

## SCIENTISTS FOR WIRED TECHNOLOGY

4G/5G Wireless Radiation is hazardous; Fiber-Optic Internet is faster, more secure and harmless.

These so-called “small cell” Distributed Antenna Systems (DAS) would harm Americans, who are protected by the US Constitution’s First and Fourth Amendments, the Americans With Disabilities Act, the Fair Housing Act, NEPA, and the Public Health Service Act Amendment of 1968, which requires that the public “be protected against electronic product emissions.” — Federal laws that California state laws should not violate.

Nearly 25,000 studies of RF/MW radiation bio-effects have been published — more than for cigarettes, lead, and benzene. In May 2016, the \$25 Million, 16-year study by the US NIEHS National Toxicology Program (NTP) proved that significant numbers of rats exposed to RF/MW radiation developed malignant brain and heart cancers and DNA damage, while unexposed controls did not develop a single tumor or show such DNA damage (<http://biorxiv.org/content/biorxiv/early/2016/05/26/055699.full.pdf>). These animals suffered the same types of cancers that have been found to occur in humans after long-term exposures to RF/MW radiation. Since additional scientific data will be reported by the NTP later in 2017, **SB.649 should be halted until after NTP results are released (Jan 2018).**

RF/MW radiation has both long-term and immediate effects, including interfering with neurologic, hormone and immune system functions, including cognitive/sleep impairments and melatonin/immune system suppression. It also harms the foundations of agriculture: bees and other pollinators. The US Dept. of Interior warned in 2014 of RF/MW radiation harm to migratory birds and other species. Finally, wireless data transmissions waste enormous amounts of energy, are much less secure and are much less reliable than wired/fiber-optic data transmissions.

**Bio-effects of pulsed, modulated RF/MW radiation are cumulative. As with any hazardous agent, total RF/MW radiation exposure over time — not the rate of exposure — is the more important factor.**

Californians need you, Senator, to stop SB.649’s harm, waste, and bulldozing of Constitutional, state and local law. We need you to oppose the private usage of public utility poles to deploy sources of RF/MW radiation on or next to homes, parks, schools and farms. Russia recently provided fiber-optics to all homes, protecting the public’s health and safety, privacy, and freedom from surveillance, while giving them fast, secure and reliable service. California could do better with **One Big Dig**: fiber-optic connections to every business, home, school, and farm instead of more wireless. **Senator, please act on this week to vote NO on SB.649.**

