After graduating in 1990 from IIT/Chicago-Kent College of Law, Israel Abaya Desierto worked for the Cook County State's Attorney's Office. He practiced in both the Civil and Criminal areas of the law. As a civil litigator he practiced in the area of Medical Malpractice defense. As a criminal prosecutor, he tried primarily gang-related murder cases. He tried over seventy juries to verdict and hundreds of bench trials.

On June 1, 2005, he was sworn in as an associate judge of the Circuit Court of Cook County, State of Illinois. Judge Desierto currently presides over civil matters at the Daley Center having previously presided over criminal matters at 26th and California. He serves as the president of the Illinois Judges Association and is a member of the Illinois Judicial Council. He is also active with the Illinois Judge's Foundation where he coordinated a program involving educating students at the Cook County Jail Counsuela York Alternative High School. He has served on the board of the Diversity Scholarship Foundation, the Asian American Bar Association and Asian American Bar Foundation. He is a member of the Asian American Bar Association, the Filipino American Lawyers Association, the Hispanic Lawyers Association of Illinois and the Women's Bar Association of Illinois. He continues to serve as an adjunct professor at IIT/Chicago-Kent College of Law where he teaches Trial Advocacy. He has also taught trial advocacy at Northwestern University and the University of Chicago Law Schools.