

# 論文のデータ解析メソッドを読む・解析結果を解釈する

## テキスト

色々、考えてみたけれど、このコンテンツのこの並べ方より良い方法が思いつかないので

Statistics for Biologists (<https://www.nature.com/collections/qghhqm/pointsofsignificance>)

() で括っている項は飛ばすかもしれない項

- Importance of being uncertain (<https://www.nature.com/articles/nmeth.2613>) Fig1 Fig2
- Error Bars (<https://www.nature.com/articles/nmeth.2659>) Fig2
- Significance, P values and t-tests (<https://www.nature.com/articles/nmeth.2698>) Fig1 Fig3
- Power and sample size (<https://www.nature.com/articles/nmeth.2738>) Fig3
- Visualizing samples with box plots (<https://www.nature.com/articles/nmeth.2813>) Fig1 Fig3
- Comparing samples—part I (t-tests) (<https://www.nature.com/articles/nmeth.2858>) Fig1 Fig3
- Comparing samples—part II (Multiple testing; FWER vs. FDR) (<https://www.nature.com/articles/nmeth.2900>) Fig 1 Fig 3
- Nonparametric tests (<https://www.nature.com/articles/nmeth.2937>) Fig2
- ((Designing comparative experiments))
- (Analysis of variance and blocking )
- ((Replication))
- ((Nested designs))
- ((Two-factor designs))
- (Sources of variation)
- ((Split plot design))
- Bayes' theorem (<https://www.nature.com/articles/nmeth.3335>) No fig
- Bayesian statistics (<https://www.nature.com/articles/nmeth.3368>) Fig1 Fig2
- (Sampling distribution and the bootstrap)
- ((Bayesian networks))
- (Association, correlation and causation)
- Simple linear regression (<https://www.nature.com/articles/nmeth.3627>) Fig1 Fig3
- ((Multiple linear regression))
- (Analyzing outliers: influential or nuisance)
- ((Regression diagnostics))
- Logistic regression (<https://www.nature.com/articles/nmeth.3904>) Fig1 Fig2
- ((Classification evaluation))
- Model selection and overfitting (<https://www.nature.com/articles/nmeth.3968>) Fig1 Fig3
- (Regularization)
- P values and the search for significance (<https://www.nature.com/articles/nmeth.4120>) Fig1
- Interpreting P values (<https://www.nature.com/articles/nmeth.4210>) No fig, but title.
- Tabular data (<https://www.nature.com/articles/nmeth.4239>) Table1
- Clustering (<https://www.nature.com/articles/nmeth.4299>) Fig1 Fig2
- Principal component analysis (<https://ja.wikipedia.org/wiki/%E4%B8%BB%E6%88%90%E5%88%86%E5%88%86%E6%9E%90>) Wiki image
- ((Classification and regression trees))
- (Ensemble methods: bagging and random forests)

- Machine learning: a primer  
(<https://ja.wikipedia.org/wiki/%E6%A9%9F%E6%A2%B0%E5%AD%A6%E7%BF%92>) Wiki 右カラム
- Machine learning: supervised methods (<https://www.nature.com/articles/nmeth.4551>) Fig1 Fig2 Fig3
- ((Statistics versus machine learning))
- (The curse(s) of dimensionality)
- ((Optimal experimental design))
- ((Predicting with confidence and tolerance))
- ((Two-level factorial experiments))