

CrossMark  
click for updatesCite this: *Anal. Methods*, 2016, 8, 1950

## Correction: Interpretation of type 2 diabetes mellitus relevant GC-MS metabolomics fingerprints by using random forests†

Jian-Hua Huang,<sup>a</sup> Hua-Lin Xie,<sup>ac</sup> Jun Yan,<sup>a</sup> Dong-Sheng Cao,<sup>a</sup> Hong-Mei Lu,<sup>a</sup> Qing-Song Xu<sup>b</sup> and Yi-Zeng Liang<sup>\*a</sup>

DOI: 10.1039/c6ay90023b

www.rsc.org/methods

Correction for 'Interpretation of type 2 diabetes mellitus relevant GC-MS metabolomics fingerprints by using random forests' by Jian-Hua Huang *et al.*, *Anal. Methods*, 2013, 5, 4883–4889.

The authors wish to draw the readers' attention to their previous related study, published in *Talanta*,<sup>1</sup> which should have been cited in this *Analytical Methods* paper.

The authors regret not giving correct attribution to Fig. 4 in the paper and Table 1 in the ESI,<sup>†</sup> which were reproduced for the readers' information. The figures are reproduced below with the correct copyright permission.

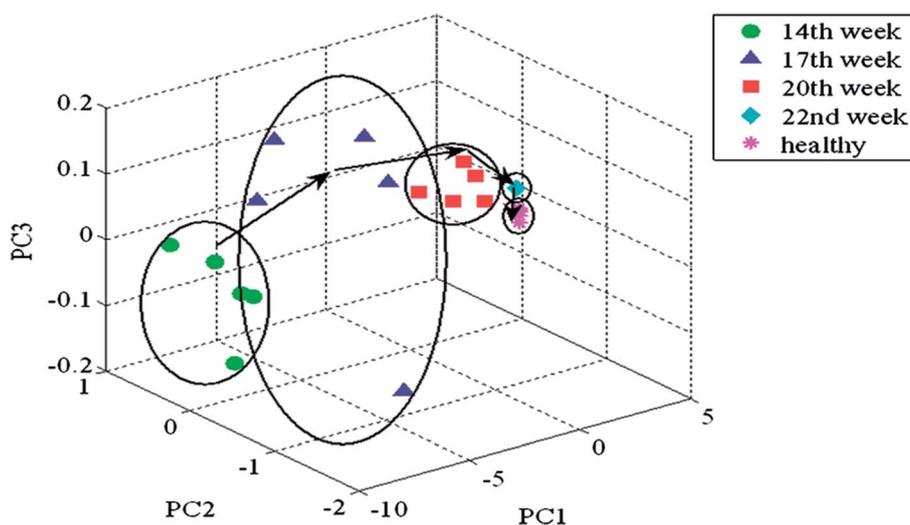


Fig. 4 3D-projection plot of metabolic fingerprints from PCA of the first three principal components for the second data set. Reproduced from ref. 2 with permission from Taylor & Francis.

<sup>a</sup>Research Center of Modernization of Traditional Chinese Medicines, Department of Chemistry and Chemical Engineering, Central South University, Changsha 410083, P. R. China. E-mail: yizeng\_liang@263.net; Fax: +86-731-88830831; Tel: +86-731-88830831

<sup>b</sup>School of Mathematical Sciences and Computing Technology, Central South University, Changsha 410083, P. R. China

<sup>c</sup>School of Chemistry and Chemical Engineering, Yangtze Normal University, Fuling 408100, P. R. China

† Electronic supplementary information (ESI) available. See DOI: 10.1039/c6ay90023b



Table 1 Qualitative and quantitative metabolic profile of three group mice. Reproduced from ref. 1 with permission from Elsevier

id	$t_r^a$ (min)	Endogenous metabolites	C57	AMPK-male	AMPK-female
1	5.922	Aminoethane	0.2456 ± 0.0705	0.1905 ± 0.0567	0.1958 ± 0.0551
2	6.593	Ethylene glycol	0.0182 ± 0.0020	0.0530 ± 0.0428	0.0746 ± 0.0626
3	6.84	<i>N,N</i> -Diethylacetamide	0.0657 ± 0.0087	0.0476 ± 0.0202	0.0557 ± 0.0107
4	7.716	Lactic acid*	0.0872 ± 0.0374	0.0952 ± 0.0592	0.1482 ± 0.2155
5	7.934	Acetic acid	0.0856 ± 0.0333	0.0229 ± 0.0140	0.0412 ± 0.0203
6	10.01	Phosphate	2.1278 ± 0.9173	1.4730 ± 0.7381	1.3767 ± 0.9361
7	10.2	<i>L</i> -Threonine	0.0173 ± 0.0098	0.0108 ± 0.0068	0.0096 ± 0.0065
8	10.297	Phenylacetic acid	0.0047 ± 0.0023	0.0159 ± 0.0103	0.0147 ± 0.0097
9	10.382	Succinic acid*	0.0311 ± 0.0129	0.0098 ± 0.0031	0.0119 ± 0.0086
10	10.447	1,2-Hydroquinone	0.0120 ± 0.0072	0.0078 ± 0.0047	0.0067 ± 0.0039
11	10.503	Glyceric acid	0.0961 ± 0.0266	0.0400 ± 0.0232	0.0183 ± 0.0087
12	10.723	( <i>R</i> *, <i>R</i> *)-2,3-Dihydroxybutanoic acid	0.0167 ± 0.0053	0.0037 ± 0.0014	0.0053 ± 0.0029
13	11.357	2,4-Dihydroxybutanoic acid	0.0147 ± 0.0051	0.0155 ± 0.0080	0.0166 ± 0.0047
14	11.583	( <i>R</i> *, <i>S</i> *)-3,4-Dihydroxybutanoic acid	0.0304 ± 0.0098	0.0132 ± 0.0064	0.0178 ± 0.0107
15	11.797	<i>N</i> -(1-Oxobutyl)-glycine	0.0653 ± 0.0244	0.0319 ± 0.0186	0.0274 ± 0.0151
16	12.341	Isovaleroglycine	0.0356 ± 0.0134	0.0160 ± 0.0079	0.0107 ± 0.0073
17	12.483	<i>D</i> -Threitol	0.0714 ± 0.0273	0.0290 ± 0.0130	0.0251 ± 0.0151
18	12.645	<i>N</i> -Crotonylglycine	0.0240 ± 0.0146	0.0207 ± 0.0129	0.0148 ± 0.0099
19	12.973, 13.203	2,3,4-Trihydroxybutyrate	0.1276 ± 0.0162	0.0631 ± 0.0343	0.0412 ± 0.0250
20	14.53	<i>N</i> -(1-Oxohexyl)-glycine	0.0960 ± 0.0319	0.0421 ± 0.0273	0.0232 ± 0.0081
21	14.58	3-Hydroxyphenylacetic acid	0.0326 ± 0.0100	0.0140 ± 0.0081	0.0134 ± 0.0088
22	14.713	<i>D</i> -Xylose	0.0408 ± 0.0150	0.0182 ± 0.0044	0.0193 ± 0.0053
23	14.823, 15.057	<i>D</i> -Ribose	0.0926 ± 0.0370	0.0252 ± 0.0142	0.0250 ± 0.0179
24	15.509, 15.733	Arabitol	0.0287 ± 0.0164	0.0283 ± 0.0179	0.0278 ± 0.0215
25	16.023	6-Deoxy- <i>D</i> -galactose	0.0336 ± 0.0083	0.0177 ± 0.0100	0.0149 ± 0.0104
26	16.087	Mannonic acid	0.0505 ± 0.0177	0.0211 ± 0.0143	0.0168 ± 0.0138
27	16.2	<i>Cis</i> -aconitic acid*	0.0535 ± 0.0288	0.0105 ± 0.0079	0.0168 ± 0.0147
28	16.357	Phosphoric acid	0.0414 ± 0.0202	0.0230 ± 0.0141	0.0212 ± 0.0168
29	17.177	Isocitric acid*	0.0348 ± 0.0121	0.0140 ± 0.0093	0.0248 ± 0.0138
30	17.563	Hippuric acid	0.0470 ± 0.0126	0.0180 ± 0.0074	0.0156 ± 0.0096
31	17.85, 17.96	<i>D</i> -Fructose*	0.0512 ± 0.0286	0.0371 ± 0.0145	0.0480 ± 0.0131
32	18.087	<i>N</i> -Phenyl glycine*	0.0596 ± 0.0214	0.0455 ± 0.0272	0.0389 ± 0.0287
33	18.197, 18.147	<i>D</i> -Glucose*	0.3785 ± 0.1618	0.1741 ± 0.0654	0.1859 ± 0.0736
34	18.507	Altronic acid	0.0302 ± 0.0069	0.0185 ± 0.0100	0.0102 ± 0.0074
35	18.577, 18.65	<i>D</i> -Sorbitol*	0.0896 ± 0.0269	0.0254 ± 0.0187	0.0300 ± 0.0275
36	18.983, 19.533	Galactonic acid	0.0613 ± 0.0282	0.0617 ± 0.0328	0.0441 ± 0.0351
37	19.99	Palmitic acid	0.0084 ± 0.0009	0.0067 ± 0.0017	0.0071 ± 0.0025
38	20.403	Myo-inositol	0.0347 ± 0.0228	0.0097 ± 0.0037	0.0134 ± 0.0129
39	25.465	<i>D</i> -Turannose	0.0216 ± 0.0138	0.0197 ± 0.0090	0.0510 ± 0.0099
40	25.653, 25.783	<i>D</i> -(+)-Lactose monohydrate*	1.0400 ± 0.3349	0.7475 ± 0.2366	0.6559 ± 0.3286
41	25.927	Lactose*	0.0142 ± 0.0043	0.0143 ± 0.0075	0.0190 ± 0.0163

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

## References

- 1 J.-H. Huang, R.-H. He, L.-Z. Yi, H.-L. Xie, D.-sheng Cao and Yi-Z. Liang, *Talanta*, 2013, **110**, 1–7.
- 2 H. Yi, L. Yi, R. He, Q. Lv, X. Ren, Z. Zhang, Y. Liang and J. He, *Anal. Lett.*, 2012, **45**(13), 1862–1874.

