#### 25th Anniversary



# ReSET ANNUAL REPORT 2012

ReSET is a Washington, DC-based volunteer organization composed of retired and working scientists and engineers whose mission is to motivate children to discover and explore the worlds of science, math, and technology, and to encourage them to consider future careers in these fields. Through experiments, hands-on science lessons, and field trips, ReSET volunteers teach children in ways that are engaging and relevant, helping them to make important connections between life and learning.

> Designated by The Catalogue of Philanthropy as "One of the best small charities in the Greater Washington region."

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**The Catalogue for Philanthropy: Greater Washington** selected ReSET for inclusion in its 2012–13 Catalogue. A panel of more than 100 expert reviewers from area foundations chose ReSET from a competitive field of nearly 220 candidates; ReSET is one of 74 selected for inclusion. "Charities were selected for excellence, cost-effectiveness, and impact," Harman said. "These are certainly among the best community-based nonprofits in the Washington region."



#### The ReSET Volunteer Commitment:

"We did an experiment looking at a number of variables in seed (radish) germination and plant growth (light, water, and nutrients). The students came up with the things they wanted to look at and I helped them to see them in the context of an experiment with control groups. Some of the students expressed an interest in animals and anatomy, so we did an owl pellet activity. We used owl pellets to discuss food webs, digestive processes, skeletons, and scale and size (for example: we looked at the size of vertebra in whales through voles—the typical skeletal remains you see in owl pellets)."—Ed Rock, ReSET volunteer since 2011

## From Little Acorns Grow Mighty Oaks ReSET Looks Back

Certainly ReSET could be a metaphor for great things that emerge from small beginnings.

Nearly 25 years ago, ReSET was just a kernel of an idea. But the seed was strong and the ground was fertile. Founder and CEO Harold Sharlin, who has a background in electrical engineering, had been volunteering at Iona Senior Services in northwest DC following his retirement at 62. He became increasingly impatient with people who kept referring to "the frail elderly." Now 87, Sharlin jokes, "In the 1980s, 62 was considered 'old.' I remember saying then, and I still believe it now: 'Not all of us are frail. Many of us have energy and resources, and we want to give something back.'"

Sharlin got in touch with Larry Mirel, an attorney, who had started The Emeritus Foundation, which was based on the idea of using retired scientists to teach hands-on science. Harold was hired to implement the program, and ESME (Emeritus Scientists, Mathematicians and Engineers) paid him a monthly stipend of \$1,000 to get started. In 1995 the organization's name was changed to ReSET.



#### "The possibilities for ReSET are endless."

-Harold Sharlin, Founder and CEO

Sharlin knew that retired scientists and engineers were an untapped resource: "I thought we should do 'real' science—not teach from a book. And I thought older volunteers would be good examples for the children. I liked the idea of building relationships between generations. I also thought the volunteers were living vocational models."

The program format that was established all those years ago is the one still used today—six one-hour sessions per term. Field trips were added, says Sharlin, "so that the children could see what real science looks like." They began with only three volunteers—and Sharlin was one of them. At first they couldn't even break into the school system. But after much perseverance, Sharlin finally had a face-to-face meeting with the DC Assistant School Superintendent, and they got the green light to begin delivering the program at Bunker Hill and John Eaton elementary schools. By year two, they had grown to seven volunteers.

"I knew ReSET was a terrific idea," says Sharlin, "too good an idea to keep it at seven volunteers. Now we have the Baby Boomers coming up. The possibilities for ReSET are endless."

Finding funding was a challenge then, as it is today. Sharlin remembers that the first grant ReSET ever received was from Chevron. That first summer he wrote 50 unsolicited letters to foundations around the country. When Chevron's \$500 check came in, he was ecstatic: "I thought, 'Now, I'm a professional. We're legit.'"

Clarence Wade, a popular long-time volunteer who retired from volunteering in 2011, recalls what it was like at the beginning: "When you came to your first get-acquainted meeting, you were struck by Harold's focus, determination, and sincerity. He knew what he needed and how to take ReSET to the next level. You also knew you were in a group of high achievers."

Sharlin explains: "I thought the volunteers were an incredible asset, and that the program should support them with the 'where, when, and how.' I felt we owed them total support. And I still think the volunteers are our greatest success. I spoke with a retired person recently (who is now a volunteer) who told me that after he retired he felt he was going 'a little nuts.' He was looking for something to do. They are really into it and are doing what they love."

As the program grew and evolved, so did the skills and confidence of the volunteers. Wade remembers: "Your first visit to the classroom came with surprises, as you met teachers who were glad to have you there and others who used your presence as an excuse to do other things. Some students were smart, some were anxious, some were ambivalent, and some were a little hostile. In this environment, your mission was always to represent ReSET. After about the third hands-on experiment, teachers started to become interested and the indifferent student was begging to be your assistant at the next session, to help you carry your materials to the car. As the students' enthusiasm, interest, and attentiveness grew, you as a ReSET volunteer became very eager to make the next experiment more attractive, more instructive, and more promotional."

#### "Reaching the minds of those children was a constant intellectual challenge for me. I had several real 'Aha moments'—when I found a new way to present science to my students. Also, I cannot think of any more worthwhile and gratifying volunteer activity for a retired engineer."

#### -Bob Blumberg, 13-year volunteer



ReSET volunteer Marsha Tsay chats with students during a field trip to the Patent and Trademark Office (PTO) in January 2012.

Along with finding funding, recruiting qualified volunteers has always been a significant challenge. Even a passionate ReSET veteran like Bob Blumberg took a bit of coaxing before he finally came on board: "A friend of mine gave my name to Harold, but it took two years of his patient calling and asking before I agreed to teach."

"Our volunteers have incredible credentials," says Executive Director John Meagher. "They reflect so many significant academic and professional achievements. But few of them have teaching experience and some haven't been inside a classroom in many years. One of our priorities as an organization is to make the volunteers feel supported—with access to other volunteers, new ideas, and training opportunities."

Fifteen-year veteran Eva Jacobs has seen many changes over the years: "The most significant change is that there are many more schools and volunteers now. There is also a greater challenge with schools because of the current emphasis on testing, which frequently interrupts sessions.

Also, when we first started, most of our schools were inner city. Now, many are in areas surrounding DC. Principals that frequently change makes it hard to build consistency from year to year, but I think the new Core School program (see page 6) will help a lot with that."

In 2000, ReSET hired a second part-time position—Volunteer Coordinator—whose primary job is to make life easier for the volunteers. Roberta Goren, a microbiologist who has held the job since its inception, says she fell into it quite by accident. "I mistakenly thought that volunteers were supposed to go to ALL the meetings at the schools," Goren laughed. "So, at the volunteer orientation meetings Harold would announce where a school meeting was taking place, and I just assumed I was supposed to be there. After this happened several times, Harold came up to me and asked me why I kept showing up at all the schools. When I explained, he asked me if I wanted a job that entailed 'showing up' and making sure that the volunteers and teachers got organized. I couldn't think of a reason not to, and so that's how I backed into the job of Volunteer Coordinator! After I observed several classes I felt confident enough to go into the classroom alone. It has always been rewarding working with the students. They enjoy the interaction with ReSET scientists so much and have so many questions that they want answered and so many projects that they want to do."

Wade adds that it isn't just the positive feeling that comes from engaging students in learning something new . . . it's imparting a lasting educational legacy: "One of the great rewards for me as a volunteer was to have teachers use my recent demonstration in their classes to further classroom learning. One day we had finished making and recording the lengths of various polymer fibers. As I was leaving, I heard the teacher say to her class, 'Using the data collected today, please calculate the average length, the mean, the median, the mode, the shortest fiber, the longest, etc.' It's such a great feeling when the teacher participates in the classes and builds on the experiments you did with the children."

Bob Blumberg feels that working in the trenches gave him a far more accurate picture of the educational system in the DC area than many of his friends. "One thing that was a positive for me was that every time I told friends that I was teaching in Anacostia they expressed concern for my safety and thought that I was so 'brave.' I made the trip for many years and had absolutely no problem. Working in the schools with real teachers and real students gave me a feeling that I knew more about the education problems in the District than the media did, and more than the local and national politicians who were doing all the talking. I felt that they needed to experience the classroom to really know what was going on."

The transition from Founder to a new Executive Director can be a stressful one in nonprofit organizations, but Sharlin is quite happy he passed the baton to Meagher in 2007. "I am very pleased with the job John is doing. It's his baby now."

But that doesn't mean Sharlin has run out of ideas. Even after 25 years he is still thinking big: "It would be great if ReSET were taken over by a very large foundation. We need a full-time recruiter, an office and a \$500,000 a year budget. Oh, the things we could do!"



#### Veteran Volunteer Bill Gill Reminisces

I started volunteering for ReSET in 1998. Harold Sharlin assigned me to a 4<sup>th</sup>grade class at Benjamin Stoddard Elementary. We had a very small budget, so I knew we couldn't afford an oscilloscope to show the class waveforms or a Van de Graaff generator to demonstrate static electricity. I had to find some simple, low-cost experiments to do with the class. At that time the Internet was in its infancy but I was able to find a couple of experiments at the Franklin Institute's web site. I also had an *Edmonds Scientific Catalog* (Edmonds sells kits for scientific experiments) from which I bought ceramic magnets, a doorbell kit, and five kits containing a switch, battery holder, light bulb, and jumper wires. I also bought some balloons at the dollar store, and off I went to my first class.

My first couple of sessions were bombs! I was talking too much, trying to teach the class "important engineering principles." I think the teacher was ready to throw me out, but then during my third session I put together a circuit with the battery and switch, and demonstrated how a flashlight works. I then gave the kits to the class and they were elated when they finally got the light to turn on. A little Russian girl in the class (Stoddard is near the Russian Embassy) even made up a song about me —"Mr. Electricity Man."

My next assignment at Stoddard was with a Pre-Kindergarten class. So I had to alter my routine to fit their shorter attention span. I whittled my "show" down to 15 minutes and only did demos for them. At the final class every one of the students came up to me and shook my hand to thank me for what I had done.

Around 2000 I transferred to Shepherd Elementary. I volunteered at Shepherd for the next 10 years. At Shepherd I brought my guitar into the final class to demonstrate how tone changes with the size and length of a wire. In Mrs. Lynn's 4<sup>th</sup>-grade class they asked me if I knew "Put the Lime in the Coconut." I said I didn't, so they said, 'Play the chords and we'll sing it.' So I played as they sang and did hand motions to the song. For the next 2<sup>1</sup>/<sub>2</sub> years whenever a group of girls would see me in the halls they would sing "Put the Lime in the Coconut." It's really nice to know that you have left an impression on the kids.

I am now volunteering at High Bridge Elementary, which is close to my Bowie, MD, home. Last year, I took Ms. Bradley's 4<sup>th</sup>-grade class on a field trip to the National Electronics Museum. Ms. Bradley had each student write a report about the trip. All of them were impressed by what they saw and one of the boys said, 'It was the best day of my life.' Comments like that are what keep me volunteering. And besides . . . I enjoy being a 'ham' and pulling rabbits out of a hat for the kids.



**Executive Director John Meagher** 

### The Year in Highlight A Message from the Executive Director

As a relative newcomer to the nonprofit world, I've learned that it is a challenge for small organizations like ReSET to succeed when the funding environment is fiercely competitive and potential volunteers have many thousands of choices.

This makes ReSET's 25-year record of service to the Washington, DC, area especially impressive, and I am pleased that this has been formally recognized by an organization such as The Catalogue of Philanthropy, which designated ReSET as a superlative nonprofit this year. I am also grateful that I have had the benefit of working alongside ReSET's founder, Dr. Harold Sharlin. That is very unusual in any organization with a 25-year track record, especially when one considers that Harold started ReSET after his retirement from academia.

This past year has been a fruitful one for ReSET and the students who benefit from our programs. We reached a record number of children, boosted by the additional Pre-Kindergarten classes with which Harold worked, either directly or through teacher training. We have expanded our geographic reach and added a number of new partner schools. We also initiated a new program, called "ReSET Core Schools," in which we choose a select number of our most loyal elementary school partners and strive to reach the same students with a variety of science and math programs as they advance through their school years.

#### "ReSET endures because of the continuing power of Harold Sharlin's original idea: scientists and engineers will have a significant positive influence on children by providing them with a series of adventures in hands-on science and math learning."

As we look to the future, challenges remain. Schools are in flux. When a school principal is replaced, ReSET has to build a new relationship from scratch. This is difficult if priorities are shifted away from science to concentrate more narrowly on raising reading and math test scores. We find today that schools and teachers are more interested in ReSET experiments that specifically reinforce their curriculum and educational standards. It is more important to find the right match between volunteers and grade levels, and for volunteers to design their programs to align with curriculum objectives, while also instilling the joy of hands-on science learning. The focus on curriculum standards does have the benefit of reinforcing the science the teacher presents, which enhances the chances of student academic success.

At the core of ReSET's sustained record of success are our volunteers. As their number has grown, so has the array of science specialties presented in ReSET programs. The wide racial and ethnic mix of our volunteer cadre enables ReSET to reflect the amazing diversity found in DC-area schools. The increase in our number of women volunteers dispels gender stereotypes that still surround science and engineering. With volunteers ranging in age from their teens to their 90s, we have multiple generations sharing their professional commitment, time, and talent to inspire the scientists and engineers of tomorrow. This is a legacy well worth carrying on in the years ahead.

## **Volunteer Profiles**



Rich Repplier looks on as Barnard Elementary School students laugh at how their voices change when speaking into a pitch-shifting machine.

#### More is More for This Six-Year Veteran

#### **Rich Repplier, Electronics**

Volunteer since 2007

"This is where I belong."

It's been a few years since Rich Repplier was 10 years old. But getting into the mind and spirit of your average 5<sup>th</sup> grader is the driving force behind this veteran volunteer's work for ReSET. The 74-year-old electronics engineer thinks back to what he liked to do at that age—playing with bells, batteries, and lights, and seeing how he could make something ring or light up. After retiring, Repplier took the unprecedented step of volunteering for five ReSET programs in the fall 2012 term, logging many miles from his Centreville, VA, home to Malcolm X Elementary in southeast DC, and Takoma Educational Campus and Barnard Elementary in northwest DC. What would make someone take on such a demanding classroom schedule? As Repplier will tell you, it's the sense of being home. "The classroom is exactly where I need to be," says Repplier. "This is where I belong. It's working with the children that makes me feel this way."

Repplier began volunteering for ReSET in fall 2007. His experiments, all of which he designed himself, vary from stretching a cable between two speakers to make a telephone to using a pitch shifter machine to demonstrate changes in voice pitches (a perennial favorite) to showing his students how to talk over a beam of light.

When he first began volunteering, Repplier was pretty confident about the six projects he had come up with, but he feels his pre-

sentation has definitely improved over time. Feedback from teachers and students has helped him to continually refine his classroom technique. One piece of feedback he received early on was that he should explain to his class what an electronics engineer does, which he discovered most students knew nothing about. Now, he makes a point of including that in his first session.

Repplier shares that the key to a good hands-on experiment is finding that "sweet spot" between too easy and too hard. "If it's too easy, they are bored. If it's too difficult, they get discouraged. That's the challenge. I never feel that I'm good enough. I'm always looking for a way to improve."

Barnard 5<sup>th</sup>-grade teacher Ms. Blair was pleased with how Repplier's experiments augmented what she teaches: "Rich seems to intuitively know exactly what we need. I'm pleased with how his lessons have enhanced what I am teaching in class instead of being peripheral to what my students need to learn."

Although some schools are more challenging than others, Repplier feels that the more disadvantaged schools are where he is needed most. "Once I broke out the sound-powered telephone for the children at Malcolm X, the experiment did all the talking for me, and I could see they were engaged and excited," Repplier says. "I'm happy I stuck with the school, rather than missing out on an important opportunity to help."

When he's not volunteering, Repplier likes to surf his favorite technical and business web sites. He reads books on philosophy and enjoys character-driven (brain vs. brawn) television shows like *Blue Bloods* and *White Collar*.

#### **A Perfect Partnership**

#### Dr. Anya Jones, Aerospace Engineering

Volunteer since 2012

#### "It's better to let them dive in and discover things on their own."

Dr. Anya Jones, who began volunteering at Ludlow-Taylor Elementary in northeast DC this past fall, is no stranger to the classroom. This Cambridge-educated aerospace engineer is currently an Assistant Professor at the University of Maryland's Department of Aerospace Engineering. But, as Dr. Jones will tell you, it is not quite the same as teaching 5<sup>th</sup>-graders. "My students are all over 18. It's a little different when they are 10. Trying to communicate difficult concepts that are hard even for college students can be challenging. I discovered that a five-minute talk is way too long. It's better to let them dive in and discover things on their own."



Anya Jones and Amanda Oberski (back left) with Ludlow-Taylor Elementary class on a field trip to UMD's Glenn L. Martin Wind Tunnel

Anya heard about ReSET through an email that was sent via the local chapter of the

American Institute of Aeronautics and Astronautics (AIAA). As she began to put together the topics she would cover during her first term, she got some ideas from NASA's web site, but benefited most from a collaborative exchange with her assigned teacher, Amanda Oberski. "Amanda and I learned together," says Jones. "We discovered what works and what doesn't." Oberski concurs: "Anya was a wonderful collaborator in the classroom. We were able to brainstorm new and exciting lessons that were accessible for the students. Anya ensured that all of the materials were purchased and available on time, and she always came prepared with a PowerPoint or a student sheet to help them understand the information. She really listened to what the students needed, and we created a comprehensive lesson plan to meet their needs. During every class, there would be a Q-and-A session (either formal or informal) where Anya would work diligently to answer student questions. Students would also frequently create post-it questions and give them to Anya to answer after the lessons."

Jones' sessions covered a variety of topics related to aeronautics—paper airplanes, balsa wood airplanes, rockets, and basic physics (lift, drag, and thrust).

In one lesson students created balloon rockets and tried to hit a target on the ceiling. Working with Jones, students realized through trial and error that the force to push the rocket forward had to be directed behind them. This experiment was a learning experience for Jones as well: "I discovered that things go better when the children tried things on their own, as opposed to my lecturing to them."

The field trip was a highlight of the term. After receiving a tour of the University of Maryland campus, students had the opportunity to walk through the Glenn L. Martin Wind Tunnel, build and fly model airplanes, and perform experiments in a real undergraduate science lab. Jones was pleased with the experience, feeling it went "quite well." Oberski is far more effusive: "It was an amazing experience! As we left the university, it was thrilling for me as a science teacher to hear my students say they 'wanted to be engineers' and were excited to 'go to college.'"

Teacher and volunteer were so delighted with their first ReSET experience together that Jones may be doing some follow-up lessons later this school year. She is excited to work with Oberski again in fall 2013. Jones, who has her private pilot's license, enjoys travel, photography, and rowing crew.



Miranda Lambourne (on right) with Laurel Ridge Elementary Spanish immersion teacher Susie Auñón.

#### A Dream That Never Died

Miranda Lambourne, General Science Volunteer since 2012

"ReSET taught me how much we need volunteers in our community to help schools overcome the STEM literacy issues they face. I might never have worked so hard to be a better science and math teacher if I hadn't encountered ReSET."

Miranda Lambourne always wanted to be a teacher, and the idea flickered about in her consciousness off and on for years. A native of London who moved to the U.S. in 2002, Lambourne married young and has been busy raising five children who range in age from 16 to 24. Now living in Leesburg, VA, Lambourne found herself wishing she had gone to college, especially as she watched her

own children begin to consider colleges themselves and leave the nest. But she worried it might be too late. Then she met a neighbor who went to college at 37 and graduated at 42. That was the inspiration she needed to revive her longtime dream. In May, she will graduate from George Mason University and will begin her Masters of Education in January 2013, qualifying her to teach elementary school in fall 2014.

Before beginning at George Mason, Lambourne received an email from the university's internship and experiential learning coordinator that said ReSET was looking for interns to help with hands-on science program development at the elementary level. "I responded immediately," Lambourne says, "because it sounded like a wonderful opportunity, given what I had learned about how hands-on activities facilitate learning." Lambourne receives college credit for volunteering with ReSET; each single credit requires a learning objective, an outline of how she plans to achieve that objective, and 45 hours of onsite work.

Lambourne has worked at John Eaton Elementary in DC and Laurel Ridge Elementary in Fairfax, VA. She teaches a variety of general science subjects, including a unit on probability and statistics (modeled after ReSET volunteer Eva Jacobs' M&M experiment). She also teaches energy transfer, electrical circuits, and electromagnetism. "I taught energy transfer my first session and then, in the second session, we built a generator with magnets and copper wire that allowed the students to generate enough alternating current to light a tiny light bulb by turning the magnets around an axis inside the copper wire. In the next lesson, we explored how to turn the magnets using natural resources. We used hydropower with a mini waterwheel under the faucet that we attached to the generator and then wind power with a mini windmill. I find that when the kids make connections themselves to things they experience outside of school that they are really happy about it."

Along with her classroom work, Lambourne has created several YouTube videos for ReSET, working with ReSET volunteers Eva Jacobs and Mike Goldstein, who chose their favorite sessions for her to videotape. Executive Director John Meagher proposed the idea as a part of Lambourne's internship, and as a way to archive experiments for new volunteers to review. See: <a href="http://www.youtube.com/user/resetonlinevideo">www.youtube.com/user/resetonlinevideo</a>.

Intensely passionate about hands-on science, Lambourne shares with many the current concern about science and math learning in the United States: "If we fail to inspire and teach our children correctly at the elementary level, I believe it carries over to the rest of their lives."

Lambourne's experience with ReSET has encouraged her to pursue other science activities: she now also volunteers at the Children's Science Center Museum Without Walls program, and she recently helped judge an underwater robotics competition for high school kids called the Northern Virginia SeaPerch Challenge. "I love to see the joy and enthusiasm for science and math that ReSET induces in the kids. However, my favorite thing about my experience with ReSET was that it validated the choice I had made to become an elementary teacher."

Lambourne's large family and jam-packed academic schedule keep her very busy, but she still finds time to cook and entertain, and enjoys taking long walks with her Golden Retriever, Milo.

#### Never Too Old, Never Too Young -ReSET Spans the Generations

#### **Eva Jacobs, Statistics**

Volunteer since 1996 (aged 91)

"My biggest reward is to see the two or three in every class that are inspired—not just the smart ones, but those who are truly engaged and interested."

Eva Jacobs laughed when she was asked if she would be willing to be profiled as ReSET's 'oldest' volunteer. "At age 91," she joked, "one brags about one's age instead of hiding it!" Jacobs is also one of ReSET's longest serving volunteers, second only to CEO Harold Sharlin in number of years served, which she estimates to be at least 15.

Born and raised in New York, Jacobs moved to the Washington, DC, area following college in 1942, where she studied to be a professional economist. In her 40-year career as a statistician, she has worked for a number of government agencies, including The Bureau of Labor Statistics. When she first began volunteering for ReSET in 1996, Eva had no teaching experience and had never worked with children before. "I had some apprehension about it," she shares, "but one of the first teachers I worked with told me: 'There's nothing to worry about. The children will



Eva Jacobs with one of her classes at Shaw Center City Public Charter School in DC.

be thrilled you are there. They are happy to see ANYBODY in the classroom but me!' " Over time Jacobs' confidence grew, and she continually improved her experiments with the help of the American Statistical Association's Quantitative Literacy Program, which gave her ideas for projects geared to the elementary school level.

Using different real-life (and often edible) props, such as raisins and M&Ms, as well as everyday analogies, like birthdates, physical attributes, and favorite pets, Jacobs teaches her students concepts such as estimating, probability, averages, and medians, and how to create a graph or a bar chart from collected data. And she likes to enlighten them on what their actual prospects are in games of chance, such as the lottery. Some of Jacobs' favorite classroom moments came in 2000 and 2010, i.e. census years, when she taught the children why census figures were important, and how the U.S. compared to the rest of the world.

Jacobs has also served on ReSET's Board of Directors since its inception. The Board sets ReSET strategy, priorities, and policies, and guides program implementation and financial decisions. This year Jacobs is serving on ReSET's 25<sup>th</sup> Anniversary Committee, which is making plans for the celebratory event in March.

When asked if she had any advice to share with new volunteers, Jacobs said: "Make sure you go to a school to observe a classroom session, and confer often with your partnering teacher. You really want the full cooperation of the teacher. The sessions go so much better when the teacher just doesn't sit there but actively engages with the class, assisting with explanations and interjecting with 'remember when we discussed so and so?' Try not to get too complicated in your experiments and always explain the relevance of what you are doing. How is this stuff going to help them or change the world? It's important to show students why it's important to them and the world around them. It's not just about what they learn, but how this learning will further develop them as people."

Jacobs has worked with numerous schools in the DC area over the years, including Shepherd, Ross, John Eaton, Bunker Hill, and three charter schools—Central City, Washington Latin, and Shaw Center City. She plans to continue volunteering as long as she can drive a car or get to a school by metro.

One of Jacobs' most memorable ReSET experiences is the day she was shopping at a local mall and a little boy ran up to her and asked if he could introduce her to his mother. When his mother came over, the boy said, "Mom, this is the lady who taught me math with M&Ms!" Jacobs was thrilled that her creative experiment on probability had made such a lasting impression.

#### **Kristen Taylor, General Science**

Volunteer since 2012 (aged 17)

"I didn't expect the students to be so welcoming. They were really eager to participate. I felt very loved and supported."

Never let it be said that this 17-year-old is simply coasting until graduation. The only thing Kristen Taylor is waiting to find out is what college she'll be attending next fall. In the meantime, she's not sitting still.

A senior at Robert E. Lee High School in Springfield, VA, Taylor has a lot on her plate besides schoolwork. She volunteers once a week at Columbia Elementary School in Annandale, VA, where she teaches Kindergarten through second grade students. Unlike other ReSET volunteers at Columbia, Taylor works in the School Age Child Care (SACC) program, an extended day program offered in Fairfax County elementary schools. Although Taylor hardly needs to find more things to do with her free time, she had been looking for volunteer work and was attracted to ReSET because of its science and math emphasis.



Kristen Taylor, a Senior at Robert E. Lee High School, is **ReSET's youngest volunteer.** 

Taylor plans to go into a pre-med program in Biology/Chemistry. She developed an interest in STEM (Science-Technology-Engineering-Math) subjects around her freshman or sophomore year and found that she also excelled in them academically. Her sophomore year chemistry teacher was particularly inspiring. "He was such a good teacher," shared Taylor. "It could have been so much more difficult, but he broke the information down and simplified it in ways that made it accessible and easy." With several uncles who are doctors, a father who is a chemist, a brother who is in a pharmacy program, and an older sister in medical school, Taylor's love of science clearly "runs in the family."

As a ReSET volunteer, Taylor teaches a variety of general science topics: animal biology, chemistry, pH measurement, animal classification, and the movement of molecules in different foods when heated or cooled. Taylor uses her former chemistry teacher as a role model when she is in class: "I try to simplify the information to make it understandable and fun. I want to show the students that science is not something to be scared of, and is often about unexpected moments."

She laughed when recalling a recent experiment where the children were using litmus papers to test the pH concentrations in liquids classified as bases and acids. For example, lime juice turned the strip green, indicating it was an acid, and water had a pH of 7, indicating it was neutral. The test strips kept turning a pale green color because some of the children accidentally mixed the lime juice in with the water. Taylor turned their innocent mistakes into a fun learning moment.

Taylor also volunteers in the Cardiology/Radiology unit at Georgetown University Hospital. She tends to patients—answering call bells, preparing medical charts, and performing other administrative functions. She also serves as an editor for the National High School Journal of Science and enjoys playing the violin.

#### **ReSET Volunteers Reflect a Rich Diversity of STEM Fields**

- Aerospace Engineering
- Biology/Conservation Biology/Microbiology
- Biomedical Engineering
  Chemical Engineering/Chemistry
- Civil Engineering
- Computer Science
- Cytogenetics
- Earth Science
- Electrical Engineering/Electronics
- Energy Science
- Environmental Science
- Forensic Anthropology

- Geology
- Imaging Science
- Materials and Energy Science
- Mathematics
- Mechanical Engineering
- Medical Physiology
- Neuroscience
- Optics
- Physics
- Statistics
- Systems Engineering
- Urban Design



Mike Fitzmaurice with his class on the football field at Waugh Elementary School after they finished building a model of the solar system.

#### Students Compete to Get Into This NASA Scientist's Class

#### Michael W. Fitzmaurice

Volunteer since 2008

"The opportunity to show children just a few of the disciplines and career paths that are available to them is one of the most fulfilling things I have ever done."

The credentials and career experiences of ReSET's volunteers are truly impressive. How many students can say they got the chance to hang out with a NASA scientist who puts real things into space? Well, with Mike Fitzmaurice, they get to do just that.

Fitzmaurice, who has a Ph.D. in Electrical Engineering from the University of Maryland, is currently serving as a consultant to NASA on the development of the James Webb Space Telescope (the successor to the Hubble Space Telescope), and is also consulting on the development of a laser communication system, which will be put into orbit around the moon in 2013.

After Executive Director John Meagher gave a talk about ReSET at Goddard Space Flight Center, Fitzmaurice got interested. Now in his fifth year for ReSET, he volunteers in Mrs. Maine's 5<sup>th</sup>-grade class at Waugh Chapel Elementary in Odenton, Maryland. Fitzmaurice wanted to work there because it was the school his grandchildren attended, and he did eventually have one granddaughter as a student, who talks about it often. Although he felt some trepidation about whether he could sustain the interest of a group of 10-year-olds for an hour and also worried that he wouldn't be able to answer all of their questions in a way they could understand, Fitzmaurice has settled in quite nicely and has learned a lot over the years. "Expect to get questions which range from completely off topic to others that are quite thoughtful," says Fitzmaurice. "The children are excited to have the 'science guy' come to their class, and they will ask a lot of questions if you encourage them."

Fitzmaurice is particularly pleased to show the children some of the exciting things they might get to do as scientists and the career paths that are available to them. He is amused that he became an electrical engineer, as initially he was quite turned off by the subject: "I recall being completely mystified by the basic concepts of electricity. I decided during my first year of college that the one type of engineering I needed to stay away from was electrical. I chuckle now when I realize that eight years later I got my Ph.D. in Electrical Engineering. I guess the moral to that story is that once the fog lifts on a particular subject, you may find it very interesting and exciting."

Executive Director John Meagher describes Fitzmaurice as a "model volunteer." The teachers at Waugh would certainly agree. Mrs. Maine shares: "Dr. Fitzmaurice motivated students to be very inquisitive about science . . . they were fascinated and often asked to work through lunch/recess. That doesn't happen normally and is a strong indicator that they were highly engaged in the lesson and experiments."

In fact, Fitzmaurice's class is so popular that the students have to actually "compete" to be in it. There are 75 students in the 5<sup>th</sup> grade, but only 25 students can be in Fitzmaurice's science class. When the teachers asked the children who would like to be in his class, almost everybody wanted in. So the teachers decided to require the children to write a short essay on why they wanted to be in the class; they then reviewed the essays and picked the students based on that. Fitzmaurice is very gratified to see that level of interest in students.

An avid reader, Fitzmaurice consumes a wide variety of books on medicine, religion, and history. He also enjoys fishing, baseball and football.

#### Antonio Jenkins Gets a 'Charge' Out of His Students

#### Antonio ("AJ") Jenkins

Volunteer since 2012

"It makes me happy to see them smile . . . they brighten my day."

Antonio Jenkins talks a lot about things that give off light and heat. But if there was ever an example of "radiant energy," it is the smile that spreads over his face when a student experiences a "lightbulb" moment.

Currently a Biology major at Northern Virginia Community College, the 22-year-old has plans to transfer to the University of Florida or the University of Miami in fall 2013 to pursue a pre-med degree. A part-time product advisor at the Microsoft store in Pentagon City, Jenkins first heard about ReSET through Microsoft's Community Development Specialist, LaSone Barber.



Antonio Jenkins reconnects with his former 5<sup>th</sup>-grade teacher, Ms. Laura Steib, at Columbia Elementary School in Annandale, VA.

In September, ReSET formed a partnership with Microsoft, using the store venue for field trips and promotional events. Microsoft also provides teams of volunteers to several of ReSET's partnering schools. When Jenkins learned that one of those schools was Columbia Elementary in Annandale, VA, he leapt at the chance. He had attended Columbia 13 years ago when he was in 5<sup>th</sup> grade and lived across the street from the school. He was eager to give back to his alma mater and to reconnect with his former teacher, Laura Steib, who inspired him to pursue a science career.

Ms. Steib realized early on that the 10-year-old AJ was a very tactile person. She gave him the opportunity to do a lot of hands-on projects with batteries, prisms, earth science, etc. Although it was a while ago, she remembers AJ as a passionate and compassionate person. "These are qualities that make great doctors," says Steib. "AJ also had the curiosity to find out why things happen . . . a great quality for a scientist. As a 5<sup>th</sup>-grade teacher, I plant seeds. But I don't usually get to the see the flowers bloom. I was excited to discover I had made a difference in the choices AJ is making in his life. This is why I decided to be a teacher. AJ reminds me I made the right choice."

Jenkins is working with Ms. Steib's colleague, Ms. Bizer, who also teaches 5<sup>th</sup> grade. Ms. Bizer asked that the Microsoft team, which includes Jenkins' two colleagues—Ray Collins and Femi Odumodu—to provide a refresher course for her students, reviewing the science concepts they covered in 4<sup>th</sup> grade. So Jenkins spent his first few sessions posing questions about insulators and conductors, light waves and sound waves, closed and open circuits, and what causes static electricity. Jenkins is heard to frequently exclaim, "Oh, you make me so happy," when a student gets the right answer, and he clearly enjoyed teasing the class with a "surprise" he would be sharing with them the following week (the class was going to build their own robot).

Jenkins is quick to point out that he volunteers because he loves it: "Nobody required me to do this volunteer work at my job. I did this by choice." Volunteering for ReSET has also validated another choice—his career path: "I've learned I still have a passion for children and a passion for science that has never died. Teaching is difficult, but it is very rewarding to see the students progress and pass with flying colors."

In addition to ReSET, Jenkins gives back to the community in many other ways, volunteering at the Lorton Community Action Center, Habitat for Humanity, and Knights of Columbus holiday food drives. He also enjoys football and choreographing hip hop and ballroom dance routines.

## **ReSET Volunteers**

Lee Abramson Robert D. Adams Sarah Al-Hashimi Thomas R. Artman Leakhena Au Mahveen Azam **Chervl Banks Greg Baranco** Carin Bisland **Bob Blumberg** Anne-Marie Boehler Ibrahim Bori Justin Bova Matthew L. Brooks Ken Brown **Casey Bryant** Anna Stuart Burnett Shail Butani Keegan Caldwell Lisa Caputo Diana J. Cheng Tamim Chouwdhurv **Danielle Clerkley** Jim Cline **Ray Collins** Thomas Dickey **Tonia Dollinger Elizabeth Dougherty** Barbara Elkus John Emler Margaret Enloe Katherine Falev Michael W. Fitzmaurice Mike Fritz Larry Galka Sonia L. Gay William L. Gill Michael Goldstein Roberta Goren Yara J. Green **Gregory Gurvich** Arthur O. Hall Lennie Harrington **Bob Hauptman** Antony Hodge Jeff Hess **Eva Jacobs** Nithva Janakiraman Antonio Jenkins Matt Johnston Anya Jones **Evelyn Karson** Victoria Kilbert

Kristy Kilgallen Ed Kim Soo Kim Alexandra Kralick John Kuriawa Bill Lake Miranda Lambourne Aimee Lee Gilbert Lee Stephen Leete Chervl Leonard Annie Levitt John M. Lindlof Katherine Lontok Juvena Loo **Channing Mahttan** Joseph Mait Panan Mamillapalli Hannah Martin Halley Massey Sonva Mazumdar Melissa McCartney David McInnis Rodecia McKnight John Meagher Pete C. Mehravari Jesse Moll John Mortell Linh Nguyen Mai Nguyen Nacrisha Norman Jorge Nunez Meghan O'Donoghue Femi Odumodu Kojo Opaku Zachary Pape William B. Partridge Bharat Patel Mariana Pavon **Dennis Pedder** Tammy Pham George S. Pick Philip Posner **Diane Post** Ramva Prakahasam Alka Prasad Amanda Pruzinsky Christvann R. Pulliam Abhi Rao Abhisek Rao **Rich Repplier** Mario Riojas Edward Rock

#### **ReSET Volunteers, cont.**

C. Ortiz Rodriguez Felton Rogers Lloyd Samples Kevin Schabow Harold Sharlin Avigavil Shudofsky Kavel Singh Rebecca Slomski Sarah Staton Justin Stefanon Martin Stein **Bob Stern** Wayne Sukow Jeff Sweeney Lauren Taneyhill Asmamaw Tarko Kristen Taylor **Bradley Teets** Nicolas Terzian **Stephen Tongelidis** John Troung Jenny Tsao Marsha M. Tsay Juan Valentin Luan Van Jithesh Veetil

Kimbleann Verdi John Walsh Howard Westmoreland Bob Williams Pamela Wise-Martinez Grant Withers Beverly Yett S. Scott Young Man Hua Zhu

#### **New Volunteer Recruits:**

Harvey Abelson Chief Buamah Shu Hui Chen Navid Eghterafi Anna Greenwald Dinari Harris Katherine Lontok Ajay Mallia Tucker Maney Ellene Mashalidis Eleonora Passeri Lea Rubin Claire Weichselbaum Stanley Wolf

#### **Interested in Supporting ReSET?**

Make a difference in a young student's science education:

- Classroom experiment supplies for one school year—\$100
- Museum or Lab Field Trip for 50 students—\$1,000
- New partnership with school or learning center—\$5,000

Please mail your donation to:

ReSET P.O. Box 9400 Washington, DC 20016-9400

Or donate online at: www.resetonline.org



## **New Initiatives**

#### **ReSET Teams Up**

In 2012, ReSET formed a partnership with the DC chapter of the Association for Women in Science (AWIS), a professional membership organization that advocates for the interests of women in science and technology. Melissa McCartney, who takes over as DC chapter president in 2013, reached out to the chapter's 150 members primarily through announcements on AWIS's various listserves. Two other members—a physicist and a virologist—joined neuroscientist McCartney as volunteers in the fall term. AWIS volunteers go to an elementary school as a team and teach a variety of subjects based on teacher preferences.



AWIS Chapter Officers and ReSET volunteers, from left: Soo Kim, Alka Prasad and Melissa McCartney.

ReSET has reached out to form collaborative relationships with other STEM professional organizations, and has successfully recruited

volunteers from the American Chemical Society, the Society of Women Engineers, the Optical Society of America, the American Institute of Aeronautics and Astronautics, the American Statistical Association, and George Mason University. New alliances are being formed with the National Society of Black Engineers (NSBE) and a sister organization, LEGACY, Inc.



ReSET volunteer Abhi Rao assists a Microsoft store visitor with a battery experiment.

#### Microsoft's Community Partnership Program

Last summer ReSET met with LaSone Barber, Microsoft's Community Development Specialist, at the new retail store in Crystal City, Virginia. Microsoft was starting a community partnership program, which allows area nonprofits and other community organizations to partner with Microsoft to promote community awareness.

In addition to the important visibility that the Microsoft name offers to area nonprofits, the company provides free theater space in one of their stores to hold meetings and educational events, and also provides teams of volunteers to work at ReSET schools (Microsoft employees are encouraged to volunteer in the communities where their stores are located). Partnering organizations also have the opportunity to receive \$1,200 of Microsoft software. In October, ReSET held its first community awareness event at the Microsoft store in Pentagon City.

## **ReSET Student Assessment Results**

To measure ReSET's effectiveness in achieving its goal of sparking children's enthusiasm for science, ReSET surveys its students on their attitude towards science learning. The survey instrument uses questions developed by the National Center for Education Statistics (NCES) in preparing "The Nation's Report Card." Using these metrics, ReSET is able to compare the responses of students in our programs with those of fourth grade students nationwide who completed the NCES assessment.

ReSET received 310 responses to the Student Assessment Questionnaire in school year 2011–2012. Responses to three questions that most directly correlate with ReSET's goal showed the positive impact that ReSET volunteers have on students. Nationally, 67% of students agree with the statement "I like science," whereas 85% of ReSET students agree. In the Nation's Report Card, 15% of students agree with the statement "Science is boring;" fewer than one-third that number (4.8%) of ReSET students agree with that statement.

Fewer ReSET students (11%) agree with the statement "If I had a choice I would not study any more science in school" than the nationwide sample of students (17%). When asked if they enjoyed the ReSET classes, 92% of students responded positively.

The chart below shows negative views students have about science, aggregating the results of more than 1,000 ReSET students surveyed between 2010 and 2012.



#### % of Students with Negative Views of Science

## **Income and Expense Report**

#### FOR THE YEAR ENDED AUGUST 31, 2012

#### **ReSET FY 2012 INCOME**

Foundations	103,000.00
Corporations	10,000.00
Interest Income	48.61
Individual Contributions	801.70
United Way/ Combined Federal Campaign	1,041.32
TOTAL INCOME	114,891.63

#### **ReSET FY 2012 EXPENSES**

Salaries	78,129.76
Payroll Taxes	8,415.58
Fringe Benefits	0.00
Consultants and Professional Fees	13,386.67
Training	567.03
Travel	463.30
Equipment	3,480.09
Supplies	583.66
Printing and Copying	3,580.07
Telephone and Fax	0.00
Postage and Delivery	780.64
Rent and Utilities	0.00
Maintenance	0.00
Technology	550.37
Evaluation	0.00
In-kind Expenses	1,453.66
Buses for field trips	2,578.69
Professional Liability Insurance	738.57
Advertising	300.00
Other	113.02
TOTAL EXPENSES	115,121.11
CHANGE IN NET ASSETS	-229.48

## **ReSET Data Trends**

ReSET annually tabulates data on the number of students reached, volunteers, classroom programs, and schools. In recent years ReSET has benefitted from a large increase in the number of volunteers and the growing level of interest in its programs by Washington, DC area schools.

Over the last five years ReSET has doubled the number of students that have experienced our hands-on science programs (see chart below).



ReSET has also had a significant increase in the number of DC-area schools in which it is active. In school year 2007-08, ReSET had programs in DC and Montgomery County, Maryland. Since then, new partnerships have been established with schools in Fairfax, Alexandria, and Arlington (in Virginia), and in Prince George's and Anne Arundel (in Maryland). ReSET has also extended its offerings to after-school programs and Pre-Kindergarten programs. In 2012, new ReSET partners were Amidon Extended Day (DC), Langley (DC), Ludlow Taylor (DC), Georgian Forest (Montgomery), Ross (DC), High Bridge (Prince George's), Barnard (DC), Takoma (DC), Watkins (DC), Catherine Reed (Prince George's), Graham Road (Fairfax), the Smithsonian Library (DC) and the DC Public Library.

ReSET's growth has been enabled by a large increase in its number of active volunteers, particularly among working professionals, recent graduates, and science and engineering students. In addition, there has been an expansion in the number of retired scientists and engineers who are volunteering. Many volunteers have been recruited through partnerships with federal agencies (Patent and Trade Office, Environmental Protection Agency, Fish and Wildlife Service, and National Oceanic and Atmospheric Administration) and professional societies (The Association for Women in Science, The Society of Hispanic Professional Engineers, The National Society of Black Engineers, The Asian Pacific American Network, The American Statistical Association, and The American Institute of Astronautics and Aeronautics).

#### The chart below illustrates the growth trend in the number of ReSET volunteers.



Number of ReSET Volunteers

#### The table below shows all ReSET program data tracked for the last 10 years.

School Year	Number of Students	Number of Volunteers	Number of Schools	Number of Class- room Programs
2002-03	528	11	4	22
2003-04	576	12	5	24
2004-05	616	14	5	28
2005-06	660	15	5	30
2006-07	704	15	7	32
2007-08	792	15	8	36
2008-09	748	16	13	34
2009-10	1320	33	25	68
2010-2011	1676	61	28	86
2011-2012	1813	74	30	86

## The Schools We Serve

ReSET is very proud of the schools and child development centers with which we partner:

- Amidon Elementary After School Program, SW DC
- Annapolis Elementary, Anne Arundel County, MD
- Barnard Elementary School, Washington DC
- Bren Marr SACC, Alexandria, VA
- Burroughs Elementary, NW DC
- CentroNia Pre-K Center I, NW DC
- CentroNia Pre-K Center II, NW DC
- Columbia Elementary, Annandale, VA
- Columbia Elementary After School Program, Annandale, VA
- East Silver Spring Elementary, Montgomery County, MD
- Eaton Elementary, NW DC
- E.L. Haynes Public Charter School, NW DC
- Friendship Heights Public Library, NW DC
- Georgian Forest Elementary, Silver Spring, MD
- Greenbrier Learning Center, Arlington, VA
- High Bridge Elementary, Prince George's County, MD
- Jackson Road Elementary, Montgomery Co., MD
- Key Elementary, Arlington, VA
- Kipp Academy, DC
- Langdon Educational Campus, NE DC
- Langley Educational Campus, NE DC
- Laurel Ridge Elementary, Fairfax, VA
- Ludlow-Taylor Elementary, NE DC
- Malcolm X Elementary, SE DC
- Mattaponi Elementary, Upper Marlboro, MD
- North Chevy Chase Elementary, Chevy Chase, MD
- Patterson Elementary, SE DC
- Catherine T. Reed Elementary, Lanham, MD
- Shepherd Elementary, NW DC
- Smithsonian Museum, Anacostia
- Takoma Education Campus, NW DC
- Wakefield Forest Elementary, Fairfax Co., VA
- Watkins Elementary School, SE DC
- Waugh Chapel Elementary, Anne Arundel Co., MD
- Whittier Educational Campus, NW DC



Key Elementary School, one of the more than 30 schools ReSET currently serves.

## **Board of Directors**

#### • James Cline (retiring from the Board)

*Physics, and active volunteer* 11110 Lamplighter Lane Potomac MD 20854

#### • Eva E. Jacobs

Statistics, and active volunteer 4629 North Park Ave. #1140E Chevy Chase, MD 20815

#### • John W. Meagher

*Executive Director* 10866 Hampton Road Fairfax Station, VA 22039

#### • Lewis J. Mendelson

*International Capital Market Consultant* 5320 Tuscarawas Road Bethesda, MD 20816

#### • John L. Newby II Attorney, BAE Systems, Inc. 1102 Wilson Boulevard Arlington, VA

#### • Harold I. Sharlin

Board Chair and CEO Number 511 4201 Butterworth Place, NW Washington, DC 20016

#### **New Board Member**

**Timothy Leonard** Teacher, Shepherd Elementary School 7247 Hylton Street Capitol Heights, MD 20743



Tim has been one of ReSET's partner teachers for 12 years. He still remembers the first volunteer he worked with—Dr. Nancy Grace Roman—who will speak at ReSET's 25th anniversary event on March 6, 2013.

"I was very excited to have been invited to be a part of such an esteemed Board of scientists, mathematicians, and lawyers. The enjoyment of watching the eyes of children widen when something on the inside clicks, and their knowledge is being enhanced because of science and math, is more than enough reason to be a member of this Board. Being an educator, it is my hope to increase the communication among the ReSET program parents, community, and the District of Columbia Public School system."—**Tim Leonard** 

## The Funders Who Make ReSET Possible

ReSET is very grateful for the financial support that makes it possible to reach and inspire so many young and eager students:

Foundations & Corporations

- The Armed Forces Communications and Electronics Association
- The Morris and Gwendolyn Cafritz Foundation
- The Clark-Winchcole Foundation
- Combined Federal Campaign Donors
- The Commonweal Foundation
- The Community Foundation of Northern Virginia
- The Dimick Foundation
- The Max and Victoria Dreyfus Foundation, Inc.
- The Bella S. and Benjamin H. Garb Foundation
- The Richard E. and Nancy P. Marriott Foundation
- Motorola Foundation
- The Luther I. Replogle Foundation
- The Harriet M. Strong Foundation
- United Way of the National Capital Area
- US Airways
- The Webber Family Foundation

#### Individual Donors

- Judy and Jack Hadley
- Marilyn Tipton Keyes and Steven J. Keyes
- Matthew Korn and Cynthia Miller Family Foundation
- Florence K. Myer
- Don Rea
- Barbara and Gary Roberts

# *"We congratulate ReSET on 25 successful years, and look forward to seeing the organization continue to evolve and contribute importantly to our community."*

-The Morris and Gwendolyn Cafritz Foundation

## **ReSET Staff & Special Contributors**

## Staff

- Dr. Harold I. Sharlin, Chief Executive Officer harold.sharlin@verizon.net
- John W. Meagher, Executive Director reset@resetonline.org
- Roberta S. Goren, Volunteer Coordinator rsgoren@verizon.net

Contractors

• Lyndi Schrecengost, Communications & Funding lyndi@fluentwriters.com • www.fluentwriters.com

## **Special Contributors**

#### • LaSone Barber

Serves as liaison between ReSET and the Microsoft Store in The Fashion Centre at Pentagon City, Virginia. LaSone reached out to ReSET in her position as Community Development Specialist for the recently opened store. In this new partnership, Microsoft recruits store technical staff to serve as ReSET classroom volunteers and ReSET uses the store facility for field trips and community outreach events.

#### • John Gaffigan

Volunteers as the liaison between ReSET and AFCEA Energy, where he serves as the Vice President for Education. He helps ReSET with volunteer recruiting and developing new partnerships with federal agencies and elementary schools, and providing funding for science equipment for ReSET teachers.

#### • David Meagher

Volunteers as ReSET's Information Technology Specialist. He does coding, formatting and troubleshooting for www.resetonline.org, the ReSET blog, and accounts on Twitter, Facebook and YouTube. Dave works at Octo Consulting Group in Tyson's Corner, VA.

"Thanks to your efforts more than 10,000 students have had deep learning experiences with professionals from a wide variety of scientific disciplines. We hope that our partnership will continue for many years to come . . ."

-Kaya Henderson, Chancellor of DC Public Schools

## **Testimonials from ReSET Principals, Teachers, and Students**



"I learned many things about science and it sounds like a fun job. Thank you, Dr. Scientist!"

-Jenna, North Chevy Chase Elementary

"It was very interactive and students were excited in every exploration . . . The students did not want the experiments to end."—**Ms. Ibe, Teacher, Whittier Educational Campus** 

"We have LOVED having Pamela come and do experiments with my class. She has been magnificent . . . This whole program has been great and my students look forward to the next time Pam is coming. Thank you so much for giving us the opportunity to expose our students to outside professionals who use their skills in their daily lives."—Ann Mudd, Teacher, Mattaponi Elementary

"I sat in on the session with Dianne Post and was amazed with the level of thinking and engagement the students had in the concept of 'waves'! It was exceptional!"—**Michael Cunningham, Principal,** Columbia Elementary School Principal

"Students loved the experiments so much that I had parents contacting me about Ms. Yett's wonderful program . . . Keep up the great job! You would make a wonderful teacher!"—**Ms. Nancy Ulba, Teacher, Shepherd Elementary School** 

"The volunteer brought such interesting and exciting experiments and activities...He allowed the students to make predictions and consider variables that might change the outcome. He also explained that science doesn't always turn out as we expect. These are priceless details about science that are not always noted, and perfect for a second grader to learn."—**Ms. Molly Moran, Teacher, Annapolis Elementary** 

*"I love science, and this class made it so I could do EXTRA science. There were so many cool things that I learned."*—Alex, 5<sup>th</sup> grader, Waugh Chapel Elementary

"Mr. John's and Mr. Kevin's love and enthusiasm for science was contagious. The students were captured in learning . . . I feel like I learned a great deal from our volunteers."—**Mrs. Greilsheimer, Teacher, Annapolis Elementary School** 

"Students were very excited and they were engaged in all of the scientist's demonstrations . . . The series was effective in that it stimulated a greater interest and excitement in the subject of science." **-Ms. French, Teacher, Center City Public Charter School** 

"Thank you so much for volunteering your time to work with our students and giving them an opportunity to learn science through hands-on lessons. Your expertise was amazing and the students loved having you in their classroom."—**Susan Myers, Principal, Annapolis Elementary School** 

## The Morris and Gwendolyn Cafritz Foundation Recognizes ReSET's Long History of Service to the DC Area

ReSET asked our longest continuing funder—The Morris and Gwendolyn Cafritz Foundation—to comment on ReSET's 25-year history as a successful DC nonprofit:

#### Why has the Foundation remained so committed to ReSET over its 25-year history?

The Morris and Gwendolyn Cafritz Foundation has awarded ReSET 13 grants totaling \$400,000 since 1999. The Board and staff understand the growing need for such educational programs and have always been impressed with the dedication of ReSET's volunteers, the breadth of topics covered, and the enthusiasm the youth display during the sessions.

#### How does an organization like ReSET fit with the Foundation's overall mission?

The Foundation is committed to improving the lives of residents of the greater Washington area. ReSET's long-standing focus on supplementing science, technology, engineering and math education for children in local schools is a wonderful example. Allowing students to do hands-on experiments where they can test hypotheses, make mistakes and work towards a solution under the guidance of experienced professionals is an amazing opportunity. Hearing about the academic and professional paths of volunteers also lets students learn about career opportunities they may never have imagined.

## What do you think are some of the opportunities and challenges organizations like ReSET face in the next 25 years?

As policymakers and school districts try to expand STEM education, ReSET seems perfectly positioned to work with school districts to achieve that goal. ReSET has been shown to make students more comfortable with, and interested in, STEM education.

## The Foundation has not only provided financial support, but also invests its time and expertise advising ReSET on issues of governance of non-profit organizations. Why do you consider that an important part of the Foundation's mission?

The Foundation has watched ReSET grow from a small nonprofit with a handful of volunteers and a few partner institutions into an organization with scores of well-trained volunteers and formal agreements with dozens of schools across the region. The funding base has become more diverse, the age range of students has expanded significantly and evaluation mechanisms have been put in place to garner feedback from children, volunteers and host teachers. Being able to support ReSET's evolution has been an honor and pleasure.



#### **Mark Your Calendars!**

#### **ReSET's 25th Anniversary Celebration**

March 6th, 2013, 5:00–7:00 pm At the Hart Senate Office Building (9th Floor/SH-902) Location: Constitution Avenue and 2nd Street, NE • Metro Stop: Union Station

Featuring Guest Speakers: Dr. Anthony Fauci, NIH Director of the National Institute of Allergy and Infectious Diseases, and Dr. Nancy Grace Roman, Pioneering Astronomer.



"This was my first time working with ReSET, and it was an amazing experience. If I could, I would use ReSET scientists for all of my classrooms (K–5) all year long."

-Amanda Oberski, Teacher

P.O. Box 9400 Washington, DC 20016-9400 www.resetonline.org

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