simply not considered or were highly subordinated to APA's strategic goals." According to Hoffman, APA sought to maintain its privileged relationship with the Pentagon, a massive employer of psychologists.

Hoffman's analysis of internal APA emails found that the members of the PENS task force were carefully chosen in a collaboration involving officials at APA, the Pentagon, and the Central Intelligence Agency, and its conclusions were vetted in advance by insiders at both agencies. The goal of PENS, Hoffman offers, was not to examine the ethics of torture but to "curry favor" with the U.S. Defense Department.

Hoffman's characterization of PENS is unfair, according to Koocher, who was one of the architects of the task force. "We solicited widely and openly for membership," he says. The fact that so many task force members came from the military is not evidence of collusion but good judgment. "If you're focusing on interrogation in a military context then those are the people with the relevant expertise." As for the allegation of currying favor with the Pentagon, Koocher is adamant that it was not his goal. "No way were we covering up for [Vice President] Cheney or [Defense Secretary] Rumsfeld, both of whom I cannot stand."

Koocher says that he was unaware that the torture was ongoing. He points out that he, along with other representatives of U.S. medical associations, visited the detention center at Guantanamo in 2006. "I asked hard questions," he says. When it was later revealed that torture continued at the facility, "I was extremely upset." But by then, he says, "I was no longer an APA official. What was I supposed to do?"

That sentiment may not save Koocher from sanctions. He is on a list of APA members to be banned from APA governance "effective immediately"-just one of several recommendations from Steven Reisner of New York University and Stephen Soldz of the Boston Graduate School of Psychoanalysis, who also urged that APA's top executive, legal, and public relations staff be fired. Reisner and Soldz, persistent critics of APA's role in the interrogation program, were invited by APA to review the Hoffman report in advance and give the society their feedback. APA wouldn't comment specifically on the pair's recommendations; several people on their "staff to be fired" list remain with APA. "A lot of change can happen, but it will take a lot of time to implement it," Kaslow says.

APA's 180° turn is only a start, Soldz says. "The APA and the entire psychology profession needs to grapple with the enormous scandal enveloping psychological ethics."

## **CLINICAL TRIALS**

## Researchers seek clear reasons when clinical trials end early

Explanations for abandoning tests of new treatments earlier than planned are often hazy

"It just seemed like a

Frederick Roth, University of Toronto

complete mess."

## By Jennifer Couzin-Frankel

ike a marathon with far more runners limbering up at the start than stumbling across the finish, the race to bring a new treatment to market has dropouts along the way. About 12% of clinical trials are reported to shut down prematurely. Knowing why could help minimize the number of terminated trials going forward.

But a paper published earlier this month by a group of computational biologists suggests that this knowledge isn't easy to come by. The main reason: Companies can type whatever they want into the tiny space—a mere 160 characters—allotted on ClinicalTrials.gov, a registry main-

tained by the National Library of Medicine. In their analysis of all 3122 terminated trials on the registry at the time their study began, "it just seemed like a complete mess," says

Frederick Roth, a systems biologist and geneticist at the University of Toronto in Canada. Reasons were often murky, ranging from "it was decided to not proceed with the study at this time" to "SARS epidemic in Asia and Canada."

While at Harvard University, Roth and two undergraduates came to their project quite by accident. They were interested in adverse interactions between drugs or between drugs and genes. They decided to do what he calls an "amateur pass" through ClinicalTrials.gov.

Their search didn't yield much. The reasons for termination were so diverse and often so vague that Roth and his students decided to launch a new project: learn more about why clinical trials end early by dividing the information given in the short blurbs into "buckets," such as funding, ethical reasons, or business decisions, so they could see the breakdown by category. They found that by far the most popular reason was insufficient enrollment, accounting for about one-third of terminated trials. About 11% failed to establish efficacy. In all, Roth and his students identified 35 categories, among them "lost interest," "inadequate design," and "key staff left." (In one case, an orthopedic surgeon performing a trial's knee surgeries moved elsewhere.) "It's a potpourri of reasons why you terminate," agrees Deborah Zarin, the director of ClinicalTrials.gov.

In the new paper, published online at bioRxiv.org, Roth and first author Theodore Pak, now an M.D./Ph.D. student at the Icahn School of Medicine at Mount Sinai in New York City, recommend that ClinicalTrials.gov aim for greater transparency by asking sponsors to answer several questions when their trials end early. Those include whether it even started, whether data were ever examined, and whether in-

terim examinations of efficacy or safety played a role.

Zarin welcomes Roth's dive into the myriad explanations, but she is cautious about the questions the authors recom-

mend for trial sponsors. Safety and efficacy can't always be easily separated from each other, she says. Zarin is especially interested in distinguishing between trials that end because of the science versus some other reason: In May, she and her colleagues reported in *PLOS ONE* that 68% of 905 terminated trials with results listed on ClinicalTrials.gov stopped for reasons other than data accumulated in the study. Only one-fifth ended early because of safety or efficacy concerns from trial data, and the rest didn't give a reason.

Another unsettling issue is that many terminated studies aren't listed as such in ClinicalTrials.gov and other databases because the entries are not up to date, according to ongoing research by clinical epidemiologist Matthias Briel at the University Hospital of Basel in Switzerland. That, combined with sometimes squishy reasons offered for trial termination, suggests to him that one implication of Roth's paper is that "people might then take information from these registries and introduce inaccuracies at least, or even bias into their own studies, without realizing it."



## Researchers seek clear reasons when clinical trials end early

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Science **349** (6245), 222. DOI: 10.1126/science.349.6245.222

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