

Miami-Dade  
**STEAM  
EXPO  
2017**

Inspiring  
**STEAM HEROES**

Science, Technology, Engineering, Art, and Mathematics



**Opening Ceremony**

Miami Dade College, North Campus  
11380 Northwest 27th Avenue  
Miami, FL 33167

Saturday, February 4, 2017 at 8:45 A.M.

OFFICE OF ACADEMICS AND TRANSFORMATION  
DIVISION OF ACADEMICS



#MDCPSSTEAM

#MiamiDadeSTEAMEXPO

TB

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**Miami-Dade STEAM Expo**  
**AUTOGRAPHS, HONORS, AND ACCOLADES**  
**Inspiring STEAM Heroes**

**Special Thanks to the Miami-Dade STEAM Expo Additional Sponsors**



FAIRCHILD TROPICAL BOTANIC GARDEN

Science, Technology, Engineering, Arts, Mathematics

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<http://stem.dadeschools.net>

# Miami-Dade STEAM Expo AGENDA Saturday, February 4, 2017

## **Building A Science Complex**

8:45 a.m. – 9:45 a.m. Opening Ceremony – Science Complex  
 8:45 a.m. – 4:00 p.m. US Army Medics – Emergency First Aid  
 10:00 a.m. – 2:00 p.m. International Bridge Building Competition

## **Lakeside Road**

10:00 a.m. – 2:00 p.m. Interactive Activities: Forensic Science, LandSharc Mobile Labs, and Miami Auto Museum, Million Orchid Project STEM Lab

## **Various locations on campus** (see pages 4 – 9)

10:00 a.m. – 12:00 p.m. Elementary Science Fair Judging (closed event)  
 10:00 a.m. – 2:00 p.m. South Florida Regional Science and Engineering Fair Judging (closed event)  
 10:00 a.m. – 2:30 p.m. SECME Competitions (spectator and closed events)  
 10:00 a.m. – 2:00 p.m. Interactive Activities

## **Gymnasium and back parking lot/basketball court**

10:00 a.m. – 2:00 p.m. Ten-80 Race Cars – basketball court  
 10:00 a.m. – 11:30 p.m. SECME Mousetrap Car and Vex IQ – Gymnasium  
 SECME Water-bottle Rocket Launch – Gymnasium Parking Lot 9  
 10:00 a.m. – 1:00 p.m. Vex and VexIQ Robotics – Gymnasium  
 11:30 a.m. – 12:30 p.m. SECME Egg Drop Container Testing – Gymnasium Parking Lot 9

## **Buildings 2**

10:00 a.m. – 2:00 p.m. Art Interactive Activities and Gallery Walk– Learning Resources Center  
 10:00 a.m. – 1:00 p.m. SECME Robotics and Brain Bowl (MS and HS)  
 1:00 p.m. – 1:30 p.m. Cody the Humanoid – painting with South Miami Senior High School

## **Buildings 3 and 7**

10:00 a.m. – 2:00 p.m. Interactive Activities (**Building 3 courtyard**): Discovery Education; Florida Department of Agriculture: Giant African Land Snail; Girls Who Code; Harcourt Mifflin Houghton;; Miami Dade College Interactive Academic STEM Tables; Patricia and Phillip Frost Museum of Science; Science with a Twist (SWAT); UDT Z Space;  
 Interactive Activities (**Building 3 grassy area**): Miami Brain Fair, Miami Marlins and US Army  
**Building 7**: DJI Pilot Experience!  
 10:00 a.m. – 1:00 p.m. **Building 3**: SECME Mathematics (MS and HS) and FPL Generator Build

## **Building 4**

10:00 a.m. – 2:00 p.m. MDCPS Middle School Jazz Band Music Performance Assessment and STEAM Experience  
 SECME Math and Brain Bowl (ES) – see page 6 for times  
 2:30 p.m. – 3:30 p.m. Elementary Science Fair Awards Ceremony - Building 4, Atrium

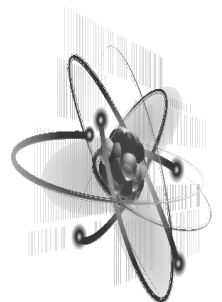
**11:30 a.m. – 2:00 p.m. Lunch available: Food trucks (Science Complex), cafeteria (Bldg. 4), and gymnasium (Bldg. 14)**

## **Science Fair Gallery of Projects Open to the Public**

1:00 p.m. – 2:00 p.m. Elementary Science Fair Projects – Building 3  
 2:00 p.m. – 2:30 p.m. Elementary Science Fair Projects retrieval --- Building 3  
 2:00 p.m. – 4:00 p.m. South Florida Regional Science and Engineering Fair Projects – Building A

## **Building 5 - Lehman Theatre:**

10:00 a.m. – 11:45 a.m. Dream in Green Eco-Hub Competition  
 12:00 p.m. – 1:00 p.m. Simplifying Climate Science and Solutions: A Diverse Perspective  
 2:00 p.m. – 2:45 p.m. SECME Elementary Award Presentation  
 3:00 p.m. – 3:40 p.m. SECME Middle School Award Presentation  
 3:45 p.m. – 4:15 p.m. SECME Senior High School Award Presentation





## **Opening Ceremony**

### **Science Complex, Main Stage**

8:45 a.m. – 9:45 a.m.

#### **Mistress of Ceremony**

Dr. Ava D. Rosales  
Executive Director

Miami Northwestern Mighty Marching Bulls  
Mr. Chad Norton, Director of Bands

#### **Call to Colors & Pledge of Allegiance**

Miami Northwestern School Color Guard  
Sergeant Joseph Simpson

#### **National Anthem**

Miami Northwestern Mighty Marching Bulls

#### **Opening Remarks**

Mr. Alberto M. Carvalho, Superintendent of Schools  
Miami-Dade County Public Schools

Dr. Malou C. Harrison, President  
Miami Dade College, North Campus

#### **STEM Designated Schools Introduction**

Mr. Cristian Carranza, Administrative Director  
Division of Academics

Parade of 2015 – 2016 Miami-Dade STEM Designated Schools

Bronze  
Silver  
Gold

Parade of SECME School Banners




#### **Dismissal**

March of the Competitors and Spectators

Cover artwork by: Miss Tiffany Lopez, South Miami K – 8 Center

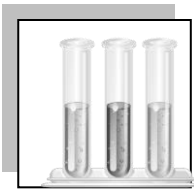


## Miami-Dade STEAM Expo At-a-Glance

Time	 <b>Elementary Science Fair</b> Page 4	 <b>South Florida Regional Science &amp; Engineering Fair</b> Page 5	 <b>SECME</b> Page 6
8:00 a.m.	Judge's Check-in & Orientation		
8:45 a.m. – 9:45 a.m.	Opening Ceremony		
10:00 a.m. – 2:00 p.m.	Interactive Activities		
10:00 a.m.	Elementary Science Fair Judging Building 3	SFRSEF Judging Science Complex Projects – Students Only Bridges – Open to the Public	SECME Competitions (various locations)
10:30 a.m.			
11:00 a.m.			
11:30 a.m.			
12:00 p.m.			
12:30 p.m.			
1:00 p.m.	Gallery of Projects Open to Public Building 3		
1:30 p.m.	Project Retrieval Building 3	Gallery of Projects Open to Public Science Complex	Project Retrieval Awards Ceremony – Elementary Level (K – 5)
2:30 p.m.	Awards Ceremony Building 4		Awards Ceremony Middle Grades (grades 6 – 8) Project Retrieval
3:00 p.m.			
3:30 p.m.			
4:00 p.m.		Project Retrieval	Awards Ceremony Senior High (grades 9 – 12)

**Lunch available from 11:30 a.m. – 2:00 p.m.**





# M-DCPS Elementary Science Fair



**Buildings 3 and 4**  
**8:00 a.m. – 3:30 p.m.**

- 8:00 a.m. Judge’s Check-in & Orientation (Building 3, Room 3238 and 3239)  
Student Check-in Science Complex, Plaza (north side)
  
- 8:45 a.m. – 9:45 a.m. Opening Ceremony, Science Complex
  
- 10:00 a.m. – 2:00 p.m. *Interactive Activities and Mobile STEM Labs in courtyard and grassy area*  
*Discovery Education*  
*Florida Department of Agriculture: Giant African Land Snail (GALS)*  
*Girls Who Code*  
*Harcourt Houghton Mifflin*  
*Miami Brain Fair*  
*Miami Dade College Academics*  
Patricia and Phillip Frost Museum of Science  
*SWAT: Science with a Twist (Courtyard)*  
US Army – (between Building 3 and 4, grassy area)  
*UDT Z Space*
  
- 10:00 a.m. – 1:00 p.m. Elementary Science Fair Judging, Building 3 (Room 3249)
  
- 12:00 p.m. – 1:30 p.m. LUNCH – Cafeteria, Gymnasium, Science Complex (Food Trucks)
  
- 1:00 p.m. – 1:30 p.m. *Gallery of Projects* – Open to the Public, Building 3 (Room 3249)
  
- 1:30 p.m. – 2:00 pm Palmetto Elementary Jazz Band Performance  
..... Mr. Oliver Diez, Music Teacher
  
- 2:30 p.m. – 3:30 p.m. Elementary Science Fair Award Ceremony (Building 4 Atrium)**  
  
Mistress of Ceremony .....Ms. Glenda Moton, Teacher  
Miami Norland Senior High School  
  
Palmetto Elementary Jazz Band Performance  
  
Remarks ..... Dr. Ava D. Rosales, Executive Director  
Department of Mathematics and Science  
  
Department of Mathematics and Science Presentation of Awards  
..... Dr. Millard Lightburn, District Supervisor  
..... Ms. Noreyda Casanas, Curriculum Support Specialist  
.....Ms. Yusimi Perez, Curriculum Support Specialist  
  
Golden ticket sponsored by CappSci Miami Science Barge

*Elementary projects available for pick-up from 1:30 p.m. to 2:00 p.m.*  
*Projects left behind will be discarded*





# South Florida Regional Science and Engineering Fair



**Science Complex  
8:00 a.m. – 4:00 p.m.**

7:30 a.m.	Judge’s Check-in & Orientation, Building 9	
8:00 a.m.	Student Check-in Science Complex, Exhibit Rooms	
8:45 a.m. – 9:45 a.m.	Opening Ceremony, Science Complex	
10:00 a.m. – 12:00 p.m.	Judging of Projects Student Exhibitors only, Science Complex	
<	Animal Sciences .....	A212
<	Behavioral and Social Sciences.....	A305
<	Biomedical and Health Sciences (Middle School).....	A114
<	Biomedical and Health Sciences (High School).....	A212
<	Cellular and Molecular Biology/Biochemistry .....	A104
<	Chemistry.....	A104
<	Earth and Environmental Sciences.....	A102-103
<	Engineering (Middle School) .....	A116
<	Engineering (High School) .....	A211
<	Environmental Engineering .....	A205
<	Intelligent Machines, Robotics and System Software .....	A211
<	Mathematics and Computational Sciences.....	A211
<	Microbiology.....	A104
<	Physics and Astronomy and Engineering (High School) .....	A117-118
<	Plant Sciences (Middle School) .....	A310-A311
<	Plant Sciences (High School).....	A315
<	Research Paper (Judges Only).....	Building 9
<	Bridges (Open to the Public) .....	Main Stage
10:00 a.m. – 1:00 p.m.	Interactive Activities	
12:00 p.m. – 1:00 p.m.	LUNCH, Cafeteria, Science Complex and Food Trucks	
1:00 p.m. – 3:00 p.m.	Judging, Continued	
2:00 p.m. – 4:00 p.m.	Gallery of Projects – Open to the Public, Science Complex	

*Projects available for pick-up from 4:00 p.m. to 5:00 p.m.  
Projects left behind will be discarded*

Note: All above participating students will receive an award in the SFRSEF Awards Program on February 25



## 22<sup>nd</sup> Annual SECME Olympiad and Festival

SECME: STEM Superheroes!



### Various Locations 8:00 a.m. – 4:15 p.m.

8:00 a.m. Judges and SECME Teacher Coordinators' Check-in & Orientation

SECME Coordinators/School Teacher Representative: Science Complex Hallway – behind stage

SECME Judges: Gymnasium

8:15 a.m. Banner Check-in & Line-up Science Complex Hallway -North side of building (behind stage)

8:45 a.m. Opening Ceremony and Parade of Banners - Science Complex

<b>*Spectator Events</b> Public invited to observe		<b>**Closed Events</b> Registered competitors only
Bionic Hand Competition	Mousetrap Car	Banners
Brain Bowl Finals	Vex and Vex IQ Robotics	Brain Bowl Preliminary
Bridges	Water-Bottle Rockets	Mathematics
Egg Drop		Patent Pending
FPL Generator Build		

*Elementary School (ES), Middle School (MS), Senior High School (SHS)*

10:00 a.m. Phase I Competitions

SECME Competitors retrieve pre-constructed projects from Gymnasium

- < Banner\*\*: Gymnasium
- < Brain Bowl Preliminary\*\*: Building 4 M/J Taylor Lounge 4207; SHS, Building 2 (2151)
- < Bridges\*: Science Complex Stage
- < FPL Generator-build Project Check-in and ES event – Building 3 (3101)
- < Mathematics\*\*: MS, Building 3 (3201)
- < Mousetrap Car\*: Gymnasium
- < Patent Pending\*\*: Gymnasium
- < Vex IQ\* ES: Gymnasium
- < Water-Bottle Rockets\*: Lot 9 behind Gymnasium
- < 13<sup>th</sup> Annual Bionic Hand Competition\*: SHS, Building 2 (2158)

11:00 a.m. Phase II Competition

- < Brain Bowl Preliminary\*\*: MS, Building 2 (2151)
- < FPL Generator Build\*: MS, Building 3 (3101)
- < Mathematics\*\*: ES, Building 4 M/J Taylor Lounge 4207; SHS, Building 3 (3201)

11:30 a.m. Phase III Competition

- < Egg Drop\*: Lot 9, behind Gymnasium
- < Vex IQ\* MS: Gymnasium
- < Vex Robotics\* SHS: Gymnasium
- < 13<sup>th</sup> Annual Bionic Hand Competition\*: MS, Building 2 (2158)

11:30 a.m. – 2:00 p.m. LUNCH (various locations) - Cafeteria (Building 4): Gymnasium; Science Complex; Food Trucks

12:00 p.m. Phase IV Competition

- < Brain Bowl Finals\*: SHS, Building 2 (2151)
- < FPL Generator Build\*: MS, Building 3 (3101)
- < Mathematics Individual Challenge\*\* – HS, Building 3 (3201)

12:30 p.m. Phase V Competition

- < Brain Bowl Finals\*: SHS, Building 2 (2151)
- < FPL Generator Build\*: MS, Building 3 (3101)
- < Mathematics Individual Challenge\*\* – MS, Building 3 (3201)

1:30 p.m. Phase VII Competition

- < Brain Bowl Finals\*: ES, Lehman Theatre, Building 5
- < Display of Banners\*: Gymnasium
- < Brain Bowl Finals\*: MS, Building 2 (2151)

*SECME projects available for pick-up from 2:00 p.m. to 4:30 p.m.  
Projects left behind will be discarded*

**2:00 p.m. – 4:15 p.m. SECME Olympiad & Festival Awards Ceremony**  
Building 5 (Lehman Theater)

2:00 p.m. – 2:45 p.m. SECME Elementary Awards Presentation and ES Brain Bowl Finals  
3:00 p.m. – 3:40 p.m. SECME Middle School Award Presentation  
3:45 p.m. – 4:15 p.m. SECME Senior High School Award Presentation

#### Officiates

Dr. Heather Belmont, Dean of the School of Science  
Miami Dade College, North Campus

Mr. Cristian Carranza, Administrative Director  
Division of Academics - STEAM

Dr. Ava D. Rosales, Executive Director  
Department of Science

#### Presentation of Awards

Departments of Mathematics and Science, Career and Technical Education, and Instructional Technology  
Ms. Michelle White, Executive Director (Mathematics)  
Ms. Melissa Fernandez, District Supervisor (Career and Technical Education)  
Mr. Dane Jaber, Instructional Supervisor (Science)  
Ms. Pamela Wentworth, Curriculum Support Specialist (Instructional Technology)

*Elementary School (ES), Middle School (MS), Senior High School (SHS)*

Golden ticket sponsored by CappSci Miami Science Barge

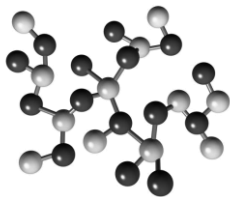




**M-DCPS Middle School Jazz Band Music Performance Assessment  
&  
STEAM Experience**  
in collaboration with the Ear Peace Foundation

**Building 4  
10:00 a.m. – 1:30 p.m.**

10:00 a.m.....	South Miami Middle School Francisco Williams, Director Fabiola Izaguirre, Principal
10:30 a.m.....	Hialeah Gardens Middle School Berman Lopez, Director Maritza Jimenez, Principal
11:00 a.m.....	Glades Middle School Erich Rivero, Director Cynthia Valdes-Garcia, Principal
11:45 a.m.....	Palm Springs Middle School Steven Raimundez, Director Leonard Torres, Principal
12:15 p.m.....	Ruben Dario Middle School Elissa Vento-Tatum, Director Verona McCarthy, Principal
12:45 p.m.....	Arvida Middle School Stephanie Gust, Director Nancy Aragon, Principal



## Interactive Activities

Below, please find a listing of *Interactive Workshops* providing students, parents, teachers, and other educational stakeholders with an opportunity to learn all about the STEM related resources in our community. Visit with representatives from a variety of areas who will address current research, post-secondary options, and educational strategies for teaching and learning.

- A. Miami Dade College Forensic Science Fingerprinting Demonstration Lakeside 10:00 a.m. – 2:00 p.m.**  
See how an invisible palm or fingerprints left on a piece of paper can be made visible by using a fingerprint powder on paper so that classification and identifications can be made.
- B. Dream in Green Eco-Hub Competition Lehman Theatre 10:00 a.m. – 11:45 a.m.**  
Students present multi-media project proposals that focus on hands-on solutions to environmental issues and sustainability, in competition for \$5,000 Eco-Hub grants.
- C. Simplifying Climate Science and Solutions: A Diverse Perspective Lehman Theatre 12:00 p.m. – 1:00 p.m.**  
An audience participatory panel discussion with the CLEO Institute.
- D. STEAM: Mission Arts Fusion Building 2 - Library 10:00 a.m. – 2:00 p.m.**  
Competition and exhibition for K-12 students, which combines technology, engineering, architecture, math, visual arts, music, film making, fashion, and performing arts, while encouraging innovation and creative risk-taking.
- E. Cody: The Humanoid Paints in Watercolors Building 2 Courtyard 12:30 p.m. – 1:30 p.m.**  
This interactive dialogue and painting session showcases STEAM in action through coding with the Department of Mathematics and Science 21<sup>st</sup> Century Community Learning Centers SECME Stars III and Bosch Foundation grant funded NAO Humanoid
- F. Miami Dade College STEM Information Tables Building 3 Courtyard 10:00 a.m. – 2:00 p.m.**  
Miami Dade College staff at these tables will provide resources and information for students and parents seeking postsecondary studies, opportunities, and preparation.
- G. Miami Brain Fair Building 3, Grassy Area 10:00 a.m. – 2:00 p.m.**  
Various brain-based activities presented by local institutions of higher education and community partners.
- H. Discovery Education Building 3, Grassy Area 10:00 a.m. – 2:00 p.m.**  
Join Discovery Education for an interactive STEM station and build your own catapult! Explore Newton's Laws of Motion while testing out your catapult design. Whose catapult will launch a projectile the farthest and with the most accuracy? Stop by to find out and have some fun!
- I. Florida Department of Agriculture Giant African Land Snail (GALS): Building 3 Courtyard 10:00 a.m. – 2:00 p.m.**  
This presentation will address the negative impact that the Giant African Land Snail has on South Florida ecosystem and how we can report its presence in our area.
- J. Patricia and Phillip Frost Museum of Science: Building 4, Atrium 10:00 a.m. – 2:00 p.m.**  
Join Frost Science and watch as balloons and flowers shatter, explode, or strengthen as we explore the freezing effects of liquid nitrogen (at -320°F!) on everyday items. Unique experiments also include creating indoor clouds and a frozen bubble eruption!
- K. FIU Coding and Girls Who Code – Summer Immersion Program Building 3, Atrium 10:00 a.m. – 2:00 p.m.**  
Learn how to “code” with Girls Who Code and FIU. Girls Who Code is a free 7- week intensive computer science course that embeds classrooms in technology companies and universities. The project -based curriculum paired with 300+ hours teaches Girls everything from robotics to mobile development to HTML and CSS gaining exposure to the tech industry and receiving valuable mentorship from women working in technology.
- L. SWAT: Science With a Twist Building 3, Courtyard 10:00 a.m. – 2:00 p.m.**  
Visit the interactive science hands-on activities for elementary students and experience the excitement of *science, technology, engineering and mathematics (STEM) in action*.
- M. Miami Marlins Building 3, Grassy Area 10:00 a.m. – 2:00 p.m.**
- N. UDT Z Space Building 3, Courtyard 10:00 a.m. – 2:00 p.m.**  
zSpace provides educators with a realistic and interactive learning environment to engage students, encourage exploration and creativity, and allow a deeper understanding of subjects. Teachers create customized 'learn-by-doing' lesson plans based on curriculum and student needs.
- O. US Army Building 3, Grassy Area 10:00 a.m. – 2:00 p.m.**
- P. STEM Vehicles and Mobile Labs Various Locations 10:00 a.m. – 2:00 p.m.**  
These interactive, mobile learning vehicles feature enriching and engaging hands-on activities that offer experiential learning that will inspire critical thinking and empower students to make a difference in the world around them and advance their knowledge of the integration of science, technology, engineering and mathematics (STEM).  
**Miami Auto Museum Mobile:** Lakeside (across from Science Complex)  
**Million Orchid Project STEM Lab:** Lakeside (across from Science Complex)  
**LandSharc MAST Academy:** Lakeside (across from Science Complex)  
**Ten-80 Race Challenge Exhibition:** Behind Gymnasium (basketball court)  
**DJI New Pilot Experience!** Building 7 courtyard

## 2015 – 2016 Miami-Dade STEM Designated Schools

Miami-Dade County Public Schools aspires to engage and prepare all of our students in science, technology, engineering, and mathematics (STEM) to ensure our community has the next generation of inventors, explorers, innovators, and leaders.

The 2015-16 M-DCPS STEM School Designation program was developed to ensure our community is aware of the STEM schools in Miami-Dade. The 2015-16 STEM School Designation Program was a rigorous year long process that reviewed the STEM participation and performance of schools in the following areas:

- State and national assessments
- STEM course offerings
- STEM teacher professional development
- STEM student competitions
- STEM parent showcases
- STEM community partnerships
- STEM integration

### Gold Designation

Sunset Elementary School  
Hialeah Gardens Middle School  
TERRA Environmental Research Institute

### Silver Designation

Calusa Elementary School  
Coral Park Elementary School  
Cutler Ridge Elementary School  
Dante B. Fascell Elementary School  
Downtown Doral Charter  
Ojus Elementary School  
Pinecrest Academy (South)  
Royal Palm Elementary School  
Sunset Park Elementary School  
Highly Inquisitive & Versatile Educational (HIVE)  
Preparatory School  
Pinecrest Cove Academy  
Winston Park K-8 Center

George W. Carver Middle School  
Howard D. McMillan Middle School  
John F. Kennedy Middle School  
South Miami Middle School  
Jose Marti MAST 6-12 Academy  
MAST Academy  
Mater Academy Charter Middle-High School  
MAST @ Homestead  
Miami Jackson Senior High School  
Pinecrest Preparatory Academy Middle-High  
South Dade Senior High School

### Bronze Designation

Ben Sheppard Elementary School  
Crestview Elementary School  
Dr. William A. Chapman Elementary School  
Holmes Elementary School  
John G. Dupuis Elementary School  
North Hialeah Elementary School  
Palmetto Elementary School  
Pinecrest Preparatory Academy  
Somerset Arts Academy  
Somerset Gables Academy  
Sweetwater Elementary School  
Wesley Matthews Elementary School  
Cypress K-8 Center  
Eugenia B Thomas K-8 Center

Pinecrest Academy (North)  
Citrus Grove Middle School  
Lamar Louise Curry Middle School  
Miami Springs Middle School  
Palmetto Middle School  
Riviera Middle School  
Rockway Middle School  
W. R. Thomas Middle School  
American Senior High School  
Biotech @ Richmond Heights 9-12 High School  
Coral Gables Senior School  
G. Holmes Braddock Senior High School  
MAST @ FIU Biscayne Bay Campus  
Miami Coral Park Senior High School



## Elementary Science Fair Schools



Academir Charter Preparatory  
Academir Charter School West  
Academy for International  
Education Charter School  
Amelia Earhart ES  
Arch Creek ES  
Archimedean Academy  
Arcola Lake Elementary  
Assurant Satellite Learning  
Center  
Auburndale ES  
Barbara Hawkins ES  
Ben Sheppard ES  
Biscayne ES  
Brentwood ES  
Broadmoor ES  
Calusa ES  
Carol City  
Charles D. Wyche ES  
Charles Hadley ES  
Christina M. Eve ES  
Claude Pepper ES  
Coconut Grove ES  
Coral Reef ES  
Cutler Ridge ES  
Dante Fascell ES  
David Fairchild ES  
Doral Academy Charter ES  
Downtown Doral Charter ES  
Dr. Carlos J. Finlay  
Dr. Edward L. Whigham ES  
Dr. Gilbert L. Porter ES  
Dr. Henry Perrine ES  
Dr. Manuel Barreiro ES  
Dr. William Chapman ES  
E.W.F Stirrup ES  
Emerson ES  
Eneida M. Hartner ES  
F.S. Tucker ES  
Fairland ES

Flagami ES  
Flamingo ES  
Florida City ES  
Fulford ES  
Gertrude K. Edelman Sabal  
Palm ES  
Greenglade ES  
Henry M. Flagler ES  
Hialeah ES  
Hibiscus  
Holmes ES  
Howard Drive ES  
iMater Academy ES  
Jack D. Gordon ES  
Joe Hall ES  
Kelsey Pharr ES  
Kendale ES  
Kendale Lakes ES  
Kinloch Park ES  
Lake Stevens ES  
Lakeview ES  
Lenora Brayon Smith ES  
Lorah Park ES  
Ludlam ES  
Madie Ives ES  
Mae Walters ES  
Mater Academy International  
Mater Academy Mount Sinai  
Maya Angelou ES  
Meadowlane ES  
Miami Heights ES  
Miami Shores ES  
Norma Butler Bossard ES  
North Beach ES  
North Dade Center for Modern  
Languages  
North Hialeah ES  
North Miami ES  
Norwood ES  
Ojus ES

Oliver Hoover ES  
Palm Springs North ES  
Palmetto ES  
Parkview ES  
Pine Villa ES  
Pinecrest Academy South  
Pinecrest Academy North  
Pinecrest Cove Preparatory  
Pinecrest ES  
Pinecrest Glades Academy  
Pinecrest Preparatory Academy  
Redland ES  
Redondo ES  
Royal Palm ES  
Santa Fe Advantage Academy  
Shenandoah ES  
Silver Bluff ES  
Somerset Academy  
Somerset Academy Bay  
Somerset Arts Academy  
Somerset Gables Academy  
Southside ES  
Spanish Lake ES  
Springview E  
Sunset ES  
Sunset Park ES  
Sweetwater ES  
The Charter School at  
Waterstone  
Tropical ES  
Twin Lakes ES  
Van E. Blanton ES  
Village Green ES  
Virginia A. Boone/ Highland  
Oaks E  
Wesley Mathews ES  
West Hialeah Gardens ES  
Whispering Pines ES  
Youth Co-op Charter School  
Zora Neale Hurston ES

### K – 8 Centers

Ada Merritt K-8 Center  
Air Base K-8 Center  
Aventura Waterways K-8  
Blue Lakes K-8  
Bob Graham Education Center  
Bowman Ashe/Doolin K-8  
Campbell Drive K-8  
Coral Gables Preparatory  
Academy  
Cypress K-8  
Ernest R. Graham K-8 Center

Eugenia B. Thomas K-8 Center  
Frank C. Martin K-8 Center I  
Gateway Environmental K-8  
Highly Inquisitive Versatile  
Education charter  
Hubert O. Sibley K-8  
iPreparatory Academy  
Irving and Beatrice Peskoe K-8  
John I. Smith K-8 Center  
Key Biscayne K-8 Center  
Leewood K-8 Center

Miami Lakes K-8 Center  
Morningside K-8  
Norman S. Edelcup/Sunny Isles  
K-8 Center  
Ruth K. Broad/Bay Harbor K-8  
South Dade Middle School  
Vineland K-8 Center  
Winston Park K-8



# South Florida Regional Science and Engineering Fair Schools



## M-DCPS K-8 Centers

Ada Merritt K-8 Center  
Air Base K-8 Center  
Aventura Waterways K-8 Center  
Bob Graham Education Center  
Bowman Ashe/Doolin K-8 Academy  
Coral Gables Preparatory Academy  
David Lawrence Jr K-8 Center  
Devon Aire K-8 Center  
Ernest R Graham K-8 Academy

Eugenia B. Thomas K-8 Center  
Fienberg-Fisher K-8  
Gateway Environmental K-8 Center  
Jane S. Roberts K-8  
John I Smith K-8 Center  
Kenwood K-8 Center  
Key Biscayne K-8 Center  
Leewood K-8 Center  
Leisure City K-8 Center

Lillie C. Evans K-8 Center  
Miami Lakes K-8 Center  
Norman S. Edelcup Sunny Isles  
Beach K-8  
Ruth K. Broad Bay Harbor K-8  
Center  
South Miami K-8 Center  
Winston Park K-8 Center

## M-DCPS Middle Schools

Carol City MS  
Citrus Grove MS  
Country Club MS  
George Washington Carver MS  
Glades MS  
Hammocks MS  
Herbert A. Ammons MS  
Hialeah Gardens MS  
Highland Oaks MS  
Howard D McMillan MS  
John F. Kennedy MS

Jorge Mas Canosa MS  
Jose de Diego MS  
Lamar Louise Curry MS  
Madison MS  
Miami Lakes MS  
Miami Springs MS  
Nautilus MS  
Palm Springs MS  
Palmetto MS  
Paul W. Bell MS  
Ponce de Leon MS

Redland MS  
Riviera MS  
Rockway MS  
Ruben Dario MS  
Shenandoah MS  
South Dade MS  
South Miami MS  
W. R. Thomas MS  
West Miami MS

## M-DCPS 6-12 Schools

Miami Arts Studio @ Zelda Glazer

Young Women's Preparatory Academy

## M-DCPS Senior High Schools

Barbara Goleman SHS  
Center for International Education: A  
Cambridge Associate  
Coral Gables SHS  
Coral Reef SHS  
Cutler Bay SHS  
Dorothy M. Wallace COPE Center  
Dr. Michael M. Krop SHS  
Felix Varela SHS  
G. Holmes Braddock SHS  
Hialeah Gardens SHS  
Hialeah SHS  
Hialeah-Miami Lakes SHS  
Homestead SHS

International Studies Preparatory  
Academy  
iPreparatory Academy  
iTech  
John A. Ferguson SHS  
Law Enforcement Officers Memorial  
High  
MAST @ FIU Biscayne Bay  
Campus  
Maritime and Science Technology  
Academy  
Medical Academy for Science and  
Technology  
Miami Beach SHS

Miami Coral Park SHS  
Miami Jackson SHS  
Miami Lakes Educational Center  
Miami Springs SHS  
New Word School of the Arts  
North Miami Beach SHS  
North Miami SHS  
Robert Morgan Educational Center  
Ronald W. Reagan/Doral SHS  
South Miami SHS  
Southwest Miami High  
Terra Environmental SHS  
William H. Turner Technical Arts SHS

## Charter Schools

Academy of International Education  
Charter  
Archimedean Middle Conservatory  
Aventura City of Excellence School  
Everglades Preparatory Academy  
Highly Inquisitive Versatile  
Education Charter

Mater Academy Charter High  
Mater Academy Charter Middle  
Mater Academy Lakes Middle  
School  
Mater Academy of International Studies  
Miami Arts Charter School

Pinecrest Cove Preparatory  
Academy  
Pinecrest Preparatory Middle High  
Youth Co-Op Preparatory Charter  
School

## Private Schools

Christopher Columbus High School  
Miami Country Day School  
Palmer Trinity School

Ransom Everglades High School  
Scheck Hillel Community School  
St. Rose of Lima School

Westminster Christian School





# SECME Olympiad and Festival Schools



## Elementary Schools

Academir Charter School Preparatory  
 Academir Charter School West  
 Academir Preparatory Academy  
 Academy for Int'l Education  
 Archimedean Academy  
 Arcola Lake  
 Barbara Hawkins  
 Ben Sheppard  
 Brentwood  
 Comstock  
 Coral Park  
 Cutler Ridge  
 Cypress  
 David Lawrence Sr. Center  
 Downtown Doral Charter  
 Dr Gilbert L. Porter  
 Dr Rolando Espinosa K  
 Dr. Carlos J Finlay  
 E.W.F. Stirrup  
 Earlington Heights  
 Eneida Massas Hartner  
 George Washington Carver

Gertrude Edelman/Sabal Palm  
 Greenglade  
 Henry M. Flagler  
 Hive Preparatory School  
 Holmes  
 Irving & Beatrice Pesko K  
 John G. Dupuis  
 Kelsey L. Pharr  
 Kinloch Park  
 Lake Stevens  
 Lakeview  
 Lenora B. Smith  
 Lorah Park  
 Mae Walters  
 Mater Academy East Charter  
 Maya Angelou  
 Myrtle Grove K Center  
 Norman S. Edelcup/Sunny Isles K  
 North Hialeah  
 Ojus  
 Palmetto  
 Pincrest Glades

Pinecrest Academy South  
 Pinecrest Cove Academy  
 Pinecrest Glades Academy  
 Pinecrest Prep Academy  
 Redland  
 Redondo  
 Royal Palm  
 Ruth K Broad/Bay Harbor K  
 Somerset Academy  
 Somerset Academy Bay  
 Somerset Arts Academy  
 Somerset Gables Academy  
 Somerset Oaks Academy  
 Spanish Lake  
 Sunset  
 Sunset Park  
 Sweetwater  
 Sylvania Heights  
 Tropical  
 West Hialeah Gardens  
 Winston Park Center

## Middle Schools

Academir Charter School  
 Academy for Int'l Education  
 Archimedean Conservatory  
 Aventura City Excellence  
 Aventura Waterways Center  
 Bob Graham Education Center  
 Bowman Ashe/Doral Academy  
 Carol City  
 Citrus Grove  
 Coral Gables Preparatory Academy  
 Cypress Elementary  
 David Lawrence Sr. Center  
 Dr Rolando Espinosa K  
 Eugenia B. Thomas Center  
 Everglades K Center  
 Everglades Preparatory Academy  
 Frank C. Martin Center  
 Gateway Environmental K  
 George Washington Carver  
 Glades  
 Hammocks  
 Herbert A. Ammons  
 Hialeah Gardens  
 Hialeah

Highland Oaks  
 Hive Preparatory School  
 Howard D. Merrill  
 iMater Academy  
 Irving & Beatrice Pescoe K  
 John F. Kennedy  
 John I. Smith K Center  
 Jorge Mas Canosa  
 Jose De Diego  
 Jose Marti MAST Academy  
 Key Biscayne K Center  
 Kinloch Park  
 Lake Stevens  
 Lamar Louise Curry  
 Lawton Chiles  
 Leewood K Center  
 Linda Lentin K Center  
 M.A. Milam K Center  
 Madison  
 Mandarin Lakes K Center  
 Maritime & Science Technology Academy  
 Mater Academy  
 Mater Academy East  
 Mater Academy Lakes

Mater Gardens Academy  
 Miami Arts Studio @ Zelda Glazer  
 Miami Springs  
 Myrtle Grove K Center  
 Nautilus  
 Norman S. Edelcup/Sunny Isles K  
 Palm Springs  
 Palmetto  
 Pinecrest Academy (North)  
 Pinecrest Academy Charter  
 Pinecrest Cove Academy  
 Pinecrest Glades Academy  
 Ponce De Leon  
 Riviera  
 Rockway  
 Ruben Dario  
 Ruth K Broad/Bay Harbor K  
 Shenandoah  
 South Miami  
 W. R. Thomas  
 West Miami  
 Winston Park Center  
 Youth Group Charter School

## Senior High Schools

Academy For Adv. Academics  
 Alonzo & Tracy Mourning High  
 American Senior  
 Archimedean Upper Conservatory  
 Booker T. Washington Sr. H  
 Coral Gables  
 Coral Reef  
 Everglades Prep Academy High  
 Felix Varela  
 G. Holmes Braddock  
 Hialeah Senior  
 Hialeah Miami Lakes Senior  
 iMater Prep Academy High  
 Int'l Studies Prep Academy

iTech @ Thomas Edison  
 Educational Center  
 John A Ferguson  
 Jose Marti MAST 612 Academy  
 Mast @ FIU Biscayne Bay  
 Mater Academy  
 Mater Academy East High School  
 Mater Academy Lakes High School  
 Med Acad Science & Technology  
 Miami Arts Studio @ Zelda Glazer  
 Miami Beach  
 Miami Coral Park  
 Miami Jackson  
 Miami Lakes Educational Cent  
 Miami Palmetto

Miami  
 Miami Springs  
 North Miami Beach  
 North Miami  
 Pinecrest Academy Charter High  
 Robert Morgan Educational Center  
 Ronald W Reagan/Doral Senior  
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 School For Advanced Studies North  
 South Dade  
 South Miami  
 Southwest Miami  
 TERRA Environmental Research  
 William H. Turner Technical  
 Youth Group Prep High School

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Dr. Eduardo J. Padron, President, Miami Dade College  
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Mr. Randel Carr, Director of Campus Services

Judges play a vital role in the success of the *Miami-Dade STEM Expo* and for that reason we want to also express our most sincere gratitude for their time and talent.

### Elementary Science Fair Judges

Ms. Amanda Aguiar, G. Holmes Braddock SHS  
Ms. Denise Alfaro, Sylvania Heights ES  
Ms. Patricia Alami-Alfau, South Miami Heights ES  
Mr. Michael Andreoli, Miami Dade College  
Ms. Annie Alvarez, Henry S. West Laboratory ES  
Ms. Sandee Apang, Southwest Miami SHS/ Phi Beta Chi Sponsor  
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Dr. Stephanie Bingham, Barry University  
Ms. Sarah Boyd, Arthur & Polly Mays Conservatory of The Arts  
Ms. Kieaita Brown, Ruth Owens Kruse  
Ms. Lesali Bullard, Arthur & Polly Mays Conservatory of The Arts  
Ms. Sharon Cacho, Arthur & Polly Mays Conservatory of The Arts  
Ms. Camila Cuesta, Southwest Miami Senior High School  
Ms. Karina Cruz, Florida International University  
Crystal Díaz, G Holmes Braddock National Science Honors Society  
Ms. Janet Diaz, Royal Palm Elementary  
Dr. Dionne Dickson, Miami Dade College  
Ms. Shadiyah Edwards, Arthur and Polly Mays Conservatory of the Arts  
Ms. Katherine Entwisle, Hubert O. Sibley K-8  
Ms. Janine Fernandez, Sunset Park Elementary  
Ms. Nielys Flores, Arthur and Polly Mays Conservatory Of The Arts  
Ms. Lilian Fundora Pelayo, Florida International University  
Ms. Daniela Garcia-Toranzo, Southwest Miami Senior High  
Mr. Pedro Garcia, Miami Dade College  
Ms. Rebecca Gavulic, Jack D. Gordon Elementary  
Ms. Ariel Gonzalez Southwest Miami Senior High  
Ms. Anna Guerrero, Virginia A. Boone Highland Oaks  
Mr. Rolando Hallmon, Comstock Elementary  
Ms. Lianett Hechavarria, Southwest Miami SHS  
Mr. Jason Howard, Florida International University  
Mr. Juan Infante, Southwest Senior High school  
Dr. Meredith Jennings, Frost Science Museum  
Mr. Alexander Jimenez, Norwood Elementary School  
Ms. Johnniesia Johnson, Arthur and Polly Mays Conservatory of the Arts  
Dr. Erick Hueck, Miami Senior High School  
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Ms. Laura Lisowski, Bob Graham Education Center  
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Ms. Zelda Williams, Overtown Youth Center  
Ms. Agnes Winokur Department of Justice- DEA - Southeast Laboratory  
Ms. Kara Zelenak, Sunset Park Elementary

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Mrs. Adela Aiguesvives, M-DCPS Biscayne Nature Center  
Ms. Leandra Allen, Florida Power and Light  
Ms. Lucretia Allen, Florida Power and Light  
Ms. Astrid Alvarez, Florida Power and Light  
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Mr. Guy Evans, Church of the Epiphany – Miami Lakes  
Mrs. Joan Evans, Church of the Epiphany – Miami Lakes

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Ms. Crystal Nattoo, University of Miami  
Mr. Felix Neco, South Dade Middle  
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 Ms. Zelda Williams, Overtown Youth Center  
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We would also like to thank all of those Miami-Dade County Public Schools' individuals who assisted in the delivery of today's event. The success of which is a result of their professional knowledge and commitment to excellence.

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Performers**

Miami Northwestern Mighty Marching Bulls  
Mr. Chad Norton, Director of Bands

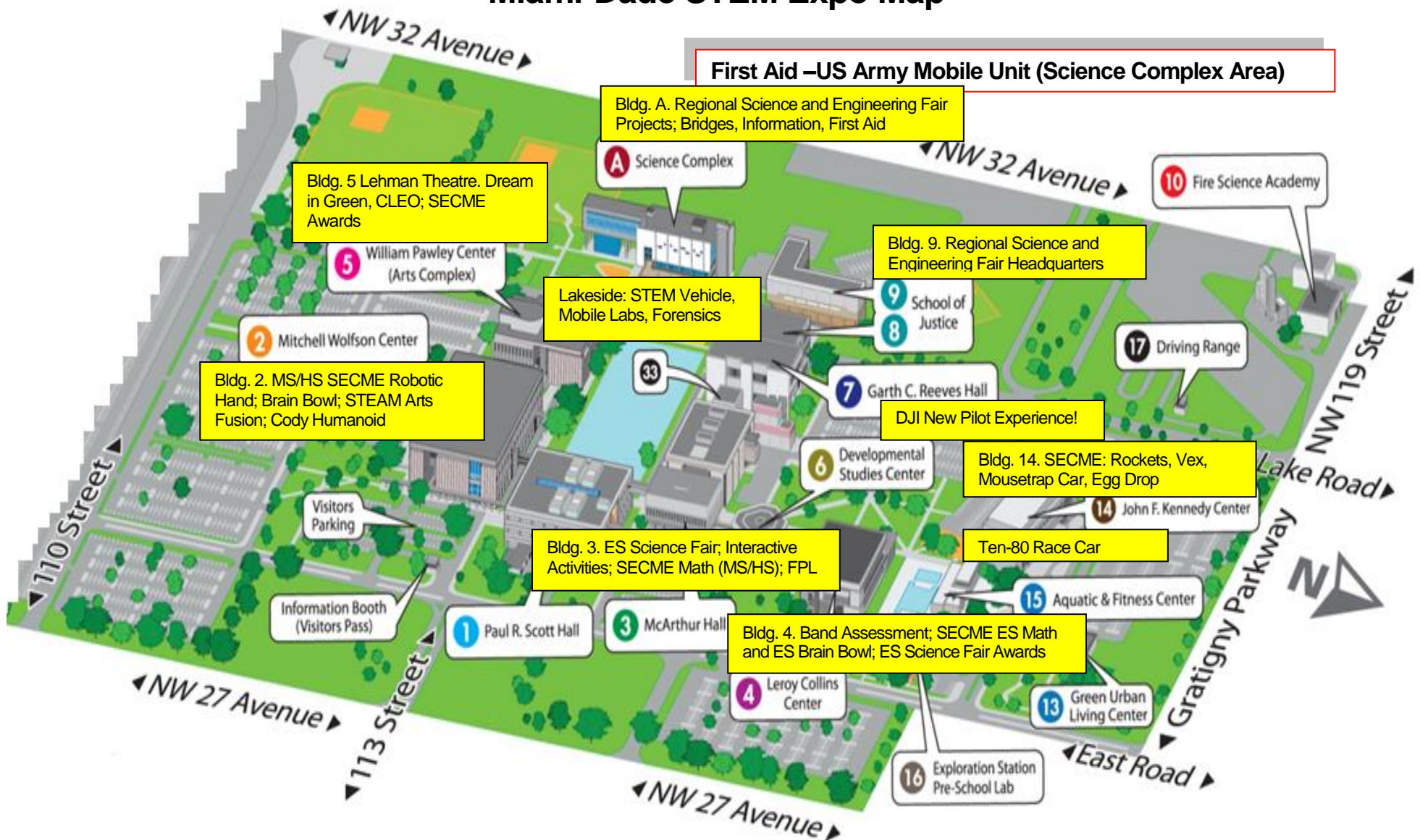
Miami Northwestern School Color Guard  
Sergeant Joseph Simpson

Palmetto Elementary Jazz Band





# Miami-Dade STEM Expo Map



**Building A:** Regional Science and Engineering Fair Projects, Information, First Aid **Lakeside:** STEM Mobile Labs, Vehicles and Forensics; **Building 2:** SECME; Art Interactive/Gallery; Cody Humanoid, **Building 3:** Elementary Science Fair, SWAT Interactive Activities, MDC Academic STEM Tables, Girls Who Code, FIU Codes; Harcourt Houghton Mifflin, Patricia and Phillip Frost Museum of Science SECME Awards; **Building 3 Grassy Area:** Discovery Education, LandShar, **Building 4:** SECME; Elementary Science Fair Awards, **Building 7:** DJI New Pilot Experience! **Building 14:** SECME; **N9 (Parking lot):** SECME

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