



12th International Conference on Predictive Modelling in Food

June 13-16, 2023 Sapporo, Japan

Conference Program
Hokkaido University Conference Hall

Day 1:
Tuesday, June 13, 2023

Registration

Open from 13:00 -

Pre-conference Workshops 14:00-17:00

Workshop 1 <u>Exploiting the power of the harmonized knowledge exchange format FSKX</u>	Workshop 2 <u>Bayesian methods for microbiological data and risk assessment</u>	Workshop 3 <u>Introduction to Predictive Microbiology</u>	Workshop 4 <u>Meta-Regression in Food Microbiological Safety</u>
Matthias Filter German Federal Institute for Risk Assessment (BfR)	Dr. Jukka Ranta Finnish Food Authority	Dr. Lihan Huang Eastern Regional Research Center, Agricultural Research Service, U.S. Department of Agriculture Research Service	Dr. Ursula Gonzales-Barron Instituto Politécnico de Bragança, Portugal Vasco Cadavez, Instituto Politécnico de Bragança, Portugal
Meeting room #3	Meeting room #4	Meeting room #5	Meeting room #6

ICPMF Board Members Meeting

17:30 – 18:30 @Meeting room #2

Welcome Reception


18:00 – 20:00 @Information center (next to the conference venue)

Day 2: Wednesday, June 14, 2023

at 2F Auditorium

8:00-	Registration
9:00 -9:10	Welcome from the chair Shige Koseki and Kento Koyama (Hokkaido University) 🇯🇵
9:10 – 9:30	Predictive Microbiology: so far and the future 30th anniversary of the RED book Prof. Tom Ross (University of Tasmania) 🇺🇸
9:30 - 10:00	Keynote lecture 1 Variability and uncertainty in predictive microbiology and QMRA – the what, the why and the how Dr. Albert Garre (Technical University of Cartagena, Spain) 🇪🇸
10:00 -10:30	Coffee break Poster session The presenters with “ odd number ” should stand by the poster (1F Hall)
10:30-12:00	Oral session 1: Quantitative Microbial Risk Assessment Chairs: Marcel Zwietering & Hiroki Abe
10:30	O1-1 Characterization of uncertainty in microbiological risk assessment: is it possible? Maarten Nauta 🇩🇪
10:45	O1-2 Minimizing the risk of foodborne illness and analytical costs using a QMRA model for raw milk cheeses Subhasish Basak, Janushan Christy, Laurent Guillier, Frédérique Audiat-Perrin, Moez Sanaa, Fanny Tenenhaus-Aziza, Julien Bect, Emmanuel Vazquez 🇫🇷 🇨🇭
11:00	O1-3 Farm to fork quantitative risk assessment of <i>Escherichia coli</i> O157:H7 illness from the consumption of fresh Australian apples <u>Elizabeth Frankish</u> , Hayriye Bozkurt, Tom Ross 🇺🇸
11:15	O1-4 Using the biorisk package for R to evaluate the risk of salmonellosis associated with

	<p>fresh-cut lettuce production and distribution chains</p> <p><u>Arícia Possas</u>, Silvia Guillén, Pablo S. Fernandez, Fernando Pérez-Rodríguez, Alberto Garre 🇪🇸</p>
11:30	<p>O1-5</p> <p>Joint FAO/WHO Expert meetings on microbiological risk assessment (JEMRA)</p> <p>Kang Zhou 🇮🇹</p>
11:45	<p>O1-6</p> <p>Development of a Quantitative Microbiological Spoilage Risk Assessment (QMSRA) Model for fresh poultry fillets</p> <p><u>Sofia Tsaloumi</u>, Leonardos Stathas, Konstantinos Koutsoumanis 🇬🇷</p>
12:00-13:30	Lunch (HOTEL MYSTAYS Sapporo Aspen)
13:30-15:00	<p>Oral session 2:</p> <p>Predictive microbiology software development</p> <p>Chairs: Ursula Gonzales-Barron & Lihan Huang</p>
13:30	<p>O2-1</p> <p>Sym'Previus MAP- A web application for the design of food packaging to improve the preservation of food products</p> <p>Jonathan Thévenot, <u>Yvan Le Marc</u>, Catherine Denis, Janushan Christy, Valérie Michel, Valérie Stahl, Didier Majou, Emilie Gauvry, Emmanuel Jamet, Fanny Tenenhaus-Aziza, Jean-Christophe Augustin, Narjes Mtimet, Guillier Laurent, Sabine Jeuge, Jeanne-Marie Membré, Anna Jofré, Alizée Guérin, Aline Rault, Stella Planchon, Olivier Couvert, Louis Coroller 🇫🇷 🇪🇸</p>
13:45	<p>O2-2</p> <p>Sym'Previus-fungi: predicting spore germination and radial growth of fungi in dairy products</p> <p>Nicolas Nguyen Van Long, Marion Valle, Yvan Le Marc, <u>Jeanne-Marie Membré</u>, Catherine Denis, Janushan Christy, Valérie Michel, Valérie Stahl, Didier Majou, Emilie Gauvry, Emmanuel Jamet, Fanny Tenenhaus-Aziza, Jean-Christophe Augustin, Narjes Mtimet, Laurent Guillier, Sabine Jeuge, Anna Jofré, Alizée Guérin, Aline Rault, Stella Planchon, Louis Coroller 🇫🇷 🇪🇸</p>
14:00	<p>O2-3</p> <p>Using shiny R package to develop a user-friendly interfaces powered by complex predictive microbiology models</p> <p>Dipon Sarkar, Mark Tamplin, Rajat Nag, Alberto Garre 🇦🇺 🇮🇹 🇪🇸</p>
14:15	<p>O2-4</p> <p>Food Safety Knowledge Exchange (FSKX) format: current status and strategic development plans</p> <p><u>Matthias Filter</u>, Thomas Schüler 🇩🇪</p>










14:30	<p>O2-5 Discovering Pathogens-in-Foods: resources and applications of a database on occurrence data of foodborne pathogens in European-marketed foods</p> <p>Ana Sofia Faria^{1,2}, Maiara Winter^{1,2}, Anne Thebault³, Laurent Guillier³, Pauline Kooh³, Winy Messens⁴, <u>Vasco Cadavez</u>^{1,2}, Ursula Gonzales-Barron </p>
14:45	<p>O2-6 e-Platon: an interactive web-based platform for spatio-temporal illustration of multi-metric laboratory food safety and quality data with capacity for real time, on-line multivariate analysis</p> <p><u>Panagiotis Skandamis</u>, Antonia Gounadaki </p>
15:00-15:30	<p>Coffee break Poster session The presenters with “odd number” should stand by the poster (1F Hall)</p>
15:30-16:00	<p>Software fair -1 Short presentation (5 min) of each software tool</p> <p>Chair: Shige Koseki</p>
15:30	<p>Food Safety Knowledge-Lab (FSK-Lab) Thomas Schueler,</p>
15:35	<p>D database, bioinactivation, biogrowth & biorisk - a complete toolset for predictive micro and QMRA Alberto Garre</p>
15:40	<p>FSSP Maryam Maktabdar</p>
15:45	<p>Sym'Previus Yvan Le Marc</p>
15:50	<p>MicroHibro Fernando Pérez Rodríguez</p>
16:00-18:00	<p>Software fair -2 Software demonstration and hands on session at conference room #1 (1st floor)</p>

Day 3: Thursday, June 15, 2023

at 2F Auditorium

8:00-	Registration
8:30-9:00	<p>Keynote lecture 2 New developments in microbial heat inactivation: Setting the basis for a risk-based design in thermal processing of foods</p> <p>Prof. Kostas Kouthomanis (Aristotle University of Thessaloniki, Greece) 🇬🇷</p>
9:00-10:30	<p>Oral session 3: Advanced modeling technique Chairs: Maarten Nauta & Vasiilis Valdramidis</p>
9:00 -	<p>O3-1 When the Weibull model helps in deciphering bacterial variability related to survival behaviour</p> <p><u>Jeanne-Marie Membré</u>, Ivan Leguérinel 🇫🇷</p>
9:15	<p>O3-2 Development of a thermal inactivation model considering the thermotolerance variability of 19 <i>Campylobacter jejuni</i> strains using the multi-variate normal distribution and the Most Probable Curve method</p> <p><u>Hiroki Abe</u>, Susumu Kawasaki 🇯🇵</p>
9:30	<p>O3-3 Understanding the relation between single-cell division times and growth dynamics of bacterial colonies</p> <p><u>Styliani Dimitra Papagianeli</u>, Zafeiro Aspidou, Konstantinos Koutsoumanis 🇬🇷</p>
9:45	<p>O3-4 Conditions Needed to Re-induce Lag Phase of Salmonella Under Dynamic Temperature Conditions</p> <p><u>Megan Wang</u>, Donald Schaffner 🇺🇸</p>
10:00	<p>O3-5 Dynamic Modeling of Interspecies Bacterial Competition – An Integrated Approach</p> <p>Lihan Huang 🇺🇸</p>
10:15 - 11:00	<p>Coffee break Poster session The presenters with “Even number” should stand by the poster (1F Hall)</p>










11:00-12:15	<p>Oral session 4: Optimization of food processing Chairs: Don Schaffner & Jukka Ranta</p>
11:00	<p>O4-1 The Use of Mathematical Modelling in the Optimization of Food Packaging Design for Vegetables to Avoid the Pack and Pray Approach: A Baby Leaf Spinach Case <u>Francesco S. Giordano</u>, Andrew Reynolds, Lorraine Foley, Jesus M. Frias 🇮🇹</p>
11:15	<p>O4-2 Optimising the selection of temperature levels in the experimental design for the estimation of cardinal parameters for growth <u>Ursula Gonzales-Barron</u>, Mariem Ellouze, Vasco Cadavez 🇪🇸🇨🇭</p>
11:30	<p>O4-3 Tomato quality and safety assessment through the application of physicochemical and predictive microbiology models Francisco Jiménez-Jiménez, <u>Árcia Possas</u>, Laura Rabasco-Vílchez, Fernando Pérez-Rodríguez 🇪🇸</p>
11:45	<p>O4-4 Predicting the growth limits of psychrotrophic <i>Bacillus cereus</i> as a function of storage temperature, pH, water activity and acetic acid: an approach based on phylogenetic groups <u>Yvan Le Marc</u>, Anne Lochardet, Emilie Pétilion, Julie Evrard, Florence Postollec, Véronique Huchet 🇫🇷</p>
12:00-13:30	Lunch (HOTEL MYSTAYS Sapporo Aspen)
13:30-15:00	<p>Special session: Next Generation Predictive Modeling in the Food Industry; from mathematical models to Information Technologies (IT) and Data Science Organized by Prof. George -John Nychas (Greece) 🇬🇷</p>
13:30	<p>S-1 New Developments in Food Safety and Quality Assessment George – John Nychas 🇬🇷</p>
14:00	<p>S-2 The Machine Learning Web Platforms for Food Microbiological Quality and authentication Fady Mohareb 🇬🇧</p>






14:30	S-3 Risk-based Decision support in the Food Industry Konstantinos Koutsoumanis 
15:00-15:45	Coffee break Poster session The presenters with “ Even number ” should stand by the poster (1F Hall)
15:45-17:30	Oral session 5: Predictive models based on new approaches Chairs: Jeanne-Marie Membré & Yvan Le Marc
15:45	O5-1 Overview: Rapid assessment of microbiological quality in meat and fish using FTIR Lemonia-Christina Fengou, Anastasia Lytou, <u>George Nychas</u> 
16:00	O5-2 Modeling interactions between <i>Listeria monocytogenes</i> and dominant bacteria in pasteurized milk Jiaming Zheng, Xiaofeng Li, Qingli Dong, <u>Xiang Wang</u> 
16:15	O5-3 Data mining for predicting bacterial population behavior integrating food components <u>Kazuki Saito</u> , Shinya Sunagawa, Ryohei Shimizu-hata, Shinji Nakaoka, Shige Koseki, Kento Koyama 
	Chairs: Matthias Filter & Laurent Guillier
16:30	O5-4 Use of modelling to shed light on the enrichment ecology of <i>Listeria monocytogenes</i> Jasper Bannenberg, <u>Marcel H. Zwietering</u> , Tjakko Abee, Heidy M.W. den Besten 
16:45	O5-5 Predicting bacterial growth and thermal inactivation in raw and cooked chicken meat during storage <u>Ibrahim Benamar</u> , Maarten Nauta, Samia Bellifa, Asma Cherif-Anntar, Omar Messaoudi, Mohamed Salih Barka, Boumedine Moussa-Boudjemaa  
17:00	O5-6 Effect of nutrient concentrations on the accuracy of predictive model for growth of <i>Escherichia coli</i> in foods <u>Masaki Kato</u> , Kento Koyama, Shige Koseki 
17:15	O5-7 Effect of benzalkonium chloride adaptation on the tolerance of <i>Cronobacter sakazakii</i> exposed to subsequent lethal stresses Hongmei Niu, Li Xu, Xiaojie Qin, Shuo Yang, Xu Wang, Xiang Wang, <u>Qingli Dong</u> 

19:00- 21:00	<p data-bbox="347 219 813 250">Gala dinner at Sapporo Beer Garden</p> <p data-bbox="347 286 1046 318">"Genghis Khan" BBQ is Hokkaido's representative dish</p> <div data-bbox="351 358 1260 604">A collage of three circular images. The leftmost image shows a hand holding a glass of beer with a thick head of foam. The middle image shows a plate of BBQ meat, likely Genghis Khan BBQ, with various cuts of meat and vegetables. The rightmost image shows the interior of a restaurant, likely Sapporo Beer Garden, with a large, open-plan space, tables, and a prominent beer tap.</div>

Day 4: Friday, June 16, 2023

at 2F Auditorium

8:30-9:00	<p>Keynote lecture 3 Omics technologies for predictive microbiology: challenges and future directions</p> <p>Dr. Laurent Guillier (French Agency for Food, Environmental and Occupational Health & Safety (ANSES), France) </p>
9:00-10:30	<p>Oral session 6: Predictive models based on various sources</p> <p>Chairs: Albert Garre & Fernando Perez-Rodriguez</p>
9:00	<p>O6-1 Modeling the effects of C18 free fatty acids on germination and emergence of vegetative cells as a function of their concentrations and degree of unsaturation</p> <p>Trunet Clement, Kaouache Sara, <u>Leguérinel Ivan</u> </p>
9:15	<p>O6-2 Assessment of microbial resistance under different pH and temperatures based on eGFP-labelled <i>Escherichia coli</i> strains</p> <p><u>Styliani Roufou</u>, Clara Buttigieg, Sholeem Griffin, Vasilis Valdramidis  </p>
9:30	<p>O6-3 Survival prediction of dried <i>Bacillus cereus</i> based on glass transition temperature</p> <p><u>Tatsuya Inomata</u>, Kento Koyama, Shigenobu Koseki </p>
9:45	<p>O6-4 <i>Bacillus cereus</i> in dairy products: Prevalence and development of extensive growth and growth boundary models for mesophilic and psychrotolerant sub-groups</p> <p><u>Maryam Maktabdar</u>, Ellen Wemmenhove, Elissavet Gkogka, Lisbeth Truelstrup Hansen, Paw Dalgaard </p>
10:00	<p>O6-5 The antagonistic effect of lactic acid bacteria isolated from dairy products against food-borne pathogens: A systematic review and meta-analysis</p> <p>Yara Loforte, Nathalia Fernandes, André Martinho de Almeida, <u>Vasco Cadavez</u>, Ursula Gonzales-Barron </p>
10:15	<p>O6-6 Descriptive statistics and meta-analysis approaches to assess the effect of microbial contamination on the cultivation of microalgal biomass and its derivatives</p> <p><u>Haileeyesus Gebrehiwot</u>, Vasilis Valdradimis  </p>
10:30 -11:00	Coffee break and Poster session (1F Hall)



11:00-12:30	<p>Oral session 7: Applications of predictive models for various fields</p> <p>Chairs: Panagiotis Skandamis & Kento Koyama</p>
11:00	<p>O7-1 Listeria innocua inactivation in salami by process and by high pressure processing, how pragmatism can support the food safety</p> <p>Elena Cosciani-Cunico, Elena Dalzini, Paola Monastero, Stefania Ducoli, Marina-Nadia Losio </p>
11:15	<p>O7-2 A literature-validated sampling simulation characterizes the power of different sampling plans by simulating recalled and reference powdered infant formula batches</p> <p><u>Minho Kim</u>, Matthew Stasiewicz </p>
11:30	<p>O7-3 Effect of herbal extracts on the survival of S. aureus in goat's raw milk cheese</p> <p>Beatriz Nunes Silva, Sara Coelho-Fernandes, José António Teixeira, Vasco Cadavez, <u>Ursula Gonzales-Barron</u> </p>
11:45	<p>O7-4 Effect of non-thermal processings on allergenicity of shrimp tropomyosin</p> <p><u>Shuai Wei</u>, Xin Wang, Weicheng Hu, Shucheng Liu </p>
12:00	<p>O7-5 Multi-criteria decision technique to evaluate food safety and environmental impacts: Application to a large dairy farm</p> <p><u>Rodney Feliciano</u>, Jeanne-Marie Membré, Paola Guzman-Luna, Almudena Hospido  </p>
12:15	<p>O7-6 Energy consumption model for liquid dairy products' heat treatment and cleaning-in-place processes in a plate heat exchanger system</p> <p><u>Maria Ioanna Malliaroudaki</u>, Nicholas J. Watson, Luanga N. Nchari, Satyajeeet Bhonsale, Jan Van Impe, Rachel L. Gomes   </p>
12:30-13:00	<p>Awards</p> <p>Presentation of ICPMF 13</p> <p>Closing remarks</p>

List of posters

P-1	<p>Methods for estimating <i>Salmonella</i> concentration in chilled chicken using highly left-censored contamination data</p> <p>Tianmei Sun, Yangtai Liu, Xin Dou, Qingli Dong </p>
P-2	<p>Quantitative microbial spoilage risk assessment of plant-based milk alternatives by <i>Geobacillus stearothermophilus</i> in Europe</p> <p>Ourania Misiou, Konstantinos Koutsoumanis, Jeanne-Marie Membré  </p>
P-3	<p>Prevalence of phylotypes and virulence factors of uropathogenic <i>Escherichia coli</i> in freshly prepared beverages vended in Taiwan</p> <p>Liu-Yean Goh, Kuan-Hung Lu </p>
P-4	<p>Hazard identification of bacterial uropathogens in retail meats: the prevalence of uropathogenic <i>Escherichia coli</i> in ready-to-eat chicken and pork in Taiwan</p> <p>Chun-Yi Kang, Kuan-Hung Lu </p>
P-5	<p>Estimating the burden of foodborne illness for <i>Campylobacter</i>, <i>Salmonella</i> and <i>Vibrio parahaemolyticus</i> in Japan, 2006-2020</p> <p>Masaru Tamura, Hiroshi Amanuma, Yuko Kumagai, Fumiko Kasuga, Kunihiro Kubota </p>
P-6	<p>Quantitative microbiological risk assessment of nontyphoidal <i>Salmonella</i> in ground pork in households</p> <p>Li Bai¹, Jun Wang, Honghu Sun, Yeru Wang, Yibaina Wang¹, Qi Wang, Zhaoping Liu </p>
P-7	<p>The open Food Safety Model Repository (openFSMR) – new features and updated content</p> <p>Taras Günther, Lars Valentin, Thomas Schöler, Matthias Filter </p>
P-8	<p>A web-based interface for individual bacterial growth and death prediction in predictive microbiology</p> <p>Kento Koyama </p>
P-9	<p>Development of CAE App for Joule Heating of Food with Heterogeneous Ingredients</p> <p>Masanori Hashiguchi¹, Dahai Mi¹, Yoshiki Muramatsu² </p>
P-10	<p>Numerical Analysis App for Heat Sterilization Process of Cylindrical Foods</p> <p>Yoshiki Muramatsu, Shuki Muramatsu, Masanori Hashiguchi, Dahai Mi, Shotaro Kawakami </p>
P-11	<p>Molecular epidemiological investigation of <i>Salmonella</i> isolated from poultry farm, animals, food and hospital in China</p> <p>Linlin Xiao </p>
P-12	<p>The variability of <i>Paenibacillus</i> spore survival in response to heating with a retort sterilizer</p> <p>Tetsuya Kobayashi, Kento Koyama, Daisuke Yasokawa, Koji Yamazaki </p>
P-13	<p>Colonial growth dynamics of <i>Listeria monocytogenes</i> single cells after exposure to acidic conditions and disinfectants</p> <p>Marianna Arvaniti, Athanasios Balomenos, Vasiliki Papadopoulou, Panagiotis Tsakanikas, Panagiotis Skandamis </p>
P-14	<p>Evaluating the impact of co-culture of different <i>L. monocytogenes</i> strains on time of first division at single-cell level</p> <p>Maria A. Gkerekou, Vasiliki Papadopoulou, Marianna Arvaniti, Antonios N. Psomas, Panagiotis N. Skandamis </p>
P-15	<p>Antimicrobial Peptides an Alternative to Antimicrobial Resistance to Ensure Food Safety</p> <p>Zohaib Aslam Muhammad </p>
P-16	<p>Functional properties of Lactic Acid Bacteria Isolated from fermented Cows' Milk in Algeria.</p> <p>Loumani Akil, Dennis S Nielsen, Mediani Ahmed </p>
P-17	<p>Antimicrobial application of the cyclodextrin metal-organic framework composites</p> <p>Mofei Shen, Tian Ding </p>
P-18	<p>The antimicrobial effects of plasma activated water (PAW) on <i>Bacillus cereus</i> spore</p> <p>Xiao Hu, Tian Ding, Jinsong Feng </p>

P-19	Effect and Mechanism of Slightly Acid Electrolyzed Water on <i>Salmonella</i> Enteritidis Biofilm Yingxia Li, Dewei Kong, Mengdi Yuan, Rongwei Wei, Qijing Du, Rongbo Fan, Yongxin Yang, Jiacheng Zhang, <u>Jun Wang</u> 🇨🇳
P-20	Re-modeling gut microbiota and muscle atrophic sarcopenia <u>Hyunsook Kim</u> , Sanghoon Han 🇰🇷
P-21	Development of real-time quality prediction monitoring technology of kimchi based on smart distribution system <u>Jong-Hoon Kim</u> , Ji-Young Kim, Seung-Eel Oh, Jae-Hwan Ahn, Byeong-Sam Kim 🇰🇷
P-22	Dynamic heating temperature simulation using numerical analysis with iPMP applications for thermal lethality evaluation of foodborne pathogens in meats Shiowshuh Sheen, <u>Lihan Huang</u> 🇺🇸
P-23	Evaluation and Optimization of a Dielectrophoresis-Based Approach for Improving the Quality of Water <u>Won Choi</u> , Young Gu Her, Dongsu Kim, Sang-ik Lee, Youngjoon Jeong 🇰🇷 🇺🇸
P-24	Biofilm formation and functional gene expression of <i>Listeria monocytogenes</i> in beef juice <u>Yangtai Liu</u> , Lili Hu, Huajian Zhu, Qingli Dong 🇨🇳
P-25	Modeling the growth probability of <i>Clostridium perfringens</i> in cured meat as affected by sodium chloride and sodium polyphosphate <u>Cheng-An Hwang</u> , Lihan Huang 🇺🇸
P-26	Development of a microbial prediction model of fresh cut apples based on electronic nose <u>Ji-Young Kim</u> , Jong-Hoon Kim, Byeong-Sam Kim, Seung-Eel Oh, Jae-Hwan Ahn 🇰🇷
P-27	Predictive models for the growth of uropathogenic <i>Escherichia coli</i> in raw and cooked beef as a function of temperature Tzu-Ping Kao, <u>Kuan-Hung Lu</u> 🇹🇼
P-28	Deep learning-based predictive model of egg haugh unit using weight loss for food quality and safety <u>Seung Eel Oh</u> , Tae Hyong Kim, Jong Hoon Kim, Ji Young Kim 🇰🇷
P-29	Cold chain management for vacuum-packed red meat using automated Shelf Life Calculator <u>Tom Ross</u> , Ian Jenson, Long Huynh, Chawalit Kocharunchitt 🇺🇸
P-30	A Monte Carlo simulation tool can provide benefits to rainbow trout (<i>Oncorhynchus mykiss</i>) processing management Pierluigi Polese, Manuela Del Torre, Marilena Marino, <u>Mara Lucia Stecchini</u> 🇮🇹
P-31	Modeling the survival of encapsulated and non- encapsulated probiotic <i>Lactiplantibacillus plantarum</i> in fruit juice Stamatia Vitsou Anastasiou, Sofia Tsaloumi, Konstantina Stasinou, Olga Papadopoulou, Agapi Doulgeraki, Anthoula Argyri, George-John Nychas, Konstantinos Koutsoumanis, <u>Chrysoula Tassou</u> 🇬🇷
P-32	Features in visible and middle infrared regions for meat quality aspects Lemonia-Christina Fengou, George Tsekos, Anastasia Lytou, Chrysoula Tassou, Panagiotis Tsakanikas, <u>George Nychas</u> 🇬🇷
P-33	Effect of organic herbs on the growth of <i>Salmonella</i> and <i>Listeria</i> in chicken bouillon <u>Agapi Doulgeraki</u> , Vasiliki Bikouli, Anthoula Argyri, Chrysoula Tassou, Antonios Manolitsakis 🇬🇷
P-34	Model for <i>Cronobacter sakazakii</i> inactivation by domestic microwave oven heating processing in milk infant formula <u>Elena Dalzini</u> , Elena Cosciani-Cunico, Paola Monastero, Daniela Merigo, Stefania Ducoli, Alessandro Norton, Marina-Nadia Losio 🇮🇹
P-35	Growth potential of <i>Listeria monocytogenes</i> in sturgeon caviar: challenge test vs software predictive tools

	<u>Elena Dalzini</u> , Elena Cosciani-Cunico, Paola Monastero, Daniela Merigo, Stefania Ducoli, Alessandro Norton, Marina-Nadia Losio 🇮🇹
P-36	Development of a predictive model for the combined effect of temperature and pH on the survival of <i>Lactiplantibacillus plantarum</i> in fruit juice <u>Sofia Tsaloumi</u> , Stamatia Vitsou-Anastasiou, Konstantina Stasinou, Chrysoula Tassou, Konstantinos Koutsoumanis 🇬🇷
P-37	Impact of encapsulation on the survival kinetics of probiotic <i>Lactiplantibacillus plantarum</i> during storage of fruit juice. <u>Styliani Dimitra Papagianeli</u> , Sofia Tsaloumi, Stamatia Vitsou-Anastasiou, Konstantina Stasinou, Chrysoula Tassou, Konstantinos Koutsoumanis 🇬🇷
P-38	Investigation of the variability originated from different fish in the microbiological quality assessment of seabream fillets Anastasia Lytou, LEMONIA-CHRISTINA FENGOU, VASSILIKI MASTRODIMAS, ISIDORA MICHALIODI, GEORGE NYCHAS 🇬🇷
P-39	Predicting growth of <i>Listeria monocytogenes</i> for intact green leaves from growth in cut green leaves Meltem Ercin, Zeinab Mohandespoor, <u>Tina Beck Hansen</u> 🇩🇰
P-40	Modeling lactic acid bacteria inactivation in Tuscan sausage through the use of oregano and rosemary essential oils <u>Weber Robazza</u> , Vinicius Badia, Alessandro Galvão, Mari Silvia Oliveira 🇧🇷
P-41	Predictive growth modeling of <i>Yersinia enterocolitica</i> in fresh Kimchi cabbage (<i>Brassica pekinensis</i>) as a function of storage temperature <u>Eun Bi Jeon</u> , Shin Young Park 🇰🇷
P-42	Predictive modeling for the growth behavior of <i>Salmonella</i> spp. in various chicken sample types by real-time PCR <u>Fia Noviyanti</u> , Mari Mochida, Susumu Kawasaki 🇯🇵
P-43	Generalized Lotka-Volterra models for interacting microbial communities using mesoscopic pool models <u>Polina Gaidrik</u> , Matthias Brunner, Daniel Heger, Christian Fleck 🇩🇪
P-44	The estimation of the growth of <i>Listeria monocytogenes</i> in butter produced by the periodic method <u>Jaroslav Kowalik</u> , Adriana Łobacz, Kamil Adamczewski 🇵🇱
P-45	Modelling the fate of <i>Listeria monocytogenes</i> on the surface of ripened raw milk cheese during storage at different temperatures <u>Adriana Łobacz</u> , Jarosław Kowalik, Justyna Żulewska 🇵🇱
P-46	SorfML: The machine learning and blockchain-enabled platform for food quality, safety and authenticity <u>Fady Mohareb</u> , Samuel Heffer, George Nychas 🇬🇷 🇬🇧
P-47	Changes in food weight according to transpiration rate in ice thermal energy storage system <u>Jae Hwan Ahn</u> , Hoon Kim 🇰🇷
P-48	Modeling heat inactivation of encapsulated and non-encapsulated probiotic strains (<i>Lactocaseibacillus casei</i> Shirota and <i>Lactocaseibacillus rhamnosus</i> GG) in fruit juice Stamatia Vitsou Anastasiou, Olga Papadopoulou, Sofia Tsaloumi, Patra Sourri, Agapi Doulgeraki, Anthoula Argyri, <u>George-John Nychas</u> , Konstantinos Koutsoumanis, Chrysoula Tassou 🇬🇷
P-49	Prediction of growth/no growth status of previously unknown bacterial strain using Raman spectroscopy and machine learning <u>Takashi Yamamoto</u> , J. Nicholas Taylor, Shige Koseki, Kento Koyama 🇯🇵
P-50	Predictive modeling of the growth of <i>Listeria monocytogenes</i> in fresh salmon under dynamic temperature conditions Limin Liu, Yuhong Tang, Chenjun Liu, Ting Fang, <u>Changcheng Li</u> 🇨🇳

P-51	Identification of fungal contamination on rice grain using machine learning-assisted hyperspectral imaging Ubonrat Siripatrawan, Yoshio Makino  
P52	How do the survival kinetics of cross-contaminated foodborne bacteria differ in ground meat during thermal inactivation process? <u>Hidemoto Yabe</u> , Hiroki Abe, Kento Koyama, Shigenobu Koseki 