			Study	Validation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
1.	Center for Nanostructure Characterization	MSE	10/13/14	9/30/16			Educational Institutions
							Tier Structure where total rates decline per group for each machine as
							usage increases
							Tier 1 (1st 0-100 Hours / Machine)
					Hour	\$132	Personal Services-Director
					Hour	\$94	Personal Services-Research Scientist
					Hour	\$31	LEO 1530
					Hour	\$34	LEO 1550
					Hour	\$20	Hitachi SU8010
					Hour	\$32	JEOL 100CX-2
					Hour	\$44	JEOL TEM 4000EX
					Hour	\$45	Hitachi HF-2000
					Hour	\$80	Tenaci F30
					Hour	\$15	Atomic Force
					Hour	\$10	Gold / Carbon
					Hour		Au-Pd
							Tier 2 (100-200 Hours / Machine)
					Hour	\$132	Personal Services-Director
					Hour	\$94	Personal Services-Research Scientist
					Hour	\$15	Hitachi S800 SEM Microscope
					Hour	\$17	Leo 1530 SEM Microscope
					Hour	\$10	Leo 1550 SEM Microscope
					Hour	\$16	JEOL 100C TEM Microscope
					Hour	\$22	JEOL 100CX-2 TEM Microscope
					Hour	\$23	JEOL 4000EX TEM Microscope
					Hour	\$40	Atomic Force Microscope
					Hour	\$8	Hitachi HF-2000 TEM Microscope
					Hour	\$5	JEM 6400 SEM Microscope
					Hour	\$5	Au-Pd
							Tier 3 (200-300 Hours / Machine)
					Hour	\$132	Personal Services-Director
					Hour	\$94	Personal Services-Research Scientist
					Hour	\$8	Hitachi S800 SEM Microscope
					Hour	\$8	Leo 1530 SEM Microscope
					Hour	\$5	Leo 1550 SEM Microscope
					Hour	\$8	JEOL 100C TEM Microscope
					Hour	\$11	JEOL 100CX-2 TEM Microscope
					Hour	\$11	JEOL 4000EX TEM Microscope
					Hour	\$20	Atomic Force Microscope
					Hour	\$4	Hitachi HF-2000 TEM Microscope
					Hour	\$3	JEM 6400 SEM Microscope
					Hour	\$3	Au-Pd
							Tier 4 (300 - 10,000 Hours / Machine)

Rate	Annual	
Study	Validation	Rates

			Study	Validation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
					Hour	\$132	Personal Services-Director
					Hour	\$94	Personal Services-Research Scientist
					Hour	\$3	Hitachi S800 SEM Microscope
					Hour	\$3	Leo 1530 SEM Microscope
					Hour	\$2	Leo 1550 SEM Microscope
					Hour	\$3	JEOL 100C TEM Microscope
					Hour	\$4	JEOL 100CX-2 TEM Microscope
					Hour	\$5	JEOL 4000EX TEM Microscope
					Hour	\$8	Atomic Force Microscope
					Hour	\$2	Hitachi HF-2000 TEM Microscope
					Hour	\$1	JEM 6400 SEM Microscope
					Hour	\$1	Au-Pd
2.	Glass Shop	Chemistry	4/1/16	10/6/16	Hour	\$36	Personal Services & Equipment Services, Internal (GA Tech)
					Hour	\$70	Personal Services & Equipment Services, External - Academic
					Hour	\$107	Personal Services & Equipment Services, External Industry
					Cost	Cost	Supplies
3.	NEETRAC Consulting Services	ECE	6/17/14	10/5/16	Hour	\$123	Managers/Consultants
					Hour	\$94	Research Engineers
					Hour	\$69	Research Coordinators
					Hour	\$44	Research Technicians
					Hour	\$28	Graduate Research Assistants
					Hour	\$20	Undergraduate Research Assistants
4.	NEETRAC Platform Services	ECE	11/30/10	10/5/16	Day	\$712	HVL Platform
					Day	\$215	Cable Platform
					Day	\$119	Mechanical Platform
					Day	\$250	MTF/Other Platform

Note: When platforms are used for multiple projects at the same time, hourly rates may be prorated among the users.

			Study	Validation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
5.	Machine Shop - College of Sciences	CoS	2/14/13	9/21/15	Hour	\$50	Full Service
					Hour	\$10	Machine Services, Students
6.	NMR Center	Chemistry	5/8/12	10/6/16			EDUCATIONAL INSTITUTION RATES
					Hour	\$30	Personal Services, Other
					Hour	\$11	Machine Services, Premium
					Hour	\$6	Machine Services, Non-premium
							INDUSTRIAL RATES
					Hour	\$176	Personal Services, Other
					Hour	\$18	Machine Services, Premium
					Hour	\$18	Machine Services, Non-premium
7.	Materials Characterization Facility	IEN	12/15/14	10/4/16			Internal / External Academic
	·				Hour	\$100	Operator/ Consultation
							Equipment Group 1
					Hour	\$40	Hitachi HT7700 TEM
					Hour	\$35	Hitachi SU8230
					Hour	\$35	Thermo K-Alpha XPS
					Hour	\$35	Zeiss Ultra60 FE-SEM
							Equipment Group 2
					Hour	\$45	FEI Nova Nanolab 200 FIB/SEM
					Hour	\$45	FEI Quanta 200 3D FIB/SEM
					Hour	\$45	IONTOF Time-of-Flight SIMS
					Hour	\$45	Kratos XPS
							Equipment Group 3
					Hour	\$20	Hysitron Tribolndenter
					Hour	\$20	Raman Spectrometer
					Hour	\$20	Veeco AFM
					Hour	\$20	Veeco AFM II Dimension 3100
					Hour	\$20	Hummer 6 Gold/Palladium Sputter

Rate Annual Study Validation

Rates Basis No. Name of Rate Study Department Date Date Amount Service **Equipment Group 4** Hour \$20 Pananalytical XRD \$20 Hour Venus25 Benchtop Plasma System Hour \$20 ZONESEM Desktop Sample Cleaner Shel Lab Vacuum Oven Hour \$20

Hour

\$20

\$20

\$100

\$100

\$135

\$135

\$150

\$70

\$50

\$40

\$40

\$40

\$20

\$50

\$20

\$20

\$20

\$20

\$20

\$70 \$100 VWR Vacuum Oven

Equipment Group 1

Hitachi HT7700 TEM

Zeiss Ultra60 FE-SEM **Equipment Group 2**

Equipment Group 3

Raman Spectrometer

Equipment Group 4

Shel Lab Vacuum Oven

Cressington Carbon Coater

VWR Vacuum Oven

Pananalytical XRD

Hysitron Tribolndenter

FEI Nova Nanolab 200 FIB/SEM

FEI Quanta 200 3D FIB/SEM

IONTOF Time-of-Flight SIMS

Veeco AFM II Dimension 3100

Hummer 6 Gold/Palladium Sputter

Venus25 Benchtop Plasma System

ZONESEM Desktop Sample Cleaner

Hitachi SU8230 Thermo K-Alpha XPS

Kratos XPS

Veeco AFM

Industrial

Cressington Carbon Coater

			ъ.		2017		
			Rate Study	Annual Validation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
8.	IEN Micro & Nano Fabrication Center (formerly CMOS)	IEN	1/7/15	10/3/16	Dusis	Timount	Academic & Industrial Rates
0.	Elviniero a riano rabrication conter (formerly civios)	ILI (1///13	10/3/10	Hour	\$100	Operator / Consultation
							1
9.	Cleanroom Access	IEN	9/15/14	9/30/16			EDUCATIONAL INSTITUTION RATES
					Month	\$200	Facility Entry Fee, (Inorganic Cleanroom)
					Month	\$0	Facility Entry Fee, (Organic Cleanroom)
					Hour	\$20	Cleanroom Supply Use Charge
							INDUSTRIAL RATES
					Month	\$550	Facility Entry Fee, (Inorganic Cleanroom)
					Month	\$0	Facility Entry Fee, (Organic Cleanroom)
					Hour	\$20	Cleanroom Supply Use Charge
							Special Projects Usage
					Month	\$3,000	Defined Limited Access, per month
10.	Printing and Copying Center	OIT	6/1/16	10/6/16	Hour	\$83	Desktop Services
					Hour	\$18	PrePress Services
					Hour	\$49	Ryobi Services
					Hour	\$48	Heidelberg Windmill Services
					Copy	\$0.024	Quick Copy Services, plus paper
					Сору	\$0.19	Color Copier, plus paper
					Hour	\$30	Bindery Hand Labor Services
					Hour	\$47	Cutter Services
					Hour	\$55	Bourg Services
					Hour	\$65	Folder Services
					Cost plus	0%	Postage Setvices
					Hour	\$62	Inkjet Mailer
					Hour	\$54	Envelope Inserter
					Hour	\$60	Small Bind Services
					Copy	\$0.04	Student Printing Student Color Printing
					Copy Sq. Ft.	\$0.19 \$3.87	Student Color Printing Wide Format Printing
					Cost plus	16%	Supplies & Third Party
					Cost plus	10/0	Supplies & Time Facty
11.	Rapid Prototyping and Manufacturing Lab (RPMI)	MARC	2/7/11	9/25/15			Personal Services/Machine Services Rate:
					Hour	\$40	Stereolithography Apparatus
					Hour	\$25	Instrument Services
					Hour	\$17	Fused Deposition Modeling
					Hour	\$17 \$12	Instrument Services
					Hour Hour	\$13 \$13	Multi Jet Modeler Instrument Services
					Hour	\$13 \$10	FMSL Microfabrication Machine
					Hour	\$10 \$10	Instrument Services
					11001	ΨΙΟ	Indianiont Del (100)

Rates

Rate Annual Study Validation

			Study	validation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
12.	Precision Machining Research Center (PMRC)	MARC	5/10/12	9/25/15			OTHER GEORGIA TECH DEPARTMENTS:
12.	recision Machining Research Center (FWRC)	MARC	3/10/12	9/23/13	Hour	\$30	Personal Services
					Hour	\$15	Instrument Services
					Hour	\$30	Machine Services
					Hour	\$30	OTHER EDUCATIONAL INSTITUTIONS:
					Hour	\$35	Personal Services
					Hour	\$25	Instrument Services
					Hour	\$35	Machine Services
					11041	Ψ33	CORPORATE:
					Hour	\$45	Personal Services
					Hour	\$35	Instrument Services
					Hour	\$45	Machine Services
					11041	Ψ.Ι.	
14.	Packaging Research Center (PRC)	ECE	9/1/00	9/27/16			INDUSTRIAL APPLIED RESEARCH
					Hour	\$60	Mechanical Analysis Platform
					Hour	\$60	Assembly Materials
					Hour	\$60	Reliability Platform
					Hour	\$60	Lithography Platform
					Hour	\$75	Interconnect Test Platform
					Hour	\$75	Coating Platform
					Hour	\$100	Flip Chip Platform
					Hour	\$144	Plating Platform
					Hour	\$144	Functional Test Platform
					Hour	\$144	Laser Platform
15.	Mass Spectrometry Lab	Chemistry	5/9/16	10/6/16			INTERNAL (GA Tech)
					Hour	\$12	Personal Services
					Hour	\$12	Instrument Services
							OTHER EDUCATIONAL INSTITUTIONS RATE
					Hour	\$12	Personal Services
					Hour	\$12	Instrument Services
							INDUSTRIAL RATE
					Hour	\$117	Personal Services
					Hour	\$41	Instrument Services

			Study	v andation	Raics			
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service	
16.	Mass Spectrometry Lab	Biology	7/21/10	10/14/13			INTERNAL (Biology & Other Georgia Tech)	
	•				Sample	\$130	Compound Specific	
					Sample	\$5	Nutrient concentration measurement	
					Sample	\$10	Gas Chromatography	
					Sample	\$10	Solid Organic	
					Sample	\$30	Disolved Nutrient	
							EDUCATIONAL INSTITUTIONS RATE	
					Sample	\$130	Compound Specific	
					Sample	\$5	Nutrient concentration measurement	
					Sample	\$10	Gas Chromatography	
					Sample	\$10	Solid Organic	
					Sample	\$30	Dissolved Nutrient	
							<u>OTHER</u>	
					Hour	\$100	Consulting Services	
					Cost	Cost	Travel	
17.	Physiological Research Lab (Vivarium)	IBB	8/6/10	9/30/16	Hour	\$30	Assistance & Special Labor	
					Hour	\$10	Room Rental (max 5hrs/day)	
					per Item	\$2	Laundry Service	
					per cage	\$20	Cage Splitting	
					per use	\$45	Faxitron Use	
					per day	\$20	Anesthesia Machine Use	
					per cycle	\$25	Gas Plasma Sterilization	
					Hour	\$30	Animal Procurement (minimum 1 hr/per order)	
							ANIMAL HUSBANDRY:	
							Mice & Rats	
					Cage per Day	\$0.60	Mice-Conventional	
					Cage per Day	\$0.90	Mice-Sterile Caging	
					Cage per Day	\$0.90	Rats-Conventional	
					Cage per Day	\$1.20	Rats-Sterile Caging	
					Cage per Day	\$1.20	Rodent-Special Caging	
							Other Species	
					Animal Day	\$0.80	Lizard/Geckos	
					Animal Day	\$2.79	Rabbits	
					Animal Day	\$2.10	Guinea Pigs	
					Animal Day	\$4.59	Cats	
					Cost plus	25%	Supplies	
18.	Histology Lab	IBB	6/26/14	9/28/16			GT Internal	
					Hour	\$16	Personal Services	
							Processing:	
					Sample	\$3.00	Parraffin (Routine)	
					Sample	\$5.00	Parraffin (Special)	
					Sample	\$5.00	Resin (Epoxy)	
	Srv Ctr Rate List 4.17.17.xlsx			Р	age 7		• •	4/17/2017

Rate Annual Study Validation

			Study	v andation	Kates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
					Sample	\$10.00	Resin (GMA)
					Sample	\$12.00	Resin (MMA)
							Embedding:
					Sample	\$5.00	Frozen
					Sample	\$1.00	Parraffin (Routine)
					Sample	\$8.00	Parraffin (Special)
					Sample	\$6.00	Resin (Epoxy)
					Sample	\$6.00	Resin (GMA)
					Sample	\$6.00	Resin (MMA)
					_		Sectioning:
					Slide	\$2.00	Frozen
					Slide	\$0.50	Paraffin
					Slide	\$2.00	Microtome
					Cut	\$5.00	Isomet
					Slide	\$10.00	Exakt Grinding
							Staining:
					Slide	\$2.00	H&E
					Slide	\$5.00	Special
					Slide	\$8.00	IHC
							Other
					Sample	\$5.00	Decalcification
					Slide	\$5.00	Antigen Retrival
					Slide	\$1.00	Coverslipping
						COST	Supplies - Pass Through
							Other Academic & Industry Partner
					Hour	\$24.00	Personal Services
							Processing:
					Sample	\$6.00	Parraffin (Routine)
					Sample	\$6.00	Parraffin (Special)
					Sample	\$10.00	Resin (Epoxy)
					Sample	\$15.00	Resin (GMA)
					Sample	\$20.00	Resin (MMA)
							Embedding:
					Sample	\$6.00	Frozen
					Sample	\$3.00	Parraffin (Routine)
					Sample	\$10.00	Parraffin (Special)
					Sample	\$24.00	Resin (Epoxy)
					Sample	\$24.00	Resin (GMA)
					Sample	\$24.00	Resin (MMA)
					-		Sectioning:
					Slide	\$4.00	Frozen
					Slide	\$0.75	Paraffin
					Slide	\$5.00	Microtome
					Cut	\$10.00	Isomet
Sn. C	th Boto List 4 17 17 year			Dog	- 0		4/17/2017

Rate Annual Study Validation

			bludy	v andation _	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
	_				Slide	\$12.00	Exakt Grinding
							Staining:
					Slide	\$5.00	H&E
					Slide	\$20.00	Special
					Slide	\$30.00	IHC
							Other
					Sample	\$10.00	Decalcification
					Slide	\$10.00	Antigen Retrival
					Slide	\$1.00	Coverslipping
						COST	Supplies - Pass Through
							<u>Industry</u>
					Hour	\$32.00	Personal Services
							Processing:
					Sample	\$6.00	Parraffin (Routine)
					Sample	\$10.00	Parraffin (Special)
					Sample	\$17.00	Resin (Epoxy)
					Sample	\$35.00	Resin (GMA)
					Sample	\$50.00	Resin (MMA)
							Embedding:
					Sample	\$11.00	Frozen
					Sample	\$7.00	Parraffin (Routine)
					Sample	\$23.00	Parraffin (Special)
					Sample	\$121.00	Resin (Epoxy)
					Sample	\$144	Resin (GMA)
					Sample	\$138.00	Resin (MMA)
							Sectioning:
					Slide	\$8.00	Frozen
					Slide	\$1.00	Paraffin
					Slide	\$13.00	Microtome
					Cut	\$13.00	Isomet
					Slide	\$13.00	Exakt Grinding
							Staining:
					Slide	\$32.00	H&E
					Slide	\$42.00	Special
					Slide	\$47.00	IHC
							Other
					Sample	\$19.00	Decalcification
					Slide	\$14.00	Antigen Retrival
					Slide	\$1.00	Coverslipping
						COST	Supplies - Pass Through

Rate Annual
Study Validation

			Study	Validation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
19.	Micro-Computed Tomography Facility	IBB/ME	11/10/15	9/26/16			GEORGIA TECH & EXTERNAL INSTITUTES
					Set Up	\$3.92	Set Up Charge
					Slice	\$0.07	Medium Resolution
					Slice	\$0.17	High Resolution
					Slice	\$0.34	Custom Resolution
					Hour	\$45.33	Additional Analysis
							IBB INDUSTRY PARTNERS
					Set Up	\$5.23	Set Up Charge
					Slice	\$0.09	Medium Resolution
					Slice	\$0.22	High Resolution
					Slice	\$0.45	Custom Resolution
					Hour	\$45.33	Additional Analysis
							INDUSTRY
					Set Up	\$6.54	Set Up Charge
					Slice	\$0.11	Medium Resolution
					Slice	\$0.28	High Resolution
					Slice	\$0.56	Custom Resolution
					Hour	\$45.33	Additional Analysis
20.	Georgia Industrial Fellowships for Teachers	CEISMC	4/11/16	11/1/16			On Campus Rate
20.	Georgia industrial Fenomemps for Federicis	CEIGITE	1/11/10	11/1/10	Participant	\$1,500	Administrative Charge
					- ur ur upunt	Ψ1,500	Off Campus Rate
					Participant	\$2,250	Administrative Charge

Rate	Annual	
Study	Validation	Rates

			Study	Validation _	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
21.	Testing Services	IPST	5/22/13	9/13/16			INTERNAL, ACADEMIC, INDUSTRY MEMBERS
					Hour	\$97	Senior Scientist
					Hour	\$65	Analyst
					Hour	\$36	Instrument Services
							INDUSTRIAL - NON-MEMBER
					Hour	\$149	Senior Scientist
					Hour	\$99	Analyst
					Hour	\$150	Consulting Services
22.	Technical Services Organization	CoC	11/6/15	9/30/16	EFT per year	\$6,123	Computing & Networking Services
23.	Interactive Media Technology Center	IMTC	3/16/17	10/14/15			
							Internal Departments:
					Hour	\$84	Consulting
							Other Educational Institutions:
					Hour	\$84	Consulting
							Corporate:
					Hour	\$84	Consulting
24.	Professional Education	GTPE	6/23/16	9/19/16			GTPE Administrative Charge - Sponsored PE Contracts:
					Federal	Other	
					26.5%	27.5%	Contract Value < \$5K
					22.0%	23.0%	Contract Value \$5K - < \$10K
					12.5%	13.5%	Contract Value \$10K - < \$30K
					10.5%	11.5%	Contract Value \$30K - < \$50K
					8.5%	9.5%	Contract Value \$50K - < \$100K
					9.0%	10.0%	Contract Value > \$100K

Rate Annual

			Study	Annual Validation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
25.	Electron Beam Laboratory	IEN	3/21/14	10/3/16			US Academic Institutions
					Hour	\$100	Staff Time
					Hour	\$110	EBL Machine Time
							Foreign Academic Institutions
					Hour	\$100	Staff Time
					Hour	\$300	EBL Machine Time
						4100	SBIR Small Business
					Hour	\$100	Staff Time
					Hour	\$200	EBL Machine Time
					TT	¢100	Industrial
					Hour	\$100 \$300	Staff Time EBL Machine Time
					Hour	\$300	EBL Machine Time
							GT Students Enrolled in COA Studio
26.	3-D Printer	COD	9/26/13	9/20/16	Cubic Inch	\$5.75	Dimension FDM Printing
					Cubic Inch	\$6.50	Fortus 360010
					Cubic Inch	\$7.50	Fortus 360005
							Other Users
					Cubic Inch	\$11.50	Dimension FDM Printing
					Cubic Inch	\$13.00	Fortus 360010
					Cubic Inch	\$15.00	Fortus 360005
27.	Telecom	OIT	1/9/13	9/29/16			<u>Internal</u>
					Line, annual	\$254.40	Analog Line
					Line, annual	\$178.68	Emergency Phones
					Line, annual	\$322.80	VOIP
					Line, annual	\$322.80	Digital Line
					Line, annual	\$60.65	MADN's
					Line, annual	\$36.25	Audio Conferencing Ports
					Line, annual	\$99.02	Softphones
					Line, annual	\$823.57	ACD Agents
					Line, annual	\$0.04	Toll Free Long Distance
					Line, annual	\$18.87	Long Distance
					Line, annual	\$44.82	Moves, Adds, and Deletes
					Line, annual	\$16.98	Feature Changes
					Line, annual	\$26.99	Service Changes
					Cost plus	5%	Purchased Telephone Services
					Line, annual	\$80.72	Standalone Voice mailbox

			Study	Validation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
							<u>Internal</u>
28.	Neuro Lab	BME	11/28/15	9/16/16	Group per Semster	\$1,264.29	Lab Coordination and Communications Fee
					Group per Semster	\$112.41	Lab Supplies and Services
					Group per Semster	\$52.49	Lab Gas Charges
							External_
					Hour	\$9.03	Instrument Services
29.	Microanalysis Center	MSE	3/28/14	9/30/16			<u>Internal</u>
					Hour	\$30	Personal Services
					Hour	\$30	Instrument Services Industrial
					Hour	\$36	Personal Services
					Hour	\$30 \$45	Instrument Services
					Houi	\$ 4 3	instrument services
30.	NMRI-MR Imaging Facility	BME	3/19/13	9/16/16			<u>Internal</u>
					Hour	\$70	Personal Services - (1 hour minimum)
					Hour	\$110	Instrument Services - (1 hour minimum)
							External (Industry)
					Hour	\$70	Personal Services - (1 hour minimum)
					Hour	\$249	Instrument Services - (1 hour minimum)
31.	Center of Nanostructured Materials for Energy Storage	MSE	7/1/14	9/30/16			Internal
					Hour	\$50	Personal Services
					Procedure	\$95	Component Testing Services
					Procedure	\$125	Material Testing Services
							External
					Hour	\$100	Personal Services
					Procedure	\$129	Component Testing Services
					Procedure	\$200	Material Testing Services
32.	Center for Advanced Brain Imaging	CoS	3/10/16	10/13/16			<u>Internal</u>
					Hour	\$42	Weekend / Evening
					Hour	\$90	Consulting Services
					Hour	\$82	Facility Use
					Hour	\$425	Instrument Services
							External/Industry
					Hour	\$42	Weekend / Evening
					Hour	\$90	Consulting Services
					Hour	\$82	Facility Use
					Hour	\$525	Instrument Services

			Study	vandation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
33.	Robotics Machine Shop	COC	8/16/11	9/20/16	Hour	\$54.49	Personal Services
	·				Hour	\$13.47	Instrument Services
34.	Confocal Microscopy	IBB	12/15/16	9/26/16			Georgia Tech
					Hour	\$16.00	Instrument Services
					Hour	\$0	Personal Services
							Affiliates and Industry Partners
					Hour	\$22.00	Instrument Services
					Hour	\$0	Personal Services
							<u>Industry</u>
					Hour	\$104	Instrument Services
					Hour	\$178	Personal Services
35.	Vacuum Test Facility	AE	2/24/16	9/28/16	Day	\$621	Main Chamber Set Up
					Day	\$1,605	Main Chamber Usage
					Day	\$621	Small Chamber Set Up
					Day	\$1,605	Small Chamber Usage

			Study	Validation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
36.	GEDC High Frequency Lab	ECE	1/25/12	9/23/16			Internal (GEDC)
					Hour	\$57.85	Personal Services
					Unit	\$27.47	Test Bed I: Millimeter-Wave
					Unit	\$3.88	Test Bed II: 50GHz s-para/NF
					Unit	\$3.19	Test Bed III: Wire Bonder
					Unit	\$4.05	Test Bed IV: Optical Signal
							Internal (Other GA Tech)
					Hour	\$57.85	Personal Services
					Unit	\$54.95	Test Bed I: Millimeter-Wave
					Unit	\$7.77	Test Bed II: 50GHz s-para/NF
					Unit	\$6.37	Test Bed III: Wire Bonder
					Unit	\$8.10	Test Bed IV: Optical Signal
							External (GEDC Industry Members)
					Hour	\$57.85	Personal Services
					Unit	\$54.95	Test Bed I: Millimeter-Wave
					Unit	\$7.77	Test Bed II: 50GHz s-para/NF
					Unit	\$6.37	Test Bed III: Wire Bonder
					Unit	\$8.10	Test Bed IV: Optical Signal
							External (Other Industry)
					Hour	\$57.85	Personal Services
					Unit	\$109.89	Test Bed I: Millimeter-Wave
					Unit	\$15.53	Test Bed II: 50GHz s-para/NF
					Unit	\$12.75	Test Bed III: Wire Bonder
					Unit	\$16.19	Test Bed IV: Optical Signal
37.	Stem Cell Engineering Center	BME	5/9/13	10/14/13			McDevitt Lab
					Sample	\$0	Nova BioProfile FLEX
					Hour	\$0	Accuri Cytometer
							<u>Academic</u>
					Sample	\$5	Nova BioProfile FLEX
					Hour	\$6	Accuri Cytometer
							Industry
					Sample	\$25	Nova BioProfile FLEX
					Hour	\$17	Accuri Cytometer

Rate Annual Study Validation

			Staaj		rtates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
38.	Genome Analysis	IBB	12/15/15	9/26/16			Internal (Georgia Tech)
					Hour	\$46	Personal Services
					Unit	\$1,210	96.96 Gene Expression
					Unit	\$836	96.96 Genotyping
					Unit	\$57	96.96 Pre-Amp
					Unit	\$603	48.48 Gene Expression
					Unit	\$542	48.48 Genotyping
					Unit	\$57	48.48 Pre-Amp
					Unit	\$606	48.48 Taqman Gene Expression
					Unit	\$762	12 X 12 Chip
					Unit	\$26	Nano Bioanalyzer
					Unit	\$27	Pico Bioanalyzer
					Unit	\$5	High Capacity cDNA
					Unit	\$9	SuperScript CDNA
					Unit	\$2	Nano Drop
					Unit	\$129	ddPCR
					Unit	\$0	Nucleofector
							Affiliates and Industry Partners
					Hour	\$46	Personal Services
					Unit	\$1,469	96.96 Gene Expression
					Unit	\$1,015	96.96 Genotyping
					Unit	\$70	96.96 Pre-Amp
					Unit	\$732	48.48 Gene Expression
					Unit	\$659	48.48 Genotyping
					Unit	\$70	48.48 Pre-Amp
					Unit	\$736	48.48 Taqman Gene Expression
					Unit	\$925	12 X 12 Chip
					Unit	\$37	Nano Bioanalyzer
					Unit	\$38	Pico Bioanalyzer
					Unit	\$5	High Capacity cDNA
					Unit	\$10	SuperScript CDNA
					Unit	\$3	Nano Drop
					Unit	\$181	ddPCR
					Unit	\$259	Nucleofector
					·	Ψ = 57	

Rate Annual Study Validation

			Study	v andation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
							External (Industry)
					Hour	\$4	
					Unit	\$1,72	9 96.96 Gene Expression
					Unit	\$1,19	4 96.96 Genotyping
					Unit	\$8	2 96.96 Pre-Amp
					Unit	\$86	2 48.48 Gene Expression
					Unit	\$77	
					Unit	\$8	2 48.48 Pre-Amp
					Unit	\$86	6 48.48 Taqman Gene Expression
					Unit	\$1,08	9 12 X 12 Chip
					Unit	\$10	6 Nano Bioanalyzer
					Unit	\$10	9 Pico Bioanalyzer
					Unit	\$	5 High Capacity cDNA
					Unit	\$1	
					Unit	\$	9 Nano Drop
					Unit	\$51	6 ddPCR
					Unit	\$74	1 Nucleofector
39.	Signal Processing and Mobile Networks Lab	ECE	3/29/12	11/3/15			ECE Users
	-				Hour	\$	0 Signal Processing
							Other Users
					Hour	\$ 11.4	6 Signal Processing
40.	Digital Fabrication Lab	COD	6/5/13	9/27/16			DFL Lab
					Hour	\$	0 Personal Services
					Hour	\$	0 Machine Services
					Hour	\$4	5 DFL Waterjet
							Internal (Georgia Tech)
					Hour	\$2	5 Personal Services
					Hour	\$3	0 Machine Services
					Hour	\$4	5 DFL Waterjet
							<u>Industry</u>
					Hour	\$2	5 Personal Services
					Hour	\$10	0 Machine Services
					Hour	\$10	0 DFL Waterjet

Rate Annual

Study Validation Rates Basis No. Name of Rate Study Department Date Date Amount Service Georgia Tech **TEM Training** 41. Cryo-EM Center Biology 8/16/12 10/21/15 Session \$200 Session \$400 **Cryo-EM Training** Hour \$25 TEM Hour \$45 Cryo-EM External Users Session \$200 **TEM Training** Session \$400 **Cryo-EM Training** Hour \$40 TEM Hour \$65 Cryo-EM Industrial Session \$775 **TEM Training** Session \$2,026 **Cryo-EM Training** Hour \$70 TEM Hour \$108 Cryo-EM Center for Polymer & Fiber Processing MSE 9/21/12 9/30/16 Hour \$120 Machine Services 43. Invention Studio Center ME 1/3/13 10/20/16 Cubic Inch \$28 Uprint 3D Printer Cubic Inch \$17 Dimension 3D Printer Cubic Inch \$27 Eden 3D Printer Advanced Semiconductor Development Center **ECE** 3/22/13 11/3/15 Hour \$78 Machine Services Alternative Media Access Center CoA 7/17/13 9/30/16 \$450 Consultation 45. Hour **Biomechanics Center** IBB 11/1/13 9/26/16 GT Investigators Hour \$53 Personal Services Hour \$16 Machine Services Other Academic & Industry Partners Hour \$53 Personal Services

Hour

Hour

Hour

\$24

\$53

\$32

Machine Services
Other Industry

Personal Services

Machine Services

Rate Annual Study Validation

No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
47.	High Performace Computing (HPC)	OIT	12/11/15	9/15/15			External
					Server	\$1,699	Infrastructure and Support
					Per TB	\$169	DDN Project Storage
					CPU Hour	\$0.0715	8 Core Node
					CPU Hour	\$0.0477	12 Core Node
					CPU Hour	\$0.0358	16 Core Node
					CPU Hour	\$0.0236	24 Core Node
					CPU Hour	\$0.0119	48 Core Node
					CPU Hour	\$0.0089	64 Core Node
48.	Mesoscale Materials Characterization	ME	4/2/14	10/5/16			Educational Institutions
					Hour	\$35	SEM
					Hour	\$45	SEM + EBSD
							<u>Industrial</u>
					Hour	\$42	SEM
					Hour	\$62	SEM + EBSD
49.	Carbon Fiber Research Center	MSE	3/18/14	9/30/16	Hour	\$72	Personal Services
					Day	\$626	Single Filament Spinning Equipment
					Day	\$2,515	Multifilament Spinning Equipment
					Week	\$11,256	Multifilament Stabilization & Carbonization
					Hour	\$68	Solution Preparation Equipment
					Day	\$794	Extruder
					Hour	\$55	Characterization Instruments
					Hour	\$94	Xray Diffraction System
					Hour	\$626	Batch Furnance Equipment

			Study	Validation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
50.	Machine Shop	AE	5/12/14	9/29/16			Educational Institutions
					Hour	\$55	Personal Services
					Hour	\$0	Machine Services
					Hour	\$55	Combined Rate
							<u>Industrial</u>
					Hour	\$65	Personal Services
					Hour	\$3	Machine Services
					Hour	\$68	Combined Rate
51.	GTMI Prototype Lab	GTMI	6/2/14	1/30/17			GT & IPP Members
					Hour	\$35	Personal Services
					Hour	\$60	GF Agie Charmilles
					Hour	\$60	Bridgeport GX CNC Milling
					Hour	\$60	Okuma Genos Lathe
					Hour	\$125	Optomec Aerosol 3D
					Cubic In.	\$11	Statasys Connex 3D
					Cubic In.	\$16	Stratasys MOJO
							<u>Industrial</u>
					Hour	\$35	Personal Services
					Hour	\$130	GF Agie Charmilles
					Hour	\$120	Bridgeport GX CNC Milling
					Hour	\$120	Okuma Genos Lathe
					Hour	\$156	Optomec Aerosol 3D
					Cubic In.	\$11	Statasys Connex 3D
					Cubic In.	\$16	Stratasys MOJO

No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
52.	Cellular Analysis Core	IBB	12/15/16	9/28/16			GT Investigators
					Hour	\$18	Personal Services
					Hour	\$10	BD FACS ARIA IIIu Analyser
					Hour	\$54	BD FACS ARIA IIIu Sorter
					Hour	\$10	BD LSR II or BD Fortessa
					Hour	\$10	BD Accuri Analyzer
					Hour	\$10	AMBR Microbioreactor
					Hour	\$10	Li-COR
					Hour	\$10	Multisizer
					Hour	\$10	Amnis Flowsight
							Other Academic Investigators & Industry Partners
					Hour	\$36	Personal Services
					Hour	\$18	BD FACS ARIA IIIu Analyser
					Hour	\$75	BD FACS ARIA IIIu Sorter
					Hour	\$18	BD LSR II or BD Fortessa
					Hour	\$18	BD Accuri Analyzer
					Hour	\$20	AMBR Microbioreactor
					Hour	\$15	Li-COR
					Hour	\$18	Multisizer
					Hour	\$14	Amnis Flowsight
							<u>Industry</u>
					Hour	\$46	Personal Services
					Hour	\$130	BD FACS ARIA IIIu Analyser
					Hour	\$130	BD FACS ARIA IIIu Sorter
					Hour	\$31	BD LSR II or BD Fortessa
					Hour	\$20	BD Accuri Analyzer
					Hour	\$25	AMBR Microbioreactor
					Hour	\$21	Li-COR
					Hour	\$27	Multisizer
					Hour	\$16	Amnis Flowsight

Rate Annual Study Validation

			Study	v anuation _	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
53.	Poster Printer	BME	11/18/14	9/16/16			<u>Internal</u>
					Gram	\$0.70	Printer Toner
					Linear Ft.	\$2.47	24lb Bond 36" Paper
					Linear Ft.	\$2.50	24lb Bond 42" Paper
					Linear Ft.	\$4.04	Tyvek 36" Paper
					Linear Ft.	\$4.33	Tyvek 42" Paper
					Linear Ft.	\$3.78	24lb Adhesive Bond 36" Paper
					Linear Ft.	\$3.87	Photo 36" Paper
					Linear Ft.	\$4.08	Photo 42" Paper
							Same Day Service
					Gram	\$0.88	Printer Toner
					Linear Ft.	\$3.09	24lb Bond 36" Paper
					Linear Ft.	\$3.12	24lb Bond 42" Paper
					Linear Ft.	\$5.05	Tyvek 36" Paper
					Linear Ft.	\$5.41	Tyvek 42" Paper
					Linear Ft.	\$4.73	24lb Adhesive Bond 36" Paper
					Linear Ft.	\$4.84	Photo 36" Paper
					Linear Ft.	\$5.10	Photo 42" Paper
54.	XRD Center	MSE	2/23/15	9/30/16			Educational Institutions
							Tier Structure where total rates decline per group for each machine as
							usage increases
							Tier 1 (1st 0-150 Hours / Machine)
					Hour	\$34.00	Personal Services
					Hour	\$17.00	X-Ray Services
							Tier 2 (1st 151-300 Hours / Machine)
					Hour	\$17.00	Personal Services
					Hour	\$8.50	X-Ray Services
							Tier 3 (1st 301-450 Hours / Machine)
					Hour	\$8.50	Personal Services
					Hour	\$4.25	X-Ray Services
							Tier 4 (1st 451+ Hours / Machine)
					Hour	\$3.40	Personal Services
					Hour	\$1.70	X-Ray Services
							Industrial
		MSE	2/23/15	9/18/15	Hour	\$53.00	Personal Services
					Hour	\$41.00	X-Ray Services

Rate Annual Study Validation

			•	_			
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
							GA Tech
55.	Neuro Design Suite	IBB	5/11/15	11/20/17	Hour	\$85.00	Machine Service
							Other Academic
					Hour	\$100.00	Machine Service
							<u>Industrial</u>
					Hour	\$125.00	Machine Service
							THE COURT OF STATE OF
							Educational Institutions
56.	Materials Analysis Center	IEN	6/4/15	10/5/16	Hour	\$118.00	Testing Services
					Hour	\$34.00	Equipment Use
							<u>Industrial</u>
					Hour	\$118.00	Testing Services
					Hour	\$34.00	Equipment Use
							Educational Institutions
	B) (T	0/20/15	10/5/16	**	#102.00	Educational Institutions
57.	Precision Services Lab	ME	9/28/15	10/5/16	Hour	\$193.00	CT Scanner
					Hour	\$171.00	Equipment Use
							<u>Industrial</u>
					Hour	\$193.00	CT Scanner
					Hour	\$171.00	Equipment Use

Rate Annual Study Validation Rates

Basis No. Name of Rate Study Department Date Date Amount Service 58. High Throughput DNA Sequencing Core IBB 3/17/15 10/5/16 **Educational Institutions** Hour \$86 Personal Services Module \$1,245 Rapid Run w/out Reagents Module \$4,465 Rapid Run 2*100 BP Module \$2,013 Rapid Run 1*50 BP Module \$6,741 Rapid Run 2*150 BP Module \$7,992 Rapid Run 2*250 BP Lane \$1,765 High Output Sample \$74 TruSeq DNA Sample \$103 Nextera DNA Sample \$65 Nextera XT Sample \$100 TruSeq RNA Sample \$131 Nextera Rapid Capture Kit \$465 Separate Samples Kit Sample \$10 Nextera Library Quantification Sample \$27 TruSeq Library Quantification **Industrial** Hour \$86 Personal Services Module \$1,346 Rapid Run w/out Reagents Module \$4,566 Rapid Run 2*100 BP Module \$2,063 Rapid Run 1*50 BP Module \$6,942 Rapid Run 2*150 BP Module \$8,243 Rapid Run 2*250 BP Lane \$3,601 High Output Sample \$74 TruSeq DNA Sample \$103 Nextera DNA Sample \$65 Nextera XT Sample \$100 TruSeq RNA Sample \$131 Nextera Rapid Capture Kit \$465 Separate Samples Kit Sample \$10 Nextera Library Quantification Sample \$27 TruSeq Library Quantification

			Study	Validation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
							Internal / Educational Institutions:
59.	Heat Lab	ME	3/1/16		Hour	\$19	High Cost Equipment Usage
					Hour	\$9	Low Cost Equipment Usage
					Hour	\$23	Measurement Service
							External / Industrial:
					Hour	\$19	High Cost Equipment Usage
					Hour	\$9	Low Cost Equipment Usage
					Hour	\$23	Measurement Service
							Internal / Other Georgia Tech Departments:
60.	Acoustics Water Tank Lab	ME	5/2/16		Hour	\$61	Underwater Acoustic Measurments
							External / Other Educations Institutions:
					Hour	\$70	Underwater Acoustic Measurments
							External /Corporate:
					Hour	\$88	Underwater Acoustic Measurments
							Internal / Other Georgia Tech Departments:
61.	Mechanical Properties Characterization Facility	IMaT	6/1/16		Hour	\$50	Personal Services
					Day	\$35	Test System Base Daily
					Week	\$150	Test System Base Weekly
					Day	\$10	Ovens & Furnaces Daily
					Week	\$45	Ovens & Furnaces Weekly
					Hour	\$5	Metallography Prep Facility Hourly
							External /Industry:
					Hour	\$80	Personal Services
					Day	\$92	Test System Base Daily
					Week	\$450	Test System Base Weekly
					Day	\$30	Ovens & Furnaces Daily
					Week	\$135	Ovens & Furnaces Weekly
					Hour	\$15	Metallography Prep Facility Hourly

			Study	vandation	Kates		
lo.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
2.	Center for X-Ray Diffraction Structure Analysis	Chem	9/20/16		Per Analysis	\$300	Full Service Structure Analysis
					Per Hour	\$75	Personnel Assistance
					Per Hour	\$25	Instrument Services
3.	Systems Mass Spectrometry Center	IBB	11/9/16				GT & External Educational Institutes:
					Per Sample	\$20	Sample Preparation - Proteomics
					Per Sample	\$80	LC-MS/MS Analysis - Proteomics
					Per Sample	\$8	Data Analysis - Proteomics
					Per Sample	\$6	Sample Preparation - Metabolomics
					Per Sample	\$35	LC-MS/MS Analysis - Metabolomics
					Per Sample	\$10	Data Analysis - Metabolomics
					Per Sample	\$30	Additional Data Processing
							GT Industry Partners:
					Per Sample	\$40	Sample Preparation - Proteomics
					Per Sample	\$155	LC-MS/MS Analysis - Proteomics
					Per Sample	\$20	Data Analysis - Proteomics
					Per Sample	\$10	Sample Preparation - Metabolomics
					Per Sample	\$50	LC-MS/MS Analysis - Metabolomics
					Per Sample	\$14	Data Analysis - Metabolomics
					Per Sample	\$40	Additional Data Processing
							Industry:
					Per Sample	\$104	Sample Preparation - Proteomics
					Per Sample	\$155	LC-MS/MS Analysis - Proteomics
					Per Sample	\$45	Data Analysis - Proteomics
					Per Sample	\$53	Sample Preparation - Metabolomics
					Per Sample	\$59	LC-MS/MS Analysis - Metabolomics
					Per Sample	\$18	Data Analysis - Metabolomics
					Per Sample	\$101	Additional Data Processing

Rate Annual Study Validation

			Study	Validation	Rates		
No.	Name of Rate Study	Department	Date	Date	Basis	Amount	Service
64.	Radiological Science & Engineering Lab	ME	7/17/12	10/5/16			Faculty Usage
					Hour	\$144	Varian
					Hour	\$35	Facility Usage Fee
					Hour	\$80	Training Lab
							<u>Industry</u>
					Hour	\$500	Varian
					Hour	\$65	Facility Usage Fee
					Hour	\$128	Training Lab
							Educational Institutions
65	CVIII Drototyping Lob	SoIC	3/1/17		Hour	\$14	3D Printing-Personal Services
65.	GVU Prototyping Lab	Soic	3/1/17				-
					Cubic Inch	\$3.75	Dimension ABS Printer Build
					Cubic Inch	\$7.50	Dimension ABS Printer Support
					Grams	\$0.40	3D Systems Project Build
					Grams	\$0.30	3D Systems Project Support
							<u>Industrial</u>
					Hour	\$16.03	3D Printing-Personal Services
					Cubic Inch	\$4.67	Dimension ABS Printer Build
					Cubic Inch	\$8.48	Dimension ABS Printer Support
					Grams	\$0.79	3D Systems Project Build
					Grams	\$0.63	3D Systems Project Support
					Cubic Inch Cubic Inch Grams	\$4.67 \$8.48 \$0.79	3D Printing-Personal Services Dimension ABS Printer Build Dimension ABS Printer Support 3D Systems Project Build

Rate Annual

No. Name of Rate Study Department Date Date Basis Amount Service

Facility Use Rate

These are rates established for the infrequent and non-recurring use by external entities of Georgia Tech lab facilities that are unique and not commercially available.

1.	Multiphoton Lithography	Chemistry	2/14/07	Day	\$107	CORPORATE: Facility Use
2.	MARC - KUKA	MARC	3/6/08	Month	\$1,364	CORPORATE: Facility Use
3.	Combustion Actuator Test Facility	ME	5/10/05	1/2 Day	\$8	OTHER ACADEMIC / CORPORATE: Facility Use
4.	Optical Imaging & Sensing Lab	ECE	10/8/08	Hour	\$15	CORPORATE: Facility Use
5.	MARC - Clean Room	MARC	6/14/10	Year	\$1,205	<u>CORPORATE:</u> Facility Use
6.	Micromachined Sensors & Transducers Lab	ECE	5/21/08	Hour	\$9	CORPORATE: Facility Use
7.	Nano Furnace	ME	2/17/13	Hour	\$20	CORPORATE: Facility Use
8.	MOF Synthesis Lab Facility	СНВЕ	4/5/13	Hour	\$36	CORPORATE: Personal Services
0.	A Contract Synthesis East Lacinty	CHBL	4/5/13 4/5/13	Sample Hour	\$50 \$8	MOF Synthesis Additional Analysis

Rates

Rate Annual Study Validation

Basis Service No. Name of Rate Study Department Date Date Amount **CORPORATE:** MSE 7/16/13 Academic Professional 9. Thermal Analysis Hour \$62 \$44 Hour GRA Hour \$15 Machine Services CORPORATE: 10. Polymer Processing & Properties Laboratory MSE 7/18/13 Hour \$44 Personal Services Hour \$37 **Processing Services** Hour \$40 **Testing Services** Chip \$50 Consumables CORPORATE: 11. Raman & Photoluminescence Facility ME 2/17/14 Hour \$111 Machine Services CORPORATE: Bionics Lab **ECE** 10/19/15 Monthly \$153 Lab Space 12. Other Acadamic Machine Service Stable Isotope Facility **EAS** 8/25/14 Hour \$18 Corporate Machine Service \$37 OTHER ACADEMIC / CORPORATE: 14. Microbial Solutions Lab **CHBE** 6/30/14 Liters \$90 Liquid Cultivations **CORPORATE:** Center for the Study of Systems Biology Biology 10/26/15 Computation \$1,000 Computational Services **EXTERNAL**: Robotic Musicianship Music 2/26/16 Hour \$109 Robot Usage 16. Hour \$54 Legal Admin Fee