

Skeletal muscle in a dish: towards making skeletal muscle in vitro Dahri. O.

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Curriculum Vitae

Ouafa Dahri was born on April 18th, 1994 in Culemborg, The Netherlands. After graduating from secondary school(Lek & Linge College, Culemborg), she pursued a bachelor degree in Biomedical Sciences at the Utrecht University. She did her bachelor internship in the group of prof. Joost Sluijter where her interest in tissue engineering was sparked. During her internship, Ouafa studied the maturity of human induced pluripotent stem cell derived cardiomyocytes in engineered cardiac tissues.

After graduating from the bachelor, Ouafa enrolled into the biomedical research Master program Biofabrication. Here, she made acquaintance with a wide range of 3D (bio)printing techniques. During her first internship in the lab of prof. Jos Malda, she worked on 3D printing of gradient hydrogels. Here she learnt how to program in G-code, how to synthesize and how to bioprint living cells. Next, Ouafa moved to Würzburg, Germany for her second internship in the group of prof. Paul Dalton. She was awarded a DIA stipendium to conduct her research. In the group of professor Dalton, Ouafa studied the use of the technique melt- electrowriting to create migration assays for neural culture. This internship focused particularly on the importance of design and alteration of design using melt-electrowriting. Parts of the works from her internship were published in Advanced Biosystems. During her Master, Ouafa was selected from a pool of 30.000 students as one of the fifteen most promising students at the University of Utrecht.

After concluding her Master, Ouafa went on to work as an academic teacher and researcher for the department of Biomedical Science Education. During this time, Ouafa applied for grants in preparation of starting her graduate research in the group of prof. Niels Geijsen. She was awarded a grant to cover her PhD trajectory by FSHD Global Research Foundation.

Ouafa started her PhD under the supervision of prof. Niels Geijsen and Dr. Fanny Sage in 2019 in the Hubrecht Institute. Shortly after, the Geijsen group moved to the department of Anatomy and Embryology in Leiden where most of Ouafa's research was conducted. Over the following years, Ouafa studied skeletal muscle engineering in healthy and diseased context. During her PhD, Ouafa has engaged in several public speaking events. In 2020, she was awarded the McKinsey Next Generation Women Leadership Award for her work. Lastly, Ouafa has attended several scientific conferences where she had the opportunity to present her work.

List of Publications

Small Non-Coding RNAs and Epigenetic Control in Human iPSC Lineage Commitment

<u>Ouafa Dahri</u>*, Andrea Hita*, Gilles Brocart, Noëlle Dommann, Miha Sovrovic, Niels Geijsen , Sol Schvartzman, Fanny Sage, Anna Alemany Manuscript in preparation for submission to Cell Systems

3D Printed Magneto-active Microfiber Scaffolds for Remote Stimulation and Guided Organization of 3D in vitro Skeletal Muscle Models

Gerardo Cedillo-Servin*, <u>Ouafa Dahri</u>*, João Meneses, Joost van Duijn, Harrison Moon, Fanny Sage, Joana Silva, André Pereira, Fernão D. Magalhães, Jos Malda, Niels Geijsen, Artur M. Pinto, Miguel Castilho *Published in Small 20.12 (2024): 2307178 doi.org/10.1002/smll.202307178*

Spatial Analysis of Transcript and Protein Expression in Skeletal Muscle

Paola Pisterzi*, Clara Martinez Mir*, <u>Ouafa Dahri</u>*, Isabel de Poorter, Sandra Batles Parera, Milica Dostanić, Massimo Mastrangeli, Christine Mummery, Niels Geijsen*, Fanny Sage*

Published in STAR protocols 5.4 (2024): 103378 doi.org/10.1016/j xpro.2024.103378

Melt Electrowritten In Vitro Radial Device to Study Cell Growth and Migration Ezgi Bakirci, Natascha Schaefer, <u>Quafa Dahri</u>, Andrei Hrynevich, Pamela Strissel, Reiner Strick, Paul D. Dalton, Carmen Villmann Published in Advanced Biosystems (2020), 4(10), 2000077 http://doi.org/10.1002/adbi.202000077

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"The result of your PhD should be you." These words have stayed with me throughout this journey. This thesis is a tangible product of years of work, but the real outcome lies in who I have become along the way. None of this would have been possible without the guidance, support, and inspiration of so many people, to whom I am deeply grateful.

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To the Muscle Team, you made the lab such a joyful and inspiring place. Clara, from the very start, our shared office and chats made everything feel lighter. Melissa, thank you for your organization, attentiveness, and warmth. You always made people feel seen. Isa, I have always admired your efficiency, reliability, and no-nonsense approach. Paola, your humor and solid science kept things lively and I am grateful we became friends. Essa, I appreciated your calm, logical perspective and our overlapping projects. Jamilla, your positivity was contagious. Mariana, your curiosity and confidence were inspiring. And Özge, thank you for being part of this dynamic team. To the students, especially Vishnu, Verona, Sandra, and Maria, it was a pleasure working alongside you.

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Appendix