Robert Koppel, MD

Medical Director, Regional Perinatal Centers

Professor of Pediatrics at Hofstra Northwell School of Medicine

Dr. Koppel earned his M.D. from McGill University School of Medicine. He completed his residency in Pediatrics at the Hospital for Sick Children and his fellowship in Neonatal-Perinatal Medicine at the University of Toronto Shared Program in Neonatology. Following his training, he joined the faculty at Cohen Children’s Medical Center. He is currently a Professor of Pediatrics at the Zucker School of Medicine at Hofstra/Northwell, where he serves as the Medical Director of the Regional Perinatal Center. Dr. Koppel’s areas of research interest include the development of non-invasive screening methods for coarctation of the aorta, patent ductus arteriosus, and sudden unexpected postnatal collapse.

Dear Bernie,

Mazal tov to you on becoming an octogenarian. I have always admired you for your warmth, your intelligence, and your numerous accomplishments. While raising generations of your beautiful family in Yerushalayim, you have achieved the highest level of success in academia, nurturing generations of mathematicians and others who have contributed to Israel’s leading position in STEM.

As we celebrate your milestone birthday, we read about the design and construction of the *Mishkan* with the *aron* containing the *luḥot* as its centerpiece. Like the builders of the *Mishkan*, you are a *ḥakham lev*. You are blessed with a big heart, together with a formidable intellect and a desire to constantly increase your knowledge.

The Mishkan is also referred to as the *Ohel Mo’ed*, the Tent of Meeting. Together with Viva, you have made your Yerushalayim home into an *Ohel Mo’ed* with your hospitality to an endless stream of visitors for over fifty years as well as by hosting your *havurah* learning partners.

In the *Aron*, in the *Ohel Mo’ed*, are the *Luḥot ha-Edut*. Rabbi David Fohrman indicates that the *luḥot* are called *luḥot ha-edut* because they represent the testimony of Hashem’s writing on the stone tablets. Hashem cares about mankind and has given us laws to guide us that are as real as the stone you could touch, the letters written by the hand of God. In this way, the mind of Hashem connects to the mind of man. This is true not only in the judicial and social realms but in the physical universe as well. Rabbi Fohrman references Paul Davies’ book *The Mind of God,* in which the author argues that one of the deepest mysteries of mathematics is that the universe is mathematically comprehensible. The math is challenging but it is at the level that a human mind can understand. The fact that the universe is understandable, that we can reach out with our minds and connect to the mathematical beauty, which is the soul of physical creation, is also a point of connection between the mind of God and the mind of man. As an exponent of Torah *u-Mada*, your mind is able to connect with the mind of Hashem on multiple planes and we are grateful to you for sharing your insights with us.

I am honored that I have been invited to contribute an article to your Festschrift*.* My research interest is the development of non-invasive methods to evaluate asymptomatic newborns for indicators of serious cardiovascular disease. For this work, I am completely dependent upon math, the Queen of Sciences, to reveal signals hidden within the routine monitoring of physiologic vital sign parameters. It is therefore fitting that as we approach the Yom Tov of the *nes nistar* and celebrate the birthday of a ḥakham lev, I share with you our paper entitled *“Enhanced Critical Congenital Cardiac Disease Screening by Combining Interpretable Machine Learning Algorithms.”*

Wishing you mazal tov, good health, and happiness*, ad me’ah v-esrim*,