

## Newsletter, Issue December 2024

### Welcome from the Chair



2024 was yet another busy year for the WISDOM Forum. We continued championing early career women in OR through our Young Women for OR (YW4OR) visibility initiative, hosting four webinars which are available to watch on our [YouTube channel](#). We were delighted to meet in person at a satellite event of EURO 2024 in Copenhagen where we hosted a workshop on Networking for career progression, and ran special sessions for the YW4OR to promote their research agendas. We wrapped up the year with a

special webinar of women in OR groups across the world.

We were delighted to share our research on gender equality opportunities and challenges for the OR community in our first peer-reviewed paper. We are developing research projects at the gender/OR nexus aiming to uncover gender dimensions in OR research and practice.

We invite the entire EURO community including EURO Working Groups and National Societies to endorse the WISDOM objectives to support, empower, and encourage the participation of all genders in Operations Research and Management Science within EURO. With your support, OR can be one of the most welcoming disciplines for women to develop a career.

*Paula Carroll (WISDOM Chair, December 2024)*

### Who we are

**WISDOM** stands for **Women In Society: Doing Operational Research and Management Science**.

WISDOM is a EURO forum that was founded in 2020 to support, empower, and encourage the participation of all genders in Operations Research and Management Science within EURO. In particular, it aims to promote inclusivity by the following actions:

- Advise/make recommendations/highlight best practices to the EURO executive on issues facing women in OR. Such guidelines can be disseminated to EURO member societies and Working Groups. Positive progress, outcomes and activities of member societies can serve as a template for other member societies;
- Promote championing, networking, and mentoring, particularly of women at the early stages of their career in OR;
- Promote a conversation around how OR can be utilized to help create a diverse and inclusive future.

The **WISDOM Forum Organizing Committee (OC)** includes representatives from 12 European OR societies (Austria, Denmark, France, Greece, Ireland, Italy, Portugal, Slovenia, Spain, Sweden, Turkey, and the United Kingdom). We invite representatives from other EURO national societies to contact us.

The Chair of the WISDOM OC is **Dr Paula Carroll** and the Secretary is **Dr Annunziata Esposito Amideo**, both from University College Dublin, Ireland.



## WISDOM subcommittees

The EURO WISDOM Forum operates through three subcommittees: the Research Subcommittee, the Events Subcommittee, and the Public Relations and Dissemination (PR-) Subcommittee. Following the main news of this year from them!

### Research Subcommittee

The WISDOM Research Subcommittee aims to:

- Specify gender equality research questions of interest to, or answerable by the broadest definition of the OR discipline;
- Identify / gather data sources in line with all GDPR and relevant ethics guidelines;
- Identify academic and other publication opportunities.

Following the WISDOM White Paper in 2020, the WISDOM Research Subcommittee has published their first peer-reviewed publication in 2024. The paper represents supporting evidence for gender issues within the OR discipline. In particular, it contributes with: (i) a systematic literature review on the new gender/OR nexus and analyzes the history of OR through a gender lens; (ii) a survey conducted during the EURO2021 conference to map the EURO OR community, also from a gender perspective; and (iii) a decision tree reflecting on predictors for barriers to participation in OR. The paper has been the first-ever discussion paper of the Journal of the Operational Research Society (JORS, ABS 3\*) as part of a special issue celebrating the 75th anniversary of the UK Operational Research Society. As a discussion paper, it has been paired with a commentary paper with insightful opinion from senior members of the OR community at large.

The authors (Assoc Prof Paula Carroll, EURO WISDOM Forum Chair and Asst Prof Annunziata Esposito Amideo, EURO WISDOM Forum Secretary) have presented the paper at a dedicated JORS webinar as part of the research dissemination. Both discussion and commentary papers are available for open access, citation, and DOIs as follows.

**Discussion paper:** Carroll, P. and Esposito Amideo, A., 2024. Gender equality: opportunities and challenges for the OR community. *Journal of the Operational Research Society*, 75(6), pp.1011-1029. DOI: <https://doi.org/10.1080/01605682.2024.2343343>

**Commentary paper:** Albert, L. A., Amideo, A. E., Bennell, J., Brailsford, S., Carroll, P., Kaufman, R., ... Speranza, M. G. (2024). Commentary on Carroll & Esposito Amideo "Gender Equality: Opportunities and challenges for the OR community." *Journal of the Operational Research Society*, 75(6), 1030–1042. [doi.org/10.1080/01605682.2024.2344969](https://doi.org/10.1080/01605682.2024.2344969)

## Public Relations & Dissemination Subcommittee (PR subcom)

The WISDOM PR subcommittee is responsible for disseminating information about future events and preparation of reports related to the work of the forum. It is in permanent contact with EURO, national OR communities, and some other organizations. The Committee publishes and edits information on the EURO official [webpage](#) and in [LinkedIn](#) group.

The main channels of the committee are the EURO, WISDOM mailing lists, and the mailing lists of the national OR societies, as well as

- the LinkedIn page <https://www.linkedin.com/groups/12400031/>,
- the X- (exTwitter) page [https://x.com/euro\\_wisdom](https://x.com/euro_wisdom), and
- the Youtube channel <https://www.youtube.com/@euroWISDOMforum>

## Events Subcommittee

The WISDOM Events Subcommittee aims to organize talks/networking/mentoring/championing events to support, empower, and encourage the participation of all genders in Operational Research within EURO. In particular, it aims to promote inclusivity through the following actions:

- Organise championing, networking, and mentoring events, particularly for women at the early stages of their career in OR;
- Promote a conversation around how OR can be utilized to help create a diverse and inclusive future.



## YW4OR Initiative

The Young Women for Operational Research (YW4OR) initiative, a visibility programme under the WISDOM Forum, continues its mission of shining a spotlight on exceptional early-career women in OR. Whether making strides in academia or driving innovation in the industry, these talented individuals embody the future of the field. Each year, twelve outstanding YW4OR awardees are selected, with their work highlighted through EURO channels. Additionally, awardees benefit from valuable networking and mentoring opportunities, fostering connections that support their professional growth.

As the YW4OR initiative continues to grow, it highlights not only the achievements of its awardees but also the vibrant, international community of young women advancing the field of Operational Research. We look forward to seeing the impact these awardees will have on OR and beyond.

## The 2024 awardees of YW4OR

For 2024, the initiative received 39 applications from 13 countries, reflecting the growing recognition of OR and the talent it attracts worldwide. Notably, 14 applicants were in the final year of their PhD studies, with 3 earning a place among the 12 awardees.

The applications spanned a diverse geographic range, with the following countries represented: Belgium, France, Germany, India, Iran, Ireland, Italy, Netherlands, Portugal, Spain, Switzerland, Turkey, and the United Kingdom. France, Italy, and Turkey stood out with the highest number of applicants, each contributing more than six submissions.

### The 2024 awardees are:

- Yasmine Beck, *France*
- Valentina Bonomi, *Portugal*
- Anna Livia Croella, *Italy*
- Dilay Aktas Dejaegere, *Belgium*
- Özlem Mahmutogulları, *Netherlands*
- Maria Meneses, *Portugal*
- Marta Monaci, *Italy*
- Alice Raffaele, *Italy*
- Jasone Ramírez-Ayerbe, *Spain*
- Yue Su, *France*
- Xiaoyan Xu, *UK*
- Zehranaz Varol, *Turkey*



*Photos of the YW4OR 2024 awardees in order of the list:  
from left to right and from top to bottom*



## WISDOM Events in 2024

### WISDOM Webinars

The main purpose of the WISDOM virtual webinars is to present to the Operational Research (OR) community the work of the awardees of the WISDOM Young Women for OR initiative (YW4OR) and to use these thematic meetings to discuss the state of research in relevant areas of OR. Webinars are held via Zoom and are open to all members of the OR community. A subject matter expert is invited to comment on the YW4OR presentations and reflect on potential future research directions. Webinars are planned by the Events subcommittee under the guidance of the WISDOM chairs.

The following is a more detailed description of all webinars that have taken place in 2024 is provided. Feel free to check them online, as all WISDOM webinars are recorded and available on the WISDOM [YouTube channel](#).

#### **March 22, 2024: YW4OR Webinar on Location and Routing**

The event featured insightful presentations from YW4OR awardees Afaf Aloulal (*Multi-period single-allocation hub location-routing*), Hannah Bakker (*Pattern recognition meets branch-and-bound: Regional branch variable selection for the Capacitated Facility Location Problem*), and Paula Segura Martinez (*Solving the Rural Postman Problem with a fleet of drones*). The session was moderated by WISDOM Chair Dilek Gunnec, Ozyegin University. Prof. Sibel Alumur Alev from the University of Waterloo provided an expert overview of key challenges in location and routing, highlighting promising future research directions inspired by the YW4OR presentations.

#### **May 17, 2024: YW4OR Webinar on Machine Learning and Operations Management**

The event opened with a brief welcome and guidelines by Vanesa Guerrero from Universidad Carlos III de Madrid, Spain. Three YW4OR awardees gave insightful presentations: Shany Azaria (*Consequences of Long Lead Time – Empirical Evidence of Adverse Effect of Delay on Effort in Court Systems*), Fatima Ezzahra Achamrah (*Solving inventory routing with transshipment and substitution under dynamic and stochastic demands using genetic algorithm and deep reinforcement learning*), and Kseniia Kurishchenko (*Explainable and fair machine learning by means of mathematical optimization*). Prof. Coralia Cartis from the University of Oxford provided an overview of current challenges and synergies in the field, offering valuable insights to conclude the session.

#### **September 13, 2024: YW4OR Webinar on Operations Management**

Prof. Ana Paula Barbosa-Póvoa from the University of Lisbon, Portugal, opened the session with introductions and webinar etiquette. The webinar showcased three engaging YW4OR presentations: Lucía Bautista Bárcena (*Maintenance modeling in systems subject to multiple degradation*), Qin Zhou (*When should suppliers adopt augmented reality technology in a dual-channel supply chain*), and Sirma Karakaya (*Design of a Centralized Alliance-Based Coordination Mechanism for Renal Relief*). Prof. Stefan Nickel from Karlsruhe Institute of Technology, Germany, concluded the event with a thought-provoking discussion on current challenges and potential synergies in operations management.

**November 14, 2024: YW4OR Webinar on Latest Advances in Mathematical Optimization**

Prof. Dolores Romero Morales opened the event. The session featured three insightful YW4OR presentations: Kübra Tanınmış (*Benders decomposition algorithms for minimizing the spread of harmful contagions in networks*), Emilia Grass (*A Machine Learning Approach to deal with Ambiguity in the Humanitarian Decision Making*), and Mariana Mesquita da Cunha (*A framework for computational efficiency and user interaction in multi-objective optimization*). Prof. Andrea Lodi concluded the webinar with an overview of current challenges and synergies in mathematical optimization, offering valuable perspectives to inspire future research.

**The Winter event**

The traditional virtual Winter Event of WISDOM was held on December 6, 2024 in collaboration with other women in OR networks: WISDOM, WORAN, Women in OR/MS, Women in Latin American OR Societies and Tunisian Women in OR. More than 45 participants from these networks participated in the webinar which took place in a festive and informal atmosphere. Each society has introduced their history, mission, activities and social media channels. Ruth Kaufman led a fun 10-minute game to test the knowledge on some interesting facts from the history of the women's movement in Math and OR. The WISDOM Forum announced the new recipients of the YW4OR award for 2024.

**Today's topic: Location and Routing**

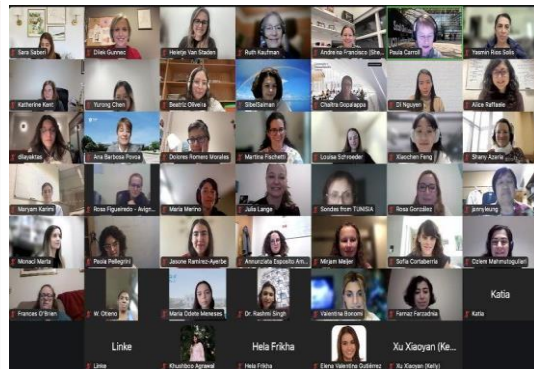
**Dr. Sibel Akınur Akın**, University of Waterloo, Canada

Dr. Akınur Akın is a tenured Associate Professor in the Department of Management Science and Engineering at the University of Waterloo. She received her Ph.D. degree in Industrial Engineering from Bilkent University in 2009 and subsequently served as a Post-Doctoral Researcher at the Institute of Operations Research at Karlsruhe Institute of Technology, Germany. Before joining the University of Waterloo in 2014, she worked as an Assistant Professor at TOBB University of Economics and Technology in Ankara. In 2012, she received the Chuck ReVelle Rising Star Award from the Institute for Operations Research and the Management Sciences (INFORMS) as a recognition of her research accomplishments in Location Analysis. In 2020, she received an Outstanding Performance Award at the University of Waterloo and in 2023, she was awarded the Engineering Research Excellence Award in recognition of her outstanding research accomplishments in the Faculty of Engineering. She served as a Board Member for the EURO Working Group on Location Analysis (EWGLA) and as the President of the INFORMS Section on Location Analysis (SOLA). She is the Founding President of the Transportation & Logistics Special Interest Group of the Canadian Operational Research Society (CORS) and also serves as a Co-Editor for CORS. She currently serves as the Senior Associate Editor for the journal *Socio-Economic Planning Sciences*, an Associate Editor for the journals *Transportation Science* and *Service Science*, an Editorial Board Editor for *Transportation Research Part B*, and an Editorial Board Member for *Computers & Operations Research*. Her research projects were funded by the Scientific and Technological Research Council of Turkey (TUBITAK), including a "National Young Researchers Career Development Grant", the Natural Sciences and Engineering Research Council of Canada (NSERC), and Mathematics of Information Technology and Complex Systems (MITACS). She guest-edited four separate special journal issues to date and organized clusters, streams, and sessions at several international conferences. Her research interests lie in optimizing facility locations and logistics operations, in particular, hub location, hub network design, supply chain and reverse logistics network design.

**Afaf Aloulal**  
Multi-period single-allocation hub location-routing

**Hannah Bakker**  
Pattern recognition meets branch-and-bound: Regional branch variable selection for the Capacitated Facility Location Problem

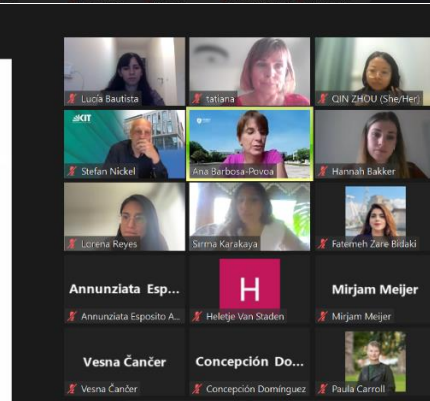
**Paula Segura Martinez**  
Solving the Rural Postman Problem with a fleet of drones




**Design of a Centralized Alliance Based Coordination Mechanism for Renal Relief**

Sırma Karakaya<sup>a,b</sup>, Burcu Balçık<sup>c</sup>, Evrim Didem Güneş<sup>c</sup>  
Ozyegin University (a) TED University (b), Koc University (c)  
Türkiye

Supported by TUBITAK with #219M356



Screenshots from the YW4OR webinars in 2024



## WISDOM at EURO 2024

At EURO 2024 conference in Copenhagen, Denmark, June 30 to July 3, 2024, WISDOM not only organized the Young Women for OR stream to spotlight the work and the career of emerging young women, but also gave space for female networking at the EURO WISDOM lunch followed by a special session entitled "Networking as a tool for career progression".



Photos of WISDOM members at the conference EURO 2024

## The WISDOM panel session on networking at EURO 2024

(Based on the report "Learn how to network at" by Martina Fischetti)

The panel "Networking as a tool for career progression" at EURO 2024 was organized by Paula Carroll and Annunziata Esposito Amideo and hosted the talks Prof. Anna Nagurney and leadership coach Margaret Collins. Over 40 participants engaged in this session.

Prof. Nagurney, a female role-model in OR, emphasized the importance of networking as fundamental to build our own confidence and expertise, and enrich ourselves through our common intellectual curiosity. Through some examples in her career, she showed how a network (with colleagues but also in general in our life) can unveil new unexpected opportunities. She also underlined the importance of the mentor-student relationship, which can help both to grow their network and provide role models. The main recommendation that Prof. Nagurney left was promoting our work outside of the research community, through social media and journalists to have one's research make a greater impact.

The second part of the panel session was given by Margaret Collins, a life coach, who provided the audience with some practical tips and advices on how to grow and maintain a network, and set the participants a challenge to grow their networks at EURO 2024.



*Some photos from the WISDOM workshop on Networking*



## The WISDOM YW4OR special sessions at EURO 2024

WISDOM ran four YW4OR special sessions at EURO 2024 which offered the YW4OR awardees of 2022 and 2023 an opportunity to highlight their research objectives and their work in progress.

The special sessions were chaired by WISDOM committee members Dilek Gunnec, Heletjé van Staden, Marcella Samà and Paula Carroll. This gave all awardees an opportunity to present themselves and keep us posted not just on their research, but also on their experience, challenges and achievement as young members of our community!



*Top left: one of the WISDOM session at EURO2024.  
Bottom left: the WISDOM chair, Prof. Paula Carroll with the YW4OR trophy.  
To the right: the YW4OR awardees of 2022 and 2023*



## Other WISDOM activities

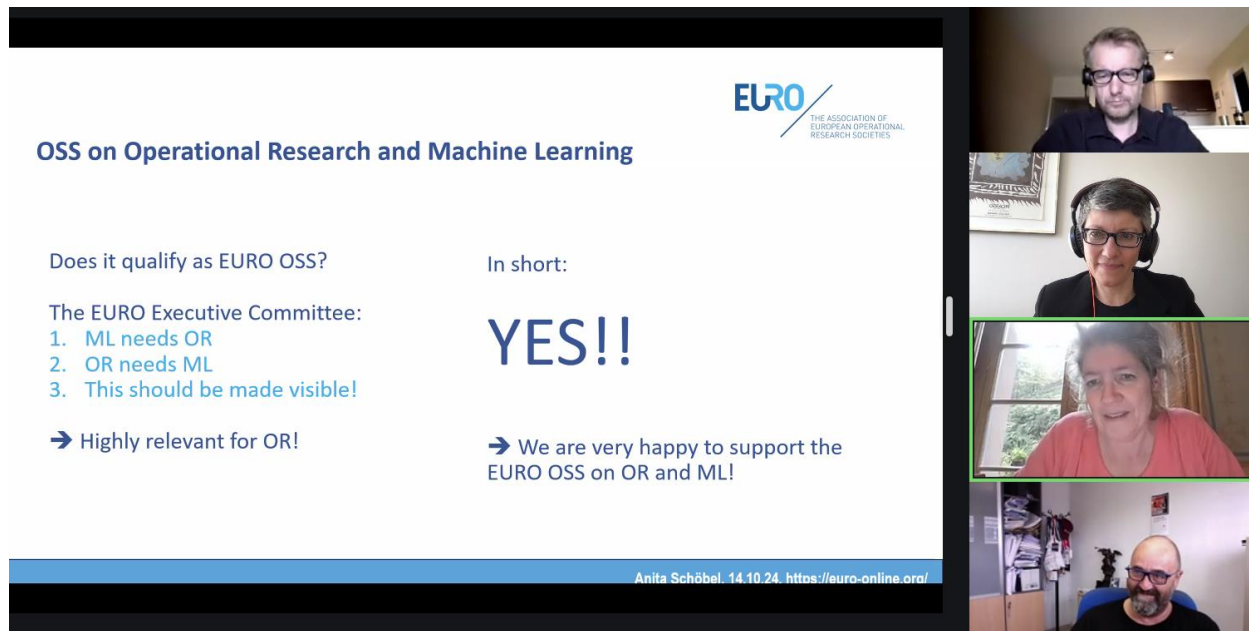
### WISDOM at Operational Research x Machine Learning seminars

WISDOM has been part of two online seminar sessions to promote the work of three young female in the intersection of Operational Research and Machine Learning,

- [Machine Learning NeEDS Mathematical Optimization](#), on April 29, 2024
- [EURO Online Seminar Series on Operational Research and Machine Learning](#), on November 4, 2024

Organized by Professors Dolores Romero Morales, Denmark, and Emilio Carrizosa, Spain, with the collaboration of PhD students Nuria Gómez-Vargas, Seville, and Thomas Halskov, Denmark.

Professors Paula Carroll and Dilek Gunnec opened the session to introduce the EURO WISDOM Forum, its mission and organized activities were presented to the audience. Then, the young researchers presented their works: Nuria Gómez-Vargas, Spain, on "A predict-and-optimize approach to profit-driven churn prevention"; Maria Eduarda Pinheiro, Germany, on "Mixed-Integer Quadratic Optimization and Iterative Clustering Techniques for Semi-Supervised Support Vector Machines"; Bahar Taskesen, Switzerland, on "Distributionally Robust Linear Quadratic Control"; Sofie Goethals, USA, on "K-anonymous counterfactual explanations"; Esther Julien, The Netherlands, on "Neur2BiLO: Neural Bilevel Optimization"; Qimeng Yu, Canada, on "On constrained mixed-integer DR-submodular minimization".



Screenshot from the Opening session with (from top to bottom) Prof Baesens from KU Leuven, Prof Dolores Romero Morales, the (now former) President of EURO Prof Anita Schöbel, and Prof Emilio Carrizosa.



*WISDOM wishes all our readers and subscribers a Happy New 2025!*





## Join WISDOM!

### *Become an ordinary Member of WISDOM*

We invite the **members of National OR Societies** to participate and support the WISDOM objectives to empower and encourage participation of all genders in Operational Research within EURO. Become an ordinary member of WISDOM by clicking [here](#).

### *Newsletter Subscription*

Get in touch to find out more and stay tuned on our channels for updates! In case you are interested in receiving future news and announcements from the **EURO WISDOM Forum**, please contact us or join our dissemination channels.

### *Newsletter Editor*

**Katerina Papapostolou**

*National Technical University of Athens*

and **WISDOM PR Subcommittee** (Special thanks to Marcella Sama)



Visit our website [here](#)



Contact us at: [wisdom@euro-online.org](mailto:wisdom@euro-online.org)



Follow us in [LinkedIn](#)

**STAY TUNED FOR MORE NEWS!**