

UPBM E-NEWSLETTER

Undergraduate Program in Biology and Medicine



Sunday, May 18th, 2014

Photo courtesy of Alisa Johnson '14, BEB

Links

- ▶ [Class of 2014 Hugs it Out](#)
- ▶ [Momma Needs a SUBS T-shirt](#)
- ▶ [Senior Slide Show 2014](#)
- ▶ [UPBM Alumni - Where Are They Now?](#)
- ▶ [UR Commencement Photos](#)
- ▶ [UPBM Home Page](#)

Good Bye Class of 2014 The Final Spam

Hello Graduate UPBMers

One final spam before you add my e-mail address to your junk folder filter.

On behalf of Dr. Benyajati, Ms. Jenn and myself it has been a pleasure to work with you and we will miss not seeing you here next year.

Congratulations, good luck, may your lives be filled with numerous triumphs, and I look forward to hearing about your future accomplishments (only good stuff please) on the news CNN.

Enjoy!

Marianne Arcoraci



UNIVERSITY of
ROCHESTER



UR Commencement 2014



CONTENTS

Class of 2014 UPBM Seniors	.3
Distinction in Research	.5-6
Pushing the Bounds of Knowledge	.7-10
deKiewiet Fellowship	.11
Biotechnology Certificate Program	.11
Awards, Accomplishments & Notables	.12-14
UPBM Founder Dr. Robert Marquis / Tribute to a Visionary	.14
National Conference of Undergraduate Research	.15
UR Undergraduate Research Exposition	.15
Keep in Touch / Send us Your News	.16

Class of 2014

List of UPBM Seniors



Program Majors:

- BA Biology
- BS Biochemistry
- BS Cell & Developmental Biology
- BS Ecology & Evolutionary Biology
- BS Microbiology
- BS Molecular Genetics
- BS Neuroscience

Bachelor of Arts Biology (BA BIO)

- | | |
|-----------------------------|-----------------------------|
| Anum Abid | Kyle Doyle |
| Seth Angelo | Jacob Griggs |
| Neslihan Ari | Cebrahil Guler-Carrasquillo |
| Adil Asgher | Kathryn Haapala |
| Shay Behrens | Selin Haci |
| Rebecca Binder | Bridget Hannon |
| Boris Borovcanin | Amy Ige |
| Scott Bruening | Rebecca Kuruvilla |
| Amanda Chang ^{ΦBK} | Elise LaCarrubba |
| Michael Cheung | Jackson Lam |
| Marlise Combe | Maura Levis ^{ΦBK} |
| Nicole DiBenedetti | Albert Lim |

- | |
|-------------------------------|
| Henry Macias |
| Billal Masood |
| Roshal Patel |
| Nuhamin Gebrewold Petros |
| Val Pyon |
| Alfred Rabinovich |
| Soo Min Rhee |
| Angela Rojas |
| Sarah Rush |
| Adam Russak ^{ΦBK} |
| Steven Russell ^{ΦBK} |
| Siddhi Shah |

- | |
|------------------------------------|
| Sanghee Shin |
| Wontack Shin |
| Evan Tandy |
| Ecaterina Toutok |
| Shyam Venkateswaran ^{ΦBK} |
| Tyler Viterise |
| Chantelle White |
| Brian Wuu |
| Victoria Yellamaty |
| Natalie Yragui |
| Janice Zhao |
| Victoria Zhou |

Bachelor of Science Biochemistry (BS BBC)

- | | |
|--------------------------|---------------------------|
| Pamela Barnett | Nicholas Giangreco |
| Zachary Brumberger | David Grossman |
| Allen Chen | William Horn |
| Iris Chen ^{ΦBK} | Tanya Khan |
| Daniel Cho | Chong Li |
| John Etter | Jonathan Lotempio ** |
| Zhaoxiang Fan | Charles Lu |
| Joshua Geiger ** | Alex Lukez ^{ΦBK} |

- | |
|---------------------------------|
| Gregory O'Connor ^{ΦBK} |
| Louis Papa III ^{ΦBK} |
| Pooja Patel ^{ΦBK} |
| Priya Patel |
| Amelia Poulin |
| John Power |
| Brianna Spencer ** |
| Petr Stastka ** |

- | |
|------------------------------------|
| Mark Torosian |
| Katherine Vanhise ^{ΦBK} |
| Morganne Wagner |
| Yuji Wakimoto ^{ΦBK} |
| Catherine Weiner ** ^{ΦBK} |
| Jessica Yao |

continued...

Degree with Distinction in Research **
Phi Beta Kappa ^{ΦBK}

UNDERGRADUATE PROGRAM IN BIOLOGY AND MEDICINE (UPBM) E-NEWS

Bachelor of Science Cell and Developmental Biology (BS BCD)

Anam Ahmed	Justin Kallman	Tatyana Lemelman	Kelvin Tam
Sarah Bjork	Yelena Kernogitski	Nicholas Love	Jacob VanderBurgh ^{ΦBK}
Chris Demme ^{ΦBK}	Pruthvi Kothari ^{ΦBK}	Deanna Roggie	Benjamin Wainblat
Kassandra Doyle	Ashley Laikin	Aaron Rusheen	Qianlangyue Xu
Chelsea Hans	Steven Lee	Katherine Strong ^{ΦBK}	Jonathan Zuckerman

Bachelor of Science Ecology and Evolutionary Biology (BS BEB)

Eleanor Arrington	Eric Han	Deborah Korzun ^{ΦBK}	Tong Tong
Roni Barak Ventura	Amelia Harvey	Daniel MacGuigan	Timothy Tsai
Mark Bell	Erin Hatch	Morgan Maisel	Madison Wagner
Rebecca Galasso	Alisa Johnson ^{**}	Anupa Manjunatha	Hannah Ward ^{ΦBK}
Benjamin Goulet ^{** ΦBK}	Michelle Koblenz	Sabina Noll	Zirou (Emily) Zhang

Bachelor of Science Microbiology (BS BMB)

Woori Bae ^{** ΦBK}	Zachariah Hale ^{ΦBK}	Fang Liu	Prishanya Pillai
Robert Bortz ^{**}	Sarah Hussein	Clare Ma	Priyanka Pillai
Jeffrey Bulger ^{**}	Saad Khan	Abhiniti Mittal ^{**}	Russell Pizzo
Natasha Chainani	Beom Soo Kim ^{ΦBK}	Bryan Myers	Patrick Schupp
Amanda Chan	Justin Kim	Ugochi Ndubuisi	Vaidehi Shah
Phillip Cohen ^{** ΦBK}	Soyeon Kim	Joo-Eun Park	Meng-Ju Wu
Hillary Figler	Yo-Ei Kim	Jessamyn Perlmutter	Isabel Wylie ^{**}
Anisha Gundewar ^{ΦBK}	Kevin Koenders ^{** ΦBK}	Valerie Pietroluongo	

Bachelor of Science Molecular Genetics (BS BMG)

Leyla Akhverdiyeva	Brigitta Gehl	Lakshmi Miller-Vedam	Jared Smith
Pantelis Antoniou	Melissa Glasner	Hiroko Miyagi	Joseph Soucy
Daniel Beringer ^{ΦBK}	Hasan Gureli	Pooja Patel	Janine Steffan ^{ΦBK}
Michael Danta	Alex Haber	Daniel Petkovich ^{**}	Stefanie Thorsness
John Dawson	Rebecca Holman	Leah Reino	Shilpa Topudurti
Zoe Edmunds	Sarah Joseph ^{** ΦBK}	Yanhan Ren ^{**}	William Vezinaw
Erin Fry	Rachel Kitt	Justin Roncaioli	Akira Neng Chun Wong
Priscilla Garcia	Yasmin Mattar	Taneisha Sinclair	

Bachelor of Science Neuroscience (BS BNS)

Giscard Adeclat	Hannah DeSelms	Kristiana Lachiusa	Sally Patel
Zachariah Adham	Mikhail Domrachev	Anisha Lashkari	Halima Rafi ^{**}
Kevin Allan ^{ΦBK}	Alexander Edelstein	Jacob Lazarus	Alyssa Ruffner
Borna Arjomandi	Bianca Flores	William Li ^{**}	Brandon Salzman
Nancy Bui	Shakeela Girard-Isaac	Theodore Lincoln	Alberto Sepulveda
Tina Bui	David Glasser	Brianne Linne	Rodriguez
Frederick Burton	Gregory Golembeski	Naveen Maliakkal	Venkatesh Abhishek
Donna Campbell	Lee Golos	Ma. Lira Camille Manhit	Erin Shea
Hamza Chengazi	Spencer Gurley-Green	Hillary McMullin	Michael Shteyn
Jessica Cheung	Stephanie Hayes	Emily Nedrow	Greta Smith
Eric Chung	Rainya Heath	Yan Nuzbrokh	Andrew Spitzberg
Amanda Connell	Emi Hitomi	Sarah Obudzinski ^{ΦBK}	Philip Sutera
Farrell Cooke	Brittany Hopkins ^{**}	Sean Oenick	Marina Tadros
Richard Cotran	Samuel Huang ^{ΦBK}	Marko Oydanich	Kwanza Warren
Bethany Dakin	Minor: Visual	Ria Pal ^{ΦBK}	Beverly Wong
Danielle Davis	Morgan Kennedy	Nirlipta Panda ^{**}	Nicole Zwald



Distinction in Research Twenty-One Seniors Defend Thesis

The Undergraduate Program in Biology and Medicine (UPBM) provides majors in the B.S. or B.A. tracks the opportunity to graduate with distinction in research. Students must achieve a minimum GPA of 2.7 and defend their written thesis at a meeting of their advisory committee.

Most students seeking a degree with distinction have worked on a research project for a year or more and have achieved significant results. They then immerse themselves in the time-consuming process of writing the thesis.

Those who successfully complete their research and then push on to write the required paper are rewarded with the phrase "Distinction in Research" added to their transcripts.

Woori Bae BMB

Dissertation: "Soluble CD40 Ligand Interrupts Sonic Hedgehog Signaling in vitro: Implications for Blood Brain Barrier Permeability in HIV-Associated Neurocognitive Disorder"

Faculty Mentor: Dr. Sanjay Maggirwar
Microbiology & Immunology

Robert Bortz BMB

Dissertation: "Examining the Possible Long Term Anti-Viral Immune Effects of Atrazine: Viral Dissemination to the Liver and Asymptomatic Infection"

Faculty Mentor: Dr. Paige Lawrence
Microbiology & Immunology

Jeffrey Bulger BMB

Dissertation: "Identifying Structure Activity Relationship Trends among RnpA Inhibitors and Optimizing a Novel Screening Method to Identify Anti-Biofilm Agents"

Faculty Mentor: Dr. Paul Dunman
Microbiology & Immunology

Phillip Cohen BMB

Dissertation: "Immunological Consequences of Nanoparticle-Based Vaccination Against Human Immunodeficiency Virus - Type 1"

Faculty Mentor: Dr. Stephen Dewhurst
Microbiology & Immunology

Joshua Geiger BBC/CHM

Dissertation: "The Role of Drosophila Small Maf Protein in Antioxidant Response and Aging"

Faculty Mentor: Dr. Dirk Bohmann
Biomedical Genetics

Benjamin Goulet BEB

Dissertation: "The Genetics of Speciation Between Drosophila mauritiana and its Sibling Species"

Faculty Mentor: Dr. Daven Presgraves
Biology

Brittany Hopkins BNS

Dissertation: "Characterizing Microglia in Transgenic Mouse Lines"

Faculty Mentor: Dr. Ania Majewska
Neurobiology & Anatomy

Alisa Johnson BEB

Dissertation: "An Investigation of the Role of Abnormal Laminin-332 Expression in ARPKD"

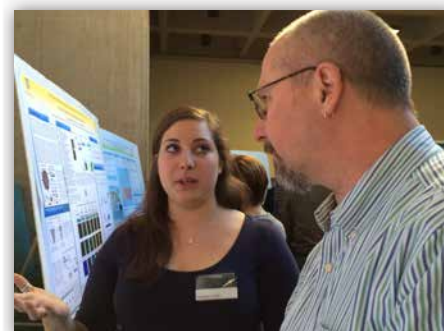
Faculty Mentor: Dr. Soundarapandian Vijayakumar
Pharmacology & Physiology

Sarah Joseph BMG

Dissertation: "Elucidating the Mitochondrial Function and Targeting Sequence for the Yeast Flap Endonuclease (RAD27)"

Faculty Mentor: Dr. Elaine Sia
Biology

continued...



UNDERGRADUATE PROGRAM IN BIOLOGY AND MEDICINE (UPBM) E-NEWS

Kevin Koenders BMB

Dissertation: "Towards the Development of More Potent Inhibitors of Cdc42"

Faculty Mentor: Dr. Alison Frontier
Chemistry

William Li BNS

Dissertation: "Elucidating the Mechanisms of Novel Protective Agents in Lysosomal Storage Disorders"

Faculty Mentor: Dr. Mark Noble
Biomedical Genetics

Jonathan Lotempio BBC

Dissertation: "Wild-Type MutS β and its Binding Tendencies Under Varied Conditions *in vitro*"

Faculty Mentor: Dr. Robert Bambara
Microbiology & Immunology

Abhiniti Mittal BMB

Dissertation: "Investigating the Role of ARMS Expression and Function in Multiple Myeloma Cells"

Faculty Mentor: Dr. Michelle Kiebal
Microbiology & Immunology

Nirlipta Panda BNS

Dissertation: "Radiation, Inflammation, and Proliferation: The Neurological Effects of Somatic Radiation"

Faculty Mentor: Dr. Kerry (Michael) O'Banion
Neurobiology & Anatomy

Daniel Petkovich BMG, CHM

Dissertation: "Convergence Analysis of Glioma Cells"

Faculty Mentor: Dr. Mark Noble
Biomedical Genetics

Halima Rafi BNS

Dissertation: "Perceptual Neurophysiology in Aging and Alzheimer's Disease: It's Better to be Young"

Faculty Mentor: Dr. Charles Duffy
Neurology Memory Care

Yanhan Ren BMG

Dissertation: "Matrix Metalloproteinases as Novel Biomarkers and their Potential Therapeutic and Diagnostic Applications in Diabetic Ulcer Healing"

Faculty Mentor: Dr. Xin Bi
Biology

Brianna Spencer BBC

Dissertation: "NHEJ Repair in Young Versus Old Mice: Expression Levels of Rosa26 Promoter and I-sceI and Cutting Efficiency of I-sceI"

Faculty Mentor: Dr. Vera Gorbunova
Biology

Petr Stastka BBC

Dissertation: "Breast Cancer Cells, Adrenergic Receptor Signaling, and Norepinephrine-Induced Alterations in Fibrillar Collagen Type I"

Faculty Mentor: Dr. Edward Brown
Biomedical Engineering

Catherine Weiner BBC

Dissertation: "2'-O-Methylation of the Anticodon Loop of tRNAPhe Catalyzed by Trm7 and its Protein Partners"

Faculty Mentor: Dr. Eric Phizicky
Biochemistry & Biophysics

Isabel Wylie BMB

Dissertation: "Construction and Characterization of Novel Forms of IL-12"

Faculty Mentor: Dr. John Frelinger
Microbiology & Immunology



Pushing the Bounds of Knowledge

Over Half of 2014 UPBMer's Took Independent Research Courses



Anum Abid BIO

Faculty Mentor: Dr. Minsoo Kim
Microbiology & Immunology

Giscard Adeclat BNS (2)

Faculty Mentor: Dr. Bradford Mahon
Brain & Cognitive Sciences

Zachariah Adham BNS (3)

Faculty Mentor: Dr. Lisa Opanashuk
Environmental Medicine

Leyla Akhverdiyeva BMG / RUS (2)

Faculty Mentor: Dr. Andrei Seluanov
Biology

Alex Haber BMG (2)

Faculty Mentor: Dr. Margot Mayer-Pröschel
Biomedical Genetics

Kevin Allan BNS (4)

Faculty Mentors: Dr. Harris Gelbard/Dr. Baek Kim
Neurology/Microbiology & Immunology

Pantelis Antoniou BMG

Faculty Mentor: Dr. Sina Ghaemmaghami
Biology

Woori Bae BMB

Faculty Mentor: Dr. Stephen Dewhurst
Microbiology & Immunology

Pamela Barnett BBC

Faculty Mentor: Dr. Paul Dunman
Microbiology & Immunology

Rebecca Binder BIO (2)

Faculty Mentor: Dr. Luiz Meirelles
Dentistry

Robert Bortz BMB (2)

Faculty Mentor: Dr. Jacques Robert
Microbiology & Immunology

Zachary Brumberger BBC/CHM (2)

Faculty Mentors: Dr. Fred Hagen /
Dr. Luis Martinez-Sobrido
Biochemistry & Biophysics /
Microbiology & Immunology

Jeffrey Bulger BMB (2)

Faculty Mentor: Dr. Paul Dunman
Microbiology & Immunology

Natasha Chainani BMB

Faculty Mentor: Dr. Luis Martinez-Sobrido
Microbiology & Immunology

Smon Cheewapansri BBC

Faculty Mentor: Dr. John Werren
Biology

Iris Xuening Chen BBC (3)

Faculty Mentors: Dr. Vera Gorbunova (2)
Dr. Andrei Selunov (1)
Biology

Michael Cheung BIO (2)

Faculty Mentor: Dr. Harold Smith
Biochemistry & Biophysics

Daniel Cho BBC / ECO (2)

Faculty Mentor: Dr. David Mathews
Biochemistry & Biophysics

Eric Chung BNS (2)

Faculty Mentor: Dr. Robert Chapman
Brain & Cognitive Sciences

Phillip Cohen BMB (2)

Faculty Mentor: Dr. Stephen Dewhurst /
Dr. Harris Gelbard
Microbiology & Immunology / Neurology

continued...

UNDERGRADUATE PROGRAM IN BIOLOGY AND MEDICINE (UPBM) E-NEWS

Michael Danta BMG (2)

Faculty Mentor: Dr. Margot Mayer-Pröschel
Biomedical Genetics

Danielle Davis BNS

Faculty Mentor: Dr. Steven Goldman / Dr. Romane Auvergne
Translational Neuromedicine

John Etter BBC, APM

Faculty Mentor: Dr. Benjamin Miller
Dermatology

Hillary Figler BMB/PSY (2)

Faculty Mentors: Dr. Paul Dunman / Dr. Judith Smetana
Microbiology & Immunology / Clinical & Social Sci.

Bianca Flores BNS

Faculty Mentor: Dr. Abdellatif Benraiss
Neurology

Erin Fry BMG

Faculty Mentor: Dr. Jacques Robert
Microbiology & Immunology

Brigitta Gehl BMG (2)

Faculty Mentor: Dr. Lei Xu
Biomedical Genetics

Joshua Geiger BBC / CHM (2)

Faculty Mentor: Dr. Dirk Bohmann
Biomedical Genetics

Nicholas Giangreco BBC (2)

Faculty Mentors: Dr. Sina Ghaemmaghami / Dr. Gail V.W. Johnson
Biology / Pharmacology & Physiology

Melissa Glasner BMG (2)

Faculty Mentors: Dr. Jennifer Jonason / Dr. Regis O'Keefe
Center for Musculoskeletal Research / Orthopedics

David Glasser BNS/PSY

Faculty Mentor: Dr. Martha Windrem
Neurology

Gregory Golembeski BNS

Faculty Mentor: Dr. Julia Fudge
Neurobiology & Anatomy

Benjamin Goulet BEB (2)

Faculty Mentor: Dr. Daven Presgraves
Biology

Anisha Gundewar BMB/HBS

Faculty Mentor: Dr. Mark Dumont
Biochemistry & Biophysics

Alex Haber BMG (2)

Faculty Mentor: Dr. Margot Mayer-Pröschel
Biomedical Genetics

Stephanie Hayes BNS/ENG

Faculty Mentor: Dr. James Palis
Pediatric Biomedical Research

Emi Hitomi BNS

Faculty Mentor: Dr. Maiken Nedergaard
Neurosurgery / Translational Neuromedicine

Brittany Hopkins BNS (3)

Faculty Mentor: Dr. Ania Majewska
Neurobiology & Anatomy

Alisa Johnson BEB (2)

Faculty Mentor: Dr. Soundarapandian Vijayakumar
Pediatrics

Sarah Joseph BMG (2)

Faculty Mentor: Dr. Elaine Sia
Biology

Tanya Khan BBC (2)

Faculty Mentor: Dr. Andrei Seluanov
Biology

Beom Soo Kim BMB (2)

Faculty Mentor: Dr. Bogdan Plevoda
Biochemistry & Biophysics

Justin Kim BMB (2)

Faculty Mentor: Dr. Martin Pavelka
Microbiology & Immunology

Soyeon Kim BMB (2)

Faculty Mentor: Dr. Michelle Dziejman
Microbiology & Immunology

Yo-el Kim BMB (2)

Faculty Mentor: Dr. Steven Bernstein
Hematology/Oncology

Rachel Kitt BMG

Faculty Mentor: Dr. Andrew Samuelson
Biomedical Genetics

Kevin Koenders BMB (4)

Faculty Mentor: Dr. Alison Frontier
Chemistry

Deborah Korzun BEB

Faculty Mentor: Dr. John Jaenike
Biology

Pruthvi Kothari BCD (3)

Faculty Mentor: Dr. David Dean
Pediatrics

Mallory Laboulaye BNS (2)

Faculty Mentors: Dr. Michael Welte / Dr. Edward Brown
Biology / Biomedical Engineering

Kristiana Lachiusa BNS (2)

Faculty Mentor: Dr. Ania Majewska
Neurobiology & Anatomy

Anisha Lashkari BNS (2)

Faculty Mentor: Dr. Shawn Newlands
Otolaryngology

Steven Lee BCD (2)

Faculty Mentor: Dr. Edward Brown
Biomedical Engineering

Chong Li BBC (2)

Faculty Mentor: Dr. Xin Bi
Biology

William Li BNS (3)

Faculty Mentor: Dr. Mark Noble
Biomedical Genetics

Albert Lim BIO

Faculty Mentor: Dr. Keigi Fujiwara
Aab Cardiovascular Research Institute

Fang Liu BMB

Faculty Mentor: Dr. Minsoo Kim
Microbiology & Immunology

continued...





Jonathan LoTempio BBC (3)
Faculty Mentor: Dr. Robert Bambara
Microbiology & Immunology

Nicholas Love BCD (2)
Faculty Mentor: Dr. Daven Presgraves
Biology

Charles Lu BBC (2)
Faculty Mentor: Dr. Mark Noble
Biomedical Genetics

Alex Lukez BBC (2)
Faculty Mentor: Dr. David Mathews
Biochemistry & Biophysics

Daniel Macguigan BEB
Faculty Mentor: Dr. Richard Glor
Biology

Morgan Maisel BEB
Faculty Mentor: Dr. Juilee Thakar
Microbiology & Immunology

Billal Masood BIO
Faculty Mentor: Dr. Patricia Sime
Department of Medicine

Yasmin Mattar BMG
Faculty Mentor: Dr. Robert Quivey
Microbiology & Immunology

Lakshmi Miller-Vedam BMG (2)
Faculty Mentor: Dr. Sina Ghaemmaghami
Biology

Abhiniti Mittal BMB (2)
Faculty Mentor: Dr. Sanjay Maggirwar
Microbiology & Immunology

Yan Nuzbrokh BNS (2)
Faculty Mentor: Dr. Gail V.W. Johnson
Anesthesiology

Gregory O'Connor BBC/PSY (2)
Faculty Mentor: Dr. Eric Phizicky
Biochemistry & Biophysics

Marko Oydanich BNS (2)
Faculty Mentor: Dr. Robert Chapman
Brain & Cognitive Sciences

Ria Pal BNS (2)
Faculty Mentor: Dr. Julie Fudge
Neurobiology & Anatomy

Nirlipta Panda BNS (2)
Faculty Mentor: Dr. Kerry (Michael)
O'Banion
Neurobiology & Anatomy

Joo-Eun Park BMB (4)
Faculty Mentor: Dr. Lisa Beck /
Dr. Paige Lawrence
Dermatology / Microbiology &
Immunology

Pooja Patel BBC (2)
Faculty Mentor: Dr. Eric Phizicky
Biochemistry & Biophysics

Pooja Patel BMG (2)
Faculty Mentor: Dr. Andrea Sant
Microbiology & Immunology

Priya Patel BBC
Faculty Mentor: Dr. Philip Fay
Biochemistry & Biophysics

Roshal Patel BIO / HLP
Faculty Mentor: Dr. Patricia White
Neurobiology and Anatomy

Sally Patel BNS/PSY
Faculty Mentor: Dr. Margot Mayer-
Proschel Biomedical Genetics

Jessamyn Perlmutter BMB (2)
Faculty Mentor: Dr. Paul Dunman
Microbiology & Immunology

Daniel Petkovich BMG/CHM (2)
Faculty Mentors: Dr. Mark Noble / Dr.
Harold Smith Biomedical Genetics /
Biochemistry & Biophysics

Nuhamin Gebrewold Petros BIO/PSY (2)
Faculty Mentor: Dr. Gloria Culver
Biology

Prishanya Pillai BMB (2)
Faculty Mentors: Dr. Maiken
Nedergaard /
Dr. Edward Vates
Neurosurgery / Traslational
Neuromedicine

Priyanka Pillai BMB (2)
Faculty Mentors: Dr. Maiken Nedergaard /
Dr. Edward Vates
Neurosurgery / Traslational
Neuromedicine

Val Pyon BCD (2)
Faculty Mentors: Dr. Karen Mustian /
Dr. Nancy Wang
Surgery / Pathology

Halima Rafi BNS (2)
Faculty Mentor: Dr. Charles Duffy
Neurology

Yanhan Ren BMG (3)
Faculty Mentors: Dr. Xin Bi (2) / Dr. Lin
Gan (1)
Biology / Opthamology

Deanna Roggie BCD (2)
Faculty Mentor: Dr. Michael Welte
Biology

Justin Roncaioli BMG (3)
Faculty Mentor: Dr. Daven Presgraves
Biology

Aaron Rusheen BCD (3)
Faculty Mentor: Dr. Patricia White
Neurobiology & Anatomy

Brandon Salzman BNS (2)
Faculty Mentor: Dr. Michelle Burack
Neurology

Patrick Schupp BMB
Faculty Mentor: Dr. Luis Martinez-
Sobrido
Microbiology & Immunology

continued...

UNDERGRADUATE PROGRAM IN BIOLOGY AND MEDICINE (UPBM) E-NEWS

Siddhi Shah BIO (2)

Faculty Mentor: Dr. Lei Xu
Biomedical Genetics

Vaidehi Shah BMB

Faculty Mentor: Dr. Terry Wright
Microbiology & Immunology

Taneisha Sinclair BMG (2)

Faculty Mentor: Dr. Eric Phizicky
Biochemistry & Biophysics

Sarah Skinner CHM

Faculty Mentor: Dr. Lei Xu
Biomedical Genetics

Joseph Soucy BMG (3)

Faculty Mentor: Dr. Elaine Sia
Biology

Brianna Spencer BBC (2)

Faculty Mentor: Dr. Vera Gorbunova
Biology

Petr Stastka BBC (2)

Faculty Mentor: Dr. Edward Brown
Biomedical Engineering

Janine Steffan BMG (3)

Faculty Mentors: Dr. Andrei Seluanov (2)
Dr. Vera Gorbunova (1)
Biology

Mark Torosian BBC (2)

Faculty Mentor: Dr. Archibald Perkins
Pathology

Timothy Tsai BEB (2)

Faculty Mentors: Dr. Justin Ramsey /
Dr. John Jaenike
Biology

Katherine Vanhise BBC

Faculty Mentor: Dr. Alan Friedman
Environmental Medicine

William Vezinaw BMG (2)

Faculty Mentor: Dr. Benoit Biteau
Biomedical Genetics

Morganne Wagner BBC

Faculty Mentor: Dr. Ethan Cohen
Endocrinology-Metabolism

Yuji Wakimoto BBC (2)

Faculty Mentor: Dr. David McCamant
Chemistry

Catherine Weiner BBC (2)

Faculty Mentor: Dr. Eric Phizicky
Biochemistry & Biophysics

Akira Neng Chun Wong BMG

Faculty Mentor: Dr. Benoit Biteau
Biomedical Genetics

Beverly Wong BNS

Faculty Mentor: Dr. Martha Windrem
Neurology / Translational Neuromedicine

Meng-Ju Wu BMB

Faculty Mentor: Dr. Stephen Dewhurst
Microbiology & Immunology

Isabel Wylie BMB (2)

Faculty Mentor: Dr. John Frelinger
Microbiology & Immunology

Qianlangyue Xu BCD (2)

Faculty Mentor: Dr. Jacques Robert
Microbiology & Immunology

Jessica Yao BBC (2)

Faculty Mentor: Dr. Jeffery Hayes
Biochemistry & Biophysics

Victoria Yellamaty BIO

Faculty Mentor: Dr. Margot Mayer-
Proschel
Biomedical Genetics

Janice Zhao BMG

Faculty Mentor: Dr. Brian Poligone
Dermatology

Nicole Zwald BNS (2)

Faculty Mentor: Dr. Ania Majewska
Neurobiology & Anatomy



deKiewiet Fellows Summer 2013



The Undergraduate Program in Biology and Medicine (UPBM) has been awarding de Kiewiet Summer Research Fellowships since 1983 to UR students majoring in UPBM tracks.

The fellowship is designed to give University of Rochester students an opportunity to obtain substantial research experience in the laboratories of Program Faculty. Students in their junior year are invited to submit competitive applications.

This year's graduates who were selected for the deKiewiet Fellowship in Summer 2013 are:

Left to Right: Zachariah Adham, Brianna Spencer, Gregory O'Connor, Chelsea Hans, Phillip Cohen, Sarah Joseph, Patrick Schupp

Zachariah Adham '14, BNS

Title: "Characterizing the Interaction of the Aryl Hydrocarbon Receptor and Notch Signaling Pathways in Medulloblastoma"

Mentor: Dr. Lisa Opanashuk - Environmental Medicine

Phillip Cohen '14, BMB

Title: "Measuring the Effect of Nanoparticle Geometry on Tfh Cell Development"

Mentor: Dr. Steve Dewhurst - Microbiology & Immunology

Chelsea Hans '14, BCD

Research Title: "Dpp as the Organizer Signal of Dorsal Development in *Ilyanassa obsoleta*"

Mentor: Dr. David Lambert - Biology

Sarah Joseph '14, BMG

Research Title: "Elucidating the Mitochondrial Targeting Sequence for Yeast RAD27"

Mentor: Dr. Elaine Sia - Biology

Gregory O'Connor '14, BBC / PSY

Research Title: "Characterizing the Interactions of Trm7 and Other Factors Involved in a Crucial tRNA Modification Pathway in Yeast."

Mentor: Dr. Eric Phizicky - Biophysics & Biochemistry

Patrick Schupp '14, BMB

Research Title: "Finding Arenavirus NP and Host Factor Interaction Using the Yeast Two Hybrid System and Nickel Column Affinity Chromatography"

Mentor: Dr. Luis Martinez-Sobrido - Microbiology & Immunology

Brianna Spencer '14, BBC

Research Title: "In Vivo Assessment of NHEJ Repair in Young Versus Old Mice."

Mentor: Dr. Vera Gorbunova - Biology

Biotechnology Certificates Received by Twelve 2014's



The Certificate Program in Biotechnology is designed to give students the background needed for entry into biotechnology and for advanced study, and it gives recognition for specialization in the field. The graduates who have met the requirements for the Biotechnology Certificate for 2014 are:

Woori Bae BMB

Amanda Chang BIO/HBS

Chelsea Hans BCD

Soyeon Kim BMB

Valerie Pietroluongo BMB

Prishanya Pillai BMB

Priyanka Pillai BMB

Vaidehi Shah BMB

Akira Wong BMG

Meng-Ju Wu BMB

Qianlangyue Xu BCD

Natalie Yragui BIO/HBS

Awards Accomplishments ... UPBMers Recognized

Ayman Amin-Salem Memorial Award

The Ayman Amin-Salim Memorial is a college-wide award which is to be presented each year at Commencement to that member of the senior class who best evidences the quality of good character and good citizenship, such as decency, reliability, responsibility, and congeniality. Preference may be given to students who also have an interest in biology or the biological sciences, music, art, writing, or athletics.

- ★ Phillip Cohen '14/15, BMB
- ★ Roshal Patel '14 BIO/HLP
- ★ Yuji Wakimoto '14, BBC/ANT

Amgen Scholarship

The Amgen Scholars Program is designed to provide undergraduates with hands-on biological science research experiences in world-class labs at leading institutions around the country while also preparing them for graduate study and science research careers.

- ★ Benjamin Goulet '14, BEB

Benjamin A. Gilman International Scholarship

The scholarship, which provides financial assistance to students who are enrolled in study abroad programs worldwide, is sponsored by the U.S. Department of State, Bureau of Educational and Cultural Affairs, and the Institute of International Education. "Rochester students have studied in 26 different countries through the scholarship," said Jacqueline Levine, director of Rochester's Center for Study Abroad and Interdepartmental Programs.

- ★ Nancy Bui '14, BNS/PSY - Denmark (Fall 2013)
- ★ Anjali Patel '15, BMG - England (Fall 2013)

Catherine Block Memorial Fund Prize

Annual prize awarded by the University to a woman in the junior class in recognition of her outstanding ability and achievement in the field of science. Selection is based on recommendations by the respective departments, which are evaluated by a committee appointed by the Dean of the College.

- ★ Chitavi Maulloo '15, BMG/CHM

Davis Projects for Peace Fellowship

The Projects for Peace program was launched by author, philanthropist, and scholar Kathryn Wasserman Davis in 2007 to commemorate her 100th birthday. Since its founding, Projects for Peace has funded more than 700 projects in over 100 countries. Davis passed away on April 23, 2013, at the age of 106.

- ★ Fatima Bawany '15, BIO
- ★ John Dawson '13/14, BMG
- ★ Katherine Wegman '15, BIO/ANT

Dr. Nathaniel & Helen Wisch Endowed Scholarship

The Dr. Nathaniel and Helen Wisch Endowed Undergraduate Scholarship provides income that supports a promising junior or senior undergraduate student or students majoring in Biology at the University of Rochester. This year's recipients are:

- ★ Iris Chen '14, BBC
- ★ Ruijia Zhu '15, BBC/CHM

Fulbright U.S. Student Program

The Fulbright Scholarship competition is sponsored by the U.S. Department of State designed to promote mutual understanding and peace between the United States and other nations through educational and cultural exchange. It offers opportunities for career-launching study, teaching, and research abroad. Scholars pursuing study or research design their own programs and arrange institutional affiliations in the host countries.

- ★ Anisha Gundewar '14, BMB/HBS - India
- ★ Shyam Venkateswaran '14, BIO - India



Anisha Gundewar Shyam Venkateswaran

German Academic Exchange Service Research Internships in Science & Engineering

RISE is a summer internship program for undergraduate students from the United States, Canada and the UK in the fields of biology, chemistry, physics, earth sciences and engineering. It offers unique opportunities for undergraduate students to work with research groups at universities and top research institutions across Germany for a period of 2 to 3 months during the summer.

- ★ Kristin Abramo '15, BMG
- ★ Kevin Allan '14, BNS
- ★ Corey Garyn '15, BCD/PHL
- ★ Alexandra Born '15, BMB/CHM
- ★ Austin Mottola '15, BBC
- ★ Louis Papa '14, BBC/CHM
- ★ Robert Rietmeijer '15, BBC
- ★ Jamie Strampe '15, BMB

continued...

Grace McCormack Fund for Biology Prize

This award is given annually to worthy students, who, in the judgment of the Department, have great potential and have demonstrated excellence in academics, teaching, service to the department, or scientific research.

- ★ Benjamin Goulet '14, BEB
- ★ Chelsea Hans '14, BCD
- ★ Sarah Joseph '14, BMG
- ★ Deborah Korzun '14, BEB
- ★ Maura Levis '14, BIO
- ★ Daniel MacGuigan '14, BEB
- ★ Deanne Roggie '14, BCD
- ★ Joseph Soucy '14, BMG
- ★ William Vezinaw '14, BMG
- ★ Hannah Ward '14, BEB

Irene Bush Steinbock Award

The award was established by Irene Bush Steinbock "in memory of the late Dean Annette Gardner Munro, whose kindness and graciousness was a great inspiration to me during my years of study at the University of Rochester." This award is given to a senior in Arts and Sciences who has made the most noteworthy contribution to human relations.

- ★ Meng-Ju Wu '14, BMB

John R. Slater Memorial Prize

To a member of the senior class who has shown the most competence in the use of the English language, as exemplified by excellence in composition, public speaking, in work on University publications, in participation in student government, or otherwise.

- ★ Shilpa Topudurti '14, BMG

Joseph O'Connor Graduate Study Endowment Prize

To a woman in the senior class who has shown marked ability in English literature, in classical languages and literature, or in archaeology.

- ★ Hannah Ward '14, BEB, RLS

Kauffman Entrepreneurial Year (KEY) Program

The University of Rochester defines entrepreneurship as "transforming an idea into an enterprise that generates value," implying that the enterprise outlives the creator and that it positively affects others. Qualified students may propose to devote as much as an entire academic year to internships, special projects, relevant coursework, business plan development, research into various facets of entrepreneurship, or analysis of how culture and public policy influence entrepreneurial activity.

- ★ Leyla Akhverdiyeva '13/14 BMG/RUS
- ★ Alisa Johnson '14/15, BEB
- ★ Halima Rafi '14/15, BNS
- ★ Brandon Salzman '14/15, BNS
- ★ Stefanie Thorsness '13/14, BMG
- ★ Sharma Venkatesh Abhishek '14/15, BNS/MUS/PSY
- ★ Benjamin Wainblat '14/15, BCD/PSY
- ★ Akira Neng Chun Wong '14/15 BMG

Outstanding Cancer Research Presentation Winner

The poster themes for this year's symposium included: Molecular and Cell Biology/Immunology, Experimental Hematology/Hematological Cancer, Solid Tumor Biology and Therapy, Cancer Control/Epidemiology. There were 54 posters presented, with prizes of \$100 each awarded to the best poster in each category.

- ★ Val Pyon '14, BIO

Student Employee of the Year Award



This award recognizes an outstanding student employee who has made valuable contributions to the department in which he or she works.

- ★ Emi Hitomi '14, BNS

Emi Hitomi/ President Joel Seligman

Student Life / Individual Leadership Awards



The annual University Student Life Awards recognize those undergraduate students who—through service to others, investment of talent and time, and pursuit of excellence—have significantly and positively impacted the University of Rochester and/or surrounding community.

Madison Wagner '14, BEB

- ★ Katherine Wegman '15, BIO - Freshman Leadership
- ★ Madison Wagner '14, BEB - Simeon Cheatham
- ★ Shilpa Topudurti '14, BMG - Rob Rouzer Award for Excellence in Student Government Leadership

Susan B. Anthony Scholarship

Sponsored by the Women's Club of the University of Rochester, this scholarship is awarded to two undergraduate women who are of junior status and who have demonstrated outstanding leadership and commitment in co-curricular activities and academic achievement.

- ★ Shilpa Topudurti '14, BMG



Take Five Scholars Program

A unique program to the University of Rochester, provides an additional semester or year, tuition-free. It offers the chance to pursue a demanding major and still enjoy the once-in-a-lifetime opportunity for the broad-based, intellectual enrichment of a liberal arts education. Since its inception in 1986, over 1,100 students have become Take Five Scholars. The number of students enrolled in the program varies each year, with new Scholars accepted each semester.

- ★ Zachariah Adham '14/15, BNS
- ★ Nancy Bui '14/15, BNS, PSY
- ★ Smon Cheewapansri '14/15, BBC
- ★ Phillip Cohen '14/15, BMB
- ★ Kyle Doyle '14/15, BIO, LIN
- ★ Gregory Golembeski '14/15, BNS
- ★ Amy Ige '14/15, BIO, HBS
- ★ Theodore Lincoln '14/15, BNS
- ★ Ma. Lira Camille Manhit '14/15, BNS
- ★ Yan Nuzbrokh '14/15, BNS
- ★ Sally Patel '14/15, BNS, PSY
- ★ Greta Smith '14/15, BNS
- ★ Kelvin Tam '14/15, BCD
- ★ Tyler Viterise '14/15, BIO
- ★ Kwanza Warren '14/15, BNS, PHL

UR Undergraduate Writing Colloquium Contest



The College Writing Program holds an annual undergraduate writing contest to recognize and celebrate outstanding student writing and to share that writing with the University of Rochester community. Each spring the College Writing Program accepts submissions from students in four categories: Humanities, Social sciences, Natural and applied sciences. Prizes are awarded for the best paper in each of the four categories. The Award for the Natural Sciences category went to:

- ★ Zachary Adham '14, BNS
The Next Generation of Anti-Itch Treatment: Progress in the Elucidation of an Itch-Specific Sensory Pathway
Written for Writing a Bio Review (BIO 275W), Professor Cheeptip Benyajati

UPBM Founder Dr. Robert Marquis Tribute to a Visionary



Robert Marquis, Ph.D.

Robert E. Marquis, Ph.D., past chair of the Department of Microbiology & Immunology at the University of Rochester School of Medicine and Dentistry and a beloved teacher to many students who trained at the medical school and at the university's College of Arts and Sciences, died in January at the age of 80.

The Undergraduate Program in Biology and Medicine (UPBM) founded by Dr. Robert Marquis in the early 1980's serves as a gateway for undergraduates studying at The College to gain research opportunities at the University of Rochester Medical Center. Since then the program has been accredited and is now one of the most popular undergraduate programs on campus.

The Biology Department together with Departments of Biochemistry, Microbiology & Immunology, and Neuroscience produce the framework of The UPBM.

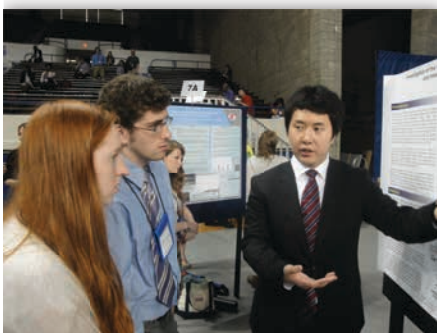
The Program provides academic year opportunities to do independent research for credit as well as DeKiewiet Summer Fellowships, which support summer research by outstanding University of Rochester undergraduate students.

Approximately five hundred sophomores, juniors, and seniors belong to UPBM majors and one hundred biological science independent research courses are registered each semester.

The UPBM was made possible by Dr. Marquis's enthusiasm for cooperative teaching aimed at providing the most up-to-date education in biomedical sciences. His vision has inspired the lives of many and will be greatly missed.

For more information on Dr. Marquis and his accomplishments visit: <http://www.urmc.rochester.edu/news/story/index.cfm?id=4014>

National Conference of Undergraduate Research UPBMers Show Up and Show Out



NCUR is an annual conference (the only one of its kind, with a national scope) for primary research and artistic performance by undergraduate students, encompassing the natural and social sciences, the humanities, the arts, and engineering. Since its beginnings the conference has enjoyed the active support of major American colleges and universities. The

UR Office of Undergraduate Research began sending students to NCUR in 1991. Student investigators may present their work at NCUR as an oral presentation or in a poster format. NCUR participants are also eligible to submit texts of their presentations to be considered for publication in the annual NCUR Proceedings, a juried publication.

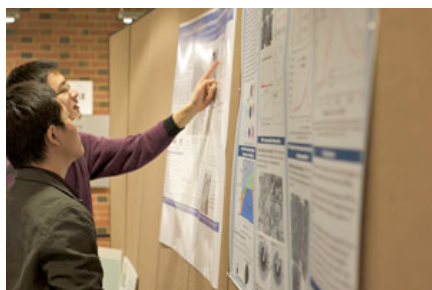
April 2013 - La Crosse Wisconsin

Shay Behrens '14, BIO
Alisa Johnson '14, BIO
Ugochi Ndubuisi '14, BMB
Louis Papa '14 BBC/CHM
Siddhi Shah '14, BIO
Shilpa Topudurti '14, BMG
Harris Weber '15, BCD

April 2014 - Lexington, Kentucky

Zachary Adham '14/15, BNS
Max Cheng '15, BBC/MUS
Joshua Cho '16, BMG
Chelsea Choi '15, BIO/PSY
Hillary Figler '14, BMB/PSY
Brigitta Gehl '14, BMG
Johua Geiger '14 BBC
Benjamin Goulet '14, BEB
Anisha Gundewar'14, HBS/BMB
Paige Haas '16, BMB
Brittany Hopkins '14, BNS
Sarah Joseph '14, BMG
Abhiniti Mittal '14, BMB
Nirlipta Panda '14, BNS
Jessamyn Perlmutter '14, BMB/CHM
Yanhan Ren '14, BMG
Patrick Schupp '14, BBC/ BSB
Siddi Shah '14, BIO
John Wilson '15, BMG

UR Undergraduate Research Exposition UPBMers Show Up and Show Out...Again



The Undergraduate Research Exposition is a College-wide event in which UR students at all levels and in all areas of study are invited to present their investigative and creative work. The Expo reflects the passion for learning that enlivens the University, professors and students alike, and that finds expression in varied forms, in every area of study.

2013 UPBM Participants

★ Kevin Allan '14, BNS
★ Shay Behrens '14, BIO
★ Boris Borovcanin '14, BIO
★ Hamza Chengazi '14, BNS
★ Alisa Johnson BIO, '14, BEB
★ Annah Moore '15, BNS/CHM
★ Junne Park '15, BCD/HLP
★ Prishanya Pillai '14 BMB
★ Priyanka Pillai '14 BMB
★ Alfred Rabinovich '14, BIO
★ Yanhan Ren '14, BMG
★ Siddhi Shah '14, BIO
★ Harris Weber '15, BCD

2014 UPBM Participants

★ Naba Ali '15, BBC
★ Natasha Chainani '14, BBC
★ Max Cheng '15, BBC/ MUS
★ Brigitta Gehl '14, BMG
★ Benjamin Goulet '14, BEB
★ Paige Haas '16, BMB

★ Brittany Hopkins '14, BMB
★ Chong Li '14, BBC
★ Yanhan Ren '14, BMG/PSY
★ Patrick Schupp '14, BNS
★ Raven Shah '15, BNS
★ Michael Shteyn '14, BNS
★ John Wilson '15, BMG
★ Janice Zhao '14, BIO

President's Award for Natural Sciences & Mathematics

Benjamin Goulet '14, BEB

Professor's Choice Award for Social Sciences

John Wilson '15: BMG/PSY

Keep in Touch Send us your news

Director: Dr. Cheeptip Benyajati

Department of Biology

E-mail: cheeptip.benyajati@rochester.edu

Phone: (585) 275-8040

Administrative Assistant: Marianne Arcoraci

E-mail: marianne.arcoraci@rochester.edu

Phone: (585) 275-3850

UPBM Website: <http://www.rochester.edu/College/BIO/UPBM/upbmhome>



Undergraduate Program in Biology and Medicine

University of Rochester
Department of Biology
488 Hutchison Hall,
Box 270211
Rochester, NY 14627-0186

Class of 2014 Go Forth and Conquer

