

University of Louisville

OFFICIAL UNIVERSITY ADMINISTRATIVE POLICY

1 **POLICY NAME (R*)**

2 Responsible Conduct of Research and Scholarship (RCRS)

3

4 **POLICY NUMBER (O*)**

5 RES-5.01

6

7 **INITIAL ADOPTION AND EFFECTIVE DATE (R*)**

8 May 23, 2007

9

10 **POLICY APPLICABILITY (R*)**

11 This policy applies to faculty, students, trainees, staff, and all other members of
12 UofL's research community, regardless of pay or leave status, hereafter referred to
13 as Scholars/Researchers. This policy applies to UofL employees and students
14 engaged in any facet of research and scholarship, regardless of internal or external
15 support, including (but not limited to):

16

- 17 • Publishing activities (journal articles, book writing, literary criticism, legal
18 research, technical and institutional research reports, literature reviews, and
19 historical scholarship, among other forms)
- 20 • Oral or poster presentations of research/scholarship
- 21 • Collection and analysis of data, information, biospecimens or records
- 22 • Inclusion as personnel on sponsored research or scholarship grants/awards
- 23 • Inclusion as personnel on internally funded research or scholarship
24 grants/awards
- 25 • Development and/or leadership of centers that generate new knowledge,
26 research or scholarship
- 27 • Media contributions
- 28 • Creative expression/performance and visual arts activities (compositions,
29 presentations, performances, exhibits and similar projects)

30

31 **REASON FOR POLICY (O*)**

32 The University of Louisville is committed to the highest standards of Responsible
33 Conduct in Research and Scholarship (RCRS). The continued success and positive
34 public image of the University of Louisville depends on the responsible and ethical
35 conduct of all members of the university community.

36

37 The purpose of this policy is to articulate this commitment. It is the responsibility
38 of the university community to foster and nurture a culture where integrity in the
39 conduct of Research and scholarly activity is the foremost aim. In addition, all
40 members of the university community are responsible for ensuring their behavior
41 and actions are consistent with this commitment, as well as with university policies
42 and procedures, and applicable federal, state, and local laws, and regulations.
43

44 **POLICY STATEMENT (R*)**

45 Primary assurance of the quality of research and scholarly endeavors arises from
46 the qualifications of individual Scholars/Researchers. All Scholars/Researchers are
47 ultimately responsible for the character, accuracy, and reliability of their output and
48 for that conducted under their supervision. Each Scholar/Researcher is responsible
49 for the integrity and originality of their own work. Scholars/Researchers are
50 responsible for being familiar with all University policies related to
51 Research/scholarly output including, but not limited to, policies on: Intellectual
52 Property, Research Misconduct, and this policy.
53

54 Academic and Research projects must be designed with rigor and conducted with
55 honesty and integrity. The design of an academic/Research project must include
56 appropriate safeguards against bias. All Scholars/Researchers involved in the
57 project and/or Research must follow the ethical principles of RCRS.
58

59 All Scholars/Researchers must complete training in RCRS as defined in related
60 University administrative procedures and/or in alignment with the requirement of
61 external funding agencies.
62

63 **VIOLATIONS OF THIS POLICY**

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65 Failure to comply with this or any other research policy of the University will result
66 in the application of Administrative Sanctions for Violations of the University of
67 Louisville Research Policies.
68

69 **RELATED INFORMATION (O*)**

70 America COMPETES Act

71 [NIH NOT-OD-22-055](#)

72 [NIH NOT-OD-10-019](#)

73 [NIH NOT-OD-21-152](#)

74 [NSF PAPPG CH II.C.1.d](#)

75 [NSF PAPPG CH IX.B](#)
76 [RES-1.01 Guidelines on the Ownership of Data University of Louisville](#)
77 [Addressing Potential Individual Conflicts of Interest](#)
78 [Intellectual Property](#)
79 [Responding to Allegations of Research Misconduct](#)
80 [Administrative Sanctions for Violations of the University of Louisville Research](#)
81 [Policies](#)

82

83 **STANDARDS (O*)**

84 Principal Investigators/Project Directors are responsible for ensuring that all
85 Scholars/Researchers as well as other applicable members of their team are made
86 aware of these requirements.

87 **Conflict of Interest and Commitment.** Researchers/Scholars are expected to
88 avoid conflicts of interest and commitment that appear to directly and significantly:
89 1. compromise objectivity in carrying out University responsibilities;
90 2. affect the University's interests; or
91 3. otherwise compromise the performance of University responsibilities unless
92 such conflicts are managed, reduced, or eliminated. Scholars/Researchers must
93 be aware of, understand, and comply with applicable University policies.

94

95 **Human Subjects.** Federal regulations for human subject research are based on
96 three overarching ethical principles, also known as the Belmont Principles. These
97 are:

- 98 1. Respect for Persons – respecting the autonomy of individuals to make their
99 own decisions and protecting individuals with diminished autonomy;
- 100 2. Beneficence – protecting research participants from risk of harm while
101 optimizing possible benefits of the research; and
- 102 3. Justice – fairly distributing the benefits and burdens of research. All human
103 subjects research conducted under the auspices of the University must follow
104 relevant policies and regulations.

105

106 Specialized training is required for University Scholars/Researchers conducting
107 Research involving human subjects.

108

109 **Animal Subjects.** Public and scientific concerns shape the laws that regulate the
110 humane care and use of animals in research, testing, and instruction. These laws
111 are governed by the following ethical mandates, known as “The Three Rs” of animal
112 research:

- 113 1. Reduction – required proof that the number of animals is reduced to the
114 smallest number possible (respecting the value of each life)
115 2. Replacement – required proof that a non-animal model is not available
116 and/or that the species identified is justified (replacing animal use where
117 feasible)
118 3. Refinement – required proof that all procedures ensure the highest
119 quality of compassionate care and comfort (applying standards
120 developed to ensure quality of life through minimizing risk and
121 discomfort, adequacy of housing, and advanced veterinary medicine).
122

123 Specialized training is required for University Scholars/Researchers conducting
124 Research involving animal subjects.
125

126 **Safe Laboratory Practices.** The Laboratory Manager (defined below) is
127 responsible for informing each staff person and all Scholars/Researchers of
128 applicable federal, state, and local regulations and University policies for conduct of
129 studies involving humans, animals, radioactive and other hazardous materials, and
130 recombinant DNA. Laboratory Managers are responsible for informing personnel
131 and all Scholars/Researchers in their laboratories about existing University policies
132 and these guidelines. The Laboratory Manager is also responsible for explaining and
133 discussing the relevant requirements for RCRS with trainees, fellows, and visiting
134 scientists/scholars in the laboratory, and to ensure that such requirements are met.
135 Specialized training is required for University Scholars/Researchers conducting
136 laboratory research.
137

138 **Mentor/Mentee Relationships.** Mentors are responsible for assuring close
139 supervision of the research of students and trainees, including the design of
140 research protocols, approval by appropriate committees, data gathering and
141 recording, statistical analysis, interpretation of results, preparation of manuscripts,
142 submission, and revision of manuscripts for publication, and presentations at
143 scholarly meetings.
144

145 **Safe Research Environments.** Scholars/Researchers are responsible for ensuring
146 all research practices are equitable and the environments in which research is
147 conducted are also diverse, inclusive, and accessible. All Scholars/Researchers
148 have the right to work in a setting free of mistreatment, harassment, and
149 discrimination.
150

151 **Collaborative Research.** In keeping with the principle of fostering reproducibility
152 in science, novel materials and technology used for experiments should be made

153 available or means for obtaining these should be given to other members of the
154 research community upon request and after the execution of a material transfer or
155 data use agreement (as necessary). The Principal Investigator should have the
156 latitude to make a fair and balanced response to requests for all research data
157 and/or materials, including novel compounds and reagents. Additionally,
158 Scholars/Researchers are expected to comply with any applicable data or material
159 sharing requirements set forth by the University, research sponsors, or applicable
160 laws and regulations.

161

162 **Peer Review.** The most effective single process for ensuring research of high
163 quality is peer review, both formal and informal. Informal review occurs through
164 departmental and interest-group seminars and research discussion groups. Each
165 division, department, or program should encourage such informal review
166 procedures. Formal review will be accomplished by existing review committees
167 (e.g., promotion and tenure committees) that are tasked with evaluating the merit
168 and relevance of research.

169

170 **Data Gathering, Storage, and Retention:** Original data must be recorded,
171 preserved, and made accessible to the University. The University retains ownership
172 of all Research data, samples, and materials generated or collected during
173 University Research. Any applicable granting agency requirements or other
174 applicable sponsored research agreement governing the preservation of data must
175 be followed; however, it may be necessary to preserve data for a longer
176 period. For joint Research involving two or more laboratories, the Principal
177 Investigators involved in the Research shall meet and agree upon which of them is
178 to maintain the data. The Principal Investigator shall make the data available for a
179 reasonable period.

180 **Research Misconduct.** Principal Investigators bear responsibility for the integrity
181 of Research performed under their supervision. Administrative unit heads must
182 pursue reasonable monitoring to ensure the integrity of the activities conducted
183 under their oversight. The Research Integrity Officer (RIO) is the individual
184 responsible for receiving and assessing allegations of Research Misconduct,
185 assuring that there is a timely response to such allegations, ensuring the timely and
186 thorough execution of relevant processes and proceedings, and disseminating
187 communications to those involved in proceedings such as sponsors and agencies.

188

189 **Authorship and Publication of Research and/ or Scholarly Works.** Each
190 author must make substantial contributions in the conception; design; analysis or
191 interpretation of data; or have drafted the work or reviewed it critically for
192 important intellectual content; AND have approved the submitted version (and any

193 substantially modified version that involves the author’s contribution to the
194 Research/Scholarship); AND have agreed to be personally accountable for the
195 author’s own contributions and to ensure that questions related to the accuracy or
196 integrity of any part of the work, even ones in which the author was not personally
197 involved, are appropriately investigated, resolved, and the resolution documented
198 in the literature. Authors must not engage in Unacceptable Authorship Practices
199 (defined below).

200 No student, trainee, or non-key personnel may publish research results without the
201 knowledge and approval of the Principal Investigator. If the Principal Investigator is
202 unable to provide approval for personal or professional reasons, the student,
203 trainee, or non-key personnel may seek approval from the cognizant Dean / VP of
204 the Principal Investigator’s home unit.

205 **International Collaboration & Research Security.** UofL recognizes that
206 international academic collaborations are an essential part of the research
207 community and critical to scientific advancement. However, it is important that all
208 personnel engaging in international partnerships are aware of their reporting
209 obligations and the concerns associated with research security, including improper
210 foreign influence. Researchers should be completely transparent about their foreign
211 relationships and activities and fully comply with all reporting requirements
212 established by University policy and sponsors of federally-funded research.

213
214 **Export Controls.** Export control and shipping regulations affect University
215 activities at home and abroad. These regulations apply to (but not limited to)
216 physical exports of Research materials, samples, data, intellectual property travel
217 to certain countries, including foreign nationals residing in the U.S., subject to U.S.
218 sanctions, and research projects conducted outside the public domain.

219
220 **Social Obligation.** Researchers have a social obligation to conduct Research and
221 Scholarship work responsibly and with integrity, and to work to ensure that their
222 contributions are not misused.

223

224 **DEFINITIONS (O*)**

225 **Laboratory Manager(s) or Supervisor(s)** means an individual who supervises
226 personnel and operations in a laboratory environment.

227 **Mentors** means someone who teaches or gives help and advice to a less
228 experienced and often younger person.

229 **Principal Investigator (PI)/ Project Director (PD)** means the individual
230 Scholar/Researcher ultimately responsible for the effective and compliant
231 management of all ethical, scientific, fiscal, and programmatic aspects of a
232 Research project.

233 **Research and Development.** Research means a systematic study directed toward
234 fuller scientific knowledge or understanding of the subject studied. This definition
235 encompasses basic and applied research, including research training activities not
236 included in formal instruction and all development activities. Development is the
237 systematic use of knowledge and understanding gained from Research, directed
238 toward producing useful materials, devices, data, systems, or methods, including
239 the design and development of prototypes and processes. For purposes of this
240 policy, both research and development apply.

241
242 **Scholar(s)/Researcher(s)** means faculty, students, trainees, staff, employees,
243 visiting scholars, key personnel, project team members, and all other members of
244 UofL's research community, as well as an individual who is responsible for the
245 design, proposal, conduct, and/or reporting of research, irrespective of discipline,
246 regardless of pay or leave status.

247
248 **Responsible Conduct of Research and Scholarship (RCRS)** means the
249 processes and actions to perform accurate, efficient, rigorous, and reproducible
250 research and scholarship. RCRS encompasses all aspects of the Research and
251 Scholarship enterprise, including, but not limited to the following topics:

- 252 1. conflict of interest - personal, professional, and financial - and conflict of
253 commitment, in allocating time, effort, or other research resources;
- 254 2. policies regarding human subjects, live vertebrate animal subjects, and safe
255 laboratory practices;
- 256 3. Mentor/mentee responsibilities and relationships;
- 257 4. safe Research environments (e.g., those that promote inclusion and are free of
258 sexual, racial, ethnic, disability and other forms of discriminatory harassment);
- 259 5. collaborative Research including collaborations with industry and Researchers
260 and institutions in other countries;
- 261 6. peer review, including the responsibility for maintaining confidentiality and
262 security in peer review;
- 263 7. data acquisition and analysis; laboratory tools (e.g., tools for analyzing data and
264 creating or working with digital images); recordkeeping practices, including
265 methods such as electronic laboratory notebooks;
- 266 8. secure and ethical data use; data confidentiality, management, sharing, and
267 ownership;

- 268 9. research misconduct and policies for handling misconduct;
269 10. responsible authorship and publication;
270 11. research security;
271 12. export controls; and,
272 13. the scientist as a responsible member of society, contemporary ethical issues
273 in biomedical research, and the environmental and societal impacts of
274 biomedical and social science research
275 14. the Scholar/Researcher as a responsible member of the profession
276 15. academic freedom

277

278 **Research Record** means any data or results, in any media or format, which
279 embodies the information resulting from Research. A Research Record includes, but
280 is not limited to, grant or contract applications, whether funded or unfunded; grant
281 or contract progress and other reports; laboratory notebooks; notes;
282 correspondence; videos; photographs; X-ray film; slides; biological materials;
283 computer files and printouts; manuscripts and publications; equipment use logs;
284 laboratory procurement records; animal facility records; human and animal subject
285 protocols; medical charts; participant research files; computer code; musical
286 scores; musical composition; and choreography.

287

288 **Scholarship** means the creation of new knowledge or the creation of novel
289 expressions of knowledge in any form.

290 **Unacceptable Authorship Practices** means publication processes that detract
291 from professional and societal advancements. The University considers the
292 following practices are considered by the University to be unethical and
293 unacceptable:

- 294 1. Ghost Authorship - Authors who contributed to the work but are not
295 listed, generally to hide a conflict of interest from editors, reviewers, and
296 readers.
297 2. Guest/gift/honorific authorship - Individuals given authorship credit who
298 have not contributed in any substantive way to the research but are
299 added to the author list by virtue of their stature in the organization.
300 3. Orphan authorship - Authors who contributed materially to the work but
301 are unfairly omitted from the author list by the drafting team.
302 4. Forged authorship - Unwitting authors who had no part in the work but
303 whose names are appended to the paper without their knowledge to
304 increase the likelihood of publication.

- 305 5. Coercive authorships - exertion of seniority or supervisory power by a
306 person to be conferred authorship when appropriate authorship criteria
307 are not otherwise met.
- 308 6. Self-plagiarism - the re-publication of one's own work or substantial and
309 substantive portions thereof without citation to the original work. The
310 threshold of whether the reuse of one's own work rises to the level of self-
311 plagiarism shall be determined by the relevant journal standard, or if
312 none exists, the relevant standard in the industry/field.
- 313 7. Use of papermills or other similar commercial enterprises to purchase
314 manuscripts with the intent of representing them as original work.
- 315 8. Use of AI tools or technology that do not follow the requirements of UofL
316 policy, the journal publisher, and Council on Publication Ethics.
317

318 **PROCEDURES (O*)**

- 319 RES 5-01a Training in the Responsible Conduct of Research and Scholarship (RCRS)
320 RES 5-01b Resolution of Authorship and Publication Disputes in Research and
321 Creative Activity
322

323 **RESPONSIBILITIES (O*)**

324 **Institutional Officials**

325 It is the responsibility of the University and its officials to provide training and
326 maintain records of training in RCRS. The training provided shall be of sufficient
327 quality and frequency to allow achievement and maintenance of certification. The
328 University will also provide templates and mechanisms to track completion of the
329 training requirement. The University and its officials shall consult with faculty,
330 administrative, and/or research staff for guidance on the content and delivery of
331 the educational materials and other program requirements; publicize the research
332 education program to all faculty, staff, and students; and track and maintain
333 information on participation in RCRS education activities and assess the ongoing
334 effectiveness of the research education program.
335

336 **Unit Heads or Designee**

337 It is the responsibility of the applicable Unit Head or their designees to ensure all
338 Scholars/Researchers and other applicable Research personnel complete RCRS
339 training requirements appropriate to their career stage and/or as required by
340 sponsors or the University; publicize the RCRS training program to faculty, staff,
341 and students in college or unit; and provide advice and guidance for the RCRS
342 training program.
343

344 **Directors and Department Heads**

345 Departments and other administrative units are responsible for providing
346 information regarding accepted standards of professional integrity and quality,
347 including aspects specific to their own disciplines. Notices sent from the Office of
348 Research & Innovation, or its designee, through the Deans, Directors, and
349 Department Heads should serve as an effective reminder to all faculty, staff and
350 students. Ensure all Scholars/Researchers complete RCRS training requirements
351 appropriate to their career stage and/or as required by sponsors or the University;
352 Publicize the RCRS training program to all faculty, staff and students in their
353 department; and Monitor completion of requirements by all faculty, staff and
354 students, as needed.

355

356 **Faculty, Staff and Students**

357 Scholars/Researchers shall complete RCRS training requirements as outlined in Res
358 5-01b.

359

360 **RESPONSIBLE AUTHORITY (R*)**

361 Executive Vice President, Research and Innovation

362

363 **RESPONSIBLE UNIVERSITY DEPARTMENT/DIVISION (R*)**

364 Office of Research Integrity
365 300 E Market, Suite 300, Louisville, KY 40292
366 Phone: 1-502-852-2454
367 Email: ori@louisville.edu

368

369 **HISTORY (R*)**

370 Revision Date(s): May 23, 2007; June 17, 2016; Sep 2022

371 Reviewed Date(s): 2016

372

373 The University Policy and Procedure Library is updated regularly. In order to
374 ensure a printed copy of this document is current, please access it online at
375 <http://louisville.edu/policies>.

376

377 **R* = Required O* = Optional**