# FOR IMMEDIATE RELEASE

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May 5, 2010

# Ramapo Students Present Research Findings at Annual Science Symposium

(MAHWAH, NJ) - More than 40 students presented posters and talks describing their undergraduate research, scholarship and creative activities in the sciences at the ninth annual Theoretical and Applied Science Student Research Symposium held April 21 at Ramapo College of New Jersey.

The research topics included how over-the-counter pain reliever acetaminophen affects the regenerative qualities of the mud worm, the implications for dinosaur speed estimates, the simulation and visualization of forest dynamics through computer technology and the microbial composition of the New Jersey Meadowlands, among others.

The symposium provided a research conference atmosphere during which students presented their results. Sponsored by the College's School of Theoretical and Applied Science and LeCroy Corporation of Chestnut Ridge, New York, the symposium was a full-day event that highlighted faculty-student collaborative research in the sciences.

"The TAS Student Research Symposium provides an opportunity for students to present their research to others within the College community as well as to corporate research representatives from the broader professional community," said Bernard Langer, dean of the School of Theoretical and Applied Science. "These research projects provide a unique, educationally enriching experience for students as an incorporate part of their undergraduate educations in the sciences and mathematics."

## The following students gave oral presentations about their research findings:

## **Bergen County**

Rami Alrabaa of North Arlington, New Jersey, "Conserved G-Quadruplexes May Regulate NF1 Gene Expression at Translational and Polyadenylation Levels"

Veronica Cavera of Dumont, New Jersey, "The Origins of Nutrition Knowledge"

Michael Chiorazzo of Rutherford, New Jersey, "3-Mercapto-5,6-Diphenyl-1,2,4-Triazine: An Alternative Method to Peptide Pegylation"

Matthew Diamond of Ramsey, New Jersey, "Analysis of Developmental and Molecular Effects of Creatine, Aspartame and Acetaminophen on Lumbriculus variegatus (Mudworm)"

Jeffery Dodd of Allendale, New Jersey, "Analysis of Developmental and Molecular Effects of Creatine, Aspartame and Acetaminophen on Lumbriculus variegatus (Mudworm)"

Fadi Abdulmaseeh Haso of Fair Lawn, New Jersey, "The Synthesis of Manganese Triphos Complexes"

Waleed Haso of Fair Lawn, New Jersey, "Plasmodium falciparum Proteins Having the Least Similarity with Human Proteins"

Edward Priestner of Midland Park, New Jersey, "Adsorption of Polyacrylates and Polyesters onto Silica"

Miles Siegel of Mahwah, New Jersey, "Measurement of Mercury Vapor in Exhaled Air in Humans"

John Soltys of Franklin Lakes, New Jersey, "Adsorption of Polyacrylates and Polyesters onto Silica"

# **Burlington County**

Marykathryn Tynon of Delanco, New Jersey, "Molecular Cloning and Purification of Bacterial Recombination Proteins Including RecR and RecO from Deinococcus radiodurans"

## **Cumberland County**

Tiffany Simons of Vineland, New Jersey, "Hydrogenations without Hydrogen: The Use of Hydrogen-Transfer Catalysts in Organic Synthesis"

## **Essex County**

Tomas Villa of Nutley, New Jersey, "Hydrogenations without Hydrogen: The Use of Hydrogen-Transfer Catalysts in Organic Synthesis"

## **Middlesex** County

Jency Alvarez of Perth Amboy, New Jersey, "Over-Expression, Purification and Biochemical Studies of E. coli RecR and Its Mutant Forms"

Tinisha Ricks of Perth Ambody, New Jersey, "Analysis of Developmental and Molecular Effects of Creatine, Aspartame and Acetaminophen on Lumbriculus variegatus (Mudworm)"

Jamie Moy of Old Bridge, New Jersey, "Mixed Monomolecular Films of Poly(Methyl Acrylate) and Poly(Octadecyl Acrylate) and Protein Solutions"

Guanyu Tian of Monroe Township, New Jersey, "Modeling Forest Processes Using Computer Simulation"

# **Monmouth County**

Sarah Carrante of Matawan, New Jersey, "Sit-1 Gene Expression and Osteoblast Differentiation"

Maria Young of Hazlet, New Jersey, "Mixed Monomolecular Films of Poly(Methyl Acrylate) and Poly(Octadecyl Acrylate) and Protein Solutions"

## **Morris County**

Justin Cappuzzo of Succasunna, New Jersey, "Use of Aminocaproic Acid as a Spacer For Multiple Pegylation of Peptides"

# **Ocean County**

Christina Bartley of Toms River, New Jersey, "Synthesis and Characterization of Benzene Derivatives as Precursors of Molecular Jumper Cables"

Alex Ucci of Brick Township, New Jersey, "Synthesis of Peptide-Epoxide Conjugates as Probes for Purification and Imaging of Cysteine Proteases"

# **Orange County**

James Marino of Goshen, New York, "Allopolyploidy in Two African Peat Mosses"

Nicole Rodstrom of Goshen, New York "Analysis of Developmental and Molecular Effects of cis-3-Hexen-1-ol on Raphanus sativus (Radish)"

## **Passaic County**

Dean Bobo of Pompton Lakes, New Jersey, "Growth in the Dinosaur Coelophysis: Implications for Dinosaur Speed Estimates from Trackways"

Bethany Walton of Ringwood, New Jersey, "Does Poly (Vinyl Methyl Ketone) Form a Poly(Cyclic Enone) When Adsorbed on Silica?"

## **Somerset County**

Kimberly Finnegan of Raritan, New Jersey, "Comparative Study of Polycyclic Aromatic Hydrocarbon (PAH) Compounds and Their Metabolites in Plants in Northern New Jersey"

## **Sussex County**

David Lancellotti of Stockholm, New Jersey, "Head Tracked Orbital Viewing in Immersive Virtual Reality"

## International

Ivaylo Balabanov of Varna, Bulgaria, "Synthesis and Characterization of Benzene Derivatives as Precursors of Molecular Jumper Cables"

Ritvik Dubey of Dubai, United Arab Emirates, "Plasmodium falciparum Proteome - Interface"

Daniela Georgieva of Varna, Bulgaria, "Effect Of c-src Kinase Inhibition on Osteoblastic Differentiation in Human Mesenchymal Stem Cells"

Viktor Vasilev of Varna, Bulgaria, "Genome-Wide Distribution of G-Quadruplexes Suggests Their Role in Regulated Splicing"

# The following students presented posters about their research:

## **Bergen County**

Rami Alrabaa of North Arlington, New Jersey, "Conserved G-Quadruplexes May Regulate NF1 Gene Expression at Translational and Polyadenylation Levels"

Kaitlyn Brown of Ridgefield Park, New Jersey, "Sphagnum australe has Three Parental Species"

Shawna Burke of Westwood, New Jersey, "A Comparison of Forest Dynamics Among Three Nearby Sites in the New Jersey Highlands"

Staci Capozzi of Lodi, New Jersey, "A Comparison of Forest Dynamics Among Three Nearby Sites in the New Jersey Highlands" and "Sphagnum australe Has Three Parental Species"

Veronica Cavera of Dumont, New Jersey, "The Origins of Nutrition Knowledge"

Michael Chiorazzo of Rutherford, New Jersey, "3-Mercapto-5,6-Diphenyl-1,2,4-Triazine: An Alternative Method to Peptide Pegylation"

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## **Cumberland County**

Tiffany Simons of Vineland, New Jersey, "Hydrogenations Without Hydrogen: The Use of Hydrogen-Transfer Catalysts in Organic Synthesis"

# **Essex County**

Penny Gregorowicz of Bloomfield, New Jersey, "cis-3-Hexen-1-ol Slows Seed Germination in Raphanus sativus (Radish)"

Nicholas Sposato of Nutley, New Jersey, "Microhabitat use by songbirds on and around Erie Landfill during two Fall migration seasons" and "A Comparison of Forest Dynamics Among Three Nearby Sites in the New Jersey Highlands"

Tomas Villa of Nutley, New Jersey, "Hydrogen-Transfer Catalysts: Using Cyclohexene as a Hydrogen Source for Organic Hydrogenation Reactions"

# **Hunterdon County**

Elizabeth Reuss of Flemington, New Jersey "Development of 16s Ribosomal Gene Sequencing for Identification of Bacteria from Sites in the Meadowlands" and "The Microbial Composition of the New Jersey Meadowlands"

## **Middlesex** County

Tinisha Ricks of Perth Amboy, New Jersey, "Inhibitory Effect of Acetaminophen on Lumbriculus variegatus (Mud Worm) Tail Regeneration"

Guanyu Tian of Monroe Township, New Jersey, "Modeling Forest Processes Using Computer Simulation"

## **Monmouth County**

Sarah Carrante of Matawan, New Jersey, "Sit-1 Gene Expression and Osteoblast Differentiation"

Paul Coraggio of Hazlet, New Jersey, "A Comparison of Forest Dynamics Among Three Nearby Sites in the New Jersey Highlands"

Christopher Scaffa of Manalapan, New Jersey, "Dispersion Patterns of Tree Species in a Temperate Hardwood Forest"

Lori Gough of Howell Township, New Jersey, "Development of 16s Ribosomal Gene Sequencing for Identification of Bacteria from Sites in the Meadowlands" and "The Microbial Composition of the New Jersey Meadowlands" Maxwell Wolfinger of Farmingdale, New Jersey, "Design and construction of a sample chamber for Raman scattering"

# **Morris County**

Justin Cappuzzo of Succasunna, New Jersey, "Use of Aminocaproic Acid as a Spacer For Multiple Pegylation of Peptides"

# **Ocean County**

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# **Orange County**

Kristen Tomasicchio of Goshen, New York, "Development of 16s Ribosomal Gene Sequencing for Identification of Bacteria from Sites in the Meadowlands" and "The Microbial Composition of the New Jersey Meadowlands"

James Marino of Goshen, New York, "Allopolyploidy in Two African Peat Mosses"

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# **Somerset County**

Kimberly Finnegan of Raritan, New Jersey, "Comparative Study of Polycyclic Aromatic Hydrocarbon (PAH) Compounds and Their Metabolites in Plants in Northern New Jersey" and "Dispersion Patterns of Tree Species in a Temperate Hardwood Forest"

Jennifer Greenspan of Hillsborough, New Jersey, "Synthesis of Peptide-Epoxide Conjugates as Probes for Purification and Imaging of Cysteine Proteases"

## **Sussex County**

Ashley Halstead of Wantage, New Jersey, "Mixed Monomolecular Films Of Poly(N-Decyl Acrylate) And Protein Solutions"

Keith Veenhuizen of Augusta, New Jersey, "Computing the Genus of a Modular Curve in Various Categories"

## International

Ivaylo Balabanov of Varna, Bulgaria, "Synthesis and Characterization of Benzene Derivatives as Precursors of Molecular Jumper Cables"

Ritvik Dubey of Dubai, United Arab Emirates "Plasmodium falciparum Proteome - Interface"

Viktoriya Staneva of Ruse, Bulgaria, "Prime Times (or Times Primes?)"

Viktor Vasilev of Varna, Bulgaria, "Genome-Wide Distribution of G-Quadruplexes Suggests Their Role in Regulated Splicing"

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