

## Semih Yalçındağ

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CONTACT INFORMATION	Yeditepe University, 26 Agustos Yerlesimi, Istanbul, Turkey	<i>Tel:</i> +90 216 578 0406 <i>E-mail:</i> semih.yalcindag@yeditepe.edu.tr <a href="http://sye.yeditepe.edu.tr/member/semih-ylcindag/">http://sye.yeditepe.edu.tr/member/semih-ylcindag/</a>
RESEARCH INTERESTS	Health Care Services Management Service Operations Management Operations Research Deterministic and Stochastic Optimization Applications Supply Chain and Logistics Applications	
EDUCATION	<b>Politecnico di Milano</b> , Milan, Italy <b>Ecole Centrale Paris</b> , Paris, France Joint Ph.D., Industrial Engineering, <b>07/2014</b> <ul style="list-style-type: none"><li>• Thesis: “Human Resource Planning Models for Home Health Care Services: Assignment and Routing Problems”</li><li>• Advisors: Andrea Matta (Politecnico di Milano) and Evren Sahin (Ecole Centrale Paris)</li></ul> <b>Sabanci University</b> , Istanbul, Turkey M.S., Industrial Engineering, <b>08/2010</b> <ul style="list-style-type: none"><li>• Thesis: “Modeling Sustainable Traffic Assignment Policies with Emission Functions and Travel Time Reliability”</li><li>• Advisor: Nilay Noyan</li></ul> <b>Yeditepe University</b> , Istanbul, Turkey B.S., Systems Engineering, <b>06/2008</b> <b>California State University</b> , Eastbay, California USA B.S., Industrial Engineering, <b>09/2006-01/2007</b> <ul style="list-style-type: none"><li>• Exchange Student</li></ul>	
ACADEMIC EXPERIENCE	<b>Yeditepe University</b> , Istanbul, Turkey <i>Assistant Prof. at the Department of Industrial and Systems Engineering</i> <b>09/2015 - Current</b> <b>HEC Montréal</b> , Montréal, Canada <b>CIRRELT, Université de Montréal</b> , Montréal, Canada <i>Postdoctoral Researcher at the Department of Management Sciences</i> <b>09/2014 - 08/2015</b> <b>Politecnico di Milano</b> , Milan, Italy <i>Postdoctoral Researcher at the Mechanical Engineering Department</i> <b>07/2014 - 09/2014</b> <b>Shanghai Jiao Tong University</b> , Shanghai, China <i>Visiting Researcher at the Industrial Engineering Department</i> <b>05/2014 - 06/2014</b>	

**Politecnico di Milano**, Milan, Italy  
**Ecole Centrale Paris**, Paris, France  
*Research Assistant*

**12/2010 - 07/2014**

**Sabanci University**, Istanbul, Turkey  
*Teaching and Research Assistant*

**09/2008 - 08/2010**

HONORS AND  
AWARDS

HEC Montréal-CIRRELT, Postdoctoral Research Fellowship,	09/2014-09/2015
Politecnico di Milano, Postdoctoral Research Fellowship,	07/2014-09/2014
Politecnico di Milano-Ecole Centrale Paris, Ph.D. Research Fellowship,	12/2010-07/2014
The Scientific Technological Research Council of Turkey, Research Fellowship,	09/2008-08/2010
Sabanci University, Full Scholarship,	09/2008-08/2010
Yeditepe University, Scholarship,	08/2003-06/2008

PUBLICATIONS-  
JOURNAL

Bas, S., Carello, G., Lanzarone, E., Yalcindag, S., 2016. An Appointment Scheduling Framework to Balance the Production of Blood Bags from Donation, *European Journal of Operational Research*, under second revision.

Bas, S., Carello, G., Lanzarone, E., Yalcindag, S., 2016. Unaddressed Problems and Research Perspectives in Scheduling Blood Collection from Donors, *Production Planning & Control*, under second revision.

Cissé, M., Yalcindag, S., Kergosien, Y., Sahin, E., Lenté, C., Matta, A., 2016. OR problems related to Home Health Care: A Review of Relevant Routing and Scheduling Problems, *Operations Research for Health Care*, under second revision.

Yalcindag, S., Cappanera, P., Scutella, M.G., Matta, A., Sahin, E., 2016. Pattern-Based Decomposition Approaches to the Assignment and Routing Problems in Home Health Care Services, *Computers and Operations Research*, 73, 12-26.

Yalcindag, S., Matta, A., Sahin, E., Shanthikumar, J.G., 2015. Assignment Problem in Home Health Care: A Data-Driven Method to Estimate Travel Times of Operators, *Flexible Services and Manufacturing Journal*, 28 (1): 304-335.

Kolak, O.I., Birbil, S.I., Feyzioglu, O., Noyan, N., Yalcindag, S., 2013. Using Emission Functions in Modeling Environmentally Sustainable Traffic Assignment Policies, *Journal of Industrial and Management Optimization*, 9 (2): 341-363.

PUBLICATIONS-  
CONFERENCE

Yalcindag, S., Matta, A., 2017. A Two-Stage Approach for the Home Health Care Assignment and Routing Problems with Time Windows, in *Springer Proceedings in Mathematics and Statistics, Health Care Systems Engineering for Scientists and Practitioners*, Forthcoming.

Lahrichi, N., Lanzarone, E., Yalcindag, S., 2017. Decomposition for the Home Health Care Assignment and Routing Problems, in *Springer Proceedings in Mathematics and Statistics, Health Care Systems Engineering for Scientists and Practitioners*, Forthcoming.

Bas, S., Carello, G., Lanzarone, E., Ocaik, Z., Yalcindag, S., 2016. Management of Blood Donation System: Literature Review and Research Perspectives, in *Springer Proceedings in Mathematics and Statistics, Health Care Systems Engineering for Scientists and Practitioners*, Eds. Matta A., Sahin E., Li J., Guinet A., and Vandaele N. J., Volume 169, pp.121-132 (Refereed).

Yalcindag, S., Matta, A., Sahin, E., Shanthikumar J. G., 2014. A Two-Stage Approach for Solving Assignment and Routing Problems in Home Health Care Services, in Springer Proceedings in Mathematics and Statistics, Eds. Matta A., Li J., Sahin E. and Fowler J., Health Care Systems Engineering, Chapter 4, pp.47-59 (Refereed).

Yalcindag, S., Matta, A., Sahin, E., 2012. Operator Assignment and Routing Problems in Home Health Care Services, in: Proceedings of CASE 2012, Seoul, Korea, pp. 325-330 (Refereed).

Yalcindag, S., Matta, A., Sahin, E., 2011. Human Resource Scheduling and Routing Problem in Home Health Care Context: A Literature Review, in: Proceedings of ORAHS 2011 (37th Conference on Operational Research Applied to Health Services), Cardiff, UK, pp. 8-22.

PUBLICATIONS-  
TECHNICAL  
REPORTS

Bas, S., Carello, G., Lanzarone, E., Yalcindag, S., 2016. An appointment scheduling framework to balance the production of blood bags from donation. Technical report, IMATI-CNR.

Yalcindag, S., Matta, A., Sahin, E., 2012. Human Resource Scheduling and Routing Problems in Home Health Care Context: A Literature Review. Technical report, Laboratoire Genie Industriel, Ecole Centrale Paris.

PROJECTS

Management of the Blood Collection System  
*Associazione Volontari Italiani Sangue (AVIS), 09/2014- Current*  
Joint work with E. Lanzarone (National Research Center of Italy), and G. Carello (Politecnico di Milano)

TUBITAK 1001 Project, Developing Traffic Assignment Optimization Models and Solution Methods for Establishing Sustainable Urban Transportation Policies (*109M137*)  
*The Scientific Technological Research Council of Turkey (TUBITAK), 09/2009- 08/2010*

- Involved as the Graduate Student

GRADUATE  
STUDENTS

Seda Bas, (Ph.D.), *An Appointment Scheduling Framework to Balance the Production of Blood Units from Donation*, co-advised with E. Lanzarone, IMATI - National Research Center of Italy (CNR), 09/2014 - Current.

Christophe Lempereur, (MS.), *Home Health Care and Traveling Salesman Problem*, co-advised with E. Sahin, Ecole Centrale Paris, 04/2012.

COURSES TAUGHT

ISE 302 - Systems Engineering Methods  
ISE 367 - Scheduling  
ISE 427 - Mathematical Modeling  
ISE 432 - Decision Analysis  
ISE 492 - Graduation Project

UNIVERSITY  
SERVICE

Erasmus Coordinator for ISE program, 02/2016 - Current.

PROFESSIONAL  
ACTIVITIES

**Affiliations:** Member of The European Working group on Operational Research Applied to Health Services (ORAHS)

**Organization and Scientific Committees:** 41th Conference on Operational Research Applied to Health Services (ORAHS 2015), Montréal, Canada, July 2015

- Member of the scientific and organization committees

International Conference on Health Care Systems Engineering (HCSE 2013), Milan, Italy, May 2013

- Member of the scientific and organization committees

30th National Congress of Industrial Engineering Operations Research (YA/EM), Istanbul, Turkey, June 2010

- Member of the organization committee

**Referee for scientific journals:** International Journal of Production Research (IJPR), Flexible Services and Manufacturing (FSM), Operations Research for Health Care (ORHC), Computers and Industrial Engineering (CAIE), International Journal of Disaster Risk Reduction (IJDRR)

CONFERENCE  
PRESENTATIONS,  
INVITED TALKS

*An Appointment Scheduling Framework to Balance the Production of Blood Units from Donation.* Joint work with S. Bas, G. Carello, E. Lanzarone.

- **(Invited talk)** Mechanical Engineering Department Seminar, Politecnico di Milano, March 2017, Milano.
- 46th Annual Conference of the Italian Operational Research Society Optimization for Energy, Emerging Advances in Logistics Systems, AIRO, September 2016, Trieste (presented by E. Lanzarone).
- 35th National Congress of Industrial Engineering Operations Research, YA/EM, September 2015, Ankara (presented by S. Bas).
- 45th Annual Conference of the Italian Operational Research Society Optimization for Energy, Environment and Sustainability, AIRO, September 2015, Pisa (presented by E. Lanzarone).
- 41th Annual meeting of the EURO working group OR Applied to Health Services, ORAHS, July 2015, Montreal (presented by S. Bas).

*A New Decomposition Approach for Solving the Assignment and Routing Problems in Home Health Care.* Joint work with N. Lahrichi, E. Lanzarone.

- 42th Annual meeting of the EURO working group OR Applied to Health Services, ORAHS, July 2016, Pamplona.

*Management of Blood Donation System: Literature Review and Research Perspectives.* Joint work with S. Bas, G. Carello, E. Lanzarone and Z. Ocak.

- 2nd International Conference on Health Care Systems Engineering, May 2015, Lyon (presented by S. Bas).

*Data-Driven Approach for Estimating the Travel Times of Operators for the Assignment Problem of Home Health Care Services.* Joint work A. Matta, E. Sahin, and J.G. Shanthikumar.

- **(Invited talk)** Industrial and Systems Engineering Department Seminar, Yeditepe University, September 2014, Istanbul.
- 40th Annual meeting of the EURO working group OR Applied to Health Services, ORAHS, July 2014, Lisbon.
- 1st International Conference on Health Care Systems Engineering, May 2013, Milan.
- Conference of French Society of Operations Research and Decision Support, February 2013, Troyes.

*Decomposition Approaches to Assignment and Routing Problems in Home Health Care Services.* Joint work with P. Cappanera, M.G. Scutella, A. Matta, and E. Sahin.

- **(Invited talk)** National Research Center of Italy (CNR), March 2016, Milano.
- 20th Conference of the International Federation of Operational Research Societies, IFORS, July 2014, Barcelona (presented by P. Cappanera).
- CORS/INFORMS Joint International Meeting, June 2015, Montreal.
- 9th annual IEEE International Conference on Automation Science and Engineering, CASE, August 2013, Wisconsin (presented by A. Matta).

- 39th Annual meeting of the EURO working group OR Applied to Health Services, ORAHS, July 2013, Istanbul.

*Operator Assignment and Routing Problems in Home Health Care Services.* Joint work with A. Matta, and E. Sahin.

- 8th annual IEEE International Conference on Automation Science and Engineering, CASE, August 2012, Seoul.

*Human Resource Scheduling and Routing Problem in Home Health Care Context: A Literature Review.* Joint work with A. Matta, and E. Sahin.

- 37th Annual meeting of the EURO working group OR Applied to Health Services, ORAHS, July 2011, Cardiff.

*Emission Functions in Modeling Sustainable Traffic Assignment Policies.* Joint work with O.I. Kolak, S. I. Birbil, O. Feyzioglu, and N. Noyan.

- 24th European Conference on Operations Research, EURO, July 2010, Lisbon.
- 30th National Congress of Industrial Engineering Operations Research, YA/EM, June 2010, Istanbul.

*Stochastic Bilevel Programming Models with CVaR for Toll Pricing in Transportation Networks.* Joint work with S.I. Birbil, O. Feyzioglu, and N. Noyan.

- 30th National Congress of Industrial Engineering Operations Research, YA/EM, June 2010, Istanbul.