

Quarter Four 2020

HAPPY NEW YEAR!

Dear Faculty and Staff,

This last year has significantly impacted our personal and professional lives in unimaginable ways. The university and College instituted practices and policies that identified safe environments in which we



could continue to do our work and for that we are grateful. We know the immense personal toll this last year has taken on our famílíes and can never thank them enough for their sacrifices. Your dedication, ingenuity and resilience enabled our department to continue to achieve success in each of its missions of education, research, community engagement and clinical responsibilities. This year's newsletters and department web page chronicle the exceptional

progress we have achieved in spite of the pandemic that is nothing short of astounding. We all should be proud of the lives each of you have impacted this year and look forward to fostering our personal wellbeing with continued

success in achieving our goals for the coming year. Wishing you and your famílies a healthy and joyful New Year.

With gratitude,

Ríck.





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CONGRATULATIONS!

The National Institutes of Health recently announced Michigan State University researcher Jens Schmidt as a recipient of its prestigious New Innovator Award to study how human cells repair damage to their genome and ward off cancer.

Dr. Jens Schmidt, assistant professor in the College of Human Medicine's Department of Obstetrics, Gynecology and Reproductive Biology, was awarded \$1.5 million for his research on a process called the DNA damage response.

Cancer can occur when DNA damage response fails, often due to mutations in tumor suppressor genes, such as BRCA1 and BRCA2. Schmidt hopes the project will lead to new and better treatments. Read more

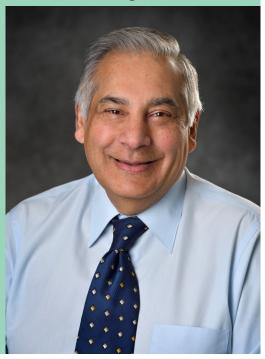




Provost Teresa K. Woodruff and Dr. Asgi Fazleabas were selected as members of the 2021 inaugural class for

induction as a Society
for the Study of
Reproduction (SSR)
Distinguished
Fellow. Induction into
the SSR Distinguished
Fellowship is an
acknowledgement of
outstanding
contributions to the

field of reproductive biology and to the Society, illustrated by sustained high impact research, leadership, service and mentorship. Induction will take place at the SSR 54th Annual Meeting in St. Louis, MO August 4-7th, 2021.





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CONGRATULATIONS! CONT.



The College of Human Medicine recognized outstanding college faculty for their achievements and contributions to medical education, research and academics at the 2020 Faculty Awards

Ceremony.

Two of Obstetrics, Gynecology and Reproductive Biology's faculty have been selected. Dr.
Jennifer Johnson has been selected for the Junior Faculty
Mentor Award and Dr. Ronald L.
Chandler for the Early Research
Excellence Award.



The Chandler Lab has been highlighted in MSU Today for their research that has identified a potential genetic target for treating an especially painful and invasive form of endometriosis.

Their study published in Cell Reports, a scientific journal, could lead to better treatments for women suffering from severe forms of



endometriosis, said Mike Wilson, a postdoctoral fellow in the MSU College of Human Medicine. Wilson and Jake Reske, a graduate student in the MSU Genetics and Genome Sciences Program, are first authors of the study. Read full story



WELCOME

Please join us in welcoming new additions to our department!

Dr. Jayson Field joins us from Oakland University William Beaumont School of Medicine and William Beaumont Hospital's Division of Gynecologic Oncology. Dr. Field's goal as a board certified gynecologic oncologist is to provide excellent care for women with gynecologic cancers with surgery, chemotherapy and coordination of radiation treatment. He specializes in care of cervical, vulvar, endometrial (or uterine), and ovarian cancers and is interested in minimally invasive surgery, fertility preservation, and cytoreduction of ovarian cancers. Dr. Field will be practicing in East Lansing with affiliations to McLaren and the Karmanos Cancer Institute.



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WELCOME CONT.

The MacKeigan Lab would like to welcome **Dr. Brendan Looyenga** – an Associate Professor at Calvin University who will be starting his sabbatical research at the GRRC in January. Dr. Looyenga is a talented researcher who will be investigating glutamine's role in activating MET on the surface of kidney cells.

The Jeong Lab welcomed Yeon Jeong Hwang. Yeon Jeong is a visiting scholar from the Republic of Korea. Yeon Jeong is currently a graduate student in the Department of Biology at the Sungshin Women's University.

NEED TO KNOW

Travel

International and Domestic travel, has been suspended indefinitely. Should essential travel arise, please contact Jenna French (French21@msu.edu) for direction.

Health screening form for in-person work

Any employee coming in person to work must fill out a <u>health screening form</u> each day before arrival. Employees are still encouraged to work remotely if possible. Do not come to work in-person unless it is absolutely necessary.

Campus parking update

Lots 16 (surface lot west of Ramp 7), 56, 58, 89, 101 and 113 will be closed for spring semester 2021. The top floor of all ramps will also be closed. Parking is banned in closed lots as they will not be plowed or salted. Employees may park in lots 15, 25, 63, 83, 91, 100, 204 and in Ramps 3, 5, 6 and 7 without a permit through May 2, 2021. Read more

GRRC Sidewalk update

The east sidewalk along Monroe, closest to the new parking structure, will be closed through the end of February 2021. Please use the sidewalk on the opposite side of Monroe.

Presentations

- Bauer, H., Ford, S., Avery, A.. (November, 2020). Follow-up of Abnormal Pap Tests: A Qualitative Study in a Postpartum Cohort. Poster presented virtually at: American College of Obstetricians and Gynecologists District V 2020. (Selected as a top abstract, receiving a \$500.00 award)
- Fazleabas AT, Plenary Speaker, "Knowledge Collaboration and Promotion for Reproduction", 35th Annual Meeting of Japan Society for Immunology of Reproduction, Beppu, Japan, November 2020 (Virtual Presentation on November 28th due to COVID-19 Pandemic).
- Luke B, Invited Speaker, "Designing Research to Assess Outcomes After Assisted Reproduction", Howard Jones Memorial Lecture, Department of Gynecology and Obstetrics at John Hopkins University School of Medicine.



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PRESENTATIONS CONT.

 Ondersma S, completed presentations for CDC Public Health Grand Rounds (seminar on Reducing Polysubstance Use in Pregnancy); for the National Academies of Sciences, Engineering, and Medicine (seminar on Caring for People with Mental Health and Substance Use Disorders in Primary Care Settings); and for the Greater Detroit Area Health Council [GDAHC] for its 5th Annual Opioid and Substance Use Disorder Summit.

GRANTS

- Lee Anne Roman (PI) and her Spectrum Health collaborators were awarded \$38,560 in CARES Act funding for their project Strong Beginnings: COVID Rapid Response Initiative. The project period for this grant award was 10/1/2020 through 12/30/2020.
- Stacey Missmer (Co-I) and Leslie Farland (PI) from the University of Arizona received an R21 grant to research Endometriosis, Infertility & Risk of Stroke. The project period runs from 7/1/2020 through 6/30/2022. Dr. Missmer was awarded \$74,938 for this subaward.
- Greg Burns (PI) was awarded \$65,310 for an NIH F32 training grant for his research on Biological Roles of Forkhead Box C1 Pelvic Endometriosis. The grant was awarded on 12/2/2020.

PUBLISHED RESEARCH

- **Luke B**, Brown MB, Nichols HB, Schymura MJ, Browne ML, Fisher SC, Forestieri NE, Rao C, Yazdy MM, Gershman ST, Ethen MK, Canfield MA, Williams M, Wantman E, Oehninger S, Doody KJ, Eisenberg ML, Baker VL, Lupo PJ. Assessment of Birth Defects and Cancer Risk in Children Conceived via In Vitro Fertilization in the US. JAMA Netw Open. 2020 Oct 1;3(10):e2022927. doi: 10.1001/jamanetworkopen.2020.22927. PMID: 33119107; PMCID: PMC7596575.
- Olmstead TA, Martino S, **Ondersma SJ**, Gilstad-Hayden K, Forray A, Yonkers KA. The short-term impact on economic outcomes of SBIRT interventions implemented in reproductive health care settings. J Subst Abuse Treat. 2021 Jan;120:108179. doi: 10.1016/j.jsat.2020.108179. Epub 2020 Oct 21. PMID: 33298305; PMCID: PMC7733031.
- Sapoznik E, Chang BJ, Huh J, Ju RJ, Azarova EV, Pohlkamp T, Welf ES, **Broadbent D**, Carisey AF, Stehbens SJ, Lee KM, Marín A, Hanker AB, **Schmidt JC**, Arteaga CL, Yang B, Kobayashi Y, Tata PR, Kruithoff R, Doubrovinski K, Shepherd DP, Millett-Sikking A, York AG, Dean KM, Fiolka RP. A versatile oblique plane microscope for large -scale and high-resolution imaging of subcellular dynamics. Elife. 2020 Nov 12;9:e57681. doi: 10.7554/eLife.57681. PMID: 33179596; PMCID: PMC7707824.
- Meghea CI. Electronic Nicotine Delivery Systems Use and Cigarette Smoking Frequency and Intensity Among Young Adult Smokers. JAMA Netw Open. 2020 Nov 2;3(11):e2016121. doi: 10.1001/jamanetworkopen.2020.16121. PMID: 33231632.
- Towner EK, Idalski Carcone A, Ghosh S, **Ondersma S**, Stylianou M. Adapting pharmacological dose-finding designs for early phase behavioral intervention development research. Health Psychol. 2020 Nov 5. doi: 10.1037/hea0001024. Epub ahead of print. PMID: 33151725.



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- Farland LV, Stern JE, Hwang SS, Liu CL, Cabral H, Knowlton R, Gershman ST, Coddington CC 3rd, **Missmer SA**. Early-life cancer, infertility, and risk of adverse pregnancy outcomes: a registry linkage study in Massachusetts. Cancer Causes Control. 2020 Nov 27. doi: 10.1007/s10552-020-01371-4. PMID: 33247354.
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- Marquardt RM, Jeong JW, Fazleabas AT. Animal Models of Adenomyosis. Semin Reprod Med. 2020 May;38(2-03):168-178. doi: 10.1055/s-0040-1718741. Epub 2020 Oct 26. PMID: 33105508.
- Markovitz AR, Haug EB, Horn J, Fraser A, Tilling K, Rimm EB, **Missmer SA**, Williams PL, Romundstad PR, Åsvold BO, Rich-Edwards JW. Normotensive preterm delivery and maternal cardiovascular risk factor trajectories across the life course: The HUNT Study, Norway. Acta Obstet Gynecol Scand. 2020 Oct 6. doi: 10.1111/aogs.14016. Epub ahead of print. PMID: 33022746.
- Sha Q, Achtyes E, Nagalla M, Keaton S, Smart L, **Leach R**, Brundin L. Associations between estrogen and progesterone, the kynurenine pathway, and inflammation in the post-partum. J Affect Disord. 2020 Oct 29;281:9-12. doi: 10.1016/j.jad.2020.10.052. Epub ahead of print. PMID: 33278766.
- Marquardt RM, Kim TH, Yoo JY, Teasley HE, Fazleabas AT, Young SL, Lessey BA, Arora R, Jeong JW. Endometrial epithelial ARID1A is critical for uterine gland function in early pregnancy establishment. FASEB J. 2020 Nov 22. doi: 10.1096/fj.202002178R. Epub ahead of print. PMID: 33222288.
- Upson K, **Missmer SA**. Epidemiology of Adenomyosis. Semin Reprod Med. 2020 Oct 26. doi: 10.1055/s-0040-1718920. Epub ahead of print. PMID: 33105509.
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- Marquardt RM, Lee K, Kim TH, Lee B, DeMayo FJ, Jeong JW. Interleukin-13 receptor subunit alpha-2 is a target of progesterone receptor and steroid receptor coactivator-1 in the mouse uterus†. Biol Reprod. 2020 Oct 5;103(4):760-768. doi: 10.1093/biolre/ioaa110. PMID: 32558878; PMCID: PMC7569349.
- Yoo JY, Ku BJ, **Kim TH**, Il Ahn J, Ahn JY, Yang WS, Lim JM, Taketo MM, Shin JH, **Jeong JW**. β-catenin activates TGF -β-induced epithelial-mesenchymal transition in adenomyosis. Exp Mol Med. 2020 Oct;52(10):1754-1765. doi: 10.1038/s12276-020-00514-6. Epub 2020 Oct 15. PMID: 33060769.
- Flores D, Madhavan M, Wright S, Arora R. Mechanical and signaling mechanisms that guide pre-implantation embryo movement. Development. 2020 Dec 21;147(24):dev193490. doi: 10.1242/dev.193490. PMID: 33158924.
- **Hailemariam M**, Pathare S. The missing global in global mental health. Lancet Psychiatry. 2020 Dec;7(12):1011-1012. doi: 10.1016/S2215-0366(20)30398-9. PMID: 33220190.

