

From Rock Star to Doc Star

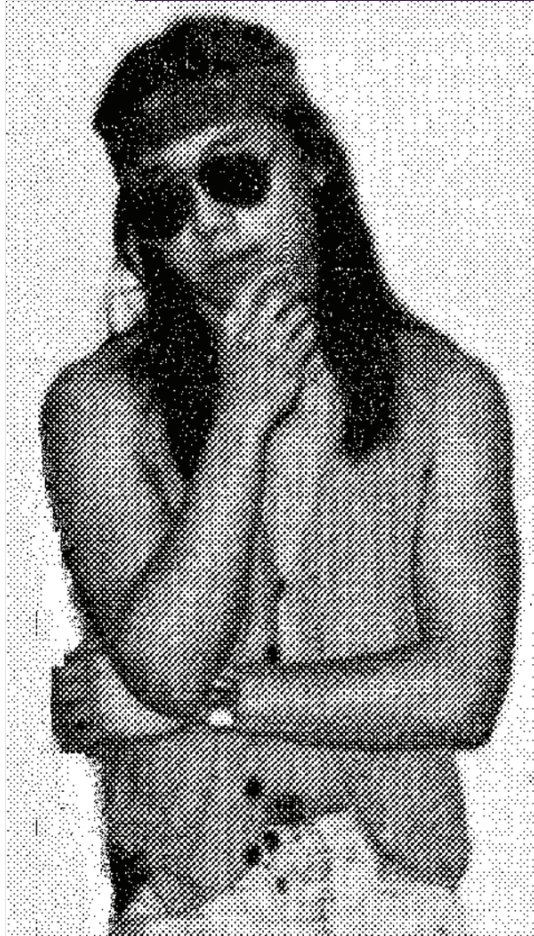
Featured Junior Science Humanities Tri-State Symposium Keynote speaker Dr. Eugene Kwon always wanted to be a rock star. Fortunately for his mother and all of us, his inability to actually play the guitar changed his career path and he went on to medical school.

Dr. Kwon is currently serving as Associate Professor of Immunology and Associate Professor of Urology at Mayo Clinic. His research focuses on methods to evoke a potent immune response to treat relatively advanced forms of malignancy. His specific areas of research pertain to the preclinical and clinical use of novel vaccines and antibodies to activate antitumoral T cells; the use of hormone manipulations to boost or rebuild host immunity; and the treatment of patients with immunotherapy in order to induce clinical tumor regression. A special emphasis is placed on developing highly state-of-the-art immunotherapies to be tested in clinical phase I or II trials to treat patients with prostate, kidney or bladder cancer.

In his keynote address, Dr. Kwon explained what our immune system is—the B cells and T cells in our blood that respond to foreign invaders fighting off bacteria, viruses, fungi, and cancer, and developing our bodies' immunities.

For our viewing pleasure, Dr. Kwon's PowerPoint presentation featured close-ups of zits, various poxes, polio victims and bodies in the full spasm of Tetanus. Dr. Kwon went on to explain how the first vaccine for smallpox (Variola Vera) was developed and then how vaccines work.

Dr. Kwon used the example, among many, of Guillain-Barré Syndrome to illustrate how our immune system can go awry and turn on us citing the possibility that given his symptoms, Franklin Delano



Roosevelt might actually have been suffering from Guillain-Barré rather than Polio. He explained how our immune systems can fail to detect foreign invaders such as Acquired Immune Deficiency Syndrome (AIDS) or parasites and how the immune system can be manipulated into attacking cancer cells, citing the new cervical cancer vaccine.

He concluded that relatively little is known about how the immune system works and that we still do not know how to treat many new devastating forms of disease that have the potential to wipe out humanity. He pointed out the great need for scientists, teachers and health care workers to protect future generations and encouraged our students to realize that they could make a big difference in the world, to be passionate in all their endeavors, to believe in themselves and to pay it forward.

All in all, Dr. Kwon's keynote address was a highly entertaining and informative presentation, with truly gross visuals.

By Celia Waldock, Executive Director

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