



# Genomics in foodborne pathogen surveillance and outbreak investigation

Uzt. 12 - Uzt. 13 2017

Kod. O12-17

**Mod.:**

Aurrez aurrekoa

**Edizioa**

2017

**Jarduera mota**

Uda Ikastaroa

**Data**

Uzt. 12 - Uzt. 13 2017

**Kokalekua**

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

**Hizkuntzak**

Ingelesa

**Balio akademikoa**

20 ordu

**Antolakuntza Batzordea**

**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  
efsas





Gipuzkoako Foru Aldundia  
Diputación Foral de Gipuzkoa

# Azalpena

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.

## Ikastaroaren laguntzaile espezifikoak



# Programa

2017-07-12

08:15 - 00:00	Registration and coffee
08:40 - 09:00	“Opening of the course, wellcome” <b>Javier Garaizar Candina</b> UPV/EHU - Professor of Microbiology <b>Gorka Urtaran</b> Ayuntamiento de Vitoria-Gasteiz - <b>Beatriz Guerra</b> European Food Safety Authority, EFSA - Senior Scientific Officer <b>Peli Manterola</b> Basque Government - Quality and Food Industries Director <b>Iván Igartua Ugarte</b> UPV/EHU - Vice-rector of Campus of Álava
09:00 - 09:45	“WGS in surveillance and outbreak detection of foodborne pathogens” <b>Eduardo N Taboada</b> Public Health Agency of Canada
09:45 - 10:30	“WGS and antibiotic resistance” <b>Martin Cormican</b> NUI Galway Ireland
10:30 - 11:00	Coffee break
11:00 - 11:10	“EU Capacity-building projects: INNUENDO” <b>Mirko Rossi</b> University of Helsinki, Finland
11:10 - 11:30	“EU Capacity-building projects: ENGAGE & COMPARE” <b>Valeria Bortolaia</b> Danish Technical University, Denmark
11:30 - 12:00	“From reads to profiles to trees: challenges and solutions in high throughput sequencing data analysis” <b>João Carriço</b> Universidade de Lisboa, Portugal
12:00 - 12:30	“Phenotypic prediction using WGS data: virulome and resistome” <b>Valeria Bortolaia</b> Danish Technical University, Denmark
12:30 - 13:30	Lunch
13:30 - 13:50	“QA/QC and automatization of whole genome sequence analysis: implementation” <b>Mirko Rossi</b> University of Helsinki, Finland
13:50 - 14:10	“QA/QC and automatization of whole genome sequence analysis: theory” <b>Miguel Machado</b> Universidade de Lisboa, Portugal
14:10 - 14:40	“GScompare: fast clustering of assembled genomes” <b>Joseba Bikandi Bikandi</b> University of the Basque Country - Senior Lecturer
14:40 - 15:00	“Whole genome MLST: theory” <b>João Carriço</b> Universidade de Lisboa, Portugal

15:00 - 15:15	“Whole genome MLST: implementation“ <b>Mickael Silva</b> Universidade de Lisboa, Portugal
15:15 - 15:30	“Whole genome MLST: phylogenetic inference and metadata visualization“ <b>Bruno Gonçalves</b> 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“ <b>Saara Salmenlinna</b> National Institute for Health and Welfare, Finland
16:30 - 17:00	“Standardized communication during outbreak investigation“ <b>Mirko Rossi</b> University of Helsinki, Finland
17:00 - 00:00	Sintesia
19:00 - 00:00	Venue and Social event

## 2017-07-13

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

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**Coffee break**

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15:30 - 16:15

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

**Bruno Gonçalves** Universidade de Lisboa, Portugal

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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 -

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19:00 - 00:00

Social event

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## Zuzendaritza



**Javier Garaizar Candina**

UPV/EHU

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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.

## **Irakasleak**



**Joseba Bikandi Bikandi**

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**Valeria Bortolaia**

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**João Carriço**

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**Martin Cormican**

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**Bruno Gonçalves**

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**Miguel Machado**

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**Mirko Rossi**

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**Eduardo N Taboada**

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**Saara Salmenlinna**

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**Mickael Silva**

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## Matrikula prezioak

<b>MATRIKULA</b>	<b>2017-05-31 ARTE</b>	<b>2017-07-12 ARTE</b>
MATRIKULA EXENTZIOA	20,00 EUR	20,00 EUR
<a href="#">OROKORRA</a>	-	100,00 EUR
<a href="#">INNUENDO Europako proiektuko kidea</a>	-	0 EUR
<a href="#">MATRIKULA BEREZIA</a>	-	50,00 EUR

## **Kokalekua**

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Araba