

## UNIVERSITY MOUNTS LEGAL ATTACK ON FORMER FACULTY INVENTOR

Faculty researchers across the country face a myriad of challenges as they search for new life enhancing breakthroughs everyday in their laboratories. But the most successful of them often face an even greater challenge in the courtroom, defending themselves from their own universities.

Take for example, Dr. David Townsend who had been collaborating for years with Dr. Ronald Nutt on a new technology that combined the PET (positron emitting tomography) and CT (computerized axial tomography) scanners into one device, which would become a superior tool in the fight against cancer. In 2000, Time Magazine selected the combined PET/CT scanner as its Medical Invention of the Year.

Nine years earlier, in 1991, the two inventors had what became known as their "epiphany in the Alps" in Geneva, Switzerland when they first conceived the device. While Townsend was on faculty at the University of Geneva, he and electrical engineer Ronald Nutt initially began exploring the idea of mating PET and CT with the goal of vastly improving imagery technology for doctors, particularly those looking for tumors in cancer patients.

Shortly after their epiphany, the University of Pittsburgh hired Dr. Townsend away from the University of Geneva to run the physics and instrumentation program of their PET facility. But after a decade of loyal service, the university turned on him, dragging Dr. Townsend and Dr. Nutt into court on a host of charges including fraud, conspiracy, breach of contract, conversion and unjust enrichment.

Townsend reflected on the four-year legal odyssey he endured between 2003 and 2007, saying, "A bunch of university lawyers sat together and said we have a case here, he screwed the university and let's put together a suit that accuses him of everything short of murder."

So what were the events that led to this dramatic parting of ways and this ensuing legal battle? Had the inventors actually deceived the University of Pittsburgh (Pitt), or was it simply a belated chase after millions in royalty revenue to cover up sloppy work by Pitt's Office of Technology Management (OTM)? No matter what the reason was, the inventors found themselves mired in prolonged litigation that unfairly tarnished their reputations and weighed heavily on their professional lives. As Scott G. Hamilton, a patent attorney at Columbia University told author Daniel Greenberg for his book Science for Sale, "All big winners end up in litigation."

Long before relocating to Pitt, Townsend had signed a consulting agreement with Nutt's Knoxville based company, CTI, and they continued collaborating on the combined PET/CT device as well as other PET related projects. It was revealed in court that although Pitt knew Dr. Townsend had an existing consulting agreement with CTI, in the decade that he both worked at Pitt and collaborated with CTI on their PET projects, the university never once asked to review the agreement or request any information from him about it.





Moreover, Townsend followed university policy by listing his consultancy each year on a required annual Conflict of Interest document, yet Pitt argued later that this information was kept from them. Pitt never produced many of these university disclosure forms during the litigation even though they were in the historical record.

Perhaps Pitt underestimated the potential for the PET/CT device or was just careless in their recordkeeping. The inventors themselves had no idea of the prospective commercial value either. Despite the diagnostic possibilities of the combined PET/CT device, Dr. Townsend told IPAO in a recent interview, "Our perception was that the combined scanner wouldn't be a huge success because PET wasn't reimbursed and making it more expensive by adding CT to it wasn't going to help it be more successful."

However, once Townsend and Nutt were able to demonstrate that they could perform the combined PET/CT scan faster and better, and insurance companies began covering PET scans, the project suddenly seemed viable. Shortly thereafter, Siemens launched a joint venture with CTI, called CTI PET Systems (CPS), to build the prototype. The concept was so viable in fact, that leading manufacturers G.E. and Philips began developing versions of a combined scanner as well.

All of these developments were public in nature and Townsend kept the university informed about his consulting efforts with CTI and the newly formed CPS. As required by university policy, Dr. Townsend submitted an Invention Disclosure Document for the PET/CT scanner in 1999 and listed CTI as an interested party. Although the form requested he do so, Dr. Townsend did not assign his interest in the work to the university because it had already been assigned to CTI.

In October of 2000, CTI PET Systems (CPS) applied for a patent on the device concept, and Pitt was not only informed, but was also provided a copy of the application. Pitt never challenged their own Invention Disclosure Document, never asked for a modification of it, and never pursued the issue. In 2002, Townsend gave a similar form to the university wherein he noted again that he was the inventor of a new technology and that an "application had been filed for a patent on the PET/CT scanner" and that the "patent application was filed by CPS."

In May 2001, G.E. launched the first PET/CT scanner, called the Discovery PET/CT. Siemens followed in August of 2001 with the introduction of their Biograph system. When these manufacturers went to market with their devices, the Townsend-Nutt patent had not yet been approved. By the time Townsend and Nutt's patent application was approved in late 2003, even technology giant Philips had also entered the market with their own PET/CT device.

In court, Pitt asserted they were unaware of the status of the innovation, yet the technology transfer office had received both an invention disclosure form and copies of the patent application. Pitt IP policies indicate that the university should have initiated the patent application themselves, but the process was left entirely in the hands of CTI PET Systems.

Townsend said, "They could have come to me at any point and asked me about this. They never did that. They put everything in a filing cabinet and forgot about it, until they figured out that they had missed a chance to make money. That's when they called in the lawyers." If Pitt's OTM had exercised due diligence, it would have been an easy task to confirm the patent application process with either CTI PET Systems, their faculty scientist or the U.S. Patent Office's website.

> After news of the sales of the device broke, Pitt began demanding Townsend assign them rights in the patent. "They got angry during 2003", Townsend said. Pitt and its legal counsel met with the inventors in January 2004 to discuss the issue and the inventors left optimistic that a resolution was on the horizon. But university attorneys filed a lawsuit the day after the meeting, indicating that the legal groundwork had been long prepared.

Townsend later came to believe that the university went into the meeting with no intention of working toward a resolution. "When I read the first filing about conspiracy and fiduciary responsibilities and all the rest of it, to say I was scared would have been an understatement. I mean we were being accused of conspiring to defraud the University of Pittsburgh. It was all nonsense, but the way it was couched in legal terms, it scared me to death. They just throw everything at you and see what sticks. In the end, nothing stuck", Townsend said.

Pitt's lawsuit against the inventors was multi-fold. One argument Pitt forwarded was that Townsend's employment automatically granted the university rights in his research. Another claim by Pitt was that the university had "collaborated" with Townsend and that entitled them to a share in his work.

Townsend readily defended himself against both of these charges in a memorandum filed in the case that read, "Pitt's primary contention is that solely by virtue of being a professor at Pitt, Dr. Townsend either assigned or was obligated to assign all of his interests in any of his intellectual property rights to Pitt. Such a position is contrary to well established law."

> He went on to say, "While Pitt trumpets the 'collaboration' in its Amended Complaint, it has not explained during two years of litigation precisely... what contributions it contends were made to the development of the PET/ CT scanner at Pitt or what obligations existed between the parties."

> Pitt also alleged that the faculty handbook containing the University Policy on Patents put Townsend on notice that the "university claims ownership and control of the worldwide patent rights that result from activities of its faculty, staff and students." However, though the handbook was given to Townsend, he was never asked to sign it or agree to the policies contained within.

Further, the handbook itself contains a disclaimer that the language in the handbook was "...not to be considered or otherwise relied upon as legal terms and conditions of employment and, the language used in this Handbook is not intended to create a contract between the University of Pittsburgh and its employees." Dr. Townsend was unsure exactly what forces within the university motivated the lawsuit , saying "I don't know who was driving it from the Pitt side... Nobody outside of the legal department ever talked to me. Nobody's name ever came up, outside the legal department, that was driving it. It developed a life of its own within the legal department."

Pitt's OTM was established specifically to manage intellectual property development, including applying for patents and issuing licenses on technology developed within their walls. On its web site, Pitt's OTM says that it "employs intellectual property protection experts..." But during the period from 1993-2003, during the invention disclosure and patent application period, if the OTM was not aware of what was happening, what then was their level of involvement and what value did they contribute?

If there were any damages suffered, was Pitt's OTM responsible? By not following its own policies and procedures, not reviewing Dr. Townsend's consulting agreement and being unable to provide years of their researcher's conflict of interest forms, what diligence was exercised?

Further, while Pitt put a number of expert witnesses on the stand, none of Townsend's peers from the University of Pittsburgh who had worked side-by-side with him ever testified in the litigation. According to Townsend, not one of his fellow

researchers wanted to be involved in the lawsuit Pitt had fabricated against Townsend.

Judge C. Clifford Shirley, Jr. of the U.S. District Court in Knoxville, Tennessee rejected Pitt's arguments. Although the court's decision cited the lapse of the statute of limitations in its ruling, in fact, Judge Shirley had heard the breadth of evidence presented by the university before he ruled against them.

The court agreed that Dr. Townsend had not concealed anything from the university and had, in fact, repeatedly informed them of the status of his research and the patent process.

> Even if the university had any legitimate claims to Townsend's work, the court said, "The time to act on them had long passed".

Both the U.S. District Court in Tennessee, as well as the U.S. Sixth Circuit Court of Appeals, rejected the university's accusations and ruled in favor of defendants Townsend, Nutt and CTI PET Systems.

In the summary judgment, Judge Shirley said, "The University... had been given notice of the commercial viability of Dr. Townsend's invention, his failure to assign rights to the university, and the defendants' pursuit of a patent related to the invention. Furthermore, the University was provided documents which, had they been adequately reviewed, would have revealed that Dr. Townsend had already assigned his rights in the invention to CPS."

This type of behavior by universities may become more common, Townsend said, "as cash-strapped universities chase intellectual property dollars that rightfully belong to their faculty researchers." He continued, saying "many of these cases go unreported, as the threat of legal action alone prompts researchers to accede quietly to their employers' demands."

On why this behavior by universities is on the upswing, Townsend answered, "...because the universities are more and more desperate for funding. They look upon taking this intellectual property as a way of generating a huge amount of funds."

In the years since its release, the combined PET/CT has become the imaging method of choice for oncologists and by 2006, had completely eliminated the market for the stand-alone PET scanner. To date, both Dr. Townsend and Dr. Nutt continue their life-saving research in the field of medical imaging technology.

Alarming but true, academic inventors must educate themselves on university intellectual property policies and practices, as well as the provisions of the Bayh-Dole Act. In theory, the Technology Transfer Office of a university should operate in the mutual best interests of the university and their faculty and manage the process, from invention to licensing, knowledgeably and with integrity.

However, there is a growing trend in university technology commercialization toward litigation with faculty scientists. The profitability of an invention may tempt university administrators to take questionable actions, disregarding the long term consequences of such action on the university's integrity and reputation.

