

## Director's Digressions

By Sheryl Burgstahler

Sixty *DO-IT Scholars* and *Ambassadors* recently participated in activities of the annual *DO-IT Scholars* Summer Study program in July. Throughout Summer Study this year, these participants, who are high school and college students with disabilities across Washington State, their advocates, and DO-IT staff celebrated DO-IT's 20th anniversary. This program has helped launch the careers of hundreds of students with a wide range of disabilities.

In addition to running the summer program, the DO-IT Center offers other activities for high school and college students with disabilities; gives presentations for faculty to learn how to teach students who have

## Think it. Dream it. **DO-IT!**



Celebrating 20 years promoting the success of people with disabilities in education and careers

disabilities; helps webmasters and technology companies make their products more accessible to individuals with disabilities; and otherwise promotes the full inclusion of individuals with disabilities in education, employment, and community involvement. "I think we're making a dent in making the world a little more accessible," said DO-IT Director and Founder Sheryl Burgstahler, an affiliate professor in the UW's College of Education.

Check out the latest version of *DO-IT Snapshots* to read the bios of *DO-IT Scholars* (participants who are still in high school) and *DO-IT Ambassadors* (participants in college and careers) at [www.uw.edu/doi/Snapshots](http://www.uw.edu/doi/Snapshots). And, consider celebrating DO-IT's 20th anniversary by contributing to the program using the form on page 13.

### Highlights of this issue:

Goodbye, Matthew.....	2
What Do the Phase I <i>Scholars</i> Do? .....	2
What Do the Phase II <i>Scholars</i> Do? .....	5
<i>Ambassador</i> Profile: Sean Marihugh .....	6
Scholarship Scams and Tips.....	6
Finding a Hidden Intruder on your Computer .....	9
The Thread: Preparing for College.....	10
The Browser: Calendar of Events.....	12

To reduce printing costs and yet still share exciting news from DO-IT, an expanded version of DO-IT News is online at [www.uw.edu/doi/Newsletters/Nov12/](http://www.uw.edu/doi/Newsletters/Nov12/).

## Goodbye, Matthew

By Sheryl Burgstahler



Matthew Porter, '95 *Scholar* and *DO-IT Ambassador*, passed away this spring. When Matthew first joined DO-IT he said his passion was computers; this remained true in all of his academic, employment, and recreational activities.

After graduating from high school, Matthew went on to pursue an education in IT at the University of Washington (UW). He also worked in the UW's Adaptive Technology Lab, helping other students with disabilities access technology.

Matthew valued his participation in DO-IT. After his death his father shared with DO-IT Director Sheryl Burgstahler, "your program opened the door and showed him that he could attend college...he was always proud of having attended the UW. Thanks again."

Matthew was awarded the Seattle Youth Hall of Fame in 1996 and the Pemco Scholarship. Matthew will be forever missed by his DO-IT family.

### Summer Study: What Do Phase I Scholars Do?

DO-IT Phase I *Scholars* participate in a two-week, live-in Summer Study session on the UW Seattle campus. They learn about college life; explore the Internet; interact with peers, staff, and mentors; and have fun. The *DO-IT Scholars* program started in 1993 as an experimental project for teens with disabilities nationwide. It is currently open to Washington State teens and is supported by the State of Washington, the Boeing Company, the Microsoft Corporation, and the National Oceanic and Atmospheric Administration.

## Accessibility In Review

By Mikayla and Jessica, *Phase I Scholars*

There are many different ways that programs and buildings can be accessible to people. At Summer Study, we learned how people with disabilities are affected when a place is not accessible to its visitors or a program is not accessible to its participants. We evaluated the accessibility of several buildings and programs.

To start, we evaluated the University of Washington, Seattle campus. Although it has ramps and elevators, it also has large hills. Some ramps are placed in very inconvenient places that take a very long time to get up and down. By the time a person in a wheelchair finally gets up the ramp they may already be separated from the group that was able to walk up the stairs.

The second problem we found was at the planetarium. Visitors who were deaf or blind were at a great loss without interpreters or audio description. People who are deaf could either look at the interpreter to understand what was being said or they could look at the screen and miss the explanation. Those who are blind could only hear what was going on because there was no description for them on what the images looked like. [See the complete article in the expanded version of DO-IT News at [www.uw.edu/doi/Newsletters/Nov12/](http://www.uw.edu/doi/Newsletters/Nov12/).]

## Outdoors for All

By Allison and Jennifer, *Phase I Scholars*

Summer Study participants are introduced to lots of different types of technology. One night we learned about many different types of accessible bikes. One bike was operated using accessible bikes. One bike was operated using hand steering, where you pedal with your hands instead of your feet. Another bike was a two-person tricycle with a backrest that was operated by your feet instead of your arms.

Jennifer used the hand-driven bike because she has cerebral palsy and cannot use her legs to pedal a standard bike. It took some getting used to the hand driven bike, but in time it became very easy to ride. This was her first time riding a bike and it was a wonderful experience.

Allison rode the tricycle. She liked that the bike had a backrest—the tricycle that she owns does not and she found the backrest much more comfortable. The tricycle was also adjustable in almost every way. The seats could shift forward or backward and the handles could move up or down. All around, it was just nice to be able to bike comfortably and safely next to her able-bodied personal care assistant, Taylor.

We were very pleased and impressed by the number of accessible bikes that were available.



*Phase I Scholars Lucas, Hannah, Kim, and Eric rode adapted bikes during the Outdoors-For-All experience.*

### **IMAX Accessibility**

By Aaliyah and Alicia, *Phase I Scholars*

Our experience at the IMAX Theater was great and interesting! We saw *Mummies: Secrets of the Pharaohs*. We were seated early, which was great for the people in wheelchairs. Also, *Scholars* who are deaf received the movie script ahead of time, which was helpful because we knew what the movie was going to be about. However, the theater was so dark that the script was unreadable during movie.

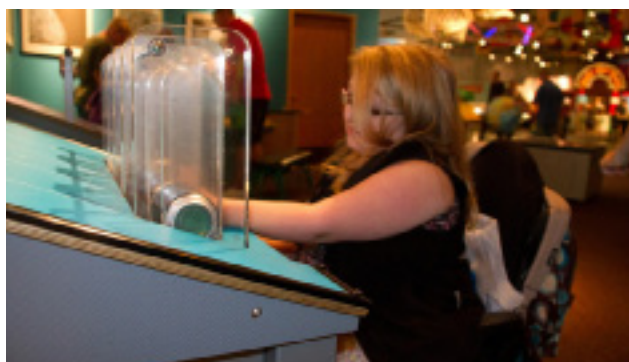
Captions would have been helpful, whether it be captioning glasses or open captioning on the screen.

The visual aspects of the IMAX movie were awesome! Because of the great visuals, *Scholars* who are hearing impaired were able to understand what was going on by the actions of the characters in the movie. The sound was also awesome because we could feel the vibrations. This made the movie fun! The movie engaged our curiosity but it was too short, we wanted to know more about the subject. We were glad to have this experience so a big thank you to DO-IT and everyone involved in making the IMAX movie happen.

### **Pacific Science Center**

By Peter and Nolan, *Phase I Scholars*

On Saturday morning, the DO-IT crew went to the Pacific Science Center. We started our visit with the dinosaur exhibit, which was very accessible. We moved towards the butterfly exhibit, also very accessible. Unlike the dinosaur exhibit, this exhibit was very warm. We ate turkey sandwiches for lunch while protecting ourselves from curious birds. We watched an IMAX movie that did not have captions. After exploring the fantastic Science Center some more, we watched a laser show featuring Michael Jackson. It was an excellent laser show, although we wish that the lyrics of the songs were laser-lit. This day was definitely an excellent, inspirational experience.



*Phase I Scholar Dominique operates some of the tools at the Pacific Science Center.*

## A Trip to Microsoft

By Eric, Colton, and Cody, *Phase I Scholars*

The trip to Microsoft was an exciting hands-on experience. We had the opportunity to work in the role of a product manager and plan out a new playful pet. Learning about the ways that Microsoft accommodates people with disabilities was one of the most important things to us. We appreciated that anyone, even a person with a disability, could have a hands-on experience with something special that would be shipped off to the customer.

Some of the new technology we saw at Microsoft was very cool. It was a good behind-the-scenes look at how the employees of Microsoft are working to make technology accessible for people with disabilities. [See the complete article in the expanded version of DO-IT News at [www.uw.edu/doit/Newsletters/Nov12/](http://www.uw.edu/doit/Newsletters/Nov12/).]



*Phase I Scholar Colton explores a tablet at Microsoft.*

## Investigative Interviews

By Grace and Hannah, *Phase I Scholars*

As *Phase I Scholars*, we learned about all different types of disabilities during our week at Summer Study.

After interviewing fellow *Scholar* Peter, we found out he has autism. He was diagnosed when he was two and a half years old. He

has worked with a therapist. One of his accommodations is he is able to have extended time on his tests at school.

Alicia, another *Phase I Scholar*, was diagnosed as deaf when she was only one year old. She uses an interpreter and has notes provided by the teachers at school. Alicia also wears not one, but two cochlear implants. A cochlear implant is a surgical device implanted in the cochlear to help people hear better. She found out about the DO-IT program through her older sister, Erika, a *Phase II Scholar*.

We also interviewed *Phase II Scholar* Kaylie, who is also deaf. She learned how to prepare for college and the future from DO-IT. She really enjoyed being a *Phase II Scholar* because of the many interactive hands-on activities

### Summer Study: What Do Phase II Scholars Do?

*Phase II Scholars* return to the UW Seattle campus for their second Summer Study. They meet the *Phase I Scholars*, learn about college life and career preparation, and participate in a one-week workshop

## Phase II Workshops

By the 2012 *DO-IT Interns*

This summer three *Phase II* workshops were held 9 am-noon, Monday through Friday. All of the participants presented their findings at DO-IT Closing Ceremonies.

*Scholars* Jae, Macy, Sean, and Joshua participated in Disability and the Media led by Reel Grrls staff member Monica Olsson and supported by two *DO-IT Interns* Rosa and Russell. Held at Reel Grrls Studio in Seattle, participants learned the technology of production while beginning to focus on how individuals with disabilities are portrayed by today's media. The *Scholars* split into two groups to create video blogs. One blog focused

on ‘ableism’ and the other used humor to get their perspective across on how to interact with people with disabilities. These videos are located at: [vimeo.com/46775630](https://vimeo.com/46775630) and [vimeo.com/46775629](https://vimeo.com/46775629)

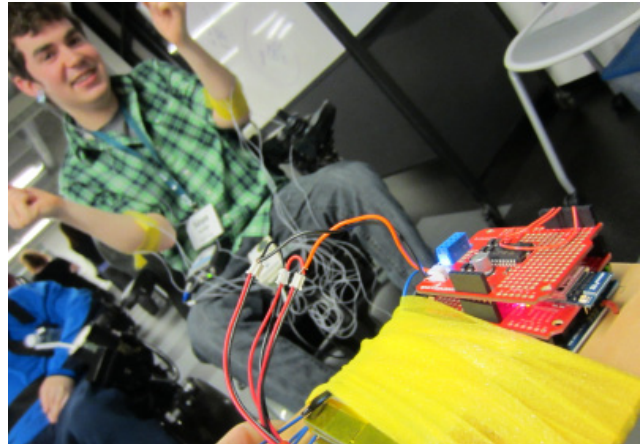
Neurobiology: Bugs, Mice and Brains! was conducted in the UW’s neurobiology labs and was led by Dr. Martha Bosma, associate professor of biology. *Scholars* Kaylie, Deicy, Mauricio, and Vaughn investigated how nerves respond during their interactions. They recorded action potentials with cockroach legs and spontaneous activity with the embryonic mouse hindbrains. The experiments conducted in real labs were led by two graduate students Hiro and Julia and were supported by *DO-IT Interns* Tatusuro and Maximo.

The National Oceanic and Atmospheric Administration (NOAA) workshop, Responding to Natural Disasters, coordinated and led by Julie Peddy and Dr. Stephanie Moore, took place both on and off campus. NOAA scientists led presentations and experiments related to earthquakes, tsunamis, hurricanes, floods, oil spills, and global warming on the UW campus. Also, *Scholars* visited the Sandpoint NOAA labs in Seattle where they viewed the actual workspaces and equipment used by scientists to monitor the weather and environment. *Scholars* Cecily, Kim, Paige, and Diego were supported by *DO-IT Interns* Benjy, Niki, and Chris.



*Phase II Scholar Macy films during a Reel Grrls class.*

## **Ambassador Profile: Sean Marihugh**



*Ambassador Sean Marihugh controls an electronic car at the Sensorimotor Neural Engineering pizza party.*

I’m Sean Marihugh, and I’m a *DO-IT Ambassador*. I was a *Scholar* in 2009, and have stayed active in the *DO-IT* community. Following my second Summer Study, I began my studies at the University of Washington, Seattle campus. Though I was initially interested in the computer science program, my focus shifted from computer programming to studying the interactions between users and technology. In order to stay true to my interests, I decided to pursue a bachelor’s degree in psychology. I am currently a junior, and I am very excited to finish my formal education and enter the workplace!

I have Becker muscular dystrophy and use a power wheelchair to travel long distances, such as at work and on campus. Had I not been involved in the *DO-IT* program, I would not be where I am today. Prior to Summer Study, I planned on going to a small private university, since I felt my mobility impairment would limit me. After Phase I of Summer Study, I realized campus size should not be a deterrent. So, I decided to attend a very large campus, and I have been pleased with this choice and the opportunities it has provided. [See the complete article in the expanded version of *DO-IT News* at [www.uw.edu/doi/Newsletters/Nov12/](http://www.uw.edu/doi/Newsletters/Nov12/).]



*Director Sheryl Burgstahler and Director of DO-IT Japan Takeo Kondo (to left and back of Sheryl) engage with DO-IT participants in Japan after Sheryl's talk at Fujitsu*

## DO-IT and Japan

by Sheryl Burgstahler, DO-IT Director

What a trip! It is hard to know where to start in sharing with you my trip to Japan earlier in October, 2012. I was invited by our DO-IT Japan partners (yes, there is a DO-IT Japan program patterned after ours, [seedoit-japan.org](http://seedoit-japan.org)). Dr. Takeo Kondo, a Tokyo University faculty member who, along with his family, spent a year (2010-2011) as a Visiting Scholar in the DO-IT program in Seattle, was my primary guide and even coordinated some sight seeing.

I gave a talk about access technology, universal design, and transition issues at the headquarters of DO-IT Japan's primary sponsor, Fujitsu, in Tokyo. Then I met with leaders of Fujitsu to learn more about their work and to share ideas regarding how more individuals with disabilities can be involved in the design and development of their products—by the way, Fujitsu is the third largest IT company in the world. I was joined by the DO-IT leader and Tokyo University professor Dr. Kenryu Nakamura. After that meeting I spent time engaging with DO-IT Japan Scholars. Takuya, a '93 DO-IT Scholar from the US that returned to Japan after attending the UW, is part of the group in a mentoring role. It was fun to see him.

After engaging with Fujitsu I had a chance to visit KidZania, a place for children to explore different careers in a Disneyland-type atmosphere. All of the buildings and places of “employment” are 2/3 the size so the children feel right at home. DO-IT Japan hosted an area for students with disabilities to test new software and is working with KidZania to make some of their interactive exhibits more accessible to students with disabilities. [See the complete article in the expanded version of DO-IT News at [www.uw.edu/doi/Newsletters/Nov12/](http://www.uw.edu/doi/Newsletters/Nov12/).]

## Scholarship Scams and Tips

By Sam Lim, Founder of Scholarship Junkies



*Scholarship Junkies gives a presentation to the Scholars on how to find the best scholarships and how to avoid scams.*

When Scholarship Junkies visited DO-IT during Summer Study 2012, the topic of scholarship scams came up in our discussion of all things scholarships. What a great topic to discuss!

With so many students, parents, and families searching for scholarships, there are inevitably a small handful of people who want to exploit their needs by stealing personal information and money. It's important to understand how to identify “scholarship opportunities” that might actually be scams. [See the complete article in the expanded version of DO-IT News at [www.uw.edu/doi/Newsletters/Nov12/](http://www.uw.edu/doi/Newsletters/Nov12/).]

## Finding a Hidden Intruder On Your Hard Drive

By Doug Hayman, DO-IT Staff

In recent years, *DO-IT Scholars* have brought in computers exhibiting strange symptoms. When we used traditional tools to scan for virus or malware infection, only a few minor issues were found and removed, but the issues were not resolved and the odd computer behavior persisted.

What we found lurking in the computers were root kit intrusions, which are a collection of programs that break through vulnerabilities in your computer's hard drive. A root kit intrusion creates a directory that is hidden from the view of the user and the operating system. Inside is the harmful payload that can be triggered to open and load into memory when the computer boots up, leaving the computer process to run amok again and again despite the best efforts to clean the system. [See the complete article in the expanded version of DO-IT News at [www.uw.edu/doit/Newsletters/Nov12/](http://www.uw.edu/doit/Newsletters/Nov12/).]

## The Thread: Preparing For College

by Sheryl Burgstahler

I wanted to share with you a question posed by a *DO-IT Ambassador* in our Internet discussion forum and some of the responses so that you can get the flavor of the many rich conversations the DO-IT community has online. Some forum posts are edited for clarity and brevity.

**One aspect of having a disability and going to college I hadn't thought about was the massive amount of work and organizing that needs to get done before you actually go to college. So far I've spent heaps of time working with counselors, checking class waitlists, organizing my dorm situation, and ensuring I get the accommodations I need from the disability office. If I could do this whole process**

**again, I would have started preparing as early as possible, because towards the end of the summer a lot of the resources are already taken and university staff get busy and have less time to help you.**

**DO-IT Ambassador:** *I think what you are saying is really true. There is a lot of work and organizing before you go to college, and there is also a lot of ongoing work after you get there just to keep receiving the same services. Sometimes it feels like starting over again every quarter. It can seem like the paperwork and meetings and information sessions never end. For me this is stressful. I have some tips, though.* [See the complete article in the expanded version of DO-IT News at [www.uw.edu/doit/Newsletters/Nov12/](http://www.uw.edu/doit/Newsletters/Nov12/).]



*Phase I Scholar Cody works on a project in class on the University of Washington campus.*

## The Browser: Calendar of Events

For a schedule of conferences, visit  
[www.uw.edu/doit/  
Newsletters/calendar.html](http://www.uw.edu/doit/Newsletters/calendar.html)

For further information, to request this newsletter in an alternate format, or submit the Support DO-IT form, contact DO-IT at: [doit@uw.edu](mailto:doit@uw.edu)  
<http://www.uw.edu/doit/>  
206-685-DOIT (3648) (voice/TTY)  
888-972-DOIT (3648) (toll free voice/TTY)  
206-221-4171 (FAX)

**SUPPORT DO-IT: How Can You DO-IT?**

- Sign me up to receive free copies of DO-IT NEWS.
- Send information about DO-IT volunteer opportunities.
- I will make a donation to support DO-IT activities.
  - I have enclosed a check for \$ \_\_\_\_\_ for unrestricted use by DO-IT.
  - Please charge \$ \_\_\_\_\_ to my credit card.
- VISA  Mastercard Number \_\_\_\_\_ Expiration Date \_\_\_\_\_

Card Holder Name \_\_\_\_\_

Signature \_\_\_\_\_

Street Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone: Home/Cell \_\_\_\_\_ Business \_\_\_\_\_

Email Address \_\_\_\_\_

*Your gift is tax-deductible as specified in IRS regulations. Pursuant to RCW 19.09, the University of Washington is registered as a charitable organization with the Secretary of State, State of Washington. For more information, call the Office of the Secretary of State, 1-800-332-4483.*

**Donor Levels**

\_\_\_\_\_ \$1,000 DO-IT Platinum

\_\_\_\_\_ \$500 DO-IT Gold

\_\_\_\_\_ \$100 DO-IT Silver



**DO-IT**

**DO-IT**  
University of Washington  
Box 354842  
Seattle, WA 98195-4842