## Errata for:

(RNA multiple structural alignment with longest common subsequences)

## 1.

The Maximum Loop Chain problem (pp. 35-37) can be solved in $O\left(n^{5}\right)$ time. The 2 -approximation in fact does not work as it uses a different definition of the original problem.

## 2.

The LCSMNL algorithm (pp. 39) in fact contains some error in the 'Compute $\mathrm{D}[.$.$] ' loop, but can be easily fixed as follows. The error is due to$ that $\mathrm{L}[.$.$] and \mathrm{D}[.$.$] are computed separately. To fix it, simply do it like in$ LCSBM. The running time would be the same as before.
d=0
if $(\mathrm{L}[\mathrm{i}, \mathrm{j}, \mathrm{k}, \mathrm{l}]=\mathrm{L}[\mathrm{i}, \mathrm{j}-1, \mathrm{k}, \mathrm{l}])$ then $d=\max (d, D[i, j-1, k, l])$;
if $L[i, j, k, l]=L[i, j, k, l-1]$ then
$\mathrm{d}=\max (\mathrm{d}, \mathrm{D}[\mathrm{i}, \mathrm{j}, \mathrm{k}, \mathrm{l}-1])$;
if $\left(a_{j}=b_{l}\right.$ and $\left.\mathrm{L}[\mathrm{i}, \mathrm{j}, \mathrm{k}, \mathrm{l}]=\mathrm{L}[\mathrm{i}, \mathrm{j}-1, \mathrm{k}, \mathrm{l}-1]+1\right)$ then
$\mathrm{d}=\max (\mathrm{d}, \mathrm{D}[\mathrm{i}, \mathrm{j}-1, \mathrm{k}, \mathrm{l}-1])$;
if $\left(a_{i}=b_{k}\right.$ and $\left.\mathrm{L}[\mathrm{i}, \mathrm{j}, \mathrm{k}, 1]=\mathrm{L}[\mathrm{i}+1, \mathrm{j}, \mathrm{k}+1,1]+1\right)$ then
$\mathrm{d}=\max (\mathrm{d}, \mathrm{D}[\mathrm{i}+1, \mathrm{j}, \mathrm{k}+1, \mathrm{l}])$;
if $\left(a_{i}=b_{k}\right.$ and $a_{j}=b_{l}$ and $a_{i}$ matches $a_{j}$ and $\mathrm{L}[\mathrm{i}, \mathrm{j}, \mathrm{k}, \mathrm{l}]=\mathrm{L}[\mathrm{i}+1, \mathrm{j}-1, \mathrm{k}+1, \mathrm{l}-$ 1] +2 ) then
$\mathrm{d}=\max (\mathrm{d}, \mathrm{D}[\mathrm{i}+1, \mathrm{j}-1, \mathrm{k}+1, \mathrm{l}-1]+1) ;$
$\mathrm{D}[\mathrm{i}, \mathrm{j}, \mathrm{k}, \mathrm{l}]=\mathrm{d}$;
The revised full version of the paper (containing more results and two extra authors) will be available soon.

