



Virginia D. Winn, MD, PhD

Professor of Obstetrics and Gynecology (Reproductive, Perinatal & Stem Cell Biology Research)

Obstetrics & Gynecology - Reproductive Biology

CLINICAL OFFICE (PRIMARY)

- **Perinatal Diagnostic Center**

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ACADEMIC CONTACT INFORMATION

- **Administrative Contact**

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Bio

BIO

Virginia D. Winn, MD, PhD, is a Professor of Obstetrics and Gynecology at Stanford University, the Director of Reproductive, Stem Cell and Perinatal Biology at Stanford School of Medicine's, and the Program Director for the Women's Reproductive Health Research (K12) at Stanford Program. Dr. Winn received both her PhD training and medical education from the University of Rochester School of Medicine and Dentistry (in 1994 and 1996 respectively.) She completed her OBGYN residency and MFM fellowship at UCSF. She received research training through the NIH-funded Reproductive Scientist Development Program (RSDP). Dr. Winn was on faculty at University of Colorado and from 2006 to 2014 leading a basic and translational NIH-funded research program. She then moved to Stanford in 2014. She is Board Certified in Obstetrics and Gynecology and Maternal and Fetal Medicine from the American Board of Obstetrics and Gynecology.

As a physician scientist, Dr. Winn's ultimate goal is to examine human placental biology and translate findings to improved clinical care resulting in healthier mothers and babies. Her lab uses a combination of molecular, cellular, tissue and translational studies in their research.

Dr. Winn is a member of the Dunlevie Maternal-Fetal Medicine Center for Discovery, Innovation and Clinical Impact, the Maternal and Child Health Research Institute (MCHRI), the Stanford Cardiovascular Institute, BioX. She was a recipient the MCHRI Arline & Pete Harman Faculty Scholar award.

CLINICAL FOCUS

- Maternal and Fetal Medicine

ACADEMIC APPOINTMENTS

- Professor - University Medical Line, Obstetrics & Gynecology - Reproductive Biology
- Member, Bio-X
- Member, Cardiovascular Institute
- Member, Maternal & Child Health Research Institute (MCHRI)

ADMINISTRATIVE APPOINTMENTS

- Director of Reproductive, Stem Cell and Perinatal Biology Division, Stanford University School of Medicine, (2014- present)
- Leadership Council, Society of Reproductive Investigation, (2020-2023)
- Basic Science Domain Lead, Dunlevie MFM Center for Discovery, Innovation and Clinical Impact, (2021- present)
- Research Director, NIH K12 Women's Reproductive Health Research, (2020-2030)
- Executive Committee, Stanford Maternal and Child Health Research Institute (MCHRI), (2016-2025)
- Evaluation Committee, Reproductive Scientist Development Program (RSDP), (2018- present)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Fellow, American Board of Obstetric and Gynecology (2005 - present)
- Member, American College of Obstetrics and Gynecology (2000 - present)
- Full Member, Society of Maternal Fetal Medicine (2003 - present)
- Full Member, Society of Reproductive Investigation (SRI, formerly SGI) (1997 - present)
- Member, AIUM (2018 - present)
- Advisory Board, AAP Perinatal Medicine (2011 - 2014)

PROFESSIONAL EDUCATION

- Medical Education: University of Rochester School of Medicine and Dentistry (1996) NY
- PhD Training: University of Rochester School of Medicine and Dentistry (1994) NY
- Board Certification: Maternal and Fetal Medicine, American Board of Obstetrics and Gynecology (2009)
- Board Certification: Obstetrics and Gynecology, American Board of Obstetrics and Gynecology (2005)
- Fellowship: UCSF (2003) CA
- Residency: UCSF (2000) CA

LINKS

- Winn Lab: <https://med.stanford.edu/winn>
- Dunlevie Maternal Fetal Medicine Center: <https://dunleviemfm.stanford.edu/>
- Maternal and Child Health Research Institute: <https://med.stanford.edu/mchri.html>
- EPOCH Study: <https://epoch.sites.stanford.edu>
- NatPro Study: <https://www.natprostudy.org/natpromain.asp>
- HOPE study: <https://www.pregnancylossanswers.org/team>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

The Winn Laboratory seeks to understand the unique biological mechanisms of human placentation. While the placenta itself is one of the key characteristics for defining mammals, the human placenta is different from most available animal models: it is one of the most invasive placentas, and results in the formation of an organ comprised of cells from both the fetus and the mother. In addition to this fascinating chimerism, fetal cells are deeply involved in the remodeling of the maternal vasculature in order to redirect large volumes of maternal blood to the placenta to support the developing fetus. As such, the investigation of this human organ covers a large array of biological processes, and deals not only with understanding its endocrine function, but the physiologic process of immune tolerance, vascular remodeling, and cellular invasion.

PROJECTS

- Effect of Preeclampsia on Cardiovascular Health (EPOCH) - Stanford School of Medicine (September 1, 2018 - present)

Teaching

STANFORD ADVISEES

Med Scholar Project Advisor

Isha Sanghvi

Doctoral Dissertation Reader (NonAC)

Maigane Diop, James Zwierzynski

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Maternal-Fetal Medicine (Fellowship Program)
- Stem Cell Biology and Regenerative Medicine (Phd Program)

Publications

PUBLICATIONS

- **Single-cell spatiotemporal dissection of the human maternal-fetal interface.** *Nature*
Wang, C., Zhou, Y., Wang, Y., Guha, T. K., Luo, Z., Mustafaraj, A., McIntyre, T. I., Schwab, M. E., Davidson, B. R., Reeder, G. C., Wong, R. J., England, S. K., Gonzalez, et al
2026
- **Systemic immune dysregulation in hypertensive disorders of pregnancy persists years after delivery.** *Frontiers in immunology*
Sabayev, M., Ganio, E. A., Stelzer, I. A., Sato, M., Cambriel, A., Bonham, T. A., Juvan, Z. N., Diop, M., Iyer, P., Sedan, O., Aghaeepour, N., Angst, M. S., Shaw, et al
2026; 17: 1716809
- **Identification of bacteriophage DNA in human umbilical cord blood.** *JCI insight*
Sequoia, J. A., Haddock, N. L., Gay, P. M., Barkal, L. J., Narasimhan, P., Martinez, N., Winn, V. D., Bollyky, P. L.
2025; 10 (13)
- **Metabolomic Profiles During and After a Hypertensive Disorder of Pregnancy: The EPOCH Study.** *International journal of molecular sciences*
Hlatky, M. A., Shu, C. H., Bararpour, N., Murphy, B. M., Sorondo, S. M., Leeper, N. J., Wong, F., Stevenson, D. K., Shaw, G. M., Stefanick, M. L., Boyd, H. A., Melbye, M., Sedan, et al
2025; 26 (13)
- **Vascular effects of a hypertensive disorder of pregnancy antepartum and postpartum: The EPOCH study.** *American journal of obstetrics & gynecology MFM*
Hlatky, M. A., Mayo, J. A., Tierney, S., Miller, H. E., Sedan, O., Stefanick, M. L., Melbye, M., Boyd, H. A., Stevenson, D. K., Shaw, G. M., Winn, V. D.
2025: 101692
- **A Novel Stem Cell Model to Study Preeclampsia Endothelial Dysfunction.** *Reproductive sciences (Thousand Oaks, Calif.)*
Wu, Y., Sun, T., Medina, P., Narasimhan, P., Stevenson, D. K., Von Versen-Höyneck, F., Armstrong, J., Wu, J. C., Sayed, N., Winn, V. D.
2024
- **The effects of leptin on human cytotrophoblast invasion are gestational age and dose-dependent.** *Frontiers in endocrinology*
Rumer, K. K., Sehgal, S., Kramer, A., Bogart, K. P., Winn, V. D.
2024; 15: 1386309
- **Vascular health years after a hypertensive disorder of pregnancy: The EPOCH Study.** *American heart journal*
Miller, H. E., Tierney, S., Stefanick, M. L., Mayo, J. A., Sedan, O., Rosas, L. G., Melbye, M., Boyd, H. A., Stevenson, D. K., Shaw, G. M., Winn, V. D., Hlatky, M. A.
2024

- **Siglec-6 Signaling Uses Src Kinase Tyrosine Phosphorylation and SHP-2 Recruitment.** *Cells*
Stefanski, A. L., Reneclle, M. D., Kramer, A., Sehgal, S., Narasimhan, P., Rumer, K. K., Winn, V. D.
2022; 11 (21)
- **Sex at the interface: the origin and impact of sex differences in the developing human placenta.** *Biology of sex differences*
Braun, A. E., Mitchel, O. R., Gonzalez, T. L., Sun, T., Flowers, A. E., Pisarska, M. D., Winn, V. D.
2022; 13 (1): 50
- **Absent or Excessive Corpus Luteum Number Is Associated With Altered Maternal Vascular Health in Early Pregnancy** *HYPERTENSION*
von Versen-Hoeynck, F., Narasimhan, P., Tierney, E., Martinez, N., Conrad, K. P., Baker, V. L., Winn, V. D.
2019; 73 (3): 680–90
- **Exploring the plasma proteome linked to corpus luteum presence and conception mode across pregnancy stages and postpartum.** *Journal of assisted reproduction and genetics*
Ramachandran, D., Dewender, R. T., Schröder-Heurich, B., Froböse, W., Avdulahu, F., Richter, K., Baker, V. L., Winn, V. D., Pich, A., von Versen-Höynck, F.
2025
- **Regulatory KIR+CD8+ T cells are elevated during human pregnancy.** *Science translational medicine*
Li, J., Wang, X., Lackner, A. I., Narasimhan, P., Li, L., Mallajosyula, V., Johnson, M. M., Höbner, A. L., Kiro Singh, A. S., Braun, A. E., Nankya, F., Musunguzi, K., Kakuru, et al
2025; 17 (810): eadm7697
- **Distinct type I and II interferon responses direct cortical and medullary thymic epithelial cell development.** *Science immunology*
Mohammed, A., Wang, W., Arreola, M., Solomon, B. D., Slepicka, P. F., Hubka, K. M., Nguyen, H. D., Zheng, Z., Chavez, M. G., Yeh, C. Y., Kim, D. K., Ma, M. R., Martin, et al
2025; 10 (107): eado4720
- **Selective inhibition of stromal mechanosensing suppresses cardiac fibrosis.** *Nature*
Cho, S., Rhee, S., Madl, C. M., Caudal, A., Thomas, D., Kim, H., Kojic, A., Shin, H. S., Mahajan, A., Jahng, J. W., Wang, X., Thai, P. N., Paik, et al
2025
- **Race and Sex Differences in Placental Lipid Metabolism are Associated with Spontaneous Early Preterm Birth.** *Biology of reproduction*
Lien, Y. C., Kan, M., Leite, R., Garifallou, J. P., Himes, B. E., Winn, V. D., Parry, S., Strauss, J. F., Simmons, R. A.
2025
- **CXCL12 drives natural variation in coronary artery anatomy across diverse populations.** *Cell*
Rios Coronado, P. E., Zhou, J., Fan, X., Zanetti, D., Naftaly, J. A., Prabala, P., Martínez Jaimes, A. M., Farah, E. N., Kundu, S., Deshpande, S. S., Evergreen, I., Kho, P. F., Ma, et al
2025
- **The single-cell immune profile throughout gestation and its potential value for identifying women at risk for spontaneous preterm birth** *EUROPEAN JOURNAL OF OBSTETRICS & GYNECOLOGY AND REPRODUCTIVE BIOLOGY-X*
Feyaerts, D., Diop, M., Galaz, J., Einhaus, J. F., Arck, P. C., Diemert, A., Winn, V. D., Parast, M., Gyamfi-Bannerman, C., Prins, J. R., Gomez-Lopez, N., Stelzer, I. A.
2025; 25
- **Preeclamptic and Normotensive iPSC-Derived Endothelial Cells Have Distinct Responses to Maternal Circulating Factors**
Plummer, X. D., Wu, Y., Iyer, P., Medina, P., Sayed, N., Winn, V. D.
SPRINGER HEIDELBERG.2025: 69A
- **Sex-Specific Placental Transcriptome Differ by Placental Region in Hypertensive Disorders of Pregnancy**
Sehgal, S., Iyer, P., Chang, L., Ha, T., Hlatky, M., Winn, V.
SPRINGER HEIDELBERG.2025: 139A
- **What Accounts for the Increased Risk of HDP Seen with Donor and Autologous Egg IVF Pregnancies?**
Yang, R., Zhang, W. Y., Sherwin, E. B., Iyer, P. N., Sehgal, S., Plummer, X., Baker, V., Lathi, R., Winn, V. D.
SPRINGER HEIDELBERG.2025: 148A
- **The single-cell immune profile throughout gestation and its potential value for identifying women at risk for spontaneous preterm birth.** *European journal of obstetrics & gynecology and reproductive biology: X*

- Feyaerts, D., Diop, M., Galaz, J., Einhaus, J. F., Arck, P. C., Diemert, A., Winn, V. D., Parast, M., Gyamfi-Bannerman, C., Prins, J. R., Gomez-Lopez, N., Stelzer, I. A.
2025; 25: 100371
- **Persistence of a Proteomic Signature After a Hypertensive Disorder of Pregnancy.** *Hypertension (Dallas, Tex. : 1979)*
Hlatky, M. A., Shu, C. H., Stevenson, D. K., Shaw, G. M., Stefanick, M. L., Boyd, H. A., Melbye, M., Plummer, X. D., Sedan, O., Wong, R. J., Aghaepour, N., Winn, V. D.
2025
 - **Establishing dosing parameters for the use of maternal hyperoxygenation to affect fetal cardiovascular physiology.** *Journal of the American Society of Echocardiography : official publication of the American Society of Echocardiography*
Kaplinski, M., Phillips, A. A., Tandel, M. D., Weng, Y., Thorson, K., Stauffer, K. J., Moon, S., Frymoyer, A., Winn, V. D., Tacy, T. A., Maskatia, S. A.
2025
 - **Solving the Puzzle of Preterm Birth.** *Clinics in perinatology*
Stevenson, D. K., Winn, V. D., Shaw, G. M., England, S. K., Wong, R. J.
2024; 51 (2): 291-300
 - **Elevation of KIR+CD8+T cells during human pregnancy**
Li, J., Narasimhan, P., Li, L., Mallajosyula, V., Prunicki, M., Kiro Singh, A., Braun, A., Nankya, F., Musinguzi, K., Kakuru, A., Kanya, M., Rosenthal, P., Dorsey, et al
AMER ASSOC IMMUNOLOGISTS.2024
 - **Corrigendum: Advances and potential of omics studies for understanding the development of food allergy.** *Frontiers in allergy*
Sindher, S. B., Chin, A. R., Aghaepour, N., Prince, L., Maecker, H., Shaw, G. M., Stevenson, D., Nadeau, K. C., Snyder, M., Khatri, P., Boyd, S. D., Winn, V. D., Angst, et al
2024; 5: 1373485
 - **Clinical Features of SARS-CoV-2 Infection During Pregnancy and Associated Placental Pathologies** *INTERNATIONAL JOURNAL OF GYNECOLOGICAL PATHOLOGY*
Ryan, E. E., Brar, N., Allard, G., Wang, A., Winn, V. D., Folkins, A., Yang, E. J., Tan, S., Hazard, F. K., Howitt, B. E.
2024; 43 (1): 15-24
 - **Cell-Free Nucleic Acids for Early Prediction of Preeclampsia.** *Current hypertension reports*
Moufarrej, M. N., Winn, V. D., Quake, S. R.
2023
 - **CXCL12 regulates coronary artery dominance in diverse populations and links development to disease.** *medRxiv : the preprint server for health sciences*
Rios Coronado, P. E., Zanetti, D., Zhou, J., Naftaly, J. A., Prabala, P., Kho, P. F., Martínez Jaimes, A. M., Hilliard, A. T., Pyarajan, S., Dochtermann, D., Chang, K. M., Winn, V. D., Paşca, et al
2023
 - **The SunBEAm birth cohort: Protocol design.** *The journal of allergy and clinical immunology. Global*
Keet, C., Sicherer, S. H., Bunyavanich, S., Visness, C., Fulkerson, P. C., Togias, A., Davidson, W., Perry, S., Hamrah, S., Calatroni, A., Robinson, K., Dunaway, L., Davis, et al
2023; 2 (3)
 - **A spatially resolved timeline of the human maternal-fetal interface.** *Nature*
Greenbaum, S., Averbukh, I., Soon, E., Rizzuto, G., Baranski, A., Greenwald, N. F., Kagel, A., Bosse, M., Jaswa, E. G., Khair, Z., Kwok, S., Warshawsky, S., Piyadasa, et al
2023; 619 (7970): 595-605
 - **Multiomic signals associated with maternal epidemiological factors contributing to preterm birth in low- and middle-income countries.** *Science advances*
Espinosa, C. A., Khan, W., Khanam, R., Das, S., Khalid, J., Pervin, J., Kasaro, M. P., Contrepolis, K., Chang, A. L., Phongpreecha, T., Michael, B., Ellenberger, M., Mehmood, et al
2023; 9 (21): eade7692
 - **Advances and potential of omics studies for understanding the development of food allergy.** *Frontiers in allergy*
Sindher, S. B., Chin, A. R., Aghaepour, N., Prince, L., Maecker, H., Shaw, G. M., Stevenson, D. K., Nadeau, K. C., Snyder, M., Khatri, P., Boyd, S. D., Winn, V. D., Angst, et al

2023; 4: 1149008

- **Early prediction and longitudinal modeling of preeclampsia from multiomics.** *Patterns (New York, N.Y.)*
Maric, I., Contrepois, K., Moufarrej, M. N., Stelzer, I. A., Feyaerts, D., Han, X., Tang, A., Stanley, N., Wong, R. J., Traber, G. M., Ellenberger, M., Chang, A. L., Fallahzadeh, et al
2022; 3 (12): 100655
- **Implementation of a comprehensive fertility biobanking initiative.** *F&S science*
Wignarajah, A., Alvero, R., Lathi, R. B., Aghajanova, L., Eisenberg, M., Winn, V. D., Behr, B., Murugappan, G.
2022; 3 (3): 228-236
- **HMOX1 Genetic Polymorphisms Display Ancestral Diversity and May Be Linked to Hypertensive Disorders in Pregnancy.** *Reproductive sciences (Thousand Oaks, Calif.)*
Sun, T., Cruz, G. I., Mousavi, N., Maric, I., Brewer, A., Wong, R. J., Aghaeepour, N., Sayed, N., Wu, J. C., Stevenson, D. K., Leonard, S. A., Gymrek, M., Winn, et al
2022
- **Extracellular Vesicles in Preeclampsia: Can Small Packages Carry a Big Punch?** *Anesthesia and analgesia*
Hess, P. E., Winn, V. D.
2022; 134 (4): 710-712
- **Early prediction of preeclampsia in pregnancy with cell-free RNA.** *Nature*
Moufarrej, M. N., Vorperian, S. K., Wong, R. J., Campos, A. A., Quaintance, C. C., Sit, R. V., Tan, M., Detweiler, A. M., Mekonen, H., Neff, N. F., Baruch-Gravett, C., Litch, J. A., Druzin, et al
2022
- **Coronary blood vessels from distinct origins converge to equivalent states during mouse and human development.** *eLife*
Phansalkar, R., Krieger, J., Zhao, M., Kolluru, S. S., Jones, R. C., Quake, S. R., Weissman, I., Bernstein, D., Winn, V. D., D'Amato, G., Red-Horse, K.
1800; 10
- **Coronary blood vessels from distinct origins converge to equivalent states during mouse and human development** *ELIFE*
Phansalkar, R., Krieger, J., Zhao, M., Kolluru, S., Jones, R. C., Quake, S. R., Weissman, I., Bernstein, D., Winn, V. D., D'Amato, G., Red-Horse, K.
2021; 10
- **Endocardial/endothelial angiocrines regulate cardiomyocyte development and maturation and induce features of ventricular non-compactation.** *European heart journal*
Rhee, S., Paik, D. T., Yang, J. Y., Nagelberg, D., Williams, I., Tian, L., Roth, R., Chandy, M., Ban, J., Belbachir, N., Kim, S., Zhang, H., Phansalkar, et al
2021
- **Noninvasive Prediction of Preeclampsia in Pregnancy with Circulating RNA.**
Moufarrej, M. N., Wong, R. J., Campos, A. A., Quaintance, C. C., Sit, R. V., Tan, M., Neff, N. F., Druzin, M. L., Winn, V. D., Shaw, G. M., Stevenson, D. K., Quake, S. R.
SPRINGER HEIDELBERG.2021: 75A
- **Multi-Omic, Longitudinal Profile of Third-Trimester Pregnancies Identifies a Molecular Switch That Predicts the Onset of Labor.**
Stelzer, I., Ghaemi, M., Han, X., Ando, K., Hedou, J., Feyaerts, D., Peterson, L., Ganio, E., Tsai, A., Tsai, E., Rumer, K., Stanley, N., Fallazadeh, et al
SPRINGER HEIDELBERG.2021: 233A-234A
- **Integrated trajectories of the maternal metabolome, proteome, and immunome predict labor onset.** *Science translational medicine*
Stelzer, I. A., Ghaemi, M. S., Han, X., Ando, K., Hedou, J. J., Feyaerts, D., Peterson, L. S., Rumer, K. K., Tsai, E. S., Ganio, E. A., Gaudilliere, D. K., Tsai, A. S., Choisy, et al
2021; 13 (592)
- **Association of Preconception Paternal Health and Adverse Maternal Outcomes among Healthy Mothers.** *American journal of obstetrics & gynecology MFM*
Murugappan, G., Li, S., Leonard, S., Winn, V. D., Druzin, M., Eisenberg, M. L.
2021: 100384
- **A Letter to President Biden and Secretary Designate of HHS Xavier Becerra: Remove Barriers to Federal Funding of Human Embryo and Fetal Tissue Research.** *Reproductive sciences (Thousand Oaks, Calif.)*
Santoro, N., Caplan, A., Strauss, J., Winn, V. D.

2021

- **Proteomic signatures predict preeclampsia in individual cohorts but not across cohorts - implications for clinical biomarker studies.** *The journal of maternal-fetal & neonatal medicine : the official journal of the European Association of Perinatal Medicine, the Federation of Asia and Oceania Perinatal Societies, the International Society of Perinatal Obstetricians*
Ghaemi, M. S., Tarca, A. L., Romero, R. n., Stanley, N. n., Fallahzadeh, R. n., Tanada, A. n., Culos, A. n., Ando, K. n., Han, X. n., Blumenfeld, Y. J., Druzin, M. L., El-Sayed, Y. Y., Gibbs, et al
2021; 1–8
- **Single-Cell Analysis of the Neonatal Immune System Across the Gestational Age Continuum.** *Frontiers in immunology*
Peterson, L. S., Hedou, J., Ganio, E. A., Stelzer, I. A., Feyaerts, D., Harbert, E., Adusumelli, Y., Ando, K., Tsai, E. S., Tsai, A. S., Han, X., Ringle, M., Houghteling, et al
2021; 12: 714090
- **Natural vs. programmed cycles for frozen embryo transfer: study protocol for an investigator-initiated, randomized, controlled, multicenter clinical trial.** *Trials*
Baksh, S., Casper, A., Christianson, M. S., Devine, K., Doody, K. J., Ehrhardt, S., Hansen, K. R., Lathi, R. B., Timbo, F., Usadi, R., Vitek, W., Shade, D. M., Segars, et al
2021; 22 (1): 660
- **Natural vs. programmed cycles for frozen embryo transfer: study protocol for an investigator-initiated, randomized, controlled, multicenter clinical trial.** *Trials*
Baksh, S., Casper, A., Christianson, M. S., Devine, K., Doody, K. J., Ehrhardt, S., Hansen, K. R., Lathi, R. B., Timbo, F., Usadi, R., Vitek, W., Shade, D. M., Segars, et al
2021; 22 (1): 660
- **Examining Sex Differences in the Human Placental Transcriptome During the First Fetal Androgen Peak.** *Reproductive sciences (Thousand Oaks, Calif.)*
Braun, A. E., Muench, K. L., Robinson, B. G., Wang, A., Palmer, T. D., Winn, V. D.
2020
- **Early prediction of preeclampsia via machine learning.** *American journal of obstetrics & gynecology MFM*
Maric, I., Tsur, A., Aghaeepour, N., Montanari, A., Stevenson, D. K., Shaw, G. M., Winn, V. D.
2020; 2 (2): 100100
- **Uteroplacental Ischemia Is Associated with Increased PAPP-A2.** *Reproductive sciences (Thousand Oaks, Calif.)*
Lamale-Smith, L. M., Gumina, D. L., Kramer, A. W., Browne, V. A., Toledo-Jaldin, L., Julian, C. G., Winn, V. D., Moore, L. G.
2020
- **Multiomic immune clockworks of pregnancy.** *Seminars in immunopathology*
Peterson, L. S., Stelzer, I. A., Tsai, A. S., Ghaemi, M. S., Han, X. n., Ando, K. n., Winn, V. D., Martinez, N. R., Contrepolis, K. n., Moufarrej, M. N., Quake, S. n., Relman, D. A., Snyder, et al
2020
- **Multiomics Characterization of Preterm Birth in Low- and Middle-Income Countries.** *JAMA network open*
Jehan, F. n., Sazawal, S. n., Baqui, A. H., Nisar, M. I., Dhingra, U. n., Khanam, R. n., Ilyas, M. n., Dutta, A. n., Mitra, D. K., Mehmood, U. n., Deb, S. n., Mahmud, A. n., Hotwani, et al
2020; 3 (12): e2029655
- **Changes in pregnancy-related serum biomarkers early in gestation are associated with later development of preeclampsia.** *PloS one*
Hao, S. n., You, J. n., Chen, L. n., Zhao, H. n., Huang, Y. n., Zheng, L. n., Tian, L. n., Maric, I. n., Liu, X. n., Li, T. n., Bianco, Y. K., Winn, V. D., Aghaeepour, et al
2020; 15 (3): e0230000
- **Maternal Height and Risk of Preeclampsia among Race/Ethnic Groups** *AMERICAN JOURNAL OF PERINATOLOGY*
Maric, I., Mayo, J. A., Druzin, M. L., Wong, R. J., Winn, V. D., Stevenson, D. K., Shaw, G. M.
2019; 36 (8): 864–71
- **Differential Dynamics of the Maternal Immune System in Healthy Pregnancy and Preeclampsia.** *Frontiers in immunology*
Han, X., Ghaemi, M. S., Ando, K., Peterson, L. S., Ganio, E. A., Tsai, A. S., Gaudilliere, D. K., Stelzer, I. A., Einhaus, J., Bertrand, B., Stanley, N., Culos, A., Tanada, et al
2019; 10: 1305

- **Increased Preeclampsia Risk and Reduced Aortic Compliance With In Vitro Fertilization Cycles in the Absence of a Corpus Luteum** *HYPERTENSION*
von Versen-Hoynck, F., Schaub, A. M., Chi, Y., Chiu, K., Liu, J., Lingis, M., Williams, R., Rhoton-Vlasak, A., Nichols, W. W., Fleischmann, R. R., Zhang, W., Winn, V. D., Segal, et al
2019; 73 (3): 640–49
- **Murine trophoblast-derived and pregnancy-associated exosome-enriched extracellular vesicle microRNAs: Implications for placenta driven effects on maternal physiology** *PLOS ONE*
Stefanski, A. L., Martinez, N., Peterson, L. K., Callahan, T. J., Treacy, E., Luck, M., Friend, S. F., Hermes, A., Maltepe, E., Phang, T., Dragone, L. L., Winn, V. D.
2019; 14 (2)
- **Multimomics modeling of the immunome, transcriptome, microbiome, proteome and metabolome adaptations during human pregnancy.** *Bioinformatics (Oxford, England)*
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