

# Preface

In the 1989 romantic comedy *When Harry Met Sally*, a chemical reaction between two initially immiscible people eventually results in a wonderful Hollywood equilibrium, but only after several misfires. Over the decades, the interactions between science and Hollywood have proven every bit as unpredictable and volatile as the journey taken by Harry and Sally. Sure, there have been fleeting encounters, but on those occasions the two never produced a strong reaction, blending more like oil and water: sometimes parting on unfriendly terms, sometimes parting as friends, sometimes simply parting. The relationship never crystallized into something solid until very recently.

Hollywood and science have found each other again, and seem to have formed the strongest bond to date. The increasing use of science consultants in science fiction and science-themed productions, from comedies like *The Big Bang Theory* to dramas like *Breaking Bad*, and the creation by the National Academy of Sciences of the Science and Entertainment Exchange—an organization founded to connect scientists and Hollywood productions—suggests a new level of dedication to science and scientific fidelity that can only benefit both sides of the equation.

What finally catalyzed this reaction? This eclectic collection of essays examines the connections between Hollywood and science, with a primary focus on the current state of the relationship. It features contributions from screenwriters, producers, directors, scientists, science advisors, science writers, even a music composer and a dramaturg. The formats of the chapters contained herein are equally eclectic: some take the form of academic journal articles, some are written as less formal interviews and some are narratives. Similar to a romantic comedy, the tones of the offerings range from the purely serious to the comedic.

In the first act of this production, “Science Reaches the Screen,” contributors explore the various approaches that different television series and movies employ to incorporate accurate science into their productions. In other instances, authors explore the more fundamental aspects of the science—like sound, music and light—that enable audience appreciation of television and film.

For the second act, entitled “Science Reaches the Public,” authors explore the effects that science in television and film has on the viewing public. Some authors explain the science, both explicit and implied, that can be found within various Hollywood productions—and explore those moments where, as happened between Harry and Sally, Hollywood and science fail to click instead of meshing. Other authors examine the influence that Hollywood science has on the science community, public policy and the legal system. Still others describe pedagogical

applications of television and movie science to education—as well as Hollywood’s role in motivating future generations of scientists and engineers.

Like Harry and Sally, it took science and Hollywood a few tries to discover their mutual chemistry. Only time will tell if the bond is ephemeral, or one of substance. Based on the enclosed collection of essays, it would seem that this mercurial couple has a solid future indeed.

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