Fifty-four Years of Adventures in Infrared Astronomy

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My adventures in infrared astronomy started when I was a grad student in 1965 with the discovery of an infrared-bright object (now known as the Becklin-Neugebauer Object) in the Orion Nebula. In 1966, I made the first measurements of the infrared radiation from the center of the Milky Way Galaxy. I was fortunate enough to be able to take advantage of the 2.2 micron sky survey carried out by Neugebauer and Leighton (1969), which produced many remarkable discoveries, the most spectacular being the heavily dust-embedded carbon star IRC+10216, the brightest object in the sky at 5 microns outside the solar system. In the 1970's there was a growth in Infrared astronomy with the availability of many new facilities such as the Kuiper Airborne Observatory, (KAO) which I used extensively with Mike Werner and Ian Gatley for many unique observations. In 1977, I moved to Hawaii to work on the NASA IRTF 3-meter telescope. Many discoveries were made, including the first L dwarf star around a white dwarf (with Ben Zuckerman). In the 1980's the introduction of large format arrays changed the way we did infrared astronomy. With Ian McLean, I moved to UCLA in 1990 to start the IR lab and get involved in Keck development and science. In 1995, Andrea, Ghez, Mark Morris and I started looking for evidence of a possible massive Black Hole in the Galactic Center. Spectacular observations using the Keck 10 meter telescopes with large format near-infrared arrays and adaptive optics led to the confirmation of the presence of such a black hole and an estimate of its mass (4xE6 M (Sun)). In 1996, I began working on the Stratospheric Observatory For Infrared Astronomy (SOFIA) and I will finish my talk by discussing SOFIA observations of the ring of dust and gas orbiting the massive black hole in the center of our Galaxy and other recent discoveries.