

## Synopsis Championship 2015

### Master Project List – Gender Sort

Loc	Proj Num	Team Cat	Gender	Students	Title
A97	061-120-10	Bot	F	Shirlene John	Salt and pH in water : How does pH and Salinity affect plant Growth
A95	061-130-6	Bot	F	Caroline Bernal	Can You "Plant" With All the Colors of the Wind...The Effects of Different Colors of Light on Plant Growth
A93	061-150-11	Bot	F	Antonia Zhou	Do Plants Grow Better in Different Colored Light?
A91	061-160-7	Bot	F	Elise Kwan	Which direction Should I Plant Plants Outside My House In Order For Them To Grow The Fastest
A89	061-170-3	Bot	F	Maria Serrano	Are You Still In There?
A87	061-210-6	Env	F	Jessica Nguyen	From Turbid to Clean
A85	061-211-4	Env	F	Justine Garcia	Copper Sulfate, Toxic?
A83	061-220-2	Env	F	Kavya Khare	A Study on how Algae helps in Carbon Dioxide Reduction in Urban Settings
A81	061-221-13	Env	F	Meera Vimalaraj	Aeration of Algae in Pond Water
A79	061-230-11	Env	F	Isha Nadig	Using Biostimulation to Cleanup Oil Spills
A77	061-240-7	Env	F	Sophia Cha	Grey Water Brown Thumb: Effect of Grey Water on Allium cepa
A69	061-270-8	Env	F	Akshaya Ganesan	FEEDING EARTHWORMS: DO DIFFERENT DIETS AFFECT THE NUTRIENT LEVELS OF VERMICOMPOST ?
A67	061-280-4	Env	F	Carissa Ott	Planty-ful Air, Effects of Plants Operating Air Purification
A59	061-520-4	Med	F	Michelle Nazareth	Inhaler Inhibitors?: Comparing steroid and nonsteroid asthmatic treatment on the height rate of Drosophila Melanogaster
A55	061-550-5	Med	F	Mika Profeta	Triple S: The Effect of Different Types of Food on Heart Rate
A53	061-570-10	Med	F	Lakshmi Talapaneni	The Effect of UV Light on DNA Structure
A51	061-620-9	Bio	F	Yumna Battisha	The Effect of Location of Water Source on the Amount of Contamination.
A47	061-640-1	Bio	F	Alekhyia Vadlakonda	Analyze Salt Crystals for the Presence of Bacteria
A45	061-650-10	Bio	F	Khushi Parikh	The Effect of Different Fertilizers on Microbial Fuel Cell Production
A41	061-A10-2	Chem	F	Ramya Chitturi	Salt Bridge Over Electrified Waters: How Electricity Changes pH
A39	061-A11-13	Chem	F	Nandita Jayanthi	Does the temperature of the water affect the rate at which the oxygen is produced while water is undergoing electrolysis?
A37	061-A12-11	Chem	F	Emma Nutter	Voltage And Copper Electroplating
A35	061-A20-11	Chem	F	Aditi Bharti	Hurray! Plastic Just Passed Away!
A33	061-A21-9	Chem	F	Charlotte Lara	Finding the Best Electrolyte for the Electrolysis of Water
A31	061-A22-7	Chem	F	Gonny Katzir	Sticky Situation
A29	061-A30-7	Chem	F	Rotem Bar	What reduces the stains from the fabric
A27	061-A31-5	Chem	F	Varsha Rammohan	Corrosion in Metals
A25	061-A32-3	Chem	F	Anushka Aritharan	Smart Perfect Face-saver
A23	061-A40-3	Chem	F	Joon Luther	Gelatin Sizing Viscosity And The Making Of Hydrophobic Paper
A21	061-A41-1	Chem	F	Carolyn Nguyen	Do Different Types of Decaffeinated and Caffeinated Teas Have the Same Amount of Caffeine?
A19	061-A42-12	Chem	F	Aline Garcia	Abraca-Dissolve: The Effect of Different Liquids on Soap
A17	061-A50-12	Chem	F	Shachi Prasad	What is the effect of temperature on the eerie blue light intensity of luminol?
A15	061-A51-10	Chem	F	Elizabeth Eckstrom	Marvelous Marinades
B10	061-A60-8	Chem	F	Masha Korolik	How does the surface area and temperature affect the speed of diffusion?
B14	061-A61-6	Chem	F	Rida Abdulwasay	Salt Water Fuel Cell Car

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B16	061-A62-4		Chem	F	Melina Kritikopoulos	Dermal Dilemma
B18	061-A70-4		Chem	F	Vianne Sedlack	I Candlelight U
B20	061-A71-2		Chem	F	Sarah Winter	Which wheat flour has the most gluten?
B22	061-A72-13		Chem	F	Anahita Srinivasan	Antacid Potency
B28	061-A82-9		Chem	F	Sherese Eaglin	What Methods Can Remove Salt From Water Best?
B32	061-A91-7		Chem	F	Katherine Anderson	Surface Tension
B52	061-B23-10		Phy	F	Isabella Nicoletti	Wired on Water
B54	061-B24-8		Phy	F	Jamie Watt	Gravity Falls
B60	061-B32-8		Phy	F	Anushka Wagle	Simple Pulley
B62	061-B33-6		Phy	F	Gracie Mansuetto	Refrigerator Magnet Binds
B64	061-B34-4		Phy	F	Abigail Klahold	Swing and a Miss
B66	061-B40-8		Phy	F	Kate Jackson	Demonstrating Doppler: Determining the Speed of an Object with Sound
B68	061-B41-6		Phy	F	Claire Luo	The Effects of Materials on Filtering Soap out of Water
B70	061-B42-4		Phy	F	Jessica Hsu	Surface Tension: The Mysterious Floating Button
B74	061-B43-2		Phy	F	Ivanna Grizelj	Electromagnet Experiment
B78	061-B50-4		Phy	F	Tejal Patel	Thermal Insulating Properties of different Clothing Materials
B90	061-B61-11		Phy	F	Shyna Ballal	HEAT IT UP! The Effects of Temperature on the Bounce of a Tennis Ball
B92	061-B62-9		Phy	F	Caitlin Gorin	Which type of thermos keeps water/rice the "hottest"?
B94	061-B63-7		Phy	F	Misbah Syed	Water, Water Everywhere ... Not a Drop to Drink !
B96	061-B70-9		Phy	F	Priyal Patel	Does the type of liquid affect how fast a penny can sink?
B97	061-B73-3		Phy	F	Ayesha Khanum	Energy Regeneration
B95	061-B80-5		Phy	F	Angelina Lue	Effects of Slope and Mass on Speed
B89	061-B83-12		Phy	F	Jaclyn Mar	What is the effect of the length of a lever on the amount of weight needed to lift an object?
B87	061-B84-10		Phy	F	Audrey Taylor	Where's My FitBit?
B81	061-B92-10		Phy	F	Sarah Yum	Catapult Catastrophe
B77	061-C10-12		Ear	F	Cailin Le	What coffee filter brand filters the best?
B75	061-C11-10		Ear	F	Lia Escobar	A New Way to Save Water
B71	061-C12-8		Ear	F	Isabella Mclarney	Maglev Magic
B69	061-C22-4		Ear	F	Chiara Ducaroir	Cave formation: Stalactites and Stalagmites
B67	061-C30-4		Ear	F	Harbani Jaggi	The World is Exhausted
B65	061-C31-2		Ear	F	Abigail Hooper	Lead Should Be Dead
B63	061-C32-13		Ear	F	Alani Elliott	How Does Soil Affect the pH of Water?
B61	061-C40-13		Ear	F	Helen Tian	Tornado in a Box Experiment
B57	061-C60-5		Ear	F	Sierra Rhodes	Green Growth
B53	061-C70-1		Ear	F	Anjali Singh	I'm Lost - How Accurate is My GPS?
B49	061-C80-10		Ear	F	Louiegail Nazareno	How To Improve Wind Turbine Efficiency
B47	061-C81-8		Ear	F	Zainah Masood	Soil Liquefaction And Remediation
B41	061-C91-4		Ear	F	Nicole Bucton	Storm Drains
B39	061-D10-4		Eng	F	Nishita Belur	Lost Luggage Tracker
B37	061-D11-2		Eng	F	Manasa Bhimaraju	Low-cost animated teaching tool for the electron structure of elements in the

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						Periodic Table
B33	061-D30-9	Eng	F	Rania Awad		Good-bye bucket! : a prototype to divert and save cold water
B27	061-D41-3	Eng	F	Santoshi Tirumala		Harnessing energy from motor movement on roads with minimal infrastructural impact
B23	061-D60-10	Eng	F	Malini Nair		Tsunami Breakers
B17	061-D90-11	Eng	F	Audrey Mogannam		Vibration
B11	061-E20-5	Comp	F	Elizabeth Lee		How Internet Speed is Affected by the Number of WiFi Devices at Home?
C10	061-E30-1	Comp	F	Anshika Agarwal		A Video Game for the Visually Impaired
C14	061-E40-10	Comp	F	Regina Hartman		Why Don't I Have Wi-Fi
C20	062-110-11	T Bot	F	Molly Dillon & Mira Chiruvolu		Soil Matters: How Soil Quality Affects Plants
C26	062-210-3	T Env	F	Julia Dubovoy & Adee Krepner		Water Filtration Systems
C28	062-310-8	T Zoo	F	Maria Guzman & Erika Lopez		What Ants Like Best
C34	062-A10-12	T Chem	F	Liah Nudell & Talya Kass		Bread Rising
C38	062-A20-8	T Chem	F	Ayushri Lad & Khadija Usman		Iron In Your Cereal ?
C40	062-B10-4	T Phy	F	Noelani Kreider & Abigail Kronik		The Great Glue Off
C46	062-B11-2	T Phy	F	Allison Webenbauer & Messiah LunaFalcon		Bouncing Balls
C52	062-B21-11	T Phy	F	Nalani Villarreal & Madison Langley		Jackpot
C62	062-B40-5	T Phy	F	Sophie Alter & Rebecca Avrutin		Static Electricity?
C64	062-B41-3	T Phy	F	Victoria Truong & Amanda Nguyen		Riding on Air
C78	062-C10-9	T Ear	F	Anisha Chatterjee & Rishima Tewari		Solar to light up streets
C88	062-D40-2	T Eng	F	Aleah Rafat & Isabella Munoz		Grasping with Straws
C96	071-111-6	Bot	F	Angela Kou		The Effect of Hydrogen Peroxide on the Germination and Growth of Cascadia Snap and Shelling Beans
C99	071-130-13	Bot	F	Anagha Sikha		Going Green starts in the Kitchen: A Comparison of Biodegradable Kitchen Sponges
C97	071-131-11	Bot	F	Sakshi Shrivastava		Circadian Dysrhythmia and Plant Productivity
C95	071-140-9	Bot	F	Hanne Holtan		What makes plants grow tallest?
C93	071-141-7	Bot	F	Maggie Li		What is the Effect of Temperature on the Production of Sugar in Plants?
C89	071-151-3	Bot	F	Sydney Liao		Which Type of Water is Most Productive For Plant Growth?
C87	071-170-10	Bot	F	Divya Nair		The Effect of Genetically Modified Crops on their Sugar Content
C85	071-180-6	Bot	F	Fionnuala LaTourrette		Tannen-Baum or Tannen-Bummer?
C83	071-190-2	Bot	F	Haritha Karthikeyan		Can Aloe Vera be used as a fruit preservative?
C81	071-211-11	Env	F	Soha Vora		Which is the Best Species of Algae for Biofuel?
C79	071-220-9	Env	F	Deevya Raman		What is the Impact of Pollutants on Marine Life?
C77	071-221-7	Env	F	Arushi Pandey		Effect on Plant Growth: Tap Water versus Desalinated Water.
C71	071-240-1	Env	F	Ioana Ana		The Effect of Liquid Laundry Detergents on Plant And Worm Health
C69	071-250-10	Env	F	Ashwini Joshi		The Effect of Fertilizer Chemicals on Bacteria in Compost/ Can Fertilizer Harm?
C67	071-260-6	Env	F	Kami Richardson		Liquid Gold: The Effect of Light on Maximizing the Production of Algae-Based Biofuels
C65	071-270-2	Env	F	Zara Shariff		How Fast Do Different Biodegradable & Compostable Materials Decompose?
C63	071-290-7	Env	F	Shloka Janapaty		California Drought: Getting more out of every Drop!
C59	071-320-1	Zoo	F	Reem Suleiman		Daphnia on Drugs
C55	071-340-6	Zoo	F	Tanvi Gaitonde		Effect of Third Hand Nicotine on Daphnia Magna

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C51	071-411-8	Soc	F	Ananya Jeyapragash		The Effects of Music on Mood and Heartbeat
C49	071-430-2	Soc	F	Kanika Khemka		The Effect of warped words on the Stroop Effect
C47	071-440-11	Soc	F	Tasnim Saada		Concentration
C45	071-450-7	Soc	F	Rithika Vatturi		Mnemonics as a strategy to improve learning & recall
C41	071-460-3	Soc	F	Lily Guggenheim		Ken vs. Barbi; Do gender stereotypes still play a role in marketing and advertising in 2015?
C39	071-470-12	Soc	F	Ellen Veargason		Your Perception of Beauty
C37	071-480-8	Soc	F	Neharika Jain		The Effect of Color and Font on Human Memory
C31	071-520-11	Med	F	Saahiti Vankayalapati		Determining the effectiveness of different sunscreen products in blocking ultraviolet
C29	071-531-5	Med	F	Ananya Vadlakonda		A Novel Treatment for Parkinson's Disease - Preventing Oxidative Stress with Chocolate
C27	071-541-1	Med	F	Gillian Grubb		Testing Sunscreen Effectiveness
C23	071-551-10	Med	F	Korrie Han		Yogurt Power- can it help with lactose intolerance?
C21	071-560-8	Med	F	Athena Fung		Pectin: A Possible Cause for Alzheimer's Disease
C19	071-580-13	Med	F	Tanshi Jain		A Healthier Filter: The Effect of Different Natural Materials on Purity of Water
C15	071-611-5	Bio	F	Maram Saada		Bacteria - How can I kill you?
C11	071-612-3	Bio	F	Paige Ashton		What are you really eating? Revealing the hidden sugars in your food
D10	071-620-3	Bio	F	Taqwa Tofaha		Spoil Me If You Can
D18	071-630-12	Bio	F	Sameeha Salman		Where is my head and tail?! The effect of magnetism on tissue regeneration.
D22	071-640-8	Bio	F	Emily Debs		Cell phones reveal unique microbiome responses to specific cleaners
D26	071-660-13	Bio	F	Jovanna Felix		Bacterial Content in Organic Milk and Non-Organic Milk
D28	071-661-11	Bio	F	Shruti Sridhar		The antimicrobial effects of common essential oils and facial treatments on staphylococcus
D30	071-680-5	Bio	F	Nina Isaka		The Effect of Different Biomasses and Heat on the Amount of Biogas Made
D32	071-681-3	Bio	F	Nidhi Gowda		Which of the drinks that we consume daily is the best choice for a hypoglycemic patient to boost their blood sugar levels quickly?
D36	071-691-12	Bio	F	Alisha Gupta		Measuring Lactose Content in Various Animal Milks
D38	071-A10-9	Chem	F	Shannon Miranda		A Low Cost Alternate to Commercially Made Ice Packs for Rural Population
D46	071-A21-3	Chem	F	Kirtana Ummethala		Understanding why root beer floats foam
D52	071-A41-8	Chem	F	Priscilla Raj		Which Ice Cream flavor lasts longer?
D54	071-A50-6	Chem	F	Sangeeta Koilada		What is the effect of varying amounts of different antacids on the pH levels of an acid solution?
D56	071-A51-4	Chem	F	Sanjana Yerramaneni		The Effect of Different Amounts of Salt on Solar Desalination
D60	071-A61-13	Chem	F	Alicia Tsung		Composting @ Work
D62	071-A70-11	Chem	F	Krithika Satish		The Effect of Different Solutes and Their Amounts on the Freezing Point of Water
D64	071-A80-7	Chem	F	Elaine Chu		Hot Ice and the Laws of Thermodynamics
D76	071-B12-10	Phy	F	Pallavi Saksena		Roller Coaster Loop-The-Loop
D78	071-B13-8	Phy	F	Surbhi Bhat		Magic of Flying Frisbees
D80	071-B14-6	Phy	F	Sahithi Karumudi		The Effect of Different Types of Plastic Filters on the Amount of Ultraviolet Light Transmission
D84	071-B20-10	Phy	F	Siya Sharma		Dye-Sensitized Solar Cells vs. Silicon Based Solar Cells: Which one is more efficient?

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D86	071-B21-8	Phy	F	Kuhoo Gupta		Escaping the Ubiquitous Cell Phone Radiation
D88	071-B22-6	Phy	F	Emily Jarvinen		Pyramid Mystery: A comparison of methods the Ancient Egyptians could have used, to move bricks for the construction of the pyramids.
D90	071-B23-4	Phy	F	Arushi Lahiri		Pulleys and Work: A Physics Experiment - What is the impact of different string material and size of pulleys vs a standard set of pulleys ?
D97	071-B40-2	Phy	F	Shriya Jain		What is the Energy Content of Different Foods?
D93	071-B42-11	Phy	F	Anna Fritz		Silence is Golden: A science experiment about the effects of different materials on the intensity of different frequencies of sound
D87	071-B50-11	Phy	F	Kaylan Martinez		Nail Polish Durability
D83	071-B52-7	Phy	F	Alekhya Natarajan		Finding the Best Shape Used For Building Domes
D79	071-B54-3	Phy	F	Hanna Suh		How Scorched Is the Car?
D69	071-B63-1	Phy	F	Jenny Shi		Violin Tension vs Frequency
D65	071-B70-3	Phy	F	Amelia Gleixner		How far can it stretch?
D63	071-B71-1	Phy	F	Victoria Scurto		What is the Best Material to Insulate a House?
D59	071-B73-10	Phy	F	Isabel Sperandio		Does the color of light and the temperature of solar panels improve the efficiency?
D57	071-B74-8	Phy	F	Ankita Reddy		Measuring Sugar Content in water in a Non-Invasive Manner
D55	071-B80-12	Phy	F	Abigail Gordon		How Long Will It Light?
D51	071-B82-8	Phy	F	Shreya Ramnath		How can you measure solute content in liquids using a laser pointer?
D49	071-B83-6	Phy	F	Vyomika Gupta		Experimentation on the COANDA Effect
D39	071-B93-2	Phy	F	Jessica Douglas		Electromagnetic Crane
D37	071-B94-13	Phy	F	Bella Fuller		Stretch Factor
D35	071-C10-6	Ear	F	Eesha Pamula		Studying Earthquake Intensity on Soils with Varying Moisture Levels
D31	071-C40-7	Ear	F	Anusha Ghosh		Slowing Global Warming using Iron and Nutrient Fertilization of Oceanic Phytoplankton
D27	071-D12-7	Eng	F	Letitia Aloysius		Electronic Flameless Reusable Candle
D25	071-D13-5	Eng	F	Rashi Ranjan		iCAS: Infant Car Alert System
E10	071-D40-12	Eng	F	Emily Zhou		Water Conservation with a Monolayer
E16	071-D42-8	Eng	F	Maya Nayak		What is the effect of the angle of incidence light on the output power of a solar panel and determine which angle produces the most output power
E30	071-D72-9	Eng	F	Nandita Gupta		A Heliotracking Parabolic Solar Cooker
E34	071-D81-7	Eng	F	Racquel Blassigame		Safety Pants
E38	071-D90-5	Eng	F	Adishree Ghatare		Adjusting Blood Sugar Levels to Address Diabetes
E40	071-D91-3	Eng	F	Jimena Romero Reyes		Book Spine Improvement
E46	071-E10-3	Comp	F	Aishani Aatresh		Allergies in a Nutshell: Correlation Between Immunoglobulin E Levels for Allergens and Allergic Reactions and Cross Reactivity
E60	071-E70-5	Comp	F	Swati Goel		Can you win the Word Game?
E68	072-110-5	T Bot	F	Karunya Krishnan & Ishanee Mitra		Do fertilizers extend plant life during drought and if so what types of fertilizers extend plant life during a drought?
E70	072-120-1	T Bot	F	Jamie Dy & Kylie Chang		Putting it Back Into the System: Organic Fertilizer Effect on Plant Growth
E78	072-220-6	T Env	F	Chaelee Park & Jane Lee		What is the effect of using a natural water filter system to clean gray water?
E82	072-310-2	T Zoo	F	Nikita Cardozo & Erica Cardozo		Do ants have an organized method of finding food?

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E86	072-410-7	T	Soc	F	Emily Uranga & Emma Mustovic	Mood Food
E96	072-630-9	T	Bio	F	Mahik Kaur & Gurkiran Braich	How Sweet It Is! Measuring Glucose in Your Food
E98	072-A10-6	T	Chem	F	Vibha Tantry & Iris Chang	Wool Sheets as a Fire Retardant for Small Fires
E97	072-A50-3	T	Chem	F	Siobhan Helms & Mariana Niblock	Bioadhesive
E91	072-B10-11	T	Phy	F	Isabel Zhong & Medha Kini	AquaOptics
E71	072-B31-1	T	Phy	F	Antonia Quake & Abigail Walker & Amelia Creemer	How's the Air Up There?
E59	072-B60-4	T	Phy	F	Kalie Ching & Anjali Mathi	True North vs. Magnetic North
E53	072-B70-13	T	Phy	F	Anita Sagar & Laila Davison	Beat the Heat
E49	072-B80-9	T	Phy	F	Enrea Galindo & Noelle Villanueva & Annabelle Oh	Sound Insulation
E41	072-C10-3	T	Ear	F	Manasa Malavathula & Camille Phares	Hard Water turns Soft
E37	072-D10-8	T	Eng	F	Anika Srivastava & Neha Shetty	Trapping and Using Carbon Dioxide Using An Environment Beneficial Device that Simulates Photosynthesis
E31	072-D20-4	T	Eng	F	Maya Abiram & Raka Acharya	Creating a Smart Device Application for Entertainment Targeted Towards the Visually Impaired
E27	072-D21-2	T	Eng	F	Liana Williams & Marjorie Semsem	MLD-Walker
E25	072-D31-11	T	Eng	F	Jessica Kuang & Samantha Alde	With The Push Of A Button
E11	072-D60-1	T	Eng	F	Alexis Galon & Christine Vera Cruz	Fleeth
F22	072-E10-13	T	Comp	F	Hayaa Hyder & Malika Ahuja	Edible Warfare-An Educational Video Game
F30	072-E30-5	T	Comp	F	Jenny La & Pranavi Manchikanti & Maggie Phong	Different types of image file formats
F34	081-110-2		Bot	F	Isra Karampurwala	Insight Into Lights:Effect of Light Source on Rate of Photosynthesis
F38	081-150-12		Bot	F	Ishani Narwankar	California Water Crisis: Landfill Trash... To The Rescue!
F40	081-160-8		Bot	F	Shannon Coakley	Which Grows Faster... Hydroponics or Soil?
F44	081-170-4		Bot	F	Sabrina Tran	The Effect Of Soft Soap On Grass Growth
F54	081-260-13		Env	F	Holly Rottenborn	Eutrophication Effects on Dissolved Oxygen in a Spirulina Culture
F56	081-310-12		Zoo	F	Vennela Chukka	The Study of Domestic Guinea Pig's (Cavia Porcellus) Smell and Vision-based Memory to Understand Human Cognitive Functions.
F60	081-330-4		Zoo	F	Laura Powers	How Does Crumb Rubber Leachate Affect Paramecium?
F64	081-350-9		Zoo	F	Ananya Karthik	Shedding Light on the Hormone of Darkness: Investigating the Effect of Exogenous Melatonin on the Heart Rate of Daphnia magna
F66	081-410-4		Soc	F	Siddhi Shah	The Effect of Playing Music on Your Creativity
F68	081-411-2		Soc	F	Abinaya Srikant	The Effect of Previous Reviews on Post-Event Ratings
F74	081-430-9		Soc	F	Astha Rai	What is The Effect of Music on Concentration?
F76	081-431-7		Soc	F	Rose Gatlin	Now You See It Now You Don't
F78	081-440-5		Soc	F	Aditi Menon	Multitasking- a necessary evil. The effect of multitasking on Memory
F80	081-441-3		Soc	F	Diya Jain	What is the impact of multitasking on memory retention and learning ability?
F82	081-450-1		Soc	F	Tanvee Joshi	Managing Bias
F84	081-460-10		Soc	F	Jaclyn Poladian	Does age affect the number of fears?
F86	081-470-6		Soc	F	Kajal Patel	Does color affect the amount of details people can remember?
F92	081-520-5		Med	F	Ruhi Sayana	Discovery of Monosodium Glutamate as an Inducing Factor of Increased Lipid Storage Through Expression of Adenosine Monophosphate-activated Protein Kinase

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F94	081-530-1		Med	F	Anika Sanyal	Effects of Vitamin B12 on the Lifespan/Motility of Diabetic Mutated versus Wild Type C. elegans strains: A Representation Concentration of Glucose in Women with Gestational Diabetes
F99	081-611-12		Bio	F	Isha Savant	The Effect of Bacterial Transformation on Cell Growth
F93	081-640-2		Bio	F	Shreya Ramasubban	The effect of Invertase on Glucose and Sucrose
F87	081-680-12		Bio	F	Nicole Adamson	The Effect of Different Wavelengths on the Luminescent Output of Pyrocystis fusiformis
F83	081-A10-3		Chem	F	Cristina Serrano	Testing the pH of Soil Surrounding Gas Stations
F79	081-A20-12		Chem	F	Prerita Pandya	The effect of different types of liquids (with different densities) at different temperatures on sodium acrylate (polymer) absorbance.
F77	081-A21-10		Chem	F	Francesca Bermudez	Hard Wax: A Study in Endothermic Transformation
F75	081-A30-8		Chem	F	Sanjana Borle	Natural vs. Artificial Oil Absorbers to Clean up Oil Spills
F69	081-A40-4		Chem	F	Audrey Cox	Which Environmentally-Friendly Material Soaks Up Oil the Best?
F63	081-A61-7		Chem	F	Katelyn Lemieux	Extending the Shelf Life of Milk Using Hydrogen Peroxide
F55	081-B12-4		Phy	F	Ysabel Li	How does material and shape affect the efficiency of solar-power collectors?
F47	081-B22-13		Phy	F	Mackenzie Lee	The Effect of Vane Tilt Angles on the Speed of a Revolving Lantern
F41	081-B30-13		Phy	F	Visala Tallavarjula	Studies to Improve the Efficiency of Parabolic Solar Reflector to boil water and desalinate for drinking and irrigational purposes
F11	081-B70-10		Phy	F	Anisha Kabir	The Effect of a Change in the Speed of a Vehicle on its Bank Angle
G16	081-B80-6		Phy	F	Bansi Patel	To Sing or Not to Sing- That is the question.
G22	081-B90-2		Phy	F	Samiksha Patil	The Magic of Fading Colors
G24	081-B91-13		Phy	F	Sakura Regan	The Effect of the Storage Conditions on the Strength of Wood
G26	081-B92-11		Phy	F	Anna Yu	Impact of string tension and external forces on tennis ball motion
G28	081-C30-5		Ear	F	Farah Masood	Effect of Air Pollutants on Solar Panel Efficiency
G36	081-D12-1		Eng	F	Jennifer Nguyen	A 40% Cheaper Alternative to Robotic Feeding Aids
G46	081-D23-8		Eng	F	Kendall Tinianov	Perfect Point
G48	081-D30-10		Eng	F	Nihal Talur	A Homemade Security System That Performs Up To Par With Commercial Security Systems
G50	081-D31-8		Eng	F	Ruchi Maheshwari	HomeBot: A Home Automation System that Combines and Controls Intelligent Devices in the Home
G58	081-D41-4		Eng	F	Nandita Naik	SmartScarf: Wearable Device for Detecting Sleep Apnea
G60	081-D42-2		Eng	F	Sofia Kritikopoulos	Kritiko Hydro
G62	081-D43-13		Eng	F	Ava Hartig	The Bridge
G64	081-D50-2		Eng	F	Anika Cheerla	Automated Diagnosis of Alzheimer's from MRI Images
G68	081-D52-11		Eng	F	Yusra Arub	The Internet of Things (IoT) meets my data binder
G70	081-D53-9		Eng	F	Sophia Kennedy	The Posture Master
G80	081-D63-5		Eng	F	Bridget Kennedy	Hidden Water
G86	081-D73-1		Eng	F	Amy Kennedy	Painless Pour
G88	081-D80-3		Eng	F	Cindy Wang	Creating a Low Cost and Eco-Friendly Water Filtration System for 3rd World Countries
G92	081-D83-10		Eng	F	Kiera O'Hara-Heinz	The Binder Pack

## Synopsis Championship 2015

### Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
G85	081-E60-3		Comp	F	Sanjana Shah	Text Compression Algorithm based on Popularity using Global English Dictionary
G67	082-130-4	T	Bot	F	Mikal Daniel & Amanda de la Cruz & Alana Steinberg	How Radiation Waves Affect Plant Growth
G63	082-310-9	T	Zoo	F	Katherine Tian & Rose Guan	The Effect of Sounds on Dispersion Patterns of Members of the Pogonomyrmex Genus
G59	082-320-5	T	Zoo	F	Nishka Ayyar & Srija Gadiraju	Effect of Larval Diet on Offspring Development to Wild Type Drosophila Melongaster
G57	082-410-1	T	Soc	F	Kelly Shen & Constance Horng	Effects of Information Versus Non-Information Multitasking on Human Performance as Measured by Accuracy and Speed During Logic Tests
G47	082-440-2	T	Soc	F	Victoria Taylor & Deeksha Alisetty	How Does Color Affect Human Perception of Smell?
G35	082-510-6	T	Med	F	Rebecca Mak & Alyson Wang	Comparing the Efficacy of Lactobacillus Acidophilus vs. Ciprofloxacin on HB101 E.coli's Zone of Inhibition
G25	082-630-3	T	Bio	F	Natasha Maniar & Nicole Chen	Effects of highly acidic foods on salivary amylase
G15	082-660-4	T	Bio	F	Katherine Zhang & Kelsey Wu	Impact of Topical Moisturizers On Superficial Fungal Growth
G11	082-A10-13	T	Chem	F	Ashli Jain & Sonal Muthal	PET levels after solar exposure in colored water bottles
H14	082-A20-9	T	Chem	F	Tessa Citron-Pousty & Maya Kolyer & Rachel Homayonfar	Affect of Different Chemicals on Crystal Growth
H18	082-A30-5	T	Chem	F	Minhthi Nguyen & Emily Tran	Turning Milk Into Plastic
H20	082-A50-10	T	Chem	F	Arevik Nazloyan & Ofri Enav	Does sunscreen protect against UVA rays that pass through glass
H30	082-B30-10	T	Phy	F	Priya Goel & Ankita Vinod	Effect of Impurities on Surface Tension of Water
H48	082-D50-12	T	Eng	F	Charlene Kong & Jennifer Tang & Vanessa Hong	O-Battery-Chine
J99	091-110-9		Bot	F	Priscilla Siow	E.Coli Filtration using Plant Xylem from the Pseudotsuga menziesii.
J95	091-140-10		Bot	F	Ankita Bhat	How does the macronutrient content change between a sprouted and unsprouted mung bean?
J91	091-210-1		Env	F	Anika Ramachandran	The Reduction of Carbon Dioxide Levels in Freshwater Using Chlorella vulgaris and Calcium Oxide
J83	091-240-2		Env	F	Pallavi Sripathi	Eco friendly method for the removal of nonylphenol from waterways using rice husk adsorption.
J71	091-310-6		Zoo	F	Gina Yang	Effects of Agricultural Adjuvant on the Olfactory Associative Learning and Memory of Honeybees (Apis mellifera L.)
J65	091-410-11		Soc	F	Christina Lau	The Correlation Between the Time Middle and High School Students Spend on Chores and Their Grade Point Average scores
J61	091-420-7		Soc	F	Lepakshi Poonamallee	The effect of distance on short term memory of a topic heard
J59	091-440-12		Soc	F	Ujjaini Mukhopadhyay	Group Discussions: Does the medium really matter?
J55	091-450-8		Soc	F	Sydney Ty	The Correlation Between High School Students' Participation in School Activities and Amount of Full Meals Eaten with Family
J53	091-460-4		Soc	F	Diana Magnusson	Most Effective Breaks for High School Students in Order to Focus
J49	091-510-3		Med	F	Jagruti Kolla	The Effects of Becatecarin and Panax Ginseng on the Inhibition of the Analog of BCRP Present in Dictyostelium Discoideum.
J47	091-540-4		Med	F	Yanru Zhou	The Time Relevance of Antibiotics on Lactobacillus Strains
J39	091-610-8		Bio	F	Divya Jindal	What is the effect of monoethanolamine on Ralstonia Eutropha H16's ability to degrade carbon dioxide?
J37	091-611-6		Bio	F	Mythri Ambatipudi	Unleash the Power of AMPK!!! Investigating the Potential Effects of Activating Adenosine Monophosphate-activated Protein Kinase (AMPK) on

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## Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
						Neurodegenerative Diseases and Cancer
J35	091-612-4	Bio	F	Chengzi Guo		Antibacterial Activity of Medical grade Manuka honey and methylglyoxal and synergism between each and ciprofloxacin against Escherichia coli
J33	091-620-4	Bio	F	Anika Padala		The Rate of Bacterial Growth in Eyeshadow at Different Temperatures
J31	091-621-2	Bio	F	Susan Zhou		The Effects of Sodium Hydroxide and Potassium Chloride on Saccharomyces cerevisiae
J27	091-630-13	Bio	F	Aditi Gnanasekar		Absence of Aurora B Kinase as a Cause of Aneuploidy in S. cerevisiae
J23	091-632-9	Bio	F	Harini Narayan		Compare treatment of Trimethoprim and Curcumin on Salmonella Enterica, and the Effect of them on human intestinal flora such as Citrobacter.
J17	091-642-5	Bio	F	Priscilla Lee		Crystal Ball?
J15	091-650-5	Bio	F	Shreya Thiagarajan		The effect of Curcumin on TDP-43 aggregates (modeled in Saccharomyces Cerevisiae) which cause Amyotrophic Lateral Sclerosis
J11	091-661-12	Bio	F	Isa Dash		Comparison of chemical reactions of skin microbiota repellents to the chemical reactions of mosquito bug sprays
K10	091-662-10	Bio	F	Bethany Chen		Glowing Dinos: Analyzing Bioluminescence of Pyrocystis fusiformis
K16	091-672-6	Bio	F	Dipashreya Sur		Got Milk: Effect of Fat Content on the Protein Concentration of Store Bought Milk
K24	091-690-2	Bio	F	Claire Zhang		Reducing the Transmission of Antibiotic Resistance via M13 Bacteriophage Infection
K30	091-711-11	Bioinfo	F	Rajita Pujare		Determining the Effectiveness of Existing Drugs Related to the mTOR Pathway on the Autism-like Phenotype Using Computational Screening
K34	091-740-1	Bioinfo	F	Holly Jackson		Computational Cardiology: An Automated Algorithm for Heart Murmur Detection
K64	091-B11-13	Phy	F	Karen Cao		Do durable objects such as wood, metals, or certain types of plastics break in a similar pattern?
K68	091-B21-9	Phy	F	Sohini Kar		Harvesting Energy From Ambient Radiation - Testing Nikola Tesla's Theory
K78	091-B80-13	Phy	F	Mashia Mazumder		A Low-Cost Electricity-less Refrigerator
K95	091-D22-4	Eng	F	Sushmasri Katakam		Keep the tower in place!
K83	091-D41-11	Eng	F	Mythili Bhethanabotla		A Smart Gadget: An effective wearable mechanism to better assist and guide the visually impaired
K79	091-D42-9	Eng	F	Shreya Khandewale		Quivr! - A Mobile Application to Alert via Sensory Notifications
K71	091-D52-5	Eng	F	Labanya Mukhopadhyay		Smart Device to Save Young Lives Abandoned in Car
K69	091-D60-5	Eng	F	Ashmita Rajkumar		Reducing and Harvesting Radiation into Sustainable Energy in a Cellular Apparatus
K65	091-D70-1	Eng	F	Nikita Goyal		A Novel Navigation System with Sensor Based Automatic Control
K61	091-D71-12	Eng	F	Saumya Nimmagadda		Development of a knee brace for athletes with torn ligaments to allow continued sports
K45	091-E10-4	Comp	F	Tejasri Sunchu		Finding a Correlation between the Percentage of Illumination of the Moon and Human Emotions expressed on Twitter Feeds
K41	091-E20-13	Comp	F	Anushka Jogalekar		Computer-Assisted Retinal Disease Detection
K35	091-E50-1	Comp	F	Aratrika Ghatak		Faster Emergency Response via Vehicle to Signal (V2S) Communication
K27	091-F20-5	RRI Phy	F	Amy Dunphy		Preventing Urushiol (Poison Oak)- Induced Dermatitis by Deactivating the Allergen
K23	092-110-6	T Bot	F	Samantha Wood & Terynn McNairnie		When Filing Goes Too Far
L10	092-640-6	T Bio	F	Vivian Huang & Jessica Liu		Ampicillin Resistance in E. Coli Depending on the Levels of Bacillus Coagulans in Surrounding Environments

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Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
L14	092-710-10	T	Bioinfo	F	Anooshree Sengupta & Anastasiya Grebin	The Classification of SNPs in the SMAD4 Gene on the Development of Pancreatic Cancer in a Human Using a Machine Algorithm
L20	092-810-2	T	RRI Bio	F	Melissa Wei & Wendy Zhang	Effect of the depletion of PKM2 protein pyruvate kinase m2 on oxidative metabolism in B16 melanoma cells
L24	092-B10-12	T	Phy	F	Anushka Narvekar & Ria Gopu	Best Combination of Insulating Materials (In Terms of Heat Retention)
L26	092-B30-4	T	Phy	F	Shivani Ayalasomayajula & Dhvani Krishnan	Building an On-Shore Tsunami-Safe Wall
L30	092-D10-9	T	Eng	F	Kimberly Zhu & Kelly Ho	For-a-day Charger
L32	092-D30-1	T	Eng	F	Angela Liu & Jessica Peng	Creating a wearable electronic device that monitors heart health
L40	101-120-8		Bot	F	Alison White	Using allelopathy as a natural herbicide
L44	101-210-4		Env	F	Sabrina Chan	The Effect of Pseudomonas putida on the Germination of Lepidium sativum Grown in the Presence of the Polycyclic Aromatic Hydrocarbon Phenanthrene
L46	101-220-13		Env	F	Sarah Shaw	The Effect of Mycorrhizae on Reducing Drought Stress on Lolium perenne
L48	101-230-9		Env	F	Elina Yon	Effects of Pistia stratiotes Phytoremediation of Nitrogen and Phosphorus, and Effects of Nitrogen and Phosphorus Enriched Pistia Stratiotes as Organic Mulch Fertilizer on growth of Lactuca sativa
L52	101-240-5		Env	F	Rhea Rangarajan	Ocean Acidification: The Effect of Bicarbonate and Rhodophyta on Mussel Shells
L54	101-250-1		Env	F	Pragna Upputuri	The Toxic Effects of Hydrocarbons On Hatching and Survival of Artemia Nauplii
L60	101-270-6		Env	F	Shefali Vijay	Rhizofiltration Potency of Elodea canadensis in Copper Contaminated Aquatic Environments
L64	101-320-5		Zoo	F	Khanh Huynh	Effect of the temperature on the nutrient and activity of Lasius niger
L68	101-330-1		Zoo	F	Jazmen Castaneda	Does Stability of Temperature and Light Exposure Affect the Survival Rate of F1 Generation Larval Pieris rapae and Resulting F2 Offspring Production?
L70	101-340-10		Zoo	F	Peace Lu	What is the Effect of Aspartame on the Pogonomyrmex spp. when Aspartame is Heated to Various Temperatures?
L74	101-350-6		Zoo	F	Niharika Desaraju	Drosophila melanogaster's immunity/longevity of life with daily supplements of regular probiotics
L78	101-520-2		Med	F	Neymika Jain	The Effect of Metformin on Transgenic Ab1-42 Caenorhabditis elegans: An in vitro study on Alzheimer's Disease
L82	101-540-7		Med	F	Rupsa Acharya	The effect of Carica papaya leaf extract on the lifespan of C. elegans with fatal germ line tumors.
L84	101-550-3		Med	F	Shriya Perati	The Effect of Melatonin on Antibiotic Resistance
L88	101-560-12		Med	F	Jenny Qian	The Effect of Scotchgard and Caffeine on the Level of Hemoglobin Under Hypoxic and Nonhypoxic Conditions on Daphnia magna and its Offspring.
L90	101-570-8		Med	F	Zunera Ghalib	The Effects of Curcumin On Rotenone-induced Drosophila Models of Parkinson's Disease
L94	101-580-4		Med	F	Divya Sundararajan	The Effect of the Genes pdr-1, pink-1, cat-4, and bas-1 Implicated in Parkinson's disease through Detecting Dopamine Level and Locomotion Assays on Caenorhabditis elegans
L98	101-610-11		Bio	F	Anjali Ponnekanti	Is clozapine's cytotoxicity enhanced by inflammatory cytokines
L99	101-611-9		Bio	F	Shaiva Patel	The effect of a high concentration of lasers on different skin pigments with E.

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## Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
						coli bacteria.
L95	101-620-7	Bio	F	Auboni Poddar		Stathmin Association with PTSD through Effect of Stress in Drosophila Melanogaster Protein Concentration
L89	101-631-1	Bio	F	Cassandra Overney		Genotoxicity Investigation by Measuring the Effect of Metal Concentrations on Garlic Root Bioassays by the Observations of Chromosomal Aberrations
L83	101-651-6	Bio	F	Sruthi Ramabadran		Effects of Salmonella infection on Caenorhabditis elegans Death (CED) -3 mutated Caenorhabditis elegans vs. Wild Caenorhabditis elegans in Programmed Cell Death
L79	101-661-2	Bio	F	Maya Kalbag		The Effects of Cleaning Agents on the Antimicrobial Properties of Copper
L69	101-681-7	Bio	F	Aditi Jain		The Antifungal Activity of Terpinen-4-ol and Tea Tree Oil on Candida famata (Yeast Infection) Compared to Nystatin Topical Yeast Treatment
L61	101-711-1	Bioinfo	F	Shivani Bhandarkar		Determining the Effect of Several Common Hb Variants on HbA1c Ratio in Diabetes
L59	101-720-12	Bioinfo	F	Arthi Iyer		Alzheimer's and Parkinson's Disease Plasma Biomarker Trends: A Data Mining Approach to Non-Invasive and Inexpensive Diagnosis
L55	101-721-10	Bioinfo	F	Dhanya Mahesh		Diagnosing Alzheimer's Disease Using Analysis of Atrophies Present in MRI Brain Images
L49	101-731-6	Bioinfo	F	Tanisha Joshi		Comparative efficacy of Lapatinib and Afatinib on ErbB1 and ErbB2/ Neu2 targets on tumor depletion in carcinoma based cancers.
L39	101-770-5	Bioinfo	F	Megha Ilango		A Region Growing Based Machine Learning Algorithm to Accurately Diagnose Low and High Grade Astrocytomas from Magnetic Resonance Imaging Appearances
L35	101-790-10	Bioinfo	F	Marilyn Zhang		Diagnosing Alzheimer's and Parkinson's Disease with Alzheimer's and Parkinson's-specific Biomarkers in Blood Sample
L29	101-820-4	RRI Bio	F	Hilal Atesoglu		Evaluating the Potential of Sesame Leaves as a Detoxifier of Toxic Mercury(Hg): Investigating the Effects of Solution pH, Adsorbent Dosage and Initial Metal Concentrations on Removal Rate of Mercury, III
L19	101-850-5	RRI Bio	F	Amrita Singh		A Study of Snail Shell Taphonomy to Determine what Traits Affect Shell Damage Across Multiple Species in Costa Rica
L17	101-870-10	RRI Bio	F	Jessie Zhao		A Study on the Immunostimulative Properties of Cimetidine on Cancer
M14	101-B10-5	Phy	F	Sneha Bhetanabhotla		Simulating Galaxy Mergers Using Gravitational Equations
M22	101-D11-13	Eng	F	Amulya Vadlakonda		Portable Analysis of Skin Anomalies for the Diagnosis of Melanoma Utilizing Image Analysis on an Embedded Microcomputer
M34	101-D50-12	Eng	F	Ankita Chatterjee		A Low-Cost Novel Construction of a Stacked E. coli-Based Fuel Cell System
M40	101-D61-6	Eng	F	Nidhi Jain		Charging Low Powered Devices by Mountain Biking: A Novel Approach to Electric Energy Generation using Interconnected Electromechanical Piezo Actuators
M48	101-D80-13	Eng	F	Prapurna Upputuri		An Effective Way To Use Low-Grade Gossypium Hirsutum (cotton) to Reduce Oil Runoff to Storm Drains
M54	101-D90-9	Eng	F	Elizabeth Wang		Operation Fire Ant: Rescuing Natural Disaster Survivors Via Collective Control of Swarm Robots
M60	101-E20-3	Comp	F	Chung Min Kim		A Website-tolerant stochastic password security strength meter

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### Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
M84	101-F20-8		RRI Phy	F	Evani Radiya-Dixit	Automatic Extraction of Cancerous Lesion Characteristics from Imaging Reports Through a Novel Integration of Natural Language Processing Techniques
M94	102-110-9	T Bot		F	Kshithija Mulam & Trisha Dwivedi	The Effects on the Growth of Brassica Rapa After Exposure of its Cryptochromes to Magnetic Fields
M95	102-210-1	T Env		F	Sophia Lau & Manjot Kaur	Effect of various metal pollutants on the photosynthetic growth of marine algae under replicated oceanic conditions measured by the resulting concentration of chlorophyll detected through a spectrophotometer
M91	102-220-10	T Env		F	Pallavi Narayanan & Haripriya Govind	The Effects of Aqueous Pollution in Different Saline Levels
M85	102-310-6	T Zoo		F	Samantha Cheung & Stephanie Sun	The Effects of Repeated Stimulation on Formica Fusca Ant Colonies
M83	102-510-3	T Med		F	Joyce Huang & Meilan Steimle	Determining the Optimal Amount of Various Carbohydrates to Maximize the Absorption Rate of Pain Relievers
M77	102-520-12	T Med		F	Anuva Mittal & May Gao	How OTC Medications Affect the Efficacy of SSRIs and SNRIs in Hydrocortisone-induced C elegans
M75	102-810-5	T RRI Bio		F	Preethi Kandappan & Joyce Zhao	Effects of Water Depth and Fatigue on the Reconfiguration of Brittle Stars
M61	102-A20-6	T Chem		F	Hifsa Khan & Leysmi Saldana & Cynthia Gomez	Comparison of Different Plant Parts for Cellulosic Ethanol
M59	102-B10-2	T Phy		F	Arianna Lagman & Natasha Castillo	Ukelele Melodies: How Tension Affects the Frequency of Sound
M53	102-B20-11	T Phy		F	Iva Khauv & Tiff Nguyen	Death of a Watermelon: Relationship of Size to Heat Loss Rate
M35	102-D60-5	T Eng		F	Swethasree Bhattaram & Saumya Baswant	A Safer Reorganization to a Landfill
M31	111-120-2	Bot		F	Manvitha Talasila	What is the effect of non-ionizing radiation emitted from cell phones and cordless phones on the health of pea plants and mustard plants?
M29	111-130-11	Bot		F	Urmila Venkataramani	The Effect of Sucrose Water Nourishment on Growth of Pea Plants Exposed to Extreme Temperatures
M27	111-140-7	Bot		F	Annie Duong	Growth of Cress Plants with Nitrogen Fertilizers & Various Amounts of Water
M25	111-210-11	Env		F	Michelle Wang	The Comparison of Plant Waste Materials in the Biosorption of Chromium in Contaminated Water
M23	111-220-7	Env		F	Aditi Mittal	Coral Bleaching by Sunscreens: Effect of Sunscreen Chemicals on the Survival of Coral Symbiont Zooxanthellae Algae
M21	111-230-3	Env		F	Amy Zhang	Bioremediation of Lead Using Shewanella oneidensis
M15	111-330-8	Zoo		F	Aparna Yellapragada	The Effects of Red Food Dye on Fruit Fly Behavior
M11	111-420-4	Soc		F	Kristen Masada	Making Waves: An Investigation of Brainwaves as a Differentiator Between Pain and Anxiety
N10	111-440-9	Soc		F	Mary Najibi	The Effect of Joy on Test Scores
N16	111-520-9	Med		F	Rachel Tham	What is the effect of the benzylpiperazine adamantane diamide on Drosophila melanogasters' cell death?
N18	111-610-5	Bio		F	Selena Huang	The Effect of Trastuzumab Emtansine on Breast Cancer Cells with Reactivated P53 Gene
N20	111-611-3	Bio		F	Helen Thio	How do the different conditions (temperature and concentration/quantity) of several essential oils work as anti-fungal agents to stop fungal infections?
N22	111-620-1	Bio		F	Constance Yin	The Effect of Methotrexate on Osteoblast Survival
N26	111-630-10	Bio		F	Pavithra Margabandu	Will oxidative stress cause the accumulation of alpha synuclein, increase

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### Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
						markers of lipid peroxidation, and apoptosis in dopaminergic neurons.
N28	111-631-8	Bio	F	Neha Pusarla		The Effect on the Lipid Storage of Caenorhabditis elegans After Silencing the DAF-16 (Abnormal Dauer Formation) Gene, relating to DAF-2 which resembles the human receptor for insulin-like growth factor (IGF-1), in the Mutated Versus the Wild type Worms
N32	111-650-2	Bio	F	Shailja Somani		The Effect of a Bacterial Protein on Plant Growth
N38	111-661-9	Bio	F	Sarita Berigei		Measuring the concentration of antioxidants and measuring preservative ability of rosemary, broccoli, and sunflower seeds, and comparing those qualities to those of synthetic antioxidants and preservatives, by using Ferric Reducing Ability Plasma assay (FRAP)
N40	111-680-3	Bio	F	Priya Choudhary		Enhancing Insulin Transport Across the Intestinal Epithelia Using Chitosan Nanoparticles
N44	111-690-12	Bio	F	Bhavana Pabbiseti		What is the effect of different concentrations of levothyroxine on the silicone membrane's ability to absorb the medication?
N68	111-810-2	RRI Bio	F	Snigdha Banda		A Novel Approach to Eliminating Antibiotic-Resistant Bacteria: Harnessing the Human Microbiome in Bacterial Interference Against Community-Acquired Methicillin-Resistant Staphylococcus aureus (CA-MRSA)
N70	111-811-13	RRI Bio	F	Esther Wang		The Effect of Increased BMP4 and Repressed TGF-beta R Signaling on Lung Cells With and Without TGIF
N78	111-822-7	RRI Bio	F	Arpita Singhal		A Novel Analytical Tool to identify Copy Number Variations (CNVs) Impacting Cancers
N90	111-832-3	RRI Bio	F	Sheamin Khyeam		Early Breast Cancer Diagnosis via Circulating Tumor Cell Analysis
N94	111-840-3	RRI Bio	F	Julia Cho		Microfabricated hydrogel-based vascular networks for the metastasis study of circulating tumor cells
N98	111-841-1	RRI Bio	F	Sophia Meng		Coagulation: The effects of plasma to red blood cell ratio on clotting efficacy
N95	111-851-10	RRI Bio	F	Durga Ganesh		Identification of NUSAP1 as a novel therapeutic target for aggressive prostate cancer: evaluating cell invasion, migration, proliferation, and morphology in androgen sensitive and insensitive cell lines
N89	111-861-6	RRI Bio	F	Meera Rachamallu		Synthesis of Acid-Sensitive, Taxol-Loaded, Enzyme-Responsive Nanoparticles for Targeted Drug Delivery, part 1
N83	111-880-13	RRI Bio	F	Adele Li		Sleep Patterns in ASD: Nature, Neurophysiological Morbidity, and Possible Biopsychosocial Aetiologies
N77	111-891-7	RRI Bio	F	Swetha Revanur		A Global-Scale Meta-Analysis of Gene Expression Distributions to Determine Detection Calls
N61	111-A50-4	Chem	F	Victoria Nguyen		What are the Effects of TDS on the Rate of Evaporation of Water?
N59	111-A70-9	Chem	F	Sampada Deglurkar		Increasing the Efficiency of Dye-Sensitized Solar Cells: How the Amount of Chiral Molecules Affects the Efficiency of the DSSC
N55	111-A80-5	Chem	F	Supriya Agarwal		The effect of current and filtration on hydrogen production in seawater electrolysis.
N53	111-A90-1	Chem	F	Priya Padmanaban		The Extraction of Oil from Aquatic Environments Using Synthesized Ferrofluids
N45	111-B40-13	Phy	F	Kim Anh Ngo		Effects of Weight Distribution on Liquefaction-Related Sinking Rates

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### Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
N41	111-B50-9	Phy	F	Anusuya Arjavalingham		Electrolysis in the Presence of a Magnetic Field: The effect of the Lorentz Force and the Measurement of Hall Voltage
N31	111-D21-3	Eng	F	Nisha Bhatia		Mood-Swing LED Lights
N29	111-D30-1	Eng	F	Amrita Venkatraman		Eyes On The Road: Building an Android Application to Test Alertness Before Drivers Take the Wheel
N27	111-D31-12	Eng	F	Nuha Ahmed		Proton Exchange Membrane Fuel Cell Technology to Produce Clean Water and Energy
N23	111-D50-6	Eng	F	Amulya Raju		Controlling Obstructive Sleep Apnea with the Usage of Mucoadhesive Strips
N21	111-D51-4	Eng	F	Annette Chu		Heat Powered Charger
N19	111-D60-2	Eng	F	Maya Varma		A Wireless Smartphone-Based System for Diagnosis of Pulmonary Illnesses
N17	111-D61-13	Eng	F	Aashia Bajwa		Grey Water Recycling and Sustainability
N11	111-D71-9	Eng	F	Mabel Furutsuki		A User Controllable, GUI-based tool for analyzing 3D Regions of Interest in PET-CT Images
P16	111-E10-1	Comp	F	Anne Zepecki		Girls Learn Code - A Lesson in Java for Teenage Girls
P18	111-E20-10	Comp	F	Divya Periyakoil		The PainGauge
P28	111-E70-3	Comp	F	Sherry Sarkar		The Applications of Coding Theory for the Analysis of Genetic Data
P30	111-E80-12	Comp	F	Manogna Vemulapati		Classification of ECG Arrhythmia Using Manifold Learning and Support Vector Machine
P32	111-F10-6	RRI Phy	F	Anjini Karthik		Combating Viral Pandemics Through the Development of a Novel Tool for the Rapid Detection of Viruses Using Polymer Imprinting Strategies.
P34	111-F20-2	RRI Phy	F	Audrey Cheng		Novel Method for the Fabrication of Carbon Nanotube Field-Effect Transistors
P40	111-F30-11	RRI Phy	F	Kristine Zhang		A New Molecular Model for Congo Red-Amyloid-Beta Interaction: Implications for Diagnosis and Inhibition of Brain Plaque Formation in Alzheimer's Disease
P46	111-F40-7	RRI Phy	F	Elina Sendonaris		Analyzing Gravitationally Bound Dark Matter Regions Using Volumetric Pixels in the Bolshoi Simulation
P48	111-F41-5	RRI Phy	F	Sherry Zhou		Concentrating Fluorescent Liposomes with a Microfluidic Chip
P68	111-F90-13	RRI Phy	F	Ayushi Gautam		Development of an Intravascular Chemofilter Filter Device for High-Dose Drug Delivery: In Vitro Study
P76	112-120-12	T Bot	F	Sarah Shaikh & Alice Dang		The Effects of Temperature and Touch on Plants
P82	112-150-13	T Bot	F	Amanda Tran & Katherine Lee		The Effect of Temperature on Iron Concentration in Fruits and Vegetables
P84	112-210-8	T Env	F	Priya Bhatia & Isabelle Truong		Effect of PAH bioremediating bacteria on algae populations
P99	112-530-2	T Med	F	Aastha Shah & Nithya Deepak		Ayurvedic Rejuvenation: Myth or Fact?
P95	112-610-2	T Bio	F	Michelle Xu & Stephanie Huang		Breaking Antibiotic Resistant Biofilms with Natural Herbs
P89	112-611-13	T Bio	F	Rachna Mandalam & Christina Ly		The Effect of Enriched and Minimal Mediums on Mutant and Non Mutant Bacteria
P79	112-630-7	T Bio	F	Amy Bugwadia & Angie Chen		Determining optimal level of 11B-HSD2 for healthy fetal neural development
P77	112-640-3	T Bio	F	Gayathri Kalla & Maalini Bommakanti		Effects of Sunscreen in Coastal Waters on Marine Life: Observing Damage of Hydrogen Peroxide from Sunscreen on Spirulina Cyanobacteria
P61	112-810-12	T RRI Bio	F	Chandler Sutherland & Marissa Patterson		What quantity of micronized silica creates the most stable Activated Partial Thromboplastin Time (APTT) assay in a micro-mechanical coagulometer?
P45	112-A30-9	T Chem	F	Jennifer Nguyen & Christine Nguyen		The Effect of Blueberry and Pomegranate Antioxidants on a Nickel Redox Reaction

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### Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
P39	112-A40-5	T	Chem	F	Pratima Manga & Nora Abushaaban & Whitney Lau	Effects of Metal Cations on the Kinetics of Ortho- Nitrophenyl-Beta Galactoside Hydrolysis by Lactase
R18	121-110-13		Bot	F	Olivia Woodford-Berry	A Novel Approach to Improving Drought Tolerance: The Effects of Biochar on Crop Yield
R24	121-310-10		Zoo	F	Laila Sathe	The Effects of LED Light on Phototaxis in Drosophila melanogaster Modified with Channelrhodopsin-2 Protein
R26	121-410-2		Soc	F	Sara Stith	Does Taking Notes on Different Surfaces vs. Typing Affect Memory Retention?
R30	121-640-13		Bio	F	Jasmine Mai	Drought: Grass
R32	121-660-5		Bio	F	Tanvi Chokshi	Title: The Use of Allicin and Vitamins to reduce stress in Wild type Caenorhabditis elegans measured by Immunohistochemistry in order to find a potential treatment to Stress Induced Alopecia
R34	121-670-1		Bio	F	Kriti Lall	A Novel Bacteria Strain and Bioreactor for Practical Arsenic Water Bioremediation
R36	121-810-9		RRI Bio	F	Joy Jin	Identification and Characterization of a Rare Subpopulation with Cancer Stem Cell Properties in Lung Cancer
R40	121-812-5		RRI Bio	F	Nidhi Navaratna	Comparative Whole-Genome Analysis of the Lager Yeast Saccharomyces Pastorianus - Investigating Hybrid Origins and Characteristic Genomic Rearrangements
R46	121-821-3		RRI Bio	F	Somya Khare	Changes in Growth Rate and Cytoskeletal Activity During the Starvation Response in E. Coli
R54	121-830-1		RRI Bio	F	Madhuri Nori	Rescuing Declining Integration Rates of Transplanted Retinal Photoreceptors in Host Mouse Retina with a Microglia-derived Factor
R58	121-831-12		RRI Bio	F	Gauri Patil	Effect of Single Nucleotide Variations in the DIXDC1 Gene on Wnt-beta - Catenin Signaling Pathway Activation
R64	121-841-8		RRI Bio	F	Hima Rajana	Mapping the Progression of Alzheimer's Disease in the Substantia Nigra of the Brainstem through Unbiased Stereology
R82	121-881-5		RRI Bio	F	Allison Tam	A Localized Approach to Stain Normalization for Optimization of Lung Cancer Models and Other Digital Pathology Modeling Applications
R88	121-891-1		RRI Bio	F	Rani Mavram	Developing a novel method to determine serpentine tolerance in Mimulus species using phenotypic and genetic assays
R94	121-A40-2		Chem	F	Leslie Larios	Limiting Carbon Dioxide
R95	121-C30-3		Ear	F	Claudia Toma	Sand Particle Size and Structural Stability in Erosion Patterns
R91	121-C40-12		Ear	F	Yana Petri	Modeling CMIP5 Projected Climate Change Impacts on Global Terrestrial Mammalian Species-Range Shifts Under RCP Emission Scenarios
R89	121-D10-3		Eng	F	Michela Gori	The Transformation of Casein into Biodegradable Plastic
R69	121-D41-2		Eng	F	Stacy Pystina	Crafting Lightning: Building a Homemade Tesla Coil
R65	121-D60-9		Eng	F	Shiloh Curtis	Enabling Situational Awareness: A Hat-Based Hands-Free Haptic Navigational Aid for the Visually Impaired
R59	121-D80-1		Eng	F	Stephanie Indaheng	Spinning Filtration
R55	121-D90-10		Eng	F	Jessica Macmillan	Amoeba Filtration through native clothing and materials
R53	121-E10-8		Comp	F	Rachel Resnick	The Picture Protected Notepad (PPN): An Android Application
R47	121-E40-9		Comp	F	Ruta Jawale	Taxicab Geometry: Analysis of Properties and Relation to Toeplitz' Conjecture

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## Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
R39	121-F20-9	RRI	Phy	F	Rhea Choudhury	Novel UV LED Device: Targeted UV Radiation As An Alternative Source for Vitamin D
R33	121-F31-3	RRI	Phy	F	Sharon Chen	Exploring the Time-of-Flight Capability of BrainPET: A Radio Frequency Field-Penetrable Positron Emission Tomography Insert for Simultaneous PET/MR Brain Imaging
R29	121-F50-10	RRI	Phy	F	Nitya Mani	Characterizing the Constructible n-Division Points of the Rational Hypocycloids Through Straightedge and Compass Constructions
R21	121-F70-2	RRI	Phy	F	Ruchi Pandya	Design and synthesis of a novel paper based biosensor platform for health diagnostics.
R17	122-310-7	T	Zoo	F	Christy Nguyen & Lillian Le	Effect of humidity on aggression in the solitary Bembicini wasps (sand wasps)
T16	122-A10-11	T	Chem	F	Jennifer Kim & Erin Kim	Chopsticks: Harmless Wood or a Bane?
T22	122-B20-12	T	Phy	F	Ally Tran & An Phan	Wind Turbine
E88	072-420-3	T	Soc	F <sub>M</sub>	Isabelle Schlegel & Jonathan Vergonio	Spicy Reducer Spray
G49	082-430-6	T	Soc	F <sub>M</sub>	Josiah Myers-Lipton & Ella Myers-Lipton & Josie Gordon	Multitasking: Brain Drain or Boost in Efficiency?
G21	082-640-12	T	Bio	F <sub>M</sub>	David Melisso & Sonya Verma	Radiation and Conjugation, Oh My!
K21	092-520-9	T	Med	F <sub>M</sub>	Isha Mehrotra & Rohan Mehrotra	The effect of natural compounds Curcumin and Nicotinamide on alpha-Synuclein accumulation in a Caenorhabditis elegans model of Parkinson's Disease
L18	092-720-6	T	Bioinfo	F <sub>M</sub>	Amy Jin & Jerry Chen	Combating the Obesity Epidemic: Computational Analysis to Identify Driver Genes and Virtual High Throughput Screening to Discover Novel Treatments
M69	102-A10-10	T	Chem	F <sub>M</sub>	Trishla Pokharna & Sohil Pokharna	Superhydrophilic Single Wall Carbon Nanotubes for Selective Absorption of Oil for Post Spill Cleanup of Oceans
P74	112-110-3	T	Bot	F <sub>M</sub>	Stephen Li & Catherine Gao	The Effect of Planting Buffalo Grass on Water Use.
P55	112-820-8	T	RRI Bio	F <sub>M</sub>	Sadhika Malladi & Jonathan Ma	Systematic Rational Identification of Sex-Linked Molecular Alterations and Therapies in Cancer
P53	112-830-4	T	RRI Bio	F <sub>M</sub>	Michael Zhao & Stuti Vishwabhan	A Yeast Functional Screen Elucidates Potential Mechanisms of C9ORF72 RAN Protein Toxicity in ALS Pathogenesis
P47	112-840-13	T	RRI Bio	F <sub>M</sub>	Stanley Zhao & Karen Tu	A Novel Tool for Monitoring Mitochondrial Calcium Dynamics in Dopaminergic Neurons
P25	112-D30-11	T	Eng	F <sub>M</sub>	Joshua Cheung & Jocelyn Cheung	Toilet Leakage Alert System
P11	112-E30-3	T	Comp	F <sub>M</sub>	Simran Pabla & Dan Truong	The Sixth Sense: A Triangulation Approach to Devising a Sound Localization Algorithm based on Inter-aural Time Difference and Inter-aural Level Delay
R16	112-F10-3	T	RRI Phy	F <sub>M</sub>	Ajinkya Nene & Alice Wu	Kinematic Anomalies in Dwarf Elliptical Galaxies: New Constraints on Current Evolutionary Models
T20	122-B10-3	T	Phy	F <sub>M</sub>	Bradley Seamons & Dana Nguyen & Eduardo Villa	It is not Rocket Science
T38	122-F20-6	T	RRI Phy	F <sub>M</sub>	Omkar Savant & Adele Bloch	The Development of A Novel Web Application for the Visualization and Characterization of Extrasolar Planet Atmospheres
A99	061-110-1		Bot	M	Aishik Bhattacharyya	Does a magnet affect plant growth?
A71	061-260-12		Env	M	Ishir Vaidyanath	Saving Water from the Ground Up
A65	061-290-13		Env	M	Pranjal Agrawal	No-Sacrifice Smart Driving to Conserve Energy and Preserve our Planet: Examining the Effect of Eco-Drive Practices on an Ordinary Vehicle's Gas Mileage and Carbon Dioxide Emission

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### Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
A63	061-450-13	Soc	M	M	Vivek Sunkam	Effect of heart rate on athletic performance in competitive sports
A61	061-510-8	Med	M	M	Mathavan Murali	Effective way to reduce pollen/dust inhalation and contact
A57	061-540-9	Med	M	M	Irum Han	Is Ripe Good?
A49	061-630-5	Bio	M	M	Kanav Mittal	Spice the Milk
A11	061-A52-8	Chem	M	M	Ryan Taffe	Electrolysis
B24	061-A80-13	Chem	M	M	Arvind Ramachandran	Waste Not, Watt Not: The Effect of Coffee Grounds on Efficiency of Microbial Fuel Cells
B26	061-A81-11	Chem	M	M	Ernie Caesar Bagaporo	Too much or Too little Glucose
B30	061-A90-9	Chem	M	M	Prithu Kachare	Electrolyte Liquids
B34	061-A92-5	Chem	M	M	Samuel Sovi	Water, Water Everywhere, Nor Any Drop To Drink
B36	061-B10-7	Phy	M	M	Vamsi Atmuri	Charging a magnet
B38	061-B11-5	Phy	M	M	Nicky Gianchandani	Will Drop Distance and Greater Angle Result in Increased Acceleration?
B40	061-B12-3	Phy	M	M	Brian Chow	Cereal Fall
B44	061-B13-1	Phy	M	M	Arnav Garg	The Effect of Magnetic Field on the Induced Electromotive Force
B46	061-B14-12	Phy	M	M	Benjamin Pham	Making it Invisible
B48	061-B20-3	Phy	M	M	Conor Padmanabhan	The Effect of Air Temperature on Sound Energy
B50	061-B22-12	Phy	M	M	Anay Nagarajan	What is the affect of different materials on sound?
B56	061-B30-12	Phy	M	M	Srikar Kolluru	Amazing Lights: Effect of slit distance on wave pattern
B58	061-B31-10	Phy	M	M	Alex Loriau	Thermal Expansion
B76	061-B44-13	Phy	M	M	Logan Ganey	Do Submarines Need Fins?
B80	061-B51-2	Phy	M	M	Satwik Vakada	Buoyancy In Non-Homogeneous Mixtures
B82	061-B52-13	Phy	M	M	Aadit Trivedi	Effect of Blade Angle and Length on Wind Turbine Efficiency
B84	061-B53-11	Phy	M	M	Adam Simler	The Perfect Position
B86	061-B54-9	Phy	M	M	Corey Justin Atmosfera	Thermal Magnetism
B88	061-B60-13	Phy	M	M	Dean Kalcic	Does Temperature Affect Resistance?
B98	061-B71-7	Phy	M	M	Ritvik Pandey	Electromagnetic Induction
B99	061-B72-5	Phy	M	M	Vineet Ranade	The Sweet Spot
B93	061-B81-3	Phy	M	M	Rijul Jain	Effect of track magnetic intensity change on the speed of the Maglev train
B91	061-B82-1	Phy	M	M	Nikhil Murthy	Overcoming the Albedo Effect! The Thermal Insulation Properties of a Living Roof
B85	061-B90-1	Phy	M	M	Mwinso Denkabe	Does the volume of a balloon affect how far it can travel
B83	061-B91-12	Phy	M	M	Parin Patel	Catching the Wave
B79	061-B93-8	Phy	M	M	Brendan Mai	Principle of a refracting telescope
B59	061-C42-9	Ear	M	M	Gabriel Valdez	Do gas stations affect the amount of acid in the soil?
B55	061-C61-3	Ear	M	M	Andrew Chiang	Wind Winds Windmills
B51	061-C71-12	Ear	M	M	Arjun Patrawala	Do Levels of Home Radio Frequency Radiation Affect Our Health?
B45	061-C90-6	Ear	M	M	Jakob Lelong	Tsunami Simulator
B35	061-D20-13	Eng	M	M	Srinath Somasundaram	A Novel Design and Evaluation of an Air Cushioning mechanism for Helmets to minimize impact acceleration on the head
B31	061-D31-7	Eng	M	M	Avi Goel	The Smart Lock
B29	061-D40-5	Eng	M	M	Akhilesh Balasingam	An Internet-Enabled Shower Usage Monitor as a Nudge Engine for Residential Water Conservation

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## Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
B25	061-D50-1	Eng	M	M	Alexander Thaik	The Faster Motor
B21	061-D70-6	Eng	M	M	Munir Bshara	Powering Game Controller with My Hands
B19	061-D80-2	Eng	M	M	Aalok Patwa	Building a Self-Balancing Bicycle
B15	061-E10-9	Comp	M	M	Bharat Kathi	Detecto-Bot
C16	061-E50-6	Comp	M	M	Erich Forney	Wacky Wi-Fi
C22	062-120-7	T Bot	M	M	Lorenzo Zapien & Alan Mares Romero	Apple Mold
C32	062-520-1	T Med	M	M	Aditya Udgaonkar & Prathik Kakarlamudi	Can we measure the concentration of glucose in our eye tears by simple means?
C50	062-B20-13	T Phy	M	M	Nathan Jobalia & Samuel Catelani	Operation Lift Off
C56	062-B30-9	T Phy	M	M	Ian Jacobs & Isaac Heintze	The Science of Drinking Birds: Do Drinking birds still work in different temperatures/climates and how do they work?
C58	062-B31-7	T Phy	M	M	Connor Shores & Timothy Downer	Making Salt Water Drinkable
C68	062-B50-1	T Phy	M	M	Bar Weiner & Mark Berlaga	Sound Amplification - What is the effect of cup material on the music's sound?
C70	062-B60-10	T Phy	M	M	Alexandre Menon & Maximilian Cozzi	Marshmallow cannons
C76	062-B80-2	T Phy	M	M	Marco Rayner & Akul Datta	What is the effect of surrounding falling magnets with high conductivity tubes within which the falling magnets induce a current?
C82	062-D10-1	T Eng	M	M	Sam Schube & Daniel Huber	All Shook Up
C86	062-D20-10	T Eng	M	M	Lukas Anagnos & Mark Schuster	Electricity Generating Suitcase
C92	062-D50-11	T Eng	M	M	Jose Medina & Marcos Castenada-Torres	The Pull Machine
C94	062-E10-6	T Comp	M	M	Pranav Srisankar & Raj Raghulan	The SMARTPACK:The Backpack Packing Help Program
C98	071-120-4	Bot	M	M	Sathvik Kaliyur	Effect of acidic and basic soil on Swiss Chard plant growth
C91	071-150-5	Bot	M	M	Jimmy Dornblaser	How Much Water Do You Eat with Common Fruits and Vegetables?
C75	071-230-5	Env	M	M	Matthew Su	Does the strength of the water flow affect cleaning?
C61	071-310-5	Zoo	M	M	Joseph Caruso	Hawk, Dove, Goose
C57	071-330-10	Zoo	M	M	Nikhil Sharma	The effects of caffeinated beverages on the heart rate of daphnia magna
C53	071-410-10	Soc	M	M	Matthew Nguyen	Are Fingerprint Patterns Inherited?
C35	071-490-4	Soc	M	M	Manuel Reyes	Music on the Mind: The Effect of Background Noise on Concentration
C33	071-511-13	Med	M	M	Oriel Zagazeta	Cancer - DNA Damage From Tobacco?
C25	071-550-12	Med	M	M	Tarun Chiruvolu	A Wearable Device for Heart Rate and Blood Oxygen Saturation Tracking and Health Management
C17	071-610-7	Bio	M	M	Aditya Behal	The Effect of Natural vs. Modern Antibiotics on the Prevention of Bacterial Growth of Escherichia Coli
D14	071-621-1	Bio	M	M	Sameer Chowdhury	Efficiency of Mircobial Biofuel Cells using Various Samples
D16	071-622-12	Bio	M	M	Jaden Morgan	DNA Extraction
D20	071-632-8	Bio	M	M	Kobi Johnsson	H2O: How Pure Can We Get?
D24	071-650-4	Bio	M	M	Rahul Amin	Acids and Bases Versus Bacteria
D34	071-690-1	Bio	M	M	Aidan Inoue	What's On Your Hands?
D40	071-A11-7	Chem	M	M	Chinmay Lalgudi	The Use of Ascorbic Acid (Vitamin C) as a Water Dechlorinating Agent
D44	071-A20-5	Chem	M	M	Ethan Lai	What type of cooking methods affect the levels of vitamin C in broccoli the most?
D48	071-A30-1	Chem	M	M	Brandon McClelland	A Gassy Science Project: What Chemical Reaction Expels the Most Gas?
D50	071-A40-10	Chem	M	M	Jimmy Huang	The Effect of Antacids on Lemon Juice
D58	071-A60-2	Chem	M	M	Rithik Jain	The Bang for Your Buck - The Effect of the Type of Fuel on Energy Content

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Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
D66	071-A81-5		Chem	M	Ayinde Olukotun	How Does Your Crystal Grow? Understanding the Effects of Temperature on Crystal Growth
D68	071-A90-3		Chem	M	Tobias Hyun	What Material Makes Ice Melt the Fastest?
D70	071-B10-1		Phy	M	Srivas Sarva	Does the shape of an object change how much light is reflected off it?
D74	071-B11-12		Phy	M	Grant Robinson	How the Strength of a Magnet Varies in Different Temperatures
D82	071-B15-4		Phy	M	Mate Aranyosi	Efficient Boat Propeller Design
D92	071-B24-2		Phy	M	Aditya Hariharan	Surface Tension: A Way of Movement
D94	071-B30-6		Phy	M	Vittal Thirumalai	Propeller Thrust
D96	071-B31-4		Phy	M	Jared Lyon	The Effect of Parachute Shape and Venting on Parachute Performance
D98	071-B32-2		Phy	M	Venugopal Chillal	The Effect of Water Path Curvature on Energy Generated
D99	071-B33-13		Phy	M	Nathan Ng	THE MAGNETIC VOLTAGE!!!
D95	071-B41-13		Phy	M	Jishnu Swamy	Waterproof Fabric - A study and comparison of common waterproofing materials, natural and synthetic, to measure water resistance
D91	071-B43-9		Phy	M	Ian Canlas	Stage 1 Execution OF Fire
D89	071-B44-7		Phy	M	Victor Rossi	The Effects of Air Pressure and Surface on Bouncing a Basketball
D85	071-B51-9		Phy	M	Marcus Ma	Watts on Your Hat? How Does the Angle of a Solar Panel Affect How Much Electricity It Generates?
D81	071-B53-5		Phy	M	Siddhartha Parekh	Rockin' the Boat
D77	071-B60-7		Phy	M	Joshua Zhou	Parachutes: Does Shape Matter?
D75	071-B61-5		Phy	M	Andrew Nazareth	The Rankine Cycle: Understanding Power Generation For A New Era
D71	071-B62-3		Phy	M	Siddharth Ganesan	Wireless Power Transfer - The Effect of Changing the Diameter on the Power Transferred
D67	071-B64-12		Phy	M	Kai Baird	How does location affect the amount of EMR children are exposed to?
D61	071-B72-12		Phy	M	Harsha Ramachandran	Effect of Surface Area on the Lift Produced by an Airfoil
D53	071-B81-10		Phy	M	Anthony Scurto	What Material is the Best at Reducing Friction on a Slide?
D47	071-B84-4		Phy	M	Patrick Callahan	Does the Temperature of an Airfoil Change its Aerodynamic Drag?
D45	071-B91-6		Phy	M	Arjun Prabhu	The effect of different rotor designs on the energy generated by wind
D41	071-B92-4		Phy	M	Shobhan Mangla	What is the best mathematical model of predicting the trajectory of a catapult.
D33	071-C20-2		Ear	M	Ethan Shaotran	The Solar Conflict
D29	071-D11-9		Eng	M	Ashvatth Maheriya	Creating an Autonomous Maze Escaping Robot
D23	071-D20-7		Eng	M	Arman Durrani	The Solar Mill
D21	071-D22-3		Eng	M	Akash Balakrishnan	Electric Motor
D19	071-D23-1		Eng	M	Gursajan Singh	Microwave versus WiFi
D17	071-D30-3		Eng	M	Matthew Cho	Braille Pad: An electronic braille display using solenoids
D15	071-D31-1		Eng	M	Shounak Ranabhor	Heat Police: Protection from heat for babies and pets in cars.
D11	071-D32-12		Eng	M	Vinay Reddy	The effect of materials on sound proofing
E14	071-D41-10		Eng	M	Kavish Trivedi	A Water Filtration Mechanism
E18	071-D50-8		Eng	M	Rushil Saha	Smart Medication Reminder using Arduino for elderly and memory impaired people
E20	071-D51-6		Eng	M	Raghav Ganesh	Developing an Electronic Solution to Predict and Prevent Autistic Meltdowns
E22	071-D52-4		Eng	M	Seiji Imai	Chow Time! : An Automatic Pet Food Distributor
E24	071-D62-13		Eng	M	Anuj Kathail	Remote coffee machine

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## Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
E26	071-D70-13	Eng	M		Shivam Verma	Fitness Tracker using a Pulse Sensor
E28	071-D71-11	Eng	M		Rahul Shenoy	Rocking the Boat
E32	071-D80-9	Eng	M		Quang-Dan Tran	Flipping Robot
E36	071-D82-5	Eng	M		Saumil Thakore	Fruveilance
E44	071-D92-1	Eng	M		Kirtan Shah	Power from the Waves: a Solution to Global Warming
E48	071-E11-1	Comp	M		Kazuki Tayama	Polyomino Solver
E50	071-E20-12	Comp	M		Mihir Kasmalkar	Py++: The Next Programming Language
E52	071-E30-8	Comp	M		Patrick Yu	Developing Efficient Algorithms for Self-Navigating Vehicles
E54	071-E40-4	Comp	M		Aneesh Virjala	Rescue App
E56	071-E50-13	Comp	M		Logan Macias	A Video Game for Blind Gamers
E58	071-E60-9	Comp	M		Pranay Satya	Can "Candle"stick Charts Shine Light on Future of Stock Prices? - Develop and Analyze the Effectiveness of Low-Cost Excel-based Pattern Recognition Capability to Detect Patterns in Stock Prices
E62	071-E80-1	Comp	M		Suhas Prasad	Mimic Me If You Can! A Simple Method for Voice Regeneration
E64	071-E90-10	Comp	M		Jay Vishwarupe	Homework Tracker
E76	072-130-10	T Bot	M		Ronit Pattanayak & Abhiraam Arun	The Effects of commercial detergents on aquatic life
E92	072-610-4	T Bio	M		Siva Sambasivam & George Polychronopoulos & Raj Janardhan	Effect of Electromagnetic Radiation on Plant Cell Physiology.
E93	072-A60-12	T Chem	M		Sreehari Mohan & Bhuvan Kommineni & Anjan Bharadwaj	Constructing an affordable water desalinator
E87	072-B11-9	T Phy	M		Patrick Gomez & Jacob Andrade	Need for Speed: The Effect of the Weight of a Car on Its Speed
E83	072-B20-7	T Phy	M		Palaniappan Sithambaram & Matthew Malto & Vincent Nguyen	Stopping Piracy
E81	072-B21-5	T Phy	M		Miguel Melendez & Julian Salazar	Marbles on Sand: The Effect of the Size of a Falling Marble on its Impact Crater
E77	072-B30-3	T Phy	M		Joseph Hernandez & Bryan Arellano	Sticky Fingers
E69	072-B40-12	T Phy	M		Bryan Reyes & Dauntae Vivas	radio helmet
E65	072-B41-10	T Phy	M		Paolo Giovanardi & Krisna Sam	Bernoulli's Principle in Action
E61	072-B50-8	T Phy	M		Jayvee Gregorio & Rishith Chowdary	Electromagnetism with Cars
E55	072-B61-2	T Phy	M		Brennan Morse & Samuel Hunt	What is the Most Cost Effective Insulator?
E45	072-B90-5	T Phy	M		Diego Macaraeg & Valerian Stolpe	The Faraday Solenoid: Effect of coils and magnet speed
E35	072-D11-6	T Eng	M		Jonathan Morales & Gabe Lopez	The Better Doorknob
E21	072-D40-9	T Eng	M		Ryan Ramirez & Nicholas Rumley & Brandon Yan	Child Locator Bracelet
E17	072-D41-7	T Eng	M		Isaac Lo & Siddarth Ramkrishnan & Brendan Su	Sensory glasses for the blind
F10	072-D70-10	T Eng	M		Rohan Kolappa & Nicholas Yu	Umbrella Backpack
F16	072-D80-6	T Eng	M		Gaurav Bhatnagar & Jayden Sanchez & Allen Phu	BAYKR Solar Oven
F20	072-D90-2	T Eng	M		John Pham & Hawk Azordegan	From Air To Water
F26	072-E20-9	T Comp	M		Brandon Lee & Arav Chheda	Video Game for the Blind
F32	072-E40-1	T Comp	M		Adithya Shanker & Pranav Kakhandiki	Where's My WiFi?
F36	081-140-3	Bot	M		Shivam Singhal	Herbalism as a Medicinal Agent: Exploring the Role of Polyphenols in Oxidative Stress and Obesity
F46	081-210-7	Env	M		Ayush Pancholy	The Effects of Pollutants on Underwater Plant Life's Light Sources
F48	081-220-3	Env	M		Arjun Prabhakar	A Cost-Effective Search for Clean Water
F50	081-240-8	Env	M		Jaydev Bhateja	Sweet Drought: Effects of Dry Farming on Sugar Concentrations in Pisum sativum
F52	081-250-4	Env	M		Rohit Menon	The effect of different surfaces on surrounding atmospheric temperature:

## Synopsis Championship 2015

### Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
						Demonstrating the greenhouse effect
F58	081-320-8	Zoo	M	Timothy Chang		The Effect of Different Temperatures on the Respiration of Crickets
F62	081-340-13	Zoo	M	Akash Shanmugam		The Effect of Docosaheaxaeonic Acid, a precursor of Resolution Mediators in Inflammation, on the Regenerative Capabilities of Planaria
F70	081-420-13	Soc	M	Logan Bhamidipaty		The Effects of Positive Expectation on Student Performance
F88	081-480-2	Soc	M	Ronit Mathur		Video Games Vs. The Senses
F90	081-490-11	Soc	M	Mihir Hasan		Parents or Kids, Who is right!: How the effect of listening to music varies between age groups
F96	081-540-10	Med	M	Tejas Kadambi		Efficiency of Silver Nitrate as a Low Cost Fungicide
F98	081-610-1	Bio	M	Alexander Young		Investigating the Rate At Which Bacteria Become Resistant to Antibiotics Under Different Conditions
F97	081-620-10	Bio	M	Bilal Malik		Using Flavonoids to Inhibit Alpha Amylase Conversion of Starch to Prevent Post-Prandial Glucose Spike
F95	081-621-8	Bio	M	Derick Cutinha		Effect of cigarette smoke extract/condensate on ROS generation and muscle function in C. elegans
F91	081-650-11	Bio	M	Luca Popescu		Comparative Effects Of Fermented Foods and Probiotics on E. coli.
F89	081-660-7	Bio	M	Kiran Rachamallu		Microbiological Identification of bacteria in the Buccal Cavity in Smokers vs Nonsmokers
F85	081-690-8	Bio	M	Andrew Wilson		Got Sugar?
F81	081-A11-1	Chem	M	Rustam Gandhi		What is the effect of sugar or salt concentration on the refractive index of a solution?
F71	081-A31-6	Chem	M	Burkeley Wallwork		Reaction Rockets
F67	081-A41-2	Chem	M	Frederick Nitta		Anthocyanin and the behavior of electrons
F65	081-A60-9	Chem	M	Ali Hamade		Lets Build a Battery
F61	081-A90-10	Chem	M	Nicholas Chin		Can You Change the rate of a Chemical Reaction by Changing the Particle Size, Container, Temperature, and size of the Reactants.
F59	081-B10-8	Phy	M	Nabeel Shaikh		The Role of Mediums in Sound Travel
F57	081-B11-6	Phy	M	Tarun Amarnath		Enhancing Oil Drilling Efficiency: The Effect of Multi-Frequency Acoustics on Formation Damage in Oil and Gas Wells
F53	081-B13-2	Phy	M	Colin Schultz		What is the effect of air pressure on the intensity of sound?
F51	081-B20-4	Phy	M	Jake Rhodes		Slowing Down the Speed of Light
F49	081-B21-2	Phy	M	Dylan Hayden		Balloon Power
F45	081-B23-11	Phy	M	William Zarbakhsh		What is the effect of shielding material on WI-FI strength
F39	081-B31-11	Phy	M	Amogh Gaitonde		Effect of Magnetic Fields on Optics.
F37	081-B32-9	Phy	M	Siddharth Kumar		What reflector shape is better for focusing signals for a wireless network?
F35	081-B33-7	Phy	M	Siddharth Jain		The effect of a strong magnetic field on the flow of alpha particles
F33	081-B40-9	Phy	M	Kaushik Shivakumar		Harnessing Wasted Heat from Jet Engines: Factors Influencing the Conversion of Heat into Electricity Using Thermoelectric Materials
F31	081-B41-7	Phy	M	Arjun Miklos		Just For Kicks: The Biomechanics of Kicking a Soccer Ball
F29	081-B42-5	Phy	M	Rithvik Chuppala		Comparing Novel Methods of Wireless Power Transmission Using Resonant Inductive Coupling
F27	081-B43-3	Phy	M	Ihita Mandal		The Effect of the Type of Metal on the Amount of Electricity Produced by Heat

## Synopsis Championship 2015

### Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
F25	081-B50-5	Phy	M	Rohin Tangirala		The Venturi Effect: Varying Shroud Intake Diameter to Improve the Efficiency of a Horizontal Axis Wind Turbine
F23	081-B51-3	Phy	M	Phillip Chau		The Effect of Increasing the Chord Length of a Propeller on Its Efficiency
F21	081-B52-1	Phy	M	Sohaib Khan		Measuring The Speed of 'Light' with a Microwave Oven
F19	081-B60-1	Phy	M	Nicholas Padmanabhan		The Effect of Surface Pattern on Sound Transmission
F17	081-B61-12	Phy	M	Amol Singh		Seebeck Effect: Converting Heat into Electricity
F15	081-B62-10	Phy	M	Tejas Thvar		Refractive Index of Common Liquids
G10	081-B71-8	Phy	M	Brian Ng		What is the effect of the firmness of foam on reducing impact force and acceleration?
G14	081-B72-6	Phy	M	Chethan Bhateja		Builder's Fault: Testing Robustness and Stability of Various Structures During Earthquakes
G18	081-B81-4	Phy	M	John Sager		Going Vertical 2.0
G20	081-B82-2	Phy	M	Ronit Dey		Reducing Joint Injuries During Impact in Contact Sports Using Energy Absorbing Protective Gear
G30	081-C40-1	Ear	M	Kyler Salameda		Ice water can crushed experiment
G32	081-D10-5	Eng	M	Anik Gupta		Who Wants to be a Billionaire? Predicting the Stock Market
G34	081-D11-3	Eng	M	Sachin Wadhwa		LIDAR, Wearable Technology for accident prevention
G38	081-D13-12	Eng	M	Devin Wong		iGlass
G40	081-D21-12	Eng	M	Dylon Tjanaka		Active Skid Detection and Compensation for Autonomous Vehicles
G44	081-D22-10	Eng	M	Anish Muthali		Parking Dilemma: Designing an Application for Parking Sensors
G52	081-D32-6	Eng	M	Ayush Gupta		Arduino, FFT, Hot-Wire Anemometers: Creating a Device for a Developing Woodwind Player
G54	081-D33-4	Eng	M	Jon Telebrico		Shplus
G56	081-D40-6	Eng	M	Tejes Srivastava		Predicting College Admissions through Decision Tree Algorithm
G66	081-D51-13	Eng	M	Matthew Wong		A Cheaper Water Filtration System for Poor People in Africa
G74	081-D60-11	Eng	M	Jason Huang		Generating Energy Through Mouth Movement
G76	081-D61-9	Eng	M	Jonathan Rogers		Baby-saving Carseat
G78	081-D62-7	Eng	M	Kishore Srinivas		Predictive Filter for Thermometers
G82	081-D70-7	Eng	M	Ashwin Reddy		An Analysis of Object Recognition Techniques in Surveillance Image Processing
G84	081-D71-5	Eng	M	Shane Rodricks		The Future of LEDs
G90	081-D82-12	Eng	M	Aayush Shah		Ultrasonic Aid for the Disabled
G94	081-D90-12	Eng	M	Rishab Yeddula		FoodSafe: A Smart Food Allergy Sensor
G96	081-D91-10	Eng	M	Aditya Subramanian		Using Energy from the Right Source
G98	081-D92-8	Eng	M	Zade Lobo		A Night Guard
G99	081-E10-10	Comp	M	Deepankar Joshi		Hidden Markov Model for Protein Sequencing
G97	081-E11-8	Comp	M	Rishi Sankar		Grammar Checker
G95	081-E21-4	Comp	M	Daniel Ong		Global minimization of protein energy profile by repeated perturbation and annealing as a method to predict final protein shape from its amino acid sequence.
G93	081-E30-2	Comp	M	Marc Bacvanski		Modular Data Collection System
G91	081-E31-13	Comp	M	Shiva Balachander		The Microscopic Image Analysis and Recognition of the Ebola Virus
G89	081-E40-11	Comp	M	Rizq Khateeb		Testing Benford's Law

## Synopsis Championship 2015

### Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
G87	081-E50-7		Comp	M	Robert Selwyn	A Social Network with a Big Twist
G83	081-E70-12		Comp	M	Viet Nguyen	Man vs. Machine
G81	081-E80-8		Comp	M	Oscar Bjorkman	Home Control with Arduino
G79	081-E90-4		Comp	M	Karthik Kalyanasundaram	To or Not To? Applying Steganography Based Information Storage in Medical Imaging.
G75	082-110-12	T	Bot	M	Rithvik Panchapakesan & Nishant Ravi	Does a Modified Tree T Pee Work for Pre-Germinated Plant Seeds?
G71	082-120-8	T	Bot	M	Nicklaus Lo & Tejas Rao	The Effect of Plant Emulsions on the Growth of the Plants Vigna radiata (Fabaceae), Raphanus sativus (Brassicaceae), and Lactu saliva (Asteraceae)
G53	082-420-10	T	Soc	M	Shafieen Ibrahim & Keval Shah	Effects of Technology-Assisted vs. Hand-Written Note-Taking Strategies on Teens' Academic Performance on Science and History Assessments
G41	082-450-11	T	Soc	M	Evan Weissbart & Ari Myron & Jacob Ferguson	What is the Effect of Lying on the Human Mind While Exercising in Isolation
G37	082-460-7	T	Soc	M	Miles Bader & Jalen Milrad	The Effect of Changes in Color of Food Acting Against Humans' Ability to Perceive the Flavor
G31	082-520-2	T	Med	M	Krish Kapadia & Anjay Saklecha	Determining the Efficacy of Different Methods to Assess the Level of Dehydration Using Human Saliva.
G29	082-620-7	T	Bio	M	Noah Lincke & Suraj Pakala	Monitoring Bisphenol A Concentration Levels in Hydration Receptacles Composed of Different Materials Using Spectrophotometry
G19	082-650-8	T	Bio	M	Phillip Salowe & David Shamis	Determining Biofuel potentials for organic materials
H24	082-B10-5	T	Phy	M	Rohit Mullappalli & Puneet Nayyar	The effects of varying wavelengths of visible light on photovoltaic cell efficiency
H26	082-B20-1	T	Phy	M	Gene Wang & Rahul Goyal	The Effects of Varying Functionality on Non-Ionizing Electromagnetic Radiation Emitted from Multi-Functional, Internet Enabled, Cellular Devices
H32	082-D10-2	T	Eng	M	Charles Pun & Jerry Peng	Minimizing Water and Energy Waste by Designing an Attachable Hydro-Mechanical Faucet Generator
H36	082-D20-11	T	Eng	M	Leon Lu & Andrew Chang	An Innovative and Multimodal Charging Apparatus for Small Consumer Electronic Devices
H40	082-D30-7	T	Eng	M	Mokshith Voodarla & Shiven Gupta	Wearable Device for the Visually Impaired
H44	082-D40-3	T	Eng	M	Avinash Subramanian & Joseph Chung	A cheap, affordable search and rescue robot
H52	082-D60-8	T	Eng	M	Shashank Mahesh & Siddharth Mahesh	Self learning system for a better home automation
H54	082-D70-4	T	Eng	M	Timothy Yung & Andrew Petersen	Self-sustaining Renewable Energy Electric Car
J89	091-220-10		Env	M	Manav Shah	The Effect of Freshwater Diatoms and Orthosilicate during Nutrient Over-Fertilization in Harmful Algal Blooms to control the Growth Rate of Dinoflagellate Peridinium
J85	091-230-6		Env	M	Rishi Upadhyay	Effect of environmental pollutants on Salmon chromatophores and their use as a biosensor
J79	091-250-11		Env	M	Joseph Pang	Growth of Plants and worm activity depending on the effects of warming
J77	091-260-7		Env	M	Paarth Sharma	The Effect of Urbanization on Biodiversity in Insects
J75	091-270-3		Env	M	Robert Yang	What is the correlation between the pH of the soil and the ability to turn pesticides into nontoxic materials most quickly?
J45	091-570-5		Med	M	Nachiket Ingle	The Parts of the Brain that Filters Out Distractions
J41	091-580-1		Med	M	Raziuddin Mahmood	Automatic Determination of Clinically Similar Cases of Pulmonary Embolism

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## Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
						through Cardiac CT
J29	091-622-13	Bio	M	Neelesh Ramachandran		Are there any Quantifiable Changes in Artificial Skin caused by Exposure to Varying Levels of Glucose?
J25	091-631-11	Bio	M	Abhinav Naikawadi		An Alternative to Statins for Reducing Cholesterol Levels Using Analgesics
J21	091-640-9	Bio	M	Jason Shen		Membrane Depolarization and Accumulation of CDK-inhibitor Sic1p in <i>S. Cerevisiae</i>
J19	091-641-7	Bio	M	Advait Patil		CryoSubtilis: A synthetic biological approach to engineering cold resistance in <i>Bacillus subtilis</i> through expression of CspC and ZeAFP proteins
K14	091-670-10	Bio	M	Parikshit Pawar		Effect of Temperature Change on the Rate of Photosynthesis of <i>Leptolyngbya</i> Sp. in Far-Red Light
K18	091-680-6	Bio	M	Nicholas Chen		The Effect of Neonicotinoids on Chemotaxis in <i>C. Elegans</i>
K20	091-681-4	Bio	M	Edmund Shen		The effects of azo food dye Sunset Yellow FCF on the growth of cultures of yeast <i>Saccharomyces cerevisiae</i> .
K22	091-682-2	Bio	M	Rohan Koodli		Optogenetics: Characterizing and Quantifying Channelrhodopsin-Expressive Microorganism Response to Laser Stimulus
K26	091-691-13	Bio	M	Joshua John		What is the effect of dollar bill value on the amount of germs found present on the bill?
K28	091-710-13	Bioinfo	M	Justin Xie		An expanded computer simulation of viral transmission in a real world model.
K32	091-720-9	Bioinfo	M	Shadaj Laddad		Applying Concurrency and Distributed Systems to Sequence Alignment Algorithms
K36	091-750-10	Bioinfo	M	Aayush Gupta		Principal Component Analysis of Flow Cytometry Data to analyze the Efficacy of Allergy Immunotherapy with Omalizumab
K38	091-760-6	Bioinfo	M	Nikash Khanna		Determining the primary genes and single nucleotide polymorphisms responsible for food allergies using a weighted keywords based search algorithm applied to online genetic databases.
K40	091-770-2	Bioinfo	M	William Luo		Using Computers And Algorithms to Analyze Data About Viruses And Find The Most Efficient Algorithm Possible
K44	091-790-7	Bioinfo	M	Advith Gopinath		Using Machine Learning to Analyze Gait to Assist in the Diagnosis of Parkinson's Disease
K46	091-A10-10	Chem	M	Jesse Wong		Determination of the Rate at Which Bisphenol-A Leaches Into the Water of Sealed Polyethylene Terephthalate Water Bottles Heated at 65.6 Degrees Celsius?
K48	091-A40-11	Chem	M	Justin Hu		Reducing Carbon Dioxide: Sodium Hydroxide vs. Calcium Hydroxide
K52	091-A50-7	Chem	M	Alexander Vu		Magnetic Water Magic: A Study on the Effect of Magnetic Water Treatment on the Scale Formation of Water
K54	091-A70-12	Chem	M	Rishabh Jain		The Effect of the Type of Fuel on Energy Density, Combustion Rate, and Pollution Levels
K58	091-A80-8	Chem	M	Brian Chen		LinkedIn: The Analysis of Cross linkers Efficiency in Damage Restoration by Thermoplastic Polymers (PVA)
K60	091-B10-2	Phy	M	Nikhil Mandava		The Effect of Wavelengths of Light on Photovoltaic Cell Electricity Generation
K70	091-B40-3	Phy	M	Christopher He		Can Bubbly Water Make Things Sink
K74	091-B60-8	Phy	M	Tian Chen		A Mathematical Proof of Heat Gradient Induced Convection Resolving Mpemba Paradox

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### Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
K76	091-B70-4		Phy	M	Saagar Sanghavi	How do Car Rearview Mirrors Affect it's Aerodynamics?
K82	091-B90-9		Phy	M	Teja Veeramacheneni	A Novel Study on the Effect of Direct Electric Fields on a Simulated Mitotic Spindle.
K84	091-C10-7		Ear	M	Jasper Huang	The Effect of Soil Coarseness and Soil Moisture Content on the Amount of Carbon Dioxide Sequestered by Basalt Sand with Red Harvester Ants as a Biotic Agent
K88	091-D10-12		Eng	M	Arnav Gupta	Improving the Flexion of a Prosthetic Upper Limb via Servo Motors Controlled by Arduino Leonardo
K90	091-D11-10		Eng	M	Mark Shacker	Studying the Implementation of Tensegrity Based Structures in Planetary Surface Exploration
K94	091-D12-8		Eng	M	Akhil Arun	Designing a Reflective Polarimeter
K98	091-D20-8		Eng	M	Rajiv Movva	A Novel Use of RC Circuits to Build a Low-Cost and Non-Invasive Respiratory Monitor
K99	091-D21-6		Eng	M	Adiyan Kaul	A flexible triboelectric generator that can harness energy induced in triboelectric process to create electric power.
K91	091-D30-4		Eng	M	Varun Raju	An alternative to compression garments to control abnormal growth of limbs.
K89	091-D32-13		Eng	M	Atul Raghunathan	Harvesting the Excess Thermal Energy Produced by Light Emitting Diodes.
K85	091-D40-13		Eng	M	Vinay Senthil	Power of Quinones in a Rechargeable and Instant Flow Battery
K77	091-D50-9		Eng	M	Vikram Miryala	Harnessing Energy Lost While Using Household Appliances
K75	091-D51-7		Eng	M	Philip Axelrod	A helio tracker for function on overcast days
K59	091-D72-10		Eng	M	Surya Auroprem	G.R.A.B.B.E.R. - Gimbal Robotic Arm Boom Based Extender Retractor
K55	091-D80-10		Eng	M	Adhitya Venkatraman	Reducing Energy Costs and Increasing Energy Availability for the Poor through Space-Based Solar Farms
K53	091-D81-8		Eng	M	Rohan Dhesikan	An Automated Battery Replacement System for Quadcopters
K49	091-D90-6		Eng	M	Shrivats Kannan	Kinetically Powered Everlasting Pacemaker
K47	091-D91-4		Eng	M	Aubhro Sengupta	Heat Powered Hearing Aids
K39	091-E30-9		Comp	M	Chris Wang	Application of returns and first returns to self-avoiding walks and polygons
K37	091-E40-5		Comp	M	Nikhil Ajarapu	Censoring Illicit Content using Machine Learning
K33	091-E60-10		Comp	M	Utkarsh Tandon	Parkinsonian Syndrome Stage Classification through Signal-Processing driven Machine Learning Ensemble Algorithms: A low-cost Wearable Device utilizing novel Feature Engineering for Diagnosing and Monitoring Tremor based Diseases
K31	091-E70-6		Comp	M	Karthik Ramachandran	Take the Plunge: Detecting Falls Using Smartphone Sensors
K29	091-E80-2		Comp	M	Sathvik Koneru	Modeling effective methods to prevent ankle injuries using simulation-based software
K17	092-610-5	T	Bio	M	Alexander Ivanov & Rajiv Nelakanti	Using extremophiles to generate biomass for Martian colonies
K15	092-620-1	T	Bio	M	Justin Callahan & Jonathan Li	What is the effect of dissolving active oxygen in unsafe drinking water to oxidize and kill harmful microbes?
L36	092-D40-10	T	Eng	M	Anton Samoylov & Shyam Maisuria	Wind Turbine Efficiency
L38	101-110-12		Bot	M	Zohair Ahmed	Effects of Carbon Dioxide Concentration on Carbon Sequestration and Biomass of Triticum aestivum
L58	101-260-10		Env	M	John Um	Exploring the Effects of Carbon Dioxide Levels on Coccolithophores' Production of its Shells and its Productivity
L76	101-420-10		Soc	M	Nathan Wong	The correlation between different music aspects and electrodermal activity.

## Synopsis Championship 2015

### Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
L91	101-630-3	Bio	M		Shakkeed Buller	The Effect of Denaturation by Heat of Wastewater vs. The Amount of Methane Produced by Methanobacterium in an Aerator
L85	101-650-8	Bio	M		Vardhaan Ambati	Modeling the Effect of High Molecular Mass Hyaluronic Acid on Formation of Amyloid-Beta Plaques in Alzheimer's Disease
L77	101-670-13	Bio	M		Nisarg Shah	A Novel Method for the Bioremediation of Pyrene through Endophyte-Plant Symbiosis.
L75	101-671-11	Bio	M		Pratik Gongloor	Rescuing the Muscular Dystrophy Phenotype by Enhancing Oxidative Stress Protective Mechanisms
L71	101-680-9	Bio	M		Biswadeep Chatterjee	Creating an Organic Insect Repellent using Exhausted Coffee Waste
L65	101-710-3	Bioinfo	M		Rishab Gargeya	Computer-Aided Grading of Diabetic Retinopathy: A Novel Screening Tool for Automated Recognition of Sight Threatening Diabetic Retinopathy (STDR)
L53	101-730-8	Bioinfo	M		Noah Gundotra	Comprehensive Prediction of Protein Structures Using Foldit
L47	101-740-4	Bioinfo	M		Pravin Ravishanker	AlZCan: Predicting Future Onset of Alzheimer's Using Gender, Genetics, Cognitive Tests, Biomarkers, and Brain Imaging.
L45	101-750-13	Bioinfo	M		David Zhu	Understanding the Gene Regulation Mechanisms of Stem Cells with Big Data Processing
L41	101-760-9	Bioinfo	M		Nikhil Cheerla	A Comprehensive Study of Alternative splicing in Human Brain and its Effect on Neuroplasticity
L37	101-780-1	Bioinfo	M		Rahul Mohan	Stage based cancer classification and identification of disease causing gene pathways and splice junction interactions using deep neural networks
L33	101-810-8	RRI Bio	M		Anish Seshadri	Determining optimum conditions of cell concentration and plating for High-Content assay development for 3D Cancer Spheroid Cultures.
L31	101-811-6	RRI Bio	M		Brent Han	Unraveling Alzheimer's Disease: The Effects of Tau on Amyloid-Beta Aggregation
L27	101-821-2	RRI Bio	M		Varun Venkatesh	A Study on Using Hydrogen Deuterium Exchange Mass Spectroscopy to Determine Protein Structure in the Coagulation Cascade
L25	101-830-13	RRI Bio	M		Nathan Ching	Identification of Bacteriophages for Therapeutic Use
L21	101-840-9	RRI Bio	M		Venkat Sankar	Investigating the mechanisms of BHLH-mediated reprogramming of fibroblasts into neurons
L15	101-880-6	RRI Bio	M		Pranav Lalgudi	Novel Molecular Dynamics Simulations and Modelling of Periplasmic Proteins and Peptidoglycan Interactions of Escherichia coli
L11	101-A20-9	Chem	M		Neilay Shahi	A Comparison between the effectiveness of natural purifying agents: Lemon Peels, Carboxylic Acid, Cilantro and manmade filters in removing heavy metals from water
M10	101-A30-5	Chem	M		Gajan Nagaraj	Nanomaterial at Nano-Cost: Synthesizing nanosheets from inexpensive feedstock.
M16	101-B20-1	Phy	M		Matthew Hase-Liu	A Novel Study on the Improvement of Electronic Transport Characteristics in a Dye-Sensitized Solar Cell
M18	101-B50-2	Phy	M		Ashwin West	Transmute the Turf: Comparing the Intensive and Extensive Physical Properties of Synthetic Turf
M20	101-D10-2	Eng	M		Talal Sohail	Creating a Self-Sustaining Vertical Herb, Algae, and Invertebrate Garden Utilizing Aquaculture

## Synopsis Championship 2015

### Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
M24	101-D20-11	Eng	M	Jacob Swenberg	Changes in Volumetric Flow Rate of Liquid Dielectric in a Variable Capacitor	
M26	101-D21-9	Eng	M	Bryon Tjanaka	Magnetic Field Survey Using A Reconfigurable Autonomous Ground Vehicle	
M28	101-D30-7	Eng	M	Connor Tinsley	Storm Drain Filter For Removal of Common Suburban Pollutants Found in Rainwater Run-off	
M30	101-D31-5	Eng	M	Ganesh Valliappan	Smart Home Safety System	
M32	101-D40-3	Eng	M	Anish Krishnan	A Non-invasive Low-Cost Electronic Nose Breath Analyzer To Detect the Deadliest Cancer.	
M36	101-D51-10	Eng	M	Soham Pardeshi	Building a Transparent Solar Panel as a Viable Alternative to Household Windows	
M38	101-D60-8	Eng	M	Sandip Nirmel	Mending Retinal Tears Using Magnetic Nanoparticles	
M44	101-D70-4	Eng	M	Arjun Subramaniam	Think-to-Type: A Machine Learning Algorithm for the Classification of Different Letters Based on EEG Patterns	
M46	101-D71-2	Eng	M	Anh Tran	Square Bug: A Wall Climbing Robot	
M52	101-D81-11	Eng	M	James Marschke	Lord Kelvin's Thunderstorm	
M58	101-E11-5	Comp	M	Nagaganesh Jaladanki	A Novel Method to Establish Quasi-Stable Orbits Around Massive Non-Spherical Bodies	
M64	101-E30-12	Comp	M	Steven Cao	Using Boosting Algorithms to Decipher Partially Unknown Scripts Given Grammatically Similar Languages	
M68	101-E40-8	Comp	M	Manan Shah	Improving the Accuracy of Sentiment Classification : Determining the Sentiment of a String of Text Based on a Novel Combination of Computational and Analytical Methods to Improve Accuracy and Algorithmic Runtime.	
M70	101-E50-4	Comp	M	Vedaad Shakib	Computer Simulation of Free-Surface Fluid Flow using MPS	
M74	101-E60-13	Comp	M	Wesley Xiao	Blackjack Strategy: Can you tip the odds in your favor?	
M76	101-E70-9	Comp	M	Vikas Gubbala	A Mobile Android Application for Pain Management	
M78	101-E80-5	Comp	M	Gokul Kalyanasundaram	ColorPrism: A Novel Internet Based Machine Learning Approach to Colorize Gray-Scale Images	
M82	101-E90-1	Comp	M	Mayank Pandey	Traffic Flow Optimization with Sensor and Historical Data	
M88	101-F30-4	RRI Phy	M	Jerry Hong	The Investigation of Anomalous Lithium Detections in Red Giants of Globular Clusters	
M98	102-120-5	T Bot	M	Antony Sagayaraj & Edward Tischler	Optimizing Hair as a Fertilizer Using Bacillus Subtilis	
M49	102-C10-7	T Ear	M	Shashank Dholakia & Shishir Dholakia	"A Search for Exoplanets in the Open Star Clusters Messier 35 and Koposov 62 Using A Novel Large-Scale Photometric Algorithm for the "Crippled" Kepler Mission."	
M45	102-D10-12	T Eng	M	Nilay Sawant & Anirudh Balasubramaniam	A Semi-Autonomous Vehicle that Searches a Natural Disaster Area for Survivors.	
M41	102-D30-4	T Eng	M	Anand Sivaram & Siddharth Gollapudi	The Use of Piezoelectrics to Detect Different Walking Surfaces	
M37	102-D40-13	T Eng	M	Kaushik Tandon & Anurag Singh	Handwashing Hound: Computer Vision System for Monitoring Effective Hand Hygiene	
M33	111-110-6	Bot	M	Hardwin Bui	Elements Best Suited for Mung Bean Growth	
N69	111-150-3	Bot	M	Peterson Nguyen	The Effects of Heat and Wind on Lima Beans	
M19	111-310-3	Zoo	M	Jonathan Lau	The effect of temperature on the pheromone trail of the ant Pogonomyrmex Occidentalis and the ability for the foragers to follow it	
M17	111-320-12	Zoo	M	Viet Nguyen	Video Analysis of Daphnia	
N14	111-450-5	Soc	M	Jeffrey Chang	The California Vowel Shift: Social Motivations for Language Change	

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Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
N24	111-621-12	Bio	M	Ayan Bandyopadhyay		Effect of a Leptothrix discophora biocathode in a microbial fuel cell on power output
N30	111-641-4	Bio	M	Vinay Ayyappan		Phage Therapy: A Novel Approach to Targeted Treatment of Melanoma via Stimulation of Programmed Cell Death and Interferon-gamma Production by the M13 Bacteriophage
N34	111-651-13	Bio	M	Truong Xe		Soil Erosion and Nitrogen Fixation
N36	111-660-11	Bio	M	Caton Lu		Comparing the effects of various vitamins on the bioluminescent strength of Vibrio bacteria
N46	111-710-10	Bioinfo	M	Kaushik Sankar		Determining the Optimum Probability Spectrum of Cacao Plant Varieties by applying Neural Network Frameworks to Genomic Analysis and Factor Mapping
N48	111-720-6	Bioinfo	M	Siddharth Venkatraman		A Monte Carlo Simulation to Determine lymph node positivity and Breast Cancer metastasis rates from sizes and location seen in breast cancer survival data.
N52	111-750-7	Bioinfo	M	Nithin Buduma		Comparative Analysis of Transcriptional Networks during Mouse and Human Red Blood Cell Development
N54	111-760-3	Bioinfo	M	Andrew Si		A Novel Method to Identify a Relationship Between Gene Expression Levels and Neuroblastoma Gene Mutations
N58	111-780-8	Bioinfo	M	Pranav Srinivas		Integrative Network Analysis of Epigenetic and Genomic Data for Colorectal Cancer
N60	111-790-4	Bioinfo	M	William Li		Prognostic Value of Alcohol-Regulated Gene Expression Signature in Glioblastoma Multiforme
N74	111-820-11	RRI Bio	M	Nathan Mallipeddi		Comparing the Infectious Efficiency of the Lipofection and Calcium Phosphate Transfection Methods
N76	111-821-9	RRI Bio	M	Ken Noh		Basophil Activation Test: Evaluating Innate Immune Response in Allergic Patients with Fever
N82	111-830-7	RRI Bio	M	Ethan Shen		Preclinical Study for Bone Regeneration Using Wnt-Treated Autologous Grafts
N88	111-831-5	RRI Bio	M	Shreyan Jain		Genetic Characterization of Yeast Histone Regulatory Proteins Ada1 and Ubp10
N99	111-850-12	RRI Bio	M	Anin Sayana		Novel Design and Optimization of an EGFRvIII-based Cancer Peptide Vaccine
N85	111-870-4	RRI Bio	M	Vineet Kosaraju		Towards Rational RNA Therapeutics: 3D RNA Engineering in a Massive Open Laboratory
N79	111-881-11	RRI Bio	M	Gautam Bulusu		Developing a cost effective prognostic model for predicting recurrence in early stage Luminal A and B breast cancers using quantitative biomarker panel and HOXB13:IL17BR gene ratio assay
N75	111-A10-7	Chem	M	Shomik Jain		Is Your Sunscreen Safe? A study of sunscreens with photocatalytic particles, their ability to produce hydroxyl radicals in pools, and the effect of these particles on chlorination.
N71	111-A20-3	Chem	M	Steven La		The Effects of Humidity on the Concentration of Salts in Freshwater Output of Desalination Plants
N65	111-A40-8	Chem	M	Jacob Inda		How do heat, soil, and surface area affect water evaporation in a reservoir?
N49	111-B10-12	Phy	M	Paul Dennig		The Effect of Geometrical Factors on the Energy Storage of Lateral Graphene Supercapacitors
N47	111-B20-8	Phy	M	Jasper Gan		Dimples on a Boat: An Innovative Way to Improve Hydrodynamics

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Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
N39	111-B60-5		Phy	M	Aayush Gupta	The Effect of Geometric and Physical Constraints on the Efficiency of Wireless Energy Transmission
N37	111-B70-1		Phy	M	Sanjaysriram Garimella	Optimizing and Conserving Mechanical Energy
N35	111-D10-9		Eng	M	Mason Julian	The Use of Trifluoroacetic Acid to Create Biodegradable-Plastic From Food Products.
N33	111-D11-7		Eng	M	Ankush Rayabhari	Development of an Intelligent Motorization System for Leg Prostheses to Augment Hindered Gait Capabilities
N25	111-D41-8		Eng	M	Pransu Dash	Enhancing public safety by using the internet and Wide-Area Control Systems to remotely disable firearms
N15	111-D70-11		Eng	M	Lawrence Cheng	A Novel Approach to Detecting Respiratory Blockage Through Portable Internal CO2 Level Monitoring via Transcutaneous Sensors
P10	111-D80-7		Eng	M	Uttam Suryadevara	Application of Computer Vision in the Recognition and Tracking of Subjects to Enhance Video
P14	111-D90-3		Eng	M	Andrew Shacker	Spark Big Data Streaming Application in Pattern Development to Predict Adverse Aviation Conditions
P20	111-E30-6		Comp	M	Kyle Cui	A System for Predicting College Class Enrollments Using Machine Learning Algorithms
P22	111-E40-2		Comp	M	Timothy Varghese	From Sums over Natural Numbers to Sums over Primes
P24	111-E50-11		Comp	M	Parth Shah	Is There a Limit?
P26	111-E60-7		Comp	M	Amit Mondal	An Inexpensive Device to Allow the Disabled to Control Computer Pointing Devices
P38	111-F21-13		RRI Phy	M	Alexander Li	Coronal Energy Buildup due to Sunspot Rotation
P44	111-F31-9		RRI Phy	M	Ajay Jain	Distributed Robotic Pursuit and Evasion: Navigation and State Estimation
P52	111-F50-3		RRI Phy	M	Rishabh Chandra	Orbit Determination of Asteroid 2001 VS78
P58	111-F60-12		RRI Phy	M	Jeehoon Park	Assessing Middle Cambrian Ocean Acidification
P60	111-F70-8		RRI Phy	M	Jonathan Fung	Surface Specific Rationally Self-Assembling Au-Fe Oxide Nanoparticles: A Potential Multi-Modal Imaging Agent Platform for Early Tumor Diagnosis
P64	111-F80-4		RRI Phy	M	Dhanush Madabusi	What is the effect of substrate, solution, and membrane properties on extent of self-healing in polyelectrolyte multilayer films?
P90	112-310-13	T	Zoo	M	Joshua Bevis & Nathan Chang	The Effect of Drought on the Skeletal Development of Danio Rerio (Zebrafish)
P94	112-510-10	T	Med	M	Vamsee Vemulapalli & Ishaan Shah	How does lipopolysaccharide influence Gram (+) and Gram (-) bacterial discrimination by Dictyostelium discoideum and its subsequent phagocytosis?
P85	112-620-11	T	Bio	M	Michael Ko & Alex Luo	The Effects of 2-Dexoy-D-Glucose with Different External Glucose Concentration on the Growth Rate of E. Coli
P71	112-680-13	T	Bio	M	Austin Chang & Charley Bi & Cooper Ge	How Bacterially Secreted Intrinsic Factor affects Vitamin B12 Transfer
P65	112-690-9	T	Bio	M	Christian Justo & Moses Rivera	Bacterial Murderers
P35	112-C10-1	T	Ear	M	Omkar Shanbhag & Prashanth Koushik & Rishabh Swarnkar	Transgressing Solar System Boundaries Using Implementations of the Orbit Raising Maneuver.
P31	112-D10-6	T	Eng	M	Liam Patterson & Samuel Lin	Developing a Copper-based Antimicrobial Spray
P27	112-D20-2	T	Eng	M	Edward Lee & Andrew Tang & Charles Tang	The Optimization of the Real-Time Analysis of Malicious Web User Behavior
P21	112-D40-7	T	Eng	M	James Nguyen & Homza Hireed & Wesley Nguyen	Automated Windshield Wipers
P17	112-E20-7	T	Comp	M	Chinmay Raut & Yash Rane & Lawrence Lim	Determining Document Similarity Using Web Based Connection Analysis

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Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
R10	112-E40-12	T	Comp	M	Roshan Narayan & Amog Kamsetty	Using a combination of statistical analysis and user feedback to develop a content-based image searching system for use as an informational aid for medical diagnoses.
R20	121-210-5		Env	M	Donghoon Kang	ROSE Mutagenesis in Escherichia coli Aerobic Metabolism for Targeted Biodegradation of Tricarboxylic Acids
R22	121-240-6		Env	M	Griffin Aseltine	The Regional Effects of pH Levels in Contrast to Soil Fertility
R28	121-610-12		Bio	M	Ilian Herzi	The Effects of Various Chemoattractants on Chemotaxis-Movement Behavior of Escherichia coli and Bacillus subtilis in a Circulatory Modeled System
R38	121-811-7		RRI Bio	M	Steven Wang	Computer-Aided Genomic Characterization of Colorectal Cancer Driver Genes for Oncogenic Transformation of Primary Colon Organoids
R44	121-820-5		RRI Bio	M	Aunoy Poddar	Is Yeast an Effective Chemotherapy Model?
R52	121-822-1		RRI Bio	M	Hersh Sanghvi	A Statistical Investigation into the Role of Genetic Diversity in Evolutionary Fitness-Related Traits
R60	121-832-10		RRI Bio	M	Anand Chukka	Automated Detection Methods for Cardiomyopathies Utilizing Induced-Pluripotent Stem Cell Derived Cardiomyocytes
R68	121-850-6		RRI Bio	M	Rahul Jayaraman	Evaluation of Novel Mechanisms of Heart Failure in Children with Congenital Heart Disease Identifies the Potential for Pediatric-Specific Heart Failure Therapies
R70	121-860-2		RRI Bio	M	Andrew Jin	Shedding Light on Human Evolution: Machine Learning Algorithms for Systematic Genome-wide Discovery and Characterization of Adaptive Mutations
R76	121-861-13		RRI Bio	M	Long Nguyen	Utilization of iPSC-ECs as surrogates in drug screening of pulmonary arterial hypertension through the adhesion assay
R78	121-880-7		RRI Bio	M	Nikash Shankar	Effect of Incubation of Cue-elicited Cocaine-Craving in Rat Medial Prefrontal Cortex
R84	121-890-3		RRI Bio	M	Vivek Sriram	A Fusion Gene Pipeline for the Identification of Gene Fusion Candidates in Cancer Cell Lines Using RNA-Seq Data
R90	121-A30-6		Chem	M	Kevin Dieu	The Drought's Effect on Creek Water Pollutants
R98	121-B30-11		Phy	M	Polo Tran	The Effects on Efficiency of a Luminescent Solar Concentrator with Respect to Concavity/Convexity.
R99	121-B40-7		Phy	M	Nikunj Khetan	The Energy Efficient Deposition of Carbon Nanotubes Using Waste-Derived Carbon Dioxide as a Precursor Gas
R85	121-D11-1		Eng	M	Neil Movva	(In)security Everywhere: Machine Learning Assisted Deep Power Analysis Fundamentally Defeats Software Cryptography
R83	121-D20-12		Eng	M	Leron Perez	Cost-Effective Prosthetics: Utilization of Artificial Muscles in a 3D Printed Arm
R79	121-D21-10		Eng	M	Justin Hao	Hybrid AC and DC Electric Supplies: An Efficient Approach to Consuming Solar and Wind Power
R77	121-D30-8		Eng	M	Chinmay Vaidya	An In Vitro Study of The Mitigation of Atherosclerosis via Magnetic Hyperthermia
R75	121-D31-6		Eng	M	Obaid Khan	Applying the Internet of Things to a School Binder
R71	121-D40-4		Eng	M	Alexis Thoeny	Optimization of potassium nitrate and sucrose rocket propellant, more commonly known as rocket candy, specific impulse (ISP) through varying metals and metal oxide catalyst additives

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### Master Project List

Loc.	Proj. Num.	Team	Cat.	Gender	Students	Title
R61	121-D70-5	Eng	M	Joshua Yuan		Tracking a Moving Object Utilizing Real Time Video Sensing and Feedback
R49	121-E30-13	Comp	M	Stephen Ebert		The Shadow Curve
R45	121-E50-5	Comp	M	Tanay Tandon		Topographical Computer Vision Algorithms for rapid, low-cost Hematological diagnostics and Parasite detection through Random Forests learning and van Leeuwenhoek-type Imaging
R41	121-E60-1	Comp	M	Indraneel Tambe		Inverse Problem Approach to Designing Better Optical Waveguides
R35	121-F30-5	RRI Phy	M	Vamsi Gadiraju		Defect-Mediated Electrocatalytic Activity of Palladium-Graphene Quantum Dot Nanocomposites
R31	121-F41-12	RRI Phy	M	Manfred Virgil Ambat		The Nature of Variability of the Ultraviolet & Optical Spectral Energy Distribution of Active Galactic Nuclei
R27	121-F51-8	RRI Phy	M	Andre Xiong		Performance Evaluation of Electrodynamical Screens in Automatic Dust Removal Applications
R25	121-F60-6	RRI Phy	M	Leo Yu		A Novel Machine Learning Model for Optimal Climate Projections
R19	121-F80-11	RRI Phy	M	Bob Wang		Characterization of Indium Tin Oxide Thin Film as Quantum Tunnel Barrier for Quantum Computing
R11	122-610-9	T Bio	M	Gerrit Orthlieb & Charles Nijmeh		Mechanisms to Increase Temozolomide Efficacy in Astrocytoma Cells
T10	122-620-5	T Bio	M	Dhiraj Nallapothula & Numair Baseer		Genetically Modifying Bacteriophages to Treat Bacterial Infections by Inhibiting Protein Synthesis
T26	122-B40-4	T Phy	M	Brian Vu & Garrett Davies		Measuring the Sugar Content of Liquids with Lasers
T28	122-E10-5	T Comp	M	Thomas Fahrner & Rishi Desai		Efficient Programming Through Natural Language Processing
T32	122-E20-1	T Comp	M	Anirudh Pennathur & Daniel Kim		Using Computer Modeling to Simulate Factors Affecting Contagion in Financial Networks
T34	122-F10-10	T RRI Phy	M	Pranav Sekhar & Aaron Huang		The Detection of Extended Galactic Wind Emission in Distant Galaxies