

# MCS Department List

Undergraduate Research Office

DEPARTMENT **Biological Sciences**

COLLEGE **Mellon College of Science**

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Yuanting Lu	Biological Sciences	2010
ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 1	10:00	Poster Presentation

*An Initial Study of Ovarian Cancer Stem Cells and the Cytokine Network*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Kelly Shibuya	Biological Sciences	2013
ADVISOR	DEPARTMENT	
Brooke McCartney	Biological Sciences	
ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 2	10:00	Poster Presentation

*Analysis of APC2 Phosphorylation on Actin Furrow Formation in the Drosophila Syncytial Embryo*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Eun Hwa Lee	Biological Sciences	2012
ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 1	10:15	Poster Presentation

*Analysis of BRCA2 protein level in pancreatic cancer patients by Western Blotting method.*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Allyson Koyen	Biological Sciences	2012
ADVISOR	DEPARTMENT	
Brooke McCartney	Biological Sciences	
Vincent Stepanik	Unknown	
ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 2	10:15	Poster Presentation

*APC2 and the Rescue of Brat11 Mutants in Drosophila Neuroblasts*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Heather Lynn	Biological Sciences	2011
ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 1	10:30	Poster Presentation

*Breast cancer migration via BDNF endothelial expression outside of blood vasculature*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Alice Basin	Biological Sciences	2011
ADVISOR	DEPARTMENT	
Alex Evilevitch	Physics	
ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 3	10:00	Poster Presentation

*Challenging infectivity of phage*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Young Yeo	Chemistry	2011
ADVISOR	DEPARTMENT	
David Hackney	Biological Sciences	
ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Rangos side	12-2:30	Poster Presentation

*Characterizing the Critical Structures in Kinesin Regulation by Fluorescence Spectroscopy*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Emily Chao	Biology and Psychology	2012
Jillian Cheng	Biological Sciences	2012
ADVISOR	DEPARTMENT	
Vicki Helgeson	Psychology	
ROOM	TIME	TYPE
Kirr Commons-1st Floor, Window side	12-2:30	Poster Presentation

*Communal Coping Between Persons with Diabetes and Their Partners: An Exploratory Study*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Mike Khan	Biological Sciences	2011
ADVISOR	DEPARTMENT	
Jill Blankenship	Biological Sciences	

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 3	11:15	Poster Presentation

*Creation of Septin Mutants in Candida albicans via Transposon Mutagenesis*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Medini Annavajhala	Biological Sciences	2012

ADVISOR	DEPARTMENT
Terrence Collins	Chemistry

ROOM	TIME	TYPE
Kirr Commons-1st Floor, Window side	12-2:30	Poster Presentation

*Degradation of naphthalene using FeIII-TAML catalysts*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Chin Shu Watt	Chemical Engineering	2011

Kenneth Yan	Chemical Engineering	2011
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ADVISOR	DEPARTMENT
Jeffrey Hollinger	Biological Sciences

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Window side	3-5	Poster Presentation

*Delivery of siRNA Using Cationic Nanostructured Star Polymers to Prevent Cell Differentiation to Bone*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Andrew McCoy	Biological Sciences	2013

ADVISOR	DEPARTMENT
Peter Berget	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 3	11:00	Poster Presentation

*Designing and Testing Fluorogen Activating Protein (FAP) Biosensors for Thrombin and Matrix Metalloproteinases*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Robert Morhard	Biomedical Engineering	2012

ADVISOR	DEPARTMENT
Justin Crowley	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 9	11:00	Poster Presentation

*Determination of Neuroanatomical Borders through the Use of Optical Imaging of Intrinsic Signals*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Quinn Weisman	Biological Sciences	2011

ADVISOR	DEPARTMENT
Charles Ettensohn	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 2	11:00	Poster Presentation

*Differential Expression of Genes Involved in Skeletogenesis in the Sea Urchin*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Danielle Devine	Biological Sciences	2013

ADVISOR	DEPARTMENT
Peter Berget	Biological Sciences

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Rangos side	3-5	Poster Presentation

*Dominant mutations in myosin II heavy chain genes 6, 7, and 11 and their affect on myosin protein dimerization*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Devin Prior	Biological Sciences	2011

ADVISOR	DEPARTMENT
Chien Ho	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 4	10:00	Poster Presentation

*Effect of Intralipid on Iron Oxide Particle Labeling of Immune Cells during Organ Rejection*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Priyanka Venkatesh	Biological Sciences	2011

ADVISOR	DEPARTMENT
Kris Dahl	Biomedical Engineering

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 7	10:00	Poster Presentation

*Effects of Fluid Shear Stress on Heterochromatin Regulation in Endothelial Cells*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Deepa Sathaye	Computer Science	2012

ADVISOR	DEPARTMENT
Dannie Durand	Biological Sciences

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Rangos side	3-5	Poster Presentation

*Efficient Software for Tree Reconciliation*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Adam Sinder	Biological Sciences	2011

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 1	11:45	Poster Presentation

*Elucidating Growth Rates of the Perennial Herbaceous Plant Maianthemum*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Trevor Ellison	Chemistry	2010

ADVISOR	DEPARTMENT
Charles Ettensohn	Biological Sciences

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Window side	3-5	Poster Presentation

*Elucidating the Regulation of SpC-lectin in Early Embryogenesis*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Kellie Kravarik	Biological Sciences	2011

ADVISOR	DEPARTMENT
Brooke McCartney	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 2	10:30	Poster Presentation

*Examination of cell autonomous and non-autonomous effects of APC loss in the developing Drosophila wing*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Chelsea Weber	Biological Sciences	2012
ADVISOR	DEPARTMENT	
Aaron Mitchell	Biological Sciences	
ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 3	11:30	Poster Presentation

*Functional Analysis of Essential Genes in Candida albicans*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Stephanie Guerra	Biological Sciences	2012
ADVISOR	DEPARTMENT	
Charles Ettensohn	Biological Sciences	
ROOM	TIME	TYPE
Pake	12:00	Oral Presentation

*Further Exploration of Non-Skeletogenic Mesoderm of the Sea Urchin Embryo*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Jason Stearns	Biological Sciences	2011
ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 2	11:45	Poster Presentation

*Heme Oxygenase Expression Under Various Conditions of Oxidative Stress and Lipid Exposure in Rat Liver Sinusoidal Endothelial Cells and Human Microvascular Endothelial Cells.*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
David Huang	Biological Sciences	2012
ADVISOR	DEPARTMENT	
Aaron Mitchell	Biological Sciences	
ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 3	11:45	Poster Presentation

*Identification of New Candida albicans Adherence Genes*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Katherine Fu	Biological Sciences	2011

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 1	10:45	Poster Presentation

*Increasing the Efficacy of Cross-Linking Agents in Lung Cancer*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Dasha Adamchik	Biological Sciences	2012
Jennifer Frazier	Civil and Environmental Engineering	2011

ADVISOR	DEPARTMENT
David Rakison	Psychology

ROOM	TIME	TYPE
Wean Commons-1st Floor, Connan side	12-2:30	Poster Presentation

*Infants' detection of recurrent evolutionary threats*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Ian Campbell	Biological Sciences	2012

ADVISOR	DEPARTMENT
John Woolford	Biological Sciences

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Rangos side	12-2:30	Poster Presentation

*Investigating the Role of Pwp1 in 60S Yeast Ribosome Assembly*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Claire Koechlein	Biological Sciences	2011

ADVISOR	DEPARTMENT
Veronica Hinman	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 2	11:15	Poster Presentation

*Investigating the role of signaling in establishing axial patterning in the sea star ectoderm*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Andre Hersan	Biological Sciences	2011

ADVISOR	DEPARTMENT
Mark Macbeth	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 4	11:00	Poster Presentation

*Investigation of debranching enzyme*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Akanksha Vaidya	Biological Sciences	2010

ADVISOR	DEPARTMENT
Alison Barth	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 3	10:45	Poster Presentation

*Investigation of the activity dependent expression of the 4 subunit of the BK channel*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Sarah Habib	BHA	2011

ADVISOR	DEPARTMENT
Ayanah Moor	Art
Robert Murphy	Biological Sciences

ROOM	TIME	TYPE
Connan	12-2:30	Visual Arts

*Meditation of The Word*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
John Sexton	Electrical & Computer Engineering	2011

ADVISOR	DEPARTMENT
Robert Murphy	Biological Sciences

ROOM	TIME	TYPE
Rangos 3	12-2:30	Poster Presentation

*Modeling the Relationship between the Subcellular Location Patterns of Co-observed Proteins*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Katherine Fu	Biological Sciences	2011

ADVISOR	DEPARTMENT
Marie Norman	History

ROOM	TIME	TYPE
Peter	2:00	Oral Presentation

*Perceptions of Childbirth Among American Expatriate Mothers in Switzerland: A Standard for Comparative Maternal Healthcare Systems in Two Countries*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Subha Patibanda	Biological Sciences	2011

ADVISOR	DEPARTMENT
Kausik Chakrabarti	Chemistry

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 1	11:15	Poster Presentation

*Role of small RNA of unknown function (RUF6) in malaria pathogenesis*

---

STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Elizabeth Coyle	Biological Sciences	2011

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 5	10:00	Poster Presentation

*Role of TLR signaling in the chemopreventive properties of naturally occurring isothiocyanates*

---

STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Chelsea Hoffman	Biological Sciences	2012

ROOM	TIME	TYPE
Kirr Commons-1st Floor, Window side	3-5	Poster Presentation

*SNP Mapping of C.elegans to identify an alpha 1-antitrypsin mutation*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Katherine Bonnington	Science and Humanities Scholars	2011

ADVISOR	DEPARTMENT
Gordon Rule	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 4	10:30	Poster Presentation

*Structural Analysis of Activation Induced Cytidine Deaminase via X-Ray Crystallography*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Sarah Zuerndorfer	Biological Sciences	2011

ADVISOR  
Gordon Rule

DEPARTMENT  
Biological Sciences

ROOM  
Rangos 1 & 2/Sigma Xi Group 4

TIME  
10:45

TYPE  
Poster Presentation

*Structural Analysis of Crystal Violet Binding Single Gene Variable Fragments by NMR*

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STUDENT  
Jane Lew

DEPARTMENT  
Biological Sciences

EXPECTED GRAD YEAR  
2011

ADVISOR  
Mark Macbeth

DEPARTMENT  
Biological Sciences

ROOM  
Rangos 1 & 2/Sigma Xi Group 4

TIME  
11:30

TYPE  
Poster Presentation

*Structural Analysis of Mutant Adenosine Deaminase that Act on RNA (ADAR)*

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STUDENT  
Amy Wang

DEPARTMENT  
Biological Sciences

EXPECTED GRAD YEAR  
2011

ADVISOR  
Mark Macbeth

DEPARTMENT  
Biological Sciences

ROOM  
Rangos 1 & 2/Sigma Xi Group 4

TIME  
11:15

TYPE  
Poster Presentation

*Structure-Function Analysis of Adenosine Deaminase that Acts on RNA (ADAR) Substrates*

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STUDENT  
Shriya Venkatesh

DEPARTMENT  
Biological Sciences

EXPECTED GRAD YEAR  
2012

Cindy Zhu

Biological Sciences

2012

ADVISOR  
Brooke McCartney

DEPARTMENT  
Biological Sciences

ROOM  
Rangos 1 & 2/Sigma Xi Group 2

TIME  
10:45

TYPE  
Poster Presentation

*The Role of Diaphanous in the Drosophila Syncytial Embryo*

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STUDENT  
Monalisa Ghose

DEPARTMENT  
Biological Sciences

EXPECTED GRAD YEAR  
2011

ADVISOR  
Adam Linstedt

DEPARTMENT  
Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 3	10:30	Poster Presentation

*The Role of Golgin-45 in Ribbon Formation*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Han Na Choi	Biological Sciences	2011

ADVISOR	DEPARTMENT
Gordon Rule	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 4	10:15	Poster Presentation

*The Single Molecule Study of Glutathione Transferases*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Douglas Bernstein	Mechanical Engineering	2012
Julia Lekht	Biological Sciences	2012

ADVISOR	DEPARTMENT
Lee Weiss	Robotics Institute

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 7	11:00	Poster Presentation

*Towards a Bioadhesive Controlled-Release Microchip Drug Delivery System*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Katherine Siewert	Biological Sciences	2013

ADVISOR	DEPARTMENT
Dannie Durand	Biological Sciences

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Rangos side	12-2:30	Poster Presentation

*Uncovering Domain Shuffling in the MAGUK Protein Family with Protein Domain Trees*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Maneesha Sakhuja	Science and Humanities Scholars	2012

ADVISOR	DEPARTMENT
Manojkumar Puthenveedu	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 3	12:00	Poster Presentation

*Understanding Conformational Changes in Opioid Receptors upon Ligand Binding*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Eda Akyar	Science and Humanities Scholars	2011
Devleen Baksi	Biological Sciences	2011

ADVISOR	DEPARTMENT
Caroline Acker	History

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Rangos side	3-5	Poster Presentation

*Understanding Hypertension and Health Literacy in Pittsburgh neighborhoods*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Lynley Doonan	Biological Sciences	2011
Anna Park	Biological Sciences	2012

ADVISOR	DEPARTMENT
John Woolford	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 3	10:15	Poster Presentation

*Understanding the Role of DEAD-Box Protein DRS1 in Ribosome Assembly*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Margaret Kim	Chemistry	2011

ADVISOR	DEPARTMENT
David Hackney	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 4	12:00	Poster Presentation

*Use of Tetramethylrhodamine dimerization to quantify pH dependence of Kinesin head-tail interaction*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Starsha Kolodziej	Biological Sciences	2011

ADVISOR	DEPARTMENT
Jonathan Finkel	Biological Sciences
Shantanu Ganguly	Biological Sciences

Frederick Lanni  
Aaron Mitchell

Biological Sciences  
Biological Sciences

ROOM  
Kirr Commons-1st Floor, Window side

TIME  
12-2:30

TYPE  
Poster Presentation

*Visualizing 3-Dimensional Structure in Biofilms of the Yeast Candida albicans*

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STUDENT  
Eda Akyar

DEPARTMENT  
Science and Humanities Scholars

EXPECTED GRAD YEAR  
2011

ADVISOR  
Veronica Hinman

DEPARTMENT  
Biological Sciences

ROOM  
Rangos 1 & 2/Sigma Xi Group 2

TIME  
11:30

TYPE  
Poster Presentation

*Wnt signaling is required for endomesoderm development in the sea star, Patiria miniata*

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DEPARTMENT **Chemistry**

COLLEGE **Mellon College of Science**

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STUDENT  
Young Yeo

DEPARTMENT  
Chemistry

EXPECTED GRAD YEAR  
2011

ADVISOR  
David Hackney

DEPARTMENT  
Biological Sciences

ROOM  
Hoch Commons-2nd Floor, Rangos side

TIME  
12-2:30

TYPE  
Poster Presentation

*Characterizing the Critical Structures in Kinesin Regulation by Fluorescence Spectroscopy*

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STUDENT  
Jane Herriman

DEPARTMENT  
Chemistry

EXPECTED GRAD YEAR  
2011

ADVISOR  
Lisa Porter

DEPARTMENT  
Materials Science Engineering

ROOM  
Hoch Commons-2nd Floor, Window side

TIME  
12-2:30

TYPE  
Poster Presentation

*Contact Development to AlGaIn/GaN HEMT Chemical Sensors*

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STUDENT  
Tyler Nighswander

DEPARTMENT  
Computer Science

EXPECTED GRAD YEAR  
2013

Hudson Thrift

Computer Science

2012

ADVISOR  
Subha Das

DEPARTMENT  
Chemistry

ROOM  
Peter

TIME  
1:20

TYPE  
Oral Presentation

*Creating Relative Wine Taste Groupings via Machine Learning*

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STUDENT  
Steve Aro

DEPARTMENT  
Chemistry

EXPECTED GRAD YEAR  
2011

ADVISOR  
Sara Majetich

DEPARTMENT  
Physics

ROOM  
Rangos 1 & 2/Sigma Xi Group 5

TIME  
10:30

TYPE  
Poster Presentation

*Creation and Testing of a Novel Iron-Platinum Nanoparticle Material for Use as a Magnetic Storage Medium*

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STUDENT  
Medini Annavajhala

DEPARTMENT  
Biological Sciences

EXPECTED GRAD YEAR  
2012

ADVISOR  
Terrence Collins

DEPARTMENT  
Chemistry

ROOM  
Kirr Commons-1st Floor, Window side

TIME  
12-2:30

TYPE  
Poster Presentation

*Degradation of naphthalene using FeIII-TAML catalysts*

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STUDENT  
Alyssa Chinen

DEPARTMENT  
Chemistry

EXPECTED GRAD YEAR  
2011

ADVISOR  
Catalina Achim

DEPARTMENT  
Chemistry

ROOM  
Rangos 1 & 2/Sigma Xi Group 5

TIME  
11:00

TYPE  
Poster Presentation

*Design and Synthesis of Ruthenium Tris-Bipyridine Peptide Nucleic Acid for Charge Transfer Studies*

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STUDENT  
Rebecca Reed

DEPARTMENT  
BSA

EXPECTED GRAD YEAR  
2011

ADVISOR  
Paul Whitmore

DEPARTMENT  
Chemistry

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Window side	3-5	Poster Presentation

*Determining Rate of Acid Production in Cellulose Based Paper*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Trevor Ellison	Chemistry	2010

ADVISOR	DEPARTMENT
Charles Ettensohn	Biological Sciences

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Window side	3-5	Poster Presentation

*Elucidating the Regulation of SpC-lectin in Early Embryogenesis*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Woong Young So	Chemistry	2011

ADVISOR	DEPARTMENT
Linda Peteanu	Chemistry

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Rangos side	12-2:30	Poster Presentation

*Emission Properties of Polyfluorene Monomers and Aggregates*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Steve Aro	Chemistry	2011

ADVISOR	DEPARTMENT
Sara Majetich	Physics

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Window side	3-5	Poster Presentation

*Growth of Iron Oxide Nanoparticles in Virus Capsid Templates*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Helen Piper	Chemistry	2011

ADVISOR	DEPARTMENT
Mark Bier	Chemistry

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Rangos side	3-5	Poster Presentation

*Investigation of poly(ADP-ribose) polymerase-1 (PARP-1) Inhibitor Binding by Mass Spectrophotometry*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Woong Young So	Chemistry	2011

ADVISOR	DEPARTMENT
Lisa Porter	Materials Science Engineering

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Window side	12-2:30	Poster Presentation

*Investigation of Transparent Multilayer Films*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Josh Heuslein	Biomedical Engineering	2011

ADVISOR	DEPARTMENT
Newell Washburn	Chemistry

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 1	11:00	Poster Presentation

*Reduction of burn progression with topical delivery of (anti-TNF-a)-hyaluronic acid conjugates*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Subha Patibanda	Biological Sciences	2011

ADVISOR	DEPARTMENT
Kausik Chakrabarti	Chemistry

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 1	11:15	Poster Presentation

*Role of small RNA of unknown function (RUF6) in malaria pathogenesis*

---

STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Rebecca Potash	Chemistry	2011

ADVISOR	DEPARTMENT
Richard McCullough	Chemistry

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 5	11:15	Poster Presentation

*Silver Containing Inks for use in Printed Electronics*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Katherine Chong	Chemistry	2012

ADVISOR	DEPARTMENT
Bruce Armitage	Chemistry

ROOM	TIME	TYPE
Wean Commons-1st Floor, Connan side	12-2:30	Poster Presentation

*Synthesis of Ester and Cyano Derivatives of Fluorogenic Dyes Based On Dimethyl Indole Red (DIR)*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
George Leonard	Chemistry	2011

ADVISOR	DEPARTMENT
Kris Matyjaszewski	Chemistry

ROOM	TIME	TYPE
Wean Commons-1st Floor, Connan side	3-5	Poster Presentation

*Synthesis of Poly(ethylene glycol methacrylate)-graft-siNPs via SI-ATRP for Pickering Emulsions*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Jasper Thompson	Chemistry	2012

ADVISOR	DEPARTMENT
Terrence Collins	Chemistry

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 5	11:30	Poster Presentation

*The Kinetics and Reactivity of Fe(O)V-TAML*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Margaret Kim	Chemistry	2011

ADVISOR	DEPARTMENT
David Hackney	Biological Sciences

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 4	12:00	Poster Presentation

*Use of Tetramethylrhodamine dimerization to quantify pH dependence of Kinesin head-tail interaction*

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DEPARTMENT	<b>Mathematics</b>	COLLEGE	<b>Mellon College of Science</b>
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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Jule Carr	Civil and Environmental Engineering	2013
Cynthia Clement	Mathematics	2014
Carineh Ghafafian	Materials Science Engineering	2014
Elissa Goldner	Civil and Environmental Engineering	2013
Mahaesh Jayaraman	Chemical Engineering	2014
Lane Kurkjian	Civil and Environmental Engineering	2013
Anna Lenhart	Civil and Environmental Engineering	2011
Kaiyang Liew	Mechanical Engineering	2014
Agnieszka Marszalik	Civil and Environmental Engineering	2013
Tejank Shah	Materials Science Engineering	2014
Lauren Sittler	Chemical Engineering	2012

ADVISOR	DEPARTMENT
Paulina Jaramillo	Engineering and Public Policy

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 5	11:45	Poster Presentation

*A Feasibility Study of Bio-Gas Digesters and Composting Systems at Carnegie Mellon University*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Yi Xiang Chong	Mathematics	2012
Christine Ibaraki	Statistics	2011
Chun Wa Mok	Mathematics	2012

ADVISOR	DEPARTMENT
Rebecca Nugent	Statistics

ROOM	TIME	TYPE
Wean Commons-1st Floor, Connan side	3-5	Poster Presentation

*Classroom Salon: Text Mining and Clustering*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Adam Conkey	Mathematics	2011

ADVISOR  
Wilfried Sieg

DEPARTMENT  
Philosophy

ROOM  
Hoch Commons-2nd Floor, Window side

TIME  
12-2:30

TYPE  
Poster Presentation

*Deepening the Automated Search for Gödel's Proofs*

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STUDENT  
Prerna Agarwal  
Yong-Gyun Choi  
Abigail Daughtrey  
Christopher Loncke  
Bassem Mikhael

DEPARTMENT  
Economics  
Economics and Statistics  
English  
Mathematics  
Economics

EXPECTED GRAD YEAR  
2011  
2012  
2013  
2011  
2011

ADVISOR  
Brian Junker

DEPARTMENT  
Statistics

ROOM  
Kirr Commons-1st Floor, Window side

TIME  
12-2:30

TYPE  
Poster Presentation

*Student Consumption of Caffeine On Campus*

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STUDENT  
Antonios Tavlarakis

DEPARTMENT  
Mathematics

EXPECTED GRAD YEAR  
2011

ADVISOR  
William Eddy

DEPARTMENT  
Statistics

ROOM  
Rangos 1 & 2/Sigma Xi Group 9

TIME  
11:30

TYPE  
Poster Presentation

*Using Simulations to Reduce Distortions in Mice Brain Images*

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DEPARTMENT **Physics**

COLLEGE **Mellon College of Science**

STUDENT  
Rachel Bradley

DEPARTMENT  
Chemical Engineering

EXPECTED GRAD YEAR  
2011

ADVISOR  
Stephen Garoff  
Todd Przybycien  
Robert Tilton

DEPARTMENT  
Physics  
Biomedical Engineering  
Chemical Engineering

ROOM	TIME	TYPE
Rangos 3	12-2:30	Poster Presentation

*Aerosol delivery of self-dispersing pulmonary drug formulations*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Alice Basin	Biological Sciences	2011

ADVISOR	DEPARTMENT
Alex Evilevitch	Physics

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 3	10:00	Poster Presentation

*Challenging infectivity of phage*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Steve Aro	Chemistry	2011

ADVISOR	DEPARTMENT
Sara Majetich	Physics

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 5	10:30	Poster Presentation

*Creation and Testing of a Novel Iron-Platinum Nanoparticle Material for Use as a Magnetic Storage Medium*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Mohit Raghunathan	Physics	2011

ADVISOR	DEPARTMENT
Prof. Stephanie Tristram-Nagle	Physics

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 4	11:45	Poster Presentation

*Determination of structure and properties of lipid membranes with the bioflavonoids genistein and daidzein using X-ray scattering and molecular dynamics simulations*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Maxwell Hutchinson	Physics	2011

Robert Lee	Physics	2011
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Karpur Shukla	Statistics	2011
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ADVISOR	DEPARTMENT
Robert Swendsen	Physics

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Window side	3-5	Poster Presentation

*Dynamic Monte Carlo Renormalization Group*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Rebecca Krall	Physics	2011

ADVISOR	DEPARTMENT
Roy Briere	Physics

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 6	10:00	Poster Presentation

*Four Track Decays of the J/ Meson*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Maxwell Hutchinson	Physics	2011

ADVISOR	DEPARTMENT
Michael Widom	Physics

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 6	10:15	Poster Presentation

*GPU acceleration of VASP with application to the structure of elemental boron*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Steve Aro	Chemistry	2011

ADVISOR	DEPARTMENT
Sara Majetich	Physics

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Window side	3-5	Poster Presentation

*Growth of Iron Oxide Nanoparticles in Virus Capsid Templates*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Alisa Rachubo	Physics	2012

ADVISOR	DEPARTMENT
Richard Holman	Physics

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Window side	3-5	Poster Presentation

*On the Classification and Fitting Procedures of RR Lyrae, Supernovae, and Recurrent Novae*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Benjamin Ellison	Physics	2011

ADVISOR	DEPARTMENT
Shiu Li	Physics

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 6	10:30	Poster Presentation

*Quantifying Grain Boundary Character Distribution of Nickel using High Energy Diffraction Microscopy and Forward Modeling Techniques*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Andrew Wesson	Physics	2021

ADVISOR	DEPARTMENT
Kunal Ghosh	Physics

ROOM	TIME	TYPE
Rangos 1 & 2/Sigma Xi Group 6	10:45	Poster Presentation

*Radiative Cooling In Astrophysical Magneto-Hydrodynamics Simulations*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Nathaniel Ondeck	Chemical Engineering	2013

ADVISOR	DEPARTMENT
Nisha Shukla	Physics

ROOM	TIME	TYPE
Hoch Commons-2nd Floor, Rangos side	3-5	Poster Presentation

*Separation of Chiral Molecules Using Nanoparticles*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Abigail Ondeck	Chemical Engineering	2012

ADVISOR	DEPARTMENT
Nisha Shukla	Physics

ROOM	TIME	TYPE
Kirr Commons-1st Floor, Window side	3-5	Poster Presentation

*Shape and Size Controlled Synthesis of Nanoparticulate Catalysts*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Ryan Kissell	Chemical Engineering	2012

ADVISOR	DEPARTMENT
Nisha Shukla	Physics

ROOM	TIME	TYPE
Wean Commons-1st Floor, Connan side	12-2:30	Poster Presentation

*SYNTHESIS OF SUB-NANOMETER SIZED METALLIC NANOPARTICLES*

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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Andrew Kojzar	Mechanical Engineering	2011

ADVISOR	DEPARTMENT
Shelley Anna	Mechanical Engineering
Stephen Garoff	Physics

ROOM	TIME	TYPE
Rangos 3	12-2:30	Poster Presentation

*The Detection of Multiple Ions in a Single Drop of Sample*

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DEPARTMENT	<b>Chemistry</b>	COLLEGE	<b>Unknown</b>
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STUDENT	DEPARTMENT	EXPECTED GRAD YEAR
Hye Jung Cho	Economics and Statistics	2011

Erica Choi	Science and Humanities Scholars	2011
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Aiena Garg	Economics and Statistics	2011
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Dong Seob Kim	Chemistry	2011
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John Shoup	Statistics	2013
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ADVISOR	DEPARTMENT
Brian Junker	Statistics

ROOM	TIME	TYPE
Kirr Commons-1st Floor, Window side	3-5	Poster Presentation

*Faculties Attitude toward Plus/Minus Grading System*

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TOTAL DEPARTMENTS: 5