

Building Minnesota's STEM Talent Pipeline Since 2012

The SciTech Internship Program
connects college STEM majors - our state's
future problem solvers - with valuable on-the-job
learning opportunities in small, for-profit Minnesota
companies. Funding provided by the Minnesota state
legislature provides a fifty percent wage reimbursement of
up to \$2,500 that helps companies boost their productivity
and invest in their talent pipeline.

SciTech internships provide students with high quality hands-on opportunities to apply their classroom knowledge to real business challenges. Each position provides top-notch work experience for the student while also helping small businesses develop their incoming workforce.

Must be a current college student; at least 18; a Minnesota resident or attend college in-state; have a GPA of at least 2.5; half way through a STEM degree; and eligible to work off campus in the U.S.

Must be a small, for-profit company with a physical presence in Minnesota; fewer than 250 employees worldwide; in a qualifying industry (see the full list on page 4); and offer a paid STEM internship.



### **PROGRAM IMPACT: Students • Employers • Our Minnesota**

79%
of INTERNS STAYED
in MINNESOTA
AFTER GRADUATING
for at least 2 years

97%
of INTERNS STAYED
IN STEM FIELDS
for at least 2 years
after graduating

47%
of interns were
WOMEN and
STUDENTS OF COLOR
in the 2022PY

580

SMALL COMPANIES
IN 145 CITIES
STATEWIDE
have hired interns since 2012

SciTech was launched in 2012 to build and retain Minnesota's STEM workforce. After 10 years of success, the numbers speak for themselves!Ninety-seven percent of SciTech interns work in STEM fields after graduation,

thus building our state's STEM workforce. Studies show that, even when students graduate with a STEM degree, they often do not continue in STEM careers. Minnesota has also been able to retain nearly 80 percent of SciTech interns after graduation, thereby slowing the "brain drain" of talent leaving the state. These statistics have remained stable since the first cohorts of SciTech interns graduated from college and started working. This is great news, because studies show that by 2029, the U.S. economy will need to fill 10.7 million jobs in STEM. To remain competitive in the state's top industry sectors, Minnesota needs its STEM workforce to be robust.

### See what interns and employers say about the impact of the SciTech Program on YouTube



Wes Baish, 2012 Intern Hunt Utilities Group



**Tatem Rios**, 2018 & 2020 Intern Innovative Surface Technologies



Kent Patterson, COO KAMP Automation, Waseca



Randy Gatzke, CFO Laser Peripherals, Plymouth

### **Focused on Inclusive Recruiting**

SciTech conducts extensive outreach to Minnesota's STEM students, particularly to women and students of color. In addition to attending dozens of career fairs, SciTech engages with more than 20 student groups, prioritizing those that support students underrepresented in STEM fields. SciTech also partnered with the North Star STEM Alliance to host three QuikSkills workshops to help students gain the confidence and skills they need to succeed in the job search process.





# **2022PY SNAPSHOT Student Applicants**

1,545 STUDENTS PARTICIPATED

were students underrepresented in STEM in 2022

(women and students of color)

Applicants by Ethnicity: 47% BIPOC, 53% White

Applicants by Gender: 30% Women, 69% Men, <1% Non-Binary

Applicants by Student's Permanent Residence:

42% Suburbs, 23% Greater MN, 23% Mpls/St. Paul, 12% Out of State

**Applicants by College System:** 

40% UMN, 34% Mn State, 16% Private, 9% Out of State, <1% Other



The team at Miromatrix is on a mission to eliminate the organ transplant waiting list by bioengineering transplantable human livers and kidneys. The simplified version of their remarkable process involves removing the animal cells from a pig organ and then replacing them with human cells. Once the original cells are flushed out, the tissue structure remains and new, compatible human cells can take their place. The bioengineered organs are then cultured in a bioreactor for 2-4 weeks, at which point the organs are ready to test or implant.

Miromatrix' process is an efficient way to address the unmet need of thousands of patients across the country who need a transplant. The company is currently working to advance their bioengineered organs to clinical trials.

This was Miromatrix's first year hiring interns through SciTech. "It's really great for us, just having one portal where we can get so many wonderful applicants. It's a nice way to connect with local students," agreed Emily Beck, Senior Manager of Kidney R&D.

This past summer, they hired Aubrey Chavarria, Kathryn Jans and Christian Labrador. Chavarria, a biochemistry and health science major at Hamline University, came across the opportunity on SciTech and was intrigued by the regenerative process. With her father on a waitlist for a kidney transplant, she felt particularly close to the cause.

As an R&D intern, Chavarria worked with the analytical team, testing cell functions, going over data and sometimes working in the lab gathering samples.

Jans is studying biomedical engineering at the University of Minnesota and put her skills to use working with the cell development team. Using stains and markers, she studied and characterized different cell types, taking and developing the photos herself using the company's fluorescent microscope in the dark room.

Read the rest of the story on the **SciTech bloq**.

"I've told so many people on campus about SciTech. It's a really helpful program for getting college students in the actual STEM workforce."

— Kathryn Jans, Miromatrix Intern

# **2022PY SNAPSHOT Employer Applicants**

271 EMPLOYERS PARTICIPATED

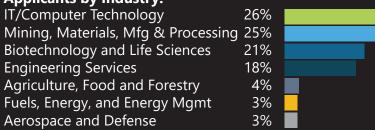
was the median size of employer applicants
based on worldwide employee count

73% of applicants had fewer than 50 employees worldwide

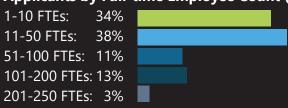
#### **Applicants by Geographic Location:**

23% Greater Minnesota, 34% Minneapolis/St. Paul, 43% Suburbs,

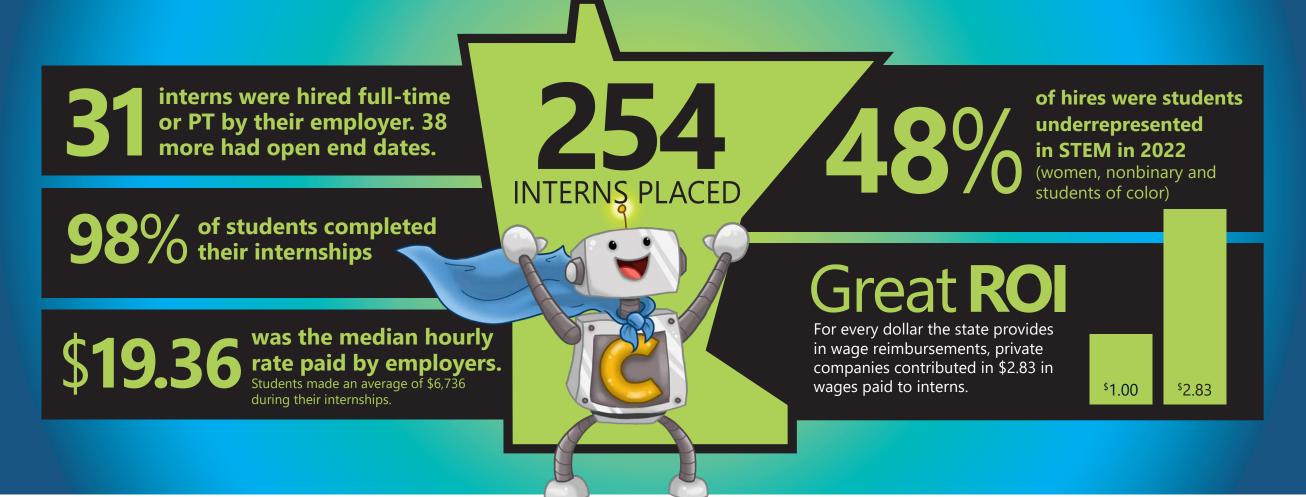
#### **Applicants by Industry:**



#### **Applicants by Full-time Employee Count (FTEs):**



## **2022 Program Year Placement Highlights**



Cities hosting one or more internship:

Angora Anoka Arden Hills Bemidji Blaine Bloomington Blue Earth Brandon Brooklyn Center Burnsville Chanhassen Clearwater

Corcoran Crookston Dassel Duluth Eagan Eden Prairie Edina Litchfield
Farmington Little Canada
Golden Valley Mahtomedi
Hopkins Mankato
Isanti Maple Grove
Lewiston Minneapolis

eld Minnetonka
Canada Monticello
Dimedi New Brighton
Dato Northfield
Dakdale
Dapolis Pequot Lakes

Perham Pine River Plymouth Rochester Roseville Sauk Rapids Savage Shoreview St. Cloud St. Louis Park St. Paul Victoria Waite Park Waseca West St. Paul White Bear Lake Winona Woodbury

### **2022PY SNAPSHOT Interns Hired**

Hires by Gender:

Men 74%

Women 26%

Nonbinary < 1%

Hires by Ethnicity: BIPOC 33%

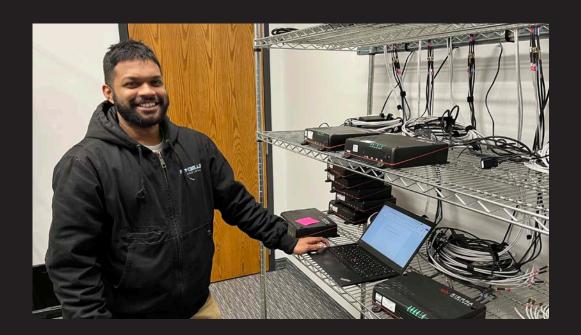
White 67%

### **Hires by Intern's Permanent Residence:**

36% Suburbs, 31% Greater MN, 22% Mpls/St. Paul, 11% Out of State

### Hires by College System:

46% UMN, 26% Mn State, 16% Private, 12% Out of State Colleges





sess whether they were a match for a long-term position with the company. We plan to send full time job offers to our latest two interns." — Vincent Truong, Anatomic Inc







# 2022PY SNAPSHOT Hiring Employers

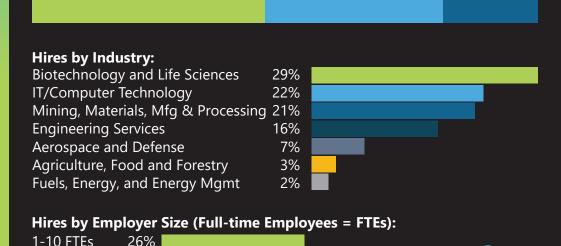
### **Hires by Geographic Location of Employer:**

11-50 FTEs

51-100 FTEs 16% 101-200 FTEs 14% 201-250 FTEs 2%

43%

46% Suburbs, 35% Minneapolis/St. Paul, 19% Greater Minnesota



"As a graduate of two SciTech internships myself, I have had an extremely positive experience...it was great to directly reach out to employers because it cuts through the computerized sorting that is often found in large companies. On the other side of the table now at Hed Cycling, I appreciate the same aspects of the program more so. It was considerably easier to interview candidates given they had expressed genuine interest by reaching out to us, and the process was extremely streamlined. We had an amazing summer intern this year."

— Sam Somrock, Hed Cycling

## **Hiring Companies**

CITY	COMPANY	CITY	COMPANY	CITY	COMPANY
Angora	Art Unlimited	Eden Prairie	Miromatrix Medical	Minneapolis	Invenshure
Anoka	Meier Tool & Engineering		Nuwellis, Inc.	•	Lynn Langit Consulting LLC
	SarTec Corporation		Third Wave Systems	•	Marrow Access Technologies
Arden Hills	CAERUS Corp	Edina	IrriGreen, Inc.		NCXT
	Cryosa LLC		MEI Research, Ltd.		New Wave Design and Verification
	Superior Managed IT Services, LLC	Farmington	Aerospace Fabrication & Materials LLC	•	NorthStar Elastomers
	TruNorth Solar	Golden Valley	Chromatic 3D Materials Inc.	•	Packet Power
Bemidji	Aircorps Aviation	Hopkins	Berd Spokes	•	Premier Biotech Labs, LLC
•	Karvakko, P.A.	Isanti	Ever Cat Fuels, LLC	•	Primal Health, LLC
Blaine	In Control, Inc.	Lewiston	PlastiCert, Inc.		Procellis Technology Inc.
Bloomington	2040 Energy	Litchfield	PNE Inc dba IRD Glass		Punch Through Design LLC
•	FMS Corporation	Little Canada	Escape Climbing	•	Railbox Consulting
	Solution Builders, Inc.	Mahtomedi	TLC Electronics, Inc.	•	Rani Engineering
	ZKarlo, Inc.	Mankato	Northflow Solutions	•	Respiratory Sciences Inc.
Blue Earth	Midwest IT Systems, Inc.	Maple Grove	Aspen Research Corporation	•	SIFT
Brandon	Voyager Industries, Inc.		MicroOptx		Software for Good, GBC
Brooklyn Center	Get Bizzy Inc.		VirtusAero LLC	•	Technologist Computers
	Trusted Semiconductor Solutions :	Minneapolis	7 Generation Games	•	TLC Millimeterwave Products Inc.
Burnsville	Celadon Systems		Absolute Quality Manufacturing Inc.	•	Virutech Systems, Inc.
	MHC Software		Adventium Labs		Wanner Engineering
	Omcare, Inc.		Alliant Engineering, Inc.	Minnetonka	Advisory Aerospace OSC
	Stonebrooke Engineering		Ambient Intelligence Incorporated	•	Atirix Medical Systems
Chanhassen	Agnitron Technology		Anatomic Incorporated	•	Engineered Products Company
Clearwater	T.O. Plastics		Atlas Manufacturing	•	Evolve Additive Solutions
Corcoran	FerskTech		BlueSky Designs	•	Intellect Earth
Crookston	Widseth Smith Nolting, & Assoc., Inc.		C70 Builders, Inc.		KLH Inc.
Dassel	Spectralytics		CNA Engineers	•	Monteris Medical
Duluth	American Precision Avionics		Delavan Ag Pumps, Inc.	•	Ostra Cybersecurity, Inc.
	Frontier Energy		DOCSI Health	Monticello	UMC
	GeaCom Inc.		e:solutions One, Inc.	: New Brighton	TheraTec
	Windsor Engineers		Exosite LLC	Northfield	All Flex Flexible Circuits
Eagan	Rainbow Computer Technology		FoodOps LLC		LoonMD
	REMastered Sleep LLC		Imbio	Oakdale	TruNorth Automation
Eden Prairie	AbiliTech Medical		INOVIQ, Inc	Pequot Lakes	Pequot Tool & Mfg., Inc.
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## **Hiring Companies**

CITY	COMPANY	CITY	COMPANY	CITY	COMPANY
Perham	Kit Masters	St. Cloud	Advanced Interconnect Technologies	St. Paul	NovoClade
Pine River	Hunt Utilities Group	•	Net V Pro	•	Sasya
Plymouth	Advanced Inspection Services	St. Louis Park	Comparatio	•	Scanlan International, Inc.
•	GenEQTY		Donohue & Associates		Sisu Solar
	Interrad Medical	•	VSI Labs		
	Peytant Solutions, Inc.	St. Paul	ABV Technology	•	Stratix Labs Corporation
	Zurich Medical	•	Aria CV, Inc.	•	Syntiron
Rochester	Canomiks, Inc.	•	Astrin Biosciences	Victoria	Servos LLC
	Pharmaceutical Specialties Inc.	•	Creed Interactive LLC	Waite Park	Starrett, Tru-Stone Technologies Div.
Roseville	Calyxt, Inc.	•	Ericksen Roed & Associates	Waseca	KAMP Automation
	Hed Cycling Products	•	Innovative Surface Technologies, Inc.	: West St. Paul	Capitol City ComputerFixx
	Scientific Research Consortium, Inc.	•	InSitu Technologies Inc.	•	Tapemark
Sauk Rapids	Pinnacle Climate Technologies, Inc.	•	Isthmus Engineering	: White Bear Lake	Techie Dudes
Savage	Hydra-Flex	•	LKT Laboratories, Inc.	Winona	Thern, Inc.
Shoreview	ASTER Labs, Inc.	•	NanoMotif	Woodbury	ECO BCG Corporation



"It's been a huge confidence boost for me to have this internship," Gahnz affirmed. "It's given me perspective into what engineers actually do and to hear that I'm contributing to that is cool." In retrospect, Gahnz was very grateful for the experience, she said, "It's the most fun job I've had. I don't really feel like I'm working. And everyone I've met has been so incredibly nice. I've really loved this experience and continue to love it. I'm really excited to work for Third Wave and learn all I can."

— Karlyn Gahnz, Third Wave Systems



"If you had told me I would come out of this being able to write top level code and really see it created, I would have said 'no way. This internship has really proven to me that I can do it." — Chi Asangwe (he) Software for Good.

"This is a great program to help educate a strong, well-educated workforce for Minnesota's biotech industry. If students have an opportunity to work with companies and companies can hire and retain quality employees, then the biotech industry can stay and grow in MN, instead of moving to the east or west coast." — Susan Belzer, INOVIQ, Inc.

