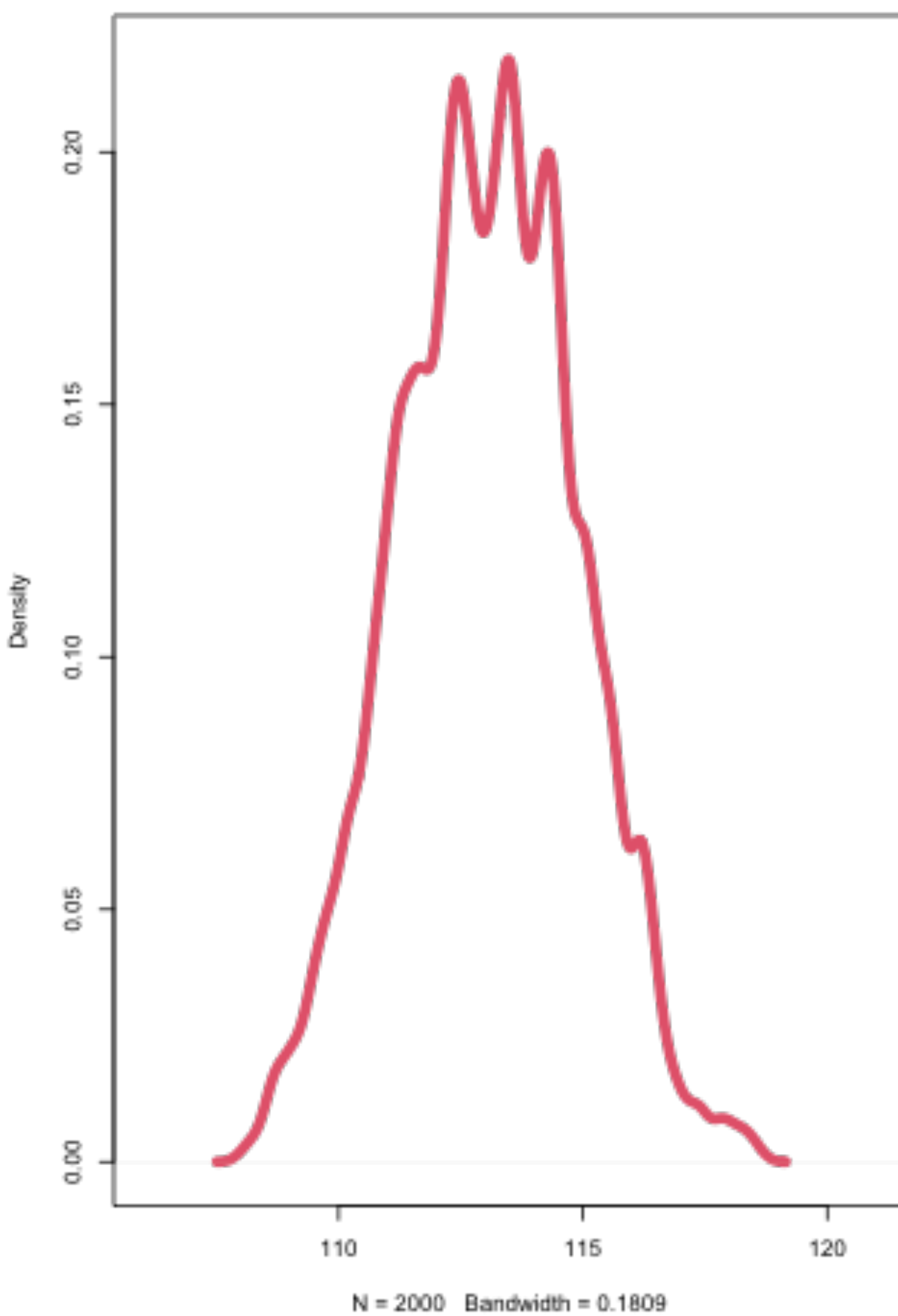
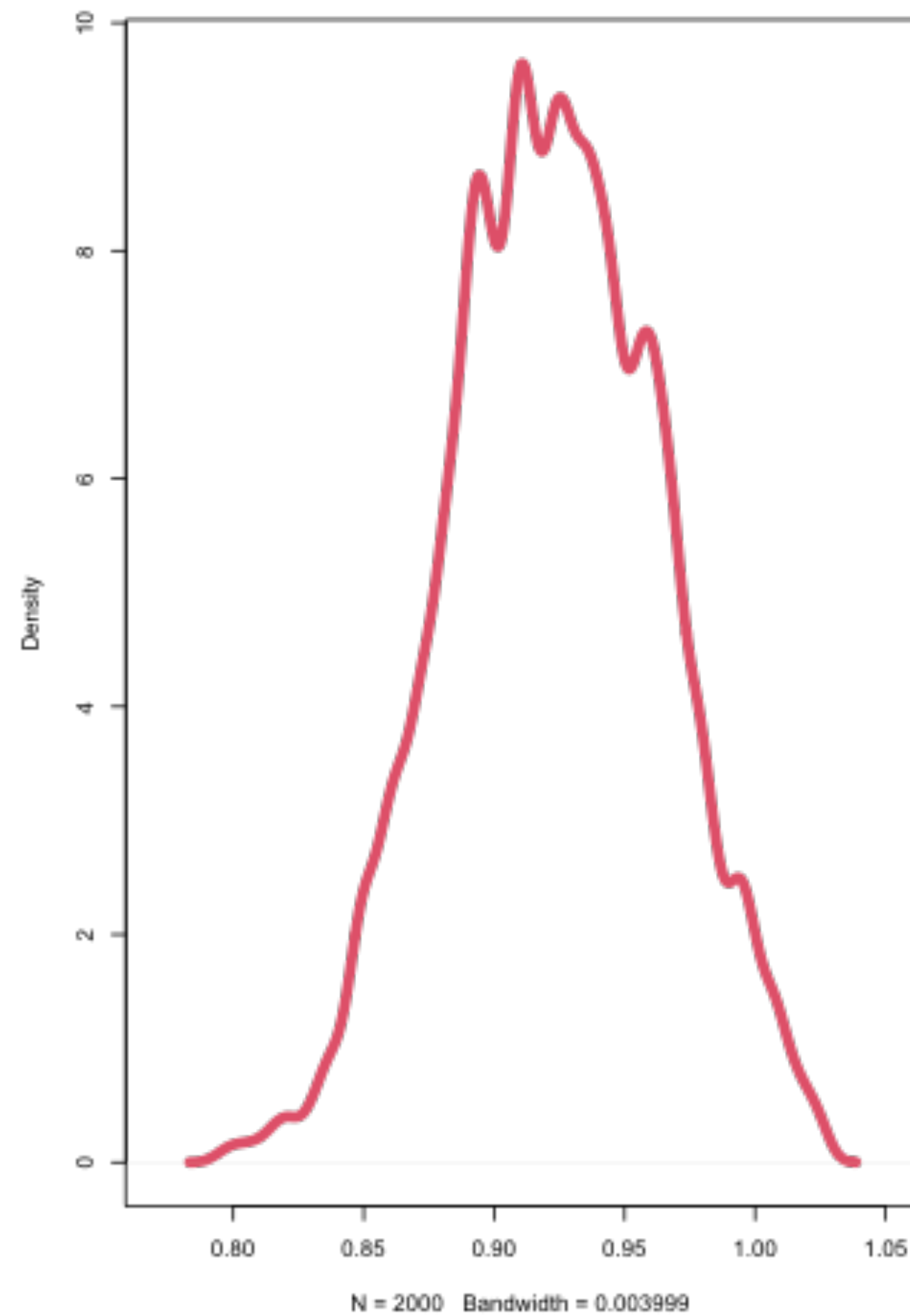


THE POSTERIOR PARAMETER DISTRIBUTION

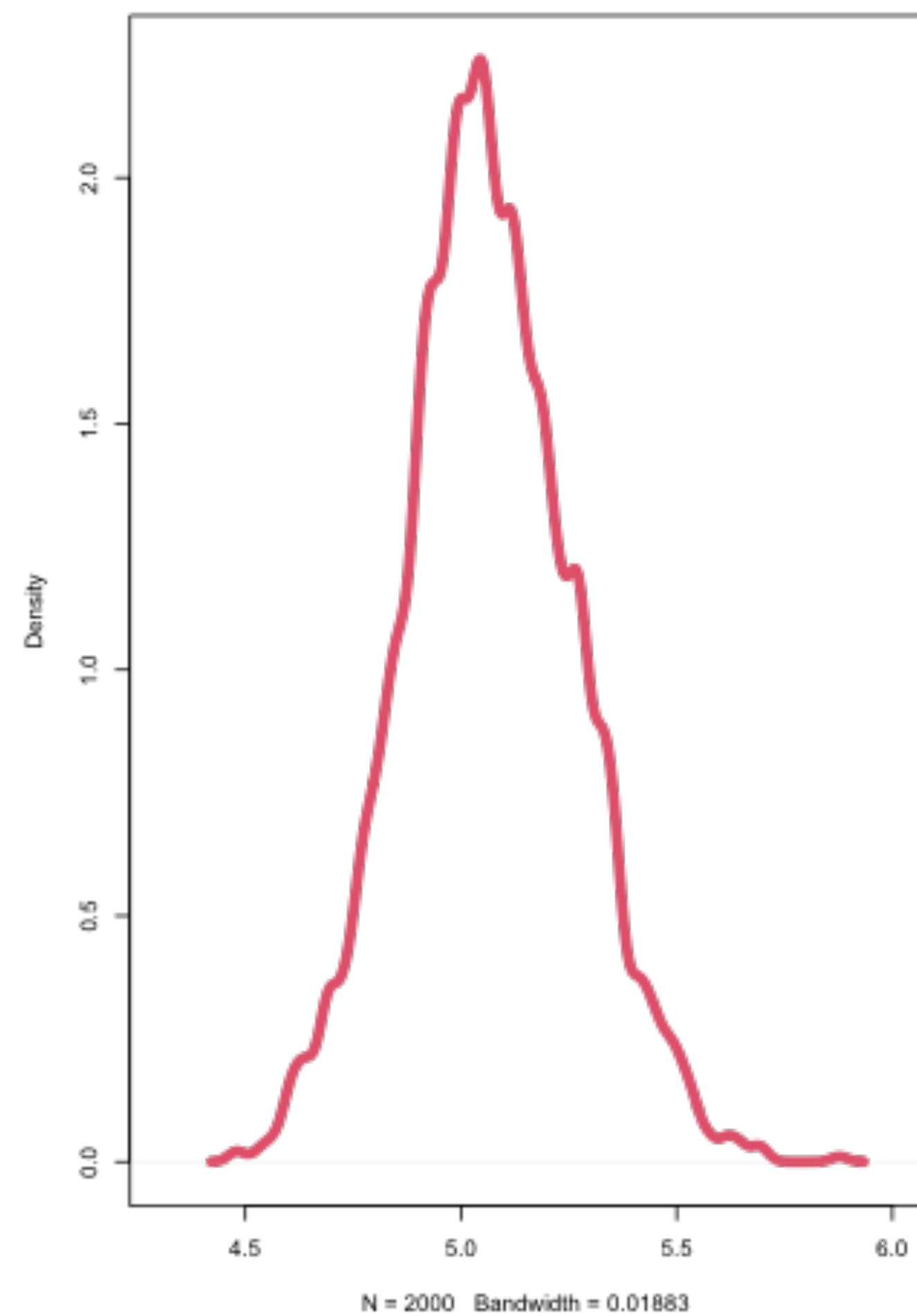
a



b



sigma



```
> samples
```

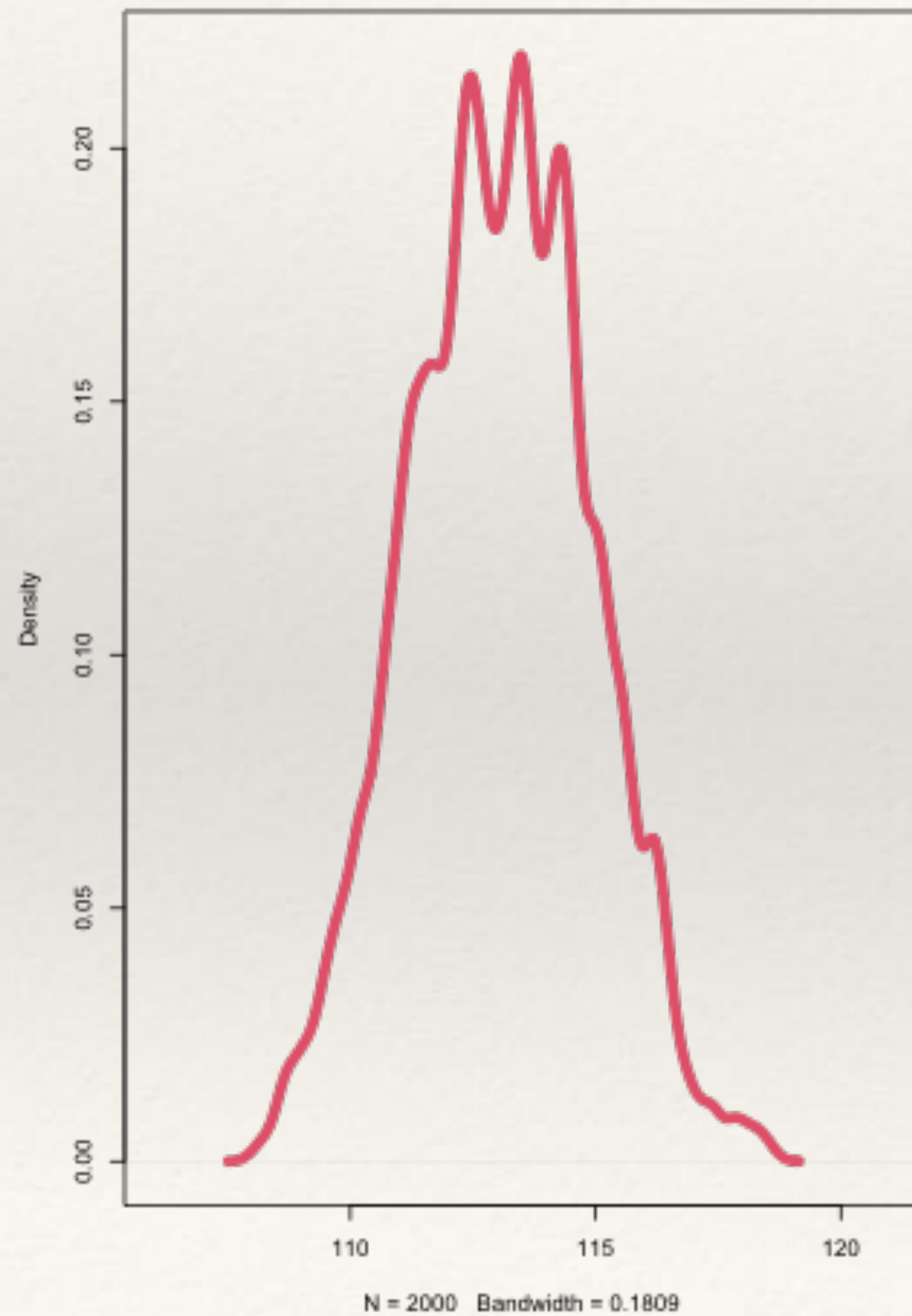
```
# A tibble: 2,000 × 3
```

	a	b	sigma
	<dbl[1d]>	<dbl[1d]>	<dbl[1d]>
1	115.	0.889	4.78
2	109.	1.02	5.30
3	112.	0.928	5.07
4	111.	0.949	5.30
5	111.	0.955	5.04
6	115.	0.872	5.19
7	109.	1.01	5.13
8	117.	0.844	5.00
9	115.	0.882	4.94
10	112.	0.939	4.95

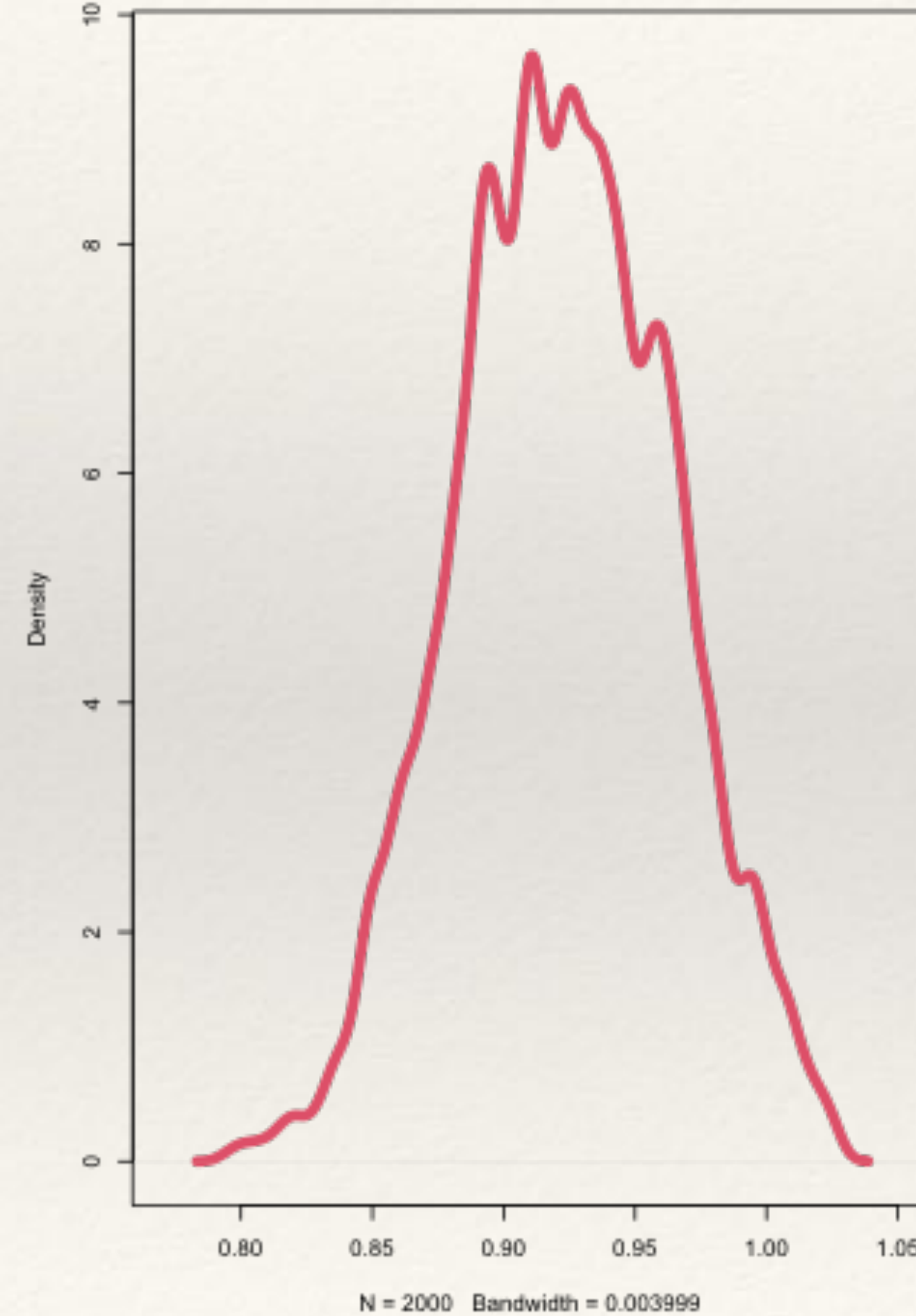
```
# ... with 1,990 more rows
```

THE POSTERIOR PARAMETER DISTRIBUTION

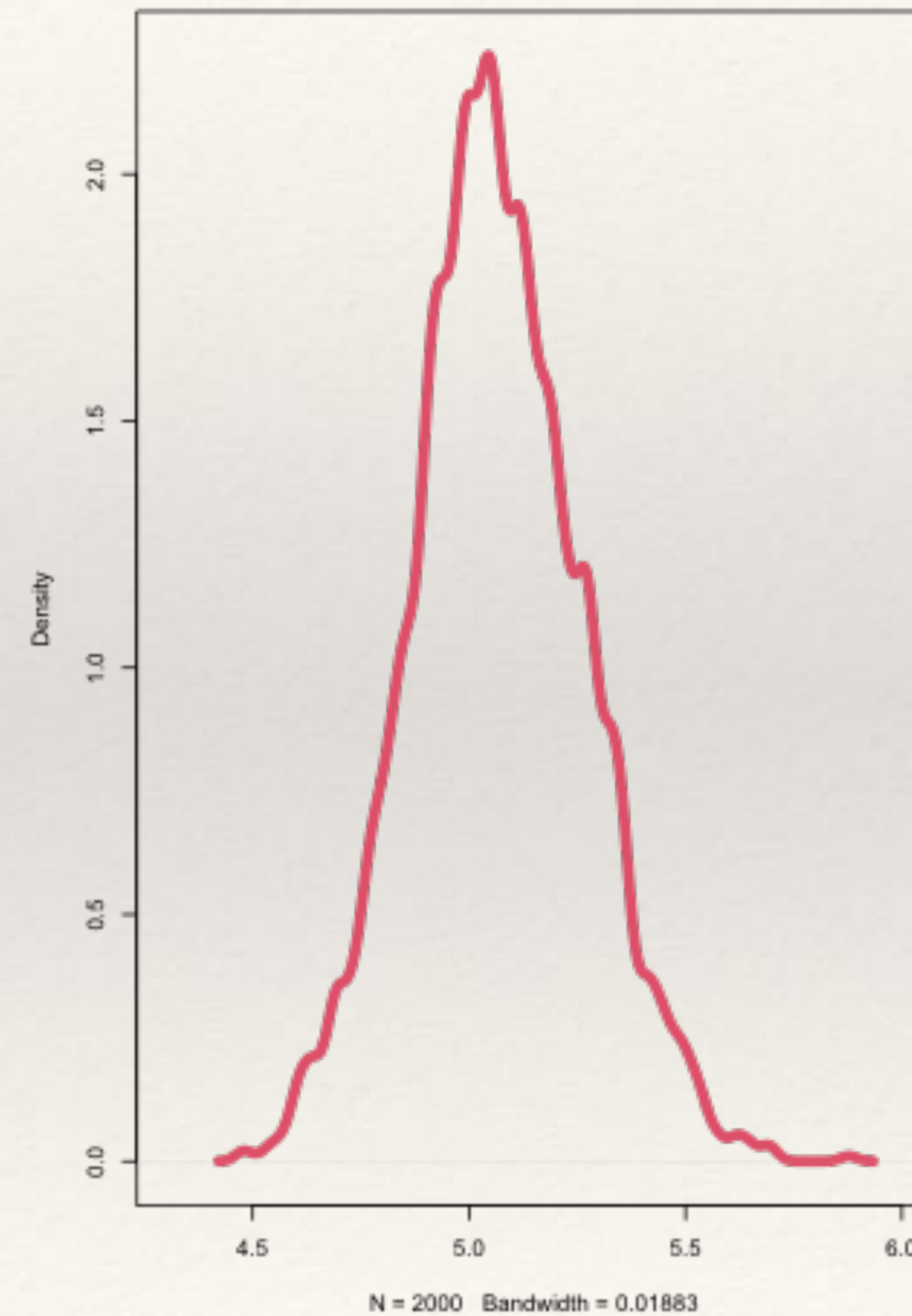
a



b



sigma



```
> samples
# A tibble: 2,000 × 3
      a      b    sigma
  <dbl[1d]> <dbl[1d]> <dbl[1d]>
1    115.    0.889    4.78
2    109.    1.02    5.30
3    112.    0.928    5.07
4    111.    0.949    5.30
5    111.    0.955    5.04
6    115.    0.872    5.19
7    109.    1.01    5.13
8    117.    0.844    5.00
9    115.    0.882    4.94
10   112.    0.939    4.95
# ... with 1,990 more rows
```

CATEGORIAL PREDICTORS AND CONTRASTS

We can also use categorical predictors to estimate per-group averages.

- K_i : caloric content of milk in several monkey groups
- *CLADE*: categorical variable for the monkey groups

$$K_i \sim \text{Normal}(\mu_i, \sigma)$$

$$\mu_i = \alpha_{\text{CLADE}[i]}$$

$$\alpha_i \sim \text{Normal}(0, 0.5)$$

$$\sigma \sim \text{Exponential}(1)$$