IOWA SCHOLARS IN CLINICAL INVESTIGATION
AND
THE UNIVERSITY OF IOWA COLLEGE OF PUBLIC HEALTH

CLINICAL RESEARCH ETHICS
(EPID:6950:0001)

SYLLABUS, SPRING 2021

Course Website: http://icon.uiowa.edu/
(EPID:6950:0001 Spr21 Clinical Research Ethics)

Course meets virtually via Zoom
Tuesdays, 12:00pm-1:50pm

💧💧💧

Lauris Kaldjian, MD, PhD, Course Director
lauris-kaldjian@uiowa.edu
Phone: 335-6706
Office: 1-112 MEB

Laura Shinkunas, MS, Course Coordinator
laura-shinkunas@uiowa.edu
Phone: 384-4654
Office: 1-110 MEB
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Purpose of Course</td>
<td>3</td>
</tr>
<tr>
<td>2. Overall Objectives</td>
<td>3</td>
</tr>
<tr>
<td>3. Format</td>
<td>3</td>
</tr>
<tr>
<td>4. Accessing Assigned Readings and Cases</td>
<td>3</td>
</tr>
<tr>
<td>5. Lecturers</td>
<td>4</td>
</tr>
<tr>
<td>6. Course Requirements</td>
<td>5</td>
</tr>
<tr>
<td>6.1. Attendance, Preparation, and Participation</td>
<td>5</td>
</tr>
<tr>
<td>6.2. Leading or Co-Leading Discussions</td>
<td>5</td>
</tr>
<tr>
<td>6.3. Final Paper</td>
<td>5-6</td>
</tr>
<tr>
<td>7. Grading</td>
<td>6</td>
</tr>
<tr>
<td>8. Course Schedule and Content</td>
<td>7-14</td>
</tr>
<tr>
<td>Week 1: <em>Course Overview and Introduction to Clinical Research Ethics</em> (Kaldjian)</td>
<td>7</td>
</tr>
<tr>
<td>Week 2: <em>What Makes Clinical Research Ethical?</em> (Kaldjian)</td>
<td>7-8</td>
</tr>
<tr>
<td>Week 3: <em>Philosophical Foundations</em> (Kaldjian)</td>
<td>8</td>
</tr>
<tr>
<td>Week 4: <em>IRB Review</em> (Countryman)</td>
<td>8-9</td>
</tr>
<tr>
<td>Week 5: <em>Special Emphases in IRB Review</em> (Countryman)</td>
<td>9</td>
</tr>
<tr>
<td>NO CLASS (March 2)</td>
<td></td>
</tr>
<tr>
<td>Week 6: <em>Informed Consent in Human Subjects Research</em> (Prince)</td>
<td>10</td>
</tr>
<tr>
<td>Week 7: <em>Integrity and Good Practice in Clinical Research, Part I</em> (Hichwa)</td>
<td>10</td>
</tr>
<tr>
<td>Week 8: <em>Integrity and Good Practice in Clinical Research, Part II</em> (Hichwa)</td>
<td>11</td>
</tr>
<tr>
<td>Week 9: <em>Gene Editing and Stem Cell Research</em> (Thomas)</td>
<td>11-12</td>
</tr>
<tr>
<td>Week 10: <em>Ethics of Genetic and Genomic Research</em> (Prince)</td>
<td>12</td>
</tr>
<tr>
<td>Week 11: <em>Ethical Issues in Research Involving Children</em> (Carlisle)</td>
<td>12-13</td>
</tr>
<tr>
<td>Week 12: <em>Vulnerable Populations and Special Circumstances</em> (Moser)</td>
<td>13</td>
</tr>
<tr>
<td>Week 13: <em>Conflicts of Interest</em> (Kaldjian)</td>
<td>13-14</td>
</tr>
<tr>
<td>Week 14: <em>Clinical Research Ethics in Developing Countries</em> (Kaldjian)</td>
<td>14</td>
</tr>
<tr>
<td>9. Communication with the Course Instructor and Course Coordinator</td>
<td>15</td>
</tr>
<tr>
<td>10. Departmental Administrative Contact Information</td>
<td>15</td>
</tr>
<tr>
<td>11. Availability of Modifications for Students with Disabilities</td>
<td>15</td>
</tr>
<tr>
<td>12. Procedures for Student Complaints</td>
<td>15</td>
</tr>
<tr>
<td>13. Collegiate Policy on Plagiarism</td>
<td>15</td>
</tr>
<tr>
<td>14. Additional Readings (not required) and Resources</td>
<td>16-19</td>
</tr>
<tr>
<td>Appendix. Research Ethics Paper Guidelines &amp; Resources (3-credit option)</td>
<td>20-21</td>
</tr>
</tbody>
</table>
1. **PURPOSE OF COURSE**

*Clinical Research Ethics* is a semester-long, 2-credit course with a 3-credit option (see Course Requirements on pages 5-6). The course introduces students to some of the key ethical, legal, and policy issues that investigators encounter as they conduct clinical research. In this course we take for granted that clinical research ethics matters to investigators, and we do so because clinical research is at heart a *moral* undertaking due both to its participants (human beings) and its goals (human health). This means that in clinical research, science and ethics are inseparable. We also recognize that clinical research is a *public* undertaking and therefore requires a vocabulary to articulate ethical justifications for research decisions so that their moral basis can be transparent to study subjects, Institutional Review Boards, and society. This course introduces you to topics, values, and policies you need to understand to design and conduct clinical research that is ethically justifiable.

2. **OVERALL OBJECTIVES**

1. Appreciate the inseparable relationship between science and ethics in clinical research.
2. Recognize common ethical challenges in clinical research.
3. Recognize the ethical aspects of the design and conduct of clinical research that require explicit assessment and justification.
4. Understand key regulations that govern clinical research.
5. Understand the ethical values that guide the regulation of clinical research.
6. Apply principles of clinical research ethics to student’s own clinical research interests.

3. **FORMAT**

The course will meet virtually *once each week, on Tuesdays from 12:00pm-1:50pm, via Zoom.* Attendance at all class sessions is required. The first hour of class will be reserved for student-led discussions. The second hour of class will be more didactic and led by the course director or one of the guest lecturers.

4. **ACCESSING ASSIGNED READINGS AND CASES**

The assigned readings and case for each week are posted as URL links or PDF files on the ICON course website ([http://icon.uiowa.edu/](http://icon.uiowa.edu/)). If for some reason a URL link does not function properly, please email the course coordinator at laura-shinkunas@uiowa.edu.
5. LECTURERS

• Lauris Kaldjian, MD, PhD
  Professor, Department of Internal Medicine
  Director, Program in Bioethics and Humanities
  Richard M. Caplan Chair in Biomedical Ethics and Medical Humanities
  
  Week 1: Course Overview and Introduction to Clinical Research Ethics
  Week 2: What Makes Clinical Research Ethical?
  Week 3: Philosophical Foundations
  Week 13: Conflicts of Interest
  Week 14: Clinical Research Ethics in Developing Countries

• Michele Countryman, CIP
  Director, Human Subjects Office
  
  Week 4: IRB Review
  Week 5: Special Emphases in IRB Review

• Anya Prince, JD, MPP
  Associate Professor, College of Law
  Member, University of Iowa Genetics Cluster
  Affiliate Faculty Member, Program in Bioethics and Humanities
  
  Week 6: Informed Consent in Human Subjects Research
  Week 10: Ethics of Genetic and Genomic Research

• Richard Hichwa, PhD
  Professor, Departments of Radiology, Physics and, Radiation Oncology
  Senior Associate Vice President for Research and Economic Development
  
  Week 7: Integrity and Good Practice in Clinical Research, Part I
  Week 8: Integrity and Good Practice in Clinical Research, Part II

• Christie Thomas, MBBS
  Professor, Department of Internal Medicine (Nephrology)
  Director, Renal Genetics Clinic
  Nephrologist, Kidney Transplant Program
  
  Week 9: Gene Editing and Stem Cell Research

• Erica Carlisle, MD
  Assistant Professor, Department of Surgery (Pediatric Surgery)
  Affiliate Faculty Member, Program in Bioethics and Humanities
  
  Week 11: Ethical Issues in Research Involving Children

• David Moser, PhD
  Professor, Department of Psychiatry
  Vice Chair, Faculty Development
  
  Week 12: Vulnerable Populations and Special Circumstances
6. COURSE REQUIREMENTS

6.1. Attendance, Preparation, and Participation (40 grading points): Consistent class attendance, preparation, and participation are critical to getting the most out of this course. Preparation is demonstrated by reviewing each week’s assigned readings and case (pp. 7-14 in Syllabus) and contributing knowledgeably on the readings and case during class discussions.

Unavoidable, expected absences from class should be preceded by an email or other communication to the course director and coordinator explaining the reason for the absence.

Gaps in Attendance, Preparation, and Participation (GAPP): GAPP notices will be provided to students whose attendance, preparation, or participation is cause for concern. If students continue to lag after receiving these notices, deductions will be made from their Attendance, Preparation, and Participation grading points.

Absences: If a student misses more than two class sessions, 1 point will be deducted from his or her Attendance, Preparation, and Participation grade for each additional class session missed (e.g., a student who misses 4 class sessions will lose 2 points).

Make-Up Work: When a student misses a class session, he or she will write a 2-page, single-spaced reflection that engages all of the assigned readings for the session missed. These reflections should be emailed to the course director and coordinator no more than one week following the missed session.

6.2. Leading or Co-Leading Discussions (30 grading points): Students will lead or co-lead (depending on the size of the class) the first half (i.e., 45-60 mins) of each week’s class session. Each student will choose a particular week or weeks (depending on the size of the class) and its associated topic; a sign-up sheet will be circulated at the semester’s first meeting. Discussion (co)-leaders are expected to (1) generate and pose to the class an engaging series of questions that cover the readings for their week, and then (2) lead a discussion of the case assigned for their week. They are expected to steer the discussion with support from the instructor.

6.3. Final Paper (30 grading points): Students must write a short final paper reflecting on a particular research practice or policy that does or may present ethical challenges in their own work. Students should describe why an issue is ethically problematic and how it could be avoided or better managed. Papers should be 3-4 double-spaced pages for 2-credit students. Referencing is not necessary. Papers should be uploaded to ICON by noon on May 6, 2021.

Directions for the 2-Credit Option:
1. Opening Paragraph
   a. A brief description of the research ethics dilemma/problem of interest.
   b. A brief note on the context, environment, etc. in which the problem arose (e.g., lab, field, clinic, or other).
2. Body
   a. Why (from a research ethics perspective) is this a problem/dilemma?
   b. Identify the ethical/moral principles at stake.
3. Conclusion
   a. Suggest possible solutions(s).
   b. What could be done to avoid/address this sort of problem in the future?
3-Credit Option: Students enrolled for 3-credits must write an in-depth final paper of 8-10 double-spaced pages with supporting references, on a research ethics topic of their choice. Prior consultation with the course director on the focus and direction of the paper is recommended. See Appendix at the end of the syllabus for further guidance.

7. Grading

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Points Allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance, Preparation, Participation</td>
<td>40 points</td>
</tr>
<tr>
<td>Leading/Co-Leading Discussion</td>
<td>30 points</td>
</tr>
<tr>
<td>Final Paper</td>
<td>30 points</td>
</tr>
<tr>
<td><strong>Point totals:</strong></td>
<td><strong>100 points</strong></td>
</tr>
</tbody>
</table>

Final letter grades will be determined using the following point ranges: 90-100 (A), 80-89 (B), 70-79 (C), 60-69 (D), less than 60 (fail).
8. Course Schedule and Content

**Date**  | **Topics, Objectives, Readings, and Case**
---|---
**Week 1:**  | **Course Overview and Introduction to Clinical Research Ethics (Lauris Kaldjian)**
**Jan 26**  |  
Learning Objectives  
Through this week’s readings and class discussion, we will aim to identify and understand:
- The inherent ethical and moral tensions in scientific experimentation involving human participants.
- The historical context for current ethical considerations, law and guidance.
- The key place of the Nuremberg Code in protecting human research participants.

Readings (on ICON)

No Case for this session

**Week 2:**  | **What Makes Clinical Research Ethical? (Lauris Kaldjian)**
**Feb 2**  |  
Learning Objectives  
Through this week’s readings, case, and class discussion, we will aim to identify and understand:
- The different benchmarks for determining whether a clinical trial is ethical.
- The (nuanced) differences between clinical research and practice.
- The ethical principles for the protection of human subjects research.

Readings (on ICON)

Case (on ICON)

Week 3: Feb 9

**Philosophical Foundations** (Lauris Kaldjian)

**Learning Objectives**
Through this week’s readings, case, and class discussion, we will aim to identify and understand:
- The relevance of philosophy to human subjects research and research protections.
- The concept of moral reasoning.
- The different ethical theories that can help organize thinking about research ethics.

**Readings (on ICON)**

Case (on ICON)

Week 4: Feb 16

**IRB Review** (Michele Countryman)

**Learning Objectives**
Through this week’s readings, case, and class discussion, we will aim to identify and understand:
- Application of the Belmont Report’s principles in IRB review.
- IRB review criteria.
- Variations between institutions in the IRB review process.
- Potential challenges regarding investigators attitudes toward IRBs.

**Readings (on ICON)**

**Case (on ICON)**


**Week 5: Feb 23**

**Special Emphases in IRB Review (Michele Countryman)**

**Learning Objectives**
Through this week’s readings, case, and class discussion, we will aim to identify and understand:

• Human subjects research determination form.
• Criteria for ‘exempt status’ (exempt from full IRB review).
• Privacy concerns posed by use of social media in research.
• Adaptive clinical trials and informed consent.

**Readings (on ICON)**

• Do I need IRB review? Is this human subjects research? A guide for investigators. Prepared by the University of Iowa Human Subjects Office/IRB.
• Code of Federal Regulations (§46.104) Exempt research.
• [OPTIONAL]: Chow SC, Chang M. Adaptive design methods in clinical trials - a review. *Orphanet J Rare Dis.* 2008 May 2;3:11.

**Case (on ICON)**


**Mar 2  NO CLASS**
Week 6: Mar 9  
**Informed Consent in Human Subjects Research (Anya Prince)**

**Learning Objectives**
Through this week’s readings, case, and class discussion, we will aim to identify and understand:

- The ethical and moral principles underlying informed consent.
- The components of informed consent (disclosure, understanding, voluntariness).
- Criticisms and emerging challenges regarding informed consent.

**Readings (on ICON)**

**Case (on ICON)**
- Waiving informed consent.

---

Week 7: Mar 16  
**Integrity and Good Practice in Clinical Research, Part I (Richard Hichwa)**

**Learning Objectives**
Through this week’s readings, case, and class discussion, we will aim to identify and understand:

- Values and guidelines for professional self-regulation in research.
- Government and institutional regulations and policies for research integrity.
- Research misconduct definitions and policies.
- Good data management practices.

**Readings (on ICON)**
- NOT-OD-19-020: Responsibilities of recipient institutions in communicating research misconduct to NIH.

**Case (on ICON)**
Week 8: Mar 23  
*Integrity and Good Practice in Clinical Research, Part II* (Richard Hichwa)

**Learning Objectives**
Through this week’s readings, case, and class discussion, we will aim to identify and understand:
- Mentor and trainee responsibilities.
- Integrity in collaborative research.
- Authorship roles and responsibilities.
- Integrity in peer review.

**Readings (on ICON)**
- Steneck NH. (2007). Part III: Conducting research: Mentor and trainee responsibilities (pp. 103-128) and Part IV: Reporting and reviewing research (pp. 129-154). In: *ORI Introduction to the Responsible Conduct of Research* (Updated ed.). Washington DC: Dept. of Health and Human Services, Office of Research Integrity.

**Case (on ICON)**

Week 9: Mar 30  
*Gene Editing and Stem Cell Research* (Christie Thomas)

**Learning Objectives**
Through this week’s readings, case, and class discussion, we will aim to identify and understand:
- Ethical issues raised by gene editing and stem cell science.
- Controversies regarding using gene editing and stem cells.
- Research using gene editing and stem cells as an opportunity to clarify the relationship of science and ethics in new technologies.

**Readings (on ICON)**
Case (on ICON)

Week 10:  
**Ethics of Genetic and Genomic Research (Anya Prince)**

**Learning Objectives**
Through this week’s readings, case, and class discussion, we will aim to identify and understand:
- Key ethical, legal, and social issues surrounding genetic and genomic research.
- Informed consent challenges surrounding biobanking.
- Policy needs for new genetic and genomic research.

**Readings (on ICON)**
- Wolinetz CD, Collins FS. Recognition of research participants’ need for autonomy: remembering the legacy of Henrietta Lacks. JAMA. 2020; 324.

Case (on ICON)
- Genetic testing of high school students. Retrieved from: https://bioethicsresearch.org/genetic-testing-high-school-students/

Week 11:  
**Ethical Issues in Research Involving Children (Erica Carlisle)**

**Learning Objectives**
Through this week’s readings, case, and class discussion, we will aim to identify and understand:
- Research ethics issues specific to pediatric populations.
- How to identify ethically justifiable approaches to research with pediatric subjects.

**Readings (on ICON)**
Case (on ICON)

Week 12: **Vulnerable Populations and Special Circumstances (David Moser)**

**Learning Objectives**
Through this week’s readings, case, and class discussion, we will aim to identify and understand:
- Which populations are considered vulnerable?
- The ethically significant features of some research subject groups that indicate vulnerability.
- Research allowances with prison populations.

**Readings (on ICON)**

Case (on ICON)

Week 13: **Conflicts of Interest (Lauris Kaldjian)**

**Learning Objectives**
Through this week’s readings, case, and class discussion, we will aim to identify and understand:
- Definitions of conflict of interest (COI).
- Typical situations involving COI in research.
- Regulations and strategies for avoiding COI.

**Readings (on ICON)**
• University of Iowa. (2012). *Conflict of Interest in Research*.

**Case (on ICON)**

---

**Week 14: May 4**  
**Clinical Research Ethics in Developing Countries (Lauris Kaldjian)**

*Learning Objectives*

Through this week’s readings, case, and class discussion, we will aim to identify and understand:

- Vulnerable populations in international research.
- The “double-standards” argument and counter-argument.
- What international researchers can do to enhance subject protection.

*Readings (on ICON)*


*Case (on ICON)*

9. **Communication with the Course Instructor and Course Coordinator**

Please feel free to contact the course instructor or course coordinator as needed by email. You should expect to receive replies by email within 24-48 hours. As needed, office meetings can be arranged to discuss questions in person.

10. **Departmental Administrative Contact Information**

If needed, the Departmental Executive Officer in the College of Public Health relevant to this course is Prof. James Torner, Chair, Department of Epidemiology (Office: C21P-1 GH, Phone: 384-5001).

11. **Availability of Modifications for Students with Disabilities**

The Course Director would like to hear from anyone who has a disability which may require seating modifications or testing accommodations or accommodations of other class requirements, so that appropriate arrangements may be made. Please contact the Course Director by email.

12. **Procedures for Student Complaints**

It is the policy of The University of Iowa that each student shall be guaranteed certain rights and freedoms. A list of these rights and the procedures for complaints against faculty can be found at: [http://www.uiowa.edu/~vpss/policies/i/d.shtml#main](http://www.uiowa.edu/~vpss/policies/i/d.shtml#main) [Instructors]

13. **Collegiate Policy on Plagiarism**

Plagiarism is the unacknowledged use of another’s ideas expressed in either the author’s original words or in a manner similar to the original form. It is the student’s responsibility to seek clarification of any situation in which he/she is uncertain whether plagiarism is/has been involved. Policies governing plagiarism can be found at [http://www.grad.uiowa.edu/Pubs/ManualRulesRegs.asp](http://www.grad.uiowa.edu/Pubs/ManualRulesRegs.asp)
14. ADDITIONAL READINGS/RESOURCES (NOT REQUIRED)

Week 1: Course Overview and Introduction to Clinical Research Ethics


Week 2: What is Clinical Research Ethical?


Week 3: Philosophical Foundations


Week 4: Informed Consent in Human Subjects Research

• (Video) Paging Dr. Peter, Part 2. (2012). Seattle Children’s Hospital.

**Week 5/6: Integrity and Good Practice in Clinical Research, Parts I & II**

- The Office of Research Integrity’s website [http://ori.hhs.gov/](http://ori.hhs.gov/)

**Week 7: IRB Review**


**Week 8: Privacy and Confidentiality**


**Week 9: Ethics of Genetic and Genomic Research**

- Schmickle S. (9/21/10). U of M's ‘DNA on a stick’ project becomes platform for debate on genetic-research ethics, [MinnPost](http://www.minnpost.com/).

**Week 10: Ethical Issues in Research Involving Children**


**Week 11: Stem Cell Ethics**


**Week 12: Vulnerable Populations and Special Circumstances**


**Week 13: Conflicts of Interest**

• Institute of Medicine. (2009) *Conflict of interest in medical research, education and practice* [report brief].
**Week 14: Recent Changes to the Common Rule**


**Week 15: Clinical Research Ethics in Developing Countries**

- **CIOMS GUIDELINES** (2016).
APPENDIX. RESEARCH ETHICS PAPER GUIDELINES & RESOURCES (FOR 3-CREDIT OPTION)

**Introduction** - statement of the problem
- What is the issue you want to address and how does it relate to the bigger field? This can be a pretty bold statement. It can be attention grabbing.
- You should mention the product you are working towards (i.e. generating guidelines).

**Literature Review/Background Section**
- Write a brief review of the issue. Include the different perspectives and point out the gaps in the field.
- Place your paper in relation to these gaps.

**Body**
- The core of the paper where you make your arguments and support your claims with references.
- Argument/counter-argument approach works well for ethics type papers.

**Wrap-Up and Conclusions** - state the significance
- Include recommendations or guidelines if appropriate.
- Point out directions for future research in this area.

---

Purdue Online Writing Lab (OWL) is a helpful website that provides free writing and referencing resources.

The Biomedical Ethics Library Guide provides an introduction to sources of information having to do with all aspects of ethics in the biosciences and the health sciences. Information provided in this guide includes:
- useful definitions
- web guides to resources
- general references, codes and oaths
- search indexes and some major periodical titles in the field of bioethics
- organizations
An alphabetical list of databases/indexes can be found and accessed through the UI Libraries website at [http://guides.lib.uiowa.edu/az.php](http://guides.lib.uiowa.edu/az.php). You will find the following databases/indexes most helpful:

1. **PubMed** - Provides access to bibliographic information in Medline and other sources. ([See the available Help Sheet](http://guides.lib.uiowa.edu/az.php))

2. **Academic Search Elite** - This multi-disciplinary database offers full text for nearly 2,000 scholarly journals, including more than 1,500 peer-reviewed titles. Covering virtually every area of academic study, Academic Search Elite offers full text information dating as far back as 1985. This database is updated on a daily basis.

3. **Catholic Periodical and Literature Index** - Includes indexed citations to articles published in Roman Catholic periodicals, Papal documents, church promulgations, and books about the Catholic faith that are authored by Catholics and/or produced by Catholic publishers.

4. **CINAHL Plus** - ([Help Sheet for Search CINAHL - PDF](http://guides.lib.uiowa.edu/az.php)) CINAHL Plus provides indexing for 3,024 journals from the fields of nursing and allied health, with indexing back to 1937. CINAHL Plus also contains searchable cited references for more than 1,160 journals. Full text material includes more than 80 journals plus legal cases, clinical innovations, critical paths, drug records, research instruments and clinical trials. Offering complete coverage of English-language nursing journals and publications from the National League for Nursing and the American Nurses’ Association, CINAHL covers nursing, biomedicine, health sciences librarianship, alternative complementary medicine, consumer health and 17 allied health disciplines.

5. **Global Health** - Global Health is the definitive international public health database for academics, researchers, NGOs, policy makers, clinicians, healthcare professionals and students.

6. **LexisNexis Academic** - Provides access to a wide range of news, business, legal research, medical and reference information. The news section provides access to full text of newspapers from the U.S., Europe, Africa, North and South America and Australia in English, as well as some in Dutch, French, German, Italian and Spanish; news wires, television and radio transcripts are also available.

7. **Philosopher's Index** - Provides indexing and abstracts from books and journals of philosophy and related fields—ethics, aesthetics, social philosophy, political philosophy, epistemology, and metaphysic logic as well as material on the philosophy of law, religion, science, history, education, and language.

8. **Web of Science** - A citation reference that includes Science Citation Index (1900-present), Social Science Citation Index (1900-present), Arts & Humanities Citation Index (1975-present), Book Citation Index- Science (2005-present), Book Citation Index- Social Sciences & Humanities (2005-present), and Medline, and links to Journal Citation Reports and EndNote web version.

Other helpful resources can be accessed through the Program in Bioethics and Humanities website at: [https://medicine.uiowa.edu/bioethics/resources](https://medicine.uiowa.edu/bioethics/resources)