September 23, 2014

The Honorable Douglas F. Gansler
Attorney General of Maryland
200 St. Paul Place
Baltimore, MD 21202

Dear Mr. Attorney General:

Maryland leads the nation in protecting its citizens from unethical research. The State’s requirements, set forth in House Bill 917, are simple but essential: any research on human subjects requires meaningful informed consent and approval by an ethical review panel. This summer, two social media companies, Facebook and OkCupid, demonstrated why laws like Maryland’s are necessary. The companies revealed that they performed psychological experiments on their users: Facebook altered users’ news feeds to manipulate their emotions, and OkCupid lied to users about their compatibility with potential romantic partners. Both companies have scoffed at the idea that their research required them to obtain the consent of their users or approval from an ethical review board, but that is exactly what Maryland law requires. We encourage you to protect Maryland citizens by using your authority to bring Facebook and OkCupid into compliance with the law.

Maryland Law

The history of science includes ugly episodes of abusive research, from the horrors of Nazi medicine to the deliberate withholding of care from syphilis victims in the Tuskegee experiment. Fortunately, most worthwhile research can be done with proper respect for participants’ safety and dignity. Two ethical standards are widely agreed upon. One is informed consent: participants should be told about the research and its risks and freely choose to take part. Another is ethical review: before research can commence, it must be approved by a panel of reviewers who have determined that the risks it poses to participants are justified.

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3  Id. pt. C.2.
The federal law popularly known as the Common Rule requires informed consent and ethical review for all research projects funded by fifteen federal agencies. It implements informed consent by specifying in detail the information that must be provided to research participants and how their consent must be documented. It implements ethical review by requiring each funded institution to have an Institutional Review Board (IRB) that ensures covered research is conducted ethically. The Common Rule is widely accepted, and adherence to it is considered a precondition of publication at many academic journals. But because the Common Rule is tied to federal funding, it does not directly regulate private-sector research.

In 2002, Maryland moved to close this gap and protect participants in private research. House Bill 917, as the law is known, protects Maryland residents by making the Common Rule applicable to all research conducted in Maryland, regardless of funding source. The rule is clear: it is illegal to conduct research on human participants unless the researcher complies with the Common Rule—including the duty to obtain informed consent and IRB approval. This solution is consistent with the federal Common Rule, which expressly invites the states to provide additional safeguards for research participants; other states including California and New York have similar laws. House Bill 917 was overwhelmingly popular: it passed the House by a vote of 135–1 and the Senate by a vote of 47–1 and was signed into law by Governor Glendening.

The Unethical Research

For a week in January 2012, Facebook employee Adam Kramer and two researchers from Cornell ran an experiment to test whether Facebook could control its users’

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4 See, e.g., 45 C.F.R. pt. 46. Its full name is the Federal Policy for the Protection of Human Research Subjects. The FDA has a parallel system, different in a few details, that applies to research conducted as part of clinical trials. See generally 21 C.F.R. pts. 50 (informed consent), 56 (IRBs).

5 See id. § 46.116.

6 See id. § 46.117.

7 See id. §§ 46.103, 117–114.


9 See David Nitkin, Senate OKs Bill to Tighten Rules on Human Research, BALTIMORE SUN, Apr. 6, 2002, at 1B.


12 See 45 C.F.R. § 46.101(f) (“This policy does not affect any state or local laws or regulations which may otherwise be applicable and which provide additional protections for human subjects.”).

13 CAL. HEALTH & SAFETY CODE §§ 24170–24179.5 (requiring detailed informed consent as part of an “Experimental Subject’s Bill of Rights”).

14 N.Y. PUB. HEALTH LAW §§ 2440–46 (requiring informed consent and oversight by a “human research review committee”).
moods. In the study, which involved over 689,000 users, Facebook showed users fewer of their friends’ posts containing emotional language, and then analyzed the users’ own posts to see whether their emotional language changed. The answer was “yes”; users who saw fewer positive posts used fewer positive words and more negative words of their own, and vice versa when negative posts were hidden. An article based on the study was published in the *Proceedings of the National Academy of Sciences* in June 2014, and was the subject of immediate and widespread criticism:

Facebook just doesn’t get it. … Facebook’s behavior in this case is all of a piece with the shockingly casual way that high-tech consumer companies have been appropriating users’ personal data.

It is unimaginable that a pharmaceutical firm would be allowed to randomly, secretly sneak an experimental drug, no matter how mild, into the drinks of hundreds of thousands of people, just to see what happens, without ever telling those people.

A month later, OkCupid’s president, Christian Rudder, wrote a post on the company’s official blog whose title speaks for itself: “We Experiment On Human Beings!” In one particularly troubling experiment involving roughly five hundred users, OkCupid “took pairs of bad matches (actual 30% match) and told them they were exceptionally good for each other (displaying a 90% match),” and vice versa. It turned out that OkCupid was quite persuasive when it lied to it users: “When we tell people they are a good match, they act as if they are. Even when they should be wrong for each other.” Although Mr.

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16 *Id.* at 8788.
17 *Id.* at 8788–89.
18 *Id.* at 8789.
19 *Id.*
20 For a full list of commentary on the study, see James Grimmelmann, *The Facebook Emotional Manipulation Study: Sources*, The Laboratorium (June 30, 2014), http://laboratorium.net/archive/2014/06/30/the_facebook_emotional_manipulation_study_source.
26 *Id.*
Rudder appeared on national media to brag about the experiments, he and OkCupid have also been widely criticized for casually lying to users:

If you’re lying to your users in an attempt to improve your service, what’s the line between A/B testing and fraud?

Rudder doesn’t put it this way, but he’s really sneering at the whole concept of user trust.

Because, ultimately, you ought to be ashamed to treat people and the things they make this way.

Facebook and OkCupid’s Violations of Maryland Law

Facebook and OkCupid are in blatant violation of Maryland law. They conducted research on human participants in Maryland without informed consent or IRB approval.

“Research” under House Bill 917 is “a systematic investigation . . . designed to develop or contribute to generalizable knowledge.” There is no dispute that Facebook’s mood-manipulation experiment and OkCupid’s bad-matchmaker experiment were research. Facebook systematically examined “verbal expressions on Facebook” to develop “experimental evidence to support the controversial claims that emotions can spread throughout a network,” and the results were published in a scientific journal. Indeed, in a letter to us, a Facebook attorney repeatedly described the study as “research.” Similarly, OkCupid’s experiment was designed to test a general hypothesis about human behavior: whether “the mere suggestion” of compatibility can “cause people to actually like each other.” OkCupid, too, admits that it conducted research: Mr.

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28 For a full list of commentary, see Grimmelmann, supra note 20.
32 See MD. CODE ANN., HEALTH-GEN. § 13-2001(e) (borrowing federal definition); 45 C.F.R. § 46.102(d) (federal definition).
33 Kramer, supra note 15, at. 8789.
34 Id.
35 See Letter from Edward Palmieri, Associate General Counsel, Privacy, Facebook, to James Grimmelmann and Leslie Meltzer Henry, Aug. 25, 2014 (attached).
36 Rudder, supra note 23.
Rudder’s blog at OkCupid, where the results were published, is subtitled “Dating Research from OkCupid.”

A “human subject” under House Bill 917 is “a living individual about whom an investigator . . . conducting research obtains . . . [d]ata through intervention or interaction with the individual.” Facebook and OkCupid users are “living individual[s],” Adam Kramer at Facebook and Christian Rudder at OkCupid are “investigators,” and they obtained “data” about Facebook users’ posts and OkCupid users’ private messages. And that data was acquired through “interventions,” which are defined as “manipulations of the subject or the subject's environment that are performed for research purposes.” Facebook concealed emotional posts from users’ news feeds; OkCupid lied to users about their compatibility. These were “manipulations . . . of the subject’s environment,” and in each case, the motivation was research.

**Informed Consent**

Under House Bill 917, research on human participants requires informed consent, which includes, at a minimum, providing a description of the research to participants, disclosing “any reasonably foreseeable risks or discomforts,” providing a point of contact for questions, and giving participants the ability to opt out of the research. Facebook and OkCupid did almost none of this. No one told users they were part of a research study—and Facebook has not told them to this day. No one gave them a point of contact for questions or offered them the ability to opt out. And importantly, no one told the research participants about the obvious risks of the studies. The Facebook mood-manipulation experiment tested the hypothesis that many users would “express increased negativity.” The OkCupid bad-matchmaker experiment was designed to make users act in ways they otherwise would not have. OkCupid pressed them to exchange messages and go on dates with other users with whom OkCupid thought they were incompatible.

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37 Id.
38 See MD. CODE ANN., HEALTH-GEN. Id. § 13-2001(c) (borrowing federal definition); 45 C.F.R. § 46.102(f) (federal definition).
39 45 C.F.R. § 46.102(f).
40 See MD. CODE ANN., HEALTH-GEN. Id. § 13-2002(a) (incorporating federal standard).
41 45 C.F.R. § 46.116(a)(1).
42 Id. § 46.116(a)(2).
43 Id. § 46.116(a)(7).
44 Id. § 46.116(a)(8).
45 After the experiment was over, OkCupid gave the affected users the deeply misleading statement that “Because of a diagnostic test, your match percentage with [nameB] was misstated as [%]. It is actually [%].” See Kashmir Hill, How OkCupid Informed Users They'd Been Part Of An Experiment, FORBES (July 29, 2014), http://www.forbes.com/sites/kashmirhill/2014/07/29/how-okcupid-informed-users-theyd-been-part-of-an-experiment/. This language makes the false match percentage sound like an inadvertent technical error, rather than a deliberate experiment.
46 Kramer, supra note 1, at 8789.
Both Facebook and OkCupid have made half-hearted attempts to suggest that their terms of service constituted informed consent.\(^{47}\) Hardly. Informed consent under the Common Rule and House Bill 917 requires specific disclosures about the study, risks, and opting out, not a boilerplate website click-through. No one could be legally enrolled in a cancer-drug trial just by signing on to a hospital website. At the time of Facebook’s experiments in January 2012, its privacy policy did not even use the word “research.”\(^{48}\) And today, Facebook’s policy says only that Facebook will use user information “for internal operations, including troubleshooting, data analysis, testing, research and service improvement.”\(^{49}\) OkCupid’s policy says it use information to “perform research and analysis about your use of, or interest in, our products, services, or content, or products, services or content offered by others.”\(^{50}\) These statements are merely data use policies; neither says anything about deliberately tampering with users’ experiences to experiment on them. Christian Rudder himself acknowledges that OkCupid’s terms of service offer only a “charade of consent.”\(^{51}\)

**IRB Approval**

The other major Common Rule requirement adopted by House Bill 917 is that research projects be reviewed and approved by an IRB.\(^ {52}\) Every IRB must meet detailed requirements on its composition, powers, duties, procedures, and record-keeping.\(^ {53}\) Neither Facebook nor OkCupid has an IRB meeting these stringent requirements, let alone one that approved these experiments.

Another provision of House Bill 917 requires that every IRB make its minutes available for public inspection.\(^ {54}\) We sent certified letters to Facebook and OkCupid, reminding them of their obligations under Maryland law and making a formal demand to

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\(^{47}\) See _id. (Facebook); Casey Sullivan, _OkCupid Experiment May Violate FTC Rules on Deceptive Practices_, _Reuters_ (July 30, 2014), http://www.reuters.com/article/2014/07/30/internet-okcupid-idUSL2N0Q420R20140730 (OkCupid).


\(^{50}\) _Privacy Policy_, _OKCUPID_, https://m.ok cupid.com/legal/privacy.

\(^{51}\) See Cornish, _supra_ note 27.

\(^{52}\) _Id_. § 46.109(a).

\(^{53}\) See _id_. §§ 46.107 (requiring IRB to comprise at least five members of specified backgrounds, competencies, and affiliations), .108 (requiring written procedures and operation by quorum at convened meetings), .109 (detailed substance of IRB duties and authority), .110 (allowing expedited review of certain types of cases), .111 (listing requirements that IRB “shall determine … are satisfied” by any approved project), .112 (limiting scope of institutional review of IRB decisions), .113 (requiring IRB to have authority to terminate non-compliant research), .114 (describing IRB responsibilities in cases involving multiple institutions), .115 (describing required IRB record-keeping).

\(^{54}\) _MD. CODE ANN., HEALTH-GEN_. _Id_. § 13-2002(a)
inspect their IRB minutes. Facebook refused, while OkCupid failed to reply at all.
Because House Bill 917 says, unconditionally and explicitly, that every IRB “shall” make its minutes available, Facebook and OkCupid’s responses amount to admissions that they lack IRBs entirely.

Research oversight at Facebook and OkCupid is atrocious by any standard. A former member of Facebook’s Data Science group stated that “there was no internal review board overseeing the studies” at Facebook at the time of the mood-manipulation experiment and that “members of the data science team could run almost any test they wanted, so long as it didn’t annoy users.” At OkCupid, Christian Rudder acted as his own review panel: he was both “approver of company research and its chief interpreter.” Rudder himself admitted to a reporter that he acted under a “conflict of interest.”

Moreover, these particular experiments are just the tip of the iceberg. Facebook routinely engages in similar experiments—indeed, so many that it created its own programming language for running randomized experiments on Facebook users. Facebook has done research to see which of its users are lonely, whether ads work better when accompanied by algorithmically generated “endorsements” from Facebook friends, and what causes users to start typing a post and then delete it. At one point,

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55 See Letter from James Grimmelmann and Leslie Meltzer Henry to Colin Stretch, General Counsel, Facebook, July 24, 2014 (attached); Letter from James Grimmelmann and Leslie Meltzer Henry to Gregg Winiarski, General Counsel, IAC (attached).
56 See Letter from Edward Palmieri, supra note 35.
58 See Natasha Singer, OkCupid’s Unblushing Analyst of Attraction, N.Y. TIMES, Sept. 6, 2014.
59 Id.
Facebook was running so many experiments that “some data scientists worried that the
same users, who were anonymous, might be used in more than one experiment, tainting
the results.” At OkCupid, Mr. Rudder has called the information on the company’s
servers “an irresistible sociological opportunity,” and he publishes a popular blog,
OkTrends, devoted entirely to his research findings from the site. The blog’s data-
driven popularity was instrumental in OkCupid’s success. Rudder recently collected his
findings into a heavily promoted book whose description proudly proclaims, “As we live
more of our lives online, researchers can finally observe us directly, in vast numbers, and
without filters.”

An Attitude of Lawlessness

Facebook and OkCupid, along with some observers, have argued that product testing
is so important that it should be excused from legal and ethical safeguards. We
wholeheartedly agree that Internet companies should be able to test new features and
improve their products. So does House Bill 917. It does not ban Facebook and OkCupid
from doing research on human participants. Quite the opposite, it allows them to conduct
research within an appropriate ethical framework of informed consent and IRB approval.
These are not impossibly onerous requirements; institutions like Johns Hopkins already
comply with them as a matter of course. Moreover, the Common Rule already has
carefully considered exemptions from what is considered covered “research” at all, rules for altering or waiving informed consent when necessary, and procedures for expedited IRB review, all in appropriate circumstances. Rather than read the law and do
what it says, Facebook and OkCupid would prefer to ignore it entirely. We ask only that
Facebook and OkCupid be held to the same standards everyone else is, just as Maryland

Their statements show that Facebook and OkCupid consider themselves above the
law. Although Facebook readily acknowledges doing “research” on its users, its letter to
us inexplicably concludes that “The federal Common Rule and the Maryland law you cite
were not designed to address research conducted under these circumstances.” It offers
no explanation or reasoning, just the bald assertion that Facebook is special. In interviews

65 Albergotti and Dwoskin, supra note 57.
66 Singer, supra note 58.
68 Chadwick Matlin, Matchmaker, Matchmaker, Make Me A Spreadsheet, FIVE THIRTY EIGHT (Sept. 9,
69 CHRISTIAN RUDDER, DATACLYSM: WHO WE ARE (WHEN WE THINK NO ONE’S LOOKING) (2014).
70 See, e.g., 45 C.F.R 46.101(b); Office for Human Research Protections, Quality Improvement Activities
71 See 45 C.F.R. § 46.116(d).
72 See id. § 46.110
73 Letter from Edward Palmieri, supra note 35.
Christian Rudder has been forced to engage with the ethical issues that OkCupid’s research raises. But his response is the same as Facebook’s: informed consent is irrelevant to what I do. When one interviewer asked whether he had ever considered discussing his experiments with an ethicist, Rudder answered, “To wring his hands all day for a hundred thousand dollars a year?” Attitudes like these, with the contempt they show for users, ethics, and the law, are why we believe your intervention is urgently needed.

What You Can Do

Maryland’s House Bill 917 contemplates a leading role for the state’s Attorney General. It authorizes your office to obtain injunctions “to prevent the conduct of human subject research in violation” of Maryland law. That is precisely what Facebook and OkCupid are doing by running experiments on users without informed consent or IRB review. Statistically, it is overwhelmingly likely that their unwitting experimental pools included Maryland residents. We invite you to seek an injunction requiring Facebook and OkCupid to refrain from human subject research on Maryland residents until they obtain full Common Rule informed consent from users and approval of each research protocol from a Common Rule-compliant IRB.

We thank you for your interest.

Sincerely,

James Grimmelmann
Professor of Law
Francis King Carey School of Law
University of Maryland*

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74 See, e.g., Cornish, supra note 27.
76 MD. CODE ANN., HEALTH-GEN.§ 13-2004(a).
77 Indeed, Facebook’s research almost certainly included children in Maryland: Facebook has confirmed that it made no effort to exclude minors from the study. See Albergotti and Dwoskin, supra note 57.
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Encl:

Letter to the Federal Trade Commission
Letter to Office for Human Research Protections
Letter to Proceedings of the National Academy of Sciences of the U.S.A.
Letter to Colin Stretch, General Counsel, Facebook
Letter from Edward Palmieri, Associate General Counsel, Privacy, Facebook
Letter to Gregg Winiarski, General Counsel, IAC