## SCIENCE AND MEDICAL JOURNALISM

School of Journalism and Mass Communication

JOMC 560.1 (cross listed as HBEH 660 & HPM 550), Fall 2014

MW 10:00 a.m. - 11:15 a.m., Carroll Hall 340

http://www.jomc.unc.edu/medicaljournalism

Tom Linden, M.D.	Office Hours:
	Wednesday, 2:00 - 3:00 p.m. or whenever office door is open
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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 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 2013, a primer about science writing from masters in the field, a best-selling, nonfiction book about infections jumping from animals to humans, 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 Journalism & Mass Communication. 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, 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.
- 2) 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.
- 3) Linden, Tom & the Writers of The New York Times. The New York Times Reader: Health & Medicine, © 2011, \$24.95, 292 pp., ISBN: 978-1604264821.
- 4) Mukherjee, Siddhartha, editor. The Best American Science and Nature Writing 2013, Mariner, © 2013, 339 pp., ISBN: 978-0-544-00343-9.
- 5) Pascoe, Wolf, Breathing for Two, Kindle Edition, \$2.99.
- 6) Quammen, David. Spillover: Animal Infections and the Next Human Pandemic, W. W. Norton & Company (paperback), © 2012, 587 pp, ISBN: 978-0-393-34661-9, \$16.95.
- 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 10, 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 <a href="Sakai">Sakai</a> where your classmates will critique your work.

Each undergraduate student will be responsible for one 15- to 20-minute presentation on assigned reading. Graduate students will be responsible for **two** presentations. 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 your presentation(s) as **15**% of your final grade, with an additional **10**% of your final grade based on your classroom participation throughout the semester. I'll base your grades on the quality (not necessarily the quantity) of your discussion. I'll judge quality of your classroom discussion based principally 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% 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 <u>AP Stylebook</u>. 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 <a href="https://instrument.unc.edu">https://instrument.unc.edu</a>).

# Exams

There will be no midterm or final exam.

## Grading Scale (for undergraduates)

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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
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## 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. 20: 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. 25: A GUIDE TO WRITING NONFICTION -- Guest speaker at 10:30 a.m.: Stephanie Brown, Director, Park Library

\* 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. 27: 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.

Mar, Andrew M. & Alison Page Howard, "Freedom of the Press: HIPAA & Newsgathering," http://www.firstamendmentcenter.org//press/topic.aspx?topic=hipaa news&SearchString=hipaa.

Reporters Committee for Freedom of the Press, "A Reporter's Guide to Medical Privacy Law," http://www.rcfp.org/reporters-quide-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: <a href="http://healthjournalism.org/secondarypage-details.php?id=56">http://healthjournalism.org/secondarypage-details.php?id=56</a>

Zietman, Anthony L., "<u>Falsification, Fabrication</u>, and <u>Plagiarism: The Unholy Trinity of Scientific Writing</u>," 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:

SEPT. 1: No class (Labor Day)

SEPT. 3: INTERPRETATION OF MEDICAL STATISTICS -- Guest Skype interview with Dr. Ivan Oransky, 10 - 10:30 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, "How to avoid 'he said-she said' science journalism," Not Exactly Rocket Science guest blog, February 18, 2010.

Oransky, Ivan, four posts from Hyung-In Moon archives, Retraction Watch.

Browse the web sites of the World Health Organization's <u>International Clinical Trials Registry Platform (ICTRP)</u> and the National Institutes of Health's <u>clinicaltrials.gov</u>.

#### WEEK 4:

SEPT. 8: 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).

SEPT. 10: NEWS STORIES

## Reading:

"Science Times" section from Tuesday, Sept. 9, New York Times.

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

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

<u>Assignment #1</u>: News story due Wednesday, Sept. 17. Please upload your draft of your news story to Sakai -> Forums -> Assignment #1 by Monday, Sept. 15, at 6 p.m.

### WEEK 5:

SEPT. 15: NEWS STORIES (cont.)

\* In-class newswriting exercise.

## 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. 17: CRITIQUE OF ASSIGNMENT #1

## Assignment #1 due today.

<u>Assignment #2</u>: Rewrite of Assignment #1 due Monday, Sept. 29. Please upload the redraft of your news story to Sakai -> Forums -> Assignment #2 by Saturday, Sept. 27, at 6 p.m.

## WEEK 6:

SEPT. 22: NON-FICTION NARRATIVE

# Reading:

Quammen, Spillover, pp. 11 - 209.

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

<u>View ABCnews.com</u> debrief on Ebola with Dan Childs, ABC News Managing Editor for its medical unit.

SEPT. 24: NON-FICTION NARRATIVE -- Skype interview with author David Quammen

#### Reading:

Quammen, Spillover, pp. 261 - 489.

#### Assignment:

Rewrite of Assignment #1 due Monday, Sept. 29. Please upload the redraft of your news story to Sakai -> Forums -> Assignment #2 by Saturday, Sept. 27, at 6 p.m.

#### WEEK 7:

SEPT. 29: CRITIQUE OF ASSIGNMENT #2

Assignment #2 (Rewrite of Assignment #1) due today.

OCT. 1: 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 10 a.m. at the Starbucks Cafe adjacent to the lobby of the UNC Cancer Hospital. (unconfirmed)

Assignment #3: 900-word profile from the UNC Emergency Department due Wednesday, Oct. 22.

#### Reading:

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

#### WEEK 8:

OCT. 6: INVESTIGATIVE & PERSPECTIVE STORIES

### Reading:

Linden, New York Times Reader, Chapter 4, pp. 51-91 & Chapter 8, pp. 162-182.

OCT. 8: OBITUARIES & HISTORICAL STORIES

### Reading:

Altman, Larry, "For 3 Nobel Winners, a Molecular Mystery Solved," New York Times, Oct. 7, 2013.

Butler, Katy, "What Broke My Father's Heart," New York Times, June 18, 2010.

Linden, New York Times Reader, Chapter 5, pp. 92-102 & Chapter 9, pp. 183-197.

# WEEK 9:

OCT. 13: COMMENTARY: COLUMNS & ESSAYS

### Reading:

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.

Mukherjee (editor), "Super Humanity" by Robert M. Sapolsky, pp. 255-260.

North Carolina Health News, "Secrecy about Food Health Program is Unhealthy," August 15, 2013.

Thomas, Lewis,  $\underline{\text{The Medusa and the Snail}}$ , 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).

## OCT. 15: EXPLANATORY STORIES

# Reading:

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

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

## **WEEK 10:**

OCT. 20: PROFESSIONAL MEMOIR -- Skype interview with author Wolf Pascoe

#### Reading:

Pascoe, Wolf, "Breathing for Two," ebook available at <a href="http://www.amazon.com/Breathing-Two-Wolf-Pascoe-ebook/dp/800BFWYCGK">http://www.amazon.com/Breathing-Two-Wolf-Pascoe-ebook/dp/800BFWYCGK</a>, Kindle edition, 102 pp., \$2.99.

View "Breathing for Two" trailer at https://www.youtube.com/watch?v=jSCuUfqVlv8.

OCT. 22: IN-CLASS CRITIQUE OF ASSIGNMENT #3 -- guest critiquer: Dr. Judith Tintinalli, professor and chair emeritus, Department of Emergency Medicine, U. of North Carolina School of Medicine

### Assignment #3 due today.

Assignment #4: Rewrite of assignment #3 due Monday, Nov. 3.

### **WEEK 11:**

OCT. 27: SCIENCE WRITING FOR MAGAZINES

#### Reading:

Mukherjee (editor), The Best American Science and Nature Writing, pp. 87-154, 169-254.

OCT. 29: 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, "McCrory Administration Officials Suppressed Insight Into Medicaid," Oct. 8, 2013.

North Carolina Health News, "Audit Edits Eliminated Defense of Medicaid Program," Oct. 9, 2013.

### **WEEK 12:**

NOV. 3: CRITIQUE OF ASSIGNMENT #4 -- guest critiquer: Dr. Judith Tintinalli, professor and chair emeritus, Department of Emergency Medicine, U. of North Carolina School of Medicine

# Assignment #4 (rewrite of assignment #3) due today.

NOV. 5: REPORTING FOR THE ELECTRONIC MEDIA

## Reading:

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

Assignment #5: Next story assignment due Wednesday, Nov. 19.

## **WEEK 13:**

NOV. 10: 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, <u>A Field Guide for Science Writers</u>, pp. 35-38, 39-44, 73-78.

NOV. 12: WRITING THE TELEVISION SCRIPT -- guest speaker, Helen Chickering

\* Script writing exercise in class.

### Reading:

"Science Times" section from Tuesday, Nov. 11, New York Times.

#### **WEEK 14:**

Science and Medical Journalism (JOMC 560)

NOV. 17: RADIO DOCUMENTARY

Listen to "My Lobotomy," "Mastodons in Manhattan, "and "Loophole Lets Toxic Oil Water Flow Over Indian Land."

NOV. 19: IN-CLASS CRITIQUE OF ASSIGNMENT #5

Assignment #5 due today.

#### **WEEK 15:**

NOV. 24: SCIENCE WRITING FOR MAGAZINES (cont.)

#### Reading:

Mukherjee (editor), The Best American Science and Nature Writing, pp. 261-318.

### NOV. 26: No Class (Happy Thanksgiving)

#### **WEEK 16:**

DEC. 1: SCIENCE BLOGGING -- quest speaker: blogger David Kroll, Ph.D. (unconfirmed)

#### Reading:

Browse David Kroll's Terra Sigillata blog.

Browse David Kroll's other blog, Take As Directed on Forbes website.

Kroll, David, "Well, how did I get here?" Oct. 24, 2012, post from "Terra Sigillata."

Kroll, David, <u>"iAroma synthetic marijuana and the loss of Max Dobner,"</u> July 16, 2011, post from "Terra Sigillata."

Kroll, David, "Trine Tsouderos on This Week in Virology: When do you fact-check article content with sources?" post on Take As Directed, Sept. 19, 2011, PLoS blogs.

Dec. 3: Class wrap-up and evaluation

### The Honor Code

The Honor Code is in effect in this class and all others at the University. I am committed to treating Honor Code violations seriously and urge all students to become familiar with its terms set out at <a href="http://instrument.unc.edu">http://instrument.unc.edu</a>. If you have questions, it's your responsibility to ask me about the Code's application. All work for this class must be submitted with a statement that you have complied with the requirements of the Honor Code.

### 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.