Andrew C. Rausch, MD

2410 W Bloomingdale Ave, Apt 3E
Chicago, IL 60647
arausch@bsd.uchicago.edu | phone (612) 309.4222

Professional Experience

2021-current	**Assistant Professor** – Obstetrics & Gynecology, Maternal-Fetal Medicine – University of Chicago, *Chicago, IL*

Medical Training

2018-2021	**Fellowship –** Maternal-Fetal Medicine – Northwell Health / Hofstra University, *Manhasset, NY* Thesis: Neural network estimation of fetal weight.
2014-2018	**Residency –** Obstetrics & Gynecology – Stamford Hospital / Columbia University, *Stamford, CT*

Education

2010-2014	**MD Degree** – Tufts University School of Medicine – *Boston, MA*
2004-2008	**BA Degree** – Carleton College – Cum laude, Physics & Astronomy – *Northfield, MN*

Licensure & Certification

2018-2021	Medical License. New York State.
2021-present	Medical License. Illinois State.

Publications and Presentations

Blitz MJ, Gerber RP, Gulersen M, Shan W, **Rausch AC**, Prasannan L, Meirowitz N, Rochelson B. Preterm birth among women with and without severe acute respiratory syndrome coronavirus 2 infection. *Acta Obstet Gynecol Scand*. 2021

Rausch AC, Segal O, Speicher A, Dimijian D, Rochelson B. Fetal weight estimation using neural networks. 2020 AIUM Annual Meeting. – Invited for oral presentation but not given due to COVID-19 related cancellation

Meirowitz N, Sharma R, **Rausch, AC**. Antenatal care for postbariatric women, in Mahmood T, Arulkumaran S & Cherveneak FA (2nd ed) *Obesity and Obstetrics*. pp 105-115

Blitz MJ, Rochelson B, **Rausch AC**, Solmonovich R, Shan W, Combs A, Nimaroff M. Universal testing for coronavirus disease 2019 in pregnant women admitted for delivery: prevalence of peripartum infection and rate of asymptomatic carriers at four New York hospitals within an integrated healthcare system. *American Journal of Obstetrics & Gynecology MFM*. 2020;2(3):100169.

Ploran EJ, Soni S, Snellings JT, **Rausch A**, Rochelson B. The effect of perceptual decision-making on the interpretation of twin fetal heart rate tracings. *The Journal of Maternal-Fetal & Neonatal Medicine*. Published online June 29, 2020:1-6.

Wieland D, Burke M, **Rausch A**, Bowman D, Bobby P. Impact of a Quality Improvement Initiative on the Episiotomy Rate at a Community Hospital. *J Repro Med*. 2017;62(6):615-620.

Ohtani T, Bouix S, Hosokawa T, Saito Y, Eckbo R, Ballinger T, **Rausch AC**, Melonakos E, Kubicke M. Abnormalities in white matter connections between orbitofrontal cortex and anterior cingulate cortex and their associations with negative symptoms in schizophrenia: A DTI study. *Schizophrenia Research*. 2014;157(1-3):190-197.

Rao M, Concannon TW, Iovin R, Yu W, Chan J, Lypas G, Terasawa T, Gaylor J, Kong L, **Rausch AC**, Lau J, Kitsios G. Identification of topics for comparative effectiveness systematic reviews in the field of cancer imaging. *Journal of Comparative Effectiveness Research*. 2013;2(5):483-495.

Whitford TJ, Savadjiev P, Kubicki M, O'Donnell L, Terry D, Bouix S, Westin CF, Schneiderman J, Bobrow L, **Rausch AC**, Niznikiewicz M, Nestor P, Pantelis C, Wood S, McCarley R, Shenton M. Fiber geometry in the corpus callosum in schizophrenia: Evidence for transcallosal misconnection. *Schizophrenia Research*. 2011;132(1):69-74.

Whitford TJ, Mathalon DH, Shenton ME, Roach BJ, Bammer R, Adcock RA, Bouix S, Kubicki M, De Siebenthal J, **Rausch AC**, Schneiderman J, Ford JM. Electrophysiological and diffusion tensor imaging evidence of delayed corollary discharges in patients with schizophrenia. *Psychol Med*. 2011;41(5):959-969.

Awards and Memberships

2020	40 Featured Voices in MFM – *2020 SMFM Annual Meeting* (@rauscha on Twitter)
2016	Gold Foundation Humanism and Excellence in Teaching Award – *Columbia University College of Physicians & Surgeons*
2015, 2016	Junior Resident Teacher of the Year – *Stamford Hospital Ob/Gyn Residency*
Current	Society for Maternal-Fetal Medicine – *Member*
Current	American College of Obstetricians and Gynecologists – *Junior Fellow*
Current	Massachusetts Medical Society – *Member*

Ongoing Research & Career Interests

Advanced technology in obstetrics – I believe new technology can dramatically simplify and improve the provision of health care, and intelligent implementation has long been lacking in obstetrics. With a background in computational physics and imaging, I have found a niche in connecting these interests to great effect.

Artificial Intelligence – In collaboration with Dr. Oren Segal, a professor of computer science at Hofstra University, we explored applications of artificial intelligence, neural networks, and other forms of machine learning to clinical problems in maternal-fetal medicine. Current avenues of research include estimation of fetal weight and identification of fetal growth restriction, prediction of latency between diagnosis and delivery in severe preeclampsia, and anomaly detection in ultrasound.

3D Printing – Working with Dr. Todd Goldstein in the Dept of 3D Printing and Innovation at Northwell Health, we pioneered 3D printing pathways to automate the creation of personalized medical devices, and print 3D models from ultrasound volumes for patient and trainee education.

Fellow and Resident Education – My passion for education led to the receipt of multiple teaching awards throughout residency, and that passion continues through fellowship, both informally at daily rounds, and through invited lectures for the medical students, residents, and advanced care practitioners at Hofstra and Northwell Health.