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Refereed Articles

1. Turman BJ, Darville T and **O'Connell CM**. Plasmid-mediated virulence in Chlamydia trachomatis. (2023) Front. Cell. Infect. Microbiol. (Sec. Bacteria and Host) 13 202
2. Liu C, Mokashi NV, Darville T, Sun X, **O'Connell CM**, Hufnagel K, Waterboer T and Zheng X. (2023) A machine learning-based analytic pipeline applied to clinical and serum IgG immunoproteome data to predict Chlamydia trachomatis genital tract ascension and incident infection in women. Microbiol. Spectr. June 15;e0468922. PMID:37318345
3. Turman BJ, Alzhanov D, Nagarajan UM, Darville T and **O'Connell CM**. Virulence protein Pgp3 is insufficient to mediate plasmid-dependent infectivity of Chlamydia trachomatis. (2023) Infect. Immun. 91(2): e0039222. PMID: 36722979 PMCID: PMC9933628.
4. Zhong W, Kollipara A, Liu Y, Wang Y, **O'Connell CM**, Poston TB, Yount K, Wiesenfeld HC, Hillier SL, Li Y, Darville T and Zheng X. (2022) Genetic susceptibility loci for Chlamydia trachomatis endometrial infection influence expression of genes involved in T cell function, tryptophan metabolism and epithelial integrity. Front. Immunol. 13: 1001255. PMID: 36248887. PMCID: PMC9562917.
5. Liu, C*, Hufnagel, K*, **O'Connell, CM**, Goonetilleke, N, Mokashi, N, Waterboer, T, Tollison, TS, Peng, X, Wiesenfeld, HC, Hillier, SL, Zheng, X and Darville, T. Reduced endometrial ascension and enhanced reinfection associated with IgG antibodies to specific Chlamydia trachomatis proteins in women at risk for chlamydia. J Infect. Dis. 2022 jiab496. doi:10.1093/infdis/jiab496
6. Zheng X, Zhong W, **O'Connell CM**, Liu Y, Haggerty CL, Geisler WM, Anyalechi GE, Kirkcaldy RD, Wiesenfeld HC, Hillier SL, Steinkampf MP, Hammond KR, Fine J, Li Y, Darville T. Host genetic risk factors for *Chlamydia trachomatis*-related infertility in women. J Infect Dis. 2021 Aug 16;224(Supplement_2):S64-S71. doi: 10.1093/infdis/jiab149. PMID: 34396400; PMCID: PMC8365119.
7. Amaral AF, Rahman KS, Kick AR, Cortes LM, Robertson J, Kaltenboeck B, Gerdts V, **O'Connell CM**, Poston TB, Zheng X, Liu C, Omesi SY, Darville T, Käser T. Mucosal vaccination with UV-inactivated *Chlamydia suis* in pre-exposed outbred pigs decreases pathogen load and induces CD4 T-Cell maturation into IFN-γ+ effector memory cells. Vaccines (Basel). 2020 Jul 2;8(3): E353. doi: 10.3390/vaccines8030353. PMID: 32630694.
8. McQueen BE, Kiatthanapaiboon A, Fulcher ML, Lam M, Patton K, Powell E, Kollipara A, Madden V, Suchland RJ, Wyrick P, **O'Connell CM**, Reidel B, Kesimer M, Randell SH, Darville T, Nagarajan UM. A human Fallopian tube epithelial cell culture model to study host responses to *Chlamydia trachomatis* infection. Infect Immun. 2020 Jun 29; doi: 10.1128/IAI.00105-20. [Epub ahead of print] PubMed PMID: 32601108.
9. Poston, TB, Lee, DE, Darville, T, Zhong, W, Dong, L, **O'Connell, CM**, Wiesenfeld, HC, Hillier, SL, Sempowski, GD, and Zheng, X. (2019) Cervical cytokines associated with *Chlamydia trachomatis* susceptibility and protection. J Infect Dis. 2019 Jun 19;220(2):330-339. doi: 10.1093/infdis/jiz087. PubMed PMID: 30820577; PubMed Central PMCID: PMC6581900.
10. Darville, T, Albritton, HL, Zhong, W, Dong, L, **O'Connell, CM**, Poston, TB, Quayle, AJ, Goonetilleke, N, Wiesenfeld, HC, Hillier, SL, and Zheng, X (2019) Anti-Chlamydia IgG and IgA are insufficient to prevent endometrial Chlamydia infection in women and increased anti-Chlamydia IgG is associated with enhanced risk for incident infection Am J Reprod Immunol. 2019 May;81(5):e13103. doi: 10.1111/aji.13103. Epub 2019 Mar 18. PubMed PMID: 30784128; PubMed Central PMCID: PMC6475609.
11. **O'Connell CM**, Brochu H, Girardi J, Harrell E, Jones A, Darville T, Seña AC, Peng X. (2019) Simultaneous profiling of sexually transmitted bacterial pathogens, microbiome, and concordant host

response in cervical samples using whole transcriptome sequencing analysis. Microb Cell. 2019 Jan 24;6(3):177-183. PubMed PMID: 30854394; PubMed Central PMCID: PMC6402362.

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13. Rahman KS, Darville T, Russell AN, **O'Connell CM**, Wiesenfeld HC, Hillier SL, Chowdhury EU, Juan Y-C, and Kaltenboeck B. (2018) Discovery of human-specific immunodominant *Chlamydia trachomatis* B Cell Epitopes. mSphere 3(4): e00246-18. doi: 10.1128/mSphere.00246-18 PMCID: PMC6070735
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15. Poston TB, **O'Connell CM**, Girardi J, Sullivan JE, Nagarajan UM, Marinov A, Scurlock AM, and Darville T. (2018) T Cell-independent gamma interferon and B cells cooperate to prevent mortality associated with disseminated *Chlamydia muridarum* genital tract infection. Infect Immun. 86(7). e00143-18. doi: 10.1128/IAI.00143-18 PMID: 29661927
16. Zheng X, **O'Connell CM**, Zhong W, Nagarajan UM, Tripathy M, Lee D, Russell AN, Wiesenfeld H, Hillier S, Darville T. (2018) Discovery of blood transcriptional endotypes in women with pelvic inflammatory disease. J Immunol. 200(8):2941-2956. PMID: 29531169
17. Taylor BD, Zheng X, **O'Connell CM**, Wiesenfeld HC, Hillier SL, Darville T. (2018) Risk factors for *Mycoplasma genitalium* endometritis and incident infection: a secondary data analysis of the T cell Response Against Chlamydia (TRAC) Study. Sex Transmit Infect. 2018; pii: sextrans-2017-053376. doi: 10.1136/sextrans-2017-053376 PMID: 29563165
18. Poston TB, Qu Y, Girardi J, **O'Connell CM**, Frazer LC, Russell AN, Wall M, Nagarajan UM, Darville T. 2017. A chlamydia-specific TCR-transgenic mouse demonstrates Th1 polyfunctionality with enhanced effector function. J. Immunol. pii: ji1700914. doi: 10.4049/jimmunol.1700914 PMID: 28855311
19. Taylor BD, Zheng X, Darville T, Zhong W, Konganti K, Abiodun-Ojo O, Ness RB, **O'Connell CM**, and Haggerty CL, 2017. Whole-exome sequencing to identify novel biological pathways associated with infertility after pelvic inflammatory disease. Sex Transm Dis. 44(1):35-41. 10.1097/OLQ.0000000000000533 PMID: 27898568
20. Russell AN, Zheng X, **O'Connell CM,** Wiesenfeld HC, Hillier SL, Taylor BD, Picard MD, Flechtner JB, Zhong W, Frazer LC, and Darville T, 2016. Identification of *Chlamydia trachomatis* antigens recognized by T cells from highly exposed women who limit or resist genital tract infection. J Infect Dis. 214 (12):1884-1892. PMID: 27738051
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