Scientific Programme

The Next NGS Challenge Conference:

Data Processing and Integration

14-16 May 2013, Valencia, Spain www.thenextngschallenge.org









Conference Programme

8:30AM	CONFERENCE REGISTRATION
9:15AM	CONFERENCE WELCOME
9:30AM	Keynote #1. Janet Kelso: Sequencing ancient genomes
10:30AM	* Ralph Vogelsang: Automated Finished Microbial Genomes and Epigenomes to Understand
	Infectious Diseases.
11:00AM	Rreak
	* Francisco M. De La Vega: Toward highly accurate and fast variant and de novo mutation
	identification from high-throughput sequencing data by joint Bayesian family calling.
11:50AM	* Vladimir B. Teif: Developing a Software Suite to analyze the interplay between Nucleosome
	arrangement, DNA Methylation and Transcription factor binding.
	* John William Whitaker: Interplay between DNA Sequence motifs and the Human Epigenome.
12:30	
2:30PM	* Morgane Thomas-Chollier: RSAT Peak- Motifs: Efficient prediction of transcription factor motifs and
2.5004	binding sites from Genome- Wide sequencing peaks sets.
	* Babette Regierer: ESFRI - Infrastructure for Systems Biology Europe - (ISBE) * Javier Santoyo: Challenges in whole exome sequencing to identify disease-causing variants in
3.10FM	human rare diseases
3:30PM	
4:00PM	Keynote #2. Karla Neugebauer: The Role of Gene Architecture in Gene Expression
5:00PM	Posters&Beers MC Meeting SeqAhead
7:00PM	
	Thursday 16th, 2013
	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and
9:00AM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and medicine and
9:00AM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and
9:00AM 10:00AM 11:00AM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break
9:00AM 10:00AM 11:00AM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models
9:00AM 10:00AM 11:00AM 11:30AM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology.
9:00AM 10:00AM 11:00AM 11:30AM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology. * Kay Nieselt: Automated transcription start site prediction for comparative comparative
9:00AM 10:00AM 11:00AM 11:30AM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology. * Kay Nieselt: Automated transcription start site prediction for comparative comparative transcriptomics using the Supergenome.
9:00AM 10:00AM 11:00AM 11:30AM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology. * Kay Nieselt: Automated transcription start site prediction for comparative comparative transcriptomics using the Supergenome. * Oskar Erik Karlsson: Viral Metagenomics – New applications for the broad-range detection
9:00AM 10:00AM 11:00AM 11:30AM 11:50AM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology. * Kay Nieselt: Automated transcription start site prediction for comparative comparative transcriptomics using the Supergenome. * Oskar Erik Karlsson: Viral Metagenomics – New applications for the broad-range detection of viromes in veterinary and public health settings.
9:00AM 10:00AM 11:00AM 11:30AM 11:50AM 12:10AM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology. * Kay Nieselt: Automated transcription start site prediction for comparative comparative transcriptomics using the Supergenome. * Oskar Erik Karlsson: Viral Metagenomics – New applications for the broad-range detection of viromes in veterinary and public health settings. Lunch
9:00AM 10:00AM 11:00AM 11:30AM 11:50AM 12:10AM 12:30AM 2:30PM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology. * Kay Nieselt: Automated transcription start site prediction for comparative comparative transcriptomics using the Supergenome. * Oskar Erik Karlsson: Viral Metagenomics – New applications for the broad-range detection of viromes in veterinary and public health settings. Lunch * Ignacio Blanquer Blanquer: Supporting NGS pilelines in the cluod.
9:00AM 10:00AM 11:00AM 11:30AM 11:50AM 12:10AM 12:30AM 2:30PM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology. * Kay Nieselt: Automated transcription start site prediction for comparative comparative transcriptomics using the Supergenome. * Oskar Erik Karlsson: Viral Metagenomics – New applications for the broad-range detection of viromes in veterinary and public health settings. Lunch
9:00AM 10:00AM 11:00AM 11:30AM 11:50AM 12:10AM 12:30AM 2:30PM 2:50PM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology. * Kay Nieselt: Automated transcription start site prediction for comparative comparative transcriptomics using the Supergenome. * Oskar Erik Karlsson: Viral Metagenomics – New applications for the broad-range detection of viromes in veterinary and public health settings. Lunch * Ignacio Blanquer Blanquer: Supporting NGS pilelines in the cluod. * Luca Pireddu: Automated and traceable processing for large-scale high-throughput sequencing
9:00AM 10:00AM 11:00AM 11:30AM 11:50AM 12:10AM 12:30AM 2:30PM 2:50PM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology. * Kay Nieselt: Automated transcription start site prediction for comparative comparative transcriptomics using the Supergenome. * Oskar Erik Karlsson: Viral Metagenomics – New applications for the broad-range detection of viromes in veterinary and public health settings. Lunch * Ignacio Blanquer Blanquer: Supporting NGS pilelines in the cluod. * Luca Pireddu: Automated and traceable processing for large-scale high-throughput sequencing facilities.
9:00AM 10:00AM 11:00AM 11:30AM 11:50AM 12:10AM 12:30AM 2:30PM 2:50PM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology. * Kay Nieselt: Automated transcription start site prediction for comparative comparative transcriptomics using the Supergenome. * Oskar Erik Karlsson: Viral Metagenomics – New applications for the broad-range detection of viromes in veterinary and public health settings. Lunch * Ignacio Blanquer Blanquer: Supporting NGS pilelines in the cluod. * Luca Pireddu: Automated and traceable processing for large-scale high-throughput sequencing facilities. * Thomas Svensson: SciLifeLab:New national infrastructures for NGS data production and applied "down stream" bioinformatics analysis in order to meet the demands of the scientific community
9:00AM 10:00AM 11:00AM 11:30AM 11:50AM 12:10AM 12:30AM 2:30PM 2:50PM 3:10PM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology. * Kay Nieselt: Automated transcription start site prediction for comparative comparative transcriptomics using the Supergenome. * Oskar Erik Karlsson: Viral Metagenomics – New applications for the broad-range detection of viromes in veterinary and public health settings. Lunch * Ignacio Blanquer Blanquer: Supporting NGS pilelines in the cluod. * Luca Pireddu: Automated and traceable processing for large-scale high-throughput sequencing facilities. * Thomas Svensson: SciLifeLab:New national infrastructures for NGS data production and applied "down stream" bioinformatics analysis in order to meet the demands of the scientific community
9:00AM 10:00AM 11:00AM 11:30AM 11:50AM 12:10AM 12:30AM 2:30PM 2:50PM 3:10PM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology. * Kay Nieselt: Automated transcription start site prediction for comparative comparative transcriptomics using the Supergenome. * Oskar Erik Karlsson: Viral Metagenomics – New applications for the broad-range detection of viromes in veterinary and public health settings. Lunch * Ignacio Blanquer Blanquer: Supporting NGS pilelines in the cluod. * Luca Pireddu: Automated and traceable processing for large-scale high-throughput sequencing facilities. * Thomas Svensson: ScilifeLab:New national infrastructures for NGS data production and applied "down stream " bioinformatics analysis in order to meet the demands of the scientific community Break Keynote #4. Ivo Gut: High-Throughput DNA Analysis
9:00AM 10:00AM 11:00AM 11:30AM 11:50AM 12:10AM 12:30AM 2:30PM 2:50PM 3:10PM 4:00PM	Thursday 16th, 2013 Keynote #3. Leif Andersson: How domestic animal genomics can teach human medicine and medicine and evolutionary biology Keynote #4. Michele Morgante: Structural variation and the plant pan genomes Break * Carine Poussin: Translational Systems Biology Understanding the limits of Animals Models as Predictors of Human Biology. * Kay Nieselt: Automated transcription start site prediction for comparative comparative transcriptomics using the Supergenome. * Oskar Erik Karlsson: Viral Metagenomics – New applications for the broad-range detection of viromes in veterinary and public health settings. Lunch * Ignacio Blanquer Blanquer: Supporting NGS pilelines in the cluod. * Luca Pireddu: Automated and traceable processing for large-scale high-throughput sequencing facilities. * Thomas Svensson: SciLifeLab:New national infrastructures for NGS data production and applied "down stream" bioinformatics analysis in order to meet the demands of the scientific community Break