

## SCIENCE AND MEDICAL JOURNALISM

School of Media and Journalism

JOMC 560.1 (cross listed as HBEH 660 & HPM 550), Fall 2015

MW 9:05 a.m. - 10:20 a.m., Carroll Hall 340

<http://mj.unc.edu/medicaljournalism>

Tom Linden, M.D.	Office Hours:
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908-723-1674	TBA, Graduate Student Lounge
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### Course Description & Goals

The purpose of this course is to teach an appreciation of science and medical journalism and provide you with skills to report on science, medical, and health news for a variety of media, principally print or text, but also video and audio.

As a participant in this course, you'll learn the following:

- How to find news value in scientific research reports.
- How to integrate scientific and medical statistics from source materials into news reports.
- How to research, report and write science, medical and health news stories for popular media.

### Reading

Readings for the course include a text about medical statistics, a classic book on writing well, a compendium of great writing about health and medicine from the New York Times, an anthology of the best science and nature writing published in 2014, a primer about science writing from masters in the field, a Pulitzer Prize-winning book about environmental contamination and human health, and a memoir from a physician writer. Please complete the reading assignments **before** the appropriate classroom discussions. In addition to the list below, I'll supply additional source materials and articles from various publications. The following books are all available at the UNC student store and copies of all the books (except A Field Guide for Science Writers) will be on reserve in the Park Library (second

floor) in the School of Media & Journalism. Please note that the books on reserve in the Park Library may be earlier editions that can be substituted for current editions. Students should also consult the [AP Stylebook](#) for proper style and usage for all written assignments.

- 1) Blum, Deborah, editor. [The Best American Science and Nature Writing 2014](#), Mariner, © 2014, 305 pp., ISBN: 978-0-544-00342-2, \$14.95.bl
- 2) Blum, Deborah, Mary Knudson & Robin Marantz Henig, editors. [A Field Guide for Science Writers \(Second Edition\)](#), Oxford University Press (paperback), 2005, \$19.95, ISBN: 0-19-5174992.
- 3) Cohn, Victor and Lewis Cope with Deborah Cohn Runkle. [News & Numbers: A Writer's Guide to Statistics](#), Wiley-Blackwell (paperback), Third Edition, © 2012, 181 pp., ISBN: 978-1-4051-6096-4.
- 4) Fagin, Dan. [Toms River: A Story of Science and Salvation](#), Island Press (Reprint Edition), 2015, pp. 576, ISBN: 978-1610915915.
- 5) Linden, Tom & the Writers of The New York Times. [The New York Times Reader: Health & Medicine](#), © 2011, \$24.95, 292 pp., ISBN: 978-1604264821.
- 6) Pascoe, Wolf, [Breathing for Two](#), Kindle Edition, \$2.99 or Audible Edition, \$6.95.
- 7) Zinsser, William. [On Writing Well: The Classic Guide to Writing Nonfiction \(30th Anniversary Edition\)](#), Collins, © 2006, 336 pp., ISBN: 978-0-06-089154-1.

Also, starting with the class for Wednesday, September 9, students should begin reading the **print version** of the Tuesday *Science Times* section of the New York Times. On the assigned dates, please bring the *Science Times* section to class. Consult the course schedule below for the exact dates for which the section should be read. Please note that the online version of the New York Times is not an acceptable substitute since the online and print versions do not necessarily have the same content. The New York Times is available in the UNC Student Store and is also available at a reduced rate by subscription. To subscribe, you can call 1-800-NYTIMES and ask for college subscriptions. Receiving the print edition by subscription also gives you unlimited online access.

## Participation

A working medical journalist typically talks and discusses relevant issues with colleagues and others before preparing his or her report. This class will be no different. I'll expect you to share your thoughts with your peers and with me. Classroom discussion will help clarify your ideas and sharpen your focus. You'll also be posting all written assignments on [Sakai](#) where your classmates will critique your work.

Each graduate student will be responsible for two 15- to 20-minute presentation on assigned reading. I'll assign the presentations at the beginning of the second class meeting. As critical thinking and discussion with peers are integral to the work of journalists, I'll count classroom participation as **25 percent** of your final grade. I'll base the classroom participation grade on the quality (not necessarily the quantity) of your discussion. I'll judge quality of

your classroom discussion on the following two criteria:

- 1) Whether it's clear that you've read and thought about the readings.
- 2) Your ability to integrate ideas gleaned both from readings and from contributions of your classmates.

After one unexcused absence, each absence will result in a drop of one letter grade. This is a graduate-level seminar, and your presence and contribution are essential. You **cannot** pass the course with more than two unexcused absences.

## **Assignments**

To succeed in science and medical journalism, you must write well. Good writing requires an understanding of the material and the ability to communicate ideas simply and clearly.

To sharpen your writing skills, you'll write a series of stories in various journalistic genres. The writing assignments will count for **75 percent** of your final grade.

All assignments must be posted on the Sakai discussion site at least two days before they are due in class. Late assignments will not be accepted without **prior** permission. Even with prior permission, submission of late assignments will result in a 10-point deduction per day. Not turning in an assignment within two days of the due date will result in a zero grade. Misspelling of proper names will result in a 10-point deduction per misspelling. Misspelling of other words will result in a two-point deduction for each word misspelled. We'll follow the print style guidelines of the [AP Stylebook](#). If you intend to pursue journalism as a career, I strongly encourage you to purchase a copy of the stylebook. As per the usual practice in the School of Journalism & Mass Communication, a major factual error will result in a failing grade for that particular assignment. Fabricating sources or quotations or engaging in plagiarism will constitute a violation of the Honor Code (for more information about the UNC Honor Code, go to <http://instrument.unc.edu>).

## **Exams**

There will be no midterm or final exam.

### **Grading Scale** (for undergraduates)

98 - 100 A+  
94 - 97 A  
91 - 93 A-  
88 - 90 B+  
84 - 87 B  
81 - 83 B-  
78 - 80 C+  
74 - 77 C  
71 - 73 C-  
68 - 70 D+  
64 - 67 D  
61 - 63 D-  
60 and below F

### **Grading Scale** (for graduate students)

93 - 100 Honors  
74 - 92 Pass  
61 - 73 Low Pass  
60 and below F

### **How To Succeed in This Course**

- Attend classes consistently.
- Complete readings *before* the appropriate classroom discussions.
- Participate actively in class discussions.
- Ask the Professor questions either during class or during office hours if you're unclear about *any* aspect of the course.
- Turn in stories on time, both on Sakai and in class.
- Check online syllabus frequently throughout the semester (preferably before each class) as assignments and topics may change without e-mail notice.

### **Course Schedule**

#### **WEEK 1:**

AUG. 19: INTRODUCTION TO SCIENCE AND MEDICAL JOURNALISM

\* Turn in Student Data Sheet that was emailed to you.

#### Reading:

Linden, Thomas, "[Learning To Be a Medical Journalist](#)," Nieman Reports, Vol. 57, No. 2, Summer 2003, pp.66-67.

Linden, Tom, "[The New York Times Reader: Health & Medicine](#)," foreword, preface and introduction.

#### **WEEK 2:**

Aug. 24: A GUIDE TO WRITING NONFICTION -- Guest speaker, [Stephanie Brown](#), Director, Park Library, 9:40 - 10:10 a.m.

\* Learn the basics of writing nonfiction.

#### Reading:

Zinsser, William, [On Writing Well](#), Chapters 1, 2, 3, 4, 5, 6, 7.

Browse [online resources](#) from the JOMC Park Library.

Aug. 26: A GUIDE TO WRITING NONFICTION (cont.) & ETHICS OF SCIENCE AND MEDICAL JOURNALISM

#### Reading:

"Aiding Those in Distress," Association of Health Care Journalists, <http://www.healthjournalism.org/secondarypage-details.php?id=898>.

Reporters Committee for Freedom of the Press, "A Reporter's Guide to Medical Privacy Law," <http://www.rcfp.org/reporters-guide-medical-privacy-law>.

Scanlan, Chip, "[The First Peril: Fabrication](#)," Poynteronline, (Adapted from *Reporting and Writing: Basics for the 21st Century*, Oxford University Press, 2000). Updated March 2, 2011.

SPJ Code of Ethics: <http://www.spj.org/ethicscode.asp>

Statement of Principles of the Association of Health Care Journalists: <http://healthjournalism.org/secondarypage-details.php?id=56>

"Understanding HIPAA: A Brief Overview," Association of Health Care Journalists, <http://healthjournalism.org/resources-tips-details.php?id=12#.Vcomq0W2gso>

Zietman, Anthony L., "[Falsification, Fabrication, and Plagiarism: The Unholy Trinity of Scientific Writing](#)," International Journal of Radiation Oncology, Vol. 87, No. 2, 1 October 2013, pp. 225-227.

Zinsser, William, *On Writing Well*, Chapters 8, 9, 10, 11, 12.

### **WEEK 3:**

AUG 31: INTERPRETATION OF MEDICAL STATISTICS -- Skype interview with Dr. Ivan Oransky, vice president and global editorial director, [MedPage Today](#), and co-founder of Retraction Watch, 9:30 - 10:15 a.m.

#### Reading:

Cohn & Cope, *News & Numbers: A Writer's Guide to Statistics*, Part I, Learning the Basics, pp. 1-68.

Leaf, Clifton, "[Do Clinical Trials Work?](#)" New York Times, July 13, 2013.

Oransky, Ivan, "Covering Medical Studies; How Not to Get It Wrong," Powerpoint presentation downloadable from Sakai.

Oransky, Ivan, "[How to avoid 'he said-she said' science journalism](#)," Not Exactly Rocket Science guest blog, February 18, 2010.

Browse the web sites of the World Health Organization's [International Clinical Trials Registry Platform \(ICTRP\)](#) and the National Institutes of Health's [clinicaltrials.gov](#).

Browse [Retraction Watch](#), the website co-founded by Dr. Ivan Oransky.

SEPT. 2: INTERPRETATION OF MEDICAL STATISTICS (cont.)

#### Reading:

Cohn & Cope, *News & Numbers: A Writer's Guide to Statistics*, Part II, pp. 70-169.

Kolata, Gina, online at "[Forty Years' War -- Advances Elusive in the Drive to Cure Cancer](#)," also in New York Times Reader, pp. 156-162.

de Lorgeril, Michel et al., "Cholesterol Lowering, Cardiovascular Diseases and the Rosuvastatin-JUPITER Controversy," *Arch Intern Med.* 2010;170(12):1032-1036 (June 28, 2010).

Meier, Barry, "[A Clash Over a Spine Treatment](#)," *New York Times*, September 5, 2012.

Ridker, Paul et al., "Rosuvastatin to Prevent Vascular Events in Men and Women with Elevated C-Reactive Protein," *N Engl J Med* 2008;359:2195-2207 (Nov. 20, 2008).

#### **WEEK 4:**

SEPT. 7: **Labor Day (no class)**

SEPT. 9: NEWS STORIES

#### Reading:

"Science Times" section from Tuesday, Sept. 8, New York Times.

Blum et al., editors. A Field Guide for Science Writers, Chapters 1, 2, 4, 5, 6.

Haelle, Tara, "[Freelances face unique conflict-of-interest dilemmas](#)," *Association of Health Care Journalists*, Aug. 10, 2015.

Linden, New York Times Reader, Chapter 1, pp. 7-24.

Assignment #1: News story due Monday, Sept. 28. Please upload your draft of your news story to Sakai -> Forums -> Assignment #1 by Saturday, Sept. 26, at 6 p.m.

#### **WEEK 5:**

SEPT. 14: NEWS STORIES (cont.)

#### Reading:

Linden, New York Times Reader, Chapters 2 & 3.

Oransky, Ivan, "[If you must use embargoes, here's how to do it right](#)," *Epidemiology Biostatistics and Public Health*, 2013, Vol. 10, No. 3.

SEPT. 16: NEWS STORIES (cont.), Skype interview with Benedict Carey, NYT

#### Reading:

Butler, Katy, "[What Broke My Father's Heart](#)," *New York Times*, June 18, 2010.

Carey, Benedict, "[A Psychedelic 'Problem Child' Comes Full Circle](#)," *New York Times*, May 4, 2008.

Linden, New York Times Reader, Chapter 5, pp. 92-98, Chapter 6, pp. 106-109, Chapter 7, pp. 138-142.

Linden, New York Times Reader, "A Conversation with Benedict Carey," pp. 99-101 & 152-154.

**WEEK 6:**

SEPT. 21: INVESTIGATIVE REPORTING

Reading:

Fagin, Dan. [Toms River: A Story of Science and Salvation](#), Part 1, pp. 3-136.

SEPT. 23: INVESTIGATIVE REPORTING, Skype interview with [Dan Fagin](#), author of "Toms River," 9:05 - 9:55 a.m

Reading:

Fagin, Dan. [Toms River: A Story of Science and Salvation](#), Parts 2 & 3, pp. 137-362.

Assignment:

Assignment #1 due Monday, Sept. 28. Please upload the draft of your news story to Sakai -> Forums -> Assignment #1 by Saturday, Sept. 26, at 6 p.m.

**WEEK 7:**

SEPT. 28: CRITIQUE OF ASSIGNMENT #1

**Assignment #1 due today.**

SEPT. 30: COMMENTARY: COLUMNS & ESSAYS

Reading:

Barish, David, "[God, Darwin and My College Biology Class](#)," New York Times, Sept. 27, 2014.

Berger, Marilyn, "[Lewis Thomas, Whose Essays Clarified the Mysteries of Biology, Is Dead at 80](#)," New York Times, Dec. 4, 1993.

Linden, New York Times Reader, Chapter 12, pp. 247-261 & Chapter 13, pp. 262-268.

Sacks, Oliver, "[My Periodic Table](#)," New York Times, July 24, 2015.

Thomas, Lewis, The Medusa and the Snail, chapters entitled "The Medusa and the Snail," "The Wonderful Mistake," "Ponds," "To Err Is Human" and "On Cloning A Human Being" (all chapters found in electronic link in Resources folder in Sakai).

Assignment #2

Rewrite of assignment #1 due Monday, Oct. 5. Please upload your draft to Sakai -> Forums -> Assignment #2 by Saturday, Oct. 3, at 6 p.m.

**WEEK 8:**

OCT. 5: CRITIQUE OF ASSIGNMENT #2

**Assignment #2 (rewrite of Assignment #1) due today.**

OCT. 7: HISTORICAL STORIES

Reading:

"Science Times" section from Tuesday, Oct. 6, New York Times.

Altman, Larry, "[For 3 Nobel Winners, a Molecular Mystery Solved](#)," New York Times, Oct. 7, 2013.

Linden, New York Times Reader, Chapter 9, pp. 183-197.

Assignment #3: Essay due Wednesday, Oct. 21. Students are encouraged to attend the Memorial Hall performances of "Antigone" at UNC Memorial Hall either Friday, Oct. 9 or Saturday, Oct. 10. I'll talk about in class how you can use the play as a jumping-off point for an essay on issues that arise from the story.

**WEEK 9:**

OCT. 12: EXPLANATORY & PERSPECTIVE STORIES

Reading:

Blum, Deborah & Mary Knudson, editors. A Field Guide for Science Writers, Ch. 17 (pp. 111-117), Ch. 20 (pp. 132-137).

Gawande, Atul, "[The Best Possible Day](#)," New York Times, Oct. 5, 2014 (a follow-up to the Katy Butler piece read earlier this semester).

Linden, New York Times Reader, Chapter 7, pp. 120-155, Chapter 8, pp. 156-182.

OCT. 14: ESSAYS -- Guest speaker, Alasdair Wilkins, freelance writer & second-year master's student, UNC Science and Medical Journalism Master's Program

Reading:

Linden, New York Times Reader, Chapter 13, pp. 262-268.

Sacks, Oliver, "[My Periodic Table](#)," The New York Times, July 24, 2015.

Sacks, Oliver, "[Sabbath](#)," The New York Times, August 14, 2015.

Wilkins, Alasdair, "[I lost 100 pounds in a year. My 'weight loss secret' is really dumb.](#)" Vox, July 7, 2015.

Wilkins, Alasdair, "[Why Childhood Memories Disappear](#)," The Atlantic, July 5, 2015.

Assignment #3: Essay due Wednesday, Oct. 21. Please upload to Sakai -> Forums -> Assignment 3 by 6 p.m., Monday, Oct. 19.

**WEEK 10:**



OCT. 19: PROFESSIONAL MEMOIR -- Skype interview with author Wolf Pascoe

Reading:

Pascoe, Wolf, "Breathing for Two," ebook available at <http://www.amazon.com/Breathing-Two-Wolf-Pascoe-ebook/dp/B00BFWYCGK>, Kindle edition, 102 pp., \$2.99 or Audible edition, \$6.95.

View "Breathing for Two" trailer at <https://www.youtube.com/watch?v=jScUufqVlv8>.

OCT. 21: CRITIQUE OF ASSIGNMENT #3 (essay)

**Assignment #3 due today.**

**WEEK 11:**

OCT. 26: SCIENCE WRITING FOR MAGAZINES

Reading:

Blum, Deborah (editor), The Best American Science and Nature Writing 2014, pp. assigned TBA.

OCT. 28: COVERING HEALTH NEWS -- REPORTING ON HEALTH NEWS -- guest speaker: Rose Hoban, publisher of [North Carolina Health News](#))

Reading:

Please browse the [North Carolina Health News](#) web site.

Hoban, Rose, "[How a bad relationship between NC DHHS and the press can harm the public](#)," News & Observer, Sept. 14, 2013.

North Carolina Health News, "[Budget writers rely on questionable method for Medicaid budgeting](#)," August 18, 2014.

North Carolina Health News, "[Complicated Hospital Accounting Adds to Medicaid Uncertainty](#)," July 14, 2014.

North Carolina Health News, "[Medicaid Managed Care Outcomes Vary Across Country](#)," July 22, 2104.

**WEEK 11:**

NOV. 2: PROFILES - REPORTING FROM THE EMERGENCY DEPARTMENT - science and medical journalism Program Guest Lecturer: Judith E. Tintinalli, MD, MS, Professor, Dept. of Emergency Medicine, UNC-CH. **Please meet at 9:05 a.m. in conference room A on the second floor of the Starbucks Cafe adjacent to the lobby of the UNC Cancer Hospital. Please allow 15 minutes to walk from the UNC Quad to the UNC Cancer Hospital.**

Assignment #4: 900-word profile from the UNC Emergency Department due Wednesday, Nov. 18. Please upload your draft of your news story to Sakai -> Forums -> Assignment #4 by Monday, Nov. 16, at 6 p.m.

Reading:

Linden, New York Times Reader, Chapter 6, pp. 103-119.

Stone, Judy, "[Ebola in the U.S. - Politics and Public Health Don't Mix](#)," October 6, 2014, Molecules to Medicine blog, Scientific American blog site.

NOV. 4: REPORTING FOR THE ELECTRONIC MEDIA

\* Discuss "Science Times" section from Tuesday, Nov. 3, New York Times.

Reading:

Linden, Tom, "Medical Reporting for the Electronic Media," in Barbara Gastel's Health Writer's Handbook (Second Edition), chapter in Sakai's "Resources" folder.

"Science Times" section from Tuesday, Nov. 3, New York Times.

**WEEK 13:**

NOV. 9: REPORTING FOR THE ELECTRONIC MEDIA -- Skype interview, Dan Childs, Managing Editor, ABC News Medical Unit

Reading:

Handout on television script writing tips (in Resources folder of Sakai).

Blum, Deborah & Mary Knudson, editors, A Field Guide for Science Writers, pp. 35-38, 39-44, 73-78.

Viewing:

"[This Week: Opting Out on Vaccines?](#)," ABC News, April 6, 2014.  
"[Powerful Norovirus Spreads Across America](#)," ABC News, Jan. 25, 2013.  
"[What is the Best Way to Sneeze?](#)" ABC News, Jan. 28, 2014.

NOV. 11: RACE AND MEDICINE, guest speaker Dr. Damon Tweedy, author of [Black Man in a White Coat](#)

Reading:

Tweedy, Damon, "A Case of Racism and Reconciliation," *Annals of Internal Medicine*, Feb. 7, 2012, Vol. 156, pp. 246-247.

Tweedy, Damon, "[The Case for Black Doctors](#)," *The New York Times*, May 15, 2015.

**WEEK 14:**

NOV. 16: RADIO REPORTING

Listen to "[My Lobotomy](#)," "[Mastodons in Manhattan](#)," and "[Why A Teenage Mom Was Jailed in El Salvador After A Stillbirth](#)."

NOV. 18: IN-CLASS CRITIQUE OF ASSIGNMENT #4 (ED assignment)

**Assignment #4 due today.**

Assignment #5: Rewrite of assignment #4 due Monday, Nov. 30. Please upload your draft of your UNC Emergency Department story to Sakai -> Forums -> Assignment #5 by Saturday, Nov. 28, at 6 p.m.

**WEEK 15:**

NOV. 23: SCIENCE WRITING FOR MAGAZINES (cont.)

Reading:

Blum, Deborah (editor), The Best American Science and Nature Writing 2014, pp. assigned TBA.

**NOV. 25: No Class (Happy Thanksgiving)**

**WEEK 16:**

Nov. 30: IN-CLASS CRITIQUE OF ASSIGNMENT #5 (rewrite of ED assignment)

**Assignment #5 due today.**

Dec. 2: Class wrap-up and evaluation

**The Honor Code**

I expect that each student will conduct himself or herself within the guidelines of the University honor system (<http://honor.unc.edu>). All academic work should be done with the high levels of honesty and integrity that this University demands. You are expected to produce your own work in this class. If you have any questions about your responsibility or your instructor's responsibility as a faculty member under the Honor Code, please see the course instructor or Senior Associate Dean Charlie Tuggle, or you may speak with a representative of the Student Attorney Office or the Office of the Dean of Students.

**Seeking Help**

If you need individual assistance, it's your responsibility to meet with the instructor. If you are serious about wanting to improve your performance in the course, the time to seek help is as soon as you are aware of the problem – whether the problem is difficulty with course material, a disability, or an illness.

**Diversity**

The University's policy on Prohibiting Harassment and Discrimination is outlined in the 2011-2012 Undergraduate Bulletin <http://www.unc.edu/ugradbulletin/>. UNC is committed to providing an

inclusive and welcoming environment for all members of our community and does not discriminate in offering access to its educational programs and activities on the basis of age, gender, race, color, national origin, religion, creed, disability, veteran's status, sexual orientation, gender identity, or gender expression.

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### **Professional Values and Competencies**

Among the many skills students will learn in this course, it's expected they will be able to fulfill the following values and competencies as enumerated by the Association for Education in Journalism and Mass Communication:

- understand concepts and apply theories in the use and presentation of images and information;
- demonstrate an understanding of professional ethical principles and work ethically in pursuit of truth, accuracy, fairness and diversity;
- think critically, creatively and independently;
- conduct research and evaluate information by methods appropriate to the communications professions in which they work;
- write correctly and clearly in forms and styles appropriate for the communications professions, audiences and purposes they serve;
- critically evaluate their own work and that of others for accuracy and fairness, clarity, appropriate style and grammatical correctness;
- apply basic numerical and statistical concepts;
- apply tools and technologies appropriate for the communications professions in which they work.

### **Special Accommodations**

If you require special accommodations to attend or participate in this course, please let the instructor know as soon as possible. If you need information about disabilities visit the Accessibility Services website at <https://accessibility.unc.edu/>

**--syllabus revised August 16, 2015**