Biography

Dr. Onishi is a retired basic research scientist with 35 years of experience in drug discovery with Merck and Co., Inc. She made key contributions to the discovery of two chemicals that were developed and approved by the FDA to treat human fungal infections. She is a biochemist with expertise developing *in vitro* tests to select chemicals for consideration as development candidates for safe, efficacious pharmaceuticals for human use. As a contributor to the discovery and development team, she is experienced evaluating safety and efficacy results of various *in vivo* pre-clinical studies designed to profile the biological activity of new chemicals.

References

1. Shalat, SL. **An Evaluation of Potential Exposures to Lead and Other Metals as the Result of Aerosolized Particulate Matter from Artificial Turf Playing Fields**. July 14, 2011. www.nj.gov/dep/dsr/publications/artificial-turg-report.pdf
2. Perkins AN *et al.* **Evaluation of potential carcinogenicity of organic chemicals in synthetic turf crumb rubber.** Environ Res. 2019; 169: 163–172. doi:10.1016/j.envres.2018.10.018.
3. Zafar, S. **How is Crumb Rubber Produced and What are Its Uses**. Dec. 7, 2021. https://www.ecomena.org/crumb-rubber-production-and-uses/
4. Paradise Greens Artificial Turf Expert; Dec 12, 2010. **One synthetic turf field provides outlet for 20,000 tires**. https://www.paradisegreen.com/2010/12/12/synthetic-turf-athletic-fields/
5. https://www.epa.gov/chemical-research/federal-research-recycled-tire-crumb-used-playing-fields. Federal Research on Recycled Tire Crumb Used on Playing Fields. 2016
6. Watterson, A. **Artificial Turf: Contested terrains for precautionary public health with particular reference to Europe.** Int J Environ Res Public Health. 2017; 14:1050. doi: 10.3390/ijerph14091050.
7. Negev, M. *et al.* **Hazardous chemicals in outdoor and indoor surfaces: artificial turf and laminate flooring.** J Expo Sci Environ Epidemiol. 2021 Oct 25. doi: 10.1038/s41370-021-00396-4.
8. **Endocrine Disrupters**. www.niehs.nih.gov/health/topics/agents/endocrine/index.cfn
9. Shoaff JR, B Coull, J Weuve *et al.* **Association of exposure to endocrine-disrupting chemicals during adolescence with attention-deficit/hyperactivity disorder-related behaviors**. JAMA Netw Open. 2020;3:e2015041. doi: 10.1001/jamanetworkopen.2020.15041
10. Roy JR, S Chakraborty, TR Chakraborty. **Estrogen-like endocrine disrupting chemicals affecting puberty in humans--a review.** Med Sci Monit. 2009 Jun;15(6):RA137-45.
11. Shanle EK and W Xu**. Endocrine disrupting chemicals targeting estrogen receptor signaling: Identification and mechanisms of action.** Chem Res Toxicol. 2011; 24:6-19. doi: 10.1021/tx100231n