

Supplementary Online Material

SOM Table S1

Information on the individuals analyzed in this study.

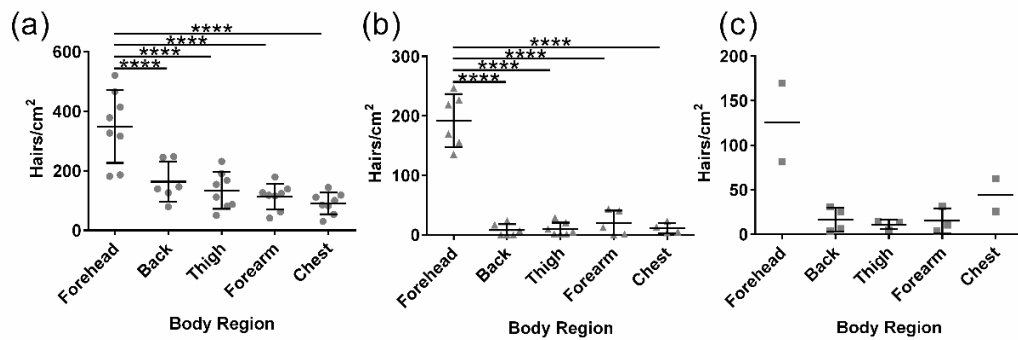
Species	Identifier	Sex	Age (yrs)	Weight (kg)	Height (cm)	Source
Human						
	3967	Female	80	45	152	HMS
	3968	Female	77	59	155	HMS
	3971	Female	82	54	166	HMS
	3992	Female	92	47	133	HMS
	3970	Male	70	68	168	HMS
	3976	Male	75	82	175	HMS
	3978	Male	89	68	168	HMS
Macaque						
	Mm213-99	Female	12	5.3	NA	NERC
	Mm166-02	Female	9	8.0	NA	NERC
	Mm185-91	Female	20	7.6	NA	NERC
	Mm184-98	Female	12	6.1	NA	NERC
	Mm185-98	Female	13	7.2	NA	NERC
	Mm428-97	Male	14	9.2	NA	NERC
	Mm374-08	Male	6	23.6	NA	NERC
	Mm288-94	Male	16	17.7	NA	NERC
Chimpanzee						
	725	Female	55	63.3		NPRC
	66423	Female	NA	NA	83(trunk only)	MCZ
	5902	Male	19	85		NPRC
	61069	Male	NA	NA	83 (head-rump)	MCZ

Abbreviations: Harvard Medical School Anatomical Gift Program (HMS), New England Primate Research Center (NERC), Yerkes National Primate Research Center (NPRC), Harvard Museum of Comparative Zoology Collection (MCZ), not available (NA)

SOM Table S2

Mean area (cm²) of replicate skin samples analyzed from each body region and species.

Body region	Macaque	Chimpanzee	Human
Forehead	4.54	10.14	1.26
Back	5.17	8.30	7.85
Chest	5.00	9.79	7.85
Thigh	5.40	7.63	7.85
Forearm	6.10	6.97	7.85



SOM Fig. S1: Hair density across body regions. a - c) Forehead hair density is highest in macaques (a) and humans (b), and shows a similar trend in chimpanzees (c). Hair density is shown for each body region within each species. Significant differences in hair density were not detected between other body regions. Each point represents the average density of hair follicles in biological replicates for each individual analyzed. Mean and standard deviation is shown except when sample size did not exceed two

individuals. Significance by one-way ANOVA with Sidak correction for multiple comparisons: * $p < 0.05$, **** $p < 0.0001$.

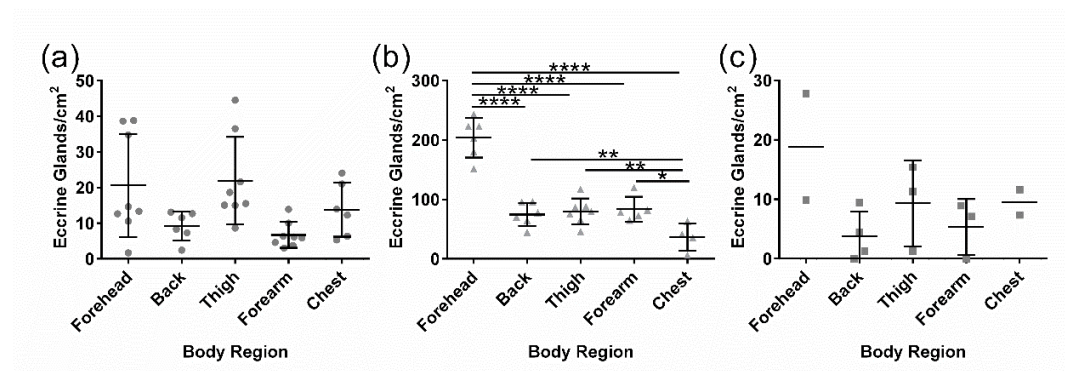
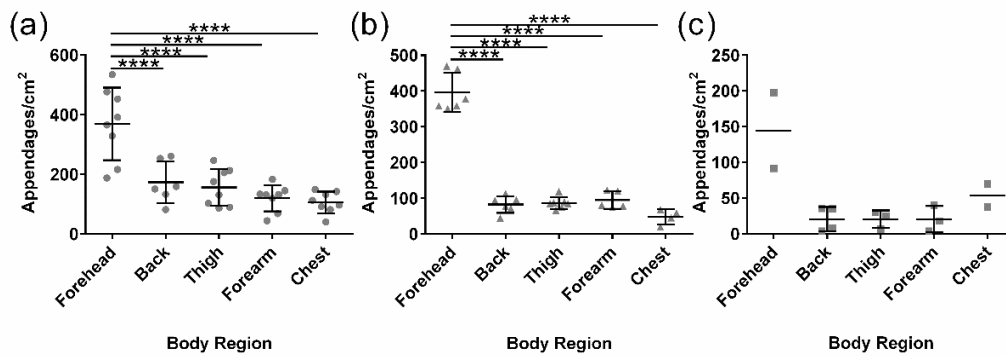
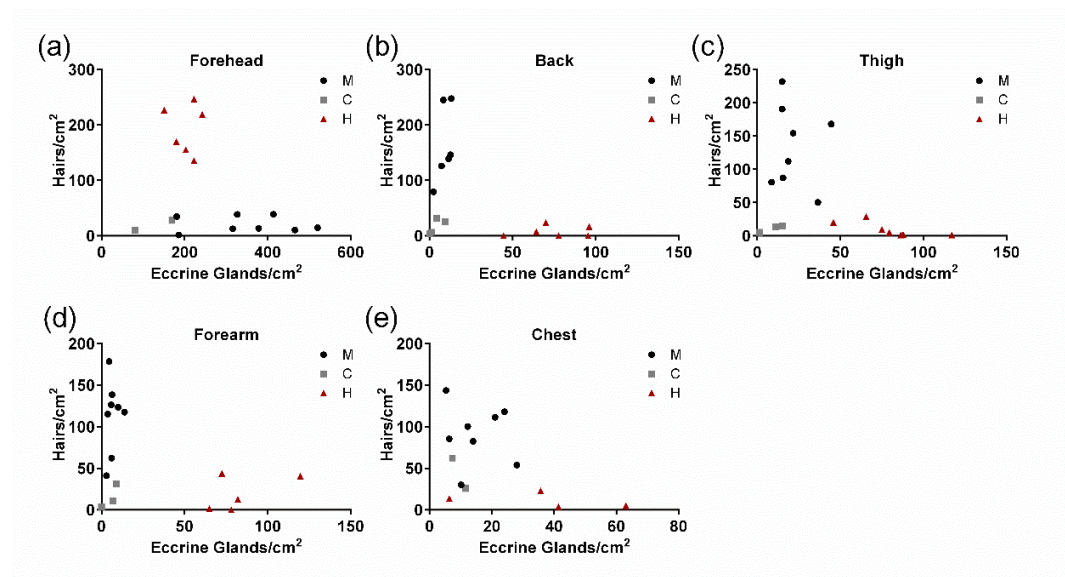


Fig. S2: Eccrine gland density across body regions. a - c) Eccrine gland density does not significantly vary between body regions in chimpanzees (c) and macaques (a), but in humans the forehead has the highest detected density of eccrine glands (b). Human eccrine gland density is lowest in the chest (b). Eccrine gland density is shown for each body region within each species. Each point represents the average density in biological replicates for each individual analyzed. Mean and standard deviation are shown except when sample size did not exceed two individuals. Significance by one-way ANOVA with Sidak correction for multiple comparisons: * $p < 0.05$, ** $p < 0.01$, **** $p < 0.0001$.



SOM Fig. S3: Comparison of combined ectodermal appendage density across body regions. a - c) The combined density of hair and eccrine glands is highest in the forehead, reaching statistical significance in macaques (a) and humans (b), and showing a similar trend in chimpanzees (c). The total appendage density for each body region is shown within each species. Significant differences in total appendage density were not detected between other body regions in any species. Each point represents the average density of appendages in biological replicates for each individual analyzed. Mean and standard deviation are shown except when sample size did not exceed two individuals. Significance by one-way ANOVA with Sidak correction for multiple comparisons: **** $p < 0.0001$.



SOM Fig. S4: Relative density of hair and eccrine glands within each body region and species. a-e) There is no correlation between hair and eccrine gland density in primate skin. Mean hair density versus sweat gland density is plotted for each individual for each body region in each species. Spearman correlation coefficient was calculated for each dataset. For all correlation tests the p value exceeded 0.05 indicating no

significant deviation from the null hypothesis that hair and eccrine gland density variables were not correlated.