

Erratum to “Statistical hypothesis testing of factor loading in principal component analysis and its application to metabolite set enrichment analysis” [BMC. Bioinformatics. 2014, 15:51]

The equation (1-6)

$$\text{corr}(\mathbf{t}, \mathbf{x}_p) = \frac{\lambda \mathbf{w}' \mathbf{c}}{\sqrt{\text{var}(\mathbf{t})} \sqrt{\text{var}(\mathbf{x}_p)}} = \frac{\lambda w_p}{\sqrt{\lambda} \sigma_p} = \frac{\sqrt{\lambda} w_p}{\sigma_p}$$

should be corrected as

$$\text{corr}(\mathbf{t}, \mathbf{x}_p) = \frac{\lambda \mathbf{w}' \mathbf{c}}{\sqrt{\text{var}(\mathbf{t})} \sqrt{\text{var}(\mathbf{x}_p)}} = \frac{\lambda w_p}{\sqrt{\lambda} \sigma_p} = \frac{\sqrt{\lambda} w_p}{\sigma_p}$$