

SPARK Research Mentorship Program at Mayo Clinic in Florida *Science Program for the Advancement of Research Knowledge*

Scholars Application 2019

The mission of the SPARK Research Mentorship Program at Mayo Clinic in Florida is to provide junior and senior high school students in Duval and St. Johns Counties with mentored research experiences in world class laboratories at Mayo Clinic in Florida which will help them develop a basic understanding of scientific research and produce a highly-competitive science fair project.

Students must submit a Scholars Application and a Research Abstract Form (no more than 250 words) which follows the guidelines of the International Science and Engineering Fair. Meritorious projects will be chosen each spring allowing students to **work 20 hours/week over the summer and limited hours until May 31, 2020 to complete projects.** The work must be presented at the student's school science fair, with the intention of entering further science competitions if selected.

PART 1: STUDENT INFORMATION

| Name: | |
|-----------------------------|---|
| Birth date: | Email: |
| Home Address: | |
| City: | State:Zipcode: |
| Cell Number: | Home Number: |
| Parent/Guardian Name: | |
| Parent/Guardian Phone Numbe | er: |
| Parent/Guardian Email: | |
| | ther school: |
| Duval County Public Schoo | ols St. Johns County School District |
| | nysical conditions that would require special |
| | |
| | |

PART 2: SCHOOL INFORMATION

| School Name: | | |
|---|---|--|
| School Address: | | |
| City: | State: <u>FL</u> Zip c | :ode: |
| Current Grade Level: | | |
| Unweighted GPA: V | acations Planned Summer | |
| Last Day of School: | Date you return to school | · |
| PART 3: EXPERIENCE | | |
| List completed high school or o | college credit science courses. | |
| | | |
| | | |
| List any completed AP courses | s not shown above. | |
| | | |
| | <u>_</u> | |
| List any paid or unpaid work ex | xperience as it relates to the internship vious science fair experience, if ap | p that you are |
| | | |
| | | |
| Rank your skills and training for | or the items listed below using the foll | owing scale. |
| 1= skilled 2= exposure to, but | not yet mastered 3= exposure to concept | s 4=no prior knowledge |
| <pre>pipet (micro and mL)solution preppH measurementsterile techniquehorizontal electrophoresis</pre> | <pre>vertical electrophoresisDNA/protein quantitationcell culture techniquesPCRcentrifugation</pre> | Western blotting transformation transfection restriction digest use of microscopes |

Other pertinent information or comments you might wish to add regarding skills and training.

PART 4: REFERENCES

Please list 3 references below. One reference should be personal and two should be academic or professional.

| Name: | |
|-----------------|-------------------|
| Contact Number: | _ E-mail Address: |
| Title: | Organization: |
| Name: | |
| Contact Number: | E-mail Address: |
| Title: | Organization: |
| Name: | |
| Contact Number: | E-mail Address: |
| Title: | Organization: |

PLEASE INCLUDE WITH YOUR APPLICATION:

1. A transcript from your high school (Grades 9-current only)

2. Recommendation Form from your current science teacher. (This can be one of the same people you listed as a reference and are **sent separately by the science teacher**)

- 3. Completed Abstract Form
- 4. Write a cover letter explaining
 - why you would like to be an research scholar at the Mayo Clinic
 - which lab/Faculty Mentor you are selecting,
 - what you can offer during your mentorship, and
 - what you expect to gain from this mentorship.

| Signature of applicant | Date |
|------------------------------------|---|
| Signature of parent/guardian | Date |
| Up to two Lab/Faculty Mentor(s) yo | ou are selecting (choose 1 per abstract): |
| Panos Anastasiadis, PhD | |
| Aging Vascular Stroke (Jam | es Meschia, MD and Taka Kanekiyo, MD, PhD) |
| Tom Caulfield, PhD | John "Al" Copland III, PhD |
| DeLisa Fairweather, PhD | Baoan Ji, MD, PhD |
| Verline Justilien, Ph.D. | Keith Knutson, PhD |
| Dev Mukhopadhyay, PhD | Melissa Murray, Ph.D. |
| NMT (Hugo Guerrero Cazares | s,MD, PhD & Rachel Sarabia Estrada, DVM, PhD) |
| Aneel Paulus, MD, PhD | Leonard Petrucelli, PhD |
| Evette Radisky, PhD | |
| Mark Sherman, MD | Peter Storz, Ph.D. |
| Nilufer Taner, M.D., Ph.D. | |
| Joy Wolfram, PhD | Abba Zubair, MD, PhD |