SARA DI PERSIO

Curriculum Vitae ai fini della pubblicazione

Part I – General Information

n.a.

Part II – Education

Type	Year	Institution	Notes
PhD	2017	Università di Roma "La Sapienza"	PhD awarded in Morphogenesis and Tissue Engineering; Supervisor: Prof. Elena Vicini; Subject: Characterization of the human spermatogonial compartment: kinetics, molecular markers and regulation Grade: Excellent
Specialty	2015	Università di Roma "Tor Vergata"	Italian Biological License Examination
University graduation	2013	Università di Roma "La Sapienza"	II level Degree in Medical Biotechnology (LM (DM 270/04) Grade: 110/110 cum laude
University graduation	2012	Università di Roma "La Sapienza"	First level degree in Biotechnology (L (DM 509/99) Grade: 110/110 cum laude

Part IIb – Non-academic Education

Type	Year	Institution	Notes
Training course	2021	University of Münster	MOMENTUM Women's Leadership Journey

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
2018	present	Centre of Reproductive Medicine and Andrology, University of Münster, Münster, Germany	Postdoctoral researcher
13.03.2023	26.03.2023	Copenhagen University Hospital, Danemark. Laboratory of Prof. Kristian Almstrup	Visiting researcher
2016	2017	Università di Roma "La Sapienza"	Assegnista di ricerca

2013	2016	Università di Roma "La Sapienza"	PhD Student
2011	2013	Università di Roma "La Sapienza"	Internship

IIIB – Other Appointments

Start	End	Institution	Position
05.2016	08.2016	Cancer Research UK Cambridge Institute, Li Ka Shing Centre, Cambridge, United Kingdom.	Trainership within the Erasmus program

Part IV – Teaching

IVA – Teaching experience

Year	Institution	Lecture/Course
2024	Università di Roma "La Sapienza"	Master Universitario di II livello in Biologia della nutrizione per la riproduzione umana. "Spermatogenesi umana: dalle cellule staminali spermatogoniali ai gameti maturi"
2023	EMBL Heidelberg Germany	EMBO Practical Course: FISHing for RNAs: Classical to Single Molecule Approaches
2023-present	Medical faculty, University of Münster	Experimental medicine course. "Model organisms in reproductive research"
2023-present	Biological faculty, University of Münster	4-week module on the topic of 'Novel Methods in Reproductive biology and medicine'.
2021-present	Medical faculty, University of Münster	Lernzentrum für individualisiertes medizinisches Tätigkeitstraining und Entwicklung (Learning center for individualized medical activity training and development)
2021-present	Center of Reproductive Medicine and Andrology (CeRA), Medical faculty, University of Münster	CeRa Summer Academy

IVB – Student supervision

Year	Institution	Note
2024	Biology faculty university of Münster	Co-supervisor of Michelle Diane Runkel´s master thesis
2022	Medical faculty, University of Münster	Co-supervisor of Florian Michael Georg Sieg´s medical PhD
2022	Medical faculty, University of Münster	Co-supervisor of Dajana Karaj´s medical PhD
2021	Medical faculty, University of Münster	Co-supervisor of Karen Schiwon´s medical PhD
2021	Medical faculty, University of Münster	Co-supervisor of Lea Stella Mundt´s

		medical PhD
2020	Medical faculty, University of Münster	Co-supervisor of Lena Charlotte Schülke´s medical PhD
2019	Biology faculty, University of Münster	Co-supervisor of Lara Marie Siebert Kuss´ master thesis

Part V - Society memberships, Awards and Honours

VA – Society memberships and reviewer activity

Year	Title
2020-2022	Member of the "Società italiana di andrologia e medicina della sessualità (SIAMS)"
2020-2022	Member of the "European Society of Human Reproduction and Embryology (ESHRE)
2020-present	Member of the "German Society of Andrology (DGA)
2021-present	Member of the "European academy of Andrology (EAA)
2022-present	Member of the European COST action "Andronet"
2023-present	Reviewer for Rockefeller university press (Journal of cell biology)
2022-present	Reviewer for Nature journals (Scientific reports)
2021-present	Reviewer for Elsevier journals (Theriogenology)
2021-present	Reviewer for Springer journals (Journal of Assisted Reproduction and Genetics, Human genetics, Journal of Molecular Medicine, BMC Genomics)
2021-present	Reviewer for Wiley journals (Andrology, Asian journal of Andrology, Journal of Cell Communication and Signaling)
2020-present	Reviewer for Oxford university press journals (Human reproduction, Molecular human reproduction, Stem cells translational medicine)

VB – Awards and Honours

2024	Conference grant from the European COST action Andronet (CA20119) for the 13th European Congress of Andrology (ECA2024)
2024	Deutsche Gesellschaft für Andrologie (DGA) Travel award for the 57th Annual Meeting of the Society for the Study of Reproduction (SSR)
2023	Inclusiveness Target Countries (ITC) conference grant from the European COST action Andronet (CA20119) for the European Testis Workshop 2023
2023	Short term scientific mission (STSM) grant from the European COST action Andronet (CA20119) related to the research stay in Kristian Almstrup´s lab at Copenhagen University Hospital in March 2023
2023	CiM Train Gain fellowship 2022-04 related to the research stay in Kristian Almstrup´s

	lab at Copenhagen University Hospital in March 2023
2022	Golden Oral Communication Award of the 12th European congress of andrology (ECA)
2022	Second best oral presentation award at the 34. Jahrestagung der Deutschen Gesellschaft für Andrologie (DGA)
2022	Deutsche Gesellschaft für Andrologie (DGA) travel award for the 34. Jahrestagung der Deutschen Gesellschaft für Andrologie e.V. (DGA)
2022	CiM Travel Award 20221-08 for the "European Society of Human Reproduction and Embryology ESHRE 38. Annual Meeting" in Milan, Italy.
2021	Best selected miniposter award at 21th European Testis Workshop (ETW2021)
2021	Deutsche Gesellschaft für Andrologie (DGA) Travel award for the 9. DVR-Kongress Virtuell

VC – Invited and selected talks at national and international congresses

Year	Congress	Lecture
2023	Selected speaker at the 22nd European Testis Workshop (ETW). Montreux (Switzerland)	The immune cell landscape of human testicular tissue investigated at single cell level
2022	Selected speaker at the 12th European Congress of Andrology (ECA 2022). Barcelona, Spain.	Identification of cellular and molecular alterations underlying two distinct types of cryptozoospermia using single cell RNA sequencing
2022	Selected speaker at the 34th meeting of the German Society of Andrology (DGA). Gießen, (Germany).	Single cell RNA sequencing reveals cellular and molecular alterations underlying two distinct patient subgroups with cryptozoospermia
2022	Selected speaker at the Gordon Research Seminar on Mammalian Reproduction. Mount Snow in West Dover, Vermont (United States)	Single cell RNA sequencing shed light on the cellular and molecular alterations behind two distinct types of male infertility
2022	Selected speaker at the European Society of Human Reproduction and Embryology (ESHRE) hybrid 38th Annual Meeting. Milan (Italy)	Cluster analysis reveals two hidden subgroups among patients with cryptozoospermia
2021	Invited speaker at the XIV Congresso nazionale SIAMS (Societa' italiana di andrologia e medicina della sessualita), Bologna (Italy)	Epigenetica: dalla fisiologia alle metodiche di analisi
2021	Selected speaker at the 9th meeting of the german society of reproducitve biologists and physicians (DVR). Virtual	Single-cell RNA sequencing analysis unravels alterations of the human spermatogonial stem cell compartment in patients with impaired spermatogenesis
2021	Selected speaker at the 21st European Testis Workshop (ETW). Virtual	EGR4-dependent decrease of UTF1 is associated with failure to reserve spermatogonial stem cells in infertile men
2020	Selected speaker at the Cold Spring Harbor Laboratory (CSHL) meeting on 'Germ Cells'. Virtual	Molecular gatekeepers balancing differentiation and maintenance of human male germline stem cells uncovered by

		single cell resolution analysis
2019	Invited speaker at the 8. DVR meeting, Leipzig (Germany)	Störung in der Informationsübertragung: DNA Methylierung und Fertilität
2019	Selected speaker at the 10th meeting of the Network for Young Researchers in Andrology (NYRA).Brussels (Belgium)	Whole genome DNA methylation analysis revealed no differences in the imprinting control regions in the sperm DNA from oligoasthenoteratozoospermic compared to normozoospermic patients

Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value
2024-2025	Epigenomic profiling of human testicular stem cells in aged males	Young Investigators Academy program "Fertilage, German research foundation	
2021-2022	Epigenomic profiling of human spermatogonial stem cell subpopulations in patients with normal and impaired spermatogenesis'	"Innovative Medical Research" (IMF), Medical Faculty of Münster.	
2018-2020	Single-cell transcriptome analysis to dissect the interaction between soma and germline in the human testis	Clinical Research Unit 326, German research foundation	

Part VII – Research Activities

Keywords	Brief Description
Spermatogenesis Spermatogonial stem cells Male germ cell development Male infertility NGS	My academic training and research experiences have provided me with an excellent background in male reproductive biology and testicular histology. As predoctoral student, I conducted my research with Prof. Elena Vicini (La Sapienza" University of Rome, Italy) on the characterization of the marker expression profile of the human spermatogonial stem cell (SSC) subpopulations (Di Persio et al., 2027). Furthermore, I used an in-vitro Sertoli cell culture system to study the effect of know regulators of the spermatogenic process, such as retinoic acid and TNF, on the expression of GDNF a key regulator of the spermatogonial function (Di Persio et al. 2021; Saracino et al.2020). I also collaborated with the group of Prof. Boitani to study the changes in the Leydig cell population during ageing in men (Mularoni et al., 2020). For three years, I was extensively trained on multiple histological approaches as well as on the histological evaluation of the human testicular tissue. For my postdoctoral training, I moved to the Centre of Reproductive Medicine and Andrology (CeRA, Münster, Germany), to work in the group of Prof. Nina Neuhaus. Here I expanded my technical and analytical portfolio, which now includes multiple next generation sequencing (NGS) approaches such as single cell RNA sequencing and whole methylome analysis as well as data analysis via R. I was able to investigate the transcriptional heterogeneity among the human SSC compartment and identify changes in case of male infertility (Di Persio and Tekath et al., 2021). I evaluated the DNA methylation changes

occurring in sperm and testicular germ cells of infertile men when comparing to controls and found specific alterations (Leitao and Di Persio et al., 2020; Di Persio and Leitao et al., 2021). Furthermore, using a sorting strategy that I designed, we were able to describe for the first time how the DNA methylation profile changes in human germ cells during sperm development (Siebert-Kuss et al., 2024). Finally, I extensively collaborate with the group of Prof. Frank Tüttelmann (Institute of Reproductive Genetics, Münster, Germany). The main goal of these projects is to identify new candidate genes whose mutations can lead to male infertility. My particular role in the different projects was to evaluate the RNA and protein expression profile of the candidate genes in the human testis (e.g.: Hoffken et al., 2023, Stallmayer et al., 2024, Brattig-Correia et al., 2024).

Publications

1) Rion Brattig-Correia, Joana M Almeida, Margot Julia Wyrwoll, Irene Julca, Daniel Sobral, Chandra Shekhar Misra, **Sara Di Persio**, Leonardo Gastón Guilgur, Hans-Christian Schuppe, Neide Silva, Pedro Prudêncio, Ana Nóvoa, Ana S Leocádio, Joana Bom, Sandra Laurentino, Moises Mallo, Sabine Kliesch, Marek Mutwil, Luis M Rocha, Frank Tüttelmann, Jörg D Becker, Paulo Navarro-Costa. The conserved genetic program of male germ cells uncovers ancient regulators of human spermatogenesis. Elife. 2024 Oct 10;13:RP95774. doi: 10.7554/eLife.95774. PMID: 39388236; PMCID: PMC11466473. **Impact Factor**: 6.4; **Citations**: 0.

2) Birgit Stallmeyer, Clara Bühlmann, Rytis Stakaitis, Ann-Kristin Dicke, Farah Ghieh, Luisa Meier, Ansgar Zoch, David MacKenzie MacLeod, Johanna Steingröver, Özlem Okutman, Daniela Fietz, Adrian Pilatz, Antoni Riera-Escamilla, Miguel J Xavier, Christian Ruckert, **Sara Di Persio**, Nina Neuhaus, Ali Sami Gurbuz, Ahmet Şalvarci, Nicolas Le May, Kevin McEleny, Corinna Friedrich, Godfried van der Heijden, Margot J Wyrwoll, Sabine Kliesch, Joris A Veltman, Csilla Krausz, Stéphane Viville, Donald F Conrad, Dónal O'Carroll, Frank Tüttelmann. Inherited defects of piRNA biogenesis cause transposon de-repression, impaired spermatogenesis, and human male infertility. Nat Commun. 2024 Aug 9;15(1):6637. doi: 10.1038/s41467-024-50930-9. PMID: 39122675; PMCID: PMC11316121. **Impact Factor**: 14.7; **Citations**: 1.

3) Siebert Kuss Lara M, Dietrich Verena, **Di Persio Sara**, Bhaskaran Jahnavi, Stehling Martin, Cremers Jann-Frederik, Sandmann Sarah, Varghese Julian, Kliesch Sabine, Schlatt Stefan, Vaquerizas Juan M, Neuhaus Nina, Laurentino Sandra. Genome-wide DNA methylation changes in human spermatogenesis. Am J Hum Genet. 2024 Jun 6;111(6):1125-1139. doi: 10.1016/j.ajhg.2024.04.017. Epub 2024 May 16. PMID: 38759652; PMCID: PMC11179423. **Impact Factor**: 8.1; **Citations**: 0.

4) Schülke Lena Charlotte, Wistuba Joachim, Nordhoff Verena, Behre Hermann M., Cremers Jann-Frederik, Kliesch Sabine, **Di Persio Sara****, Neuhaus Nina** (2024). Identification of two hidden clinical subgroups among men with idiopathic cryptozoospermia. Hum Reprod. 2024 May 2;39(5):892-901. doi: 10.1093/humrep/deae013. Erratum in: Hum Reprod. 2024 May 2;39(5):1160. doi: 10.1093/humrep/deae059. PMID: 38365879; PMCID: PMC11063552. **Impact Factor**: 6.0; **Citations**: 0.

5) Marie H Sieper, Avinash S Gaikwad, Marion Fros, Philipp Weber, **Sara Di Persio**, Manon S Oud, Sabine Kliesch, Nina Neuhaus, Birgit Stallmeyer, Frank Tüttelmann, Margot J Wyrwoll. Scrutinizing the human TEX genes in the context of human male infertility. Andrology. 2024 Mar;12(3):570-584. doi: 10.1111/andr.13511. Epub 2023 Aug 18. PMID: 37594251. **Impact Factor**: 3.2; **Citations**: 1.

6) Federica Innocenti, **Sara Di Persio**, Marilena Taggi, Roberta Maggio, Pina Lardo, Vincenzo Toscano, Rita Canipari, Elena Vicini, Antonio Stigliano. Effect of Mitotane on Male Gonadal Function. Cancers (Basel). 2023 Jun 18;15(12):3234. doi: 10.3390/cancers15123234. PMID: 37370841; PMCID: PMC10296642. **Impact Factor**: 4.5; **Citations**: 0.

7) Capponi Chiara, Palazzoli Martina, **Di Persio Sara**, Fera Stefania, Spadetta Gustavo, Franco Giorgio, Wistuba Joachim, Schlatt Stefan, Neuhaus Nina, de Rooij Dirk, Vicini Elena. Interplay of spermatogonial subpopulations during initial stages of spermatogenesis in adult primates. Development. 2023 May 15;150(10):dev201430. doi: 10.1242/dev.201430. Epub 2023 May 24. PMID: 37222410. **Impact factor**: 3.7; **Citations**: 1.

8) Verena Höffken, **Sara Di Persio**, Sandra Laurentino, Margot J Wyrwoll, Nicole Terwort, Anke Hermann, Albrecht Röpke, Manon S Oud, Joachim Wistuba, Sabine Kliesch, Hermann J Pavenstädt 1, Frank Tüttelmann, Nina Neuhaus, Joachim Kremerskothen. WWC2 expression in the testis: Implications for spermatogenesis and male fertility. FASEB J. 2023 May; 37(5):e22912. doi: 10.1096/fj.202200960R. PMID: 37086090. **Impact Factor**: 4.4; **Citations**: 0.

9) Ann-Kristin Dicke, Adrian Pilatz, Margot J Wyrwoll, Margus Punab, Christian Ruckert, Liina Nagirnaja, Kenneth I Aston, Donald F Conrad, **Sara Di Persio**, Nina Neuhaus, Daniela Fietz, Maris Laan, Birgit Stallmeyer, Frank Tüttelmann. DDX3Y is likely the key spermatogenic factor in the AZFa region that contributes to human non-obstructive azoospermia. Commun Biol. 2023 Mar 31;6(1):350. doi: 10.1038/s42003-023-04714-4. PMID: 36997603; PMCID: PMC10063662. **Impact Factor**: 5.2; **Citations**: 13.

10) **Di Persio Sara**, Neuhaus Nina. Human spermatogonial stem cells and their niche in male (in)fertility: novel concepts from single-cell RNA-sequencing. Hum Reprod. 2023 Jan 5;38(1):1-13. doi: 10.1093/humrep/deac245. PMID: 36409992; PMCID: PMC9825264. **Impact Factor**: 6.0; **Citations**: 18.

11) Lara M Siebert-Kuss, Henrike Krenz, Tobias Tekath, Marius Wöste, **Sara Di Persio**, Nicole Terwort, Margot J Wyrwoll, Jann-Frederik Cremers, Joachim Wistuba, Martin Dugas, Sabine Kliesch, Stefan Schlatt, Frank Tüttelmann, Jörg Gromoll, Nina Neuhaus, Sandra Laurentino. Transcriptome analyses in infertile men reveal germ cell-specific expression and splicing patterns. Life Sci Alliance. 2022 Nov 29;6(2):e202201633. doi: 10.26508/lsa.202201633. PMID: 36446526; PMCID: PMC9713473. **Impact Factor**: 5.781; **Citations**: 6.

12) **Di Persio Sara***, Tekath Tobias*, Siebert-Kuss Lara Marie, Cremers Jann-Frederik, Wistuba Joachim, Li Xiaolin, Meyer Zu Hörste Gerd, Drexler Hannes C. A., Wyrwoll Margot Julia, Tüttelmann Frank, Dugas Martin, Kliesch Sabine, Schlatt Stefan, Laurentino Sandra, Neuhaus Nina. Single-cell RNA-seq unravels alterations of the human spermatogonial stem cell compartment in patients with impaired spermatogenesis. Cell Rep

Med. 2021 Sep 9;2(9):100395. doi: 10.1016/j.xcrm.2021.100395. PMID: 34622232; PMCID: PMC8484693. **Impact Factor**: 16.998; **Citations**: 44;

13) **Di Persio Sara***, Leitão Elsa*, Wöste Marius, Tekath Tobias, Cremers Jann-Frederik, Dugas Martin, Li Xiaolin, Meyer Zu Hörste Gerd, Kliesch Sabine, Laurentino Sandra, Neuhaus Nina, Horsthemke Bernhard. Whole-genome methylation analysis of testicular germ cells from cryptozoospermic men points to recurrent and functionally relevant DNA methylation changes. Clin Epigenetics. 2021 Aug 21;13(1):160. doi: 10.1186/s13148-021-01144-z. PMID: 34419158; PMCID: PMC8379757. **Impact Factor**: 7.259; **Citations**: 13.

14) Lucia A Torres-Fernández, Jana Emich, Yasmine Port, Sibylle Mitschka, Marius Wöste, Simon Schneider, Daniela Fietz, Manon S Oud, **Sara Di Persio**, Nina Neuhaus, Sabine Kliesch, Michael Hölzel, Hubert Schorle, Corinna Friedrich, Frank Tüttelmann, Waldemar Kolanus. TRIM71 Deficiency Causes Germ Cell Loss During Mouse Embryogenesis and Is Associated With Human Male Infertility. Front Cell Dev Biol. 2021 May 13;9:658966. doi: 10.3389/fcell.2021.658966. PMID: 34055789; PMCID: PMC8155544. **Impact Factor**: 6.684; **Citations**: 15.

15) **Di Persio Sara**, Starace Donatella, Capponi Chiara, Saracino Rossana, Fera Stefania, Filippini Antonio, Vicini Elena. TNF-α inhibits GDNF levels in Sertoli cells, through a NF-κB-dependent, HES1-dependent mechanism. Andrology. 2021 May;9(3):956-964. doi: 10.1111/andr.12959. Epub 2021 Jan 1. PMID: 33314792. **Impact Factor**: 4.456; **Citations**: 10.

16) Valentina Mularoni, Valentina Esposito, **Sara Di Persio**, Elena Vicini, Gustavo Spadetta, Pasquale Berloco, Flaminia Fanelli, Marco Mezzullo, Uberto Pagotto, Carla Pelusi, John E Nielsen, Ewa Rajpert-De Meyts, Niels Jorgensen, Anne Jorgensen, Carla Boitani. Age-related changes in human Leydig cell status. Hum Reprod. 2020 Dec 1;35(12):2663-2676. doi: 10.1093/humrep/deaa271. PMID: 33094328. **Impact Factor**: 6.918; **Citations**: 34.

17) Leitão Elsa*, **Di Persio Sara***, Laurentino Sandra, Wöste Marius, Dugas Martin, Kliesch Sabine, Neuhaus Nina, Horsthemke Bernhard. The sperm epigenome does not display recurrent epimutations in patients with severely impaired spermatogenesis. Clin Epigenetics. 2020 May 6;12(1):61. doi: 10.1186/s13148-020-00854-0. PMID: 32375885; PMCID: PMC7204326. **Impact Factor**: 6.551; **Citations**: 24

18) Rossana Saracino, Chiara Capponi, **Sara Di Persio**, Carla Boitani, Silvia Masciarelli, Francesco Fazi, Stefania Fera, Elena Vicini. Regulation of Gdnf expression by retinoic acid in Sertoli cells. Mol Reprod Dev. 2020 Apr;87(4):419-429. doi: 10.1002/mrd.23323. Epub 2020 Feb 5. PMID: 32020743. **Impact Factor**: 2.609; **Citations**: 7

19) Laurentino Sandra, Heckmann Laura, **Di Persio Sara**, Li Xiaolin, Meyer Zu Hörste Gerd, Wistuba Joachim, Cremers Jann-Frederik, Gromoll Jörg, Kliesch Sabine, Schlatt Stefan, Neuhaus Nina. High-resolution analysis of germ cells from men with sex chromosomal aneuploidies reveals normal transcriptome but impaired imprinting. Clin Epigenetics. 2019 Aug 28;11(1):127. doi: 10.1186/s13148-019-0720-3. PMID: 31462300; PMCID: PMC6714305. **Impact Factor**: 5.028; **Citations**: 33

20) **Di Persio Sara**, Saracino Rossana, Fera Stefania, Muciaccia Barbara, Esposito Valentina, Boitani Carla, Berloco Bartolomeo P., Nudo Francesco, Spadetta Gustavo, Stefanini Mario, de Rooij Dirk G., Vicini Elena. Spermatogonial kinetics in humans. Development. 2017

Oct 1;144(19):3430-3439. doi: 10.1242/dev.150284. Epub 2017 Aug 21. PMID: 28827392. **Impact Factor**: 5.413; **Citations**: 69

21) Naro Chiara, Jolly Ariane, **Di Persio Sara**, Bielli Pamela, Setterblad Niclas, Alberdi Antonio J., Vicini Elena, Geremia Raffaele, De la Grange Pierre, Sette, Claudio. An orchestrated intron retention program in meiosis controls timely usage of transcripts during germ cell differentiation. Dev Cell. 2017 Apr 10;41(1):82-93.e4. doi: 10.1016/j.devcel.2017.03.003. Epub 2017 Mar 30. PMID: 28366282; PMCID: PMC5392497. **Impact Factor**: 9.616; **Citations**: 113.

22) Boitani Carla, **Di Persio Sara**, Esposito Valentina, Vicini Elena. Spermatogonial cells: mouse, monkey and man comparison. Semin Cell Dev Biol. 2016 Nov;59:79-88. doi: 10.1016/j.semcdb.2016.03.002. Epub 2016 Mar 5. PMID: 26957475. **Impact Factor**: 6.614; **Citations**: 37.

* Shared first authorship
** Shared last authorship

Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	22	Scopus	2016	today
Papers [last 5 years]	18	Scopus	2020	today

Total Impact factor	143,127
Total Citations	441
Average Citations per Product	20,01
Hirsch (H) index	11
Normalized H index*	1,375

*H index divided by the academic seniority.

SCOPUS Author ID: 57160453500	ORCID ID: https://orcid.org/0000-0002-9279-7373

Part IX– Selected Publications

Authors, title, reference data from PubMed
Impact factor (IF) from InCites Journal Citation Reports-ISI Web of Science
Number of citations (cit) from Scopus
* Shared first authorship, ** Shared last authorship

1) Birgit Stallmeyer, Clara Bühlmann, Rytis Stakaitis, Ann-Kristin Dicke, Farah Ghieh, Luisa Meier, Ansgar Zoch, David MacKenzie MacLeod, Johanna Steingröver, Özlem Okutman, Daniela Fietz, Adrian Pilatz, Antoni Riera-Escamilla, Miguel J Xavier, Christian Ruckert, **Sara Di Persi**o, Nina Neuhaus, Ali Sami Gurbuz, Ahmet Şalvarci, Nicolas Le May, Kevin

McEleny, Corinna Friedrich, Godfried van der Heijden, Margot J Wyrwoll, Sabine Kliesch, Joris A Veltman, Csilla Krausz, Stéphane Viville, Donald F Conrad, Dónal O'Carroll, Frank Tüttelmann. Inherited defects of piRNA biogenesis cause transposon de-repression, impaired spermatogenesis, and human male infertility. Nat Commun. 2024 Aug 9;15(1):6637. doi: 10.1038/s41467-024-50930-9. PMID: 39122675; PMCID: PMC11316121. **Impact Factor**: 14.7; **Citations**: 1.

2) Siebert Kuss Lara M, Dietrich Verena, **Di Persio Sara**, Bhaskaran Jahnavi, Stehling Martin, Cremers Jann-Frederik, Sandmann Sarah, Varghese Julian, Kliesch Sabine, Schlatt Stefan, Vaquerizas Juan M, Neuhaus Nina, Laurentino Sandra. Genome-wide DNA methylation changes in human spermatogenesis. Am J Hum Genet. 2024 Jun 6;111(6):1125-1139. doi: 10.1016/j.ajhg.2024.04.017. Epub 2024 May 16. PMID: 38759652; PMCID: PMC11179423. **Impact Factor**: 8.1; **Citations**: 0. Press Release: Publikation des Monats ; Publikations-Highlights; Ein Meilenstein in der Epigenetik der Reproduktion: Münstersche Forschungsgruppe entschlüsselt männlichen Fruchtbarkeitscode

3) Schülke Lena Charlotte, Wistuba Joachim, Nordhoff Verena, Behre Hermann M., Cremers Jann-Frederik, Kliesch Sabine, **Di Persio Sara****, Neuhaus Nina** (2024). Identification of two hidden clinical subgroups among men with idiopathic cryptozoospermia. Hum Reprod. 2024 May 2;39(5):892-901. doi: 10.1093/humrep/deae013. Erratum in: Hum Reprod. 2024 May 2;39(5):1160. doi: 10.1093/humrep/deae059. PMID: 38365879; PMCID: PMC11063552. **Impact Factor**: 6.0; **Citations**: 0.

4) Capponi Chiara, Palazzoli Martina, **Di Persio Sara**, Fera Stefania, Spadetta Gustavo, Franco Giorgio, Wistuba Joachim, Schlatt Stefan, Neuhaus Nina, de Rooij Dirk, Vicini Elena. Interplay of spermatogonial subpopulations during initial stages of spermatogenesis in adult primates. Development. 2023 May 15;150(10):dev201430. doi: 10.1242/dev.201430. Epub 2023 May 24. PMID: 37222410. **Impact factor**: 3.7; **Citations**: 1.

5) Verena Höffken, **Sara Di Persio**, Sandra Laurentino, Margot J Wyrwoll, Nicole Terwort, Anke Hermann, Albrecht Röpke, Manon S Oud, Joachim Wistuba, Sabine Kliesch, Hermann J Pavenstädt 1, Frank Tüttelmann, Nina Neuhaus, Joachim Kremerskothen. WWC2 expression in the testis: Implications for spermatogenesis and male fertility. FASEB J. 2023 May; 37(5):e22912. doi: 10.1096/fj.202200960R. PMID: 37086090. **Impact Factor**: 4.4; **Citations**: 0.

6) **Di Persio Sara**, Neuhaus Nina. Human spermatogonial stem cells and their niche in male (in)fertility: novel concepts from single-cell RNA-sequencing. Hum Reprod. 2023 Jan 5;38(1):1-13. doi: 10.1093/humrep/deac245. PMID: 36409992; PMCID: PMC9825264. **Impact Factor**: 6.0; **Citations**: 18.

7) **Di Persio Sara***, Tekath Tobias*, Siebert-Kuss Lara Marie, Cremers Jann-Frederik, Wistuba Joachim, Li Xiaolin, Meyer Zu Hörste Gerd, Drexler Hannes C. A., Wyrwoll Margot Julia, Tüttelmann Frank, Dugas Martin, Kliesch Sabine, Schlatt Stefan, Laurentino Sandra, Neuhaus Nina. Single-cell RNA-seq unravels alterations of the human spermatogonial stem cell compartment in patients with impaired spermatogenesis. Cell Rep Med. 2021 Sep 9;2(9):100395. doi: 10.1016/j.xcrm.2021.100395. PMID: 34622232; PMCID: PMC8484693. **Impact Factor**: 16.998; **Citations**: 44; **Press Release**: Hoden unter der Lupe: neue Einblicke in zelluläre und molekulare Veränderungen bei männlicher Unfruchtbarkeit

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