



THE SENATOR'S SLEUTH

Paul Thacker, a reporter-turned-Congressional-investigator, has disrupted the careers of several top researchers with lucrative industry ties. **Meredith Wadman** tracks his effect on US science.

In February 1991, a US Army specialist, one month past his 21st birthday, was busy driving huge supply trucks bearing tank ammunition through the Saudi Arabian desert as part of the US First Infantry Division in the Gulf War. At night, he would watch the vast desert sky, lit by the bombs of US warplanes pounding Saddam Hussein's Iraqi troops.

"You felt sorry for them," he recalls, "but better them than us."

At the same time, half a world away, a 41-year-old MD-PhD at Duke University in Durham, North Carolina, was preparing to move to Emory University in Atlanta, Georgia. There he would take over an academically obscure psychiatry department and turn it into a Mecca of psychiatric research — in the process making himself a magnet for megabucks from the pharmaceutical industry.

Both men were bright, driven, ambitious and not easily deterred from their goals. But in an unlikely collision, 17 years later, one would

dramatically change the life of the other.

The army specialist was Paul Thacker — now an investigator working for Senator Charles Grassley (Republican, Iowa). Thacker is the point person behind a far-reaching probe into the financial reports required from biomedical researchers who receive federal funds. The rising academic star was Charles Nemeroff, the chair of psychiatry at Emory until he was forced out of that position last December as a result of Grassley's investigation. Thacker had requisitioned documents from the pharmaceutical industry showing that Nemeroff had violated National Institutes of Health (NIH) rules by failing to declare to the university at least \$1.2 million in income from drugmakers.

Nemeroff is not the only academic target that Thacker has hounded in the past 18 months. He has identified seven other physician-researchers who broke NIH rules by not disclosing large payments from drug and device companies. In several cases, the researchers were involved in

human trials of the products made by some of the very companies with which they had financial relationships. The revelations and the ensuing negative publicity have had profound effects on US universities and biomedical scientists. So far, several dozen leading research institutions in the United States have tightened their financial oversight or are in the process of doing so. And the NIH is planning to strengthen the conflict-reporting requirements for universities and researchers who receive its funds. The outcry has also created support for a federal law proposed by Grassley, the Physician Payments Sunshine Act, which would require drug and device companies to register on a public website virtually all payments made to physicians.

By the unwritten rules of most congressional offices, employees such as Thacker work behind the scenes and rarely get mentioned by the press. But the path that Thacker took to becoming the ethics cop of US biomedicine shows how one Senate employee can affect an

M. TEMCHINE

entire field of research. Thacker has become worrisome enough to university officials that this March, administrators at Tufts University in Medford, Massachusetts, where Thacker was making preliminary inquiries about a researcher, refused to participate in a public ethics discussion unless Thacker was taken off the list of planned speakers.

The Grassley investigation "has changed the practice of medicine", says Steven Nissen, a cardiologist at the Cleveland Clinic in Ohio, which last December began requiring its physicians to publicly disclose industry payments of more than \$5,000 a year. "And Paul Thacker is the bulldog that's leading the charge."

That canine breed comes up frequently in descriptions of Thacker, a former investigative reporter. His tenaciousness, however, hasn't always been well received. Three years ago, Thacker was fired from *Environmental Science & Technology*, a publication of the American Chemical Society (ACS), based in Washington DC, which represents academic and industrial chemists. He had written a series of exposés that a senior ACS official claimed showed an anti-industry bias.

Many, both inside and outside the biomedical research community, have praised the Grassley team's investigation for helping to clean up the field. But others contend that Thacker's zeal, given the power of Senate backing, has crossed the line from vigilant to harmful; that, however egregious his findings about researchers such as Nemeroff may seem, he is using a damningly broad brush that tars an entire community, the great majority of whom are playing by the rules. What's more, institutions and the federal government, in the interest of fuelling drug discovery, encourage researchers to foster industry collaborations, an art that Nemeroff had perfected.

A case such as Nemeroff's "has been portrayed as this black and white thing and it's not. It's nuanced and it's subtle and it's difficult. And there are a lot of aspects to this whole issue where there are no right answers," says Joseph Cubells, a neurogeneticist at Emory and a colleague of Nemeroff.

From Iraq to Congress

Thacker is a compact man with short-cropped blond hair, intense blue eyes and an open, direct manner. He makes \$63,000 a year working in a small, windowless room deep in Grassley's warren of offices in the Hart Senate Office Building on Capitol Hill. He is assisted piecemeal by other employees, including interns, bringing to roughly two the number of full-time people that Grassley has devoted to the

NIH investigation.

Thacker grew up in California and Texas, the eldest child of a construction supervisor and a childcare worker. He joined the army after high school and served in Saudi Arabia and Iraq during the Gulf War. After obtaining a biology degree at the University of California, Davis, in 1997, he moved to Atlanta and went to work at Emory as a biomedical lab technician. He was thinking of going into science but dreaded the prospect of more classwork. Soon, he was writing pieces on faculty doings for *The Emory Report*. In 2000, he left for a journalism internship at *Audubon Magazine* and later joined the staff of *Environmental Science & Technology*, in an upscale office building two blocks from the White House.

Thacker became known there for both his charm and intensity. He was often seen pacing circuits of the office's square hallway, deep in thought, his hands jammed in his pockets. Alan Newman, Thacker's former editor, recalls Thacker's delight when he was closing in on a story. "He had this laugh — this sort of 'ah-hah' laugh [that said]: 'I got it. I'm seeing the pieces fall together.'"

In May 2006, Thacker published the article that would begin his undoing at the ACS. Called 'The Weinberg Proposal', it focused on a consulting firm based in Washington DC called the Weinberg Group, which offers corporate clients advice on how to 'shape the debate' about potentially toxic compounds. Acting on a tip, Thacker had dug up an unsolicited written sales pitch in which the Weinberg Group proposed using scientists and publications to help the materials firm DuPont dispel concerns about a chemical — perfluorooctanoic acid — that Dupont was being sued over in a West Virginia class-action lawsuit alleging health effects. Dupont did not hire Weinberg for the proposed work but did engage the company in another capacity. Dupont says it settled the claims in 2005 for \$107 million.

Thacker's article would later prompt a congressional investigation by John Dingell (Democrat, Michigan) about Weinberg's involvement defending another controversial chemical. But it also hit a nerve with the ACS president, who communicated his unhappiness to Rudy Baum, the society's top news editor. In a meeting with Baum, Thacker was told that he was too immature for investigative reporting. Baum later

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Thacker's probe has provided fodder for reporters.

described the Weinberg piece in the Society of Environmental Journalists' newsletter as a "hatchet job". He said he was "uniformly unimpressed with Paul's journalistic skills".

Others disagreed. The article generated media attention for the Weinberg group and it was part of a package that was honoured by the Society of Environmental Journalists. Baum told *Nature* that Thacker's article was factually correct.

Fired for insubordination

After the Weinberg piece ran, Thacker went on to pursue another investigative story — this time about White House interference in climate science, but he was not allowed to publish the piece. So he found a new job and gave his notice, then published the climate story on Salon.com. Two days before he was scheduled to leave the ACS, he was fired for insubordination.

Despite that setback, Thacker left with a set of new skills that soon helped him make the switch from journalism to congressional investigator, a position that tends to draw tenacious individuals who often view the world in stark ethical terms. Some journalists say that they look at Thacker with both respect and wariness. "When he started working for Grassley, my feeling was: 'My God, I hope I'm never on the other end of his gun,'" says a science journalist who did not want to be identified for commenting on a fellow reporter.

When Thacker arrived on Grassley's staff in April 2007, the senator was already well known for his investigations, including a probe of how drug-industry payments might be influencing advisers on government drug approvals. Thacker himself had spent little time thinking about the finances of biomedical researchers. But within weeks of his hiring, he was inspired

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to pursue a new investigation on that topic. The impetus was an article in *The New York Times* describing payments from drug companies to psychiatrists in Minnesota, the only state that at the time required companies to make public their payments to physicians. *The New York Times* had found that the psychiatrists taking the most from companies were more likely to prescribe a controversial class of anti-psychotic drugs to children.

Melissa DelBello, a psychiatrist from the University of Cincinnati in Ohio, was quoted in the story, refusing to disclose how much she made from the drugmaker AstraZeneca. DelBello had published a company-funded study in 2002 that reported positive results for AstraZeneca's anti-psychotic drug Seroquel (quetiapine) in adolescents with bipolar disorder. Sales of the drug jumped 27% the year after publication. "Trust me, I don't make much," she told the newspaper. (DelBello later said she was misquoted, that she had been referring only to her fee for giving a single lecture.)

The "trust me" quote caught Thacker's eye. Still holding the newspaper, he walked into the office of Emilia DeSanto, Grassley's chief of investigations. "This reads like nonsense," Thacker told her. From working for the *Emory Report*, he added, he knew that researchers had to file financial-interest disclosure forms with their universities. Thacker drafted a letter to the general counsel of the University of Cincinnati, requesting copies of DelBello's disclosure forms. Days later, it went out with Grassley's signature.

Missing money

Three months later, Grassley made a nine-minute speech on the Senate floor launching his investigation by announcing that AstraZeneca had said it had paid DelBello more than \$180,000 in 2003 and 2004, the first two years after the Seroquel study was published. The money was for lectures, consulting fees, travel expenses and other services.

Within days, DelBello and the University of Cincinnati challenged Grassley in comments that appeared in the online publication *Inside Higher Ed*. University spokesman Richard Puff said that Grassley had falsely implied that she was disingenuous. "She has been completely open in disclosing her payments. She's made complete disclosures to the university and its [institutional review board]. Furthermore, she's made full disclosure to the Senate Finance Committee," he said.

Thacker read the article and wasn't happy. Several days later, on a "lark", he says, he attached a question to a letter going out the door to AstraZeneca from another Grassley staffer on another matter. He asked the company for records of



Senator Charles Grassley is keen to expose those who do not adhere to NIH rules.

how much it had paid DelBello in recent years.

Even as he was digging into the DelBello case, he was having trouble rationalizing Grassley's involvement in the issue. It had to be linked to the senator's work as an overseer of federal funds: he is the top Republican on the finance committee. Yet the arrangements between DelBello and AstraZeneca were in the private sector. Thacker eventually found the connection: NIH grant recipients are compelled, under federal rules in place since 1995, to disclose financial interests of more than \$10,000 in cash or 5% equity in a company to their universities. "That was the whole hook," Thacker recalls. "You tie in NIH money, that's when a senator can come forward and say: 'Hey look, you're taking taxpayer dollars.'"

After that, "it became a process", says Thacker, of identifying NIH-funded researchers who were probably earning top dollar from drug or device firms, often by following leads in the media or from whistleblowers. Thacker would solicit researchers' conflict-of-interest reports from their universities and simultaneously ask relevant companies to provide their own records of what they had paid those individuals. So far, Thacker and his colleagues have sent letters to more than 30 universities requesting the financial-disclosure forms filed by some 50 researchers. Among the first letters was one that went to Emory University on 25 October 2007, asking for the financial disclosure reports filed between January 2000 and January 2007 by Charles Nemeroff, a leader in the field of psychopharmacology.

Over the next few months, Thacker collected records methodically. He was in his element. "Good investigation to me is like doing science," he says. "You know something before

anybody else knows it."

By spring 2008, he had his ducks in a row. He was also getting ready to work the media as perhaps only a former reporter can, tipping journalists to findings published by Grassley in the obscure pages of the *Congressional Record*. That generated major stories in *The New York Times* and the *Wall Street Journal* along with *Nature* and *Science*, among other science publications. "He really knows how to work the phones and maintain contact with folks in a way I've never seen with anybody else," says Newman.

In April, Grassley took to the Senate floor to announce that AstraZeneca had paid DelBello \$238,000 between 2005 and 2007, during which she had reported receiving \$100,000 from all sources. "Obviously, the university is engaged in the practice of 'trust but did NOT verify,'" Grassley concluded. (When contacted last week by *Nature*, DelBello referred questions to the university, which said that she is closely following a conflict-management plan. The university also said it had strengthened its conflict-reporting policy for researchers.)

Relying on Thacker's harvest, Grassley was just getting warmed up. In June 2008, he reported that three psychiatrists at Harvard University had each under-reported hundreds of thousands of dollars in payments.

Storm at Stanford

The same month, he reported that Alan Schatzberg, the chair of psychiatry at Stanford University in Palo Alto, California, owned equity then worth \$6 million in the drug firm Corcept Therapeutics, in nearby Menlo Park. Schatzberg had co-founded the company to develop the drug mifepristone for treatment of psychotic depression. At the same time, he was principal investigator of an NIH-funded study, which included a component that tested the drug. Grassley's report triggered a media storm and Stanford removed Schatzberg as principal investigator, pending an investigation. The university said that although it believed that Schatzberg and Stanford had not broken any rules, "we can see how having Dr. Schatzberg as the principal investigator on this grant can create the appearance of a conflict of interest". (Schatzberg says that Stanford and the NIH had preapproved his service as the study's principal investigator and that "I did not run the [mifepristone] trial at all". Stanford reinstated him as principal investigator in late July this year after the NIH wrote to the university saying that no rules had been broken; by that time the mifepristone part of the study had concluded.)

Back in 2008, with his investigation making news, Grassley turned up the heat on then-NIH

director Elias Zerhouni to better police grant recipients. “NIH oversight of the extramural program is lax and leaves people with nothing more than questions,” said Grassley in a letter to Zerhouni that he inserted into the *Congressional Record* on 4 June.

Years of trouble

When Emory received Grassley’s letter about Nemeroff, the questions about his finances did not come as a surprise to research administrators there. Over the course of 16 years, Nemeroff had built the psychiatry department into one of the field’s leading centres. But at the same time, he had developed substantial financial ties to many companies and a history of failing to disclose them to the university.

Seen from one perspective, the connections to industry were just what universities and the federal government wanted. In fact, Nemeroff had won a \$3.95-million grant from the National Institute of Mental Health (NIMH) in 2003 that would test at least five new anti-depressants developed by the British drug giant GlaxoSmithKline, whose advisory board Nemeroff chaired. In soliciting grant proposals, the NIMH had asked researchers to involve industry as a way to accelerate the development of new drugs.

But Nemeroff had made mistakes in managing these relationships, in the eyes of Emory administrators. By late 2003, officials there had grown concerned enough about his network of industry ties that the university’s conflict-of-interest committee launched an investigation. In a 14-page report issued in May 2004, it concluded that there were “serious lapses” in Nemeroff’s reporting of his relationships with 19 companies.

Two years later, Nemeroff’s name landed in the *Wall Street Journal*. He had favourably reviewed an implantable device as a treatment for depression, without disclosing that he had financial ties to the company

that made the device (C. B. Nemeroff *Neuropsychopharmacology* 31, 1345–1355; 2006). He was also editor of the journal *Neuropsychopharmacology*, where the review was published. A representative of that journal told the *Wall Street Journal* that Nemeroff had filled out author-disclosure forms but did not report his financial ties in the manuscript, as the journal required. Stories such as this one soon caught the attention of Thacker when he was looking for investigational targets.

Privately, Emory tried to rein in its star psychiatrist. “I can’t remember when I have gotten so many complaints about the action of one or



“I plan to use my experience to help others avoid problems with conflict of interest.”
— Charles Nemeroff

more of our faculty from inside and outside the institution,” one administrator wrote in an e-mail to Nemeroff in the wake of the *Neuropsychopharmacology* article controversy.

But the university was singing another tune publicly, especially after Nemeroff landed a \$9.3-million grant from the NIMH for a trial on depression. The three-armed trial aimed to compare the effectiveness of two drugs against cognitive behavioural therapy — ‘talk therapy’ — in people with major depression. Its investigators planned to use genetic scans and brain imaging to see whether there are factors that predispose some people to respond well to different treatments — creating a rational alternative to the ‘try-this-pill-and-see-if-it-works’ approach that is common practice in psychiatry today.

As is typical of large clinical trials — this one originally aimed to enrol 400 people — it took months to gear up. Participants weren’t

easy to find because they had to agree to an arduous 14-week course of investigations and treatment and they couldn’t participate if they had ever been treated for major depression. By August 2008, two years into their funding, the researchers had enrolled just a handful of patients. Still, there was a sense that enrolment momentum was growing.

The NIH, however, had become aware that Grassley’s investigation had found large discrepancies between what Nemeroff had disclosed to Emory and what he had actually earned. Zerhouni quietly approved a suspension of the study in mid-August, forcing the university to stop enrolling patients.

In mid-September, Emory learned in a letter from Grassley about the discrepancies. Of \$2 million he had collected from drug companies between 2000 and 2007, Nemeroff had failed to report at least \$1.2 million. Any hope of keeping those disclosure lapses private disappeared in October when the story broke in the media. At the same time, reporters learned that the NIH had suspended the study.

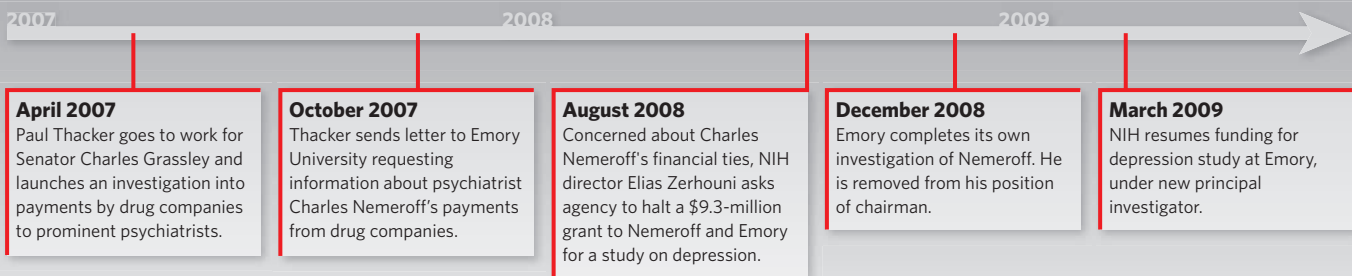
“Frankly, the integrity of the research was at stake,” Zerhouni says, explaining why the NIH had stopped supporting the study. “We said: This can’t continue [under this principal investigator].”

Grassley had wanted this outcome all along. “All NIH should have to do is pull back one grant or refuse to give a grant to a university that’s not [policing conflicts properly] and they all get in line,” Grassley told *Nature Medicine* last September (M. Wadman *Nature Med.* 14, 1006–1007; 2007).

Nemeroff’s study is the only one to have been suspended because of Grassley’s investigations. And ironically, although his financial connections with industry were the source of the problem, the Emory trial is not one that would necessarily be beloved by drugmakers. By including a cognitive-behavioural therapy group, in which patients take no drugs at all,

EMORY UNIV.

HOW DISCLOSURE ISSUES PLAGUED A RESEARCH PROJECT





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— Paul Thacker

it opens the distinct possibility of identifying patient subgroups for whom psychotherapy should be the first-line, or even the only, treatment. The trial's structure, says Cubells, "is a really important example of [Nemeroff's] intellectual honesty. There is a huge prejudice against non-medication treatment approaches in all of psychiatry, due in no small part to the fact that when well-executed psychosocial interventions are provided, no corporate interests profit. Charlie has bucked this trend actively."

What annoys Cubells, he says, is "the unproven insinuation of the Grassley witch hunt that [Nemeroff] is some kind of advocate for pharmaceutical companies because of his ties with the industry".

But others say that the investigation is on the mark and that anger at Grassley is misdirected. "People flouted the rules, didn't disclose, and did it for years on end, repeatedly," says Zerhouni. "That tells you the problem is not Grassley. The problem is our current system of managing conflicts," he says.

Prompted by Thacker's findings, Emory conducted its own investigation into Nemeroff. In December 2008, it announced that Nemeroff had received — and not declared — \$800,000 in payments from GlaxoSmithKline for giving more than 250 talks to psychiatrists between January 2000 and January 2006. Nemeroff told the university that, because the talks dealt with general educational topics, such as the treatment of depression, he didn't consider them promotional and thought they were off-the-books under Emory's rules for declaring outside income. The evidence that Emory examined supported Nemeroff's description of his talks, but the university concluded that he should have declared the income. He was removed from the position of chairman and the university forbade

him to apply for, or be involved with, any NIH grants for at least two years or to receive any outside compensation without prior review and approval by the dean's office. It also issued a statement that the investigation "found no evidence that Dr. Nemeroff's outside speaking activities affected clinical care for patients or persons enrolled in clinical trials, and no evidence that his activities biased scientific research in which he was engaged".

On 4 March this year, the depression study was restarted, this time with a different principal investigator.

Nemeroff, who has not talked with the press since last October when news broke about his disclosure lapses, told *Nature* last week that "I made mistakes in the area of conflict of interest for which I am sorry and remorseful. However the mistakes I made were honest mistakes." He explained that "my actions were, in my view at the time, in keeping with my understanding of the current Emory policies".

Nemeroff adds that he continues to see patients and teach and "I also plan to use my recent experience to help others avoid problems with conflict of interest from the lessons I have so painfully learned."

Open payments

He and others will have to keep up with a changing world. In the coming months, any health reform that becomes law may well include the Physician Payments Sunshine Act, which is part of legislation that is being developed in both the House and the Senate, with the House version lowering the threshold for reportable payments to \$5.

The prospect of a public website that documents every payment to physicians isn't

being received with enthusiasm by some researchers. "By dint of [Grassley] posting every relationship every physician has, it's guilt by association," says Jeffrey Garber, chief of endocrinology at Harvard Vanguard Medical Associates in Boston and an active member of the New York-based Association of Clinical Researchers and Educators, a group of physicians that sprang up in July to resist what it calls the overreach of the conflict-disclosure movement. A new sunshine law in Massachusetts, for example, requires companies to disclose online any payments to doctors of more than \$50.

Some researchers complain that the disclosures are an invasion of privacy; others argue that lowering the reporting threshold, as the NIH is expected to do, will take a toll. "The thing that I am concerned about is the regulatory burden. When it comes to practising scientists, we want them to have time to do experiments," says Paul Kincade, an immunobiologist at the Oklahoma Medical Research Foundation in Oklahoma City.

It remains unclear whether a national disclosure law would deter the industry-academic collaborations that are touted as the best way to get cures into clinics, especially in this tight funding environment. In fact, many university administrators welcome the prospect. "It becomes a tool that complements our own public disclosures," says Steven Fluharty, vice-provost for research at the University of Pennsylvania in Philadelphia. On 1 July, the university's School of Medicine began posting on a public website all relationships between faculty members and any industry from which they receive any amount of money. Grassley's revelations, adds Fluharty, "have been an eye-opening experience for us all".

Thacker, in the meantime, has set his sights on some new targets: military doctors who fail to report financial disclosures as they are required to do; and spinal surgeons with lucrative ties to medical device-makers such as Medtronic in Minneapolis, Minnesota.

In an interview with *Nature* in June, Grassley said that he is pleased with his lead biomedical investigator and what he has been able to achieve in two short years. "Paul's good," said the senator, sitting across from Thacker. "If you're going to be successful in these investigations, you gotta have people like Paul."

Thacker, for his part, says he likes his job because "you can have an impact. I wanted to do something that, when it hits, it reverberates for a while." ■

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