



Genomics in foodborne pathogen surveillance and outbreak investigation

12.Jul - 13.Jul 2017

Cod. O12-17

Mod.:

Face-to-face

Edition

2017

Activity type

Summer course

Date

12.Jul - 13.Jul 2017

Location

12 de julio-Centro Investigacion Micaela Portilla-Nieves Cano Kalea, 27, 01006 Vitoria-Gasteiz//13 de Julio Edificio las Nieves-Nieves Cano 33. 01006 Vitoria-Gasteiz

Languages

English

Academic Validity

20 hours

Organising Committee

SUMMER COURSES
2017
12-13 July

Genomics in foodborne pathogen surveillance and outbreak investigation

University of the Basque Country, UPV/EHU, Vitoria-Gasteiz, Spain

SAVE THE DATE!

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UPV EHU
INNUENDO
ESCMID
EUSKO JAURLARITZA GOBIERNO VASCO
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Gipuzkoako Foru Aldundia
Diputación Foral de Gipuzkoa

Description

The Summer Course **Genomics in foodborne pathogen surveillance and outbreak investigation** is an open teaching action of the European Research Project INNUENDO. The overall objective of the Innuendo international research consortium is to deliver a standardized, cross-sectorial framework for integration of bacterial whole genome sequencing (WGS) in routine surveillance and epidemiological investigations to reduce the burden of disease caused by both epidemic and sporadic food-borne zoonotic infections.

Up to 40 students will attend to the course and will receive theoretical and practical training about application of WGS in surveillance of food pathogens. The workshop will be divided in two parts. The first part will be one day of Scientific Symposium during which invited speakers and speakers within Innuendo consortium will present recent advance in the field. The second part will include a practical hands-on course on bioinformatics solution for public health microbiology. During the hands-on students will learn several bioinformatics tools including those developed within the project.

Course specific contributors



Program

12-07-2017

08:15 - 00:00 Registration and coffee

08:40 - 09:00 “Opening of the course, wellcome“

Javier Garaizar Candina UPV/EHU - Professor of Microbiology
Gorka Urtaran Ayuntamiento de Vitoria-Gasteiz -
Beatriz Guerra European Food Safety Authority, EFSA - Senior Scientific Officer
Peli Manterola Basque Government - Quality and Food Industries Director
Iván Igartua Ugarte UPV/EHU - Vice-rector of Campus of Álava

09:00 - 09:45 “WGS in surveillance and outbreak detection of foodborne pathogens“

Eduardo N Taboada Public Health Agency of Canada

09:45 - 10:30 “WGS and antibiotic resistance“

Martin Cormican NUI Galway Ireland

10:30 - 11:00 Coffee break

11:00 - 11:10 “EU Capacity-building projects: INNUENDO“

Mirko Rossi University of Helsinki, Finland

11:10 - 11:30 “EU Capacity-building projects: ENGAGE & COMPARE“

Valeria Bortolaia Danish Technical University, Denmark

11:30 - 12:00 “From reads to profiles to trees: challenges and solutions in high throughput sequencing data analysis“

João Carriço Universidade de Lisboa, Portugal

12:00 - 12:30 “Phenotypic prediction using WGS data: virulome and resistome“

Valeria Bortolaia Danish Technical University, Denmark

12:30 - 13:30 Lunch

13:30 - 13:50 “QA/QC and automatization of whole genome sequence analysis: implementation“

Mirko Rossi University of Helsinki, Finland

13:50 - 14:10 “QA/QC and automatization of whole genome sequence analysis: theory“

Miguel Machado Universidade de Lisboa, Portugal

14:10 - 14:40 “GScompare: fast clustering of assembled genomes“

Joseba Bikandi Bikandi University of the Basque Country - Senior Lecturer

14:40 - 15:00 “Whole genome MLST: theory“

João Carriço Universidade de Lisboa, Portugal

15:00 - 15:15	“Whole genome MLST: implementation“ Mickael Silva Universidade de Lisboa, Portugal
15:15 - 15:30	“Whole genome MLST: phylogenetic inference and metadata visualization“ Bruno Gonçalves Universidade de Lisboa, Portugal
15:30 - 16:00	Coffee break
16:00 - 16:30	“A road map to national WGS based surveillance of foodborne bacteria, Finland“ Saara Salmenlinna National Institute for Health and Welfare, Finland
16:30 - 17:00	“Standardized communication during outbreak investigation“ Mirko Rossi University of Helsinki, Finland
17:00 - 00:00	Synthesis
19:00 - 00:00	Venue and Social event

13-07-2017

08:40 - 09:40	“Content of the day, division of groups, setting computer environment“ Joseba Bikandi Bikandi University of the Basque Country - Senior Lecturer
09:00 - 09:20	“Overview of the INNUENDO platform and its modules“ João Carriço Universidade de Lisboa, Portugal
09:20 - 09:45	“The INNUENDO platform: the user interface“ Bruno Gonçalves Universidade de Lisboa, Portugal
09:45 - 10:45	“The INNUENDO platform: QA/QC analysis - INNUca (Part 1)“ Miguel Machado Universidade de Lisboa, Portugal
10:45 - 11:15	Coffee break
11:15 - 12:15	“The INNUENDO platform: QA/QC analysis - INNUca (Part 2)“ Miguel Machado Universidade de Lisboa, Portugal
12:15 - 12:45	“The INNUENDO platform: GScompare for species determination“ Joseba Bikandi Bikandi University of the Basque Country - Senior Lecturer
12:45 - 14:00	Lunch
14:00 - 15:30	“The INNUENDO platform: cg/wgMLST using chewBACCA“ Mickael Silva Universidade de Lisboa, Portugal

Coffee break

15:30 - 16:15

“The INNUENDO platform: from analysis to action, interpreting trees“

Bruno Gonçalves Universidade de Lisboa, Portugal

16:15 - 18:00

“Working in groups, self-learning/testing - Free Coffee break“

Miguel Machado Universidade de Lisboa, Portugal

Mickael Silva Universidade de Lisboa, Portugal -

Bruno Gonçalves Universidade de Lisboa, Portugal -

19:00 - 00:00

Social event

Directed by



Javier Garaizar Candina

UPV/EHU

Javier Garaizar Candina es Catedrático de Universidad del área de Microbiología en el Departamento de Inmunología, Microbiología y Parasitología de la Facultad de Farmacia del Campus de Álava de la UPV/EHU. Se doctoró en Medicina y Cirugía en el año 1989. Tiene una amplia experiencia docente, investigadora y de gestión en la UPV/EHU. Ha realizado varias estancias investigadoras postdoctorales, destacando las desarrolladas en el Laboratorio Central de Salud Pública de Londres, Reino Unido, el Centro Médico Erasmus de Rotterdam, Holanda, el Centro del Cáncer Sidney Kimmel en San Diego, EEUU, y recientemente la desarrollada en la Universidad de Carolina del Sur, en Columbia, EEUU. Ha sido Vicedecano de Innovación Docente, Relaciones Internacionales y Alumnado y Decano en funciones en la Facultad de Farmacia de la UPV/EHU y Coordinador del Campus de Álava del Servicio de Asesoramiento Educativo y Vicerrector del Campus de Álava.

Teachers



Joseba Bikandi Bikandi



Valeria Bortolaia



João Carriço



Martin Cormican



Bruno Gonçalves



Miguel Machado



Mirko Rossi



Eduardo N Taboada



Saara Salmenlinna



Mickael Silva

Registration fees

REGISTRATION	UNTIL 31-05-2017	UNTIL 12-07-2017
REGISTRATION EXEMPTIONS	20,00 EUR	20,00 EUR
GENERAL	-	100,00 EUR
Members of the project European INNUENDO	-	0 EUR
SPECIAL FEES	-	50,00 EUR

Place

12 de julio-Centro Investigacion Micaela Portilla-Nieves Cano Kalea, 27, 01006 Vitoria-Gasteiz//13 de Julio Edificio las Nieves-Nieves Cano 33. 01006 Vitoria-Gasteiz

Araba