Table S1. Spearman Rank Correlations (n=3) between amino acids, TPHs and the most significant PAHs compounds.

	TPHs	Isoleucine	Threonine	Alanine	Asparatic acid	Glutamic acid	Glycine	Tyrosine	Chrysene (CHY)	Pyrene (PYR)	Benzo(b)fluoranthene (BbF)	Dibenzo(a,h)anthracene (DahA)
TPHs		0.4264 p=0. 719	0.8962 p=0. 2927	0.7752 p=0. 4353	0.9563 p=0. 1889	0.9999 p=0. 0091	0.8012 p=0. 4084	0.9647 p=0. 1696	-0.9747 p=0. 1435	-0.4855 p=0. 6773	-0.4752 p=0.6848	-0.4894 p=0. 6744
Isoleucine	0.4264 p=0.7196		0.7834 p=0. 4269	0.9019 p=0. 2843	0.6722 p=0. 5307	0.4393 p=0. 7105	0.8829 p=0. 3112	0.6494 p=0. 5500	-0.6177 p=0. 5761	-0.9978 p=0. 0423	-0.9985 p=0. 0348	-0.9975 p=0. 0452
Threonine	0.8962 p=0. 2927	0.7834 p=0. 4269		0.9750 p=0. 1426	0.9867 p=0. 1038	0.9024 p=0. 2835	0.9835 p=0. 1158	0.9814 p=0.1231	-0.9727 p=0. 1492	-0.8230 p=0. 3846	-0.8162 p=0. 3921	-0.8255 p=0. 3817
Alanine	0.7752 p=0. 4353	0.9019 p=0. 2843	0.9750 p=0. 1426		0.9260 p=0. 2464	0.7842 p=0. 4262	0.9991 p=0. 0269	0.9141 p=0. 2657	-0.8967 p=0. 2918	-0.9286 p=0. 2420	-0.9242 p=0. 2495	-0.9303 p=0. 2391
Asparatic acid	0.9563 p=0. 1889	0.6722 p=0. 5307	0.9867 p=0. 1038	0.9260 p=0. 2464		0.9604 p=0. 1798	0.9411 p=0. 2195	0.9995 p=0. 0193	-0.9975 p=0. 0454	-0.7199 p=0. 4884	-0.7116 p=0. 4959	-0.7230 p=0. 4855
Glutamic acid	0.9999 p=0. 0091	0.4393 p=0. 7105	0.9024 p=0. 2835	0.7842 p=0. 4262	0.9604 p=0. 1798		0.8097 p=0. 3993	0.9684 p=0. 1605	-0.9778 p=0. 1343	-0.4980 p=0. 6682	-0.4877 p=0. 6757	-0.5019 p=0. 6653
Glycine	0.8012 p=0. 4084	0.8829 p=0. 3112	0.9835 p=0. 1158	0.9991 p=0. 0269	0.9411 p=0. 2195	0.8097 p=0. 3993		0.9304 p=0. 2389	-0.9146 p=0. 2650	-0.9121 p=0. 2688	-0.9072 p=0. 2764	-0.9140 p=0. 2660
Tyrosine	0.9647 p=0. 1696	0.6494 p=0. 5500	0.9814 p=0. 1231	0.9141 p=0. 2657	0.9995 p=0. 0193	0.9684 p=0. 1605	0.9304 p=0. 2389		-0.9992 p=0. 0261	-0.6985 p=0. 5077	-0.6900 p=0. 5152	-0.7017 p=0. 5048
Chrysene (CHY)	-0.9747 p=0. 1435	-0.6177 p=0. 5761	-0.9727 p=0. 1492	-0.8967 p=0. 2918	-0.9975 p=0. 0454	-0.9778 p=0. 1343	-0.9146 p=0. 2650	-0.9992 p=0. 0261		0.6686 p=0. 5338	0.6597 p=0. 5413	0.6719 p=0. 5309
Pyrene (PYR)	-0.4855 p=0.6773	-0.9978 p=0.0423	-0.8230 p=0.3846	-0.9286 p=0.2420	-0.7199 p=0.4884	-0.4980 p=0.6682	-0.9121 p=0.2688	-0.6985 p=0.5077	0.6686 p=0.5338		0.9999 p=0.0075	1.0000 p=0.0029
Benzo(b)fluoranthene (BbF)	-0.4752 p=0.6848	-0.9985 p=0.0348	-0.8162 p=0.3921	-0.9242 p=0.2495	-0.7116 p=0.4959	-0.4877 p=0.6757	-0.9072 p=0.2764	-0.6900 p=0.5152	0.6597 p=0.5413	0.9999 p=0.0075		0.9999 p=0.0104
Dibenzo(a,h)anthracene (DahA)	-0.4894 p=0.6744	-0.9975 p=0.0452	-0.8255 p=0.3817	-0.9303 p=0.2391	-0.7230 p=0.4855	-0.5019 p=0.6653	-0.9140 p=0.2660	-0.7017 p=0.5048	0.6719 p=0.5309	1.0000 p=0.0029	0.9999 p=0.0104	

P-Value Indicates significant non -zero correlation at 95.0% confidence level