

# ICAR 2024 SCIENTIFIC PROGRAM

Day / Location	Session / Chair	Oral / Poster	Time	Speaker	Topic
<b>Wednesday, May 22, 2024</b>	<b>ICAR Plenary Session</b>	Oral	<b>10:30</b>	Ana Granados Chapatte & Harald Sverdrup	Sustainable breeding strategies; what does it mean?
		Oral	<b>11:15</b>	Marleen Broekhuijse	New ICAR service to standardize bovine semen quality assessment
		Oral	<b>11:45</b>	Jo Newton, Katharina Schodl, Caeli Ridchardson	“Brian Wickham Young Persons Exchange Program (BWYPEX):” People: the forgotten side to sustainability?
Location: <b>ARNOLD I / II</b>	Chair: Tatjana Pirman				
	<b>13:00 – 14:30 LUNCH</b>				People: the forgotten side to sustainability?
<b>Wednesday, May 22, 2024</b>	<b>Joint ICAR/INTERBULL Session: Data collection for Beef on Dairy</b>	Oral	<b>14:30</b>	Matthew Shaffer	Welcome and intro
		Oral	<b>14:32</b>	Jo Newton	Overview: data collection for beef on dairy
		Oral	<b>14:42</b>	Kevin Byskov	Experiences from collection of feed and methane data from beef x dairy calves in Denmark
		Oral	<b>14:54</b>	Brian Van Doormaal	An Alternative Solution for Supporting Beef on Dairy Genetic Selection Decisions
		Oral	<b>15:06</b>	Ross Evans	The evolving landscape of beef from the dairy herd: A perspective from Ireland
		Oral	<b>15:18</b>	Martino Cassandro	The use of beef semen in Italian Holstein cows
		Oral	<b>15:30</b>	Randie Culbertson	Beef x Dairy: The U.S. beef perspective
		<b>Panel</b>	<b>15:42</b>	All speakers	<b>Panel discussion with audience interaction</b>
Location: <b>ARNOLD I / II</b>	Chair: Matthew Shaffer & Jo Newton				

		Poster		Mojca Voljč	Carcass traits of Holstein, Simmental and Brown Swiss calves, bulls and heifers and their crossbreeds with Charolais, Limousin, and Belgian Blue in Slovenia
	<b>16:00 – 16:30 Coffee Break</b>				
<b>Wednesday, May 22, 2024</b>  Location: <b>ARNOLD I / II</b>	<b>Manufacturers Showcase</b>  Chair: Steven Sievert	Oral	<b>16:30</b>	Pierre Broutin, BENTLEY	Latest cutting-edge analytical and automation solutions to extract the maximum value of every milk sample and streamline Central Milk Testing laboratories operation
		Oral	<b>16:50</b>	Wim Schielen, European Livestock Diagnostics Center - ELDC BV	Basic and in depth, continuing Farm Management Monitoring creates Trust, Transparency and Value
		Oral	<b>17:00</b>	André Eggen, Illumina	Genomics Tools from Farm to Fork
		Oral	<b>17:15</b>	Julie Leblois, EMR	Spectral standardisation between brands to build and use robust FT-MIR models
		Oral	<b>17:25</b>	Greta Bonacina, TECNOSENS	Moologger - Not just a simple sniffer
		Oral	<b>17:35</b>	Romy Morrin- O'Donnell, Weatherbys Scientific	Weatherbys Scientific our history & our services
		Oral	<b>17:45</b>	Janez Kunc, AI Center Preska	Presentation of Slovenian AI Center Preska
		Oral	<b>17:50</b>	All speakers	<b>Panel discussion with audience interaction</b>
		Poster	-	Loïc Commun	IDEXX REALPCR MILQ-ID DNA system: new solution for mastitis testing

18:00 – 20:00 WELCOME COCKTAIL

Day / Location	Session / Chair	Oral / Poster	Time	Speaker	Topic
<b>Thursday, May 23, 2024</b>  Location: <b>ARNOLD I</b>	<b>Session 1a: Decision Support Tools of the Future – Promoting Sustainability Farm Management</b>  Chair: Robert H. Fourdraine	Oral	<b>08:00</b>	Lorenzo Pascarella	SiallSCM: a nation-wide tool for milking monitoring to enhance efficiency and welfare
		Oral	<b>08:18</b>	Margaret Kelleher	The Commercial Beef Value (CBV) encourages the adoption of sustainable and profitable practices in beef production.
		Oral	<b>08:36</b>	Robert Fourdraine	HeiferHub – A decision support tool to forecast sales of beef calves and future heifer replacements
		Oral	<b>08:54</b>	Valentina Ferrari	Optimization of dairy herd replacements combining conventional, sexed, and beef semen in mating programs
		Oral	<b>09:18</b>	Yura Pekov	Development of an analytical tool for animal genetic progress assessment based on gEBVs and results of its on-farm implementation
		Oral	<b>09:36</b>	Wim Schielen	The Dairy-Farm Management Monitor; a lab-driven system for sustainable farming, prevention of disease, and increased lactations
		Oral	<b>09:54</b>	Matti Pastell	Digitalized data sharing strategy for decreasing administrative burden– how data spaces will be utilized in Digi4Live project

		Poster / Pitch	10:12	Tineke Ammerlaan - Sieperda	How data can have a big impact on small farms in developing countries
		Poster / Pitch	10:17	Pablo Pinedo	Comparing the milking behaviour of primiparous vs. multiparous Holstein and Jersey cows in an automated batch milking system
		Poster / Pitch	10:22	Pablo Pinedo	Comparing the milking behaviour of primiparous vs. multiparous Holstein and Jersey cows in an automated batch milking system
		Poster / Pitch	10:27	Anita Ule	Slovenian dairy farmers' view on breeding goals
<b>10:30 – 11:00 Coffee Break</b>					

Day / Location	Session / Chair	Oral / Poster	Time	Speaker	Topic
<b>Thursday, May 23, 2024</b>  Location: <b>ARNOLD II</b>	<b>Session 2: New tools to extend the horizon of milk mid-infrared spectrometry</b>  Chair: Josée Bordeleau	Oral	08:00	Helene Soyeurt	How spectrally representative are datasets used to build MIR-based predictive models? A data-driven study.
		Oral	08:20	Malia Caputo	Association of individual cow milk fatty acid proportion and variance with milk production
		Oral	08:40	Marine Gelé	Predicting glutamate concentration in milk using mid-infrared spectrometry for routine detection of energy-deficient cows
		Oral	09:00	Laura Monica Dale	FeMIR - MIR Spectral predictions for feed and energy efficiency - Practical Application

		Oral	<b>09:20</b>	Phuong Ho	Predicting the likelihood of conception to first insemination using milk mid-infrared spectroscopy: a model for FOSS instrument
		Oral	<b>09:40</b>	Octave Christophe	Improving taste and flavor in dairy product through milk analysis of free fatty by Mid-infrared (MIR) spectrometry.
		Oral	<b>10:00</b>	André Mensching	Daily standardization of milk mid-infrared spectra in a comprehensive regression model framework considering animal related data
		Poster	-	Sarah-Joe Burn	Prediction of residual energy intake in Fleckvieh cows using mid-infrared spectroscopy
		Poster	-	Laura Monica Dale	Predicting dairy cattle heat stress indicators using machine learning and mid infrared spectral data
		Poster	-	Yang Ming-Kuew	Effects of Feeding Time on Fatty Acid Composition in Milk of Primiparous Dairy Cows During Early Postpartum Stage
		Poster	-	Po-An Tu	Investigating the Impact of Heat Stress and Subsequent Recovery on Fatty Acid Profiles in Bovine Milk
	<b>10:30 – 11:00 Coffee Break</b>				

Day / Location	Session / Chair	Oral / Poster	Time	Speaker	Topic
<b>Thursday, May 23, 2024</b>  Location: <b>Hotel KOMPAS</b>	<b>Session 8: Global challenges in genetic selection for lower methane emission in ruminants</b>  Chair: Birgit Gredler- Grandl & Roel Veerkamp	Oral	<b>08:00</b>	Birgit Gredler-Grandl	Genetic selection for lower methane emission in dairy cattle – ready for implementation?
		Oral	<b>08:20</b>	Samuel Clark	Selecting for Lower Methane Beef Cattle – the current state of play
		Oral	<b>08:40</b>	Joanne Conington	International approach to reduce greenhouse gas emissions from sheep
		Oral	<b>09:00</b>	Elly Navajas	Developing livestock breeding strategies for enteric methane mitigation in developing countries – the case of Latin America
		Oral	<b>09:20</b>	Claudia Arndt	Overview on the Status-Quo and Challenges to Reduce Methane Emission from livestock systems in Africa
		Oral	<b>09:40</b>	Tao Ma	Methane emission from ruminants and current advances in mitigation strategies in China and India
		Panel	<b>10:00</b>	All speakers	<b>Panel discussion with audience interaction</b>
	<b>10:30 – 11:00 Coffee Break</b>				

Day / Location	Session / Chair	Oral / Poster	Time	Speaker	Topic
<b>Thursday, May 23, 2024</b>  Location: <b>ARNOLD I</b>	<b>Session 1b: Decision Support Tools of the Future – Promoting Sustainability Farm Management</b>  Chair: Robert H. Fourdraine	Oral	<b>11:00</b>	Asha Miles	Proposing a new US dairy herd sustainability metrics platform
		Oral	<b>11:17</b>	Joanna Newton	Stakeholder engagement to support the development of next generation decision support tools
		Oral	<b>11:34</b>	Arnaud Delpeuch	New algorithm to plan easier and faster weighing for French breeders and technicians
		Oral	<b>11:51</b>	Harm-Jan van der Beek	Different types of Benchmarking of international datasets from dairy farms with an unique data set.
		Oral	<b>12:08</b>	Mike Lynch	AgNav - a tool for putting climate action planning in farmers' hands
		Oral	<b>12:25</b>	Jasper van der Noord	The reality of on-farm hardware when providing tools of the future
	Oral	<b>12:42</b>	Mauro Fioretti	A tool to identify cows eligible for Selective Dry Cow Therapy (SDCT)	
	<b>13:00 – 14:30 LUNCH</b>				

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<b>Thursday, May 23, 2024</b>  Location: <b>ARNOLD II</b>	<b>Session 5: How to relate on farm sustainability and milk analysis?</b>  Chair: Josée Bordeleau	Oral	<b>11:00</b>	J.S. Clay	DecisiveDry – Decision support for proper use of Selective Dry Cow Therapy while enhancing dairy sustainability
		Oral	<b>11:20</b>	Kristina Linke	Dry-off treatment of dairy-cows – Methods to guide targeted antimicrobial use
		Oral	<b>11:40</b>	Clément Grelet	Can we get information on dairy cows chronic stress biomarkers using milk MIR spectra?
		Oral	<b>12:00</b>	Julie Leblois	HoliCow – a new transnational approach to get the best out of DHI data collection and FT-MIR spectral data
		Oral	<b>12:20</b>	Wim Schielen	Dutch Multifarm Study on Salmonella Infections in Dairy Herds and the use of a Postbiotic
		Poster	-	Liao Hsiao-Han	The effect of different brands of automatic milking systems on bulk tank milk bacterial and somatic cell counts
		Poster	-	Yi-Hsuan Chen	Comparative Dynamics of Milk Fatty Acids for Primiparous and Multiparous Holstein Cows in Early Lactation
	<b>13:00 – 14:30 LUNCH</b>				

Day / Location	Session / Chair	Oral / Poster	Time	Speaker	Topic
<b>Thursday, May 23, 2024</b>  Location: <b>KOMPAS</b>	<b>Session 11: Methane Emission-Free Communications: Genetics, Environmental, and Life Cycle Assessment Studies</b>  Chair: Maddalena Zucali & Raffaella Finocchiaro	Oral	<b>11:00</b>	Giulia Gislou	Environmental impact assessment of milk production: is a simplified tool possible?
		Oral	<b>11:20</b>	Coralia I. V. Manzanilla-Pech	Incorporating genetic information about methane into the Dutch Annual Nutrient Cycling Assessment
		Oral	<b>11:35</b>	Lorena Foschi	Machine Learning for Predicting Environmental Impacts in Intensive Livestock Farming, Overcoming Data Challenges
		Oral	<b>11:50</b>	Anouk van Breukelen	Towards breeding for lower enteric methane emissions of dairy cows in the Netherlands
		Oral	<b>12:00</b>	Lorenzo Benzoni	A holistic approach for monitoring the environmental sustainability of the Italian Holstein cattle population
		Oral	<b>12:10</b>	Trine Villumsen	Data Collection and Preparation for Genetic analysis of Methane Emissions in Danish Dairy Cattle
		Oral	<b>12:20</b>	Maria Frizzarin	Validation of previously developed methane emission prediction model using individual Irish cow milk mid-infrared spectra
		Oral	<b>12:30</b>	Phuong Ho	Predicting methane emissions of Australian dairy cows using mid-infrared spectroscopy from milk samples
		Oral	<b>12:40</b>	Boris J. Sepulveda	Reducing dairy cattle enteric methane emissions using rumen metagenome

		Pitch	12:51	Beat Bapst	The Swiss way of breeding dairy cattle for reduced methane: CH4COW
		Pitch	12:52	Kristina Linke	Breed4green – Recording of new phenotypes for methane emission and feed efficiency in Austrian dairy cattle
		Pitch	12:53	Rachelle Hergenhan	Impact of environmental conditions on GreenFeed access in feedlot steers
		Pitch	12:54	Michael Aldridge	Phenotyping more animals for methane is more important than precise measures of methane
		Pitch	12:55	Riccardo Negrini	Estimation of enteric methane emission of three dairy breeds in Italy by a Tier 2 approach
		Pitch	12:56	Marko Bizjak	Greenhouse gas emission intensity of milk production in three Slovenian sheep breeds
		Pitch	12:57	Marija Bric	Effect of housing system and season on methane and carbon dioxide concentration in a dairy cow barn
		Pitch	12:58	Enyew Negussie	Methane phenotyping with different methods and estimates of parameters for the Nordic Red cattle in Finland
		Pitch	12:59	Valentina Ferrari	Environmental impact of growing young stock using LCA approach: an example with data recorded at ANAFIBJ genetic centre
	<b>13:00 – 14:30 LUNCH</b>				

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<b>Thursday, May 23, 2024</b>  Location: <b>ARNOLD I</b>	<b>Session 3: Factors Affecting the Accuracy of the Recording Day</b>  Chair: Steven Sievert	Oral	<b>14:30</b>	Kirsi Leppikorpi	Factors affecting the success of test milking and milk sampling in milk recording on Finnish AMS-farms
		Oral	<b>14:45</b>	Christian Ammon	Possibilities for estimating milk carryover during milk sampling in automatic milking systems (AMS) in field tests, by ICAR test centers
		Oral	<b>15:00</b>	Justin Frankfort	The carry-over contamination of milk recording samples; learning from the past to improve sample quality in the future.
		Oral	<b>15:15</b>	Matthew Thompson	From Milk Recorder to Bulk Tank: Understanding The Factors Affecting Consistency In Fat and Protein Reporting
		Oral	<b>15:30</b>	Xiaolin Wu	Analysis of Factors Affecting Daily Milk Yields: An Initial Case Study in an Automatic Thrice-Milking Farm
		Oral	<b>15:45</b>	Y. H. Yeh	Assessing the Impact of Automatic Milking Systems on Milk Free Fatty Acid Content in Taiwan
	<b>16:00 – 16:30 Coffee Break</b>				

Day / Location	Session / Chair	Oral / Poster	Time	Speaker	Topic
<b>Thursday, May 23, 2024</b>  Location: <b>ARNOLD II</b>	<b>Session 6:</b> Evaluation and presentation of new parameters in herd management for dairy farms  Chair: Kai Kuwan & Betka Logar	Oral	<b>14:30</b>	Debora Santschi	Transition Management Index: a new tool to assess the transition period success
		Oral	<b>14:45</b>	Laura Monica Dale	Predicting dairy cattle heat stress indicators using machine learning and mid infrared spectral data
		Oral	<b>15:00</b>	Florian Grandl	Identifying mastitis earlier by combining test day data and AMS sensor data
		Oral	<b>15:15</b>	Debora Santschi	Evolution of mature size, mature production and the relative maturity and performance during the first two lactations of DHI registered Holsteins in Canada
		Oral	<b>15:30</b>	Iliia Rukin	Application of machine learning methods to control the milk samples analysis results reliability
		Poster / Pitch	<b>15:45</b>	Laura Monica Dale	ResKuh - development of tools, diagnostics and recommendations for better herd management
		Poster / Pitch	<b>15:48</b>	Yi-Hsin Yeh	Assessing the Impact of Automatic Milking Systems on Milk Free Fatty Acid Content in Taiwan
		Poster / Pitch	<b>15:51</b>	Rafael Guimarães Vizoná	Challenges and Opportunities in Sustainable Genetic Improvement of Zebu Dairy Farming
		Poster / Pitch	<b>15:54</b>	Maddalena Zucali	Simulation of natural lighting contribution to the illuminance of the milker's visual task area
	<b>16:00 – 16:30 Coffee Break</b>				

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<b>Thursday, May 23, 2024</b>  Location: <b>KOMPAS</b>	<b>Session 7:</b> Breeding for agroecological transition in sheep and goats  Chair: Jean-Michel Astruc & Mojca Simčič	Oral	<b>14:30</b>	Birgit Fuerst-Waltl	Introduction of a genetic evaluation for longevity in Tyrol Mountain sheep
		Oral	<b>14:45</b>	Jean-Michel Astruc	Breeding for resistance to parasites in French dairy sheep: towards an increase in resilience and sustainability of sheep dairying
		Oral	<b>15:00</b>	Pera Herold	Breeding dairy goats for organic farming – sustainable and animal-friendly
		Oral	<b>15:15</b>	Georgios Arsenos	Standard operating procedures for efficient management of small ruminant farms
		Oral	<b>15:30</b>	Pera Herold	Conformation recording as auxiliary trait for functionality and fitness in dairy goats
		Oral	<b>15:45</b>	Lucia Trapanese	Assessment of Mediterranean buffalo lactation curves shape using lactation models
		Pitch	<b>16:00</b>	Gregor Šen	The estimation of variance components for litter size in two Slovenian sheep breeds
Pitch	<b>16:02</b>	Yueh Tung Chen	Early Detection of Multifetal Pregnancies in Alpine Goats Using Pregnancy-Associated Glycoprotein (PAG) Concentrations in Milk		
<b>16:00 – 16:30 Coffee Break</b>					

Day / Location	Session / Chair	Oral / Poster	Time	Speaker	Topic
<b>Thursday, May 23, 2024</b>  Location: <b>ARNOLD I</b>	<b>Session 9: Genomic's impact on Livestock Sustainability</b>  Chair: Gerben de Jong	Oral	<b>16:30</b>	Peter Dovč	Milk cell transcriptome opens a new dimension in the mammary gland biology research
		Oral	<b>16:45</b>	Mark Waters	Unlocking Genetic Potential: The National Genotyping Programme for Ireland's Cattle Herd
		Oral	<b>17:00</b>	Marija Špehar	Opportunities and obstacles of the use of genomic data in sheep breeding – large versus small populations
		Oral	<b>17:15</b>	Yaniv Lavon	Estimating the Effect of the Kappa Casein Genotype on Milk Coagulation Properties in Israeli Holstein Cows
		Oral	<b>17:30</b>	Asha Miles	Genetic and genomic evaluations of quantitative milking speed and duration phenotypes
		Poster / Pitch	<b>17:45</b>	Kacper Żukowski	The genetic trends for beta and kappa casein identified in the Polish Holstein-Friesian population
		Poster / Pitch	<b>17:48</b>	Jiansheng Qiu	Igenity® BeefxDairy: A genomic tool for identifying genetic merit of Beef on Dairy cross calves
		Poster / Pitch	<b>17:51</b>	Ana Encina Martínez	Design of a medium density chip (microarray) for the genetic management of Pura Raza Española horses and related breeds.

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<b>Thursday, May 23, 2024</b>  Location: <b>ARNOLD II</b>	<b>Session 4: Value Adding to Electronic Identification</b>  Chair: Ken Evers	Oral	<b>16:30</b>	Kenneth Evers	More than just a tag – Maximizing RFID!
		Oral	<b>17:00</b>	Anthony Browne	Artificial Intelligence meets Animal Identification
			<b>17:30</b>	Giuseppe Todde	Advancements in combining electronic animal identification and augmented reality technologies in digital livestock farming

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<b>Thursday, May 23, 2024</b>  Location: <b>KOMPAS</b>	<b>Session 10: New approaches in the field of functional traits for management and breeding</b>  Chair: Christa Egger Danner & Luiz Brito	Oral	<b>16:30</b>	Ilka Klaas	Improving animal health and welfare by using sensor data in herd management and dairy cattle breeding – a joint initiative of ICAR and IDF
		Oral	<b>17:00</b>	Aashish Gyawali	Body Conditions Scoring – first proposal for recommendations for recording and use for herd management, genetic improvement and welfare assessment.
		Oral	<b>17:15</b>	Tomas Klingström	A Gigacow example, weather data in longitudinal studies on heat stress
		Oral	<b>17:30</b>	Caspar Matzhold	Evaluating Farm Management Practices: A semi-supervised clustering approach to assess the impact of technologies

		Oral	17:45	Maxence Bruyas	Performance monitoring in the cattle sector innovates with 3D imagery
		Oral	18:00	Fiona Louise Guinan	Calculating resilience indicators in US Holstein cows using pen-level data
		Poster / Pitch	18:15	Lorenzo Benzoni	HappyFeet: Hoof Health Project in Italian Holstein cattle
		Poster / Pitch	18:18	Joanna Kwaśniewska	Selection of cows at risk of subclinical ketosis as part of the milk recording of dairy cattle in Poland in 2014-2022
		Poster	-	Ivanka Hadzic	Cow nutrition and hoof care in extensive dairy farming in two regions in republic of Serbia

Day / Location	Session / Chair	Oral / Poster	Time	Speaker	Topic
Thursday, May 23, 2024	Session 12: Resilience for Dairy	Poster		Jocelyn Fagon	Resilience for dairy (R4D), a journey towards sustainable farming
	Chair: Marija Klopčič	Poster		Marija Klopčič	Dairy sector in Europe: needs and solutions

Day / Location	Session / Chair	Time	Speakers	Topic
<p><b>Friday, May 24, 2024</b></p> <p>Location: <b>ARNOLD I/II</b></p>	<p><b>Session:</b> <b>ICAR 2024 Wrap up meeting</b></p> <p><b>Chair:</b> Daniel Lefebvre</p>	<p><b>08:00 – 10:30</b></p>	<p>Matt Shaffer &amp; Jo Newton, Robert H. Fourdraine, Josée Bordeleau, Birgit Gredler-Grandl and Roel Veerkamp, Maddalena Zucali and Raffaella Finocchiaro, Steven Sievert, Kai Kuwan, Jean-Michel Astruc, Gerben de Jong Ken Evers, Christa Egger Danner and Luiz Brito</p>	<p><b>ICAR 2024 Wrap up meeting</b></p>
		<p><b>10:30 – 11:00 Coffee Break</b></p>		