

1. Page 2, (see note0101.pdf at <https://github.com/SorensenD/SLGDS>) for more details on the subject)  
 CHANGE: "This requires equating the expected proportion of genotypes shared identical by descent, given a pedigree, with the observed phenotypic correlation between relatives."  
 TO: "This requires equating the expected proportion of the genome shared identical by descent, given a pedigree, with the observed phenotypic correlation between relatives."
2. Page 18, CHANGE: "Jeffrey's prior and mathematical form as the likelihood, proportional to  $((1 - \theta)^{27})$  lead to posterior distributions  $Be(0.5, 27.5)$  and  $Be(1, 28)$ , respectively;"  
 TO: "Jeffrey's prior and the uniform prior, when combined with the likelihood, proportional to  $(1 - \theta)^{27}$ , lead to posterior distributions  $Be(0.5, 27.5)$  and  $Be(1, 28)$ , respectively;"
3. Page 63, CHANGE  
 "There are  $m$  complete bivariate observations  $(x_i, y_i), i = 1, 2, \dots, m$  and  $(n - m)$  univariate records ..."  
 TO: "There are  $m$  complete independent bivariate observations  $(x_i, y_i), i = 1, 2, \dots, m$  and  $(n - m)$  independent univariate records ..."
4. Pages 201-203, REPLACE subsection :  
 "The acceptance probability for a general Metropolis-Hastings algorithm"  
 WITH the content of note0401.pdf
5. Page 258, eqn. (6.1),  
 CHANGE second line to (brackets missing):
 
$$\begin{aligned}
 E_{y_0|x} [\text{MSE}(f(x))] &= E_{y_0|x} [(y_0 - f(x))^2] \\
 &= E_x [E_{y_0|x} [(y_0 - f(x))^2 | x]] \\
 &= E_x [\text{Var}(y_0|x) + (E(y_0|x) - f(x))^2], \quad (6.1)
 \end{aligned}$$
6. Page 259, below eqn. (6.7),  
 CHANGE: "that is in the best linear approximation ..."  
 TO: "that is the best linear approximation ..."
7. Page 264, bottom  
 CHANGE: "...as the predictor variables have larger sampling variances and are uncorrelated with each other."  
 TO: "...as the predictor variables have larger sampling variances and are mutually orthogonal."  
 CHANGE: "If the covariables are uncorrelated ..."  
 TO: "If the covariables are orthogonal ..."

CHANGE: "When the covariables are correlated ..."

TO: "When the covariables are not orthogonal ..."

8. Page 265, top

CHANGE: "indicating that when the covariables are correlated ..."

TO: "indicating that when the covariables are not orthogonal ..."

9. Page 270, eqn. (6.31),

CHANGE: the left hand side of the first line:

$$\text{Var} (y_0 - \hat{y}_0 | x_0)$$

TO:

$$\text{Var} [(y_0 - \hat{y}_0) | x_0]$$

(brackets missing)

10. Page 277,

CHANGE:

$$E_{y_v y} (\text{MSE}_v) = \text{Var} (y_{v,i} | x_i) + \text{bias}^2 + \frac{1}{N} \text{Var} (\hat{f}(x_i) | x_i)$$

and

$$E_{y_v y} (\text{MSE}_t) = E_{y_v y} (\text{MSE}_v) - \frac{2}{N} \sum_i \text{Cov} (y_i, \hat{f}(x_i))$$

TO:

$$E_{y_v y} (\text{MSE}_v) = \frac{1}{N} \sum_i \text{Var} (y_{v,i} | x_i) + \frac{1}{N} \sum_i \text{bias}(i)^2 + \frac{1}{N} \sum_i \text{Var} (\hat{f}(x_i) | x_i)$$

and when covariates in training and validating data take the same values,

$$E_{y_v y} (\text{MSE}_t) = E_{y_v y} (\text{MSE}_v) - \frac{2}{N} \sum_i \text{Cov} (y_i, \hat{f}(x_i))$$

11. Page 286, below eqn. (6.66),

CHANGE: "and from (6.65)"

TO: "and from (6.65) when covariates in training and validating data take the same values,"

(see note0603.pdf for elaborations on the subject).

12. Page 332, CHANGE: "..., while incurring a relatively low proportion of false positives."

TO: "..., while incurring a user-chosen proportion of false positives."

13. Page 325, eqn. (7.41),

CHANGE:

The conditional distribution of the data takes the form

$$y|\mu, \alpha, \delta, \sigma^2 \sim N \left( 1\mu + \sum_{i=1}^m X_i (\alpha_i \delta_i), I\sigma^2 \right), \quad i = 1, \dots, m \quad (7.41)$$

where  $X_i$  is the  $i$ th column of  $X$ .

TO: The conditional distribution of the data takes the form

$$y|\mu, \alpha, \delta, \sigma^2 \sim N \left( 1\mu + \sum_{i=1}^m X_i (\alpha_i \delta_i), I\sigma^2 \right), \quad i = 1, \dots, m \quad (7.41)$$

where  $X_i$  is the  $i$ th column of  $X$ .

(remove extra ",," before  $i = 1, \dots, m$ ).

14. Top of page 393, eqn. (9.30),

CHANGE:

An unbiased estimator of incidence (given  $n$ ,  $sen$ ,  $spe$  and bounded between 0 and 1) is

$$\frac{\Pr(\hat{Y} = 1) - (1 - spe)}{sen + spe - 1} = \frac{T - n(1 - spe)}{n(sen + spe - 1)}. \quad (9.30)$$

TO: An unbiased estimator of prevalence (given  $n$ ,  $sen$ ,  $spe$  and bounded between 0 and 1) is

$$\frac{\widehat{\Pr}(\hat{Y} = 1) - (1 - spe)}{sen + spe - 1} = \frac{T - n(1 - spe)}{n(sen + spe - 1)}. \quad (9.30)$$

(change "incidence" to "prevalence" and "hat" missing on the biased estimator of prevalence; see note0901.pdf for further details).

15. Page 675,

CHANGE: "Boyle EA, Li YI, Pritchard JK (2017) An expanded view of complex **trits**: from polygenic to omnigenic. Cell 169:1177–1186"

TO: "Boyle EA, Li YI, Pritchard JK (2017) An expanded view of complex traits: from polygenic to omnigenic. Cell 169:1177–1186"