"Success is a journey, not a destination." ~ Ben Sweetland.

Contents

Note to Readers…

After the successful launch of the last edition, RSG-India is back again this summer with the eighth volume of 'CONNECT'. Firstly, we introduce you to the 'FAQ Archive' in the initiatives section. Apart from that, we have 'Top 10 posts on the Message Board' and 'Topic of the month (TOTM) – Bioinformatics and Python' as the regular sections on Bioinformatics awareness. Further, in the triumphant section, 'BIO-Innovation', we give you a preview of a comparative genomics tool called 'Genomicus'. Last but not least, we update you of the latest session held at CBDG-SirMVIT. We also introduce a link to the RSG-India FAQ Archive at the bottom left corner of the page.

We hope you find this issue engrossing, benefit from the initiatives that RSG-India is keen upon bringing out for you, and also support our eagerness for academic and research excellence!

RSG-India's Initiatives – Spanning our wings…

RSG-India FAQ Archive

In the last issue of 'CONNECT', we introduced you to RSG-India's online initiatives via the RSG-India Google Calendar. We talk about yet another informative and helpful online initiative, the 'FAQ Archive' in this issue.

- Bioinformatics and Computational Biology still being upcoming fields, have plenty of room for confusion and curiosity, faced especially by newbie's. To help the situation, RSG-India launched the 'FAQ Archive' 6 months ago.
- It is a compilation of *frequently asked questions (FAQs)* related to a diverse set of topics ranging from: commonly used tools to programming languages; scope of higher studies to job opportunities.
- The FAQ Archive aims to quickly resolve queries by being a ready reference of earlier inquiries and providing direct links to the related replies. It helps save time spent in awaiting a response for most common clarifications.
- Once you have logged onto the **RSG-India Message Board Google-group**, the following link can provide access to the FAQ-Archive:

https://sites.google.com/site/rsgiplus/archives

We welcome more inputs from RSG-India members to help make the FAQ Archive more assorted, educational and relevant!

… will be continued …

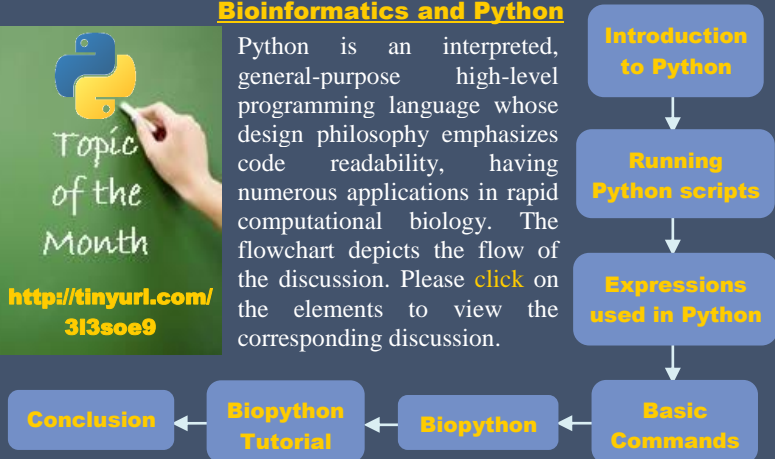## TOP in Focus 10 POSTS ON THE MESSAGE BOARD

1. INTERNSHIP (ABROAD) – Bioinformatics Internship opportunity at UCSF
2. FELLOWSHIP (NATIONAL) - Jawaharlal Nehru Memorial Fellowship 2011
3. RESOURCE - Writing Research Papers
4. Inspiring story of Saras Saraswathi
5. ARTICLE - NCBI to shut down databases
6. MISC - iMotifs, Sequence Motif Editor
7. OPENING (ABROAD) - Bioinformatics positions at SciLifeLab, Stockholm
8. FELLOWSHIP (ABROAD) - Biomedical Research Fellowship Programme for India
9. OPENING (NATIONAL) - M.Tech. & Ph.D (ENGINEERING), IIT-Kanpur
10. INTERNSHIP (NATIONAL) - Summer Research Programme 2011, JNU, New Delhi

Bioinformatics and Python

Python is an interpreted, general-purpose high-level programming language whose design philosophy emphasizes code readability, having numerous applications in rapid computational biology. The flowchart depicts the flow of the discussion. Please click on the elements to view the corresponding discussion.

http://tinyurl.com/3l3soe9

Introduction to Python → **Running Python scripts** → **Expressions used in Python** → **Basic Commands** → **Biopython** → **Biopython Tutorial** → **Conclusion**

CompBio Discussion Group (CBDG) – Updates

The latest CBDG session at the Department of Biotechnology, Sir MVIT was a hands on tutorial session on Perl. The session was conducted by Wisvesh B.S., a final year B.E. Biotechnology student.

The daylong session began with a brief introduction of PERL and its advantages. Topics ranging from installation to file handling were taught and helped familiarize the students with the various PERL functions and statements. Since it was taught practically, it led to better comprehension of the language. Many queries were raised and the session was interactive.

BIO-Innovation - 'Genomicus'

Comparative genomics study the evolution of gene organization, which in the past years was by the fast growing number of full genome sequences available in public repositories. Most of the available bioinformatics tools for visualization and comparison of genomes are restricted to only two or three genomes at a time. Recently, a new phylogenetic software was developed to overcome this limitation – Genomicus. It provides functionality of a synteny browser, which can represent and compare unlimited numbers of genomes in a broad phylogenetic view. The tool provides reconstructed ancestral gene organization, in a way that facilitates the interpretation of the analysis data.