Spring 2023

CONTENT:

- Call for member engagement: input for WG3 needed!
- MC Meeting and ANDRONET Symposium at ETW
- Report from the Budapest School
- ❖ STSMs
- Meetings of the Extended Core Group
- Grants for ITC Members
- Science Corner latest publications
- Event Calendar

Dear ANDRONET Members,

Our main annual event is quickly approaching - we are looking forward to the ANDRONET Workshop and the Managing Committee Meeting which will be held in June in conjunction with the 22nd European Testis Workshop (ETW2023), coorganized by the ANDRONET. See the latest details in this newsletter.

We are pleased to confirm that 72 ANDRONET members will be fully supported to attend the ETW in Switzerland. We were though disappointed to see that only a minority of them have been actively participating in ANDRONET work. Hence, we reiterate the call for a **greater engagement** in the Working Group (WG) activities. The leader of **WG3**, Andrea Sansone, is calling again for help in promoting male health among the lay public. Please inform Andrea about any male health promoting activities in your community (andrea.sansone@uniroma2.it).

This edition brings also a short report from the EAA-ANDRONET Andrology School in Budapest, and the usual list of recent publications from the ANDRONET members and notify the Science Communication Coordinator if you have a new article that you would like to share with your colleagues.

ANDRONET's main event in 2023: the Final Agenda



The highly awaited 22nd European Testis Workshop (ETW), co-organized by ANDRONET is just around the corner. The ETW will be preceded by the 15th NYRA meeting. Mark your calendars for ANDRONET events: the **Working Group meetings will take place during the entire duration of ETW, starting on Sunday, June 18 (13:00) and ending on Thursday June 22 (12:15)**. In addition, **the ANDRONET Managing Committee (MC) meeting** will take place on **Tuesday, June 20 (19.00-20.15)** and a specific **ANDRONET Symposium** will be held on **Wednesday, June 21 (18.15-19.30)**. ANDRONET will reimburse the travel and participation costs of 72 members, who have been notified and will get their reimbursement via the e-COST account after the meeting.





ANDRONET-EAA Budapest School Report



The 4th EAA-ANDRONET Budapest School on Basic Clinical Andrology and Therapies in Male Infertility was held in Budapest, Hungary on 28 February – 3 March 2023. The first, educational module comprised lectures focused on spermatogenesis, testicular dysgenesis syndrome and testicular cancer, andrological

endocrinology and genetics of male infertility, prostate cancer and sexual

dysfunction. The second part was an open meeting focused on the pathogenesis of male infertility and available therapies. The faculty of both modules was composed of internationally renowned speakers, most of whom were members of ANDRONET's extended Core Group. The social programme included an interesting visit to the Semmelweis Museum of Medical History, honouring the Hungarian physician who was a pioneer of aseptic procedures (pictured).

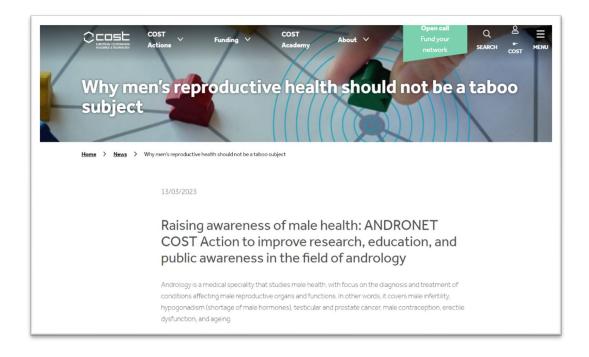


Ignaz Semmelweis

The school was a great success, with the capacity attendance of 36 participants from 27 countries. Six trainees and one teacher from the ANDRONET network were reimbursed by the COST.

ANDRONET Press Release via COST

The COST Communication Office released on 13 March 2023 a press information about ANDRONET, which was prepared by our Science Communication Committee (see the COST website release below). The information was picked up by several portals, including Alpha Galileo and Medical News of the AZO Network.







Short-term scientific missions (STSM)

Three STSM fellowships were granted in 2023: **Sara Di Persio**, currently at the Centre of Reproductive Medicine in Münster (Germany) visited the Almstrup Lab at the Department of Growth & Reproduction, Copenhagen University Hospital (Denmark); **Ida Sofie Weber Strand**, a PhD student from the National Food Institute, Technical University of Denmark, is visiting the Chalmel Lab at Rennes University (France); and **Ana Planinic**, representing Zagreb University (Croatia) will visit Rod Mitchell's lab at the MRC Centre for Reproductive Health, the University of Edinburgh (UK) in autumn 2023.

Meetings of the Extended Core Group

Since the beginning of 2023, the extended Core Group (Ext. CG) of the leaders and co-leaders of all ANDRONET Working Groups and Committees have been meeting monthly (14 February, 21 March, 18 April). The meetings are held using the ZOOM platform and are organized by the Coordinator, Rafael Oliva. A screenshot from the March meeting is shown below.



REMINDER: Travel grants for members from ITC countries

If you are an early carrier ANDRONET investigator from one of the "Inclusiveness Target Countries" (ITC) you can be eligible for a travel grant, worth up to 2000€. These grants are earmarked to cover the expenses of active participation in any relevant scientific conference (excluding the upcoming ETW). The applications including motivation and the CV should be submitted to the Grant Awarding Coordinator, Davor Ježek (davorjezek@yahoo.com) before the deadline: June 15, 2023. More information is available on the ANDRONET website: https://www.andronet.cat/stsms/





Science Corner

Recent publications of ANDRONET members

We highlight here selected publications that are relevant to the Action's objectives and can help you decide on specific collaboration projects with other ANDRONET members. If you want to share your latest publications, please notify the Science Communication Coordinator.

Reminder: if you are a contributor to an article that is authored by ANDRONET members from another centre or country, or if you benefited from an ANDRONET travel grant, kindly remember to acknowledge ANDRONET COST Action with the following sentence: "This publication is also based upon work from COST Action CA20119 (ANDRONET) supported by European Cooperation in Science and Technology (www.cost.eu)".

WG1. Biomarkers of Infertility / Androgenetics

Holt R, Yahyavi SK, Kooij I, Andreassen CH, Andersson AM, Juul A, Jørgensen N, Blomberg Jensen M. Low Serum anti-Mullerian Hormone is Associated with Semen Quality in Infertile Men and not Influenced by Vitamin D Supplementation. *BMC Medicine* 2023 Feb 28;21(1):79. PMID: 36855109.

Farnetani G, Fino MG, Cioppi F, Riera-Escamilla A, Tamburrino L, Vannucci M, Rosta V, Vinci S, Casamonti E, Turki L, Degl'Innocenti S, Spinelli M, Marchiani S, Lotti F, Muratori M, Krausz C. Long-term effect of cytotoxic treatments on sperm DNA fragmentation in patients affected by testicular germ cell tumor. *Andrology*. 2023 Mar 17. PMID: 36932666.

Neirijnck Y, Sararols P, Kühne F, Mayère C, Weerasinghe Arachchige LC, Regard V, Nef S, Schedl A. Single-cell transcriptomic profiling redefines the origin and specification of early adrenogonadal progenitors. *Cell Rep.* 2023 Feb 28;42(3):112191. PMID: 36862551.

Ruthig VA, Hatkevich T, Hardy J, Friedersdorf MB, Mayère C, Nef S, Keene JD, Capel B. The RNA binding protein DND1 is elevated in a subpopulation of pro-spermatogonia and targets chromatin modifiers and translational machinery during late gestation. *PLoS Genet*. 2023 Mar 1;19(3):e1010656. PMID: 36857387.

Pozza C, Sesti F, Tenuta M, Spaziani M, Tarantino C, Carlomagno F, Minnetti M, Pofi R, Paparella R, Lenzi A, Radicioni A, Isidori AM, Tarani L, Gianfrilli D. Testicular dysfunction in 47, XXY boys: when it all begins. A semi-longitudinal study. *J Clin Endocrinol Metab*. 2023 Apr 12:dgad205. Epub ahead of print.

López Krabbe HV, Petersen JH, Asserhøj LL, Johannsen TH, Christiansen P, Jensen RB, Cleemann LH, Hagen C, Priskorn L, Jørgensen N, Main KM, Juul A, Aksglaede L. Reproductive hormones, bone mineral content, body composition and testosterone therapy in boys and adolescents with Klinefelter syndrome. *Endocr Connect*. 2023 Apr 1:EC-23-0031. Epub ahead of print.

Zufferey F, Buitrago E, Rahban R, Senn A, Stettler E, Rudaz S, Nef S, Donzé N, Thomas A, Rossier MF. Gonadotropin axis and semen quality in young Swiss men after cannabis consumption: Effect of chronicity and modulation by cannabidiol. *Andrology*. 2023 Apr 12. Epub ahead of print. PMID: 37042163.

Kuntsal E, Kadıoğlu A, Şirvancı S. Testicular Apoptosis and Proliferation in Relation to Body Mass Index and m-TESE Success in Nonobstructive Azoospermic Men", *Andrologia*, April 2023, Epub ahead of print.

Dicke AK, Pilatz A, Wyrwoll MJ, Punab M, Ruckert C, Nagirnaja L, Aston KI, Conrad DF, Di Persio S, Neuhaus N, Fietz D, Laan M, Stallmeyer B, Tüttelmann F. 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.

Dicke AK, Albrethsen J, Hoare BL, Wyrwoll MJ, Busch AS, Fietz D, Pilatz A, Bühlmann C, Juul A, Kliesch S, Gromoll J, Bathgate RAD, Tüttelmann F, Stallmeyer B. Bi-allelic variants in INSL3 and RXFP2 cause bilateral cryptorchidism and male infertility. *Hum Reprod*. 2023 May 19:dead105. Epub ahead of print.





Westerich KJ, Reinecke S, Emich J, Wyrwoll MJ, Stallmeyer B, Meyer M, Oud MS, Fietz D, Pilatz A, Kliesch S, Reichman-Fried M, Tarbashevich K, Limon T, Stehling M, Friedrich C, Tüttelmann F, Raz E. Linking human Dead end 1 (DND1) variants to male infertility employing zebrafish embryos. *Hum Reprod*. 2023 Apr 3;38(4):655-670.

Cannarella R, Caruso M, Condorelli RA, Timpanaro TA, Caruso MA, La Vignera S, Calogero AE. Testicular volume in 268 children and adolescents followed-up for childhood obesity-a retrospective cross-sectional study. *Eur J Endocrinol*. 2023 Apr 5;188(4):331-342.

Albrethsen J, Østergren PB, Norup PB, Sønksen J, Fode M, Kistorp C, Nordsborg NB, Solheim SA, Mørkeberg J, Main KM, Juul A. Serum Insulin-like Factor 3, Testosterone and Luteinizing Hormone in Experimental and Therapeutic Testicular Suppression. *J Clin Endocrinol Metab*. 2023 May 26:dgad291. Epub ahead of print.

Jørgensen PL, Kreiberg M, Jørgensen N, Juul A, Oturai PS, Dehlendorff C, Lauritsen J, Wagner Y, Rosenvilde J, Daugaard G, Medici CR, Jørgensen NR, Bandak M. Effect of 12-months testosterone replacement therapy on bone mineral density and markers of bone turnover in testicular cancer survivors – results from a randomized double-blind trial. *Acta Oncol* 2023, in press.

Carlomagno F, Minnetti M, Angelini F, Pofi R, Sbardella E, Spaziani M, Aureli A, Anzuini A, Paparella R, Tarani L, Porcelli T, De Stefano MA, Pozza C, Gianfrilli D, Isidori AM. Altered thyroid feedback loop in Klinefelter syndrome: a cohort study from infancy through the transition into adulthood. *J Clin Endocrinol Metab*. 2023 May 22:dgad281. Epub ahead of print.

Madsen A, Juul A, Aksglaede L. Biochemical identification of prepubertal boys with Klinefelter syndrome by combined reproductive hormone profiling using machine learning. *Endocr Connect*. 2023 Apr 6;12(5):e220537. doi: 10.1530/EC-22-0537. PMID: 36892968

Grande G, Graziani A, Di Mambro A, Selice R, Ferlin A. Osteoporosis and bone metabolism in patients with Klinefelter syndrome. *Endocr Connect*. 2023 May 1:EC-23-0058. doi: 10.1530/EC-23-0058. Epub ahead of print. PMID: 37166398.

Capponi C, Palazzoli M, Di Persio S, Fera S, Spadetta G, Franco G, Wistuba J, Schlatt S, Neuhaus N, de Rooij D, Vicini E. Interplay of spermatogonial subpopulations during initial stages of spermatogenesis in adult primates. *Development*. 2023 May 15;150(10):dev201430. Epub 2023 May 24.

Höffken V, Di Persio S, Laurentino S, Wyrwoll MJ, Terwort N, Hermann A, Röpke A, Oud MS, Wistuba J, Kliesch S, Pavenstädt HJ, Tüttelmann F, Neuhaus N, Kremerskothen J. WWC2 expression in the testis: Implications for spermatogenesis and male fertility. *FASEB J*. 2023 May;37(5):e22912.

Blanco M, El Khattabi L, Gobé C, Crespo M, Coulée M, de la Iglesia A, Ialy-Radio C, Lapoujade C, Givelet M, Delessard M, Seller-Corona I, Yamaguchi K, Vernet N, Van Leeuwen F, Lermine A, Okada Y, Daveau R, Oliva R, Fouchet P, Ziyyat A, Pflieger D, Cocquet J. DOT1L regulates chromatin reorganization and gene expression during sperm differentiation. *EMBO Rep.* 2023 Apr 26:e56316. Epub ahead of print.

Gobé C, Ialy-Radio C, Pierre R, Cocquet J. Generation and Characterization of a Transgenic Mouse That Specifically Expresses the Cre Recombinase in Spermatids. *Genes*. 2023; 14(5):983.

WG3. Male Health Awareness

Claessens JJM, Penson A, Bronkhorst EM, Kremer LCM, van Dulmen-den Broeder E, van der Heiden-van der Loo M, Tissing WJE, van der Pal HJH, Blijlevens NMA, van den Heuvel-Eibrink MM, Versluys AB, Bresters D, Ronckers CM, Walraven I, Beerendonk CCM, Loonen JJ, Dutch LATER Study Group. Desire for children among male survivors of childhood cancer: A DCCSS LATER study. *Cancer*. 2023 Mar 7. PMID: 36881488.





Event Calendar

17 - 18 June 2023

15th Meeting of the Network of Young Researchers in Andrology (NYRA), Caux Palace, Montreux, Switzerland

Info: https://nyra-youngresearch.eu/15th-nyra-meeting

18 - 22 June 2023

2nd ANDRONET Workshop and 22nd European Testis Workshop, Caux Palace, Montreux, Switzerland

Info: https://etw2023.org/



39th ESHRE Annual Meeting, Copenhagen, Denmark

Info: https://www.eshre.eu/ESHRE2023

25 - 29 September 2023

32nd Summer Academy in Andrology and Reproductive Biology, CeRa, Münster, Germany

Info: Ursula.Rueschhoff@ukmuenster.de

1-3 October 2023

28th Symposium of Biology and Immunology of Reproduction, Chateau Liblice, Czech Republic

Organizer: Kateřina Komrsková Info: https://www.sbir.cz/

9 - 13 October 2023 (*To be confirmed*)

2nd ANDRONET-EAA Training School in Basic Semen Analysis, Stockholm, Sweden Attention: Full travel reimbursement available for five ANDRONET members

Info: Lars Björndahl (Lars.Bjorndahl@ki.se)





Newsletter Editor: Ewa Rajpert-De Meyts
ANDRONET Science Communication Coordinator
Contact: @Ewa Rajpert-De Meyts (slack), @Ewa Meyts (Twitter)
Email: rajpertdemeyts.eaa@gmail.com

COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation



