

Nicola Caporaso

PERSONAL INFORMATION	Nicola (Nick)) Caporaso,	MSc, PhD		
	♀ 1 Elslev cot	tages. Calf La	ne, Chipping Ca	mpden, GL5	
	\$ +44 07405	5			
		icola@hotmai	l.com		
	•	-	6b9451 ORCID (002-1826-256	5
	Sex M Date o	of birth 28/01/	1987 Nationali	ty Italian	
CURRENT POSITION	Research engi Buhler UK, Lon				
Summary	A food scientist with extensive knowledge on food composition and analysis, food quality parameters and its influence on processing, rapid methods for food quality estimation based on non-destructive detection coupled with chemometrics and data analysis. Keen in scientific dissemination and collaboration with stakeholders linking scientific knowledge with practical skills and outcomes. Despite a solid scientific background, I am business- oriented and practical, and tend to set realistic goals to achieve business outcomes.				
WORK EXPERIENCE					
EDUCATION AND TRAINING					
02.2012 to 01.2015	5 Postgraduate research in Science and Technology of Agricultural Production			cultural	
01.2012 to 12.2012	 University of Naples Federico II, Department of Agriculture - Section of Food Science Virgin olive oil quality (chemical and sensory analysis), aroma and O/W emulsions Laboratory leaders: prof. Raffaele Sacchi, Prof. Alessandro Genovese. Part-time postgraduate course in Foodservice Management University of Naples Federico II Naples, Department of Food Science, Italy HACCP in food industry; dietetics and nutrition; customer satisfaction; human resource management, etc. 				
12.2009 to 10.2011	Master's Degree in Science and Technology of Agricultural Production Faculty of Agriculture, University of Naples "Federico II". Degree: 110/110 Cum Laude				
	management; pes	st/plant diseases	ant nutrition; food cl control; plant/anima wines by MALDI-TC	al breeding, Disse	
09.2006 to 12.2009	Bachelor's Degree in Agricultural Science and Technology Faculty of Agriculture, University of Naples "Federico II". Degree: 110/110 Cum Laude				
	0 / 0	5		5	
	industry, etc.	e aroma of virgin	omy/management; a olive oil: biogenesia		
PERSONAL SKILLS					
Mother tongue	Italian				
Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction		
English	C2	C2	C2	C2	C2
French Spanish	B1 C2	B2 C2	B1 C1	B1 C1	B1 C1
Spainsn	62	62	UI		U1



ADDITIONAL				
INFORMATION				
Awards and achievements	November 2018: Invited chair of the EFFOST conference, session on "Process,			
	Structure Sensing" at the (Nantes, 6-8 November 2018).			
	October 2018: Foods journal (MDPI, Basel, Switzerland) Travel Award 2018.			
	July 2018: CNIRS (Council for Near-Infrared Spectroscopy) travel award to attend			
	the IDRC conference, (Pennsylvania, USA, 26 July-2 August).			
	April 2016: RSC/SCI award Best Contribution to Flavour Science - Nursten			
	symposium, Reading University, UK.			
	April 2015: First prize, SCI Best Poster Award - Food Flavour conference, University			
	of Nottingham, UK			
	November 2012: First National Prize, Vincenzo Dona award for MSc thesis – Italian			
	Union of Consumers, Rome, Italy.			

ANNEXES



ANNEX 1. Scientific activity Nicola Caporaso

Relevance: understanding the activity related to scientific research.

Key research topics/expertise	Since my MSc in Agricultural Science and Technology, I focused on the study of food chemical composition and quality, in particular olive oil and wine. During my doctorate, I researched on the use of by-products of the oil industry through the formulation of functional food emulsions and their characterization. I have mainly applied analytical methods for the characterization of the volatile fraction of foods (GC-MS, using SPME as extraction method), analysis of the oxidative state of oils, stability and rheology of emulsions, etc. In addition to the main research methods, I applied these techniques to other foods with a strong economic impact in the food industry (coffee), as well as typical foods for possible future valorisation ("fossa" cheese, figs). I have also studied some aspects of the research field called "molecular gastronomy", which aims at a scientific study of cooking processes, so far somehow neglected by the food industry. I deepened the methods of sensory analysis with particular reference to olive oil and table olives, with courses for sensory assessors and then becoming a panel leader officially recognized by the IOC, for both products (two qualifications). The subsequent research period in the United Kingdom allowed me to use equipment for the characterization of the chemical composition of foods: LC-MS-MS, APCI-MS, Dumas method, NMR fat analyser and other methods applied for the study of wheat and flours. The industrial research project I managed led me to use hyperspectral imaging (HSI) in the near infrared spectral region, to create predictive models of chemical composition and food quality, in particular three commodities: wheat, cocoa and coffee. This study has strong application impact and is covered by industrial secrecy; and has allowed me to develop knowledge for multivariate statistical analysis using different approaches (PCA, PLSR, LDA, SVM, etc.) During my research I created a network of scientific contacts for collaborations between several research broides, public and private,
	between foods and the maximization of the sensorial impact of the finished product, in a vision that recalls molecular gastronomy, but using typical Mediterranean foods. Finally, the exploitation of by-products and waste from the agri-food industry (e.g. virgin oil pomace, olive oil waste, dairy waste, by-products of the oenological and canning industry) through innovative technologies and biotechnologies and new food and gastronomy applications.
Member of scientific societies	Member of the ICNIRS (International Council of NIR Infrared Spectroscopy) and SCI (Society of Chemical Industry; elected member of the Food Group committee); former member of AACCI (American Association of Cereal Chemists International); AEPAS (Spanish Association of Sensory Analysis); IFST (Institute of Food Science and Technology); IFT (Institute of Food Technologists); RCS (Royal Society of Chemistry); SISS (Italian Society of Sensory Analysis).
Activity in scientific journals	I serve as a reviewer for several scientific journals, including Food Hydrocolloids, Foods, Journal of Chemistry, Molecules, Journal of Agricultural and Food Chemistry, Journal of Basic and Applied Research international, International Research Journal of Pure and Applied Chemistry, British Journal of Pharmaceutical Research, Food Research International, Journal of Food Research. I acted as a Lead Guest Editor for two special issues, in Journal of Chemistry (Hindawi) and Journal of Food Quality (Wiley). Invited to become a member of the editorial board for the Sumerianz Journal of Agriculture and Victorinary.
Attendance to scientific confere o	Agriculture and Veterinary. nce 21st International Conference on Near Infrared Spectroscopy (NIR 2023), 20-24 August 2023 - Innbruck, Austria



- 11th Colloquium Chemiometricum Mediterraneum. 27-30 June 2023 Padova, Italy. Poster presented: "Analysis of electronic nose data for the discrimination of volatiles from food-saliva interaction in individuals with different BMI". N Caporaso, A Balivo, R Sacchi, A Genovese.
- o UKIVA Machine Vision Conference. 20-22 June 2023 Ricoh arena, Coventry, UK
- SPIE Photonex conference and exhibition 2022. 6-8 Dec 2022 NEC, Birmingham, UK
- Invited speaker at the national conference "EVOO I Edition Research's got talent 2020" related to extra virgin olive oil quality – University of Bari (Italy), 20-21 January 2020.
- Invited speaker at the PITTCON conference (Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy), Philadelphia, USA, 17-21 March 2019
- Invited Conference Chair at the EFFOST (European Food Science and Technology) conference, session Process, Structure & Sensing, Nantes (France), 6-8 November 2018
- EFFOST (European Food Science and Technology) conference, Nantes (France), 6-8 November 2018
- 6th Nursten Symposium, The University of Nottingham, Nottingham (UK), 27-28 September 2018
- Conference on Future of Foods 2, IChemE, Department of Chemical engineering, University of Cambridge, 26 September 2018
- International Diffuse Reflectance Conference (IDRC) 2018 conference on Near-Infrared Spectroscopy, Chambersburg, PA (USA). 29July-2August 2018
- Food Antioxidants and Functional Ingredients Shelf Life Extension, Nutrition and Health. SCI, London. 2018
- Newton workshop on "Innovations in Aerated Food Processing for Sustainability, Health and Life", UK-Malaysia network. Campden BRI, Chipping Campden, UK. 23-26 January 2017.
- Hyperspectral imaging conference 2016, Ricoh Arena, Coventry, UK. 12-13 October 2016.
- IASIM conference in spectral imaging, Chamonix-Mont-Blanc, France. 3-6 July **2016**.
- 4th International Conference and Exhibition on Food Processing & Technology OMICS Conference. London, UK. 10-12 August 2015.
- ICC/AISTEC Conference "Grains for feeding the world", Milan, Italy. 1-3 July **2015**.
- Trends in Food Flavour, The University of Nottingham, UK. 16-17 April 2015,.
- TRADEIT Entrepreneurship Summer Academy (European network), Como, Italy. 23-26 June 2015.
- Third national congress on olive and olive oil, Bari, Italy. 26-28 November **2014**.
- Coffee, Cocoa and Tea (CoCoTea) 2nd international congress, Portici, Italy. 9-11 October 2013.
- XVII Workshop on Developments in the Italian PhD Research on Food Science, Technology and Biotechnology, Cesena, Italy. 19-21 September **2012**.
- ChimALSi IX congresso italiano di Chimica degli Alimenti, Ischia, Italy. 3-7 June 2012.
- First national congress on olive and olive oil, Portici (Naples), Italy. 1-2 October 2009.

ANNEX 2. Publications (updated March 2023)

Publications in international journals

- 1. Genovese A., Caporaso N. (2022). Advances in Food Flavor Analysis. APPLIED SCIENCES, vol. 12, ISSN: 2076-3417, doi: 10.3390/app12189004
- Sacchi, R, Corrado, G, Basile, B, Mandarello, D, Ambrosino, ML, Paduano, A, Savarese, M, Caporaso, N, Aponte, M, Genovese, A (2022). Effect of Salt Addition and Fermentation Time on Phenolics, Microbial Dynamics, Volatile Organicv Compounds, and Sensory Properties of the PDO Table Olives of Gaeta (Italy).
- 3. MOLECULES, vol. 27, ISSN: 1420-3049, doi: 10.3390/molecules27228100
- Caporaso N, Whitworth MB, Fisk I (2021). Total lipid prediction in single intact cocoa beans by hyperspectral chemical imaging. FOOD CHEMISTRY, vol. 334, ISSN: 0308-8146, doi: 10.1016/ j.foodchem.2020.128663
- 5. Caporaso N, Whitworth MB, Fisk I (2021). Prediction of coffee aroma from single roasted coffee beans by hy perspectral imaging. FOOD CHEMISTRY, ISSN: 0308-8146, doi: 10.1016/j.foodchem.2021.131159
- 6. Okuskhanova E, Caporaso N, Yessimbekov Z, Assenova BK, Smolnikova F, Rebezov M, Ali Shariati M, Khan MU, Thiruvengadam M (2021). Functional and physical properties of oil-in-water emulsion based on sodium caseinate, beef rumen and sunflower oil and its effect on nutritional quality of forcemeat. JOURNAL OF DIS-PERSION SCIENCE AND TECHNOLOGY, ISSN: 0193-2691, doi: 10.1080/01932691.2021.1950008
- 7. Genovese A., Caporaso N., Moio L. (2021). Influence of yeast strain on odoractive compounds in fiano wine. APPLIED SCIENCES, vol. 11, ISSN: 2076-3417, doi: 10.3390/app11177767



- 8. Genovese A, Caporaso N, Sacchi R (2021). Flavor Chemistry of Virgin Olive Oil: An Overview. APPLIED SCI ENCES, vol. 11, ISSN: 2076-3417, doi: 10.3390/app11041639
- Yessimbekov Z, Kakimov A, Caporaso N, Suychinov A, Kabdylzhar B, Shariati MA, Baikadamova A, Domínguez R, Lorenzo JM (2021). Use of Meat-Bone Paste to Develop Calcium-Enriched Liver Pâté. FOODS, ISSN: 2304-8158, doi: https://doi.org/10.3390/foods10092042
- 10. Sims C, Oddy J, Hibbert L, Newell AS, Steel L, Gibbons AT, Caporaso N, Dumenil C, Read S, Margerison RCP (2021). Feeding the future: developing the skills landscape in the agri-food sector. JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, ISSN: 0268-2575, doi: 10.1002/jctb.6844
- 11. Caporaso N, Genovese A, Perez-Jimenez MA, Olivero-David R, Sacchi R (2021). Impact of Olive Harvesting Date on Virgin Olive Oil Volatile Composition in Four Spanish Varieties. European journal of lipid science andtechnology, ISSN: 1438-7697, doi/10.1002/ejlt.202000350
- 12. Pirzadeh, Maryam, et al. "Pomegranate as a source of bioactive constituents: a review on their characteriza tion, properties and applications." Critical Reviews in Food Science and Nutrition (2020): 1-18.
- 13. Genovese, A., Caporaso, N., di Bari, V., Yang, N., & Fisk, I. (2019). Effect of olive oil phenolic compounds on the aroma release and persistence from O/W emulsion analysed in vivo by APCI-MS. Food Research International, 126, 108686.
- Sacchi, R., Caporaso, N., Squadrilli, G. A., Paduano, A., Ambrosino, M. L., Cavella, S., & Genovese, A. (2019). Sensory profile, biophenolic and volatile compounds of an artisanal ice cream ('gelato') functionalised using extra virgin olive oil. International Journal of Gastronomy and Food Science, 18, 100173.
- Genovese, A., Caporaso, N., Leone, T., Paduano, A., Mena, C., Perez-Jimenez, M. A., & Sacchi, R. (2019). Use of odorant series for extra virgin olive oil aroma characterisation. Journal of the Science of Food and Agriculture, 99(3), 1215-1224.
- Caporaso, N., Whitworth, M. B., Cui, C. & Fisk, I. D. (2018). Variability of single bean coffee volatile compounds of Arabica and Robusta roasted coffees analysed by SPME-GC-MS. *Food Research International. Accepted*. (IF = 3.856, Q1)
- Genovese, A., Caporaso, N., Leone, T., Paduano, A., Mena, C., Perez-Jimenez, A. & Sacchi, R. (2018). Aromatic series: a fingerprint for extra virgin olive oil origin and sensory description. *J. Agric. Food Chem. Under revision*. (IF = 3.856, Q1)
- Caporaso, N., Whitworth, M. B., Fowler, M. & Fisk, I. D. (2018). Hyperspectral imaging for non-destructive prediction of fermentation index, polyphenol content and antioxidant activity in single cocoa beans. *Food Chemistry. Accepted*. (IF = 4.498, Q1)
- Olivero-David, R., Ruiz-Roso, M.B., Caporaso, N., Perez-Olleros, L., De las Heras, N., Lahera, V. & Ruiz-Roso, B. (2018). In vivo bioavailability of polyphenols from grape by-products, and effect on lipemia of normocholesterolemic Wistar rats. *Journal of the Science of Food and Agriculture*. 98(15), 5581-5590. (IF = 2.463, Q1)
- Caporaso, N., Whitworth, M. B., Grebby, S., & Fisk, I. D. (2018). Rapid prediction of single green coffee bean moisture and lipid content by hyperspectral imaging. *Journal of Food Engineering*. 227, 18-29. (IF = 3.585, Q1)
- Caporaso, N., Whitworth, M. B., & Fisk, I. D. (2018). Near-Infrared spectroscopy and hyperspectral imaging for non-destructive quality assessment of cereal grains. *Applied Spectroscopy Reviews*, 1-21 (IF = 5.459, specrtoscopy Q1,)
- Caporaso, N., Whitworth, M. B., Grebby, S., & Fisk, I. D. (2018). Non-destructive analysis of sucrose, caffeine and trigonelline on single green coffee beans by hyperspectral imaging. *Food Research International*, 106, 193-203. (IF = 3.856, Q1)
- 23. Caporaso, N., Whitworth, M. B., & Fisk, I. D. (2018). Protein content prediction in single wheat kernels using hy perspectral imaging. *Food Chemistry*, 240, 32-42. (IF = 4.498, **Q1**)
- 24. Russo, F., Caporaso, N., Paduano, A., & Sacchi, R. (2017). Characterisation of volatile compounds in Cilento (Italy) figs (*Ficus carica* L.) cv. Dottato as affected by the drying process. *International Journal of Food Properties*, 1-11. (IF = 1.427, **Q2**)
- Caporaso, N., Formisano, D., & Genovese, A. (2017). Use of phenolic compounds from olive mill wastewater as valuable ingredients for functional foods. *Critical reviews in food science and nutrition*, 1-13. (IF = 4.43, Q1)
- 26. Caporaso, N., Whitworth, M. B., & Fisk, I. D. (2017). Application of calibrations to hyperspectral images of food grains: example for wheat falling number. *Journal of Spectral Imaging*, 6(1), 1-15.
- 27. Pannico, A., Cirillo, C., Giaccone, M., Scognamiglio, P., Romano, R., Caporaso, N, Sacchi, R., N., & Basile, B. (2017). Fruit position within the canopy affects kernel lipid composition of hazelnuts. *Journal of the Science of Food and Agriculture*. 97(14):4790-4799. (IF = 2.463, **Q1**)
- 28. Sacchi, R., Della Medaglia, D., Paduano, A., Caporaso, N., & Genovese, A. (2017). Characterisation of lemonflavoured olive oils. *LWT-Food Science and Technology*, *79*, 326-332. (IF = 2.929, **Q1**)
- 29. Caporaso, N., & Formisano, D. (2016). Developments, applications, and trends of molecular gastronomy among food scientists and innovative chefs. *Food Reviews International*, *32*(4), 417-435. (IF = 2.823, **Q1**)
- 30. Caporaso, N., Genovese, A., Burke, R., Barry-Ryan, C., & Sacchi, R. (2016). Effect of olive mill wastewater phenolic extract, whey protein isolate and xanthan gum on the behaviour of olive O/W emulsions using response surface methodology. *Food Hydrocolloids*, *61*, 66-76. (IF = 5.459, **Q1**)
- 31. Caporaso, N. (2016). Virgin olive oils: environmental conditions, agronomical factors and processing techno logy affecting the chemistry of flavor profile. *Journal of Food Chemistry and Nanotechnology*, 2(1), 21-31.



- 32. Caporaso, N., Genovese, A., Burke, R., Barry-Ryan, C., & Sacchi, R. (2016). Physical and oxidative stability of functional olive oil-in-water emulsions formulated using olive mill wastewater biophenols and whey proteins. *Food & function*, 7(1), 227-238. (IF = 3.247, **Q1**)
- Genovese, A., Caporaso, N., & Sacchi, R. (2015). Temporal changes of virgin olive oil volatile compounds in a model system simulating domestic consumption: The role of biophenols. *Food Research International*, 77, 670-674. (IF = 3.856, Q1)
- 34. Genovese, A., Caporaso, N., Villani, V., Paduano, A., & Sacchi, R. (2015). Olive oil phenolic compounds affect th e release of aroma compounds. *Food chemistry*, *181*, 284-294. (IF = 4.498, **Q1**)
- 35. Genovese, A., Caporaso, N., De Luca, L., Paduano, A., & Sacchi, R. (2015). Influence of olive oil phenolic compounds on headspace aroma release by interaction with whey proteins. *Journal of agricultural and food chemistry*, *63*(15), 3838-3850. (IF = 3.39, **Q1**)
- 36. Sacchi, R., Caporaso, N., Paduano, A., & Genovese, A. (2015). Industrial-scale filtration affects volatile com pounds in extra virgin olive oil cv. Ravece. *European Journal of Lipid Science and Technology*, 117(12), 2007-2014. (IF = 2.145, **Q1**)
- 37. Caporaso, N., Savarese, M., Paduano, A., Guidone, G., De Marco, E., & Sacchi, R. (2015). Nutritional quality assessment of extra virgin olive oil from the Italian retail market: Do natural antioxidants satisfy EFSA health claims?. *Journal of Food Composition and Analysis*, 40, 154-162. (IF = 3.076, **Q1**)
- Caporaso, N., Armento, V., & Sacchi, R. (2015). Volatile profile of Conciato Romano cheese, a traditional Italian cheese, during ripening. *European Journal of Lipid Science and Technology*, 117(9), 1422-1431. (IF = 2.14, Q1)
- 39. Caporaso, N., Panariello, V., & Sacchi, R. (2015). The "True" Neapolitan pizza: Assessing the influence of ex tra virgin olive oil on pizza volatile compounds and lipid oxidation. *Journal of Culinary Science & Technology*, 13(1), 29-48. (IF = 0.39, **Q3**)
- 40. Caporaso, N., Genovese, A., Canela, M. D., Civitella, A., & Sacchi, R. (2014). Neapolitan coffee brew chemical analysis in comparison to espresso, moka and American brews. *Food Research International*, *61*, 152-160. (IF= 3.856, **Q1**)
- 41. Russo, F., Caporaso, N., Paduano, A., & Sacchi, R. (2014). Phenolic Compounds in Fresh and Dried Figs from Cilento (Italy), by Considering Breba Crop and Full Crop, in Comparison to Turkish and Greek Dried Figs. *J* ournal of food science, 79(7), C1278-C1284. (IF = 1.815, **Q1**)
- 42. Genovese, A., Caporaso, N., Civitella, A., & Sacchi, R. (2014). Effect of human saliva and sip volume of coffee brews on the release of key volatile compounds by a retronasal aroma simulator. *Food Research International*, *61*, 100-111. (IF = 3.856, **Q1**)
- 43. Paduano, A., Caporaso, N., Santini, A., & Sacchi, R. (2014). Microwave and ultrasound-assisted extraction of capsaicinoids from chili peppers in flavored olive oil. *Journal of Food Research*, *3*(4), 51-59.
- 44. Caporaso, N., Paduano, A., Nicoletti, G., & Sacchi, R. (2013). Capsaicinoids, antioxidant activity, and volatile compounds in olive oil flavored with dried chili pepper (*Capsicum annuum*). *European Journal of Lipid Science and Technology*, *115*(12), 1434-1442. (IF = 2.145 **Q1**)

Book chapters:

- 45. <u>Caporaso, N</u>. & Boskou, D. (2018). Chapter 9. Olive (Olea europaea). Nicola Caporaso, Dimitrios Boskou. In: *Oilseeds: Health Attributes and Food Applications*. Editors: Tanwar, Beenu, Goyal, Ankit (Eds.). Publisher: Springer Singapore. 2021. eBook ISBN: 978-981-15-4194-0. DOI: 10.1007/978-981-15-4194-0. Hardcover ISBN: 978-981-15-4193-3
- 46. Rocha Baqueta, M., Caporaso, N., Coqueiro, A., and Valderrama, P. (2020). Chapter 2. A Review of Coffee Quality Assessment Based on Sensory Evaluation and Advanced Analytical Techniques. In: *Innovations in Coffee Quality*. ISBN: 978-1-53618-223-1
- 47. Genovese, A, Caporaso, N., Baiano, A. (2020). Book Chapter: 'Impact of brewing methods on the quality of coffee cup'.

Publications in national journals:

- 48. A. Genovese, N. <u>Caporaso</u>, A. Civitella, R. Sacchi. Caffè espresso, moka, napoletano e americano. Parte 2: simulazione dell'aroma retronasale. Indagine sull'influenza della saliva e del volume del sorso. Industria delle bevande, Agosto 2016. pp.5-15.
- 49. N. <u>Caporaso</u>, A. Genovese, A. Civitella, R. Sacchi. Caffè espresso, moka, napoletano e americano. Parte 1. Influenza della tipologia di estrazione sulla composizione chimica e aromatica della bevanda. Industria delle bevande, Maggio/Giugno 2015. pp.3-12.
- 50. Several articles published online in OlioOfficina and TeatroNaturale, which are aimed to spread information to the general public about scientific outcomes related to food and agriculture.

Oral communications:

- 51.<u>N. Caporaso</u>. Olive oil as a functional food: the role of natural antioxidants and their use in the food industry. Food Antioxidants and Functional Ingredients Shelf Life Extension, Nutrition and Health. 7-8 March 2018. SCI, London, UK.
- 52. N. <u>Caporaso</u>. "Hyperspectral imaging applied to granular food commodities: case studies for raw material characterisation and quality control". Newton workshop on "Innovations in Aerated Food Processing for Sustainability, Health and Life", UK-Malaysia network. Campden BRI, Chipping Campden, UK. 23-26/01/2017.



- 53. N. <u>Caporaso</u>, M. Whitworth, I. Fisk. Application of calibrations to hyperspectral images of food grains: example for wheat falling number. IASIM conference in spectral imaging, Chamonix-Mont-Blanc, France, 3-6 July 2016.
- 54. N. <u>Caporaso</u>, M. Whitworth, I. Fisk. HSI for rapid screening of quality parameters in granular food commodities. Hyperspectral imaging conference 2016, Ricoh Arena, Coventry, UK.
- 55. Fisk, N. <u>Caporaso</u>, M. Whitworth. Non-invasive measurement of coffee beans by hyperspectral imaging. 26th International Conference on Coffee Science. 14-17 November 2016. Kunming, Yunnan, China.

Posters, Abstracts and Proceedings:

- 1. N Caporaso, A Balivo, R Sacchi, A Genovese. Analysis of electronic nose data for the discrimination of volatiles from food-saliva interaction in individuals with different BMI". 11th Colloquium Chemiometricum Mediterraneum. 27-30 June 2023 Padova, Italy
- 2. N. Caporaso, M.B. Whitworth, I.D. Fisk. Hyperspectral imaging for rapid prediction of food composition: Cocoa and coffee beans chemical composition. EFFoST conference (European Federation of Food Science and Technology), Nantes (France), 6-8 November 2018.
- Caporaso N., Whitworth M., Fisk I. Hyperspectral imaging for compositional and functional analysis of green coffee beans. Poster at the ASIC (Association For Science Information on Coffee) conference. Portland, Oregon (USA) –16-20 September 2018
- 4. Sacchi, R., <u>Caporaso, N.</u>, Squadrilli. G.A., Paduano, A., Ambrosino, M.L., Genovese, A. Antioxidant activity and sensory properties of an artisanal ice-cream functionalised using extra virgin olive oil. Shelf Life Extension, Nutrition and Health. 7-8 March 2018. SCI, London, UK.
- Fisk, I., <u>Caporaso</u>, N., Whitworth, M. Hyperspectral imaging for rapid compositional and functional analysis of food commodities. NET4FS (Interdisciplinary training Network to address key questions in plant development for Food Security). 7-10 Nov. 2016. Shanghai, China.
- 6. Fisk, I., Nicola Caporaso, Whitworth, M. Hyperspectral imaging for compositional and functional analysis of green coffee beans. ASIC, 26th International Conference on Coffee Science. 24 November 2016, Kinming, China.
- 7. <u>Caporaso</u>, N., Whitworth, M., Fisk, I. Assessment of hyperspectral imaging for measurement of single kernel protein variation in UK wheat. Conference: Joint ICC/AISTEC Conference at the World Expo Milan 2015 "Grains for feeding the world", DOI: 10.13140/RG.2.1.1387.9126. 1-3 July 2015. Milan, Italy.
- 8. <u>Caporaso</u>, N., Whitworth, M., Cui, C., Fisk, I. Application of hyperspectral imaging for rapid screening of key quality parameters in cereal grains. Conference: 4th International Conference and Exhibition on Food Processing & Technology OMICS Conference, DOI: 10.13140/RG.2.1.2698.6321. 10-12 August 2015. London, UK.
- 9. <u>Caporaso</u> N, Genovese A, De Luca L, Sacchi R. Effect of whey proteins and olive oil phenolic compounds on the release of key odour compounds in olive oil-in-water dispersions. Poster at "Trends in Food Flavour" at the University of Nottingham (UK), 15-17 April 2015. *Book of abstract in press.*
- <u>Caporaso</u> N, Genovese A, Paduano A, Sacchi R. Effect of industrial filtration of extra virgin olive oil cv. Ravece on volatile compounds. Proceedings of the III Convegno Nazionale dell'Olivo e dell'Olio Bari. Bari, 26-29 November 2014. Book of Abstracts p. 55. ISBN 978-88-940276-1-7.
- 11. <u>Caporaso</u> N, Genovese A, Sacchi R. Stability of functional O/W emulsions by adding biophenols from olive oil wastewater. Proceedings of the III Convegno Nazionale dell'Olivo e dell'Olio Bari. Bari, 26-29 Nov. 2014. Book of Abstracts p. 42. ISBN 978-88-940276-1-7.
- Genovese A, Leone T, Paduano A, Ambrosino ML, <u>Caporaso</u> N, Sacchi R. Aromatic series as a fingerprint for Italian extra virgin olive oil. Proceedings of the III Convegno Nazionale dell'Olivo e dell'Olio Bari. Bari, 26-29 Nov. 2014. Book of Abstracts. ISBN 978-88-940276-1-7.
- Paduano A, Lisi M, Mandarello D, Ambrosino ML, Savarese M, <u>Caporaso</u> N, Sacchi R. Phenolic profile of Pisciottana and Itrana olives processed "al naturale". Proceedings of the III Convegno Nazionale dell'Olivo e dell'Olio Bari. Bari, 26-29 Nov. 2014. ISBN 978-88-940276-1-7.
- 14. Sacchi R, Ambrosino ML, Paduano A, Grasso F, <u>Caporaso</u> N, Genovese A. Typicality and flavours of extra virgin olive oil: recent developments and future horizons. Proceedings of the III Convegno Nazionale dell'Olivo e dell'Olio Bari. Bari, 26-29 Nov. 2014. ISBN 978-88-940276-1-7.
- 15. <u>Caporaso</u> N, Genovese A, Canela M, Civitella A and Sacchi R. Neapolitan coffee brew analysis in comparison to different brewing procedures. Proceedings of the 2nd International conference on Coffee, Cocoa and Tea, Book of Abstracts, p.62. Naples, 09-11 Oct. 2013.
- Canela MD, <u>Caporaso</u> N, Genovese A, Sacchi R, Fogliano V. Spent coffee as a functional ingredient: development of cookies with high antioxidant properties. Second International Congress on *Cocoa* Coffee and *Tea* (CoCoTea 2013), Book of Abstracts, Naples, 09-11 October 2013.
- 17. Savarese M, <u>Caporaso</u> N, Parisini C, Paduano A, De Marco E and Sacchi R. Application of an Electronic Nose for the evaluation of rancidity and shelf life in virgin olive oil. Proceedings of the second international interdisciplinary conference, September 2-6 2013, ISBN: 978-80-554-0762-3, ISSN: 1338-7871, pp. 361-366.
- Savarese M, De Marco E, <u>Caporaso</u> N and Sacchi R. Extra virgin olive oil overall quality assessment during prolonged storage in PET containers. Proceedings of the Global Virtual Conference GV-CONF 2013, 8-12 April 2013, ISBN: 978-80-554-0649-7, ISSN: 1339-2778. Vol. I, issue 1, pp. 674-679.
- Paduano A, <u>Caporaso</u> N, Armento V, Savarese M and Sacchi R. Caratterizzazione sensoriale ed evoluzione durante la stagionatura del formaggio Conciato Romano. Atti del "IV Convegno Nazionale Società Italiana di Scienze Sensoriali". A cura della Società Italiana di Scienze Sensoriali, CUES ed. ISBN 978-88-97821-46-5, pp. 71-76.
- 20. Paduano A, Caporaso N, Armento V, Savarese M and Sacchi R. Caratterizzazione sensoriale del formaggio



Conciato Romano e sua evoluzione durante la maturazione. IV Convegno nazionale Società Italiana di Scienze Sensoriali (SISS). Trieste, 22-23 November 2012.

 <u>Caporaso</u> N. Virgin Olive Oil and its interactions during cooking. XVII Workshop on Developments in the Italian PhD Research on Food Science, Technology and Biotechnology. Proceedings book. p. 287. Cesena, 19-21 September 2012.

Summary of international experience:

- January 2015-To date. PhD research at the University of Nottingham, but entirely based at Campden BRI (Chipping Campden, Gloucestershire, UK); then started a post-doc contract at Buhler Ltd (London, UK). Industrial supervisor at Campden BRI: Dr. Martin Whitworth.
- March-July 2014. International Olive Council, Technical Division. Contact: Catarina Bairrao-Balula.
- May-August 2013. Exchange student at the School of culinary arts and food technology. Dublin Institute of Technology, Dublin, Ireland. Contact: Dr. Roisin Burke. Short courses attended (June 2013):
- October-December 2013. International course on virgin olive oil sensory assessment, University of Jaen, Spain.
- February-August 2011. Erasmus programme for study. Successfully attended 6 courses and took 8 exams. University of Cordoba, Spain. Additionally attended the summer course entitled: "olive oil in the culture and gastronomy of the Mediterranean people" (2 ECTS) and CAD (2 ECTS).

Other academic achievements, honours, and activities:

- Chair of session on Process, Structure & Sensing, at the conference EFFoST (European Federation of Food Science and Technology), Nantes (France), 7 November 2018.
- Chair and member of the scientific committee at the 6th Nursten symposium (Nottingham, UK). 27-28 September 2018.