

POST-DISINFECTION CORONAVIRUS-19 FIELD VERIFICATION TESTING REPORT

Mitchell Gayer

NJIT

333 Martin Luther King Blvd

Newark, NJ 07102

SITE LOCATION: NJIT

333 Martin Luther King Blvd

Newark, NJ 07102

SCOPE OF WORK: COVID-19 Verification Testing

AREAS TESTED: Campus Wide

CLIENT CONTACT(S): Mitchell Gayer

SITE EVALUATION CONDUCTED: 9/30/20-10/1/20

DATE OF REPORT: 10/02/2020

REPORT PREPARED BY: Kadeem Hill

REPORT REVIEWED BY: Veronica Kero P.E., CIH

{Omega Project#: 20-1175}

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Executive Summary:

On 9/30/20 and 10/1/20 Omega Environmental Services conducted ATP surface testing and SARS-CoV-2 environmental sampling in Kupfrain Hall, Mechanical Engineering Center (MEC), Faculty Memorial Hall (FMH), Guttenberg Information Technologies Center (GITC), Houten Library, The Campus Center, The Central King Building, Wellness Entertainment Center (WEC), Cullimore Hall, Life Science, and Engineering Center (LSEC), Oak Hall, Redwood Hall, Honors College, and Laurel Hall of the NJIT campus. The purpose of this testing was to document adequate disinfection and cleaning by the NJIT Building Service staff.

Parameter	Results
Adenosine Triphosphate (ATP) Direct Reads: Bioluminescence Meter (Detects Bacteria and Bio- Load)	 9 out of the 197 ATP representative surface samples collected had recorded in elevated ATP levels (3.6% of samples). 4 out of the 9 surfaces with elevated ATP levels were recleaned by NJIT Building Services and retested. Retest results indicated acceptable levels of ATP on all recleaned surfaces. Omega Environmental Services collected SARS-CoV-2 surface samples on the 5 surfaces, with elevated ATP levels, that were not recleaned by NJIT Building Services.
Coronavirus-19 PCR Swab	•Laboratory results indicate all the SARS-Cov-2 samples taken on 9/30/20 and 10/1/20 were negative

Bio-Load and COVID-19 Field Sampling & Analysis Protocol:

While a COVID-19 PCR DNA sequencing field testing method has become available, pre-screen methods that apply to overall bacteria cleaning are being employed to more efficiently clear areas and reduce testing costs.

- REAL-TIME FIELD SCREEN USING ATP DIRECT-READ BIO-LUMINESCENCE METER AND WHITE CLOTH TESTS: Omega field IH to inspect the room and collect ATP swabs on all component basis to assess overall cleaning thoroughness. If there are ATP swab results statistically above "typical background," re-cleaning of the room will be requested followed by repeat ATP testing before proceeding with further testing.
- COVID-19 PCR DNA SEQUENCING METHOD: Once a room passes above described bio-load testing protocols, a COVID-19 PCR swab will be collected from alternating room locations.
- COVID-19 PCR AIR SAMPLING METHOD: Air samples are collected using a linear oscillating pump in conjunction with a 0.3 µm Polytetrafluoroethylene (PTFE) filter housed 37 mm cassettes. The pump pulls the air from the surrounding area into the cassette where any airborne virus particulates are captured. The samples are collected at a flow rate of 15 liters per minute (LPM), for 2 hours, totaling 1800 liters. Once sampling is complete, samples are

shipped to an independent laboratory for analysis. Samples are analyzed via a polymerase chain reaction (PCR) method. The PCR method relies on a protein responsible for DNA replication in cells, please note this protein will only replicate DNA strands that match the COVID-19 sequence. If replication exceeds a threshold established by the laboratory the sample is determined to be positive for the COVID-19 strand. Test results should be used as metrics for cleaning success rather than a direct estimator for infection potential.

Definitions:

ATP - Adenosine Triphosphate RLU - Relative Light Unit *- Elevated ATP Levels

ATP Direct Read: Bio-Luminescence Meter (Hygiena/Ensure) Data:

Test No.	Date	Building	Room	Surface	RLU Result	Lower Control Limit	Upper Control Limit	Notes
1	09/30/2020 10:47 AM	Kupfrain Hall	206	Door Handle	110	105	211	Classroom Side
2	09/30/2020 10:48 AM	Kupfrain Hall	206	Light Switch	129	105	211	
3	09/30/2020 10:48 AM	Kupfrain Hall	206	Row 1, Seat 8, Table	7	105	211	
4	09/30/2020 10:49 AM	Kupfrain Hall	206	Row 1, Seat 6, Table	18	105	211	
5	09/30/2020 10:50 AM	Kupfrain Hall	206	Row 1, Seat 1, Table	7	105	211	
6	09/30/2020 10:50 AM	Kupfrain Hall	206	Row 2, Seat 7, Table	11	105	211	
7	09/30/2020 10:51 AM	Kupfrain Hall	206	Row 2, Seat 4, Table	5	105	211	
8	09/30/2020 10:52 AM	Kupfrain Hall	206	Row 2, Seat 3, Table	13	105	211	
9	09/30/2020 11:02 AM	Kupfrain Hall	206	Row 3, Seat 8, Table	5	105	211	
10	09/30/2020 11:03 AM	Kupfrain Hall	206	Row 3, Seat 6, Table	6	105	211	
11	09/30/2020 11:03 AM	Kupfrain Hall	206	Row 3, Seat 1, Table	42	105	211	

12	09/30/2020	Kupfrain Hall	206	Row 4, Seat 8, Table	10	105	211	
12	11:04 AM	кирпаш пап	200	NOW 4, Seat 6, Table	10	103	211	
13	09/30/2020	Kupfrain Hall	206	Row 4, Seat 4, Table	11	105	211	
13	11:05 AM	Kupiraiii riaii	200	Now 4, Seat 4, Table	11	103	211	
14	09/30/2020	Kupfrain Hall	206	Row 4, Seat 3, Table	30	105	211	
14	11:05 AM	Kupiraiii ilaii	200	Now 4, Seat 3, Table	30	103	211	
15	09/30/2020	Kupfrain Hall	206	Row 5, Seat 7, Table	9	105	211	
15	11:06 AM		200	Now 3, 3cat 7, Table	,	103	211	
16	09/30/2020	Kupfrain Hall	206	Row 5, Seat 6, Table	10	105	211	
	11:07 AM	Карпантнан	200	Now 3, sear 6, rable	10	103		
17	09/30/2020	Kupfrain Hall	206	Row 5, Seat 1, Table	24	105	211	
	11:07 AM	Rapiranirian		11011 3) 3000 1) 10010		100		
18	09/30/2020	Kupfrain Hall	206	Row 6, Seat 8, Table	6	105	211	
	11:08 AM							
19	09/30/2020	Kupfrain Hall	206	Row 6, Seat 6, Table	7	105	211	
	11:08 AM				•			
20	09/30/2020	11:39 AM	204	Row 1, Seat 1, Table	14	105	211	
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
21	09/30/2020	Kupfrain Hall	204	Row 1, Seat 2, Table	21	105	211	
	11:40 AM			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
22	09/30/2020	Kupfrain Hall	204	Row 2, Seat 3, Table	13	105	211	
	11:40 AM							
23	09/30/2020	Kupfrain Hall	204	Row 2, Seat 6, Table	9	105	211	
	11:41 AM	'		, ,				
24	09/30/2020	Kupfrain Hall	204	Row 2, Seat 9, Table	12	105	211	
	11:42 AM	'		, ,				
25	09/30/2020	Kupfrain Hall	204	Row 3, Seat 1, Table	12	105	211	
	11:42 AM	'		, ,				
26	09/30/2020	Kupfrain Hall	204	Row 3, Seat 4, Table	12	105	211	
	11:43 AM	'		, ,				
27	09/30/2020	Kupfrain Hall	204	Row 3, Seat 12, Table	3	105	211	
	11:44 AM	'		, ,				
28	09/30/2020	Kupfrain Hall	204	Row 4, Seat 6, Table	79	105	211	
_	11:45 AM	•	-	, , , , , , , , ,	-			

20	09/30/2020	K of sets Hall	204	D. AC. J. 7 T. bl.	_	405	244	
29	11:45 AM	Kupfrain Hall	204	Row 4 Seat 7, Table	9	105	211	
30	09/30/2020	Kupfrain Hall	204	Row 4, Seat 10, Table	9	105	211	
	11:46 AM	Kapiraiirriaii	204	Now 4, Seat 10, Table		103	211	
31	09/30/2020	Kupfrain Hall	204	Row 5, Seat 3, Table	7	105	211	
	11:47 AM 09/30/2020							
32	11:48 AM	Kupfrain Hall	204	Row 5, Seat 6, Table	15	105	211	
	09/30/2020	_						
33	11:49 AM	Kupfrain Hall	204	Row 5, Seat 9, Table	12	105	211	
2.4	09/30/2020	K of voice I I oll	204	Daw E Coat 12 Table	1.4	105	211	
34	11:49 AM	Kupfrain Hall	204	Row 5, Seat 12, Table	14	105	211	
35	09/30/2020	Kupfrain Hall	204	Light Switch*	237	105	211	SARS-CoV-2 Sample Taken
	11:50 AM	- Napirali riali		Light owned		100		or the coverage rate.
36	09/30/2020	Kupfrain Hall	204	Door Handle	72	105	211	Classroom side
	11:51 AM 09/30/2020							
37	12:25 PM	MEC	224	Door Handle	89	105	211	Left Side of Classroom
20	09/30/2020	1450	224	1:1.6 ::1	00	405	244	1 5 6 1 5 6
38	12:26 PM	MEC	224	Light Switch	82	105	211	Left Side of Classroom
39	09/30/2020	MEC	224	Row 1, Seat 1, Table	15	105	211	
	12:27 PM	IVIEC	227	NOW 1, 3cat 1, Table		103	211	
40	09/30/2020	MEC	224	Row 1, Seat 4, Table	13	105	211	
	12:29 PM							
41	09/30/2020 12:30 PM	MEC	224	Row 1, Seat 8, Table	7	105	211	
	09/30/2020							
42	12:31 PM	MEC	224	Row 3, Seat 2, Table	10	105	211	
42	09/30/2020	MEC	224	Daw 2 Coat C Table	7	105	211	
43	12:31 PM	MEC	224	Row 3, Seat 5, Table	7	105	211	
44	09/30/2020	MEC	224	Row 3, Seat 11, Table	9	105	211	
' '	12:32 PM	20						
45	09/30/2020	MEC	224	Row 5, Seat 3, Table	5	105	211	
	12:32 PM							

46	09/30/2020	MEC	224	Row 5, Seat 6, Table	6	105	211	
40	12:33 PM	IVIEC	224	Row 5, Seat 6, Table	D	105	211	
47	09/30/2020 12:34 PM	MEC	224	Row 5, Seat 12, Table	8	105	211	
48	09/30/2020 01:26 PM	Tiernan Hall	105	Row 1, Seat 1, Table	15	105	211	
49	09/30/2020 01:26 PM	Tiernan Hall	105	Row 1, Seat 3, Table	10	105	211	
50	09/30/2020 01:27 PM	Tiernan Hall	105	Row 2, Seat 1, Table	11	105	211	
51	09/30/2020 01:28 PM	Tiernan Hall	105	Row 2, Seat 3, Table	15	105	211	
52	09/30/2020 01:28 PM	Tiernan Hall	105	Row 2, Seat 5, Table	37	105	211	
53	09/30/2020 01:29 PM	Tiernan Hall	105	Row 3, Seat 1, Table	9	105	211	
54	09/30/2020 01:30 PM	Tiernan Hall	105	Row 3, Seat 3, Table	14	105	211	
55	09/30/2020 01:31 PM	Tiernan Hall	105	Row 3, Seat 5, Table	7	105	211	
56	09/30/2020 01:31 PM	Tiernan Hall	105	Row 4, Seat 1, Table	17	105	211	
57	09/30/2020 01:32 PM	Tiernan Hall	105	Row 4, Seat 3, Table	16	105	211	
58	09/30/2020 01:33 PM	Tiernan Hall	105	Row 4, Seat 5, Table	7	105	211	
59	09/30/2020 01:35 PM	Tiernan Hall	105	Light Switch	20	105	211	
60	09/30/2020 01:35 PM	Tiernan Hall	105	Door handle	30	105	211	Classroom side
61	09/30/2020 02:23 PM	FMH	408	Light Switch	42	105	211	
62	09/30/2020 02:24 PM	FMH	408	Door Handle*	211	105	211	Classroom Side - SARS-CoV-2 Sample Taken

63	09/30/2020		408	Dow 1 Coat 1 Table	59	105	211	
63	02:25 PM	FMH	408	Row 1, Seat 1, Table	59	105	211	
64	09/30/2020	FMH	408	Row 1, Seat 6, Table	21	105	211	
04	02:25 PM	1 10111	400	NOW 1, Seat 0, Table	21	103	211	
65	09/30/2020	FMH	408	Row 1, Seat 7, Table *	259	105	211	SARS-CoV-2 Sample Taken
	02:26 PM			, , , , , , , , , , , , , , , , , , , ,				, , , , , , , , , , , , , , , , , , ,
66	09/30/2020	FMH	408	Row 2, Seat 2, Table	21	105	211	
	02:26 PM							
67	09/30/2020 02:27 PM	FMH	408	Row 2, Seat 4, Table	20	105	211	
	09/30/2020							
68	02:28 PM	FMH	408	Row 2, Seat 9, Table	28	105	211	
	09/30/2020							
69	02:28 PM	FMH	408	Row 3, Seat 1, Table	65	105	211	
70	09/30/2020	EN ALL	408	Pow 2 Soat 2 Table	26	105	211	
70	02:29 PM	FMH	408	Row 3, Seat 3, Table	20	105	211	
71	02:30 PM	FMH	408	Row 3, Seat 4, Table	40	105	211	
/ -			700	Now 3, 3cat 4, Table		103	211	
72	09/30/2020	FMH	408	Row 4, Seat 1, Table	12	105	211	
	02:31 PM			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
73	09/30/2020	FMH	408	Row 4, Seat 3, Table	44	105	211	
	02:32 PM							
74	09/30/2020 02:32 PM	FMH	408	Row 4, Seat 6, Table	22	105	211	
	09/30/2020							
75	02:33 PM	FMH	408	Row 5, Seat 2, Table	17	105	211	
	09/30/2020							
76	02:34 PM	FMH	408	Row 5, Seat 4, Table	1	105	211	
77	09/30/2020	EN 411	400	Dow E Cost O Toble	20	105	211	
//	02:34 PM	FMH	408	Row 5, Seat 9, Table	20	105	211	
78	09/30/2020	FMH	408	Row 6, Seat 4, Table	1	105	211	
/0	02:35 PM	1 1711 1	400	Now 0, Seat 4, Table	1	103	711	
79	09/30/2020	FMH	408	Row 7, Seat 9, Table	17	105	211	
, ,	02:37 PM	1 14111		1.5W 7, Seat 3, Table	± ,	103		

80	09/30/2020	GITC	1400	Row 1, Seat 2, Table	5	105	211	
	04:26 PM	GITC	1400	Now 1, Scat 2, Table	3	103	211	
81	09/30/2020 04:28 PM	GITC	1400	Row 1, Seat 8, Table	11	105	211	
82	09/30/2020 04:29 PM	GITC	1400	Row 1, Seat 14, Table	15	105	211	
83	09/30/2020 04:30 PM	GITC	1400	Row 2, Seat 1, Table	0	105	211	
84	09/30/2020 04:31 PM	GITC	1400	Row 2, Seat 7, Table	6	105	211	
85	09/30/2020 04:32 PM	GITC	1400	Row2, Seat 11, Table	32	105	211	
86	09/30/2020 04:32 PM	GITC	1400	Row 4, Seat 4, Table	8	105	211	
87	09/30/2020 04:33 PM	GITC	1400	Row 4, Seat 10, Table	14	105	211	
88	09/30/2020 04:33 PM	GITC	1400	Row 4, Seat 14, Table	9	105	211	
89	09/30/2020 04:34 PM	GITC	1400	Row 6, Seat 1, Table	6	105	211	
90	09/30/2020 04:34 PM	GITC	1400	Row 6, Seat 5, Table	9	105	211	
91	09/30/2020 04:35 PM	GITC	1400	Row 6, Seat 13, Table	4	105	211	
92	09/30/2020 04:36 PM	GITC	1400	Row 8, Seat 2, Table	3	105	211	
93	09/30/2020 04:36 PM	GITC	1400	Row 8, Seat 4, Table	16	105	211	
94	09/30/2020 04:37 PM	GITC	1400	Row 8, Seat 11, Table	23	105	211	
95	09/30/2020 04:37 PM	GITC	1400	Row 9, Seat 4, Table	12	105	211	
96	09/30/2020 04:38 PM	GITC	1400	Row 9, Seat 12, Table	21	105	211	

97	09/30/2020 04:40 PM	GITC	1400	Door Push Bar	49	105	211	Classroom Side
98	09/30/2020 04:41 PM	GITC	1400	Light Switch	17	105	211	
99	10/01/2020 08:48 AM	Houten Library	1 st Floor	Computer 1, Mouse	21	105	211	
100	10/01/2020 08:50 AM	Houten Library	1 st Floor	Computer CA-1047- 005, Keyboard*	288	105	211	SARS-CoV-2 Sample Taken
101	10/01/2020 08:50 AM	Houten Library	1 st Floor	Computer CA-1047- 009, Mouse	46	105	211	
102	10/01/2020 08:51 AM	Houten Library	1 st Floor	Computer CA-1047- 016, Keyboard	64	105	211	
103	10/01/2020 08:52 AM	Houten Library	1 st Floor	Computer CA-1047- 032, Mouse	98	105	211	
104	10/01/2020 08:52 AM	Houten Library	1 st Floor	Computer CA-1047- 036, Keyboard	39	105	211	
105	10/01/2020 08:53 AM	Houten Library	1 st Floor	Computer CA-1047-39, Keyboard	94	105	211	
106	10/01/2020 08:54 AM	Houten Library	1 st Floor	Computer CA-1047-43, Mouse	77	105	211	
107	10/01/2020 08:54 AM	Houten Library	1 st Floor	Computer CA-1047-63, Keyboard	11	105	211	
108	10/01/2020 08:55 AM	Houten Library	1 st Floor	Computer CA-1047- 060, Keyboard	31	105	211	
109	10/01/2020 08:56 AM	Houten Library	1 st Floor	Computer CA-1047-074 Mouse	30	105	211	
110	10/01/2020 08:56 AM	Houten Library	Lower Level	Drink Vending Machine Keypad	44	105	211	
111	10/01/2020 08:59 AM	Houten Library	3 rd Floor	Elevator Call Button (Down)	26	105	211	
112	10/01/2020 08:59 AM	Houten Library	2 nd Floor	Elevator Call Button (Down)	81	105	211	
113	10/01/2020 09:00 AM	Houten Library	2 nd Floor	Door Handle to Room 2022	69	105	211	Hallway Side of the Door

114	10/01/2020 09:01 AM	Houten Library	2 nd Floor	Stair Handrail	15	105	211	Between 2 nd and 3 rd Floor Landing
115	10/01/2020 09:02 AM	Houten Library	1 st Floor	Elevator Call Button (Up)	162	105	211	SARS-CoV-2 Sample Taken
116	10/01/2020 09:24 AM	Campus Center	C-Store	Fridge Handle 1	148	105	211	SARS-CoV-2 Sample Taken
117	10/01/2020 09:24 AM	Campus Center	C-Store	Fridge Handle 2	24	105	211	
118	10/01/2020 09:25 AM	Campus Center	C-Store	Fridge Handle 3	42	105	211	
119	10/01/2020 09:26 AM	Campus Center	C-Store	Fridge Handle 4	63	105	211	
120	10/01/2020 09:26 AM	Campus Center	C-Store	Fridge Handle 5	15	105	211	
121	10/01/2020 09:27 AM	Campus Center	C-Store	Fridge Handle 6	45	105	211	
122	10/01/2020 09:28 AM	Campus Center	C-Store	Fridge Handle 7	22	105	211	
123	10/01/2020 09:28 AM	Campus Center	C-Store	Fridge Handle 8	28	105	211	
124	10/01/2020 10:09 AM	Central King Building	116	Table 1, Seat 1	44	105	211	
125	10/01/2020 10:09 AM	Central King Building	116	Table 1, Seat 3	34	105	211	
126	10/01/2020 10:10 AM	Central King Building	116	Table 2, Seat 5	33	105	211	
127	10/01/2020 10:11 AM	Central King Building	116	Table 2, Seat 7	27	105	211	
128	10/01/2020 10:12 AM	Central King Building	116	Table 3, Seat 1	15	105	211	
129	10/01/2020 10:12 AM	Central King Building	116	Table 3, Seat 3	19	105	211	
130	10/01/2020 10:13 AM	Central King Building	116	Table 4, Seat 5	18	105	211	

	10/01/2020	Central King						
131	10:13 AM	Building	116	Table 4, Seat 7	33	105	211	
	10/01/2020	Central King						
132	10/01/2020 10:14 AM	Building	116	Table 5, Seat 1	8	105	211	
133	10/01/2020	Central King	116	Table 5, Seat 3	14	105	211	
	10:15 AM	Building						
134	10/01/2020	Central King	116	Table 6, Seat 5	22	105	211	
	10:16 AM	Building		,				
135	10/01/2020	Central King	116	Table 6, Seat 7	31	105	211	
	10:17 AM	Building						
136	10/01/2020	Central King	116	Table 7, Seat 1	24	105	211	
130	10:17 AM	Building	110	Table 7, Seat 1	27	103	211	
137	10/01/2020	Central King	116	Table 7, Seat 3	34	105	211	
157	10:18 AM	Building	110	Table 7, Seat 5	54	105	211	
120	10/01/2020	Central King	116	Table O. Cast F	2.4	105	244	
138	10:19 AM	Building	116	Table 8, Seat 5	24	105	211	
420	10/01/2020	Central King	446	T-1- 0 C - 7	40	405	244	
139	10:19 AM	Building	116	Table 8, Seat 7	18	105	211	
140	10/01/2020 10:21 AM	Central King Building	116	Door 1, Handle*	324	105	211	Classroom Side of the door Omega Requested a reclean by NJIT Building Services. SARS- CoV-2 Sample Taken before reclean
141	10/01/2020 10:21 AM	Central King Building	116	Door 2, Handle	130	105	211	Classroom Side
142	10/01/2020 10:22 AM	Central King Building	116	Light Buttons	15	105	211	Near Door 1
1.10	10/01/2020	Central King	110			4.0.5	244	
143	10:23 AM	Building	116	Light Buttons	59	105	211	Near Door 2
	10/01/2020	Central King						
144	10:25 AM	Building	116	Door 1, Handle	67	105	211	Test No. 140 Retest
		Wellness	2 nd FL					
145	10/01/2020	Entertainment	Fitness	Treadmill 1	30	105	211	Pre-Cleaning Sample
1.5	10:43 AM	Center (WEC)	Center					
		55 (1120)	50601		1	l	l	

146	10/01/2020 10:44 AM	WEC	2 nd FL Fitness Center	Stairmaster 2	17	105	211	Pre-Cleaning Sample
147	10/01/2020 10:45 AM	WEC	2 nd FL Fitness Center	Jungle Gym Dip handle*	1201	105	211	Pre-Cleaning Sample
148	10/01/2020 10:46 AM	WEC	2 nd FL Fitness Center	Octane Fitness Treadmill 2*	249	105	211	Pre-Cleaning Sample
149	10/01/2020 10:47 AM	WEC	2 nd FL Fitness Center	15lbs dumbbell Handle	77	105	211	Pre-Cleaning Sample
150	10/01/2020 10:48 AM	WEC	2 nd FL Fitness Center	50lbs Dumbbell Handle	37	105	211	Pre-Cleaning Sample
151	10/01/2020 10:51 AM	WEC	2 nd FL Fitness Center	Free Weight Shoulder press bench	25	105	211	Pre-Cleaning Sample
152	10/01/2020 10:52 AM	WEC	2 nd FL Fitness Center	Adjustable Free weight bench 4	89	105	211	Pre-Cleaning Sample
153	10/01/2020 10:52 AM	WEC	2 nd FL Fitness Center	Door Push Bar*	280	105	211	Weight room Side of the Door, Pre-Cleaning Sample
154	10/01/2020 10:53 AM	WEC	2 nd FL Fitness Center	Door Handle	65	105	211	Hallway Side of the Door, Pre- Cleaning Sample
155	10/01/2020 11:04 AM	WEC	2 nd FL Fitness Center	Octane Fitness Treadmill 2	2	105	211	Post Cleaning Sample- Test No. 148 Retest
156	10/01/2020 11:10 AM	WEC	2 nd FL Fitness Center	Jungle Gym, Dip handle	25	105	211	Post-Cleaning Sample- Test No. 147 Retest

157	10/01/2020 11:19 AM	WEC	2 nd FL Fitness Center	Door Push Bar	8	105	211	Post-Cleaning Sample- Test No. 153 Retest, Fitness Center Side of the Door
158	10/01/2020 02:36 PM	Cullimore Hall	104	Row 1, Seat 2, Table	19	105	211	
159	10/01/2020 02:36 PM	Cullimore Hall	104	Row 1, Seat 4, Table	2	105	211	
160	10/01/2020 02:37 PM	Cullimore Hall	104	Row 1, Seat 10, Table	10	105	211	
161	10/01/2020 02:37 PM	Cullimore Hall	104	Row 3, Seat 1, Table	33	105	211	
162	10/01/2020 02:38 PM	Cullimore Hall	104	Row 3, Seat 5, Table	4	105	211	
163	10/01/2020 02:39 PM	Cullimore Hall	104	Row 3, Seat 8, Table	2	105	211	
164	10/01/2020 02:41 PM	Cullimore Hall	104	Row 5, Seat 1, Table	5	105	211	
165	10/01/2020 02:41 PM	Cullimore Hall	104	Row 5, Seat 7, Table	64	105	211	
166	10/01/2020 02:42 PM	Cullimore Hall	104	Row 5, Seat 8, Table	6	105	211	
167	10/01/2020 02:48 PM	Cullimore Hall	104	Row 7, Seat 2, Table	7	105	211	
168	10/01/2020 02:49 PM	Cullimore Hall	104	Row 7, Seat 4, Table	11	105	211	
169	10/01/2020 02:50 PM	Cullimore Hall	104	Row 7, Seat 9, Table	1	105	211	
170	10/01/2020 02:52 PM	Cullimore Hall	104	Row 9, Seat 1, Table	2	105	211	
171	10/01/2020 02:53 PM	Cullimore Hall	104	Row 9, Seat 5, Table	2	105	211	
172	10/01/2020 02:54 PM	Cullimore Hall	104	Row 9, Seat 8, Table	4	105	211	

173	10/01/2020	Cullimore Hall	104	Row 11, Seat 1, Table	5	105	211	
1/3	02:54 PM		104	NOW 11, Seat 1, Table	,	103	211	
174	10/01/2020	Cullimore Hall	104	Row 11, Seat 2, Table	5	105	211	
174	02:55 PM		104	NOW 11, Scat 2, Table	,	103	211	
175	10/01/2020	Cullimore Hall	104	Door 01, Push Bar	26	105	211	Classroom Side of the Door
1,3	02:57 PM			2001 01) 1 0311 201		100		
176	10/01/2020	Cullimore Hall	104	Door 02, Push Bar	152	105	211	Classroom Side of the Door,
	03:00 PM			, , , , , ,				SARS-CoV-2 Sample Taken
177	10/01/2020	Cullimore Hall	106	Door 01, Push Bar	4	105	211	
	03:22 PM			,				
178	10/01/2020	Cullimore Hall	106	Door 02, Push Bar	4	105	211	
	03:23 PM	C III: 11 II		,				
179	10/01/2020	Cullimore Hall	106	Row 1, Seat 1, Table	7	105	211	
	03:24 PM	6 11:						
180	10/01/2020	Cullimore Hall	106	Row 1, Seat 6, Table	9	105	211	
	03:25 PM 10/01/2020	Cullimore Hall						
181	03:26 PM	Cullimore Hall	106	Row 1, Seat 10, Table	14	105	211	
	10/01/2020	Cullimore Hall						
182	03:26 PM	Cullilliore Hall	106	Row 3, Seat 3, Table	7	105	211	
	10/01/2020	Cullimore Hall						
183	03:27 PM	Cullillore Hall	106	Row 3, Seat 7, Table	6	105	211	
	10/01/2020	Cullimore Hall						
184	03:28 PM	Cummore rian	106	Row 3, Seat 9, Table	5	105	211	
	10/01/2020	Cullimore Hall						
185	03:28 PM		106	Row 5, Seat 1, Table	6	105	211	
	10/01/2020	Cullimore Hall						
186	03:29 PM		106	Row 5, Seat 2, Table	9	105	211	
107	10/01/2020	Cullimore Hall	100	David Carl 7 Told		105	244	
187	03:29 PM		106	Row 5, Seat 7, Table	6	105	211	
188	10/01/2020	Cullimore Hall	106	Dow 7 Coat 1 Table	4	105	211	
188	03:33 PM		106	Row 7, Seat 1, Table	4	105	211	
189	10/01/2020	Cullimore Hall	106	Row 7, Seat 3, Table	5	105	211	
103	03:34 PM		100	Now 7, Seat 3, Table	3	103	211	

190	10/01/2020 03:35 PM	Cullimore Hall	106	Row 7, Seat 9, Table	4	105	211	
191	10/01/2020 03:36 PM	Cullimore Hall	106	Row 9, Seat 3, Table	7	105	211	
192	10/01/2020 03:37 PM	Cullimore Hall	106	Row 9, Seat 5, Table	6	105	211	
193	10/01/2020 03:37 PM	Cullimore Hall	106	Row 9, Seat 8, Table	3	105	211	
194	10/01/2020 03:38 PM	Cullimore Hall	106	Row 10, Seat 1, Table	4	105	211	
195	10/01/2020 03:39 PM	Cullimore Hall	106	Row 10, Seat 2, Table	4	105	211	
196	10/01/2020 03:40 PM	Cullimore Hall	106	Row 10, Seat 3, Table	7	105	211	
197	10/01/2020 03:41 PM	Cullimore Hall	106	Row 10, Seat 4, Table	4	105	211	

Field Notes

- Seat numbering starts on the left side of the room, from the perspective of the instructor.
- Row A or 1 is the row closest to the instructor.
- All directions and labels are from the perspective of the instructor, looking towards the seats
- Due to student occupancy, surface sampling in the Life Science and Engineering Center and Kupfrain 211 could not be conducted

Data Interpretation:

- 9 out of the 197 ATP representative surface samples collected had recorded in elevated ATP levels (3.6% of samples).
- 4 out of the 9 surfaces with elevated ATP levels were recleaned by NJIT Building Services and retested. Retest results indicated acceptable levels of ATP on all recleaned surfaces.
- Omega Environmental Services collected SARS-CoV-2 surface samples on the 5 surfaces, with elevated ATP levels, that were not recleaned by NJIT Building Services.
- In the Wellness Entertainment Center, the average pre-cleaning ATP concentration was 207 RLU, with 33% of samples indicating elevated ATP levels. The average post-cleaning ATP concentration was 12 RLU, with a 94.2 % decrease in ATP concentrations. No post-cleaning samples resulted in elevated levels of ATP. It should be noted, only surfaces with elevated pre-cleaning ATP concentrations were tested post-cleaning.

Surface SARS-CoV-2 Swab Data: 9/30/20-10/1/20

Sample No.	SARS-CoV-2 Swab Sample Locations	Result (Positive/Negative)
	Kupfrain Hall, Room 206, Door Handle, Classroom Side of the Door	Negative
2	Kupfrain Hall, Room 206, Light switch	Negative
3	Kupfrain Hall, Room 204, Door Handle, Classroom Side of the Door	Negative
4	MEC, Room 224, Left Door Handle, Classroom Side of the Door	Negative
5	FMH, Room 408, Door Handle, Classroom Side of the Door	Negative
6	FMH, Room 408, Row 1, Seat 7, Table	Negative
7	Houten Library, 1st Floor, Computer CA-1047-005, Mouse	Negative
8	Houten Library,1st Floor Elevator Call Button (Up)	Negative
9	Campus Center, 1st Floor, C-Store, Fridge Handle 1	Negative
10	Central King Building, Room 116, Door 1, Handle	Negative
11	Honors College, 1st Floor, Door Handle to Room 111 (Elevator Lobby) , Lobby Side of the Door	Negative
12	Redwood Hall, 1st Floor, Door Handle to Hallway, Lobby Side of the Door	Negative
13	Oak Hall, 1st Floor, Door Handle to Lobby, Vestibule Side of the Door	Negative
14	Laurel Hall, 1st Floor, Door Handle to Lobby, Vestibule Side of the Door	Negative
15	Cullimore, Room 104, Door Push Bar, Classroom Side of the Door.	Negative

SARS-CoV-2 Air Sample Data: 9/30/20-10/1/20

Sample No.	SARS-CoV-2 Air Sample Locations	Result (Positive/Negative)		
1	Kupfrain Hall, Room 211	Negative		
2	WEC, 2 nd Floor Fitness Center	Negative		
3	MEC, Room 224	Negative		
4	Tiernan Hall, Room 105	Negative		
5	FMH, Room 408	Negative		
6	Cullimore Hall, Room 104	Negative		
7	GITC, Room 1400	Negative		
8	Central King Building, Room 116	Negative		
9	Houten Library,1st Floor Computer Area	Negative		
10	Campus Center, 1st Floor, C-Store	Negative		
11	Honors College, 1st Floor Lobby	Negative		
12	Laurel Hall, 1st Floor Vestibule	Negative		
13	Oak Hall, 1st Floor Vestibule	Negative		
14	Redwood Hall, 1st Floor Lobby	Negative		
15	Cullimore Hall, Room 106	Negative		
16	LSEC, Ground Floor Sitting Area	Negative		

nterpretation: Laboratory resu negative	lts indicate all the	e SARS-Cov-2	samples taken o	n 9/30/20 and 10/

Attachments:	
	Laboratory analysis reports with chain-of-custody Room Maps

Prestige EnviroMicrobiology, Inc.

Analytical Test Report

Client: Omega Environmental Services, Inc., 280 Huyler Street, South Hackensack, NJ 07606

Client Project/Name: 20-1175

Sample date: 9-30-2020 Submittal date: 9-30-2020 Sample received: 10-1-2020

Samples submitted by: Kadeem Hill

Date analysis completed: October 2, 2020

Prestige Report number: 201001-02

RT-PCR 2019-nCoV: Analysis of Swab samples for the detection of SARS-CoV-2 Genetic

Markers

Markers					
Prestige # Client sample ID Location	2019-nCoV (N1 Protein)	Cycle Threshold (Ct) Value ³ (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value ³ (N2 Protein)	Conc. (copies of RNA/mL)
201001-02-003 01 Kupfrain Hall, Room 206, Door Handle	ND	ND	ND	ND	NA
201001-02-004 02 Kupfrain Hall, Room 206, Light Switch	ND	ND	ND	ND	NA
201001-02-005 03 Kupfrain Hall, Room 204, Door Handle	ND	ND	ND	ND	NA
201001-02-006 04 MEC, Room 224, Door Handle	ND	ND	ND	ND	NA
201001-02-009 07 FMH, Room 408, Door Handle	ND	ND	ND	ND	NA
201001-02-010 08 FMH, Room 408, Row 1, Seat 7, Table	ND	ND	ND	ND	NA

RT-PCR 2019-nCoV: Analysis of Air samples for the detection of SARS-CoV-2 Genetic Markers

Prestige # Client sample ID Location	2019-nCoV (N1 Protein)	Cycle Threshold (Ct) Value ³ (N1 Protein)	2019-nCoV (N2 Protein)	Cycle Threshold Value ³ (N2 Protein)	Conc. (copies of RNA/mL)
201001-02-007 05 Kupfrain Hall, Room 211	ND	ND	ND	ND	NA

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Prestige EnviroMicrobiology, Inc.

201001-02-008 06 WEC, 2 nd Floor, Workout Gym	ND	ND	ND	ND	NA
201001-02-011 09 MEC, Room 224	ND	ND	ND	ND	NA
201001-02-012 10 Tiernan Hall, Room 105	ND	ND	ND	ND	NA
201001-02-013 11 FMH, Room 408	ND	ND	ND	ND	NA
201001-02-014 12 Culimore Hall, Room 104	ND	ND	ND	ND	NA
201001-02-015 13 GITC, Room 1400	ND	ND	ND	ND	NA
201001-02-016 14 CKB, Room 116	ND	ND	ND	ND	NA

Report approved:	Theresa Lehman, MPH, Lab Director				
Technical Manager:	QR45-5				

Chin S Yang, Ph.D.

Analyst: Ching-Yi Tsai, Ph.D.

- 1. The samples in this report were received in good, acceptable conditions. Results relate only to the items tested.
- 2. The primers and probes in 2019-nCoV CDC EUA Kit are designed for the detection of the two SARS-CoV-2 genes that encode for the N1 and N2 proteins. The kit is manufactured and supplied by Integrated DNA Technologies and approved by the U.S. Centers for Disease Control and Prevention (CDC). Three controls, two positive controls for N proteins and one internal control for the RNA extraction process, are simultaneously run with the samples.
- 3. Cycle Threshold Value refers to the number of cycles required for the fluorescent signal to cross the detectable threshold in Reverse Transcriptase Polymerase Chain Reaction (RT-PCR); a lower cycle threshold value indicates a higher viral load. 4. ND = not detected, no genetic marker is detected within 40 PCR cycles. NA = not applicable. The detection limit is 10 copies/reaction.
- 5. Sampling reference: Rahmani, A. R., M. Leili, G. Azarian, A. Poormohammadi. 2020. Sampling and detection of corona viruses in air: A mini review. Science of the Total Environment. https://doi.org/10.1016/j.scitotenv.2020.140207

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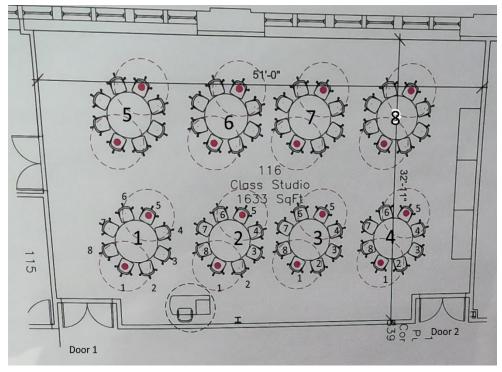


Figure 1: CKB Room 116

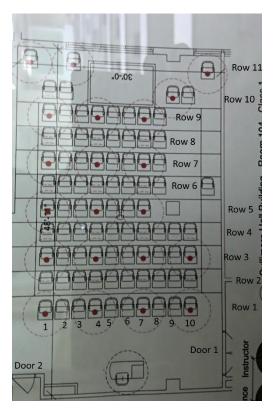


Figure 3: Cullimore Hall Room 104

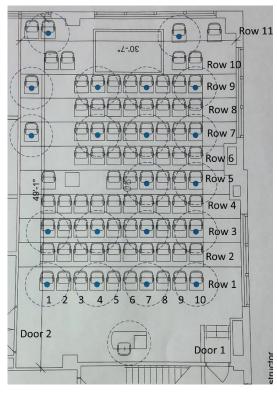


Figure 2: Cullimore Hall Room 106

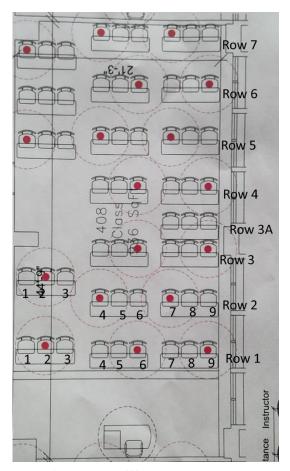


Figure 4: FMH Room 408

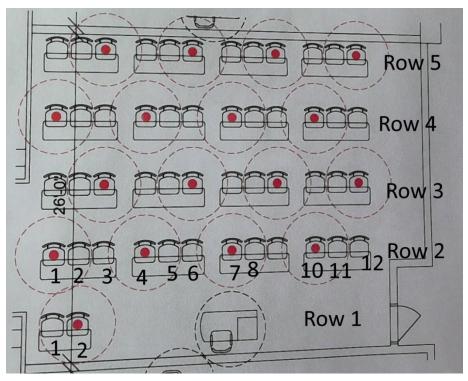


Figure 5: Kupfrain Hall Room 204

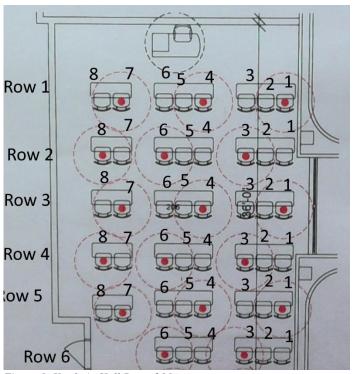


Figure 6: Kupfrain Hall Room 206

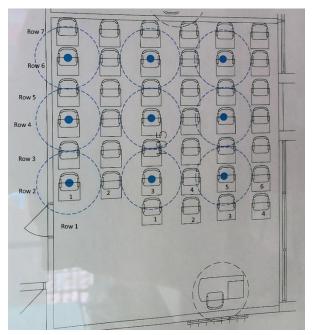


Figure 8: Tiernan Hall Room 105

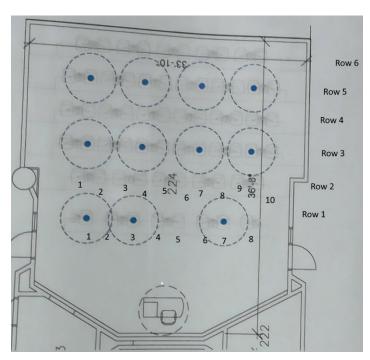


Figure 7: MEC Room 204

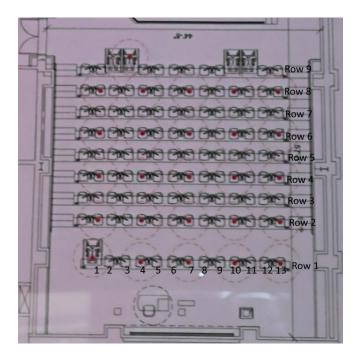


Figure 9: GITC 1400