

# Identification of Conserved Regions in CRISPR protein family

Christine Baek  
Computational Biology  
Carnegie Mellon University  
baek@cmu.edu

Qi Chu  
Computational Biology  
Carnegie Mellon University  
qchu@andrew.cmu.edu

Yanyu Liang  
Computational Biology  
Carnegie Mellon University  
yanyul@andrew.cmu.edu

**Abstract**—The abstract goes here.

## I. INTRODUCTION

This demo file is intended to serve as a “starter file” for IEEE conference papers produced under L<sup>A</sup>T<sub>E</sub>X using IEEE-tran.cls version 1.8b and later. I wish you the best of success.

mds

August 26, 2015

### A. Subsection Heading Here

Subsection text here.

1) *Subsubsection Heading Here*: Subsubsection text here.

## II. METHODS

We used 3 different approaches .. blahblahblah. All used the same .fa sequence, etc. etc. talk about the data itself here, and why we used 3 different methods.

### A. Sequence Alignment using Dynamic Programming

1) *Model & Algorithm Overview*: talk about overview of what the method does (method itself, not in detail of how you used it)

2) *Pros and Cons*: of using the method - what is it capable of, what are the limitations ?

3) *Protocol*: implementation details - justifications for decisions you made when you ran the experiment, parameters, etc.

4) *Analysis*: Discuss METHOD for analysis, not the actual result/analysis itself.

### B. Gibbs Sampling

1) *Model & Algorithm Overview*: talk about overview of what the method does (method itself, not in detail of how you used it)

2) *Pros and Cons*: of using the method - what is it capable of, what are the limitations ?

3) *Protocol*: implementation details - justifications for decisions you made when you ran the experiment, parameters, etc.

4) *Analysis*: Discuss METHOD for analysis, not the actual result/analysis itself.

### C. HMM

1) *Model & Algorithm Overview*: talk about overview of what the method does (method itself, not in detail of how you used it)

2) *Pros and Cons*: of using the method - what is it capable of, what are the limitations ?

3) *Protocol*: implementation details - justifications for decisions you made when you ran the experiment, parameters, etc.

4) *Analysis*: Discuss METHOD for analysis, not the actual result/analysis itself.

## III. RESULTS

## IV. CONCLUSION

The conclusion goes here.

## ACKNOWLEDGMENT

The authors would like to thank...

## REFERENCES

- [1] H. Kopka and P. W. Daly, *A Guide to L<sup>A</sup>T<sub>E</sub>X*, 3rd ed. Harlow, England: Addison-Wesley, 1999.
- [2] K. S. Makarova, Y.I. Wolf, O.S. Alkhnbashi, E.V. Koonin et al., *An updated evolutionary classification of CRISPR-Cas systems* <http://dx.doi.org/10.1038/nrmicro3569>