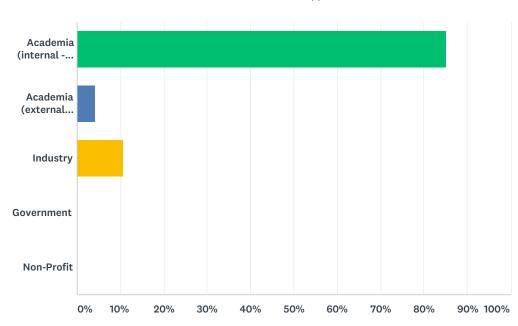


ANSWER CHOICES	RESPONSES	
Student	50.00%	47
Post-Doc	5.32%	5
Faculty	30.85%	29
Scientist/Engineer	13.83%	13
TOTAL		94

Q2 User Affiliation

Answered: 94 Skipped: 0



ANSWER CHOICES	RESPONSES	
Academia (internal - from the NNCI site universities)	85.11%	80
Academia (external institution)	4.26%	4
Industry	10.64%	10
Government	0.00%	0
Non-Profit	0.00%	0
TOTAL		94

Q3 Which NNCI facility were you a user at primarily during the previous 12 months? Your responses below should refer to this NNCI facility.

		Answere	ed: 94	Skipped	d: 0		
Center for Nanoscale							
Cornell Nanoscale							
Kentucky Multi-Scale							
Mid-Atlantic Nanotechnolo							
Midwest Nanotechnolo							
Montana Nanotechnolo							
Nano@Stanford (Stanford							
Nanotechnology Collaborativ							
Nebraska Nanoscale							
Northwest Nanotechnolo							
Research Triangle							
San Diego Nanotechnolo							
Soft and Hybrid							
Southeastern Nanotechnolo							
Texas Nanofabricat							
Virginia Tech Center for							

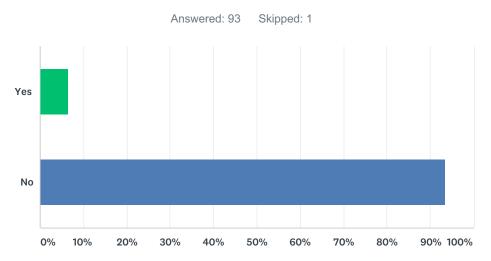
ANSWER CHOICES

RESPONSES

NNCI Facility User Survey 2018

	0.009/	0
Center for Nanoscale Systems (Harvard University)	0.00%	0
Cornell Nanoscale Science and Technology Facility (Cornell University)	0.00%	0
Kentucky Multi-Scale Manufacturing and Nanotechnology Integration Node (University of Louisville & University of Kentucky)	0.00%	0
Mid-Atlantic Nanotechnology Hub (University of Pennsylvania)	0.00%	0
Midwest Nanotechnology Infrastructure Corridor (University of Minnesota and North Dakota State University)	100.00%	94
Montana Nanotechnology Facility (Montana State University)	0.00%	0
Nano@Stanford (Stanford University)	0.00%	0
Nanotechnology Collaborative Infrastructure Southwest (Arizona State University)	0.00%	0
Nebraska Nanoscale Facility (University of Nebraska at Lincoln)	0.00%	0
Northwest Nanotechnology Infrastructure (University of Washington & Oregon State University)	0.00%	0
Research Triangle Nanotechnology Network (NC State University, University of NC, & Duke University)	0.00%	0
San Diego Nanotechnology Infrastructure (University of California San Diego)	0.00%	0
Soft and Hybrid Nanotechnology Experimental Resource (Northwestern University & University of Chicago)	0.00%	0
Southeastern Nanotechnology Infrastructure Corridor (Georgia Institute of Technology & Joint School of Nanoscience and Nanoengineering)	0.00%	0
Texas Nanofabrication Facility (University of Texas Austin)	0.00%	0
Virginia Tech Center for Earth and Environmental Nanotechnology (Virginia Polytechnic Institute and State University and Pacific Northwest National Laboratory)	0.00%	0
TOTAL		94

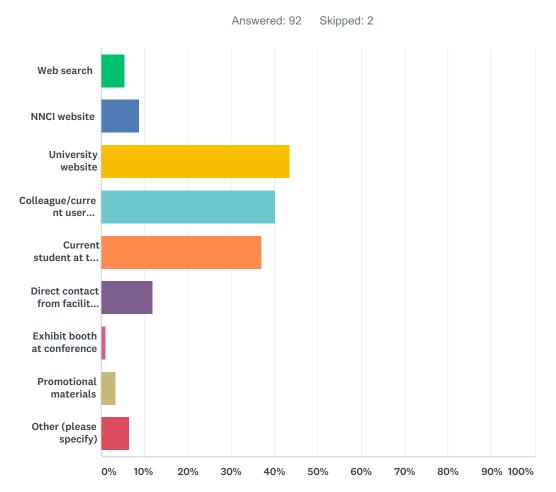
Q4 Did you use more than one NNCI facility during the past 12 months?



ANSWER CHOICES	RESPONSES	
Yes	6.45%	6
No	93.55%	87
TOTAL		93

#	IF YES, PLEASE SPECIFY WHICH SITES.	DATE
1	Minnesota Nano Center	8/16/2018 12:46 PM
2	University of Minnesota	8/16/2018 10:31 AM
3	UMN Nanocenter	8/16/2018 10:12 AM
4	University of Minnesota	7/17/2018 12:29 PM
5	University of Minnesota, Minnesota Nano center	7/17/2018 10:37 AM

Q5 How did you find out about the NNCI facility? Check all that apply.

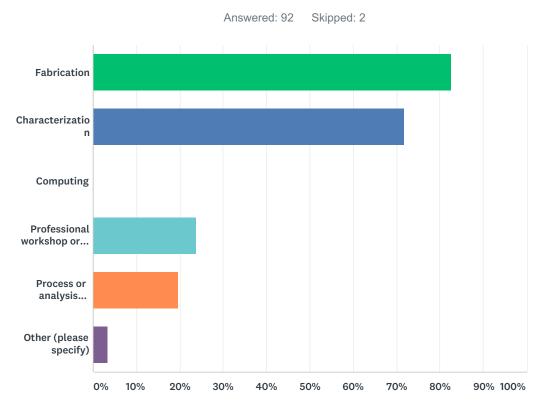


ANSWER CHOICES	RESPONSES	
Web search	5.43%	5
NNCI website	8.70%	8
University website	43.48%	40
Colleague/current user referral	40.22%	37
Current student at the site university	36.96%	34
Direct contact from facility (email or phone call)	11.96%	11
Exhibit booth at conference	1.09%	1
Promotional materials	3.26%	3
Other (please specify)	6.52%	6
Total Respondents: 92		

#	OTHER (PLEASE SPECIFY)	DATE
1	Univesity of MInnesota alumni	8/19/2018 9:44 PM
2	Spoke with director during faculty recruitment	8/17/2018 7:58 AM

NNCI Facility User Survey 2018

3	Long time user	8/16/2018 10:31 AM
4	I have been using the Minnesota Nanocenter (or its antecedents) since 1997	8/16/2018 10:25 AM
5	Have been employed by the facility; use it for consulting work.	7/18/2018 12:53 PM
6	adviser	7/17/2018 2:58 PM



Q6 Which services did you use at the facility?

ANSWER CHOICES	RESPONSES	
Fabrication	82.61%	76
Characterization	71.74%	66
Computing	0.00%	0
Professional workshop or training	23.91%	22
Process or analysis consultation	19.57%	18
Other (please specify)	3.26%	3
Total Respondents: 92		

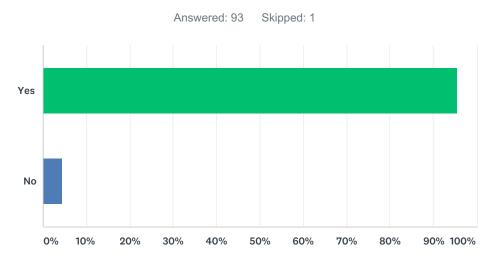
#	OTHER (PLEASE SPECIFY)	DATE
1	Biolab	8/16/2018 12:10 PM
2	This work was a few years ago	7/17/2018 10:07 PM
3	Worker	7/17/2018 11:28 AM

Q7 If you have any recommendations for specific new tools or services at this NNCI facility, please indicate them here.

Answered: 19 Skipped: 75

#	RESPONSES	DATE
1	It would be helpful if more staff were available to do work on some cost basis. Staff is generally too busy to assist in projects.	8/20/2018 2:46 PM
2	Keyence VK-X250 Violet Laser Confocal Scanning Microscope	8/16/2018 1:45 PM
3	N/a	8/16/2018 1:20 PM
4	QCM-D	8/16/2018 12:46 PM
5	Focussed ion Beam using He	8/16/2018 10:55 AM
6	The facility is well-equipped. Deposition tools could use in-situ cleaning capability. We are working on it.	8/16/2018 10:25 AM
7	Nanoscribe 3D lithography system	8/16/2018 10:22 AM
8	IR NSOM (Infra-Red Near field Scanning Optical microscope)	8/16/2018 9:54 AM
9	Quartz crystal microbalance	8/16/2018 9:49 AM
10	Ion implantation	8/16/2018 9:37 AM
11	Some of the websites require updated information on training contacts since some of the staff scientists/ engineers don't offer training sessions anymore on certain equipment.	7/23/2018 11:49 AM
12	Thermal ALD. Existing one has heavy demand and also to allow more precursors	7/19/2018 10:19 AM
13	NA	7/17/2018 4:39 PM
14	Surface area analyzer, mercury porosimetry	7/17/2018 12:38 PM
15	1. AJA Sputterer I - Repeatability is a major issue in this equipment. It would be great if MNC could upgrade this system. 2. SEM - The system is very much outdated. It takes around 10-15 minutes to pump down and start characterizing a sample. Especially, characterizing multiple samples simultaneously is an arduous and time stretching task. Please buy a new one.	7/17/2018 12:20 PM
16	Maybe a better SEM? Charfac has a couple really nice ones. Also a quick way to deposit gold or platinum for imaging insulating samples.	7/17/2018 11:48 AM
17	Dimatix Materials Printer	7/17/2018 10:49 AM
18	None at this time.	7/17/2018 10:42 AM
19	Upgrade the software and reservation system to get more friendly.	7/17/2018 10:37 AM

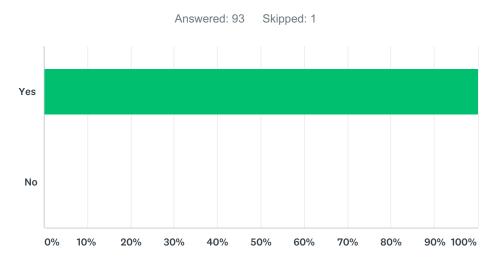
Q8 Were you able to complete your project in a timely manner?



ANSWER CHOICES	RESPONSES	
Yes	95.70%	89
No	4.30%	4
TOTAL		93

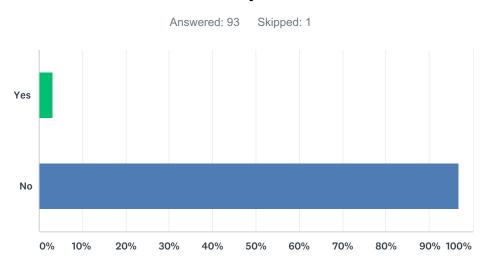
#	IF NOT, WHY NOT? (PLEASE SPECIFY)	DATE
1	Its still unclear.	8/20/2018 2:46 PM
2	The training session for equipment on the MNC website doesn't work. I waited a few days until I realized that this link will allow me to fill it out and submit but won't actually setup any training sessions: https://docs.google.com/forms/d/e/1FAIpQLSfF4qKJT2FuK8wmbBQNqVedjaHUqPs66Bxsth3ND3 _MkusgPw/viewform . This second link should be posted on the Minnesota Nanofabrication Center website instead since it works: https://docs.google.com/forms/d/e/1FAIpQLSfr66FQ93csqDx4_no4M8tZ3Yt04TLWhW73pngA9Vb iFhLeiA/viewform .Thanks.	7/23/2018 11:49 AM
3	Worker	7/17/2018 11:28 AM

Q9 Would you recommend this site to another colleague?



ANSWER C	HOICES	RESPONSES		
Yes		100.00%		93
No		0.00%		0
TOTAL				93
#	IF NOT, WHY NOT? (PLEASE SPECIFY)		DATE	
	There are no responses.			

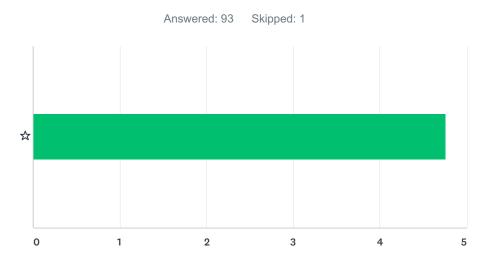
Q10 Did you have any concerns about safety while working in this facility?



ANSWER CHOICES	RESPONSES	
Yes	3.23%	3
No	96.77%	90
TOTAL		93

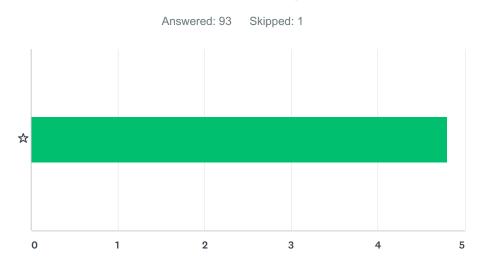
#	IF YES, PLEASE SPECIFY YOUR CONCERNS.	DATE
1	Ours was a healthy general concern. It was not caused by unsafe conditions at this facility.	7/17/2018 10:07 PM
2	Chemicals were improperly stored, used, or cleaned on occasion, although this was addressed by staff when it did happen. I blame this on the individuals more than the staff or facility.	7/17/2018 1:05 PM

Q11 Please provide a rating of the facilities at this NNCI site.



POOR	FAIR	GOOD	VERY GOOD	EXCELLENT	TOTAL	WEIGHTED AVERAGE	
\$ 0.00%	0.00%	1.08%	21.51%	77.42%			
0	0	1	20	72	93		4.76

Q12 Please rate your overall experience with the process of working at this NNCI facility.



	POOR	FAIR	GOOD	VERY GOOD	EXCELLENT	TOTAL	WEIGHTED AVERAGE	
☆	0.00%	0.00%	1.08%	18.28%	80.65%	02		4 90
	0	0	1	17	75	93		4.80

Q13 Additional Comments

Answered: 14 Skipped: 80

#	RESPONSES	DATE
1	Its hard for me to rate the facility because its the only facility I've used so I don't have anything to compare it to.	8/20/2018 2:46 PM
2	Update the temescal :)	8/16/2018 1:20 PM
3	Incredibly high-quality nanofabrication center. The tools are high quality, and the staff is immensely helpful in solving fabrication issues.	8/16/2018 11:12 AM
4	The staff at Minnesota are excellent at both maintaining the facility, training students, and working with students who do not always get it right the first time. They are also good partners and consultants.	8/16/2018 10:25 AM
5	The staff is extremely helpful and the equipment in the Minnesota Nano Center is fantastica very safe and professional place to research. Thank you.	7/18/2018 10:50 AM
6	This facility satisfied all of our needs	7/17/2018 10:07 PM
7	Fantastic facility, excellent staff, very responsive. Top notch communication, training, and maintenance.	7/17/2018 4:39 PM
8	The staff at the UMN cleanroom are absolutely amazing, extremely helpful, and extremely knowledgeable. They are always willing to go out of their way to help with any equipment or process problems I experience and provide helpful suggestions and advice for my projects.	7/17/2018 12:31 PM
9	MNC has incredible people. All the scientists, engineers and technicians have a thorough understanding of the working principle of the equipment assigned to them. They reply promptly to my emails and clarify my doubts quickly. Overall, I am truly happy to work with them. I have one small suggestion. It would be great to have a quick reference book containing process recipes of frequently used fabrication processes like dry etching, photolithography and metal deposition.	7/17/2018 12:20 PM
10	It was very easy to use the equipment, and the staff was very courteous and helpful. I love this facility!	7/17/2018 11:42 AM
11	Provided chemicals/materials should be restocked more frequently.	7/17/2018 11:00 AM
12	Overall, excellent service.	7/17/2018 10:51 AM
13	The parylene coater and STS plasma etcher have been crucial to my research. We have a materials inkjet printer in our own lab, but it would improve the quality of my samples to be able to fabricate them completely in the cleanroom by have a printer in one of the bays. The Dimatix printer is nice because each user can have their own cartridge for their use and nobody would	7/17/2018 10:49 AM
	have to worry about contaminating eachothers materials.	