

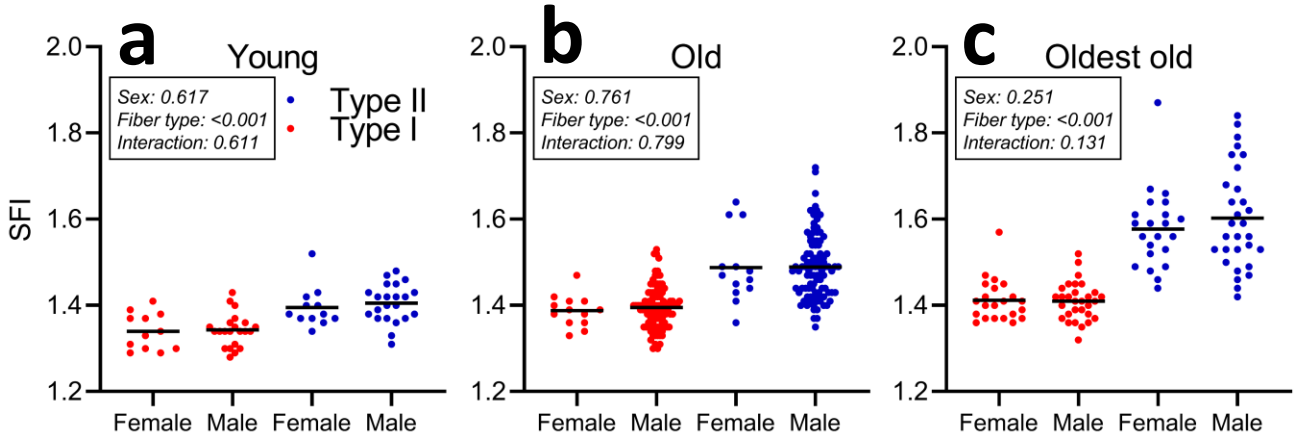
SM 1

	Young women (12)			Old women (13)			Oldest Old women (22)		
	Average \pm SD	Min - Max	n	Average \pm SD	Min - Max	n	Average \pm SD	Min - Max	n
Age (y.)	23 \pm 3	20 - 28	12	74 \pm 3	71 - 78	13	87 \pm 3	83 - 97	22
Height (m.)	1.68 \pm 0.07	1.57 - 1.77	12	1.67 \pm 0.03	1.62 - 1.74	13	1.59 \pm 0.08	1.42 - 1.76	13
Weight (kg.)	64 \pm 8	53 - 75	12	67 \pm 9	57 - 84	13	57 \pm 10	45 - 76	13
BMI (kg/m ²)	22.7 \pm 2.0	19.0 - 25.5	12	24.2 \pm 3.8	19.9 - 30.4	13	22.3 \pm 2.9	18.7 - 26.2	13
LBM _{leg} (kg.)		N/A		13 \pm 1	12 - 13	2	12 \pm 2	9 - 17	12
CSA _{quad} (cm ²)		N/A			N/A		35 \pm 8	26 - 48	10
Isometric MVC (Nm)		N/A			N/A		80 \pm 31	22 - 140	10
Isokinetic MVC (Nm)		N/A			N/A		58 \pm 19	18 - 91	10
	Young men (22)			Old men (98)			Oldest Old men (30)		
	Average \pm SD	Min - Max	n	Average \pm SD	Min - Max	n	Average \pm SD	Min - Max	n
Age (y.)	26 \pm 5	20 - 36	22	71 \pm 4	60 - 79	98	86 \pm 3	81 - 93	30
Height (m.)	1.81 \pm 0.08	1.68 - 1.93	22	1.78 \pm 0.07	1.55 - 1.95	98	1.76 \pm 0.07	1.60 - 1.88	27
Weight (kg.)	82 \pm 15	62 - 111	22	82 \pm 12	56 - 109	98	79 \pm 9	65 - 98	27
BMI (kg/m ²)	24.6 \pm 3.3	20.1 - 30.4	22	25.9 \pm 3.2	18.9 - 32.5	98	25.6 \pm 3.0	20.7 - 33.2	27
LBM _{leg} (kg.)	22 \pm 4	17 - 30	22	20 \pm 3	13 - 26	51	18 \pm 2	15 - 21	21
CSA _{quad} (cm ²)	73 \pm 15	55 - 99	7	62 \pm 12	36 - 91	65	50 \pm 8	37 - 69	22
Isometric MVC (Nm)	272 \pm 62	186 - 364	22	188 \pm 38	85 - 278	93	145 \pm 30	75 - 205	24
Isokinetic MVC (Nm)	307 \pm 67	200 - 425	22	207 \pm 46	75 - 313	94	130 \pm 34	40 - 219	25

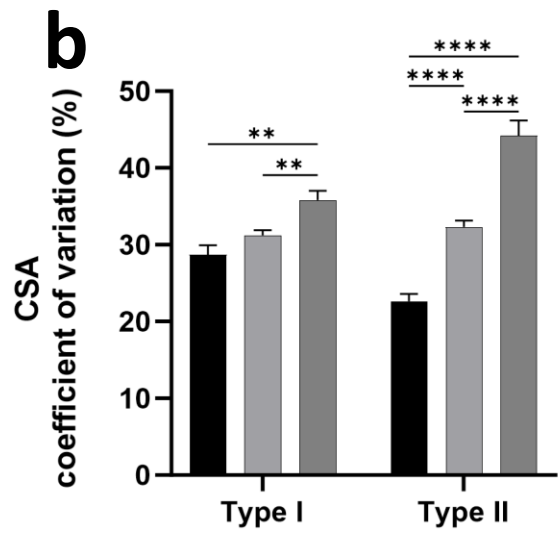
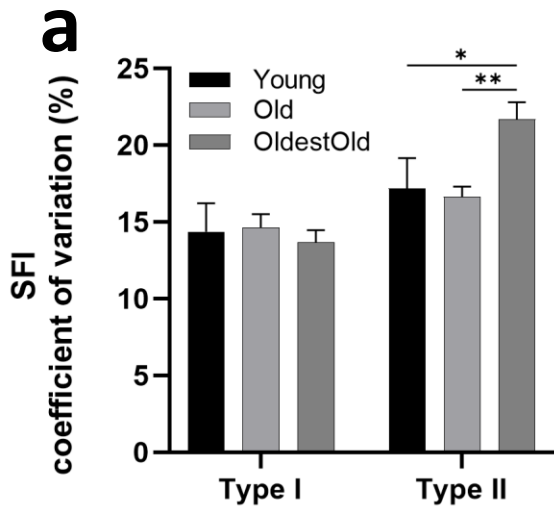
SM 2

Soendenbroe et al., 2022 (n=46)								
Old (n=31)				Young (n=15)				
	Average	SD	Min	Max	Average	SD	Min	Max
Age (yrs)	73 ± 4		68	82	26 ± 5		20	36
Height (m)	1.77 ± 0.07		1.61	1.95	1.83 ± 0.07		1.69	1.93
Weight (kg)	79 ± 10		63	109	82 ± 13		62	105
BMI (kg/m ²)	25.1 ± 3.3		20.5	32.4	24.5 ± 3.0		20.3	29.7
LBM _{leg} (kg)	20 ± 2		17	26	23 ± 3		18	27
Isometric MVC (Nm)	186 ± 38		118	278	285 ± 66		186	364
Isokinetic MVC (Nm)	197 ± 45		123	313	318 ± 74		200	425
Karlsen et al., 2020a (n=26)								
Old (n=19)				Young (n=7)				
	Average	SD	Min	Max	Average	SD	Min	Max
Age (yrs)	67 ± 4		60	73	25 ± 3		20	31
Height (m)	1.81 ± 0.07		1.68	1.94	1.79 ± 0.08		1.68	1.91
Weight (kg)	85 ± 14		60	108	81 ± 19		62	111
BMI (kg/m ²)	25.9 ± 3.6		18.9	32.5	25.0 ± 4.2		20.1	30.4
LBM _{leg} (kg)	20 ± 3		15	26	21 ± 5		17	30
CSA _{quad} (cm ²)	58 ± 11		36	82	73 ± 15		55	99
Isometric MVC (Nm)	200 ± 36		130	257	244 ± 45		203	334
Isokinetic MVC (Nm)	230 ± 42		143	295	284 ± 44		230	358
Heisterberg et al., 2018 (n=52)								
	Average	SD	Min	Max				
Age (yrs)	72 ± 5		65	85				
Height (m)	1.78 ± 0.07		1.61	1.90				
Weight (kg)	84 ± 11		57	108				
BMI (kg/m ²)	26.5 ± 3.0		19.2	33.2				
CSA _{quad} (cm ²)	62 ± 11		37	91				
Isometric MVC (Nm)	177 ± 38		85	256				
Isokinetic MVC (Nm)	197 ± 47		75	298				
Bechshøft et al., 2019 (n=23)								
Old (n=11)				Young (n=12)				
	Average	SD	Min	Max	Average	SD	Min	Max
Age (yrs)	74 ± 3		71	78	23 ± 3		20	28
Height (m)	1.66 ± 0.03		1.62	1.69	1.68 ± 0.07		1.57	1.77
Weight (kg)	69 ± 10		57	84	64 ± 8		53	75
BMI (kg/m ²)	25.0 ± 3.6		20.3	30.4	22.7 ± 2.0		19.0	25.5
Bechshøft et al., 2017 (n=29)								
	Average	SD	Min	Max				
Age (yrs)	87 ± 3		83	94				
Height (m)	1.69 ± 0.11		1.42	1.88				
Weight (kg)	71 ± 13		45	98				
BMI (kg/m ²)	24.7 ± 3.1		19.0	30.8				
LBM _{leg} (kg)	16 ± 3		9	21				
CSA _{quad} (cm ²)	43 ± 10		26	69				
Isometric MVC (Nm)	120 ± 45		22	205				
Isokinetic MVC (Nm)	94 ± 37		18	148				
Karlsen et al., 2020b (n=9)								
	Average	SD	Min	Max				
Age (yrs)	77 ± 7		69	91				
Height (m)	1.70 ± 0.09		1.55	1.83				
Weight (kg)	64 ± 11		48	85				
BMI (kg/m ²)	22.2 ± 3.2		18.7	29.1				
LBM _{leg} (kg)	13 ± 2		10	15				
Kryger & Andersen, 2007 (n=12)								
	Average	SD	Min	Max				
Age (yrs)	88 ± 3		85	97				

SM 3

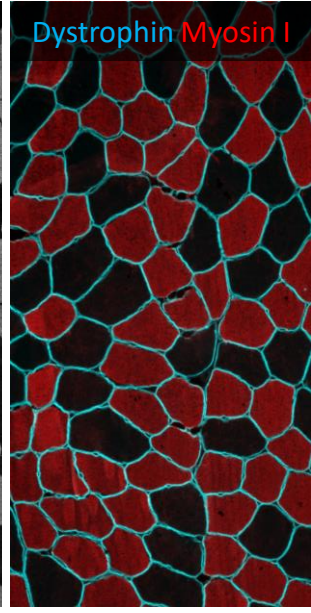
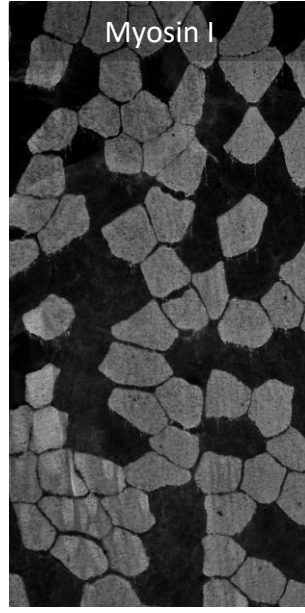
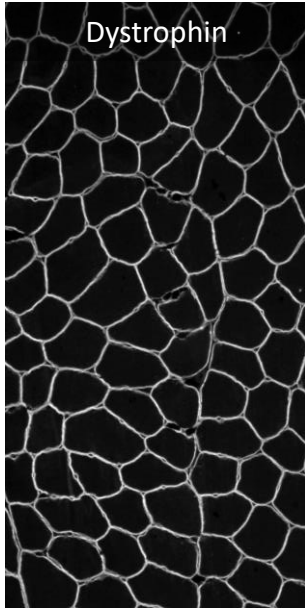


SM 4

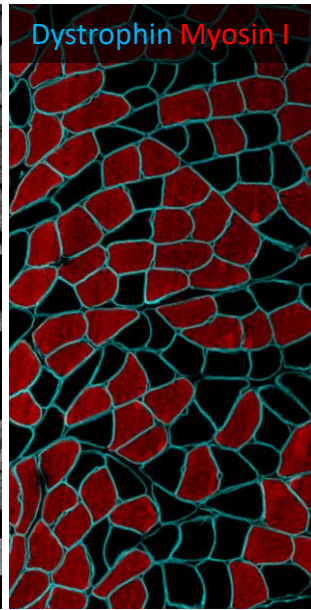
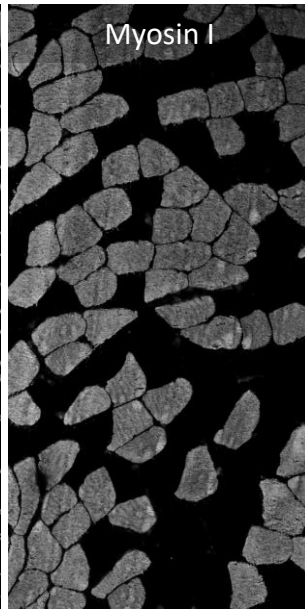
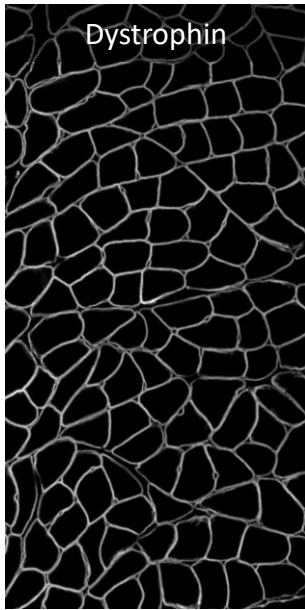


SM 5

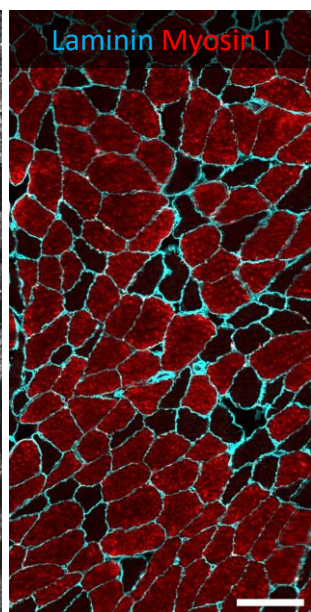
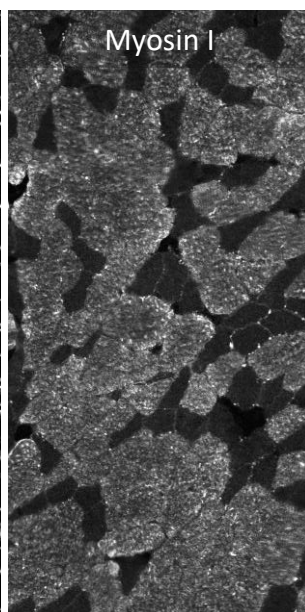
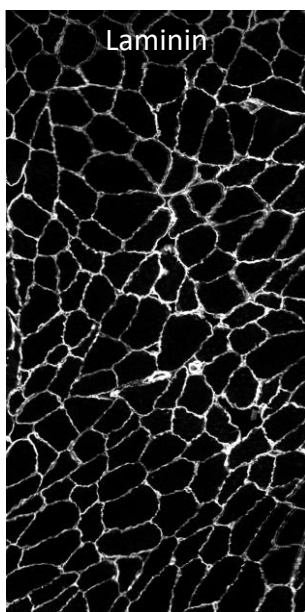
Young



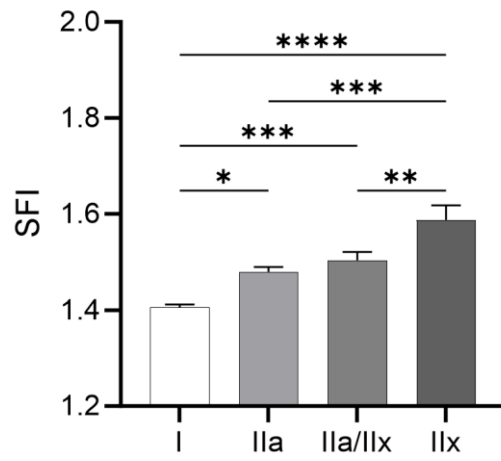
Old



Oldest Old



SM 6



SM 7

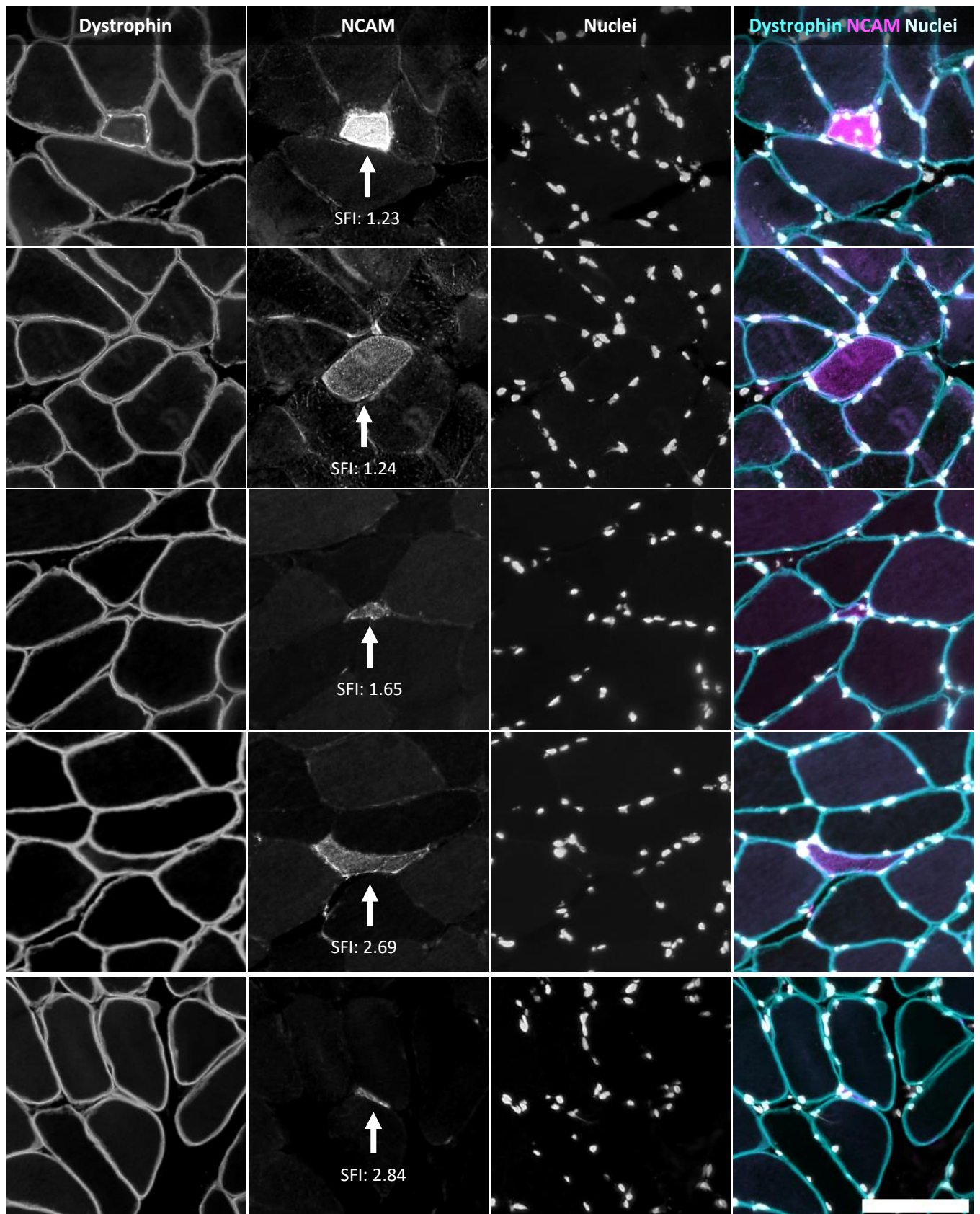
a

		Number of subjects in each SFI increment			Number of myofibers in each SFI increment		
		Young	Old	Oldest Old	Young	Old	Oldest Old
Type I	<.1.10	1	1	1	1	1	1
	1.10-1.20	34	99	49	497	992	316
	1.20-1.30	34	111	52	2859	5916	2264
	1.30-1.40	34	111	52	2134	6041	2663
	1.40-1.50	34	111	52	984	3576	1760
	1.50-1.60	34	107	51	421	1845	977
	1.60-1.70	30	101	52	144	946	505
	1.70-1.80	21	93	45	85	464	290
	1.80-1.90	14	76	41	33	253	161
	1.90-2.00	7	56	34	10	128	103
	>2.00	16	67	40	35	233	184
Type II	<.1.10	0	0	1	0	0	1
	1.10-1.20	29	79	34	191	410	142
	1.20-1.30	34	111	52	1980	2924	1012
	1.30-1.40	34	111	52	2310	4303	1705
	1.40-1.50	34	111	52	1326	3266	1495
	1.50-1.60	34	111	52	673	2272	1154
	1.60-1.70	33	108	52	306	1287	774
	1.70-1.80	31	104	51	161	912	512
	1.80-1.90	27	96	50	75	537	385
	1.90-2.00	15	88	51	28	336	238
	>2.00	26	95	51	68	776	757

b

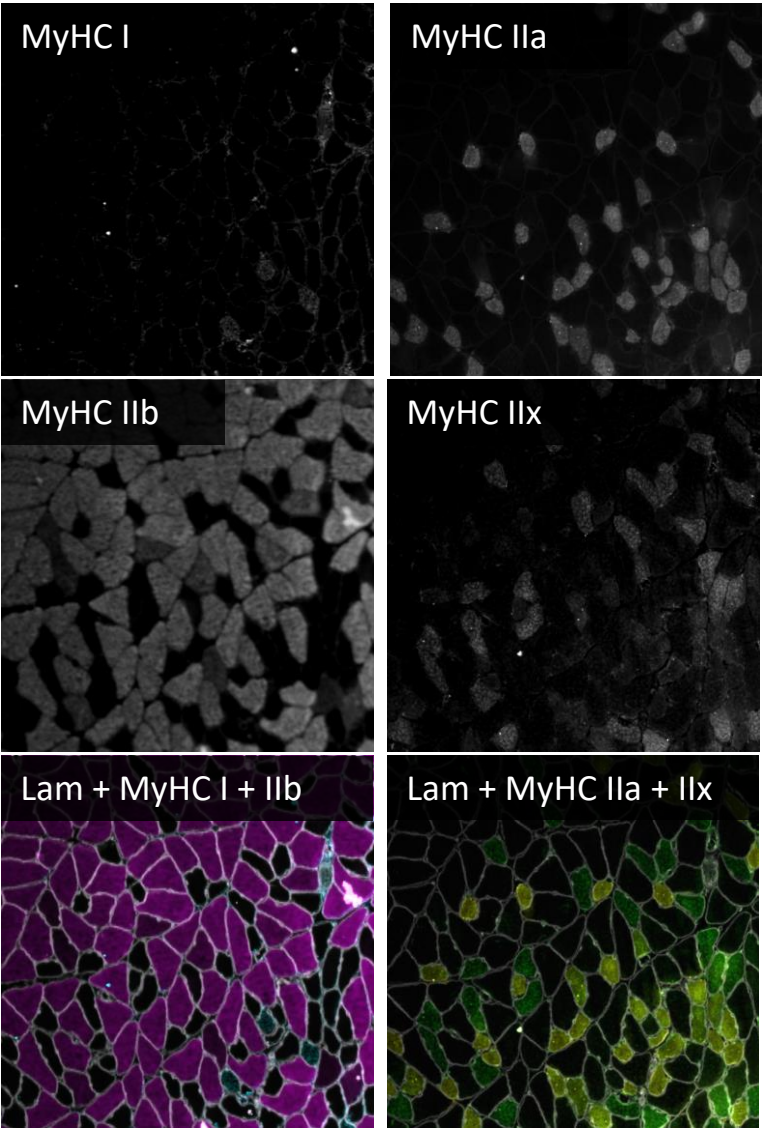
		Number of subjects in each CSA increment			Number of myofibers in each CSA increment		
		Young	Old	Oldest Old	Young	Old	Oldest Old
Type I	0-1000	10	37	31	73	188	178
	1000-2000	23	78	49	423	1126	647
	2000-3000	33	99	52	1256	3574	1447
	3000-4000	34	110	51	1692	4641	2015
	4000-5000	34	110	49	1526	4421	1812
	5000-6000	31	109	45	1068	3187	1413
	>6000	29	103	41	1166	3407	1734
	Type II	0-1000	7	52	46	35	923
1000-2000		16	92	50	313	2803	2707
2000-3000		27	107	50	898	4548	1824
3000-4000		33	110	48	1447	4198	1048
4000-5000		33	105	41	1634	2418	517
5000-6000		29	96	27	1422	1132	234
>6000		22	66	17	1371	1018	187

SM 8

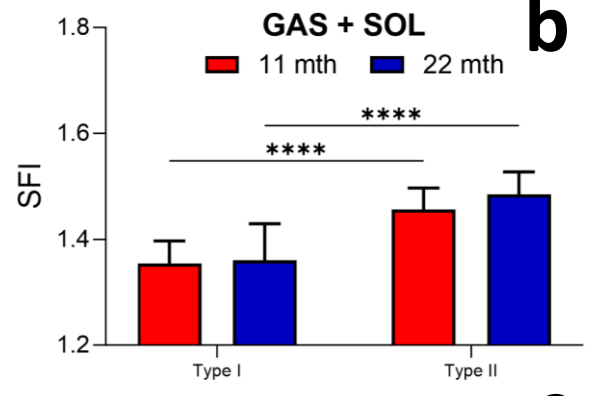


SM 9

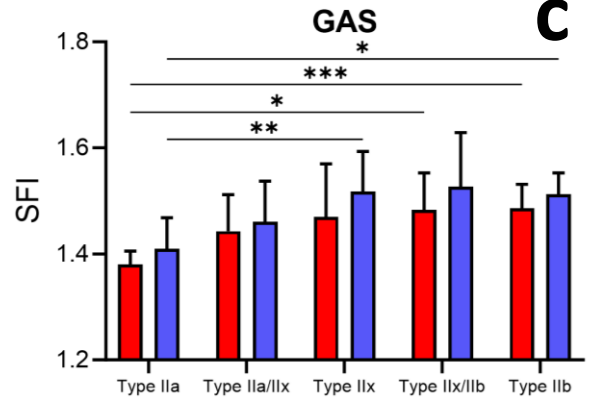
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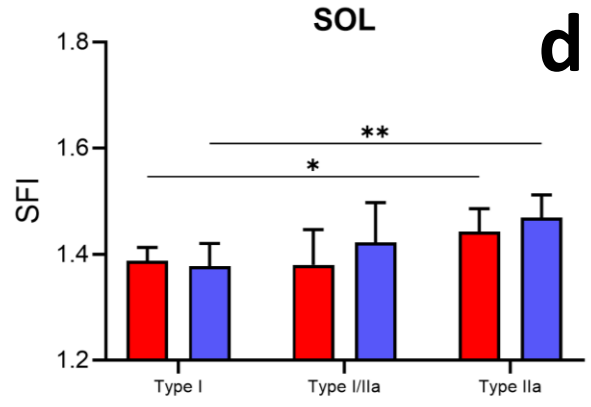
b



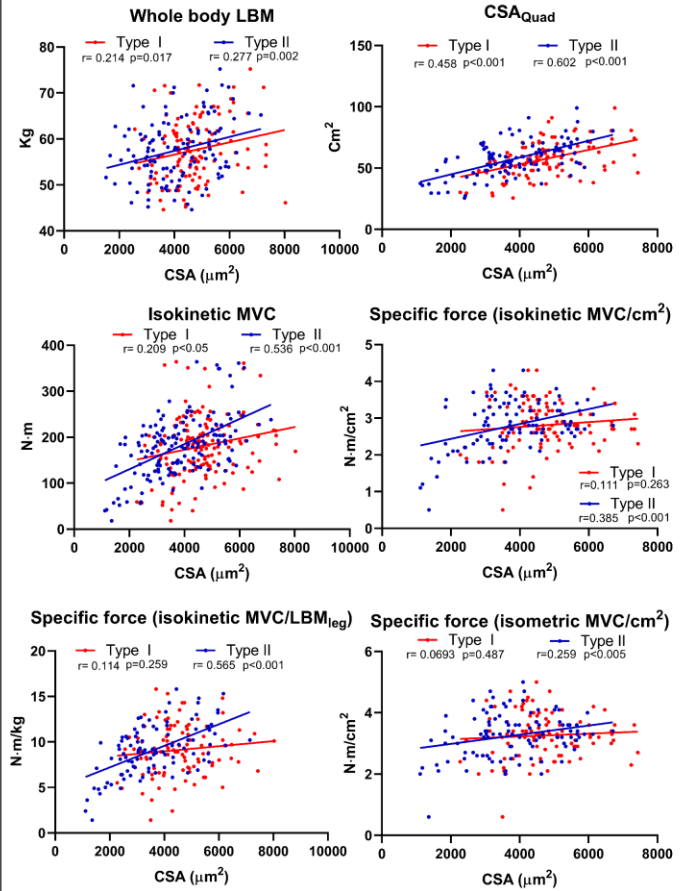
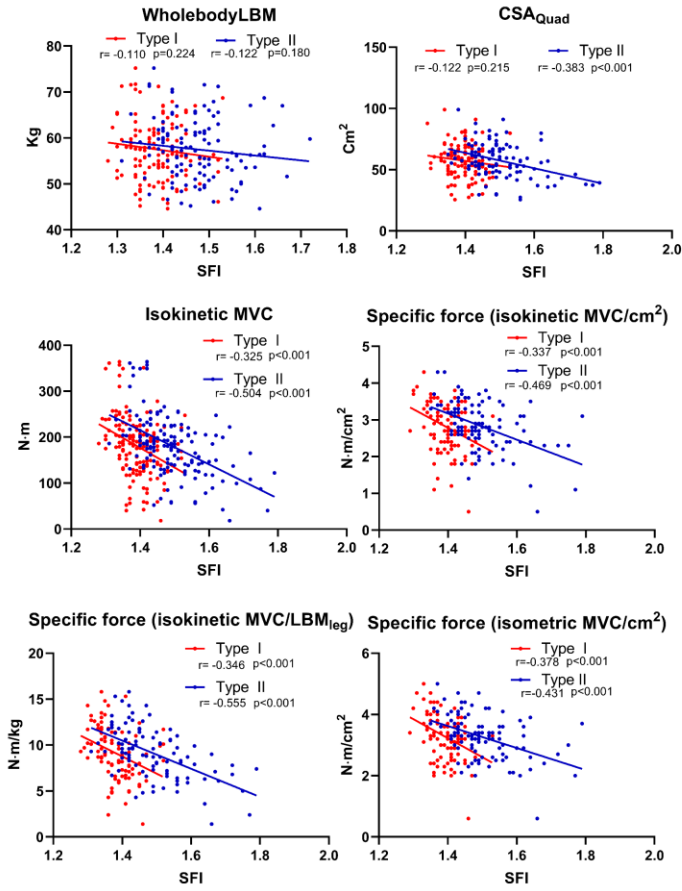
c



d



SM 10



SM 11

LBMleg				
<i>Resulting model: n=108, p<0.0001, R Squared=41%</i>				
	Coefficient	SE	p-value	R Squared
Intercept	32,79	8,61	0,0002	
Type I SFI	-14,23	5,97	0,0190	0,032
Type II CSA	0,002	0,0002	<0,0001	0,272
Isometric MVC				
<i>Resulting model: n=150, p<0.0001, R Squared=58%</i>				
	Coefficient	SE	p-value	R Squared
Intercept	579,61	69,55	<0,0001	
Age	-2,25	0,25	<0,0001	0,229
Type II SFI	-187,70	53,09	0,0005	0,036
Type I CSA	0,01	0,004	0,0013	0,031
Isometric RFD				
<i>Resulting model: n=123, p<0.0001, R Squared=35%</i>				
	Coefficient	SE	p-value	R Squared
Intercept	2847,71	182,97	<0,0001	
Age	-22,23	2,78	<0,0001	0,346
Specific force (isometric MVC/LBMleg)				
<i>Resulting model: n=98, p<0.0001, R Squared=57%</i>				
	Coefficient	SE	p-value	R Squared
Intercept	23,99	3,23	<0,0001	
Age	-0,08	0,01	<0,0001	0,270
Type II SFI	-5,49	2,40	0,0242	0,024
Whole body LBM				
<i>Resulting model: n=123, p=0.0022, R Squared=8%</i>				
	Coefficient	SE	p-value	R Squared
Intercept	51,26	2,08	<0,0001	
Type II CSA	0,002	0,0005	0,0022	0,075
CSAquad				
<i>Resulting model: n=104, p<0.0001, R Squared=55%</i>				
	Coefficient	SE	p-value	R Squared
Intercept	98,32	19,64	<0,0001	
Age	-0,26	0,08	0,0016	0,048
Type II SFI	-36,30	14,00	0,0110	0,030
Type I CSA	0,004	0,001	0,0002	0,068
Type II CSA	0,003	0,001	0,0081	0,033
Isokinetic MVC				
<i>Resulting model: n=150, p<0.0001, R Squared=57%</i>				
	Coefficient	SE	p-value	R Squared
Intercept	516,30	64,08	<0,0001	
Age	-2,04	0,23	<0,0001	0,231
Type II SFI	-164,82	48,84	0,0009	0,034
Type I CSA	0,01	0,003	0,0024	0,028
Specific force (isokinetic MVC/LBMleg)				
<i>Resulting model: n=99, p<0.0001, R Squared=57%</i>				
	Coefficient	SE	p-value	R Squared
Intercept	22,13	3,06	<0,0001	
Age	-0,08	0,01	<0,0001	0,264
Type II SFI	-5,33	2,27	0,0209	0,025
Specific force (isokinetic MVC/CSAquad)				
<i>Resulting model: n=103, p<0.0001, R Squared=34%</i>				
	Coefficient	SE	p-value	R Squared
Intercept	9,78	1,72	<0,0001	
Type I SFI	-3,60	1,47	0,0164	0,040
Type II SFI	-1,79	0,80	0,0273	0,034
Type II CSA	0,0002	0,00005	0,0002	0,100
Specific force (isometric MVC/CSAquad)				
<i>Resulting model: n=103, p<0.0001, R Squared=26%</i>				
	Coefficient	SE	p-value	R Squared
Intercept	7,79	1,11	<0,0001	
Age	-0,01	0,00	0,0031	0,068
Type II SFI	-2,33	0,83	0,0060	0,059

SM 12

