Gerceida E. Jones
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OBJECTIVE

To Teach/Research in the field of astrophysics, climate change, and engage in community service programs

EDUCATION

New York University, Department of Applied Science, *Ph.D., Fluid Dynamics, August 1997.*
The dissertation description is given below.

New York University, Department of Applied Science, *M.S., Fluid Dynamics, February 1986.*
Thesis: An Elementary Study of the Internal Wave Field.

University of Michigan, College of Engineering, *B.S. Physical Oceanography, August 1981.*
For more detail, see section on "Other Accomplishments".

DOCTORIAL DISSERTATION

Title: Influences of Increased Recycling Rates on Incinerator Design in the Emerging Millennium ♥.
Advisor: Gabriel Miller, Ph.D., Professor of Chemistry, New York University
Skills and Methodology: This dissertation determined whether modern incinerator design did accommodate the changes in the waste stream composition due to an increase in recycling rates. The composition of the average refuse was found via published data in conjunction with the Ultimate Analysis Method. Seven models were generated for the years; 1970, 1980, and projected years 2,000, 2010, and 2020 with varying amounts of excess air. For waste disposal systems, the Ultimate Analysis Method produces information on chlorine analyses, significant elements that affect our environment, heavy metals, and other elements that would influence the combustion process or would be important to air and water pollution assessments.

TEACHING EXPERIENCE

New York University, Faculty of Arts & Sciences, Liberal Studies Department
Clinical Assistant Professor, September 2016 – Present
See job description below:

Master Teacher of Science, Full-Time Professor and Mentor of Undergraduate Studies, September 2006 – August 2016
Lecture/lab combination for History of the Universe: A sixteen week course with the objective of addressing the history of events in the cosmos, to include the formation of the solar system, the appearance of life on earth, and its evolution.

The following questions are explored: 1) How big is the Universe, our Milky Way Galaxy & Earth in comparison? 2) How did ancient philosophers view the Universe? 3) How does science investigate the history of the Universe by looking at patterns in the sky? 4) What are the physical laws that govern the Universe? 5) How do humans create a sustainable relationship with our planet? And, 6) what are the latest concepts on the nature, origin of birth, life cycle, and death of stars and galaxies? Major topics explored are Einstein's Theory of relativity, The Double Dark Theory (dark matter and energy), the fate of the universe, and the possibility of life elsewhere in the Universe. Labs are taught when appropriate to the subject matter. Students visit the American Museum of Natural History (AMNH) as a required lab and also monthly seminars and lectures on current technology related to astronomy. In my course students employ the use of algebraic equations to solve quantitative reasoning problems involving Newton's Laws, Kepler's Laws, Doppler Shift, Radiometric Dating, Special & General Relativity, Inverse Square Law of Light, Parallax Formula, Modern Magnitude Scale, Stellar Masses and Radii, Hubble's Law, and the Drake Equation.

Mentorship – Serving as a role model, establish close personal relationships with mentees. Encourage students to pursue their academic goals, as well as their passions. Help mentees to identify their talents and skills. Provide support to students with artistic talent, social and or enterprising skills to further develop them into competencies. Discuss the impact their course choices will have on their career options, what their options are, and how to effectively market themselves for internships or permanent jobs once they've graduated.

TEACHING EXPERIENCE (Continued)

New York University, School of Continuing and Professional Studies,
General Studies Program (SCPS-GSP), Premier Teaching School of the University!!
Teacher of Science, Full-Time Professor and Academic Advisor of Undergraduate Studies, January 2001 – August 2006
Instruct Recitation/Discussion Sessions for two courses:

a) Environmental Studies (EV) – Conducted and developed 2-3 labs (sophomore class) employing the scientific method to investigate various topics, including: Biomes, The NY-NJ Hudson River/Estuary System, The Greenhouse Effect, Human Population Studies, Developed vs. Developing Countries, Gecko Woods Forest Simulation, Toxicity, Predator/Prey Relationship, Genetic Engineering, and Solid Waste. Investigated combinations of hands-on experimental lab work, along with virtual lab simulation and internet connectivity. Focused on providing students with a sense of environmental ethics, issues, and policy. Final project entailed, requiring students to work in groups of two, on a topic of their choice relating to the subject, to be presented in PowerPoint® format in class at the end of the semester.

b) Developed website, and labs used for the recitation/discussion. History of the Universe (HOU) – Conducted 3-4 labs (freshman class) employing the scientific method to investigate various topics. Estimated Earth's Mass using Erastosthenes' Method. Explored Newton's & Kepler's Laws, Duality of Light as a Wave/Particle, Atomic Spectroscopy (wrote and performed a rap song for the Hip Hop generation, summarizing the concept), Radioactive Decay, Stars, and Hubble's Law. A trip to the Museum of Natural History was required with a set of questions to be answered from specified exhibits. The lab was a combination of hands-on/virtual lab simulations, internet access, and using the student's backgrounds from high school physics, math A, and astronomy to complete assignments. The final project was required in PowerPoint® form, from a course related topic of their choice. The course's focus was to take a look at the history of the universe, developed to help student gain an understanding of how the universe works and the physical laws that govern it.

Academic Advisor to pre-med students and new incoming freshmen, *Fall 2006 – Fall 2009*
Provided a high level of support to students on a number of issues, concerning their academic experience. Offered face to face counseling, to facilitate students' ability to avail themselves with the web-based All University Undergraduate Advisement Guide. The guide formats a structured course of study with the advisement of academic advisors during pre-registration, normal registration or whenever there is a need. This all inclusive document is also available to all university personnel to find answers to questions related to advisement, registration, financial aid, study abroad, transfer, and deadlines for important academic events. LSP is a two-year program. Students in their sophomore year prepare for transfer to other parts of the university. Once transferred, students receive their bachelor's degree from that school. Many of our students transfer to the College of Arts and Science (CAS). The Director of Advisement Services holds monthly seminars for advisors to keep them abreast of student life on campus as well as policy changes. As an advisor, I was available to my students to deal with a variety of issues, such as scheduling, withdrawing from courses, grading complaints, transcript issues, AP or Transfer Credit Questions, expectations for freshman year, difficulties with coursework, future plans, choice of major and clarification of LSP requirements.

Quilt Club Advisor, September 2003 – 2005
Focused on its historical relevance, and the continuation of its long history, that spans across many cultures. Quilting served not only practical or decorative uses, but also as a means of communicating. The Quilting Club seeks to recapture this lost art form by introducing a younger generation to the traditional techniques of needlework that once bonded African-American and mainly Southern American women together in a shared gathering of ideas, thoughts and expression. Quilting is creative, relaxing, practical, and brings together a diverse student population from many cultures and disciplines. On exhibit is a group quilt on the wall in my office.

TEACHING EXPERIENCE (Continued)

Francis Lewis High School, Fresh Meadows, New York
Earth Science and Physics Teacher, September 1999 – February 2001
Taught Regents Earth Science and Physics. Conducted Biology, Earth Science, and Physics Labs. 30 completed satisfactory labs were required to sit for the June State Regents exam, for both subjects as a State Certified Teacher in Physics with a passing rate of eighty-five (85%) for Earth Science and ninety-eight (98%) for deficient Physics students. Tutored both Earth Science and Physics. Mentored students in the Math/Science institute on individual projects in preparation for the Westinghouse competition. Strong backgrounds in math were required to pass regents physics, which included Math A (algebra, geometry, trigonometry), and Math B (pre-calculus).

Springfield Gardens High School, Springfield Gardens, County of Queens, New York
State Certified and Licensed Physics Teacher, September 1991 – August 1999
Taught Regents Earth Science I & II. Taught Physical Science and Math A. Conducted both Earth Science and Biology Labs. Utilized scientific software to enhance learning of basic concepts.
Advisor to the annual Science Fair competition. Brought in local entrepreneurs to judge competition. Distinguished awards given in recognition of excellence and a general participant award given to all students.
Lead Teacher – Community of Caring; John F. Kennedy Foundation. Assisted Principal Pamela LeMelle in initiating a values-based school and curriculum. Attended conferences held countrywide for the sole purpose of collaborating with other high schools implementing the exact program and to discuss its success rate in the inner-city. Sponsored by the Kennedy Foundation.
Co-Founder to the Rites of Passage Program for Females. Developed workshops to assist teens in making the transition from puberty to young adulthood. Students rotated through 5 classes led by dedicated and nurturing teachers in the building. Workshops focused on developing selves; stages of adolescence, the home, friendships, spiritualism, and the Nguzo Saba. The program concluded with an end of the year ceremony in May, an outstanding community leader as the keynote speaker, certificates of completion, and a piece of Kente cloth as a souvenir.

New York University, Manhattan, New York
Math Teacher, 1982 – 1983
Taught pre-calculus to first-year students in the Higher Educational Opportunity Program (HEOP).

RESEARCH EXPERIENCE

- Independent research involving the predictions made in my dissertation. Developed a lab for the Environmental Studies course; "Man's Mulligan Stew". Progress has been made in providing current information on the state of the solid waste situation in New York State
- Academic liaison with the Lamont Doherty Geological Observatory @ Columbia University and Dr. Arnold Gordon in the Oceanography Department. The problem is to calculate the flow of a homogeneous body of water through a channel of varying widths vs. axial diminished depth under the influence of a pressure head that varies with depth and time
- Participated as a team member in the research of the magnetohydrodynamics project as an alternative source of energy in the Department of Applied Science, New York University
- Formulated computer simulation models of the Falkland and Brazilian currents for energy balance studies at the Lamont Doherty Geological Observatory, Columbia University
- Researched and simulated various alternative sources of energy: wave power; the Gulf Stream, wave refraction study; Lake Huron, and geothermal power; California coast during undergraduate studies in the Department of Atmospheric and Oceanic Sciences, the University of Michigan
- Collected data from the Gulf Stream basin using an Acoustic Doppler Velocity Profiler. Utilized geo-science data processing software for analysis. Information extraction used for feasibility studies at Standard Oil of Indiana, Tulsa, Oklahoma

PUBLICATIONS

Frank, Adam, Astronomy: At Play in the Cosmos, (textbook author) packaged with co-authored Instructor's Manual by Jones, Gerceida and Polomski, Elisha, W.W. Norton and Co., New York, New York, ISBN: 978-0-393-93522-6.

Jones, Gerceida, The Science Behind Technology (all 13 chapters completed), final stages of publishing, May 2017, Kendall-Hunt Publishing Company, Dubuque, IA.

Faculty Resource Network National Symposium: Advancing Social Justice From Classroom to Community Journal, February, 2016, Title: Connecting a STEM Education and Civil Rights to the Universe

Faculty Resource Network National Symposium: New Faces, New Expectations Journal, February, 2013, Title: "The Liberal Arts as a Practical Education: Helping Students Make Connections between Liberal Arts Majors & Future Employment".

Jones, Gerceida, "A Neutrino's Encounter with a Terrestrial Detector", EYEPIECE, Journal of the Amateur Astronomers Association of New York, May 2010, Volume 58, Number 5, page 1.

Jones, Gerceida, "Dark Matter Seen Shaping Universe on a Galactic Scale", EYEPIECE, Journal of the Amateur Astronomers Association of New York, July 2010, Volume 58, Number 7, page 10-12.

G. Jones, C. King, L. Nicholas, and J. Vasquez, History of the Universe Laboratory Manual, John Wiley & Sons Custom Services, Hoboken, New Jersey, ♥General Studies Program, New York University, 2004-2005.

Jones, Gerceida E., "Food Chains Begin with Photosynthesis", a review of two (2) videos, running time 15 minutes each, The American Biology Teacher, vol. 64, no. 1, January 2002, page 70.

APPEARANCES IN PUBLICATIONS

Diverse: Issues in Higher Education, Lois Elfman, "Celestial Perspective", an article on Dr. Gerceida Jones' fascination with astronomy, creating a comfortable learning environment, the innovative ways she engage students, and her struggles as a woman in a white male dominated field, July 30, 2015, Volume 32, No. 13, page 4, www.diverseeducation.com.

NYU Global Liberal Studies Bulletin for Academic Year 2009-2010, Acquire Global Perspectives, Dr. Jones – A science professor guides students through a laboratory exercise, page 34.

New York University Calendar, Parents Day Calendar for Academic Year 2008-2009. Photograph of Dr. Jones for the month of October.

Jones, Gerceida E., Comfortable Learning Environment, Produced by Advertising and Publication, New York University, School of Continuing and Professional Studies, General Studies Program, September 2004, page 10.

Jones, Gerceida E., The Rich History of Quilt Making, Produced by Advertising and Publication, New York University, School of Continuing and Professional Studies, General Studies Program, September 2004, page 29.

Jones, Gerceida E., *Teacher of Science and NYU students f*eatured. In the photo, Dr. Jones states, "I like to create a comfortable learning environment. Students learn best when visually stimulated, the use of props, and the introduction of real-life situations encourages active participation and interaction in the classroom. To get my students' attention, I

APPEARANCES IN PUBLICATIONS (Continued)

prefer to incorporate my personal experiences into the material rather than taking a strict didactic approach to teaching." Produced by Advertising and Publication, New York University's Student Bulletin, September 2003, page 4.

Jones, Gerceida E., Creation of Math/Science Institute, Article by United Black Men of Queens, Inc., published on web-site: **http://www.ubm.org**, May 2001.

CURRICULUM DEVELOPMENT

New York University, Faculty of Arts & Sciences, Liberal Studies Program
***Received a Grant for Applied Science Pilot along with* Rhoda Berenson,** *June 2010 – August 2011*
This new course will investigate the science, history, and present state and effect of technology on society. The course will be appropriate for both Liberal Studies and Global Liberal Studies student. It will be particularly attentive to the fundamental aims of the Global Liberal Studies degree. To comprehend the history of global systems, the character of globalization in contemporary times, and how scientific principles have allowed us to perceive these technologies that are more closely connected to the world. This course will follow the intertwined histories of science and technology, clarify how technological developments are inspired by scientific investigations and inventive technology and vice versa, and include the stories of the creative personalities who provided the theories, applied the science, and/or conceived the inventions. The course will be student-centered with much of the learning gained through group activities, student projects, lab activities that illustrate the scientific method, the role of experimentation in producing scientific results, and illuminating the science behind the particular technology, with computer-based lab activities. Course pack includes a ten chapter text written by Dr. Gerceida Jones on the topics specific to this course.

Academic Year 2010-2011 Projects:
Projects A:
Spring 2011 overhauled the Spectroscopy Lab by adding a new experiment. Went to Home Depot bought the materials and assembled the experiment from scratch, 12 set-ups in all. The previous lab allowed students to observe a continuous and emission spectrum but not an absorption spectrum. Part III set-up was with a neodymium light bulb which acts as both the light source (the sun or any star) and the filter. The light bulb is made with neodymium glass. It filters out any dull, yellow rays that can mask as an object's real color. Once the light bulb is turned on, and begins to heat, neodymium reacts with oxygen to form neodymium oxide (Nd_2O_3), a light blue powder which is made of hygroscopic blue hexagonal crystals. What is being observed is a continuous spectrum emitted by the filament being filtered as light passes through the bulb's own Nd_2O_3 layer. Reference: Beehler, "Demonstrating Spectral Band Absorption with a Neodymium Light Bulb", The Physics Teacher, Volume 48, March 2010, page 206.

Project B:
Rhoda Berenson and I developed the new course, "The Science of Technology". This course is student-centered with much of the learning gained through group activities and student projects, rather than lectures. Rhoda and I developed lab activities that illustrate the scientific method and the role of experimentation in producing scientific results, while illuminating the science behind the particular technology being studied. Many of the lab activities are PhET computer-based. Spring 2012, I sat in on Dr. Berenson's class to observe how we can continue improving the course and making it more enjoyable for the student as well as academically challenging. We are collaborating on what needs to be changed for academic year 2012-2013 by paying attention to student's feedback on the evaluation forms. I will teach this course Spring 2013.

Projects C:
Time was spent in re-engineering History of the Universe. The evaluation scores reflect changes made to my syllabus for academic year 2009-2010 but implemented Spring 2010. The Center for Astronomy Education (CAE) assisted in the design of my new syllabus for non-science majors in astronomy. Two questions helped in the decision-making process: 1) how to decide on what to teach given the existing syllabus set for HOU. I found that the students were overwhelmed by the amount of material to be covered. And 2) how do we choose learning strategies to integrate into our class and make it a meaningful experience for the student?

CURRICULUM DEVELOPMENT (Continued)

Implementing changes in my syllabus seemed like a logical place to start since it is a legally binding contract. The language used had to be more specific (learning outcomes) besides general information such as attendance strongly encouraged, classroom participation is expected, etc. Therefore, course goals and objectives must be clearly defined. Since there is an enormous amount of material to be covered, part of my new strategy was to get the student to take active responsibility for not only participating in classroom activities but also being responsible for monitoring their own learning by engaging in critical reasoning about the concepts presented in the classroom. CAE uses student belief and reasoning difficulties to promote a learner-centered introduction astronomy course. The critical question now becomes how to address my second point, what strategies and resources are available that prove to actively engage students and improve their understanding in this course?

The summer of 2009, I attended CAE workshops in Hawaii where we were introduced to a method now used by universities across the country designed by CAE. The so-called idealized classroom implements a lecture that lasts approximately 20 minutes covering the core ideas of the topic outlined in the syllabus for that day which prepares the student to work on a particular activity. Students are first given a conceptually challenging question in the lecture (PowerPoint®) to set the stage for the activity to come. The classroom is divided into small groups and instructed to work collaboratively and reach a consensus on the questions asked in the lecture-tutorial activity. They are given approximately fifteen minutes to complete the activity. Students download and print the activity from blackboard, now NYU Classes that is posted about three days ahead of time. Once the fifteen minutes are over, I debrief the activity interactively, highlighting the difficulties in reasoning and common problems. Sometimes, impromptu demos are required or demos are planned into the lesson ahead of time to enhance their learning. After debriefing, I return to lecture mode and present a set of multiple choice question to test if they have a thorough understanding of the material covered **(As of Fall 2014 I have used TurningPoint technology to poll questions and give credit for right answers)**. This method is designed to keep everyone on the same page. If students encounter problems during the tutorial, I encourage them to collaborate with a nearby group(s) to check their answers and account for any differences to facilitate class interaction. This gives students an opportunity to talk with other students in the classroom that they may not know. I also pull in non-participants by asking them what and why a nearby group answered the way that they did. Below is a sample question used during the lecture-tutorial to facilitate class participation:

> This is a debate between two students about the cause of the phases of the moon. Which, if either, do you agree with? Why?
>
> > Student 1: The phase of the Moon depends on how the Moon, Sun, and Earth are aligned with one another. During some alignments only a small portion of the Moon's surface will receive light from the Sun, in which case we would see a crescent moon.
> > Student 2: I disagree. The moon would always get the same amount of sunlight it's just that in some alignments Earth casts a larger shadow on the Moon. That's why the Moon isn't always a full moon. (Incorrect Statement)

In reading this question, you can see why students struggle, mainly due to common misconceptions about moon phases. It is one of the three biggest concepts that students struggle with in astronomy class according to CAE. I concur from my observation on other topics presented in the class. I have purposely chosen this concept as one of my observations for reappointment. Once thoroughly explained, they get it and can instantly apply it to the night sky. A student came to me after learning this concept and asked, "Prof. did you see the sky last night?" My reply was yes! I then asked her, what phase is the moon in, when does it rise, set, and highest in the sky? I got the correct answers. This is just one example of how the tutorials have increased learning for the student without resorting to rote memorization, which they will do when something doesn't make sense. What I have found in using this method is that: 1) learning is productive/constructive, 2) students associate the material to prior mental models which could be correct or incorrect (as shown in the example above), 3) what and how you learn depends on the environment, and 4) that peer interaction is more effective sometimes than me explaining it. I've recently discovered that I am perceptually challenged. In other words, because I've studied higher-level math and science, I can't imagine why my students struggle with something that comes so naturally to me given the fact that my students are very bright. I know this to be true when I am covering material through my PowerPoint presentation and I move too quickly, thinking they've got it. Then someone holds up their hand and asks me to go back to the previous slide (process of correcting speaking pace).

This is one way to improve the course for non-science majors because a straight lecture approach is insufficient. The learner-centered instructional strategies that I am now using to accompany the lecture do engage my students

CURRICULUM DEVELOPMENT (Continued)

intellectually and creates a comfortable atmosphere for inquiry. Aristotle once quoted, "What we need to learn before doing, we learn by doing." Here is a list of other things I do besides lecture/tutorials to engage students in their learning by using Bloom's Taxonomy of Educational objectives as a guide:

- Surprise quizzes (graded and ungraded)
- In-class writing (with and without discussion)
- Small group interactions (in and out of class; lectures, seminars, and observations)
- Student debates (individual and group)
- Whole class discussions
- Metacognitive approach (learning styles)

General Studies Program (SCPS-GSP), *January – 2001*

Originated a website for the Environmental Studies course (GSP) including virtual labs with hyperlinks to other websites and databases for research and the collection of data. This interaction enhances critical thinking skills while recording real-time data. Students are able to be creative in scientific discovery. Created and developed five (5) laboratory/discussion exercises for GSP sophomore students that follow the lecture series taught by Dr. Louis Pataki.

The five lab classes are: **1)** "Biomes Unmasked" – students in groups of three (3) are assigned one of the nine (9) world biomes by the luck of a draw from Uncle Sam's hat. They are expected to carry out research activities and report results back to the by the following week. **2)** "Heating Up With CO_2", The Greenhouse Effect – students in groups of four (4) perform a simple greenhouse experiment inside of two small fish tanks; one control (Tank A) and one experimental (Tank B) to gain a better understanding of the process. **3)** Gecko Woods Simulation –A spatial individualized based simulator for modeling ecosystem dynamics. The forest simulator was created by Ginger Booth at Yale University to help the student understand the concept of succession in the northeast region of the United States. The lab was tailored to meet the goals and needs of our course relating back to the deciduous forest biome. **4)** "Frankenfood or Not?" Genetic Engineering (GE) – Set up as a town hall meeting with a press release. Students are assigned roles (executive of a multinational corporation, a legislator, a world renowned scientist, environmental activist, and a student of the village-consumer) one week before the mock town hall meeting. Using the class website students are able to research their roles in detail with the appropriate links provided. They are expected to debate the risks and benefits of genetically engineered foods. The theme: What are genetically engineered foods and are they dangerous to our health and to the environment? This question is designed so that the speaker is able to debate multiple points of view. A series of topics are discussed within the allotted time. The final task is designed for analysis of the exercise, and **5)** "Man Mulligan Stew", Solid Waste Management. This laboratory exercise requires that the student keep track of his/her liquid and solid waste for one week. Students are given a spring balance to weigh and record on appropriate data sheets each portion of their solid waste before discarding. Liquid waste are estimated from data tables and recorded on appropriate data sheets. Students are encouraged to record recycled materials as well. At the end of the exercise, students transfer results to a final sheet. Labs are collected, analyzed, and returned the following week for and open discussion on the results with the entire class. Students report that even though the exercise was difficult (remembering to count everything eaten and discarded or used and discarded) it was beneficial in raising awareness in how they contribute to waste generation. Set format standards for each laboratory assignment turned into instructor. *LabTrac* is signed by the instructor when lab exercises are submitted. This sheet is evidence that the student has completed the assigned work.

Created and performed a rap song; "The Atomic Spectra" as a way to draw the student's attention to the concept of Atomic Spectroscopy. My purpose for creating the song in their language was to demonstrate that science is fun in the classroom and provide them with ingenious ideas for their PowerPoint ® Presentations.

Revised current History of the Universe laboratory exercises due to the disparity found between the lecture and recitation. The Nature of Electromagnetic Radiation was changed to "Light as a Wave" and the Atomic Emission Spectra was changed to Atomic Spectroscopy. Both lab exercises; pre- and post-lab questions were modified as were the data tables to be used by the students during observation and experimentation.

PROFESSIONAL DEVELOPMENT

Bobst Libtary, Instructional Media and Technology, *July 2014 – Present*
Trained by Alvin Shelton to use TurningPoint Technologies as a tool to poll students after they have been taught a particular concept to assess their learning. Four questions are given and points for right answers automatically connect to the gradebook without penalty for wrong answers. On-going relationship with Campus Media (David Gail) to stay abreast of changes in the technology. Chosen as a pilot class Fall 2015 to use student cell phones instead of clickers.

Faculty Resource Network Winter Seminar – Reacting to the Past Democracy in Ancient Greece
The American University, Athens, Greece, *January 12-17, 2014*
Role-playing pedagogy is very engaging as I was able to delve into primary text of ancient Greece while in location where it was written. The seminar plunged the participants into primary texts to make points in speeches related to important topics addressed in the Assembly. This is a very innovative method in teaching which I am now investigating the "Galileo" game for my History of the Universe class.

Liberal Studies Department, *July 24, 2012*
Trained in NYU Classes online learning system by Lucy Appert, Amy Males, and Jen San Miguel from 10-12 for the upcoming academic year. Used the web as an enhancement tool for classroom instruction, similar to Blackboard but much faster in loading.

Faculty Resource Network Winter Seminar – Climate and the Atlantic
University of the Sacred Heart, San Juan, Puerto Rico, *January 8-15, 2012*
Climate change studies involved research and using computer simulations to mimic real-time events. Participated in the workshop previous year with FRN, "Does the Rest of the World Matter? Incorporating Social and Global Themes into the Curriculum", which inspired the idea to incorporate this theme into classes by extending student's knowledge of global warming. The Climate and Atlantic seminar allowed the integration of real-time activities into the course to increase student awareness in climate change and their contributions to it. Also used as a resource is the New York State website for sea level rise which I participated in helping to develop readiness strategies for our State.

Amateur Astronomers Association of New York, *January 25, 2011 – March 1, 2011*
Enrolled in "Introductory Astrophysics: Winter 2011", six-week astronomy course given by Jason Kendall; NASA/JPL Solar System Ambassador and manager of the Inwood Astronomy Project, NYC.

Amateur Astronomers Association of New York, April 7, 2010 – May 19, 2010
Course title: "The Cave Man Sky" discussed ancient astronomy (imagination very useful) including modern times and the instrumentation being used now to gather more information on astrophysics. A six-week course taught by the president and long time member of A^3, Richard Rosenberg.

GRANTS APPLIED FOR

Liberal Studies Research Challenge
Title of Project: Applied Science/Engineering Pilot
New York University, NYC
Principal Investigators; Rhoda Berenson & Gerceida Jones, April 2010 (Proposal Accepted)

Liberal Studies Research Challenge Awards
Title of Project: Applied Science/Engineering Pilot - From the Sphinx to the Spitzer (Inquisitive Students Need Only Apply), New York University, NYC
Lead Investigator, April 2009 (Proposal not Accepted)

Curricular Development Challenge Fund
Project Title: ¡Vamos Verde!
New York University, NYC
Lead Investigator, March 6, 2008 (Proposal not Accepted)

GRANTS APPLIED FOR (Continued)

Curricular Development Challenge Fund
Project Title: History of the Universe: From the Milky Way to the Millennial Student's Way
New York University, NYC
Lead Investigator, April 20, 2007 (Proposal not Accepted)

CONFERENCES ATTENDED

Faculty Resource Network National Symposium: , Teaching a New Generation of Students, Atlanta, GA, *Participant,* *November 18-19, 2016*
Today's college students are both like and unlike those of previous generations. As noted in my teaching philosophy, they bring with them similar aspirations for personal growth and development but an increasing pressure to gain an education that will provide them with a path to a fulfilling profession. Faculty face challenges in the classroom that require a collaborative effort to help students achieve academic success, especially those who need academic support. Therefore, the workshops chosen reflect those values, such as, "Diversifying Learning Strategies to Meet Millennials Where They Learn Best", "Successful Teaching and Engagement Using Technology", and "Enhancing STEM Self-Efficacy Through Transformative Pedagogy for a Diverse Population of Students".

American Physical Society
Salt Lake City, UT, *April 11-14, 2016*
Invited Speaker – Session Title: *"St. Albans Under the Stars: Connecting the Community to the Universe"*
PowerPoint presentation introducing St. Albans Under the Stars (SUTS), the premier program of COMETS (Center for Mathematics, Engineering, Technology, & Science) founded July 11, 2006. The presentation illustrated how to connect astronomy to the community by addressing the important issues that affect the community and students, i.e., increase the leaky pipeline for underrepresented groups in STEM, recognition that these issues play an integral part in their lives, showed participants how to take active steps to apply these issues to educational, career, and civic engagement choices with examples of interaction with the community, used our program to advertise/Promote SUTS to encourage greater awareness & participation in community projects, pictures of student participation our results of engagement, how we have been able to recognize/track college students participation, talked about how we were able to solicit help from senior community members as roles, and provided a twelve-point checklist (template; monitoring, evaluation, advocacy and periodic surveys) for any individual or organization wanting to start a community outreach program.

Faculty Resource Network National Symposium: Advancing Social Justice from Classroom to Community, Washington, DC, *Presenter,* *November 21, 2015*
Session Title: "Connecting a STEM Education and Civil Rights to the Universe". Exposure is the key to realizing our interconnectedness, whether it is in civil rights or STEM fields. The question that this session addressed was "How do you bring civil rights struggles to the classroom and how can the community feel connected to the Universe? My partner and I focused on bridging these gaps and raising student awareness of the role that they play in navigating socio-political barriers in these fields.

Howard University - Conference on Pan-Africanism and Negritude: Dialogues between Africa and the African Diaspora (Past, Present, Future), Washington, DC, *November 6, 2015*
PowerPoint® Presentation – Panel Discussion, Title: "The Astronomical Achievements of the Ancient Dogon People: Facts vs. Myths". This research addressed the question whether the Dogon People had an influence on the surrounding countries or vice versa. Research revealed that there was a rigorous exchange of ideas and technology as far back as 5,000 years.

Reacting to the Past Fifteenth Annual Faculty Institute Conference
Barnard College, Columbia University, Manhattan, New York, *June 11-14, 2015*
Participants were assigned to two different types of roles: one of partisan advocacy which requires a lot of preparation and the other more neutral where you actually do more listening and judging. The purpose of this type of immersion is to allow us to experience "Reacting" as our students do. This was more difficult than the experience I had in Athens, Greece due to the short period of time.

CONFERENCES ATTENDED (Continued)

American Geophysical Union Fall Meeting, San Francisco, CA, *December 2013*
Attended this conference for educational purposes. Interacted with college professors from around the globe. Poster sessions were very helpful. An opportunity to see how professors teach the physical sciences in their classroom. Many used demonstrations with equipment that could be assembled by buying the materials from Homedepot or through vendors. The professors shared research projects that students could do in a semester and finally how they get the community involved in science. Networked in order to find out about student internships, post docs, etc.

American Geophysical Union, Chapman Conference, Reykjavik, Iceland, Participant, *March 10-15, 2013*
Fundamental Properties and Processes of Magnetotails, Participant with Solar Telescope Observations for the group as my part. Scientific sessions included tutorials on the external and internal processes of magnetotails; basically how they are created, and sustained. Spacecraft observations have long established that all planets within our solar system are magnetic either by the conditions created from a rapidly rotating planet with a molten outer core or through ionospheric conductivity as in the Jovian planets. These planets interact strongly with the solar wind and possess well-developed magnetotails on the night side of the planet that extend 150 million miles into space. They are the site for many dynamic processes critical to a planet's circulation of mass, energy and magnetic flux.

Faculty Resource Network National Symposium: New Faces, New Expectations
New Orleans, Louisiana, *Presenter*, *November 17, 2012*
Session Title: "The Liberal Arts as a Practical Education: Helping Students Make Connections between Liberal Arts Majors & Future Employment".
A liberal arts education is interdisciplinary. The hiring practices of employers are to find well-rounded individuals with good communication skills, problem solving abilities, and achievement across a variety of general and specialized fields. The aim of this workshop was to determine if industry standard were being met. If not, how to go about instituting change within the departmental structure? Small group discussions as well as the dissemination of information was gathered to help facilitate a rapid exchange of ideas.

Howard University - Conference on Africa and People of African Descent: Issues and Actions to Re-Envision, Washington, DC, *Presenter, PowerPoint Presentation – Panel Discussion*, *September 14, 2011*
Title: "The Astronomical Achievements of the Ancient Dogon People: Facts vs. Myths"
Noah Brosch established a time line of what he believes is western civilization's first contact with the Dogon People in Africa more than a century ago and the possible influence, if any, on specific knowledge acquired by the ancient Dogon people on the Sirius star system. According to western literature and Griaule's three decades of ethnographic field studies with the elders and priests, their cosmogony points to the fact that since the thirteenth century or before, the Dogon have claimed that there is a third star, Emme Ya Tolo (C) in the binary (A & B) Sirius star system located in the Canis Majoris constellation. Evidence of symbolic markings and graphic designs on sanctuaries, calendars of our sun system, archaeological excavations of artifacts, and oral tradition all comprised the early history of Dogon who possessed keen observational skills. The debate as to whether Emme Ya Tolo is a fact or fiction relies on modern astronomical instruments and data verification from ADONIS. Benest and Duvent have made mathematical calculations using a Fourier function as proof of the third star's existence. This presentation discussed the methods used to verify the existence of a possible third body in the Triple Sirius Star system. The presentation can be seen on YouTube under the following link: http://www.youtube.com/user/SusanMajekNetwork?blend=2&ob=5#p/.

Faculty Resource Network National Conference
Washington, DC, *Participant*, *November 19-20, 2010*
Conference title was "Engaging Students in the Community and the World". Since NYU is a private university in public service, and with my commitment to public service, I chose workshops that would enhance my service commitments, such as, "Does the Rest of the World Matter? Incorporating Social and Global Themes into the Curriculum", "Bringing University Students to the Public Schools and Bringing Public School Students to the University", "How do we Develop a Culture That Engages Faculty and Students in the Community and the World?", and "Collaboration for Cultural and Global Educational Enhancement". My goal is to implement and incorporate some of the methods that are working for professors around the country into my daily approach towards student learning and curricula.

CONFERENCES ATTENDED (Continued)

American Geophysical Conference,
Iguassu Falls Convention Center, Iguassu Falls, Brazil, *Participant/Mentor,* *August 8-12, 2010*
One of AGU's missions of late is to increase minority participation in the sciences. For a little over a year I've been in contact with Women in Earth Science. They needed a college professor on the east coast to mentor minority students. One of the oral session categories that our students participated in was titled Education and Human Resources with the topic being a "Broader Impact Actualized through Full Engagement". The other topic under the same category was a poster session entitled "Developing Sustainable Education and Outreach Programs and Projects" (A picture of the entire group except the young lady from Brazil of which 2 presented poster sessions) found in Binder #2 under the "Professional Engagement" tab. The last oral presentation on Thursday was under the category of Hydrology, "Water Resources under Stress: Climate Variability, Land Use Changes & Atmospheric Deposition. Undergraduate women presented all three of these projects from Howard & Duke University, which I helped, mentor and assisted at the conference.

The NASA Center for Astronomy Education
Maui Community College, Kahului, Hawaii, *Participant,* *July 11-12, 2009*
The workshop was designed to assist college professors with the intent of improving their pedagogy. 16 hours of instruction, consisting of learning how to enhance existing technology, for example, teaching using PowerPoint, CLEA programs beyond Stars & Hubble, and authentic investigations in the study of astronomy. Focused on special topics within the Tier II workshop structure, including: the benefit of using the Lecture-Tutorials as a tool to optimize classroom experiences for students, and how to help students gain a better understanding of the concepts in astronomy. Small groups practiced together before leaving the workshop, to ensure the professors were able to grasp complicated ideas.

American Association of Physics Teachers
Winter Meetings, Baltimore, Maryland, *Participant,* *January 19, 2008*
A series of workshops were attended during the winter meetings, including: W09: *Exploring Beyond the Solar System,* implemented in lecture/lab as current information in a PowerPoint presentation. Looking far beyond the Milky Way galaxy at billions of other galaxies the students found intriguing. The following questions were explored: How old is the Universe? How big is it? And, are we alone? The session addressed how teachers should get students to approach these questions and ultimately define them by searching through scientific evidence.

People to People Ambassador Programs
Seattle, Washington, *Participant* & *Presenter,* *June 3-21, 2007*
Our delegation traveled to China to meet with college professors teaching physics and math in several major cities; Beijing, Nanjing, & Shanghai. The talks through a translator consisted of conversations making a comparison between China's school system and our own here in the United States. We identified the following similarities between the two countries, including: encouraging students to examine the universe by combining education with values, collaboration amongst fellow students, developing critical thinking skills, strong internships and showing that learning is part of everyday life.

2006 National Symposium: The Millennial Student
San Juan, Puerto Rico, *Participant,* *November 17-18, 2006*
Millennial ('M') students were born between 1980-1994. The Faculty Resource Network's definition of an M Student is that they have "greater exposure to and more experimentation with 'grown-up' activity than any previous generation; receive extensive and rapid exposure to a vast and ever increasing level of informational activity, which make them the most informed generation to have lived on the planet". Leveraged this information and linked traditional teaching methods with new and innovative techniques to capture, motivate, and involve the 'M' student. Discovered that 'M' students are not as apt at evaluating sources of information over the internet nor are they technology geeks despite the number of hours spent IM, texting, and using the computer for recreation and work. This has been remedied by expert assistance from the science librarians, projects in class, and personal instruction in order to foster an effective end of term project.

ACADEMIC SERVICE

Advisor to the LS/GLS Astronomy Club, *Fall 2010 to present*
New York University, Liberal Studies Program
The Astronomy club now has approximately 125 members. We host the Amateur Astronomers Association (A^3) of New York monthly seminars, which meet every 2nd Thursday at various locations around campus. Attendance is somewhere between 25 to 40 students. The event is lively with debates on new theories and current events. Before there was an astronomy club LSP students have volunteered to present their researched topics to the Amateur Astronomers Association. This was the catalyst for starting the club. Individual students pose question in the seminar and are asked to research their question and present their findings at the next meeting. We've had great guest speakers in the past; 1) Dr. Louis Pataki from LSP spoke to a group of about 40 students, topic: "Planetary Science", 2) Dr. David Hogg from the Center for Cosmology and Particle Physics, NYU's Physics Department, whose topic was "Spectroscopy and the Expansion of the Universe", a group of over 50, 3) Jason Kendal, NASA science ambassador, who spoke on "Hydrodynamics of the Sun", and other Amateur Astronomers Association club member have given talks.

Second Session Summer School, *July 2013 to present*
New York University, Liberal Studies Program
Teach History of the Universe to both college and pre-college students from various states and countries. This shorten version of the course provides the student with a survey of astronomical concepts, tools and an opportunity for both solar and night observations.

New York University, Liberal Studies Program
Manhattan, New York, *September 29, 2015*
Observation of Rhoda Berenson for Reappointment
Course: History of the Universe, Topic taught: Newton's Laws of Motion and Conservation Laws

New York University, Liberal Studies Program
Manhattan, New York , *May 9, 2015*
Glocal Symposium – Posthumanism & Society
Presenter – Title: "Space Migration: Is It Possible?"

New York University, Liberal Studies Program
Manhattan, New York , *October 8, 2014*
Observation of Lenny Tevlin for Reappointment
Course: Science of Technology, Topic taught: Faraday/Lenz's Law

New York University, Liberal Studies Program
Manhattan, New York, Annual Colloquium, *March 25, 2011*
Lead Teacher – Lunch table and Member of the Colloquium Planning Committee (not listed)
Titled; The Price of Fashion: The Triangle Fire & the Global Garment Trade
Lunch Table Discussion – Planet Hollywood: Fashion Beauty & Space led by 4 students; 1) Anna Griffith, 2) Tara Kiernan, 3) Imani Ribadeneyra, and 4) Megan Young
Paper submitted to the Liberal Studies Virtual Commons website: "Fashion 'N Beauty: What Does It Really Cost?

New York University, Liberal Studies Program
Manhattan, New York, Third Annual Colloquium, *March 28, 2008*
Lead Teacher – Lunch table
Titled; Made in China: Globalization Past and Present.
Paper submitted to the Liberal Studies Virtual Commons website: China Now: Globalization, Society, & Culture
Paper Title: "Science, Education, & Technology in China". This article was based on a three week experience, June 2007, with a delegation of scientists from around the USA & the UK. We journeyed to several major cities in China to exchange ideas on science, education, and technology. The trip was arranged by People to People Ambassador Programs, established in 1956 by former President Dwight D. Eisenhower.

COMMUNITY SERVICE

St. Albans Under the Stars, Queens, New York
Founder and Coordinator, *since July 2006 - Present*
This annual event is collaboration between the Amateur Astronomers Association and St. Albans Under the Stars. Two types of telescopes are set up for both daytime and night observations. The community has an opportunity to safely view the sun, with night telescopes to view the moon, planets, and star clusters in the night sky. New York State Certified Teachers and I developed activities. This was the sixth year the event has been sponsored by Councilman Leroy Comrie, 29th District. We had over 200 children and adults to attend our workshops and it is growing. Expansion of the program will take place next year within the community to other parks and a possible weekend program for disadvantaged students connected to one of the three churches we are in negotiations with.

Infinite Variety Productions and Frigid New York @ Horse Trade Theater Group at the Kraine Theater presents the world premiere of Sean Michael Welch's Insignificant, *December 12, 2015*
A Post-show Talk Back/Q&A with Dr. Gerceida Jones about the untold stories of pioneer women in STEM fields and their struggles and in particular the story of Henrietta Leavitt. How do you tell the story of a group of pioneering women in the field of astronomy? How do you tell a story that for so long went unheralded simply because the protagonists were women? How do you get an audience to pay attention to tedious work that would bore fruitful results but lacked drama? You give them a spectacle! All of the characters in Insignificant were based on actual people, places, and discoveries.

Career Day, PS 107, Flushing, Queens, *March 22, 2013*
Spoke with grades 3-5 in reference to my teaching role at New York University. Discussed how I became interested in science, how many years of schooling it takes, and career choices, starting salaries of engineers versus teachers, travel, the science itself, and what my day is like.

Amateur Astronomers Association, Board Member and Chair of Seminar on Recent Advances in Astronomy, *Re-appointed April 2011*
This association sponsors a lecture series of renowned scientists monthly at the American Museum of Natural History, night sky observations around the five boroughs, seminars, and support to its members for the purpose of disseminating information about astronomy and current technology in the field. My HOU classes have participated in a number of these events; observations, bi-yearly presentations made to the association, lectures, and seminars.

Wakka Wakka & Nordland Visual Theatre in cooperation with Riksteatret at Baruch Performing Arts Center, *December 23, 2010*
A Post-show Talk Back/Q&A; Distance Measuring Techniques to Nearby Galaxies & Beyond! **BABY UNIVERSE (A PUPPET ODYSSEY)** Presented over 30 puppets ranging in size from 9 inches to 9 feet, mask, a Stephen Hawking inspired robot, animated video projection and a space-age score. Featured in New Yorker magazine; Wakka Wakka spins the bizarre tale of "Baby Universe" – the ultimate savior (a puppet), the last hope for deliverance, the messenger on whom the fate of an entire race rests. Several of my students accompanied me to the show.

Sea Level Rise Task Force (SLRTF), Board Member
Bureau of Marine Resources, East Setauket, NY, *April 2009-December 2010*
Legislative Appointment by Senate Majority Leader Malcolm A. Smith
The Board is responsible for making recommendations to the Governor on the impact of climate change. On 6/25/09 the SLRTF produced a draft document coordinating an effective response to the effects of climate change between agencies responsible for the health, safety, and welfare of NYS residents and businesses. These policies are designed to improve the resiliency of our communities and build upon federal, local, and private efforts to adapt to climate change. There are several focus groups working towards reducing risk to coastal systems, communities and infrastructure. As a member of the Natural Resources Working Group (NRWG), our job is to evaluate sea level rise as a potential threat to the full array of coastal habitat types within the Task Force's focal geography. A preliminary report was issued on 5/21/09 highlighting a subset of natural resources, such as, salt marshes, barrier islands, and groundwater. We are presently identifying areas at greatest risk by prioritizing 18 recommendations from the 6/25/09 board meeting as either a risk level of high, medium, or low using the beta version of the survey monkey. Recommendations were

COMMUNITY SERVICE (Continued)

submitted to the governor on December, 2010, approved 3/2011. Sea Level Rise Task Force **Final** Report - New York State ...**www.dec.**ny**.gov/docs**/administration_pdf/slrtffinalrep.pdf - Cached

Camp Kingdom, Jamaica, NY
Teacher, *July 9-August 14, 2010*
Prepared seventh and eighth grade students to take the preliminary SAT in Math. We met Monday, Tuesday, and Thursday from 10:30-12:30 at P.S. 59.

Amateur Astronomers Association of New York, Hayden Planetarium Space Theater, *April 12, 2010*
Covered lecture on Dark Matter given by MIT physicist Peter Fisher. Article published in the EYEPIECE, Journal of the Amateur Astronomers Association of New York. Dr. Fisher discussed the role dark matter plays in our galaxy and the universe. He also discussed the history of dark matter, the search to find it and MIT's new research aimed at discovering how dark matter is created.

Yale University, New Haven, CT, ***April 10, 2010***
Speaking Engagement/Demonstrations - Girls in Science
A program designed to introduce inner city girls to the physical science through active engagement via a choice of many experiments and explorations. The World of Sound was the curriculum for the session, which I spoke and participated.

Friends of Bill Thompson, Candidate for Mayor
Fundraising Hostess, Jamaica Estates, New York, October 2008
Raised $15,000 in one week for this event.

Sponsored by Assemblyman William Scarborough and Councilman Leroy Comrie, Jamaica, New York
Consultant, *September 2003 - 2007*
Linked in partnership with Queens Direct Foster Care and Preventive Services, Malcolm Pirnie & Southeast Queens Neighborhood Network to develop an environmental studies program for I.S. 59 in Queens, New York. Our goal was to meet NYS curriculum requirements, gear interested students towards a career in environmental studies and provide resources and state-of-the art facilities for students in the Southeast Queens District 29. An environmental science lab construction finished Fall '07.

"You Can Go To College Committee", Jamaica, New York
Mentor/Math Instructor, *September 2003 – 2007*
We meet every Saturday from 11:00-1:30 at Hillcrest High School and occasionally at York College in the borough of Queens. Advised and prepared our students to take the SAT's (my part-Math). Recruited, and encouraged High School students, for the purpose of touring Historically Black Colleges during spring break. This experience gave minority students who ordinarily would not have dreamed of going to college a glimpse at "college life." We had student representatives on campus to assist us with the tour. Some high school seniors received acceptance letters on the spot at the university. We also provided scholarships to the students who demonstrated excellence or improvement in their studies. Recognized for past and present community service by local and state politicians at the annual fundraiser. I personally raised $2,000.

Comrie '05 Fundraising Committee, Jamaica, New York
Chairperson, December 2003-2006
February 12th – Second Annual Valentine's Ball delayed due to a snow storm. Snow date 2/24/06. Raised $48,000. Councilman Leroy Comrie of the 27th District is the Majority Whip of the City Council of New York. The committee's goal was to raise $100,000 by November 2005. September 8, 2001, personally raised $2,500 (amount does not include matching funds) for the Councilman's re-election.

COMMUNITY SERVICE (Continued)

United Black Men of Queens, St. Albans, New York
Mentor/Science & Math Tutoring, *September 1999 – August 2003*
Organized and developed a Math/Science Institute geared towards assisting students of all ages for careers with a focus/interest in math, science, engineering or medicine. Our academic programs covered a kaleidoscope of topics ranging from elementary to college level course work. Each student was independently tutored to address their specific needs. Scientific equipment was purchased to demonstrate basic concepts in biology, chemistry, earth science and physics. Teaching liaisons were established between high school and university curriculum developers. Worked closely with teachers from Springfield Gardens H.S. and Francis Lewis H.S. to improve regent scores in collaboration with professors at Medgar Evers, York, and Queens College. Assisted the NYSTAR, Liberty Partnership and Teacher Opportunity Corps, Dental Van which has Director in securing grant money from the Dept. of Mental Health and Substance Abuse by writing a proposal. Our proposal focused on high school student at-risk in the Southeast Queens area. We generally received about $60,000 a year in grant monies from the City of New York. Local politicians contributed money to cover the budget gap. Another proposal written by me to Babson College in Boston, won two

UBM mentors an all expense paid trip for a week of intense entrepreneurial training. Babson College is one of the premier schools for training students who want to be entrepreneurs upon completion of their B.S. degree. Our team participated and competed with teams from around the country. We came in First Place. Babson then provided us with the resources to come back and train our students to prepare and think like real entrepreneurs. The program produced some excellent results. Several of the students have started their own businesses or product line.

SERVICE TO NEW YORK UNIVERSITY AND LIBERAL STUDIES DEPARTMENT

New York University Faculty of Color Caucus, Steering Committee member, *May, 2016 – Present*
Sole purpose of this committee is to increase hiring of minority faculty.

New York University MRSEC, *Elected Boardmember,* *September, 2015 – Present*
NYU's merger with Polytechnic has created a dynamic environment for interdisciplinary materials research to unite investigators from Chemistry, Physics, Chemical and Civil Engineering, the Courant Institute of Mathematics and Biomaterials in the NYU College of Dentistry. Besides the goal of world-class research, MRSEC is now engaged in a strong and rigorous community outreach project. As a boardmember, this is my area of concentration, community outreach to underserved populations.

Summer History of the Universe course, *July 2013 – Present*
Teach non-science major an introductory astronomy course to fulfill the science requirement.

Colloquium Committee, Gallatin School of Individualized Studies, Evaluator, *September 22, 2016*
Shannon Sullivan's two-hour defense of her rationale on "Education: An Equalizer".

Internship Program, Mentor, *Summer 2016*
Mentored Denys Hildin who interned at Haddad Brands which is a kids clothing company. The eight page research paper discussed the design, manufacturing, and distributrion of such popular brands as Nike, Jordan, Converse, Levi's and Hurley.

"NYU Welcomes You 2012" Day, New York University, NYC
Volunteer, *August 26, 2012*
Welcomed approximately 1,000 incoming freshman and transfer students to Rubin Hall. A major component of NYU's traditional move-in day is the presence of volunteers and experienced administrators. We answered questions of general knowledge and served as friendly ambassadors. I have received e-mails from students that I met on the line while assisting them in moving.

SERVICE TO NEW YORK UNIVERSITY AND LIBERAL STUDIES DEPARTMENT (Continued)

Internship Programs, Mentor, *Spring 2012*
Mentored two students: 1) Ashley Flor created a 15-piece collection for an online gallery. She kept a rigorous schedule which included research, sketches, design courses constructing clothing, photo shoot for collection, attending conferences field experience and presentation to *Seventeen Magazine*. And 2) Jennifer Park had a public relations internship. Her duties were to manage and organize Dockers' fashion closet, track samples to and from magazines, photo shoots and public events. She assisted in the planning and execution of special events, such as press/promotional materials and organization of contact lists for special events. Each received a passing grade for their obviously hard work and dedication to their individual projects.

Reappointment Committee for academic year ***2011-2012, Member of the Board***
Our duty was to evaluate the file assigned to us, share our findings with other members of the board, and then to finally make a recommendation to Dean Schwarzbach both oral and written. Reviewed the other nine files in order to be ready for discussion concerning the remaining candidates up for reappointment. Our last performance for this committee was to look at the annual activity forms submitted by faculty and rate them numerically with a 1, 2, or 3 for annual increases.

Astronomy Club Showcase, 5 Washington Place, room 101, Club Advisor, *April 14, 2011*
Facilitated the showcase at the request of Joanne Rizzi – "An Evening of Poetry and Stars"
My HOU Students/club members provided talks on the interstellar medium, aka, the ISM (an idea I had several years ago to get student participation and make a proposal to the University wide ISM Gala), Tonya Ingram (HOU Student and club member) provided an original poem on the ISM, Stephanie Holombo sang and provided a poem, one of Tim Tomlinson student provided a poem, and JP Borum provided a PowerPoint presentation combining science and art entitled, "Serpents, Butterflies, Cells, & Stars: Interstellar Methods of Inquiry. All artistic expressions were related to astronomy and were original works.

Parents Day, Participant, *September 24, 2011*
Taught a mock class for the parents of new freshmen. Prepared a lesson on "Our Closest Neighbor" the moon.

Faculty and Student Reading Series, Participant, *Fall 2011*
Robin Goldfin, Advisor
Recited two monologues by Edgar Lee Masters; Margaret Fuller Slack and Mrs. Purkapile

Colloquium, "Shirtwaist Triangle Factory Fire", the 100th Anniversary, Participant, *March 25, 2011*
Participated and provided an article for the website entitled "Fashion 'N Beauty: What Does It Really Cost?" Facilitated a lunch table hosted by students in my History of the Universe class, topic "Planet Hollywood: Fashion, Space, & Beauty".

Identities and Representations Concentration Group, Liberal Studies Department, Member
Curriculum Committee, *Fall 2010 – Present*
Develop new curricula. Several of the members have submitted course proposals that were accepted or suggested to be revamped and re-submitted. My idea for the committee was that every student should have experience working with ethnographic research and writing. My goal is to take a course in ethnographic research and develop a course in Civil Right after writing a book about my experiences.

Amateur Astronomers Association of New York Events:
American Museum of Natural History, Kaufman Auditorium, *October 2010 – Present*
Accompany History of the Universe/Astronomy Club students to monthly lecture series on Friday evenings usually given by renowned scientists from various universities around the country. For example, on February 2011, the topic was given by NYU's physics professor Glennys Farrar, "Getting Photos of Supermassive Black Holes Tearing Stars Apart" was well received by 20 of our GLS/LS students who attended with me. The schedule of this year's events can be found on the Amateur Astronomers Association (A^3) of New York website. Attendance sheets signed by students for all events from Spring 2010-Fall 2012.

SERVICE TO NEW YORK UNIVERSITY AND LIBERAL STUDIES DEPARTMENT (Continued)

High Line - Accompany History of the Universe/Astronomy Club students once a month on Tuesdays for night observations of the sky hosted by the Amateur Astronomers Association weather permitting. Most recent event on 9/25/12, 24 students were in attendance.

Central Park - Accompany History of the Universe/Astronomy Club students to on the 4th Saturday of the month in the afternoon for a solar observation throughout the year hosted by the Amateur Astronomers Association.

Brown Bag Lunch, ***Submitted October 15, 2010***
Liberal Studies Department
Submitted an article entitled "Modernity in Crisis: Educating the Millennials in a Post-Modern World" to Lori Nicholas for consideration. It was not selected.

Commencement Day at NYU, New York University, Marshall, *May 2007*
Lead LSP students in graduation ceremonies at Washington Square Park.

New York University, Association of Black Faculty, Administrators, and Staff (ABFAS)
Manhattan, New York, ***Chairperson and Mistress of Ceremonies for annual scholarship fund,*** *May 5, 2007*
Responsible for bringing the renowned Maxine Greene as keynote speaker who is an NYU alumni holding a M.A. and Ph.D. from Steinhardt School of Education. She is now a Professor of Philosophy and Education (Emer.), Teachers College, Columbia. Eight monetary awards were given to both graduate and undergraduate students.

New York University Day in Albany, Manhattan, New York, ***Delegate of Team #19,*** *February 24, 2004*
In January there was an initial briefing to prepare volunteers for our trip to Albany. We each received a packet designed to focus the team for a day of lobbying with our local politicians. The day provided legislators with an opportunity to hear about the issues affecting our university and simultaneously educating them about the programs that were important to the University and the students, such as, TAP, STEP/C-STEP, also visits to the Southeast Queens Community by Councilman Leroy Comrie and staff, etc. The timing of our trip was tied into the release of the Governor's budget. We went when the Legislators were reviewing the budget and open to the suggestions of their constituents. It was our job to convenience the Legislators to fund the programs outlined above beyond the Governor's budget proposal.

PROFESSIONAL ORGANIZATIONS

Toastmasters International, Queens, NY
Member since 2013 – Present
Club name: Talk of the Town
An organization that focuses on affective communication and listening skills in the public arena.

Amateur Astronomers Association, New York, NY
Member *since 2008,* ***Board Member*** *January 2009 – May 2011 (still an active member to present)*
This association sponsored a lecture series of renowned Scientists monthly at the American Museum of Natural History, night sky observation around the five boroughs, seminars, and support to its members for the purpose of disseminating information about astronomy and current technology in the field. My classes participated in a number of events; observations, presentations, lectures, and seminars.

Earth Science Women's Network, Washington, D.C.
(Founded in 2002, at an American Geophysical Union Conference for the purposes of promoting women in science) Member, *since Spring 2010*
Provided peer-mentoring guidance, for the purpose of supporting young women in the early stages of their careers Participants, included: upper level undergraduates and graduate students in college, or professionally in the university, government, or the private sector.

PROFESSIONAL ORGANIZATIONS (Continued)

American Association of Physics Teachers (AAPT), Baltimore, MD, ***Member*** *since 2005*
(A nonprofit scientific organization committed to the enhancement of understanding and appreciation of physics through teaching, with over 11,000 members teaching physical science classes on all levels*)*
Attended a conference in Anchorage, AK, January 21-25, 2006. Acquired and shared new information with colleagues. Used a lesson plan, given by one of the presenters in the conference on "Light Waves". Topic covered in History of the Universe, where "invisible light" was made visible through the use of everyday technology that students have right at their fingertips all the time!

New York University, Association of Black Faculty, Administrators, and Staff (ABFAS), Manhattan, New York (no longer in existence) ***Executive Committee Member (ECM) of ABFAS, Chairperson of Special Event,*** *May 2004-May 2008*
The ECM representing *Special Events* has the overall responsibility of serving on the Executive committee of the Association. This involves: a) attending all executive council and general meetings as well as select meetings with members of the University staff and the NYU community at-large, b) Oversee the activities of all AD-HOC Special Committees (unless otherwise voted by the Executive Committee), c) provide a tentative agenda to the General Body or Executive Committee, d) Conduct meetings with the sub-committee heads at least once a month to discuss the committee and its activities in relationship to the Association, e) Submit monthly reports to the General Membership and a comprehensive report each quarter to the Executive Committee, f) Maintain accurate records of all events and meetings to be conveyed to the Association Secretary, g) Copies of such records shall also be provided to the First Vice President or other respective board member (i.e., Second Vice President, or Treasurer), and finally, h) The primary function of the Special Event Committees Chair will be a role of acting as liaison with all other Committee Chairs for the purpose of providing support for membership by actively seeking new members, maintaining old members, and encouraging active participation of current members.

American Geophysical Union (AGU), Washington, D.C., ***Member****, September 1977 – Present*
AGU is a nonprofit scientific organization, established in 1919 by the National Research Council. It has over 41,000 scientists from approximately 130 countries. AGU's mission is to promote the scientific study of both Earth and space. The American Geophysical Union disseminates information to the public about various geophysical disciplines and related disciplines through scientific discussion, publication, and research. AGU is a valuable tool in the classroom providing current research info for students who want to keep abreast of lightning speed changes which take place in the field of geophysical sciences. Strong community outreach program – St. Albans Under the Stars has made valuable in-roads in the St. Albans community providing physical science workshops to underprivileged minority children which is an out reach goal by AGU and ESWN which promotes women since 2010.

AWARDS RECEIVED

Toastmasters International, Member, ***since 2013***
Received Competent Communicator award on June 22,2015 for successfully completing 10 speeches to the club, "Talk of the Town", St. Albans, NY

Toastmasters International, Member, ***since 2013***
Received Competent Leadership award on November 24,2015 for successfully taking on30 leadership roles in the club, "Talk of the Town", St. Albans, NY

Guy R. Brewer Democratic Club, St. Albans, New York, *May 15, 2009*
Nominated and received the Community Service Award in Higher Education

White House Fellowship competition, Washington, D.C., ***March 1, 2006***
Selected as a Regional Finalists in the 2006-2007

AWARDS RECEIVED (Continued)

Citation from New York City Council, *March 22, 2005*
***"Outstanding Community Service",* selected by Councilman Leroy Comrie**

"Who's Who in America", Long Island, New York, ***Year 2004***
Nominated for inclusion as an outstanding professional in the field of Education.

"You Can Go To College Committee", Jamaica, New York, *November 22, 2003*
***"Save the Children Award"* for outstanding service and dedication**

New York University, Manhattan, New York, 1987-1993
Received a Tuition Scholarship for PhD course work.

University of Michigan, College of Engineering, Ann Arbor, Michigan, Most Improved Student, ***April 1981***
Received the Elijah McCoy Achievement Award

OTHER ACCOMPLISHMENTS

•First African American female to graduate from the University of Michigan (U of M), College of Engineering, Department of Atmospheric & Oceanic Science with a B.S. in Physical Oceanography. Attrition rates for minorities during late 70's early 80's 70 % for minority students.

•First African American female to graduate with a B.S. degree in Physical Oceanography in the United States of America. U of M, College of Engineering ranked #4 in the Country

•Obtained State Certification as a High School Physics and General Science Teacher, September, 1995

•Passed four-hour qualifying examination in Physical/Chemical Sciences, May 1995

•Passed four-hour qualifying examination in Advanced Mathematical Sciences (partials, differential equations, and complex variables), May 1994

•Knowledge of FORTRAN, BASIC & C

•Type between 60-80 wpm with accuracy

•Computer skills:

- ☐ Use of TurningPoint Technology as a teaching tool
- ☐ Word and Excel/Lotus used in administrative duties
- ☐ NYU Classes to post sylabi, PowerPoints, labs, lectures announcements, e-mail students and grades
- ☐ PowerPoint/overhead projector as a teaching tool in lecture
- ☐ Use the Lenovo X61 Tablet with rotating screen which becomes a pad to solve math problem in real-time on the screen while students solve the problems at their desk

OTHER ACCOMPLISHMENTS (Continued)

DESCRIPTIVE TITLES OF COURSES TAKEN-NEW YORK UNIVERSITY

Atmospheres & Oceans I & II
Analytical Methods for Engineers & Atmospheric Science I & II – Advanced Mathematics
Fluid Dynamics I & II and Fluid Mechanics
Applied Thermodynamics and Applied Modern Physics
Fundamentals of Energy and Geophysical Science I & II – Computer Simulation Models
Materials Science
Problems in Energy & Science I & II – Computer Simulation Models
Introduction to Applied Magnetohydrodynamics
Heat & Mass Transfer I & II – Real Time Simulation and Problem Solving
Turbulence I & II

PERSONAL DATA

Married 28 years (anniversary 10/9), three (3) children; ages 27, 25, & 24. Hobbies: Quilting (Rochdale Quilters since 1992), photography, travel to exotic lands, cross-country jogging, Yoga, and kettle bells/Insanity exercise programs.

REFERENCES

Credential File Forwarded Upon Request