard
Assistant Fair Director

NORTHERN VIRGINIA REGIONAL SCIENCE & ENGINEERING FAIR

March 1, 2025

CATEGORY AWARDS

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Project Number	Name	School
<i>1st Place</i>		
<u>Animal Sciences</u>		
9 AS 103	Sundqvist, Marek	Arlington Tech
<u>Behavioral and Social Sciences</u>		
8 BE 201	Brooks, Johnna-Averi	Hammond
11 BE 209	Brodsky, Anna	H-B Woodlawn
<u>Biochemistry</u>		
9 BI 302	Gottshall, Daniel	Arlington Tech
9 BI 303	Thulson, Samuel	Alexandria City HS
10 BI 305	Pfautz, Tesla	Washington-Liberty
11 BI 307	Hoffman, Lilah	Washington-Liberty
<u>Chemistry</u>		
7 CH 407	Perez-Lopez, Miriam; Strauss, Charlotte	George Washington
8 CH 409	Beckner, Cayleigh	Swanson
9 CH 424	Saperstein, Margaret	Washington-Liberty
11 CH 433	Weber, Jackson	Yorktown
11 CH 434	Wan, Hamo; Lu, Mirabelle; Mao, Zehang	Veritas
<u>Engineering</u>		
8 EN 506	Horowitz, Helena	Gunston
8 EN 509	McNally, Lucy	Swanson
10 EN 528	Vasisht, Janak	H-B Woodlawn

Project Number	Name	School
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1st Place

Environmental and Earth Sciences

7 EV	604	Pearson, Amelia	Swanson
8 EV	609	Fern, Harper	Kenmore
8 EV	610	Ganzorig, Aranz	Swanson
8 EV	611	Troost, Danny	Swanson
9 EV	617	Ghosh, Sid	Yorktown
9 EV	619	Leaning, Alexandra	Wakefield
9 EV	621	Wells, Cassidy	Yorktown
11 EV	632	Ackleson, Emma	Washington-Liberty
11 EV	633	Fiorino, Anthony	Washington-Liberty
11 EV	635	Torg, Carrie	H-B Woodlawn
11 EV	637	Xu, Yuesi; Huang, Tianxiao; Wu, Chenfan	Veritas

Mathematics and Computer Science

8 MC	701	Russell, Nolan; Wagnon, Tim	Swanson
10 MC	705	Cohen, Gabriel	Yorktown
10 MC	707	Sirak, Sam	Alexandria City HS
11 MC	709	Lach-Hab, Nadia	Washington-Liberty
11 MC	710	O'Reilly, Brendan	Yorktown
11 MC	711	Elmagraby, Mya; Khalifa, Tarek	Washington-Liberty

Project Number	Name	School
<i>1st Place</i>		
<u>Medical and Health Sciences</u>		
7 ME 800	Wagman, Garrett	George Washington
8 ME 801	Arul Palaniraj, Vishnuvardhini	Jefferson
8 ME 802	Caparas, Paige	Williamsburg
9 ME 806	Jolly, Avaani	Yorktown
10 ME 808	Fan, Jerry Jiayu; van Linden, Maria	Veritas
11 ME 809	Madison, Kaitlin	Washington-Liberty
12 ME 813	Mohanty, Anna	Washington-Liberty
<u>Microbiology</u>		
11 MI 908	Allyn, Noah	Washington-Liberty
<u>Physics and Astronomy</u>		
7 PH 1003	Carpenter, Kara	Williamsburg
7 PH 1004	Carstens, Kaeli	George Washington
8 PH 1011	Ayalew, Maedot	Kenmore
8 PH 1012	Butler, Helen	Swanson
11 PH 1025	Leighton, Declan	Yorktown
<u>Plant Sciences</u>		
6 PS 1100	Co, Juna; Mahoney, Mallory	Patrick Henry
7 PS 1104	Scanlon, Harper	Jefferson-Houston
8 PS 1107	Szeto, Michael	Jefferson

Project Number	Name	School
<i>2nd Place</i>		
<u>Animal Sciences</u>		
7 AS 100	Yarker, Iris	Hammond
9 AS 104	Waggy, Charlotte	Arlington Tech
10 AS 106	Burks, Thomas	Alexandria City HS
<u>Behavioral and Social Sciences</u>		
10 BE 206	Shiu, Walter	Yorktown
<u>Biochemistry</u>		
7 BI 300	Lakhani, Leela	Dorothy Hamm
8 BI 301	Meyer, Evan	Kenmore
<u>Chemistry</u>		
8 CH 415	Hengst, Vivienne	Williamsburg
8 CH 416	Minor, Aidan	Swanson
9 CH 422	Majano, Allison	Washington-Liberty
10 CH 431	Parment, William	Wakefield
<u>Engineering</u>		
8 EN 510	Sibley, Kayla	Kenmore
9 EN 521	Gunter, June; Munipalla, Megha	Alexandria City HS

Project Number	Name	School
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2nd Place

Environmental and Earth Sciences

6 EV	600	Levene, Hannah	Kenmore
7 EV	605	Villwock, Eliana	Williamsburg
8 EV	606	Capiaux, Flora	Kenmore
8 EV	607	Choi, Olivia	Dorothy Hamm
8 EV	612	Zee, Rebecca	Kenmore
8 EV	615	Kelley, McKenzie; D'Amico, Alessandra	Swanson
9 EV	620	McGeorge, Tyler	Yorktown
10 EV	631	Zee, Rachel; Rahman, Sumra	Wakefield

Mathematics and Computer Science

7 MC	700	Sarkar, Ayan	Hammond
9 MC	703	Seyran, Zeynep	Washington-Liberty
10 MC	706	Hazari, Jasmin	Washington-Liberty
12 MC	712	Shi, Ziyi; Li, Meipan; Peng, Ho Ming Tim	Veritas

Project Number	Name	School
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2nd Place

Medical and Health Sciences

8 ME	803	Chen, Avery	Dorothy Hamm
8 ME	804	Eberhart, Jr., Darien	Jefferson
9 ME	805	Carpenter, Kylie	Yorktown
10 ME	807	Fitzgerald, Maya	Alexandria City HS
11 ME	810	Uddin, Maqsuda	Wakefield
11 ME	811	Zhang, Lingyue Joyce; Du, Qingyou	Veritas

Microbiology

9 MI	900	Baba, Nina	Washington-Liberty
9 MI	901	Chudiwale, Arya	Washington-Liberty
10 MI	907	Lyons, Momoka; Thomas, Morgan	Washington-Liberty

Physics and Astronomy

6 PH	1002	Zelenovic, Alec	Gunston
7 PH	1007	McQuillan, Gabriela	Williamsburg
8 PH	1013	Hirst, Anders	Gunston
8 PH	1014	Rathod, Ishaan	Swanson
9 PH	1016	Gallagher, James	Yorktown
9 PH	1017	Herrick, Sam	Yorktown
10 PH	1022	Chinoy, Eric	Yorktown
10 PH	1024	Shewchuk, Abigail	Alexandria City HS

Project Number	Name	School
<i>2nd Place</i>		
<u>Plant Sciences</u>		
8 PS 1105	Hirschfield, Leyla	Kenmore
8 PS 1108	Tran, Y-Lan	Williamsburg
8 PS 1110	Stern, Charlotte; Salerno, Ella	George Washington
9 PS 1111	Camey Gomez, Sarai	Arlington Tech
9 PS 1112	Karlton, James	Arlington Tech
10 PS 1113	Lehn, Rachel	Wakefield
10 PS 1114	Lester, Siena	Alexandria City HS
10 PS 1115	Shoffner, Sophia	Washington-Liberty

Project Number	Name	School
3rd Place		
<u>Animal Sciences</u>		
8 AS 102	Matthews, Oliver	George Washington
9 AS 105	Weber, Ryan	Alexandria City HS
<u>Behavioral and Social Sciences</u>		
9 BE 204	Tarpley, Summer	H-B Woodlawn
<u>Biochemistry</u>		
10 BI 304	McGlinchey, Quinn	Alexandria City HS
10 BI 306	Thulson, Benjamin	Alexandria City HS
<u>Chemistry</u>		
7 CH 402	Lee, Isabel	Dorothy Hamm
7 CH 406	Nigal, Ayush; Chu, Theodore	Jefferson
8 CH 410	Brosnan, B	Swanson
8 CH 412	Dannes, Avelyn	Williamsburg
8 CH 419	Shattuck, Maia	Kenmore
10 CH 428	Flashberg, Natalie	Washington-Liberty
10 CH 429	Knepper, Abigail	Washington-Liberty

Project Number	Name	School
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3rd Place

Engineering

8 EN	504	Atewologun, Corsen	Jefferson
9 EN	516	Madha, Mahasin	Alexandria City HS
10 EN	522	Berger, Owen	Arlington Tech
10 EN	524	Clemence, Idris	Alexandria City HS
10 EN	527	Tarpley, Michael	H-B Woodlawn

Environmental and Earth Sciences

6 EV	601	Lim, Jilliane	Patrick Henry
7 EV	603	Mellen, Connor	Hammond
8 EV	608	Cordova, Rossybell	Kenmore
9 EV	622	Zanni, Celia	Yorktown
10 EV	625	Mitzen, Julia	Wakefield
10 EV	627	Ondias-Souna, Oyane	Washington-Liberty
10 EV	630	Martin, Maya; Latifi, Mursal	Alexandria City HS
11 EV	634	Mukhtar, Ayah	Wakefield

Mathematics and Computer Science

10 MC	704	Clarke, Tess	Alexandria City HS
10 MC	708	Yimer, Sabrina	Washington-Liberty

Project Number	Name	School
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3rd Place

Microbiology

9 MI 902	Fuelling, Addison	Washington-Liberty
10 MI 903	Abdelbagi, Amna	Yorktown
10 MI 906	Hengst, Sadie	Washington-Liberty

Physics and Astronomy

6 PH 1000	Gross, Thomas	Gunston
7 PH 1006	McClinch, Evaleen	Williamsburg
9 PH 1018	Shaw, Ryan	Washington-Liberty
9 PH 1019	Wilson, Alex	Yorktown
10 PH 1023	Mathew, Nicholas	Washington-Liberty

Plant Sciences

7 PS 1102	Birdsall, Lillianna	Williamsburg
8 PS 1106	Metwaly, Alaa	Jefferson
8 PS 1109	Williams, John	Swanson
10 PS 1117	Dalton, Arthur; Tesfai, Essam	Alexandria City HS

Project Number	Name	School
<i>Honorable Mention</i>		
<u>Animal Sciences</u>		
7 AS 101	Baterdene, Misheel; O'Connor, Caitlin	H-B Woodlawn
<u>Behavioral and Social Sciences</u>		
9 BE 202	Henton, Estella	Alexandria City HS
9 BE 203	Sexton, Morgan	Arlington Tech
9 BE 205	Stouffer, Audrey; Wolf, Nina	Alexandria City HS
10 BE 207	Hao, Alvin; Lu, Haotian; Wang, Xiaohan Sophie	Veritas
10 BE 208	Li, Hejin; Wu, Jianing; Yan, Xinyu	Veritas
12 BE 210	Wallin, Carson	Yorktown
<u>Biochemistry</u>		
11 BI 308	Yavuz, Arzu	Washington-Liberty

Project Number	Name	School
<i>Honorable Mention</i>		
<u>Chemistry</u>		
6 CH 400	Hayes, Reagan; Gola, Rose; Hayes, Sloan	Swanson
7 CH 401	Downs, Samuel	Dorothy Hamm
7 CH 403	Rouland, Sophia	Dorothy Hamm
7 CH 404	Stuppy, Maya	George Washington
7 CH 405	Adams Rothrock, MJ; McCormick, Cecelia; Moline, Emma	Hammond
8 CH 408	Baker, Jaime	Kenmore
8 CH 411	Carney, Abigail	Dorothy Hamm
8 CH 413	Desai, Maliya	Dorothy Hamm
8 CH 414	Grigorescu, Ana	Williamsburg
8 CH 417	Podolsky, Hayden	Hammond
8 CH 418	Roske, Quinn	Swanson
8 CH 420	Bagai, Saira; Ebikwo, Eden	Dorothy Hamm
9 CH 421	Culbertson, Vincent	Arlington Tech
9 CH 423	Park, Thomas	Yorktown
9 CH 425	Waziri, Maryam	Alexandria City HS
10 CH 426	Barry, Fatoumata	Alexandria City HS
10 CH 427	Calam, Ethan	Wakefield
10 CH 430	Parker, Jayce	Alexandria City HS

Project Number	Name	School
<i>Honorable Mention</i>		
10 CH 432	Wang, Yihe; Tang, Botao	Veritas

Project Number	Name	School
<i>Honorable Mention</i>		
<u>Engineering</u>		
7 EN 500	Lao, Naomi	Kenmore
7 EN 501	Hsu, Amelia; Hart, Laura	Dorothy Hamm
7 EN 502	Komlodi, Lea; Grignon, Elspeth; Thompson, Lilia	Jefferson
7 EN 503	Van Duyn, Ben; Van Lare, Julian	H-B Woodlawn
8 EN 505	Cocuzzi, Sophia	Kenmore
8 EN 507	Lashley, Addison	Gunston
8 EN 508	Leighton, Arden	Williamsburg
8 EN 511	Smith, Edward	Dorothy Hamm
8 EN 512	Sylwester, Garrett	Gunston
8 EN 513	Talbot, Grayson	Dorothy Hamm
9 EN 514	Gravelle, Jameson	Arlington Tech
9 EN 515	Heredia, Paul	Arlington Tech
9 EN 517	O'Neil-Vira, Ishaan	Alexandria City HS
9 EN 518	Slapar, Charlotte	Arlington Tech
9 EN 519	Soronzonbold, Orgil	Washington-Liberty
9 EN 520	Dementi, Kye; Silva, Christian-Delfin	Alexandria City HS
10 EN 523	Brooke, Josephine	Yorktown
10 EN 525	Hurst, Mark	Yorktown

Project Number	Name	School
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Honorable Mention

10 EN 526	Ostrowski, Devin	Arlington Tech
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Environmental and Earth Sciences

8 EV 614	Chowdhury, Fathimah; Chitalkar, Saeed; Hossain, Anusha	Jefferson
9 EV 616	Do, Lan-Madeleine	Arlington Tech
9 EV 618	Guttridge, Ari	Arlington Tech
10 EV 623	Butzer, Allison	Washington-Liberty
10 EV 624	Klein, Florence	Alexandria City HS
10 EV 626	Mulder, Malena	Alexandria City HS
10 EV 628	Ruiz Castro, Davian	Alexandria City HS
10 EV 629	Schofield, Caroline	Alexandria City HS
11 EV 636	Qadir, Zaineb; Hardwick, Katie	Yorktown

Microbiology

10 MI 904	Desai, Suhani	Yorktown
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Project Number	Name	School
<i>Honorable Mention</i>		
<u>Physics and Astronomy</u>		
6 PH 1001	Moore, Mihret	Patrick Henry
7 PH 1005	Gamache, Brielle	Dorothy Hamm
7 PH 1008	Rahman, Tasnia	Hammond
7 PH 1009	Thuma, Aidan	Williamsburg
7 PH 1010	Garcia, Ethan; Remus, William	Gunston
8 PH 1015	Wondimagegn, Beza	Hammond
9 PH 1020	Vajjhala, Kavya; Hutchinson, Genevieve	Alexandria City HS
10 PH 1021	Barua, Preontee	Wakefield
<u>Plant Sciences</u>		
10 PS 1116	Vargas, Jennifer	Alexandria City HS

2025 Thermo Fisher Junior Innovators Challenge Nominees

PROJECT	NAME	SCHOOL
8 BE 201	Johnna-Averi Brooks	Hammond
7 CH 407	Miriam Perez-Lopez & Charlotte Strauss	George Washington
8 CH 409	Cayleigh Beckner	Swanson
8 EN 506	Helena Horowitz	Gunston
8 EN 509	Lucy McNally	Swanson
7 EV 604	Amelia Pearson	Swanson
8 EV 609	Harper Fern	Kenmore
8 MC 701	Nolan Russell & Tim Wagnon	Swanson
8 ME 801	Vishnuvardhini Arul Palaniraj	Jefferson
8 ME 802	Paige Caparas	Williamsburg
8 PH 1011	Maedot Ayalew	Kenmore
8 PH 1012	Helen Butler	Swanson
7 PS 1104	Harper Scanlon	Jefferson-Houston
8 PS 1107	Michael Szeto	Jefferson

Nominees For 2025 Virginia State Science & Engineering Fair

PROJECT	NAME	SCHOOL
9 AS 103	Marek Sundqvist	Arlington Tech
11 BE 209	Anna Brodsky	H-B Woodlawn
9 BI 303	Samuel Thulson	Alexandria City HS
10 BI 305	Tesla Pfautz	Washington-Liberty
11 BI 307	Lilah Hoffman	Washington-Liberty
9 CH 424	Margaret Saperstein	Washington-Liberty
11 CH 433	Jackson Weber	Yorktown
11 CH 434	Hamo Wan, Mirabelle Lu & Zehang Mao	Veritas
10 EN 528	Janak Vasisht	H-B Woodlawn
11 EV 633	Anthony Fiorino	Washington-Liberty
11 EV 637	Yuesi Xu, Tianxiao Huang & Chenfan Wu	Veritas
10 MC 707	Sam Sirak	Alexandria City HS
11 MC 709	Nadia Lach-Hab	Washington-Liberty
11 MC 711	Mya Elmagraby & Tarek Khalifa	Washington-Liberty
11 ME 809	Kaitlin Madison	Washington-Liberty
12 ME 813	Anna Mohanty	Washington-Liberty
11 MI 908	Noah Allyn	Washington-Liberty
11 PH 1025	Declan Leighton	Yorktown

BEST OF FAIR 2025

GRADES 6, 7 & 8

Maedot Ayalew
Kenmore

The Effect of Solar Magnetic Flux and Spatiotemporal Interplanetary Magnetic Field Variations on Space Weather Prediction Accuracy

GRAND PRIZE AWARDEES

Declan Leighton
Yorktown

The Analysis of the Effect of Input Power on the Efficiency of a Magnetoplasmadynamic Thruster Using Magnetic Deflection and Phosphor Screen Emission

and

Anna Mohanty
Washington-Liberty

RNA Knot: Topological-Based Prediction of Proviral DNA Expression

ALTERNATE AWARDEE

Janak Vasisht
H-B Woodlawn

Disrupting Renewable Energy With AI