

NJRSF REGISTRATION LIST
for Middlesex County (of residence)
March 22, 2006

Natalia Hlushko Colonia H. S. grade: 12 age: 17

Avenel

advisor: James Danch (732-499-6521)

Quantifying the Cryopreservation of Beta Vulgaris Using Dimethyl Sulfoxide(DMSO)¶R

The ability of a 30% solution of DMSO to inhibit the formation of ice crystals as measured by the leakage of vacuolar contents was measured.

Payal Ashok Patel John F. Kennedy Memorial H. S. grade: 12 age: 18

Iselin

advisor: Kathleen Piccinich (732-602-8650)

The Effect of Curcumin on Copper Based Plaque¶R

This project examines the effect of curcumin on copper based plaque in different concentrations of curcumin.

Alexander Fernando Chang Waksman Institute grade: 12 age: 17

East Brunswick

advisor: William Sofer (732-445 - 3052)

Intron conservation and divergence analysis using EST data in C. remanei¶R

Using EST data to determine intron locations in *C. remanei*, comparisons were made regarding intron evolution rate relative to amino acid rates, and sequence patterns amongst the introns.

Daphne Ezer Waksman Institute grade: 10 age: 16

Plainsboro

advisor: William Sofer (732-445-3052)

Evolution of asp-6 Aspartyl Protease in Nematodes¶R

Data will be presented comparing the evolutionary origin of the asp-6 aspartyl protease paralogs in three species of roundworms.

Kushkaran Kaur Colonia H. S. grade: 10 age: 15

Colonia

advisor: James Danch (732-499-6521)

Correlations Between Unique Gene Sequences and Phenotype in Artemia Franciscana. ¶R

Online gene sequence databases for *Artemia Franciscana* will be examined and compared to those of other organisms in an attempt to relate select phenotypical characteristics of *Artemia Franciscana* to the genotype.

Charlotte Schwarz Waksman Institute grade: 10 age: 15

Edison

advisor: William Sofer (732-445-3052)

A lin-53-like Gene in C. remanei¶R

Using bioinformatics, I am investigating the function of a protein that is similar to lin-53.

Rohan Pundlik, and Adrian Daukszewicz

Woodbridge High School grade: 11 age: 16

Keasbey

advisor: Anne Greenberg (732-6028600)

We dont need grass with weed!¶R

We plan to test the newly introduced herbicide, mesotrione on annual blue grass during different stages of growth. We intend to find the most effective method of application.

Daria Nicole Bialik, and Bryan Joseph Horvath

Woodbridge H. S. grade: 11 age: 17

Woodbridge

advisor: Mrs. Greenberg (732-602-6800)

Can Coffee or Egg Shells be a fertilizer?

We tested coffee grinds and egg shells against a name brand fertilizer to see if there was a significant difference in growth in a variety of plants.

Charmi Shah John F. Kennedy Memorial H.S. grade: 11 age: 16

Iselin

advisor: Kathleen Piccinich (732-6028650)

The effect of various concentrations of calcium carbonate on Alternaria alternata

The purpose of the experiment was to observe the effect of various concentrations of calcium carbonate on *Alternaria alternata*, which is an allergenic fungus.

Paul Michael Iaquina Woodbridge High School grade: 10 age: 16

Woodbridge

advisor: Mrs. Anne Greenberg (732-604- 9322)

Can Classical Music Affect the Growth of Common Basil?

This project will determine, with the use of two separate tanks, affects of different music played to Common Basil(if there are any effects at all)whose leaves and stem have been trimmed off.

Christopher John Early Woodbridge H. S. grade: 10 age: 15

woodbridge

advisor: Anne Greenberg (732-7634106)

The Effects of Red, Blue, and White Light on Plant Growth

Testing the effects of red, blue and white light to see if the different colors will cause a difference in plant growth.

Waqar Tariq John F. Kennedy Memorial H.S. grade: 12 age: 18

Iselin

advisor: Kathleen Piccinich (908-602 8650)

Effect Of Kava Extract on the Roots of Plants

Kava is a perennial pepper plant; its scientific name is piper methysticum and is known for having inhibitory effects on the growth of plants. This project studied the effect of kava extract on the growth of plants and the movement of the roots by placing soil in an elongated tray. The left half of the tray was used to grow Standard Wisconsin fast plants while the right side was filled with kava extract to see whether the roots of the plants would penetrate the kava/soil mixture.

Ross Karlo Tuason John F. Kennedy Memorial H.S. grade: 10 age: 16

Iselin

advisor: Kathleen Piccinich (732-602-8650)

Effects of Injected Sucrose in Tomato Plants Root Growth

Various amounts of sucrose was injected into the stems of the tomato plants. Root growth and root mass were measured. More root hairs may decrease the amount of soil erosion.

Vihar Patel John F. Kennedy Memorial H.S. grade: 11 age: 17

Iselin

advisor: Kathleen Piccinich (732-602-8650)

The Effect of Calcium on the Growth of Wisconsin Fast Plants

the effect of various levels of calcium will be tested on 3 individual groups of wisconsin fast plants. one control and two experimental groups will be used during the experiment. the results will then be statistically analyzed.

Tariq Suleman Colonia H. S. grade: 12 age: 17

Avenel

advisor: Mr. James Danch (732-4996500)

Ability In Auxiliary Pigments in Filtering Ultraviolet Light in Acer rubrum✓R

Collecting and Testing the ability of Auxiliary pigments such as anthocyanins in *Acer rubrum* in filtering out Ultraviolet light from a UV source throughout the autumn season. Then collecting the amount of light transmitted through the leaf from a self constructed fluorometer.

Nirav Patel John F. Kennedy Memorial H.S. grade: 10 age: 15

Iselin

advisor: Kathleen Piccinich (732-602-8650)

Effect of Micelles produced by Stearic Acid on Plant Growth✓R

In this experiment, Wisconsin Fast Plants were exposed to micelles produced by the fatty acid stearic acid, which reforms water molecules into a chain like structure improving bio-availability. These plants were then compared to a control group for overall plant growth.

Roshan Virendra Patel John F. Kennedy Memorial H.S. grade: 10 age: 15

Iselin

advisor: Mrs. Piccinich (732-602-8650)

Effect of Plant Hormones on Leaf Cuttings of Rex Begonias✓R

The point of this project is to add Rootone and Hormex to the leaf cuttings of Rex begonias and measure the growth of the roots that grow off of the leaves after two weeks.

Lekhaj Chand Daggubati John F. Kennedy Memorial H.S. grade: 10 age: 14

Iselin

advisor: kathleen piccinich (732-602-8650)

Effects of Molybdenum on the Growth of Brassica rapa✓R

Molybdenum has a positive effect on Nitrogen fixation in plants. *Brassica rapa* was exposed to various strengths of Molybdenum over a two week period. Variables such as root growth, leaf number, leaf mass, and overall growth of the plants were measured.

Vandan Dipak Upadhyaya John F. Kennedy Memorial H.S. grade: 10 age: 16

Iselin

advisor: Kathleen Piccinich (732-6028650)

The Effects Of Taurine in High Calcium Soil.✓R

Taurine is proved to have decreased calcium in certain areas of the body. High calcium soil is known to have malnutrition the seedlings. Since taurine decreases the calcium, and high calcium soil is harmful, the mixture of each is hypothesized to have created soil with normal calcium rates.

Mitesh Patel John F. Kennedy Memorial H.S. grade: 11 age: 17

Iselin

advisor: Ms. Kathleen Piccinich (732-602-8650)

Salinity: Effect on Lycopersicon esculentum✓R

Irrigation causes an increase in salinity in ground soil. This affects the vegetations root size and production.

Harpreet Uppal John F. Kennedy Memorial H.S. grade: 10 age: 15

Iselin

advisor: Kathleen Piccinich (732-602-8650)

Effects of Certain Plants on Carbon Monoxide From Second Hand Smoke ✓R

This project was done to determine which plant, the Gerbera Daisy, Chinese Evergreen, or the Peace Lily was capable of removing the most amount of carbon monoxide released from a cigarette.

Ashley Nicole Growney Colonia H. S. grade: 10 age: 15

Avenel

advisor: James Danch (732-4996521)

The relationship between diameter and slope of ant lion pits.✓R

I will determine the slope of the insect-trapping pits constructed by antlions, to determine if the height, width, and substraigh have any relation to the slope of the constructed pit.

Mahmoud Atef Elmedani Colonia High School grade: 10 age: 15

avenel

advisor: James Danch (732-4996521)

The effect of Beta-Pinene on the movement of Brown Planaria✓R

The ability of Beta-Pine to attract planaria will be investigated

Michael Caffarelli, and Michael Gianfrancesco

Woodbridge H. S. grade: 12 age: 18

Port Reading

advisor: Mrs. Anne Greenberg (732-602-8600)

The Mozart Effect: Fact or Fallacy?✓R

To analyze to effectiveness of the Mozart Effect on adolescents.

Sunaina Arshad John F. Kennedy Memorial H.S. grade: 10 age: 16

Iselin

advisor: Kathleen Piccinich (732-602-8650)

Can goldfish learn to discriminate between shapes using operant conditioning?✓R

We have to see whether the common goldfish can discriminate between various geometric figures with the use of operant conditiong.

Malgorzata Demkow Colonia H. S. grade: 12 age: 17

Colonia

advisor: Mr. James Danch (732-499-6521)

Effects of magnetic reversals on the movement of anguilla rostrata.✓R

Eels trained to swim north to obtain food were subjected to a magnetic field equal and opposite to that of the earth and their behaviour under those conditions was studied.

Zain Paracha Colonia H. S. grade: 11 age: 16

Avenel

advisor: James Danch (732-499-6521)

The Effect of Verbal Stimuli on Human Reaction Time✓R

The subjects will have their reaction time tested by the classic ruler drop method. Blind folded subjects will be prompted to stop the ruler via the verbal command "stop" and "go" in an effort to see if those commands affect reaction time.

Erica Tina Encardone, and Theresa Laurel Allen

Woodbridge H. S. grade: 12 age: 18

Woodbridge

advisor: Anne Greenberg (732-602-8600)

The Psychological Effects of Color on Students Ability to Learn and Process Information✓R

We are testing students, by giving them two simple math tests, one in pink and the other in yellow ink. The purpose is to test their ability to learn in these colors.

Megha Nandan Vyas Colonia H. S. grade: 10 age: 15

Iselin

advisor: James Danch (732-499 6521)

The Effect of Reduced Carbon Dioxide Concentration on DMFC Efficiency✓R

A soda lime carbon dioxide scrubber will be used to remove waste carbon dioxide from the

environment of a Direct Methanol Fuel Cell in the hope that the cell reaction will be driven to the right as predicted by Le Chatliers principle.

Susan Geraldine Barringer, and Andrij Olexander Kuzyszyn

Woodbridge H. S. grade: 12 age: 18

Woodbridge

advisor: Mrs. Anne Greenberg (732-602-8600)

The Efficiency of Alternative Fuels

Our project is designed to test the efficiency of alternative fuel sources on a diesel engine. Fuels to be tested include various mixtures of gasoline, alcohol, and vegetable oil. We will also be testing the power output of these fuels by using a prony brake to measure torque.

Kevin Bruce Paszinski Colonia H. S. grade: 11 age: 17

Colonia

advisor: James Danch (732-499-6521)

The Effect of Acid on a Dolomite-Epoxy Deicing Surface

An experimental deicing surface s ability to maintain deicing chemicals, sodium and calcium chloride, was tested under simulated acid rain conditions.

Aisha Hasan John F. Kennedy Memorial H.S. grade: 10 age: 15

Woodbridge

advisor: Kathleen Piccinich (732-6028650)

Which is the Best Fire Extinguisher?

According to a source fire extinguishers let out a chemical that is harmful to the body when inhaled. I read in a book, how to create an old-fashioned fire extinguisher out of baking soda and vinegar. My project is to test the efficiency of the old-fashioned fire extinguisher compared to that of a dry-chemical fire extinguisher. If the old-fashioned fire extinguisher is of the same efficiency or better than the dry-chemical fire extinguisher then maybe we can begin to use the old fashioned fire extinguisher instead of the dry-chemical fire extinguisher.

Arvind Srinivasan John F. Kennedy Memorial H.S. grade: 12 age: 17

Iselin

advisor: Mrs. Kathleen Piccinich (732-602 8650)

The Relation Between Keplers second law on Planetary Motion and the Indian Solar Calendar

This project relates the Indian Solar Calendar to Keplers laws on Planetary motion and in order to establish that Keplers principles were prevalent on planetary motion were prevalent before his time.

Brahmikha Anchala Colonia H. S. grade: 11 age: 16

Avenel

advisor: James Danch (732-499-6500)

The role of calcium carbonate, oxygen isotopes, and paleoclimate through belomnite fossils

To analyze and measure oxygen isotopes from Cretaceous fossils in order to derive conclusions about paloeclimate.

Gavely Toor Colonia H. S. grade: 10 age: 15

Avenel

advisor: James Danch (732-499-6521)

Modeling bolide induced Atlantic Megatsunamis

A physical model of the east of the Atlantic coast will be constructed and will be subjected to the simulated sunamis in a water tank.

Chelsea Dawn Hanrahan Colonia H. S. grade: 10 age: 15

Colonia

advisor: James Danch (732-499-6521)

Chemical Composition of New Jersey Cretaceous Amber

Amber collected in Sayerville, New Jersey will be subject to analytical techniques.

Justin Chirdon Immaculata H.S. grade: 10 age: 16

Middlesex

advisor: Ssiter Mary Ann Besitka, IHM (908-722-0200 x201)

Titan Tilt System

The purpose of this reserch was to design a durable tilt-in-space wheelchair platform with higher controllability than presently available models

Katherine Camille Wysoczanski, and Megan Marie McDonald

Woodbridge H. S. grade: 12 age: 17

Port Reading

advisor: Anne Greenberg (732-602-8600)

The effectiveness of herbicides and spray adjuvants

We are testing the herbicide Velocity with spray adjuvants to see if it is more effective than just the herbicide alone.

Krishna Jayprakash Patel Colonia H. S. grade: 10 age: 15

Colonia

advisor: James Danch (732-499-6521)

The effect of de-icing chemicals on the germination of plants.

Seeds of various plants will be exposed to different concentrations of de-icing chemicals (sodium chloride and calcium chloride). Germination rate and health of the seedlings will be observed.

Divya Krishnamurthy Colonia H. S. grade: 11 age: 16

Avenel

advisor: Mr.James Danch (732-4996521)

The difference in the chemical compositions between the undisturbed and disturbed lands.

Different nutrient tests were conducted on various sites from the New Jersey Pine Barrens to analyze the difference in the chemical compositions between the disturbed and undisturbed sites.

Akriti Kapoor John F. Kennedy Memorial H.S. grade: 10 age: 15

Iselin

advisor: Kathleen Piccinich (732-602 8650)

Effects of Chlorogenic Acid on Tobacco Hornworm Behavior and Physiology

The experiment will test what changes are caused by allelochemicals in insects.

Melissa Toledo Colonia H. S. grade: 10 age: 15

Colonia

advisor: James Danch (732-499-6521)

The Allelopathic Effect of Cladonia Lichen Leachate on Mycorrhizae Growth

The effect of Cladonia lichen water leachate on the growth of mycorrhizal cultures will be investigated.

Yves Andre Javier Woodbridge H. S. grade: 12 age: 1217

Sewaren

advisor: Anne Greenberg (732-602-8600)

The Effectiveness of Juglone As An Alternative to Natural Herbicides

This project requires me to make a solution with Juglone and apply it to typical weed species. I will also take this solution and apply it to different grass species to test for application saftey.

Michael Charles Kreisel Woodbridge H. S. grade: 12 age: 17

Woodbridge

advisor: Anne Greenberg (732-602-8600)

Quantitative Analysis of Triclosan and DEET in Local Tap Waters yR

I took tap water samples and analyzed them using GC-MS to see if triclosan or DEET was present.

Brundha Kranthi Colonia H. S. grade: 12 age: 17
07067

advisor: Mr. James Danch (732-499-6521)

Using Spectrophotometric Techniques to Quantify the Bioremediation of Oil Spills yR

If biodegradation of the oil produces a regular, predictable pattern of change in opacity, then it should be possible to quantify the effectiveness of bioremediation using a spectrophotometer.

Bryan John Schwab, and William Joseph Zupko

Woodbridge H. S. grade: 11 age: 17

Woodbridge

advisor: Anne Greenberg (732-6028600)

Herbs, can they be the Next Generation of Medicine? yR

We use different types of herbs on types of bacteria while comparing them to the effects of normal antibiotics.

Emily Marie Novosedlik John F. Kennedy Memorial H.S. grade: 12 age: 17

Sewaren

advisor: Kathy Piccinich (732-602-8650)

The Effect of Vicks VapoRub on Trichophyton Rubrum yR

This project examined Vicks VapoRub as an alternate treatment for foot fungus, in particular, Trichophyton Rubrum.

Amtul Mussawir Mansoor John F. Kennedy Memorial H.S. grade: 10 age: 16

Iselin

advisor: Kathleen Piccinich (732-602-8650)

The effect of Cod Liver Oil on Escherichia coli yR

Cod liver oil, which consists of mainly vitamin A, vitamin D, etc. I am exposing vitamin A, vitamin D, vitamin A and D (to see if those vitamins can work together), and cod liver oil. Then, I am going to do a colony count.

Barry Philip Shifrin John F. Kennedy Memorial H.S. grade: 12 age: 18

Iselin

advisor: Kathleen Piccinich (732-602-8650)

pH Adjusted Photodynamic Therapy yR

This purpose of this project was to determine the effect of pH adjustment using buffers on the photodynamic therapy eradication of Staphylococcus epidermidis bacteria.

Sanandeesh S Kamat John F. Kennedy Memorial H.S. grade: 10 age: 15

Iselin

advisor: Kathleen Piccinich (732-6028650)

Beneficial effects of fructooligosaccharides on L.acidophilus under heat treatment yR

Fructooligosaccharides are a class of carbs that might allow lactobacillus acidophilus survive under heat treatment that would normally kill it.

Mina Andaraws Woodbridge H. S. grade: 10 age: 15

Fords

advisor: Anne Greenberg (732-602600)

The Quantity of Bacterial Contamination in School Water Fountains yR

Testing school water fountains for bacteria and comparing it to other water fountains in other areas outside of school. Also the bacteria will not be identified

Dipesh R. Nayee John F. Kennedy Memorial H.S. grade: 10 age: 15

Metuchen

advisor: Mrs. Piccinich (732-602-8650)

*The effects of most commonly found herbal medicines on Escherichia Coli.*YR

Taking various herbal medicines in powder form, and dissolving into water to make mixture of about 30%-40%, all going to be the same percent. At the same time, culturing e.coli for 48 hours, each herbal medicine having separate petri dishes. Then placing the mixtures of each herbal medicine on separate petri dishes and wait about 24-48 hours. Then observing zone of inhibition on each petri dish.

Christina Louis, and Valerie Tice

Woodbridge H. S. grade: 12 age: 18

Fords

advisor: Anne Greenberg (732-602-8600)

*Can Seaweed Extract Be Used As An Antimicrobial Agent?*YR

We wanted to see if seaweed extract had any antimicrobial properties.

Laura Toth John F. Kennedy Memorial H.S. grade: 11 age: 16

Iselin

advisor: Kathleen Piccinich (732-602-8650)

*Investigation of Lifespan Length With Mutant Nematodes Grown on A. faecalis*YR

3 lines of long lived mutants of C. elegans strains were tested on A. faecalis to see the effect on their lifespan, and a mutant hunt for the suppressor of age-1 in the A. faecalis background was conducted.

Sara Ann Said Colonia H. S. grade: 12 age: 17

Colonia

advisor: Mr. James Danch (732-499-6521)

*Quantifying Bacterial Survival During Controlled Biomass Combustion.*YR

Dried lawn clippings were burned and the particulate emissions were collected, cultivated, and analyzed for the presence of viable bacteria,

Daniel George Pevny, and Michael Keith Kortrey

Woodbridge H. S. grade: 11 age: 17

Woodbridge

advisor: Mrs. Anne Greenberg (732-602-8600)

*Can You Improve Your Vision With Eye Exercises?*YR

The clarity of vision for participating subjects will be assessed before and after a month of following an eye exercise regimen.

Kelly Ann Bramwell John F. Kennedy Memorial H.S. grade: 12 age: 17

Iselin

advisor: Kathleen Piccinich (732-602-8650)

*Effect of Sleep Deprivation on Blood Pressure in Young Adults and Adolescents*YR

The purpose of my research was to see if chronic sleep deprivation can cause an increase in the blood pressures of young adults and adolescents.

Melissa Chantell Growney Colonia H. S. grade: 12 age: 17

Avenel

advisor: Mr. James Danch (732-499-6521)

*An electromagnetic beacon for the visually impaired*YR

A cane-mounted device was constructed using a coil, amplifier, and receiver that can pick up electromagnetic waves. Blindfolded subjects utilized the device to locate the source of an electromagnetic emission.

Nina Elizabeth Babeu John F. Kennedy Memorial H.S. grade: 11 age: 16

Iselin

advisor: Mrs. Kathleen Piccinich (732-6028650)

The Effects of Bathroom Cleaners on Mold yR

This project tests to see how efficient chlorinated cleaners are as opposed to non-chlorinated cleaners. This is because people with asthma or those who get asthma like symptoms are effected greatly by the fumes and may go into an attack.

Kruti K. Sanghavi John F. Kennedy Memorial H.S. grade: 11 age: 17

Metuchen

advisor: Kathleen Piccinich (732-602-8650)

The Effect of Radon on the Incidence of Alzheimers disease yR

The increasing rise in the radon concentration in the atmosphere has an effect on the p53 protein. Radon mutates the conformation, which in turn increases the chance of cancer. However, p53 can also be linked with Alzheimers disease. This indirect effect of radon was measured in a epidemilogy study to see the effects of radon the incidence of Alzheimers disease. The effect of radon inversely correlates to the incidence of radon.

Vanessa Kristina Pizutelli Colonia H. S. grade: 10 age: 16

Colonia

advisor: James Danch (732-4996521)

Anti Dessication Properties of American Eel Glycoproteins yR

The ability of mucus produced by the American eel to prevent dessication will be tested by coating water saturated polymer samples and observe the loss in mass.

Aakruti Bhalja John F. Kennedy Memorial H.S. grade: 11 age: 17

Iselin

advisor: Kathleen Piccinich (732-6028650)

Effect of Ultra Violet Radiation on Prevalence of Osteoporosis yR

The Pearson Correlation will be used to determine if increased levels of UV radiation reduce the prevalence of Osteoporosis.

Sonia Sharma Colonia H. S. grade: 12 age: 17

Avenel

advisor: Mr. James Danch (732-4996521)

Degradation Rate of Superabsorbent Polymers Under Simulated Human Stomach Conditions yR

The ability of a polyacrylamide polyvinylacetate composite to degrade under simulated human stomach conditions was tested and results discussed as an alternative to Gastric Bypass Surgery.

Manalika Ringshia John F. Kennedy Memorial H.S. grade: 11 age: 17

Woodbridge

advisor: Kathleen Piccinich (732-6028650)

The Effect of Purple Grape Juice on the Adherence of Streptococcus mutans to Tooth Surfaces yR

The purpose of this study is to determine a relationship between purple grape juice and the prevention of dental decay.

Joanna Shin Kong John F. Kennedy Memorial H.S. grade: 12 age: 18

Iselin

advisor: Kathleen Piccinich (732-602-8650)

Diet as a Cause for Low Birth Weight in Asian Indian Babies yR

This project aimed to determine whether Asian Indian mothers who ate no meat had lower birth-weight babies than those who did eat meat

Christopher Paul Pajonk Colonia H. S. grade: 12 age: 18

Colonia

advisor: James Danch (732-4996521)

*The Effect of Aqueous Sodium Chloride on Electrical Anti-bubble Inhibition*YR

Sodium Chloride will be added to a system in which anti-bubbles are forming. The number of anti-bubbles forming per minute will be recorded before and after the introduction of the NaCl.

Ronald Joo John F. Kennedy Memorial H.S. grade: 11 age: 17

Iselin

advisor: Kathleen Piccinich (732-602-8650)

*Effects of Anthrophonic Noise on Natural Habitats*YR

This study observes the effects of unnatural human noise on animal communication through sound recording.

Pranav Gupta Colonia High grade: 9 age: 15

Avenel

advisor: Mr. Danch (732-499-6521)

The change in R-Value due to sphagnum moss microstructure. YR

Experimenting how sphagnum moss microstructure leads to a change in the Thermal Resistivity (R-Value) of insulating material.

William Robert Hodroski, and Richard Alexander Vayda

Woodbridge High School grade: 10 age: 15

Woodbridge

advisor: Mrs. Anne Greenberg (732-602-8600)

*Can We Make an Anti-Gravity Machine*YR

We are attempting to create a machine that can alter the effects of gravity on a specific object, using collapsing magnetic fields

Apurva Bharat Sanghvi John F. Kennedy Memorial H. S. grade: 12 age: 17

Iselin

advisor: Kathleen Piccinich (732-602-8650)

*The Effect of Cell Phone Radiation on Blood Pressure*YR

This study looks at the effect of cell phone radiation in correlation with time on blood pressure.

Mohammed Yasin Vayani Colonia H. S. grade: 12 age: 17

Avenel

advisor: James Danch (732-4996521)

*Magnetically Induced Viscosity Change and the Lubricating Ability of Ferrofluid.*YR

The speed of a piston lubricated with Ferrofluid was measured with and without a magnetic field.

Russell Baker Immaculata H.S. grade: 10 age: 15

Middlesex

advisor: Sister Mary Ann Besitka, IHM (908-722-0200x201)

*The Effectiveness of a trebuchet versus a Dumptruck for Transportation of Construction Rubble*YR

The purpose of this research was to determine whether a trebuchet would be more efficient than a dump truck in transporting construction debris.

Sarah Heitmeyer John F. Kennedy Memorial H.S. grade: 12 age: 18

Iselin

advisor: Kathleen Piccinich (732-608-8650)

*Heat Generated During Rappel*YR

The amount of heat generated by friction when rope feeds through a Descent Control Rappel Rack at different speeds was observed.

Meaghan Elizabeth Gfroehrer Colonia H. S. grade: 10 age: 15

avenel

advisor: mr. danch (732-499-6521)

rotating liquid parabolic mirrors utilizing nontoxic metal components✓R

Rotating liquid parabolic mirrors utilizing nontoxic aluminum dust rather than toxic metals will be constructed and evaluated utilizing an electronic optical sensor.

Michael, Jason Partyka Colonia H. S. grade: 11 age: 17

Colonia

advisor: Mr. James Danch (732-499-6521)

Determining the difference between internal and external temperatures of snakes✓R

With the use of an infrared non-contact thermometer, the external temperature of a ball python was taken. It was then compared to the internal temperature which was taken by means of a temperature probe. The difference between the temperatures measured was statistically analyzed.

shamik patel Colonia High School grade: 11 age: 16

iselin

advisor: james danch (732-499-6521)

The effects of creatine nonehydrate on cockroaches work and power.✓R

feeding cockroaches creatine to test if it really does make the muscles stronger with no side effects.

Kristen Michelle Wachocki Colonia High grade: 12 age: 17

Colonia

advisor: James Danch (732-4996521)

Effect of N, N-diethyl-meta-toluamide (Deet) on Sarcoaphagid Fly Development.✓R

To determine the effect of Deet on the ability of flies to colonize samples of decaying flesh in an outdoor environment.

Vicky Du John F. Kennedy Memorial H.S. grade: 11 age: 16

Iselin

advisor: Kathleen Piccinich (732-602-8650)

Using Audio Recording to Measure Biodiversity✓R

The Niche Hypothesis states that all animals communicate at a respective frequency. This focus studies on using this hypothesis and audio recording to measure biodiversity through sound analysis software.