

# CONNECT

October 2014, vol.

“ It doesn't matter how slowly we go as long as we do not stop” – Confucius

## Contents

- Note to Readers.
- RSG-India's Initiatives – ‘Google Calendar’.
- Top-10 posts on the Message Board.
- Topic of the Month (TOTM) – ‘NGS-Next Generation Sequencing’.
- CompBio Discussion Group (CBDG)– Updates from VIT, Vellore.
- ‘BIO-Innovation’ – Online Bioinformatics Resource Collection.



RSG-India is glad to present before you the third edition of ‘CONNECT’. First, we give you a foretaste of our new collaborations in the Initiatives section. We also focus on the regular sections, ‘Top 10 posts on the Message Board’ and ‘Topic of the Month (TOTM) – NGS – Next Generation Sequencing’. Further, with the flourishing progression of the section titled ‘BIO-Innovation’, we include the link to a online tool which is helpful to annotate viral metagenomic sequences - METAVIR. Lastly, we give you an **update** of the **latest session held on Drug Discovery at CBDG-VIT**. We also introduce a link to our **Google Calendar Service** at the bottom right corner of the newsletter.

We sincerely hope that you would find this edition much more informative and the RSG-India intent of academic excellence motivates you for all your current and future endeavors!

## RSG-India's Initiatives – Spanning our wings...



We have spoken about several initiatives of RSG-India including conferences, workshops and collaborations in the earlier issues of ‘CONNECT’. In this issue, we throw light upon one of our significant, yet unpopular **online initiative**, the **RSG-India Google Calendar**.

**Google Calendar** is a **free time-management web application** offered by Google. **Events and tasks** can be added to the calendar with **dates, venue, deadlines** and other related fields. **Reminders** can be configured to be sent at a time **via e-mails, pop-ups** and also as a **SMS**. Apart from this, invitations can also be sent to friends about personal events. Events can also be imported from Microsoft Outlook, etc. or synchronized with public calendars.



RSG-India Google Calendar is associated with our group **since the past 2 years**. It is **updated daily** by the core committee and all information pertaining to upcoming **conferences, presentations** and their respective **deadlines** for the submission of abstracts or papers. This is a more easy way to browse through events of interest rather than reading tons of mails/ browse websites daily. You may subscribe to RSG-India Google Calendar service by following the steps illustrated at the following link: <http://tinvurl.com/6cr9teh>

... will be continued ...

## 10 POSTS ON THE MESSAGE BOARD

1. Opening: PhD fellowship at Stockholm University, Sweden.
2. Opening: PhD position in bioinformatics at Chosun University, South Korea.
3. Opening: PostDoc position at Max Planks Institute.
4. Opening: PhD position in System biology at SilicoLife.
5. Opening: Faculty position at Jackson laboratory for genomic medicine, Farmington.

6. Conference: International Conference on environment and bio-engineering.
7. Conference: The NGS in cancer drug development & diagnostic congress.
8. Workshop: The ReComb comparative genomics satellite workshop, New York.
9. Meeting: European Society for evolutionary biology, at Lausanne.
10. Article: Bio/Cheminformatics in India

## NGS: Next Generation Sequencing: Summary

NGS - The high demand for low-cost sequencing has driven the development of high-throughput sequencing, which is also termed as Next generation sequencing (NGS). It is most commonly used and resourceful tool for biomedical research for the analysis of next generation sequencing data, which involves quality testing and mapping to a reference genome; it also includes variant detection, RNA sequencing and ChIP sequencing and SNP detection.

**The various platforms available for NGS data generation are:** 1) Illumina MiSeq 2) Illumina HiSeq 2000/2500 3) Roche 454 4) Ion Torrent 5) ABi SOLid 5) Pacific Biosciences 6) Illumina Genome Analyser and few others.

To retrieve meaningful information from NGS sequences, it needs to proceed using various online and offline softwares. Each sequencing platform has their own specific protocol and so are the tools to study and identify what is significant in biological perspective.

## CompBio Discussion Group (CBDG) – VIT, Vellore

A **Drug Discovery workshop** on ‘Insilico approach to Drug Discovery’ by Educept- Healthcare Solutions was held in VIT, Vellore as a session of CBDG during graVITas-’14 (Tech Fest) on 27th September. It was handled by 2 speakers- Akanksha Srivastava and Devashish Das. It was an interactive session, where in the participants cleared their doubts and queries while performing. The workshop gave an insight on the topics like Homology Modeling, QSAR, MDS, and several other softwares involved in the process. The participants were provided with a reference handbook and the required softwares as the part of workshop kit along with the participation certificate.

## BIO-Innovation – METAVIR

METAVIR is a web server designed to annotate viral metagenomic sequences (raw reads or assembled contigs). A set of published viromes, identified as "public projects", is already available, and your own data sets can be processed in a private environment.

