



**July 9-August 10, 2018 • Monday through Friday, 10am-3:30pm (30 min lunch)**

Open Works' mission is to **make tools, technology and the knowledge to use them accessible to everyone.**

This commitment extends to our educational programming as well. You have been chosen for your excitement, talent, and demonstration of commitment to learning and making, so we are so excited to have you participate in our Teen Maker Program through YouthWorks.

## Your Instructors



**Program Director & Facilitator**  
Theresa "Nacho" Montiel

- BFA in Painting and Drawing
- Associates degree in Digital Arts
- 15 years experience as a Graphic designer and Art Director
- MICA Graduate Student in Community Arts
- Artist in Residence at **Open Works**



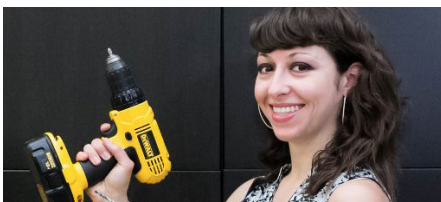
**Intern Facilitator**  
Toby Harris

- Summer intern with Open Works
- B.A. in Public Health, graduating December 2018



**Textiles & Sewing Construction**  
Sharmane Herron

- Tailor and fashion designer with 40 years of experience in the garment industry
- Technician and instructor at **Open Works**



**Electronics**  
Jen Schachter

- Frontierwoman of the growing "Maker Movement"
- **Robert W. Deutsch Foundation** Fellow + MICA graduate
- Has worked with Make: *Magazine*, *Tested.com*, *Made In Baltimore*, *Nation of Makers*, and **OpenWorks**.



**Laser Cutting & CNC**  
Alisa Brock

- Owner of the Drama MaMa Bookshop
- Published Author and Playwright
- Coppin State University, Urban Arts Production 2005-2009
- Laser Cutting Instructor at **Open Works**



**Woodworking**  
Laurence Moore

- Owner of Heavy Paper LLC
- University at Buffalo, 2005
- *Station North Tool Library* and **OpenWorks** Technician and instructor.



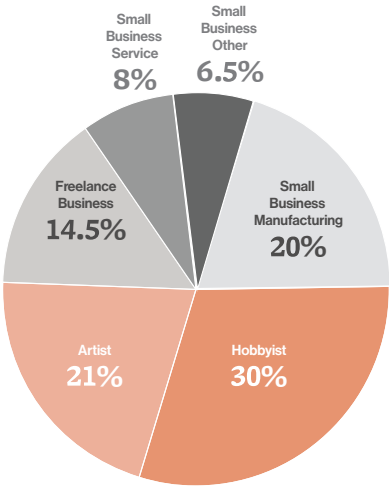
## What is Open Works?

**Open Works** provides access to one of the largest maker-focused work spaces and one of the first makerspaces in an urban environment, right here in Baltimore. This city is full of artists, hackers, micro-manufacturers, inventors, students, teachers, entrepreneurs, and builders and **Open Works** offers a special place where these creatives, makers, and dreamers come together to bring their ideas to life.

At Open Works, you'll get access to nearly a million dollars' worth of state-of-the-art equipment to accelerate your business and/or creative ideas -- making these **tools, technology and the knowledge to use them accessible to everyone**. So because our motto is about "everyone," we do not promote or discriminate against any person, population group, or organization. These include, but are not limited to, race, color, religion, sex, gender expression, physical appearance, language, education background, national origin, age, disability, and veteran status. **Open Works** holds its members, teachers, contractors, visitors, partners, and STUDENTS to the same standard.

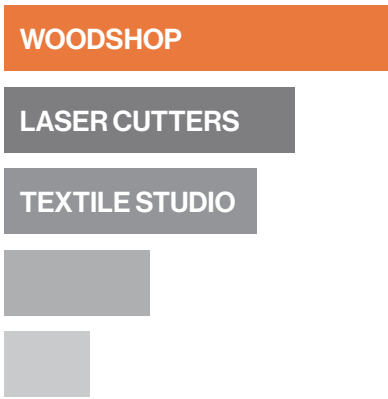
## Who is at Open Works?

One of the things we believe is that a makerspace is more a **mindset** than a specific place. **Open Works** has a wonderful tapestry of people of all different types, and simply purchasing a bunch of materials, tools, and equipment would not make a **Open Works** a makerspace. In order for a makerspace to be effective and grow, we have to create an environment (and a mindset) that fosters learning, creativity, **and inclusivity**. Here is just a few details of the people who are contributing to that mindset:



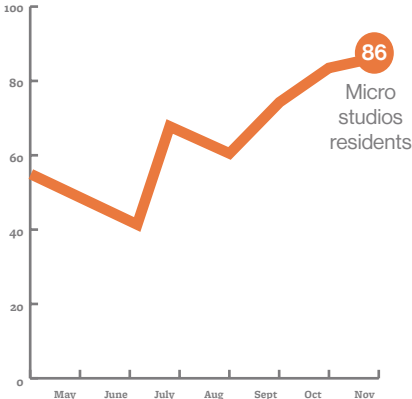
### We all help make it Work

About half of our members identify as an artist and /or hobbyist, while 49% of our members are using the space for a business in some kind... and we are looking to grow our ENTREPRENEUR roster while also with growing the small business that are already housed here.



### What wood you make?

There are 8 wonderful studios, but it seems the top three studios for the current makers are Woods, Lasers, and Textiles. Why is that? Do you have a different interest? What are you most excited to make?



### Micro can be huge

Many of our members even house their businesses here. One micro-studio is only 7x7, but in a community full of like-minded makers which makes collaboration and cross training and education really easy -- you are now apart of this collaborative community.

## What can you learn at **Open Works**?

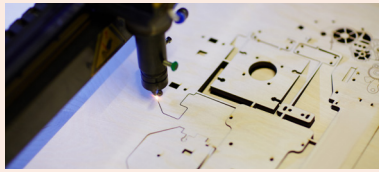
**Open Works** is 34,000 square feet of studios that include....

### Teen Maker YouthWorks Summer Program



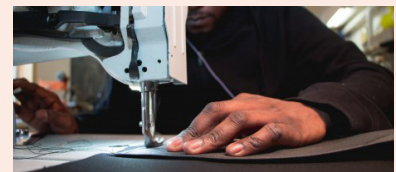
#### Computers

We have 16 Dell Precision workstations and X Mac Desktops with...SolidWorks, AutoCAD product suite, Sketchup Pro, Rhino, Adobe Suite, 3D Studio Max, and Microsoft Office.



#### Lasercutting

Advanced large-format machines that can cut through plywood, plastic, and soft metals with hair-splitting accuracy.



#### Sewing/Textiles

Our cut-and-sew studio is ideal for bags, clothes, even soft sculpture. Industrial sewing machines can handle anything from muslin to denim, and a computerized embroidery machine can output intricate custom designs.



#### Wood

Covering how each machine can help you prepare wood for your projects and which order of operations will give you the best results. These tools are key for resurfacing and dimensioning rough sawn and reclaimed lumber into flat, smooth, and usable pieces.



#### Electronics

Our electronics shop is the perfect place to build robots, flexible circuits, Arduino projects, or repair broken appliances.

#### other studios you can come back for

#### Metal

Metal fabrication is the building of metal structures by cutting, bending, and assembling processes creating machines, parts, and structures from various raw materials.



#### 3D Printing

In an additive process an object is created by laying down successive layers of material until the object is created. Each of these layers can be seen as a thinly sliced horizontal cross-section of the eventual object.



## What are WE going to learn **Teen Maker YouthWorks Programming**?

**Open Works** Teen Maker Program is focused in skill acquisition that will prepare you for both a collegiate or work force future through experience and/or certification in the Open Works studios and classrooms.

#### Real World Job Skills, including

- Team Building
- Product Prototyping
- Public Speaking
- Marketing Skills
- Resume Writing

#### Open Works Studios

- Digital Arts and Programs
- Laser Cutting
- Woodworking
- Electronics
- Sewing and Textiles

#### Making a Maker *in a Makerspace*

- Learning by doing/creating
- Growing to be comfortable with failing/failure
- Opportunity to progress
- Sharing your creation/new knowledge with other
- **Growing the community of makers**

Certifications can be earned for each studio with 20 hours of INCIDENT FREE logged studio time. **How do you log your time?** You will be logging your attendance and studio time at the front desk via your MindBody account that you created during orientation. So make it a priority to check in with the front desk each day before class so that you can log your hours. On top of Open Works' **Safety Regulations**, we will be concepting a **Code of Conduct** as a cohort that we will all agree to, both set of rules need to be abided by to stay "incident free."

## By the end of the YouthWorks

You will have experience/gain...

- Up to 80 hours in four Open Works studios
- Networking opportunities with Open Works makers
- Presentation and public speaking
- Team building with fellow team makers
- Expanded your knowledge and vocabulary in “making,” entrepreneurship, and professionalism
- Completed projects + certifications in sewing, electronics, woodshop, + laser cutting

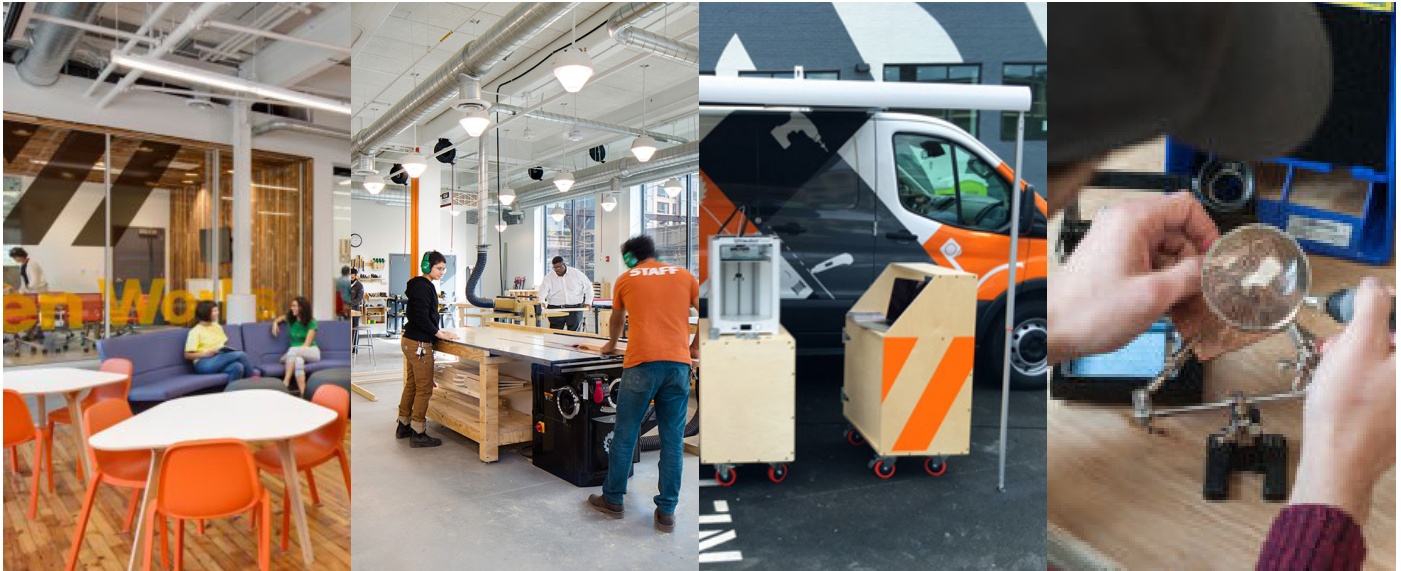
## Maker Vocabulary & Values

- **Making** - learning by doing or creating
- **Maker** - someone who creates and shares
- **Makerspace** - a place to design and create
- **Maker Movement** - growing community of makers, often centered around new technologies
- **Exploration** - Participants are encouraged to explore materials, technology tools and equipment, and new methods of problem solving through their projects/work
- **Collaboration** - Makerspaces are a place to share tools, share space, share ideas, and share expertise - allow opportunities to do those things
- **Core Values of a Makerspace**  
Makerspace(s) allow people...
  - » freedom to experiment
  - » to feel comfortable with failing
  - » the opportunity to progress and iterate
- **What is the Purpose of a Makerspace?**
  - » offer inspiration
  - » provide shared access to supplies and equipment
  - » are cooperative / collaborative
  - » Teach skill(s) that improve/ grow businesses
- **Teen Maker (YouthWorkers) Ownership**
  - » Ownership of learning
  - » Ownership of the product / project
  - » All participants should be able to describe their project in detail and what they learned in the process
- **Also remember to bring...**
  - » Perseverance
  - » Grit / Determination
  - » Comfort with the Unknown
  - » Creativity
  - » Productivity



## PROGRAMMING SCHEDULE

		TRACK A	TRACK B
WEEK 1	M	Laser Cutting	Electronics
	T		
	W		
	TH		
		CRITIQUE: Teen Maker Project Presentations	
WEEK 2	M	Sewing	Woodshop
	T		
	W		
	TH		
		CRITIQUE: Teen Maker Project Presentations	
WEEK 3	M	Woodshop	Laser Cutting
	T		
	W		
	TH		
		CRITIQUE: Teen Maker Project Presentations	
WEEK 4	M	Electronics	Sewing
	T		
	W		
	TH		
		CRITIQUE: Teen Maker Project Presentations	
WEEK 5	M	Professional Development + Entrepreneurship	
	T		
	W		
	TH		
	F		
		CRITIQUE: Teen Maker Project Presentations	

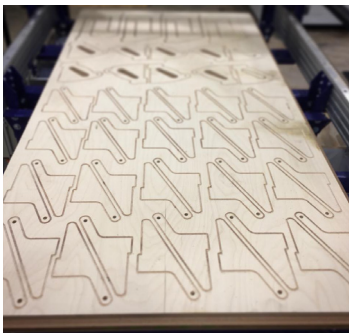


## YouthWorkers - diverse, but similar

### We are Baltimoreans

Baltimore is home to 620,000 people across a city that is about 16 miles long and 10 miles wide -- that encompasses close to 300 different neighborhoods.

Open Works joins a thriving DIY and maker community that include a dozen other maker-spaces around the city. But Open Works is different as it also one of the largest independent non-profit spaces in the U.S...and being apart of TMEP we get to count YOU as amongst this continually growing collective.



### We're in the same place

This entire cohort are all teenagers -- we all are dealing with rapid mental and physical development, along with the transition to being an adult and all the skill acquisition that comes with that...so even though you may be from different places, go to different schools, or be graduating at different times, you are all growing together.



### We are all Makers

We recruited you from many different organizations, schools, and communities...but we are all MAKING in the same CHARMING city, Baltimore. So don't let what high school or part of town you live in limit your ability to MAKING a new friend.



### We all have culture

We all identify with a race, a country, a culture and we all need to recognize, respect, and even stay open minded to what that means -- it is different for each individual. WE have to MAKE makers spaces SAFE spaces for everyone.



# Teen Maker Values

- **Stay yourself**- we need your unique creativity
- **Be mature** - You are in an adult space, and I will treat you like adults. If you have questions if something is appropriate as an instructor or Miss Nacho before you say or do. **Golden Rule applies.**
- **Respect eachother's interest(s)**- we all like different things, and we may all not know or like it, but we need to stay respectful and stay positive.
- **Respect eachother's personal/project space** - if you would like to offer a high five or a to see a project up close, ask the person and wait for confirmation if they are ok with the physical touch or if it is ok to pick up.
- **Empower eachother** - Stay positive while encouraging eachother.
- **Offer Compliment Sandwiches** - If you have a critique, ask the person if they would like feedback first: *"I have a critique about your project, would you like to hear it?"*  
  
*If they accept,* offer a "compliment sandwich" -- something "I like \_\_\_ about it, but" ...the thing you see that needs improved upon/you have concerns about, then a positive thing you see they learned or achieved.
- **Stay curious** - Even if you think you know something really well, stay curious about what you can learn from this programming and/or the current instructor(s).
- **Collaborate** - Makerspaces are a place to share tools, share space, share ideas, and share expertise - allow opportunities to do all these things -- TOGETHER!
- **Follow the safety rules set by the studio**- Safety information will be gone over in each studio, along with handouts for you to refer back to.
- **Have fun**- learning + making should be fun!
- **You are YouthWorkers and we...**
  - » persevere and try hard
  - » are creative and unique
  - » empower others and lead by example
  - » **ARE Makers!**

## Things that can affect your certifications/job

- **Tardiness/Absences** - Open Works opens at 9am, programming starts at 10am. Feel free to arrive early to unpack, decompress, or preprepare for your workday. If you are not on time and/or are absent for certification and safety day instruction(s) days, you will not be allowed into the studio for the rest of that section, and may be released from your YouthWorks position.
- **Excessive disruptions** - if you are interrupting a lot of or distracting others during instruction, you are not listening. If you are not listening you may be missing important and valuable safety information (same goes for cell phone use). Both could result in dismissal for the day, the section, or the YouthWorks program.
- **Appropriate Clothing** - Make sure to bring clothes or dress on programming days in clothes that are acceptable for that shop. No open toed shoes, loose/hanging clothing, & long hair needs to be tied back.
- **No food or drink in the studio** - Do not bring your snacks or drinks into the working studios, eating is restricted to the lobby or classroom.
- **Disrespect for machines or staff** - Both REQUIRE your attention and focus.
- **Damage to machines or projects** - Again, both REQUIRE respect and be handled respectfully. If either Open Works or a fellow Teen Maker project or property is damaged or stolen, you may not receive your certification or could be released from the program. **ZERO TOLERANCE** on personal violence.
- **Immaturity and/or disrespect** - This goes for machines, instructors, and your fellow Teen Makers. **Empowerment and respect is required by all**, if not received, we can refuse your certifications and/or remove you from the program.



# We are TRACK A/TRACK B

I have read, understand and agree to abide by the rules that are stated in the Teen Maker Values and also agree to abide by the safety standards for all Open Works Studios. I understand if I do not comply with these rules I may be asked to leave the studio for the day /duration of the program. I will also be a good community maker, keeping myself and outther accountable while at Open Works.

---

Aaliyah Braswell

---

Cheraye Brown

---

Jarmaine Childs

---

David Crosby, Jr.

---

Keontay Evans

---

Kendra Glenn

---

Meko Jenkins

---

Emani Johnson

---

Zachariah Thomas

---

Rasun Torbit

---

Jonathan Tshibangu

---

Tysheria Williams



Theresa "Nacho" Montiel



Toby Harris