



**UNIVERSITÀ
DI FOGGIA**

**DOCTORATE "BIOTECHNOLOGY AND SMART PRACTICES FOR A
SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES, FOOD AND
AGRICULTURE"**

Dipartimento di Scienze Agrarie, Alimenti, Risorse Naturali e Ingegneria
Università di Foggia

**DOCTORATE COURSE:
"Biotechnology and smart practices for a sustainable management of natural
resources, food and agriculture"**

INDIVIDUAL EDUCATIONAL PLAN

CYCLE XXXVIII

STUDENT	Muhammad Usman
TUTOR	Maurizio Quinto
CO-TUTOR	Donatella Curtotti

CURRICULUM	<i>2 Emerging Technologies for Ensuring Food Quality and Safety</i>
AREA OF RESEARCH INTEREST	Analytical Chemistry
PROVISIONAL TITLE of the RESEARCH PROJECT	Determination of illicit drugs in environmental samples by innovative methods based on microextraction followed by chromatography – mass spectrometry analyses.
DOCTORAL SCHOLARSHIP	DM 351
TRAINING PERIOD OUTSIDE UNIFG (company, other Italian	ARPA Puglia - Dipartimento Ambientale Provinciale - DAP Foggia Via Giuseppe Rosati, 139, Foggia, Provincia di Foggia, 71121, Puglia, Italia During the II – III year of the Ph.D. program



Institution)	
TRAINING PERIOD ABROAD	Dr. Kafil Razeed Tyndall National Institute Lee Maltings Complex Dyke Parade, Cork, T12 R5CP, Ireland https://www.tyndall.ie/nano-materials-based-sensor/ During the II – III year of the Ph.D. program

MANDATORY COURSES	YEAR OF COURSE	CV	HOURS/CREDITS	PROFESSOR
Informative systems and data elaboration : descriptive statistics	1 st	1, 2	16 HR/2 ECTS	Fabio SANTERAMO
Informative systems and data elaboration : experimental design	1 st	1, 2	24 HR/3 ECTS	Giuseppe GATTA
Basics of programming	1 st	1, 2	16 HR/2 ECTS	Annalisa MASTROSERIO
Advanced statistic	2 nd	1, 2	20 HR/ 2 ECTS	Massimo MONTELEONE
OPTIONAL COURSES at choice at least 2 (4 ECTS)	YEAR OF COURSE	CV	HOURS/CREDITS	PROFESSOR and INSTITUTION
Research Methods: aspetti teorici e applicazioni al settore agro – alimentare	1 st	2	20 HR/ 2 ECTS	Francesco Bimbo
Trends in analytical techniques for quality and safety controls in the agro-food sector	2 nd	2	16 HR/2 ECTS	Maurizio Quinto
Enzyme assays in plant cell extracts: a practical approach	2 nd	1, 2	16 HR/2 ECTS	Mario Soccio

Muhammad Usman

Maurizio Quinto