A Concise Guide to Understanding Suicide

Epidemiology, Pathophysiology, and Prevention
Introduction: Looking to the future: how can research prevent suicide?
Stephen H. Koslow, Pedro Ruiz, and Charles B. Nemeroff

Section 1. Understanding Suicide
1 Brief history of suicide in Western cultures
   Leonardo Tondo

2 Global epidemiology of suicide
   Pedro Ruiz

3 Identification and screening of suicide risk
   Kelly Posner, Jacqueline Buchanan, Leora Amira, Kseniya Yershova, Adam Lesser, and Erica Goldstein

4 Rethinking suicide risk assessment and risk formulation
   Alan L. Berman and Morton M. Silverman

5 High-risk cognitive states
   Gregory K. Brown and Kelly L. Green

6 Suicide clusters and suicide contagion
   Alison M. Lake and Madelyn S. Gould

7 Ethnicity: How much of our understanding of suicide is applicable across ethnic cultures?
   Donna Holland Barnes, William B. Lawson, and Kelsey Ball

8 Suicide-related bereavement and grief
   M. Katherine Shear and Sidney Zisook

9 Statistics
   Robert D. Gibbons

Section 2. Suicidal Comorbidities
10 Current and chronic signs and symptoms
   Jan Fawcett

11 Anxiety, depression, and suicide: epidemiology, pathophysiology, and prevention
   Giampaolo Perna and Alan F. Schatzberg

12 Suicide in schizophrenia
   Philip D. Harvey and Stacey Espaillat

13 Personality disorders and suicide
   Katharine J. Nelson, Michael J. Miller, Alexandra Zagoloff, Melinda K. Westlund, and S. Charles Schulz

14 Suicide and substance use disorders
   Timothy W. Lineberry and Kathleen T. Brady

15 Eating disorders and suicide
   April R. Smith, Tracy K. Witte, and Scott J. Crow

16 Suicidality and epilepsy: a complex relationship
   Andres M. Kanner

Section 3. Special Populations
17 Suicidal ideation and behavior during pregnancy and the postpartum period
   Jessica Coker and Zachary N. Stowe

18 Childhood and adolescence
   Tina R. Goldstein, Jeffrey A. Bridge, and David A. Brent

19 Indigenous/native populations
   Deborah Goebert

20 Bullying and suicidality in youth
   Anat Brunstein Klosek and Madelyn S. Gould

21 College students
   Amanda L. McMillan and Steven J. Garlow
## Contents

22 **Suicide in older adults**  
Yeates Conwell and Kimberly Van Orden 182

23 **Armed forces**  
James A. Naifeh, Matthew K. Nock, and Robert J. Ursano 191

24 **Medical illness**  
Gary J. Kennedy and Anne Rohs 201

25 **Suicide in the criminal justice system**  
Steve Leifman and Tim Coffey 208

### Section 4. Treatment

26 **Reduction of suicidal behavior in bipolar disorder patients during long-term treatment with lithium**  
Leonardo Tondo and Ross J. Baldessarini 217

27 **Clozapine**  
David W. Ayer and Herbert Y. Meltzer 229

28 **Antidepressants**  
Molly Ryan and Charles B. Nemeroff 237

29 **Emergency department identification, assessment, and management of the suicidal patient**  
Collin L. Davidson, Jennifer H. Olson-Madden, Marian E. Betz, and Michael H. Allen 244

30 **Psychosocial approaches to reduce suicidal behavior**  
Anne C. Ward, Catherine R. Glenn, Matthew K. Nock, and Michael W. Otto 256

### Section 5. Research: Mediators and Moderators

31 **Genome-wide association studies of suicidal behaviors**  
Marcus Sokolowski, Jerzy Wasserman, and Danuta Wasserman 277

32 **Epigenetics**  
Benoit Labonté and Gustavo Turecki 288

33 **The use of neuroimaging to investigate the pathophysiology of suicide**  
Christopher R. Bailey, Allison M. Greene, and Alexander Neumeister 307

34 **Brain serotonin in suicides with psychological autopsy**  
Victoria Arango and Helene Bach 317

35 **The noradrenergic system in depression and suicide**  
Michelle J. Chandley and Gregory A. Ordway 325

36 **Brain corticotropin-releasing factor and the hypothalamic–pituitary–adrenal axis in suicide**  
Ghanshyam N. Pandey 336

37 **Receptor signaling in suicide**  
Yogesh Dwivedi 343

### Section 6. Suicide Prevention

38 **Strategies to improve suicide prevention**  
Sarah A. Struthers and Robert M. A. Hirschfeld 357

39 **Safety planning to prevent suicidal behavior**  
Barbara Stanley, Emily A. Biggs, and Gregory K. Brown 366

40 **Contracting for safety**  
Michael Craig Miller 372

41 **Suicide and the media**  
Jane Pirkis and R. Warwick Blood 378

*Note:* The color plate section can be found between pages 210 and 211.
Contributors

Michael H. Allen, MD, VA, VISN
19 Mental Illness Research Education and Clinical Center (MIRECC), Denver, CO, USA, and
Department of Psychiatry, University of Colorado School of Medicine, Aurora, CO, USA, and Prophase, LLC, New York, NY, USA

Leora Amira, PhD
Child and Adolescent Psychiatry, New York State Psychiatric Institute, Columbia University, New York, NY, USA

Victoria Arango, PhD
Professor, Columbia University and
The New York State Psychiatric Institute, New York, NY, USA

David W. Ayer, PhD
Centerstone Research Institute, Bloomington, IN, USA

Helene Bach, PhD
Assistant Professor, Columbia University and
The New York State Psychiatric Institute, New York, NY, USA

Christopher R. Bailey, BA
Johns Hopkins University School of Medicine, Baltimore, MD, USA

Ross J. Baldessarini, MD, DSc
Department of Psychiatry, Harvard Medical School and International Consortium for Bipolar Disorder Research, McLean Hospital, Boston, MA, USA

Kelsey Ball
Graduate Student, Department of Psychology, Howard University, Washington, DC, USA

Alan L. Berman, PhD
Executive Director, American Association of Suicidology, Washington, DC, USA

Marian E. Betz, MD, MPH
Department of Emergency Medicine, University of Colorado School of Medicine, Aurora, CO, USA

Emily A. Biggs, MA
New York State Psychiatric Institute, New York, NY, USA

R. Warwick Blood
Emeritus Professor of Communication, News and Media Research Centre, University of Canberra, Australia

Kathleen T. Brady, MD, PhD
Distinguished University Professor, and Director, South Carolina Clinical and Translational Research Institute, Medical University of South Carolina and Ralph H. Johnson V. A. Medical Center, Charleston, SC, USA

David A. Brent, MD
University of Pittsburgh Medical Center, Western Psychiatric Institute and Clinic, Pittsburgh, PA, USA

Jeffrey A. Bridge, PhD
The Research Institute at Nationwide Children’s Hospital and The Ohio State University College of Medicine, Columbus, OH, USA

Gregory K. Brown, PhD
Department of Psychiatry, Perelman School of Medicine of the University of Pennsylvania, Philadelphia, PA, USA

Anat Brunstein Klomek, PhD
Senior Lecturer, School of Psychology, Interdisciplinary Center, Herzliya, Israel, and Adjunct Associate Research Scientist, Division of Child and Adolescent Psychiatry, College of Physicians and Surgeons, Columbia University, New York, NY, USA
<table>
<thead>
<tr>
<th>List of contributors</th>
</tr>
</thead>
</table>
| Jacqueline Buchanan, A.  
Child & Adolescent Psychiatry, New York State Psychiatric Institute, Columbia University, New York, NY, USA |
| Michelle J. Chandley, PhD  
Department of Biomedical Sciences, James H. Quillen College of Medicine, East Tennessee State University, Johnson City, TN, USA |
| Tim Coffey  
Project Coordinator for the Eleventh Judicial Circuit Criminal Mental Health Project, Miami, FL, USA |
| Jessica Coker, MD  
Department of Psychiatry, University of Arkansas for Medical Sciences, Little Rock, AR, USA |
| Yeates Conwell, MD  
Professor of Psychiatry, University of Rochester School of Medicine, Rochester, NY, USA |
| Scott J. Crow, MD  
Professor of Psychiatry, University of Minnesota, Minneapolis, MN, USA |
| Collin L. Davidson, PhD  
VA VISN, 19 Mental Illness Research Education and Clinical Center (MIRECC), Denver, CO, USA, and Department of Psychiatry University of Colorado School of Medicine, Aurora, CO, USA |
| Yogesh Dwivedi, PhD  
Professor of Psychiatry and Pharmacology, Department of Psychiatry, University of Illinois at Chicago, Chicago, IL, USA |
| Stacey Espaillat, MD  
Department of Psychiatry and Behavioral Sciences, University of Miami, Miller School of Medicine, Miami, FL, USA |
| Jan Fawcett, MD  
Professor, Department of Psychiatry, The University of New Mexico, Albuquerque, NM, USA |
| Steven J. Garlow, MD, PhD  
Division of Child and Adolescent Psychiatry, Department of Psychiatry and Behavioral Sciences, Emory University School of Medicine, Atlanta, GA, USA |
| Robert D. Gibbons, PhD  
Professor of Biostatistics, Departments of Health Studies, Medicine and Psychiatry, University of Chicago, Chicago, IL, USA |
| Catherine R. Glenn, PhD  
Department of Psychology, Harvard University, Cambridge, MA, USA |
| Deborah Goebert, DrPH  
Professor of Psychiatry and Public Health Sciences, University of Hawaii, John A. Burns School of Medicine, Honolulu, Hawaii, USA |
| Erica Goldstein, BS  
Child & Adolescent Psychiatry, New York State Psychiatric Institute, Columbia University, New York, NY, USA |
| Tina R. Goldstein, PhD  
University of Pittsburgh Medical Center, Western Psychiatric Institute and Clinic, Pittsburgh, PA, USA |
| Madelyn S. Gould, PhD, MPH  
Professor, Division of Child and Adolescent Psychiatry, College of Physicians and Surgeons, Columbia University; Professor, Department of Epidemiology, School of Public Health, Columbia University; and Research Scientist, New York State Psychiatric Institute, New York, NY, USA |
| Kelly L. Green, PhD  
Department of Psychiatry, Perelman School of Medicine of the University of Pennsylvania, Philadelphia, PA, USA |
| Alison M. Greene, BA  
New York University, New York, NY, USA |
| Philip D. Harvey, PhD  
Professor, Department of Psychiatry and Behavioral Sciences, University of Miami Miller School of Medicine, Miami, FL, USA |
| Robert M. A. Hirschfeld, MD  
Titus H. Harris Chair, Harry K. Davis Professor, Chair, Department of Psychiatry, The University of Texas Medical Branch, Galveston, TX, USA |
Donna Holland Barnes, PhD
Director, Suicide Prevention Program, Howard University, Washington, DC, USA

Andres M. Kanner, MD
Director, Comprehensive Epilepsy Center; Head, Section of Epilepsy, Department of Neurology; and Professor of Clinical Neurology and Psychiatry, University of Miami, Miller School of Medicine, Miami, FL, USA

Gary J. Kennedy, MD
Professor of Psychiatry and Behavioral Sciences, Albert Einstein College of Medicine; Director, Division of Geriatric Psychiatry and the Leslie and Rosalyn Goldstein Fellowship Training Program in Geriatric Psychiatry, Montefiore Medical Center, Bronx, NY, USA

Stephen H. Koslow, PhD, FAMCI
Science Consultant, Department of Psychiatry and Behavioral Sciences, Leonard M. Miller School of Medicine, University of Miami, current position Director, U.S. Medical Affairs, CNS Otsuka America Pharmaceutical, Inc., Princeton, NJ, USA

Benoit Labonté, BA
McGill Group for Suicide Studies, Department of Psychiatry, McGill University, Montreal, QC, Canada

Alison M. Lake, MA
Project Director, Division of Child and Adolescent Psychiatry, New York State Psychiatric Institute, New York, NY, USA

William B. Lawson, MD, PhD
Chair, Department of Psychiatry, Howard University, Washington, DC, USA

Steve Leifman
Associate Administrative Judge for the County Court, Criminal Division of the Eleventh Judicial Circuit of Florida, Miami, FL, USA

Adam Lesser, MSW
Child & Adolescent Psychiatry, New York State Psychiatric Institute, Columbia University, New York, NY, USA

Timothy W. Lineberry, MD
Department of Psychiatry and Psychology, Mayo Clinic, Rochester, MN, USA

Amanda L. McMillan, MD
Division of Child and Adolescent Psychiatry, Department of Psychiatry and Behavioral Sciences, Emory University School of Medicine, Atlanta, GA, USA

Herbert Y. Meltzer, MD
Department of Psychiatry and Behavioral Sciences, Northwestern Feinberg School of Medicine, Chicago, IL, USA

Michael Craig Miller, MD
Senior Editor, Mental Health Publishing, Harvard Health Publications, Harvard Medical School, Boston, MA, USA

Michael J. Miller, PsyD, LP
Assistant Professor of Psychiatry, Department of Psychiatry, University of Minnesota, Minneapolis, MN, USA

James A. Naifeh, PhD
Research Assistant Professor, Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, MD, USA

Katharine J. Nelson, MD
Assistant Professor of Psychiatry, Department of Psychiatry, University of Minnesota, Minneapolis, MN, USA

Charles B. Nemeroff, MD, PhD
Leonard M. Miller Professor and Chairman, Department of Psychiatry and Behavioral Sciences, Leonard M. Miller School of Medicine, University of Miami, Miami, FL, USA

Alexander Neumeister, MD
Professor of Psychiatry and Radiology and Director, Molecular Imaging Program for Anxiety and Mood Disorders, New York University School of Medicine, New York, NY, USA
List of contributors

Matthew K. Nock, PhD
Department of Psychology, Harvard University, Cambridge, MA, USA

Jennifer H. Olson-Madden, PhD
VA Veteran’s Integrated Service Network, 19 Mental Illness Research Education and Clinical Center (MIRECC), 1055 Clermont St, Denver, CO, USA, and Department of Psychiatry University of Colorado School of Medicine, Aurora, CO, USA

Gregory A. Ordway, PhD
Department of Biomedical Sciences, James H. Quillen College of Medicine, East Tennessee State University, Johnson City, TN, USA

Michael W. Otto, PhD
Department of Psychology, Boston University, Boston, MA, USA

Ghanshyam N. Pandey, PhD
Department of Psychiatry, University of Illinois at Chicago, Chicago, IL, USA

Giampaolo Perna, MD, PhD
Department of Clinical Neurosciences, Villa San Benedetto Hospital, Hermanas Hospitalarias, FoRiPsi, Albese con Cassano, Italy; Department of Psychiatry and Neuropsychology, Faculty of Health, Medicine and Life Sciences, University of Maastricht, The Netherlands; and Department of Psychiatry and Behavioral Sciences, Leonard M. Miller School of Medicine, University of Miami, Miami, FL, USA

Jane Pirkis, BA(Hons), MPsych, MAppEpid, PhD
Professor and Director, Centre for Mental Health, The University of Melbourne, Melbourne, Australia

Kelly Posner
Director, Center for Suicide Risk Assessment, New York State Psychiatric Institute, Associate Clinical Professor of Medical Psychology (in Psychiatry), Columbia University College of Physicians and Surgeons, New York, NY, USA

Anne Rohs, MD
Assistant Professor of Psychiatry, Montefiore Medical Center, Bronx, NY, USA

Pedro Ruiz, MD
Professor, Executive Vice Chair and Director of Clinical Programs, Department of Psychiatry and Behavioral Sciences, Leonard M. Miller School of Medicine, University of Miami, Miami, FL, USA

Molly Ryan, DO, MPH
Department of Psychiatry and Behavioral Sciences, Leonard M. Miller School of Medicine, University of Miami, Miami, FL, USA

Alan F. Schatzberg, MD
Professor of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Stanford, CA, USA

S. Charles Schulz, MD
Professor and Head of Psychiatry, Department of Psychiatry, University of Minnesota, Minneapolis, MN, USA

M. Katherine Shear, MD
Professor of Psychiatry, Columbia University School of Social Work, Columbia University College of Physicians and Surgeons, New York, NY, USA

Morton M. Silverman, MD
Assistant Clinical Professor of Psychiatry, The University of Colorado Denver School of Medicine, Aurora, CO, USA

April R. Smith, PhD
Assistant Professor, Department of Psychology, University of Miami, Miami, FL, USA

Marcus Sokolowski, MD, PhD
Professor of Immunology, National Center for Suicide Research and Prevention of Mental Ill-Health, Karolinska Institute, Stockholm, Sweden

Barbara Stanley, PhD
Professor of Clinical Psychology in Psychiatry and Director, Suicide Intervention Center, Columbia University College of Physicians and Surgeons, New York, NY, USA
Zachary N. Stowe, MD
Department of Psychiatry, Department of Pediatrics, and Department of Obstetrics and Gynecology, University of Arkansas for Medical Sciences, Little Rock, AR, USA

Sarah A. Struthers, MD
Department of Psychiatry, UT Southwestern Medical Center, Dallas, TX, USA; formerly Medical Student at UTMB Galveston, Galveston, TX, USA

Leonardo Tondo, MD, MSc
Department of Psychiatry, Harvard Medical School and International Consortium for Bipolar Disorder Research, McLean Hospital, Boston, USA; Lucio Bini Mood Disorder Centers, Cagliari and Rome, Italy

Gustavo Turecki, MD, PhD
McGill Group for Suicide Studies, Department of Psychiatry, McGill University, Montreal, QC, Canada

Robert J. Ursano, MD
Professor and Chair, Department of Psychiatry, Uniformed Services University of the Health Sciences, and Director, Center for the Study of Traumatic Stress, Bethesda, MD, USA

Kimberly Van Orden, PhD
Assistant Professor of Psychiatry, University of Rochester School of Medicine, Rochester, NY, USA

Anne C. Ward, BS
Department of Psychology, Boston University, Boston, MA, USA

Danuta Wasserman, MD, PhD
Professor of Psychiatry and Suicidology, Karolinska Institute, Stockholm, Sweden

Jerzy Wasserman, MD, PhD
Professor of Immunology, National Center for Suicide Research and Prevention of Mental Ill-Health, Karolinska Institute, Stockholm, Sweden

Melinda K. Westlund, BA
Department of Psychiatry, University of Minnesota, Minneapolis, MN, USA

Tracy K. Witte, PhD
Assistant Professor, Department of Psychology, Auburn University, Auburn, AL, USA

Kseniya Yershova, PhD
Child & Adolescent Psychiatry, New York State Psychiatric Institute, Columbia University, New York, NY, USA

Alexandra Zagoloff, PhD
Assistant Professor of Psychiatry, Department of Psychiatry, University of Minnesota, Minneapolis, MN, USA

Sidney Zisook, MD
Professor of Psychiatry, University of California San Diego, San Diego, CA, USA

The following authors wish to declare a conflict of interest:

Michael H. Allen has received support from the VISN 19 Mental Illness Research Education and Clinical Center, NIMH and the Military Suicide Research Consortium but has no conflict of interest relevant to this work. The views expressed do not necessarily represent those of the Veterans Administration or the Government.

Marian E. Betz has received a consulting honorarium and grant funding from the American Foundation for Suicide Prevention, but has no support that would pose a conflict of interest in this work.

David A. Brent currently works for the University of Pittsburgh School of Medicine and University of Pittsburgh Medical Center, Western Psychiatric Institute in Clinic. He also has research projects funded by the National Institute of Mental Health. Other potential conflicts include I have or will receive royalties from Guilford Press, I have or will receive royalties from the electronic self-rated version of the C-SSRS from ERT, Inc., UpToDate Psychiatry Editor, I receive honoraria from presentations for Continuing Medical Education events.

Steven J. Garlow receives research support from the Dana Foundation and Hope Foundation and has been on scientific advisory board and speaker bureau for Eli Lilly Inc, in 2010 and earlier. He was previously on speaker bureau for GSK and Pfizer also before 2010. He has received research support from Janssen Pharmaceuticals.

Robert D. Gibbons has been an expert witness on cases related to issues involving drugs and suicide for
the US Department of Justice, Wyeth, and Pfizer over the past 10 years.

Deborah Goebert has a state suicide prevention grant from the Substance Abuse and Mental Health Services Administration and a behavioral health services grant from The Queen’s Medical Center and has no conflict of interest.

Tina R. Goldstein is currently employed by the University of Pittsburgh School of Medicine and University of Pittsburgh Medical Center, Western Psychiatric Institute and Clinic. She has research projects funded by the National Institute of Mental Health, the National Institute on Drug Abuse, the National Institute on Child Health and Human Development, and The Pittsburgh Foundation. She has and will receive royalties from Guilford Press.

Madelyn S. Gould receives royalties as an author of the Columbia Suicide Severity Rating Scale (C-SSRS).

Philip D. Harvey has contract funding from Genentech. He also serves as a consultant/advisory board member for Abbvie, Boehringer Ingelheim, Forest Labs, Genentech, Otsuka America, Roche, Shire, Sunovion, and Takeda.

Robert M. A. Hirschfeld has received royalties from Jones and Bartlett, has been a consultant for Grey Healthcare, Biostrategies, Merck Manual Editorial Board, Equinox Group and has received honorarium from Physicians Post Graduate Press, Health and Wellness Partners, Merck Manual Editorial Board, CME Outfitters, Letters & Sciences, Nevada Psychiatric Association, and CMEology.

Gary J. Kennedy has received grant support from Eli Lilly of less than $10,000 in the last 3 years but it has not influenced the content of his contribution to his chapter.

Timothy W. Lineberry is a Board Member of Institute for Clinical Symptoms Improvement and Government expert Military Suicide Prevention.

Herbert Y. Meltzer conflicts of interests include: ownership/investment interests – Suregene, ACADIA, and GlaxoSmithKline; industry activities, such as speaking, advising, consulting, providing educational programs with Janssen Pharmaceuticals, Lundbeck Inc., Sunovion Pharmaceuticals Inc (Dainippon Sumitomo Pharma Co., Ltd), TEVA, BiolineRx, BI (Boehringer Ingelheim Pharma GmbH & Co. KG), Envivo, Companion Diagnostics; and expert testimony – Janssen.

Charles B. Nemeroff has received research/grants from: National Institutes of Health (NIH), Agency for Healthcare Research and Quality (AHRQ); consulting: Xhale, Takeda, SK Pharma, Shire, Roche, Lilly, Allergan, Mitsubishi Tanabe Pharma Development America, Taisho Pharmaceutical Inc.; stockholder: CeNeRx BioPharma, PharmaNeuroBoost, Revaex Pharma, Xhale; other financial interests: CeNeRx BioPharma, PharmaNeuroBoost; patents: Method and devices for transdermal delivery of lithium (US 6,375,990B1), Method of assessing antidepressant drug therapy via transport inhibition of monoamine neurotransmitters by ex vivo assay (US 7,148,027B2); scientific advisory boards: American Foundation for Suicide Prevention (AFSP), CeNeRx BioPharma (2012), National Alliance for Research on Schizophrenia and Depression (NARSAD), Xhale, PharmaNeuroBoost (2012), Anxiety Disorders Association of America (ADAA), Skyland Trail, AstraZeneca Pharmaceuticals (2009); Board of Directors: AFSP, Mt. Cook Pharma (2010), NovaDel (2011), Skyland Trail, Gratitude America, ADAA; income sources or equity of $10,000 or more: AstraZeneca Pharmaceuticals, PharmaNeuroBoost, CeNeRx BioPharma, NovaDel Pharma, Reeva Pharma, American Psychiatric Publishing, Xhale; honoraria: various; royalties: various; expert witness: various.

Michael W. Otto has in the past 2 years served as a paid consultant for MicroTransponder Inc., Concert Pharmaceuticals, and ProPhase; and received royalty support for use of the SIGH-A from ProPhase.

Kelly Posner receives no remuneration from clinical practice users of the C-SSRS, as its use is free. She receives royalty payments from the e-CSSRS, which is distributed to her by her employer, the Research Foundation for Mental Hygiene.

Alan F. Schatzberg has been a consultant to Bay City Capital, CeNeRx, Cervel, Eli Lilly, Genentech, Gilead, Lunbeck/Takeda, McKinsey, Merck, MSI, Neuronetics, PharmaNeuroBoost, and Xhale. He has equity in Amnestic, BrainCells, Cervel, Corcept (co-founder), Delpor, Forest, Merck, Neurocrine, Pfizer, and Xhale. He is a named inventor on pharmacogenetic and antiglucocorticoid use patents.
on prediction of antidepressant response. He has received speaker honoraria from Merck.

S. Charles Schulz is reporting Grant/research support from: NIMH, Astra-Zeneca, Myriad/RBM, Otsuka; and Consultant for Eli Lilly, Genentech.

M. Katherine Shear has a book contract with Guilford Press for publication of a treatment manual for complicated grief. Other than that, she has no conflicts of interest to declare and no other financial relationships relevant to the subject of her chapter.

Zachary N. Stowe. Life time disclosure (no outside relationships since June 2008): he has received research support from GSK and Wyeth, served on advisory boards for Wyeth, BMS, and GSK, and received speakers’ honoraria from Eli Lilly, GSK, Pfizer, and Wyeth.