Bioinformatics Open Source Conference (BOSC) 2015

A Special Interest Group (SIG) meeting at ISMB/ECCB 2015

Dublin, Ireland
July 10-11, 2015
http://www.open-bio.org/wiki/BOSC_2015

BOSC is organized by the Open Bioinformatics Foundation (OBF, www.open-bio.org). The OBF is a non-profit group that promotes the practice and philosophy of Open Source software development and Open Science in the biological research community.

We are grateful to Google for their generous support for videorecording BOSC 2015, and we thank Curoverse (the team behind the open source platform Arvados) and GigaScience as returning sponsors.

Schedule for Day 1 (Friday, 10 July 2015)

Time	Title	Speaker / Chair
7:30-9:00	**Registration**	
9:00-9:15	**Introduction and Welcome**	Nomi Harris and Peter Cock (Co-Chairs, BOSC 2015)
9:15-10:15	**Keynote: Bioinformatics: Still a scary world for biologists**	Holly Bik
10:15-10:45	***Coffee Break***	
10:45-12:30	**Session: Data Science**	Chair: Rob Davey
10:45-11:02	Apollo: Scalable & collaborative curation for improved comparative genomics	Mónica Muñoz-Torres
11:02-11:19	GOexpress: A R/Bioconductor package for the identification and visualisation of robust gene ontology signatures through supervised learning of gene expression data	Kévin Rue-Albrecht
11:19-11:36	Arvados: A Free Software Platform for Big Data Science	Peter Amstutz
11:36-11:53	Bringing Hadoop into Bioinformatics with Cloudgene and CloudMan	Sebastian Schoenherr
11:53-12:10	Segway: semi-automated genome annotation	Michael Hoffman
12:10-12:15	QualiMap 2.0: quality control of high throughput sequencing data	Konstantin Okonechnikov

Time	Title	Speaker / Chair
12:15-12:20	A Genomics Virtual Laboratory	Andrew Lonie
12:20-12:25	BioSolr: Building better search for bioinformatics	Tony Burdett
12:25-12:30	Prioritization of structural variants based on known biological information	Brad Chapman
12:30-13:30	***Lunch***	
13:00-14:00	**Poster Session and Birds of a Feather** (overlapping with lunch)	
14:00-15:30	**Session: Standards and Interoperability**	Chair: Peter Cock
14:00-14:17	Portable workflow and tool descriptions with the CWL	Michael R. Crusoe
14:17-14:34	From peer-reviewed to peer-reproduced: a role for research objects in scholarly publishing in the life sciences	Alejandra Gonzalez-Beltran
14:34-14:51	Demystifying the Interoperability of Disparate Genomic Resources	Daniel Blankenberg
14:51-15:08	Increasing the utility of Galaxy workflows	John Chilton
15:10-15:15	Kipper: A software package for sequence database versioning for Galaxy bioinformatics servers	Damion Dooley
15:15-15:20	Evolution of the Galaxy tool ecosystem - happier developers, happier users	Martin Čech
15:20-15:25	Bionode - Modular and universal bioinformatics	Bruno Vieira
15:25-15:30	The EDAM Ontology	Hervé Ménager
15:30-16:00	***Coffee Break***	
16:00-17:00	**Panel: Open Source, Open Door: increasing diversity in the bioinformatics open source community**	***Moderator***: Mónica Muñoz-Torres ***Panelists***: Holly Bik, Michael R. Crusoe, Aleksandra Pawlik, Jason Williams
17:00-17:10	Open Bioinformatics Foundation (OBF) Update	Hilmar Lapp (President, OBF)
17:10-17:15	**Announcements**	Nomi Harris
17:15-18:30	BOF/Unconference: Building successful open-source bioinformatics developer communities (Part 1)	Aidan Budd, Dave Clements, Manuel Corpas, Natasha Wood
17:15-18:30	**BOFs (feel free to organize one!)**	
19:00-	Pay-your-own-way BOSC dinner, Kennedy's Pub (see RSVP link for address)	RSVP at bit.ly/BOSC2015-dinner (limited space--you must RSVP to attend)

Schedule for Day 2 (Saturday, 11 July 2015)

Time	Title	Speaker or Session Chair
9:00-9:05	**Announcements**	Peter Cock and Nomi Harris
9:05-9:15	Codefest 2015 Report	Brad Chapman (Codefest 2015 Organizer)
9:15-10:15	**Keynote: Big Data in Biology**	Ewan Birney
10:15-10:45	***Coffee Break***	
10:45-12:30	**Session: Open Science and Reproducibility**	Chair: Mónica Muñoz-Torres
10:45-11:02	A curriculum for teaching Reproducible Computational Science bootcamps	Hilmar Lapp
11:02-11:19	Research shared: www.researchobject.org	Norman Morrison
11:19-11:36	Nextflow: a tool for deploying reproducible computational pipelines	Paolo Di Tommaso
11:36-11:53	Free beer today: how iPlant + Agave + Docker are changing our assumptions about reproducible science	John Fonner
11:55	The 500 builds of 300 applications in the HeLmod repository will at least get you started on a full suite of scientific applications	Aaron Kitzmiller
12:00	Bioboxes: Standardised bioinformatics tools using Docker containers.	Peter Belmann
12:05	The perfect fit for reproducible interactive research: Galaxy, Docker, IPython	Björn Grüning
12:10	COPO: Bridging the Gap from Data to Publication in Plant Science	Robert Davey
12:15	ELIXIR UK building on Data and Software Carpentry to address the challenges in computational training for life scientists	Aleksandra Pawlik
12:20	Parallel recipes: towards a common coordination language for scientific workflow management systems	Yves Vandriessche
12:25	openSNP - personal genomics and the public domain	Bastian Greshake
12:30-13:30	***Lunch***	
13:00-14:00	**Poster Session and BOFs (overlapping with lunch)**	
14:00-14:40	**Session: Translational Bioinformatics**	Chair: Brad Chapman
14:00-14:17	CIViC: Crowdsourcing the Clinical Interpretation of Variants in Cancer	Malachi Griffith
14:17-14:34	From Fastq To Drug Recommendation - Automated Cancer Report Generation using OncoRep & Omics Pipe	Tobias Meissner
14:35-14:40	Cancer Informatics Collaboration and Computation: Two Initiatives of the U.S. National Cancer Institute	Ishwar Chandramouliswaran

Time	Title	Speaker or Session Chair
14:40-15:30	**Session: Bioinformatics Open Source Project Updates**	Chair: Nomi Harris
14:40-14:57	Biopython Project Update 2015	João Rodrigues
14:57-15:14	The biogems community: Challenges in distributed software development in bioinformatics	George Githinji and Pjotr Prins
15:14-15:31	Apache Taverna: Sustaining research software at the Apache Software Foundation	Stian Soiland-Reyes
15:30-16:00	***Coffee Break***	
16:00-16:30	**Session: Visualization**	Chair: Karsten Hokamp
16:00-16:17	Simple, Shareable, Online RNA Secondary Structure Diagrams	Peter Kerpedjiev
16:17-16:22	BioJS 2.0: an open source standard for biological visualization	Guy Yachdav
16:22-16:27	Visualising Open PHACTS linked data with widgets	Ian Dunlop
16:30-17:00	**Session: Late-Breaking Lightning Talks**	Chair: Hilmar Lapp
16:30	Biospectra-by-sequencing genetic analysis platform	Aurelie Laugraud
16:35	PhyloToAST: Bioinformatics tools for species-level analysis and visualization of complex microbial communities	Shareef Dabdoub
16:40	Otter/ZMap/SeqTools: A productive alternative to web browser genome visualisation	Gemma Guest
16:45	aRchive: enabling reproducibility of Bioconductor package versions	Nitesh Turaga
16:50	Developing an Arvados BWA-GATK pipeline	Pjotr Prins
16:55	Out of the box cloud solution for Next-Generation Sequencing analysis	Freerk van Dijk
17:00-17:10	Concluding Remarks	Nomi Harris and Peter Cock
17:15-18:30	BOF/Unconference: Building successful open-source bioinformatics developer communities (Part 2)	Aidan Budd, Dave Clements, Manuel Corpas, Natasha Wood
17:10-18:10	**BOFs (feel free to organize one!)**	

Any last-minute schedule updates will be posted at
http://www.open-bio.org/wiki/BOSC_2015_Schedule

BOSC 2015 Organizing Committee:

Nomi Harris and **Peter Cock** (Co-Chairs)
Brad Chapman, Rob Davey, Chris Fields, Sarah Hird, Karsten Hokamp, Hilmar Lapp, Mónica Muñoz-Torres

BOSC 2015 Program Committee: Nomi Harris, Brad Chapman, Peter Cock, Karsten Hokamp, Raoul Bonnal, Chris Fields, Karen Cranston, Jens Lichtenberg, Eric Talevich, Frank Nothaft, Michael Heuer, Mónica Muñoz-Torres, Francesco Strozzi, Hans-Rudolf Hotz, Timothy Booth, Tiago Antão, George Githinji, Manuel Corpas, Thomas Down, Sarah Hird, Scott Markel, Rob Davey, Spencer Bliven, Michael Reich, Lorena Pantano, Björn Grüning, Hilmar Lapp, Daniel Blankenberg, Amye Kenall, Hervé Menager

BOSC is a community effort—we thank all those who made it possible, including the organizing committee, the program committee, the session chairs, our sponsors, and the ISMB SIG chair, Steven Leard.

If you are interested in helping to organize BOSC 2016, please email bosc@open-bio.org.