Preface

HEN WE FIRST CONTEMPLATED REVISING THIS VOLUME a little over a year ago, it was in the context of an **V** ongoing escalation in the abuse of opioids in many parts of the world. Although opioid use disorder has been a reality for centuries, the recent increase is due to two main factors. In the late twentieth century, pharmaceutical companies developed increasingly potent synthetic opioid analgesics. Oral fentanyl, for example, is about 80 times as potent as oral morphine. Starting in the 1990s, pharmaceutical companies convinced the medical community that newer opioid analgesics, notably oxycodone, were not addictive. In fact, the opposite was the case and soon these drugs were in high demand through both medical and illicit means. Approximately a quarter of chronic pain patients misuse prescribed opioids, with around 10% meeting the clinical criteria of opioid use disorder. Many parts of the United States—including both urban and rural areas—experienced staggering increases in opioid overdoses in the 2010s, a trend that unfortunately continues. In acknowledgment of these circumstances, Ellen Unterwald was recruited as an editor to oversee the opioid section of the revised volume. In this new edition of Addiction, some chapters were updated by the original authors, while in other cases new authors were asked to address similar topics, but from their own unique perspectives. Several chapters were added reflecting significant technical advancements over the past 8 years. We thank all of the authors for investing their valuable time and energy to make this project a success.

We are now experiencing severe societal disruptions due to the emergence of a novel coronavirus. Following widespread governmental stay-at-home advisories, social media was soon awash in memes making light of increased alcohol use. *Saturday Night Live* recently aired a music video entitled "Let Kids Drink" because "parents need some help these days." In the course of a century in the United States, we have gone from societal alcohol prohibition to many states designating liquor stores as essential in the midst of a deadly virus pandemic. The secondary results of increased communal stress are not yet clear, but there is little question that increases in alcoholism and all other substance use disorders will be an unfortunate chapter in this epoch of history. Readjustment of governmental budgets in the years to come are inevitable, but we hope that the innovative and creative work represented in the chapters of this book will highlight the importance of support for research into the mechanisms underlying addiction. Without research, there are no treatments, which are needed for substance use disorders now perhaps more than ever.

We are fortunate that the editorial team at Cold Spring Harbor Laboratory Press—Richard Sever, Barbara Acosta, and Diane Schubach—remained consistent between volumes. We thank them for their dedication and professionalism completing this project under difficult circumstances. The first version of this text was dedicated to our children and we now add Adam and Ariel Takle to that list. This edition is dedicated to Andrea Yañez, Dympna Kenny, and Garry Takle, our resilient and supportive spouses, whom we appreciate now perhaps more than ever.

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