**Format of a Regular Article for Biomedical Sciences Today**

Md. Ashrafuzzaman1,\*, C.-Y. Tseng2

1Department of Biochemistry, College of Science, King Saud University, Riyadh, Saudi Arabia

2Computational Biology Division, MDT Canada, Edmonton, AB, Canada

\*Correspondence should be addressed to Md. Ashrafuzzaman; [bmst@mdtcanada.ca](mailto:bmst@mdtcanada.ca)

Received 16 January 2015; Revised 4 March 2015; Accepted 22 March 2015; Published 25 March 2015

Editor: Ralph Scheicher

Copyright © 2015 Md. Ashrafuzzaman and C.-Y. Tseng. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Abstract**

A regular article or a review must have an abstract to be written in this space. Front page left column (and part of right column, if needed) is dedicated for abstract. Author’s photos will follow Abstract. Maximum abstract word count is 400 for regular article and review. The abstract should demonstrate the summary of hypothesis, techniques, results and findings of the paper in a concise manner. It should also be general enough to let it be understood by readers from various related fields.

**Keywords:** Regular article, BMST, simulation.

**1. Introduction**

This provides a general background, summary of the existing progresses of the topic and related techniques, mention of the necessity of the current studies, proposed techniques and expected outcomes. Introduction should be concise but general and with enough information so that a reader who may even be new in this field can already understand the theme of the paper. This section should have an objective to educate a reader. As many appropriate references as possible to be mentioned and summarized of those studies and their outcomes to give the reader a historical as well as current status of the field in relation to the theme of submitted article. Proper references [1] should be provided.

This provides a general background, summary of the existing progresses of the topic and related techniques, mention of the necessity of the current studies, proposed techniques and expected outcomes. Introduction should be concise but general and with enough information so that a reader who may even be new in this field can already understand the theme of the paper. This section should have an objective to educate a reader. As many appropriate references as possible to be mentioned and summarized of those studies and their outcomes to give the reader a historical as well as current status of the field in relation to the theme of submitted article.

This provides a general background, summary of the existing progresses of the topic and related techniques, mention of the necessity of the current studies, proposed techniques and expected outcomes. Introduction should be concise but general and with enough information so that a reader who may even be new in this field can already understand the theme of the paper. This section should have an objective to educate a reader. As many appropriate references as possible to be mentioned and summarized of those studies and their outcomes to give the reader a historical as well as current status of the field in relation to the theme of submitted article.

This provides a general background, summary of the existing progresses of the topic and related techniques, mention of the necessity of the current studies, proposed techniques and expected outcomes. Introduction should be concise but general and with enough information so that a reader who may even be new in this field can already understand the theme of the paper. This section should have an objective to educate a reader. As many appropriate references as possible to be mentioned and summarized of those studies and their outcomes to give the reader a historical as well as current status of the field in relation to the theme of submitted article.

This provides a general background, summary of the existing progresses of the topic and related techniques, mention of the necessity of the current studies, proposed techniques and expected outcomes. Introduction should be concise but general and with enough information so that a reader who may even be new in this field can already understand the theme of the paper. This section should have an objective to educate a reader. As many appropriate references as possible to be mentioned and summarized of those studies and their outcomes to give the reader a historical as well as current status of the field in relation to the theme of submitted article.

This provides a general background, summary of the existing progresses of the topic and related techniques, mention of the necessity of the current studies, proposed techniques and expected outcomes. Introduction should be concise but general and with enough information so that a reader who may even be new in this field can already understand the theme of the paper. This section should have an objective to educate a reader. As many appropriate references as possible to be mentioned and summarized of those studies and their outcomes to give the reader a historical as well as current status of the field in relation to the theme of submitted article.

Introduction should be concise but general and with enough information so that a reader who may even be new in this field can already understand the theme of the paper. This section should have an objective to educate a reader. As many appropriate references as possible to be mentioned and summarized of those studies and their outcomes to give the reader a historical as well as current status of the field in relation to the theme of submitted article.

Introduction should be concise but general and with enough information so that a reader who may even be new in this field can already understand the theme of the paper. This section should have an objective to educate a reader. As many appropriate references as possible to be mentioned and summarized of those studies and their outcomes to give the reader a historical as well as current status of the field in relation to the theme of submitted article.

Introduction should be concise but general and with enough information so that a reader who may even be new in this field can already understand the theme of the paper. This section should have an objective to educate a reader. As many appropriate references as possible to be mentioned and summarized of those studies and their outcomes to give the reader a historical as well as current status of the field in relation to the theme of submitted article.

**2. Materials and Methods**

All the materials, programs, softwares, etc. used in the study must be mentioned clearly including the names and addresses of the supplying companies. Names of any machines or set ups that are used to produce data have to mentioned including the model number. If any material is laboratory made the preparation method needs to be addressed including the purity level.

A clear address of the techniques, methods [1, 2] and strategies of the research should be presented here. Theoretical, computational, experimental techniques to collect data, data analysis methods, presentation of data, etc. should be explained in a plain manner. The presentation should be well enough so that anyone in the field or in related fields can reinvestigate similar topics using any of these methods.

**3. Results**

All important results must be presented in scientific ways of presentations. Besides writing the summary of results appropriate graphs, tables, etc. can be created to make the date understandable easily. If the results are repeated their means and standard deviations/standard errors can also be mentioned. In that case the number of samples should be clearly mentioned.

Figure 1 demonstrates aptamers’ protein binding mode.



Figure 1. Binding mode of aptamers.

**4. Discussion**

This is perhaps the most important part of the paper. All the outcomes of the paper should be explained here. Why the outcomes are important, what are the developments made over available information and what will be the subsequent strategies to develop further on these achievements should be explained. The application of the results in real life or virtual world use should be also addressed here. The basis of the majority of explanations must be based on the results produced in the paper.

**5. Conclusion**

This section outlines the outcomes of the paper. It should not be too large. It emphasize mainly on explaining the novelty of the outcomes both techniques and results.

**Conflict of Interests**

The authors declares no conflict of interests regarding the publication of this article.

**Acknowledment**

Grant number with the funding agency name should be clearly written. Personnel who helped raising ideas, producing data, etc. but their contributions are not enough so that they deserve to be co-authors should be mentioned. Colleagues, bosses (academic, institutional or administrative) can’t be acknowledged if they have not considerable research contributions. Some unique facilities that provide supports to produce data can also be mentioned. Referees or editors can’t be acknowledged.

**References**

[1] Ashrafuzzaman, M.; Tuszynski, J. Regulation of channel function due to coupling with a lipid bilayer. J. Comput. Theor. Nanosci., 2012, 9, 564-570.

[2] Ashrafuzzaman, M.; Tseng, C.-Y.; Duszyk, M.; Tuszynski, J. Chemotherapy drugs form ion pores inmembranes due to physical interactions with lipids. Chem. Biol. Drug. Des., 2012, 80, 992–1002.

**End Notes**

If any theoretical analysis, results, conclusions, etc. that are not the main outcome but important for related matters can be presented here. This is an optional section.

**Authors’ Biosketches**

(This is an optional section, to be chosen by authors)

**Dr. Ashrafuzzaman**

Dr. Ashrafuzzaman works in the domain of biophysics. Stability of the structures of biomolecules, their independent random existence, coexistence with other molecules <complex biological structures> in biological environment, especially in cellular environment (cell membrane, cellular interior and exterior regions where various proteins exist) are often energy- based biophysical problems. Going beyond simple biochemical approaches we apply various biophysical techniques to not just observe things or measure the effects but also try to understand the hidden causes of responses, underlying mechanisms and aftermath effects using response theory based science. We apply all three common methodologies of investigations: theory, experiments and computation to penetrate dip into the problems. Our techniques are dedicated mainly to first finding the equilibrium structures, calculating the energies corresponding to specific structures, then raising the understanding of phenomenological structural transitions between various energy landscapes that represent various functional aspects. For more contact at [mashrafuzzaman@ksu.edu.sa](mailto:mashrafuzzaman@ksu.edu.sa).





**Dr. Tseng**

Dr. Tseng works at MDT Canada Inc. His laboratory is focused at computation drug-biological target structure binding mechanism. For more contact at [rtseng@mdtcanada.ca](mailto:rtseng@mdtcanada.ca).

Bio sketch of authors and description of their laboratory facilities and research activities.

150 words and 1 figure/picture are dedicated for each author.

The authors may also provide video links in their respective sections (maximum 1 link per author) to demonstrate their laboratory activities.