2018 Student Research Day

Tuesday April 17, 2018
Student Union MPR

Keynote Speaker at 1:00pm
Dr. Sylvester James Gates Jr.
World-Renowned Theoretical Physicist
Ford Foundation Professor of Physics, Brown University

Design: Christina A. Will
2018 Student Research Day
Student Union Multi-Purpose Rooms (MPR)
Tuesday April 17, 2018

Conference Schedule

11:20 – 12:50 pm  Oral Presentations: Session I
                   MPR A, B, & C

1:00 pm – 2:30 pm  Welcome to “Movement & Motion”
                   MPR B

                   Student Introduction by: Alyssa Strassburg
                   Keynote Speaker: Dr. Sylvester James Gates, Jr.

2:30 pm – 3:40 pm  Art & Poster Sessions
                   MPR A, B, & C

                   Buffet
                   MPR C

3:50 pm – 5:20 pm  Oral Presentations: Session II
                   MPR A, B, & C

5:30 pm – 7:00 pm  Oral Presentations: Session III
                   MPR A, B, & C
Dr. Sylvester James Gates, Jr.

Sylvester James “Jim” Gates, Jr. (born December 15, 1950) is an American theoretical physicist bestowed in 1973 with two B.S. degrees (math & physics) and a Ph.D. degree from the Massachusetts Institute of Technology, the latter in 1977. His doctoral thesis was the first one at MIT to deal with supersymmetry.

Gates was formerly a University System Regents Professor, the John S. Toll Professor of Physics at the University of Maryland, College Park, the Director of the String and Particle Theory Center, Affiliate Professor of Mathematics, and served on the U.S. President’s Council of Advisors on Science and Technology, National Commission on Forensic Science, and on the Maryland State Board of Education.

After 33 years at the University of Maryland, he retired in 2017 to assume the position of the "Ford Foundation Professor of Physics" at Brown University. His involvement in public policy continued with service on the Forensic Science Standards Board at the National Institute of Standards and Technology and as a member of the Board of Directors of the American Association for the Advancement of Science.
His public policy writing on diversity and education were cited in 2015 by the U.S. Supreme Court http://mitblackhistory.blogspot.com/2016/07/supreme-decisions-dr-sylvester-james.html in a rarity for a theoretical physicist. He is scientifically known for his work on supersymmetry, supergravity, and superstring theory. In 1984, working with M.T. Grisaru, M. Rocek, W. Siegel, Gates co-authored Superspace, the first comprehensive book on the topic of supersymmetry. In 2006, he completed a DVD series titled Superstring Theory: The DNA of Reality for The Teaching Company composed of 24 half-hour lectures to make the complexities of unification theory comprehensible to non-physicists.

In 2012, he was named a University System of Maryland Regents Professor, only the sixth person so recognized in the system's history. He is a past president of the National Society of Black Physicists, and is a NSBP Fellow, as well as a Fellow of the American Physical Society, the American Association for the Advancement of Science, and the Institute of Physics in the U.K. He also is an elected member of the American Academy of Arts and Sciences, and the American Philosophical Society. In 2013, he was elected to the National Academy of Sciences, becoming the first African-American physicist so recognized in its 150-year history. On November 16, 2013, Prof. Gates was awarded the Mendel Medal by Villanova University “in recognition of his influential work in supersymmetry, supergravity and string theory, as well as his advocacy for science and science education in the United States and abroad.” President Obama awarded Prof. Gates the National Medal of Science, the highest award given to scientists in the U.S., at a White House ceremony in 2013.

During 2014, he was named the Harvard Foundation's “Scientist of the Year.” In 2015, he became a member of the Board of Directors of the Achieve, Inc and the Board of Councillors for the Boy Scout of America’s STEM National Council. He continues to broadly engage video documentaries with appearance or cameos in the following in 2015 and 2016: “The Big Bang Machine” https://www.youtube.com/watch?v=cqTcjFsN3gw “The Mystery of Matter” http://www.pbs.org/program/mystery-matter/ "Inside CERN” http://www.bbc.co.uk/programmes/p0446wyj. He currently continues his research in supersymmetry in systems of particles, fields, and strings.
# Schedule of Oral Presentations

## SESSION I

<table>
<thead>
<tr>
<th>Time</th>
<th>MPR A Title</th>
<th>MPR B Title</th>
<th>MPR C Title</th>
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<tbody>
<tr>
<td>11:20</td>
<td><em>The Effects of Maximum Muscle Capacity on Motion</em></td>
<td><em>Food Insecurity at Old Westbury: A Study Assessing the Campus Need</em></td>
<td><em>DOL Fiduciary Rule: The Good, the Bad, and the Ugly</em></td>
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<td></td>
<td>Aleena Anu</td>
<td>Gabrielle Galluzzi and Zarmina Mashaikh</td>
<td>Thomas Higgins</td>
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<td>Sponsor: Anthony Deluca, PhD</td>
<td>Sponsor: Sarah Smith, PhD</td>
<td>Sponsor: Kasia Platt, PhD</td>
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<tr>
<td>11:35</td>
<td><em>Investigating Prosocial Behavior in Virtual Reality</em></td>
<td><em>The Direct Care Worker Experience and its Effects on Health</em></td>
<td>Long and Short Positions, the basics and how to research both</td>
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<td>Raul Mendez, Kiernan Lonergan, Jen Lobody</td>
<td>Loundy Victor</td>
<td>Brett McGuinness</td>
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<td>Sponsor: Ashok Basawapatna, PhD</td>
<td>Sponsor: Sarah Smith, PhD And Shijian Li, PhD</td>
<td>Sponsor: Elena Smirnova, PhD</td>
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<tr>
<td>11:50</td>
<td><em>miRNAs as a Potential Biomarker in the detection of Early Stage Cancer</em></td>
<td><em>The Role of Women’s Groups in Gender Empowerment: A Case Study</em></td>
<td>EDTPA: Being Active</td>
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<td></td>
<td>Alexandros Konstantinidis</td>
<td>Tiffani Grey and Falyn Katman</td>
<td>Katelyn Bragg</td>
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<td>Sponsor: Christos Noutsos, PhD</td>
<td>Sponsor: Sarah Smith, PhD</td>
<td>Sponsor: Andrew Hashey, PhD</td>
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<tr>
<td>12:05</td>
<td><em>Characterizing Visual Eye Tracking Difference in Students with and without Disabilities: An Assess for predicting Prescriptive Visual Accommodative Technologies</em></td>
<td><em>Social Attitudes of LGBT Young Adults</em></td>
<td>Teaching Persuasive Writing Through SRSD</td>
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<td>Rui Freitas</td>
<td>Francine Alogna</td>
<td>Ashley Pfeffer</td>
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<td>Sponsor: Lillian Park, PhD</td>
<td>Sponsor: Dana Prewitt, PhD</td>
<td>Sponsor: Andrew Hashey, PhD</td>
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<tr>
<td>12:20</td>
<td><em>The Conformational Analysis of N-aryl Imide Molecular Torsional Balance for Measuring CH-π Aromatic Interactions</em></td>
<td><em>Rights of Immigrants</em></td>
<td>SRSD Writing Intervention Project</td>
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<td>Ronald Spinelle</td>
<td>Justin Ellis</td>
<td>Charles Deneroff</td>
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<td>Sponsor: Bright Emenike, PhD</td>
<td>Sponsor: Jingyi Song, PhD</td>
<td>Sponsor: Andrew Hashey, PhD</td>
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# SESSION II

### MPR A

**Striving for Success: Motivation and Engagement in K-12 & College Settings**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter(s)</th>
<th>Sponsor(s)</th>
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<tbody>
<tr>
<td>3:50</td>
<td>First generational college student’s challenges and motivational factor</td>
<td>Reneese Miller</td>
<td>Seojung Jung, PhD</td>
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<tr>
<td>4:05</td>
<td>Daring to Fly: Experiences of First Generation Students at Old Westbury</td>
<td>Honour Odigie, Gissel Marquez, Jasjit Kaur, Anders Chan, Maliha Ali</td>
<td>Runi Mukherji, PhD</td>
</tr>
<tr>
<td>4:20</td>
<td>First Generation College Students: The Impact of Stressors and Motivators on Academic Success</td>
<td>Oluwadara Ogunbo, Rhayna Prado, Alicia Fyne, Juliet DeVito, Julissa Chaparro</td>
<td>Ashlee Lien, PhD</td>
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<tr>
<td>4:35</td>
<td>Functional Behavior Assessment &amp; Behavioral Intervention Plan</td>
<td>Breana Goldstein</td>
<td>Andrew Hashey, PhD</td>
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<tr>
<td>4:50</td>
<td>The effects of breakfast on academic performance, engagement, hours of studying of college students</td>
<td>Minjung Park</td>
<td>Seojung Jung, PhD</td>
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### MPR B

**Play, Performance, Politics & Plants**

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<tr>
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<tbody>
<tr>
<td>3:50</td>
<td>Religious and Social Movements under Nasser &amp; Sadat</td>
<td>Eric Khairi</td>
<td>Kyle Anderson, PhD</td>
</tr>
<tr>
<td>4:05</td>
<td>Comparing the Regulation of genes in C3 and C4 plants using Arabidopsis thaliana and Zea Mays</td>
<td>Brian Weil</td>
<td>Christos Noutsos, PhD</td>
</tr>
<tr>
<td>4:20</td>
<td>Effects of orgDNA to genes in 34 different plant species</td>
<td>Tahalia Lozano</td>
<td>Christos Noutsos, PhD</td>
</tr>
<tr>
<td>4:35</td>
<td>The Effects of Team Win: Loss Ration on Individual Motivation and Performance</td>
<td>Stephanie P. Bailey</td>
<td>Lorenz Neuwirth, PhD</td>
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<tr>
<td>4:50</td>
<td>Developmental Lead Exposure Alters Rodent Maternal Pup Retrieval Disrupting Adolescent Social-Play</td>
<td>Nimra Hameed &amp; Eric Khairi</td>
<td>Lorenz Neuwirth, PhD</td>
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### MPR C

**Gender, Race, and Representation in Literature & Media**

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<tr>
<th>Time</th>
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<th>Sponsor(s)</th>
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<tbody>
<tr>
<td>3:50</td>
<td>“I Made Up My Mind To Be One”: Benigna Machiavelli and the Subversion of the Gender Binary</td>
<td>Jaime Leigh McGovern</td>
<td>Jackie Emery, PhD</td>
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<td>4:05</td>
<td>Beware of Darkness</td>
<td>Jake Roche</td>
<td>Jackie Emery, PhD</td>
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<td>4:20</td>
<td>Herland: A How to Guide</td>
<td>Kiara Castellanos</td>
<td>Jackie Emery, PhD</td>
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<tr>
<td>4:35</td>
<td>Women’s Choice Between Career and Marriage in Violets and Other Tales</td>
<td>Samantha Barr</td>
<td>Jackie Emery, PhD</td>
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<tr>
<td>4:50</td>
<td>Media Racial Bias</td>
<td>Shamar Lingo</td>
<td>Peter Ikeler, PhD</td>
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*Movement & Motion*
### SESSION III

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<thead>
<tr>
<th><strong>MPR A</strong></th>
<th>Violence, Guns and Authority</th>
<th><strong>MPR B</strong></th>
<th>Health and Well-Being</th>
<th><strong>MPR C</strong></th>
<th>Social Integration of Immigrants</th>
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<tbody>
<tr>
<td><strong>5:30</strong></td>
<td><strong>Juvenile Incarceration</strong></td>
<td><strong>Does the Amount of Family Support Affect Educational Aspirations?</strong></td>
<td><strong>The Treatment of Immigrant Jews in the American Colonies</strong></td>
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<td>Charles Lawrence</td>
<td>Tysheeka Deslandes</td>
<td>James Fernandez</td>
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<td>Sponsor: Diana Papademas, PhD</td>
<td>Sponsor: Peter Ikeler, PhD</td>
<td>Sponsor: Jingyi Song, PhD</td>
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<td><strong>5:45</strong></td>
<td><strong>Repetition in Film</strong></td>
<td><strong>Attitudes and Frequency of Contraceptive Use among College Students</strong></td>
<td><strong>Fleeing the Rising Seas: Refugees of a Changing Climate</strong></td>
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<td></td>
<td>Daniel Tobin</td>
<td>Brittany O’Brien</td>
<td>Paul Eversman</td>
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<td>Sponsor: Eric Hagan</td>
<td>Sponsor: Christopher Hartmann, PhD and Sarah Smith, PhD</td>
<td>Sponsor: Jingyi Song, PhD</td>
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<td><strong>6:05</strong></td>
<td><strong>Critical Race and Marxist Theories</strong></td>
<td><strong>A Comparison of Healthy Food and Beverage Advertisements Promoted Throughout Low Income and High-Income Communities Along One of the Busiest Bus Routes in NYC</strong></td>
<td><strong>Ethnography on Hao Noodle and Tea</strong></td>
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<td></td>
<td>Jefferson Charles</td>
<td>Jazmine Hill</td>
<td>Clayton Smalls</td>
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<td>Sponsor: Peter Ikeler, PhD</td>
<td>Christopher Hartmann, PhD</td>
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<td><strong>6:20</strong></td>
<td><strong>School Shooting Victims Protest the NRA</strong></td>
<td><strong>A Lively Experiment: Seeing Humanity Anew through the Revolution Occurring in Genetic Engineering and Phenotypic Research</strong></td>
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<td></td>
<td>Alexander Zepeda-Rodriguez</td>
<td>Maheen Khan and Zarrin Mahmud</td>
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<td>Sponsor: Betty Berbari</td>
<td>Sponsor: Anthony DeLuca, PhD</td>
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<td><strong>6:35</strong></td>
<td><strong>Grow, Eat and Heal: A Student/Teacher Project Growing Sunchokes at SUNY Old Westbury Garden</strong></td>
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<td>Cassandra Lirio, Abdul Tokhie, David Rodriguez, Abisha Blair, Ervents Bien-Aime</td>
<td>Sponsor: Ali reza Ebrahimi, PhD</td>
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Poster Presentations

Multi-Purpose Room A
Common Hour 2:30 – 3:40

Biology

Repression of Clonal Growth of MYC/RAS Transformed Cells by Hexim1
Natasha Salman
Sponsor: Manya Mascareno, PhD

Investigating the Link Between Obesity and Prostate Cancer
Jerline Aristide, Ericka Cabanas and Shahla Partowmah
Sponsor: Zulema Cabail, PhD

Pathophysiology of Obesity-Associated Metabolic Inflammation
Lydia Geevarghese and Shannon Rosengarten
Sponsor: Zulema Cabail, PhD

Tyrosine Phosphorylation of Hexim1 is Critical for Prostate Cancer Growth
Sarah Sadik
Sponsor: Manya Mascareno, PhD

The role of Hexim1 in stress induced apoptosis in Mouse embryonic Fibroblasts cell lines
Kristelle Pierre
Sponsor: Manya Mascareno, PhD

Isolation and Characterization of Mycobacteriophages at SUNY Old Westbury
Sponsor: Fernando Nieto, PhD and Christos Noutsos, PhD

Annotating Rahel’s Genome, a first encounter with Bioinformatics
Sponsor: Fernando Nieto, PhD and Christos Noutsos, PhD
Chemistry & Physics

Enhanced Production of Superoxide Radicals through UVA irradiation of 6-Thioguanines in the Presence of Glutathione
Nelson Euceda
Sponsor: Ruomei Gao, PhD

Effect of Mutation on Protein Tyrosine Phosphatase 1B Activity
Faiq Tariq and Melody Young
Sponsor: Youngyoo Kim, PhD

Stabilization of Carboxylic Acids by Amide Hydrogen Bonds: An NMR Study
Ambar Rosario
Sponsor: Bright Emenike, PhD

Finance

Indian-American Consumption of Financial Service: A Cultural Framework
Daniel Chacko
Sponsor: Raj Devasagayam, PhD

Psychology

The Experience of Research within Community Psychology as an Undergraduate Student
Rhayna Prado, Oluwadara Ogunbo, Alicia Fyne, Julissa Chaparro
Sponsor: Ashlee Lien, PhD

Public Health

Exercise, Depression and College Students: Preventing Depression in College Students Through Exercise
Alexis Warren
Sponsors: Sarah Smith, PhD and Shijian Li, PhD

An Exploration of Sun Protection Behaviors Among SUNY Old Westbury Students
Falyn Katzman
Sponsors: Christopher Hartmann, PhD and Sarah Smith, PhD

Does time constrains contribute to overall eating habits among college students at SUNY Old Westbury?
Zarmina Mashaikh
Sponsor: Christopher Hartmann, PhD
Art Presentations
Multi-Purpose Room A and C
Common Hour 2:30 – 3:40

Artists Sponsored by Professor Eric Hagen
Luis Diaz
Emily Fetter
Gabrielle Mayo
Alyssa Strassburg

Artists Sponsored by Professor Patty Harris
Karla P. Villanueva
Candic Mordhorst
Holly Skir
Humberto Bonilla

Artists Sponsored by Professor Fred Fleisher
Lindsey Littman
Harry Parham
Ziare Patrick
Arquimedes Polanco
Stephanie Rodriguez
Donald Stevens
Nicole Villota
Artists Sponsored by Professor Hyewon Yi

Jasmine Aristhee
Amanda Benitez
Lauren Crandall
Oumou Harmon
Jada Diggs
Alexis Harmon
Abu Huraira
Sara Iacono
Jordan Lambert
Zachary Lewis
Geena Memos
Denieka Patterson
Keyara Pryce
Natasha Rivera
Courtney San Juan
Joeshin Septh-Bullock
Katieann Theodore
Devin VanSteekeelenburg
Reina Viera Navarro
Jade Wilson.

Research Day Poster Competition

Ridwan Chadhoury
Thomas Higgins
Jonathan Ruiz
Arlyn Sorto
Christina Will*

*Winner of poster competition
Acknowledgements

Student Research Day would not have been possible without the support of the School of Arts and Sciences, the School of Education, and the School of Business. We also gratefully acknowledge Dr. Calvin O. Butts, President of SUNY Old Westbury; Christina Will for the design of the Student Research Day poster and the program cover; Patty Harris and the Department of Visual Arts for overseeing the poster competition and the program cover design; Alyssa Strassburg, student speaker and all the student session moderators; Steven Serr and Robert Shields at the Print Shop for the printing of the programs and the research day posters; Monique Clark and Kendra Getaw from the CSTEP program for printing the student presentation posters; J.J. Zaffuto and the IT Team; AJ Morgan and his team at Chartwell’s for the refreshments; Mike Dolan and his team for room setup; and the campus community who supported the research and creative efforts of the students by attending the sessions. Finally, we recognize the time, energy and wisdom of our keynote speaker, Dr. Sylvester J. Gates.

Research Day Committee

Phyllis Danielle, Secretary, School of Arts and Sciences
Bright Emenike, Assistant Professor, Chemistry
Jacqueline Emery, Assistant Professor, English
Eric Hagan, Assistant Professor, Visual Arts
Andrew Hashey, Assistant Professor, Exceptional Education and Learning
Barbara Hillery, Dean, School of Arts and Science
Seojong Jung, Assistant Professor, Psychology
Roger Mayer, Assistant Professor, Accounting, Taxation & Business Law
Lorenz Neuwirth, Assistant Professor, Psychology
Cristina Notaro, Assistant Dean, School of Arts and Sciences
Carol Quirke, Associate Professor, American Studies
Sarah Smith, Assistant Professor, Public Health
Lorraine Todisco, Director, Career Services, External Relations, & Administration

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