Age Group	20-34	35-49	50-64	65-79	80+	<i>P</i> -value	R <sup>2</sup>
	( <i>n</i> =13)	( <i>n</i> =11)	( <i>n</i> =12)	( <i>n</i> =12)	( <i>n</i> =10)		
Gender	<i>M</i> 8, <i>F</i> 5	<i>M</i> 7, <i>F</i> 4	M7, F5	<i>M</i> 8, <i>F</i> 4	M6, F4		
Age (yr)	27.2 ± 3.3	41.3 ± 4.5	57.1 ± 4.7	70.3 ± 2.3	82.4 ± 2.4		
Race	9C, 2AA, 2A	5C, 6AA	8C, 4AA	10C,1AA,1A	9C,1AA	0.0958	
*BMI, kg/m²	25.9 ± 2.8	26.4 ± 2.6	26.6 ± 3.2	26.4 ± 2.4	25.2 ± 3.9	0.3458	0.007
Height (cm)	172 ± 11	177 ± 10	169 ± 4	172 ± 11	172 ± 6	0.3985	
*Weight (kg)	76 ± 10	81 ± 9	77 ± 12	75 ± 13	73 ± 16	1.74E-05	0.34
Education (yr)	16 ± 3	14 ±3	14 ± 2	16 ± 2	17 ± 2	0.3305	
*Waist Circumference(cm)	82 ± 7	87 ± 7	90 ± 11	92 ± 11	92 ± 13	6.32E-06	0.39
*KEIS (left) ±	192 ± 31	208 ±55	200 ± 71	165 ± 62	130 ± 42	4.29E-07	0.40
*KEIS (right) ±	194 ± 38	220 ± 65	194 ±78	169 ± 53	147 ± 57	2.41E-07	0.41
†Physical Activity	1.8 ± 1.4	1.8 ± 1.3	2 ± 1.1	2.3 ± 1	1.5 ± 1.1	0.5145	

## Figure 5-figure supplement 1. Baseline characteristics of the GESTALT skeletal muscle

**participants.** The participants are classified into 5 different age groups. Gender: The number of donors is represented in numeric, *M* is Male, *F* is Female. Age in years as mean and standard deviation (SD  $\pm$ ) for each age group. Race: number of donors is shown in left and race is shown in italics, *C* is Caucasian, *AA* is African American, and *A* is Asian. Body Mass Index (BMI) expressed as mean and SD ( $\pm$ ) for each group. *P*-value is calculated by 1-way ANOVA with Kruskal-Wallis test.

\*P-value calculated from linear regression model, gender adjusted.

± Knee Extension Isokinetic Strength (KEIS) (30<sup>0</sup>/sec; Nm).

**†**Physical activity is calculated from the sum of weight circuit, vigorous exercise, brisk walking and casual walking and summed as high intensity physical activity per week. This is further categorized into 0 (not active),1 (moderately active), 2 (active), and 3 (highly active) and expressed as mean of categorical variables  $(0,1,2,3) \pm$  SD.