

EVIDENCE IDENTIFICATION

Date: _____ Time: _____ Case No: _____

Tag for: ☒ DNA SEQUENCING ☐ TOXICOLOGY ☐ OTHER

☐ DRUGS ☒ QUESTIONED DOCUMENTS ☐ TRACE EVIDENCE

☐ IMPRESSIONS

Description of Evidence: _____

Location Collected: _____

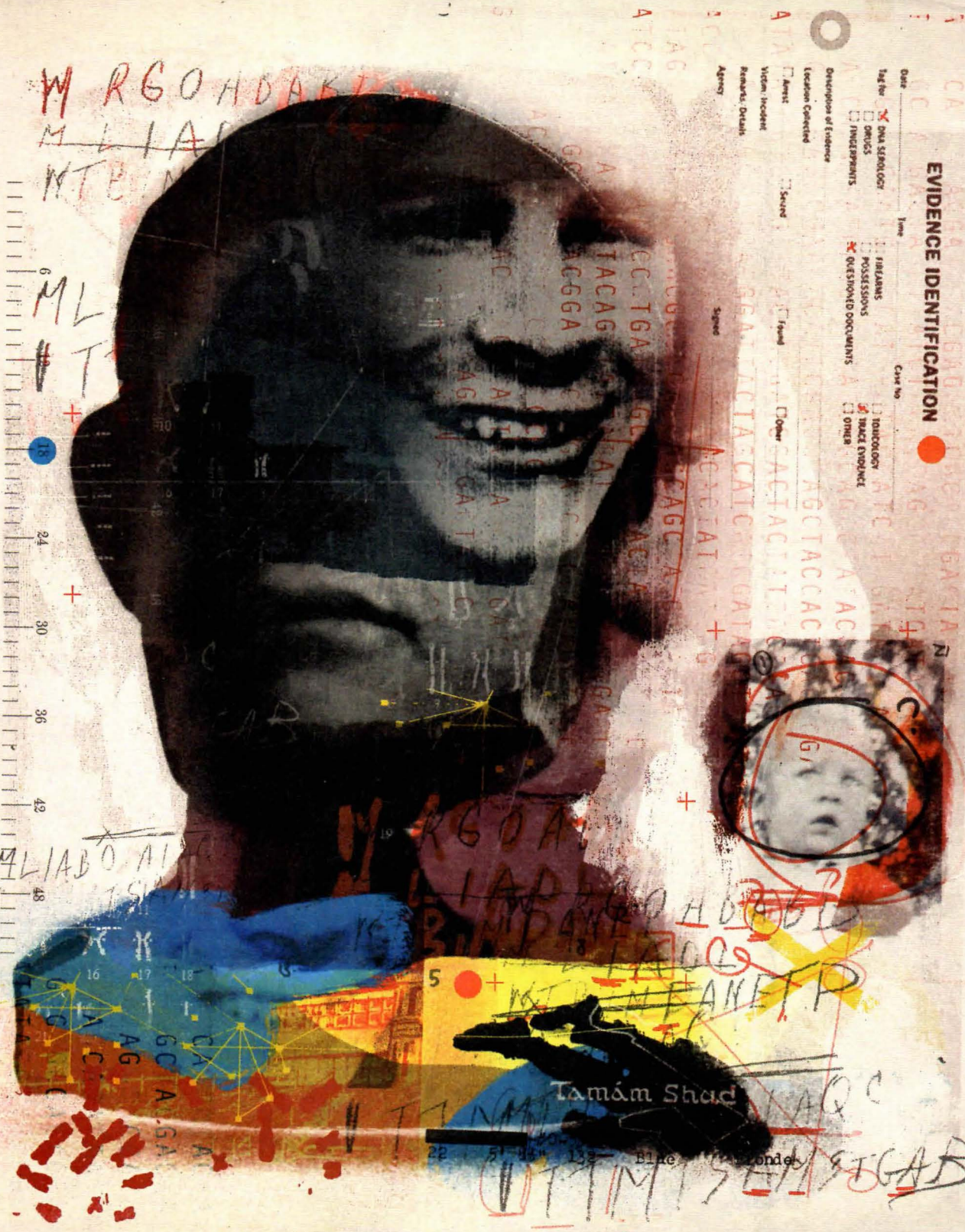
Agency: _____

Victim, Incident: _____

Remarks, Details: _____

Signed: _____

Found: _____ Other: _____



The mystery of Somerton Man

He was found dead on a beach 70 years ago. Now one woman's blood could be key to solving Australia's strangest cold case, says Alice Klein

IT WAS a mild evening in Brisbane and Rachel Egan had just got home after a long day teaching at a primary school and attending a ballet class. She greeted her cat, Billy, and listened to the answering machine. There was a message from a man called Derek who wanted to talk to her about her family history. "I thought he was a telemarketer and deleted it," she says.

At that moment in 2010, Rachel had no idea of the secrets locked up in her past. But she and her family were about to become entangled in one of Australia's oldest and most baffling cold cases. She would end up intimately connected to the man trying to solve it – and her own blood would provide him with a vital clue.

The case centred on a man who was found dead on Somerton beach in Adelaide, South Australia, on 1 December 1948. Growing up with adoptive parents in New Zealand, Rachel had never heard of the Somerton Man, or the rumours that swirled around his strange death on the other side of the Tasman sea.

Those rumours did not begin straight away. At first, everyone assumed the case was a cut-and-dried death by suicide. Why else would an athletic, elegantly suited gentleman with no outward injuries be found lifeless on the sand?

The problem was, the police could not work out how the Somerton Man had died. Extensive internal bleeding hinted at an unnatural death, but no poison was found in his body or nearby. Nor could they work out who he was. He had no ID on him, the labels on his clothing had been cut off, and no one claimed the body. The

police's best guess was that he was in his mid-40s and well-to-do, on account of his shiny bespoke shoes and neatly trimmed nails.

A few months later, the case went from baffling to distinctly weird. Closer examination had revealed a tightly rolled scrap of paper in the man's fob pocket printed with the words *Tamám Shud*, meaning "the end" in Persian. It turned out to have been torn from a copy of *The Rubáiyát of Omar Khayyám* that had been found tossed into a businessman's car parked near the beach. The book, a collection of translated Persian poetry, was popular at the time; what made this copy singular was a code inscribed on its back cover – one that even the Australian navy couldn't crack.

Jotted down near the code was the one obvious lead in the case: a phone number. It belonged to a nurse-in-training called Jo Thomson who lived close to the beach. But when police showed her a plaster cast they had made of the Somerton Man's head and shoulders, she swore she had never set eyes on him.

The newspapers couldn't make up their minds. Was he a jilted lover, an underworld criminal, or perhaps a Russian spy killed with an undetectable poison? As the years stretched on with no further clues, the theories got wilder and wilder.

In 1995, almost half a century later, a PhD student named Derek Abbott was flicking through a magazine at a launderette in Adelaide when a story about the case caught his attention. He had loved brain-teasers from a young age and was instantly

intrigued by the mysterious code.

It wasn't until 2007 that he gave it serious thought, though. By then, he was an electrical engineer at the University of Adelaide and had recently appeared as an expert witness in another infamous South Australian case, that of the gruesome Snowtown murders. The police had found strange, bulbous hairs at the scene and approached him for advice on whether the victims had been electrocuted. Abbott experimented enthusiastically with his own hairs and found that heat, but not electricity, could produce the effect.

Scrawling nonsense

He realised he might be good at this sort of thing: detective work fitted his obsession with detail and documentation. As a child growing up in the UK, his hobbies had included memorising the *British Pharmacopeia*, a 1500-page catalogue of medicines, and meticulously researching the history of lamp posts and postboxes.

Abbott made the Somerton case his pet project and enlisted the help of a group of research students to crack the code, in the hope that it might give further clues to the case. They tried 30 different second-world-war ciphers, but none worked. They searched for a link between the code and words in the poetry book – again, no luck.

Abbott's students started to wonder if the Somerton Man had simply scrawled nonsense on the back cover while drunk or psychotic. But when they bought their

friends beers and asked them to write out random letters, the frequency of letters they produced was different to that of the code, suggesting it had a meaningful structure.

Analysing how often words start with each letter of the alphabet in different languages, they concluded that the code probably stood for English words. One hunch of Abbott's was that they were names of horses. Two jockeys had found the body and local bookmakers mysteriously offered to pay for the burial. So perhaps the Somerton Man was mixed up in race-fixing?

Abbott followed several other hunches, including that the Somerton Man was a ballet dancer – he had unusually well-developed calf muscles. But the big break that would lead him to Rachel came in 2009.

He was staring at autopsy photos of the Somerton Man one day when he noticed his ears. "There was something strange about

them, but I just couldn't put my finger on it," he says. An anatomist later explained to Abbott that the man's upper ear hollow, the cymba, was larger than the lower hollow, the cavum. Only about 1 per cent of people have this configuration, which is thought to be hereditary.

Soon afterwards, Abbott noticed that the Somerton Man also had unusual teeth. His canines were positioned right next to his front teeth, instead of being separated by lateral incisors. Dentists told him this was another hereditary trait, found in less than 1 per cent of the population. If the Somerton Man had any living relatives, they might have the same features.

Hoping to trace them, Abbott dug out old telephone directories and electoral records and looked into the connection with Jo, whose number had been in the poetry book. He discovered that she had died in 2007 at the age

of 86, and that she had a son called Robin who was, curiously, a professional ballet dancer.

When Abbott found photos of Robin in old newspaper articles, he nearly fell off his chair. Robin had the same ears and teeth as the Somerton Man. His mind began to whirr: did Jo have a fling with the Somerton Man? If so, and if Robin was conceived out of wedlock, she may have pretended not to know his father when shown the plaster cast. "Back then, you could get into all sorts of social problems if you didn't cover those things up," says Abbott.

Secret liaison

The suspicions increased when Abbott later tracked down the man who made the plaster cast of the Somerton Man's face. He said that when shown it, Jo looked as though she would faint – although that was a second-hand report perhaps distorted over many years.

And anyway, it seemed to be another cold lead: it turned out that Robin had died of cancer just two months before Abbott learned of his existence. Still, Abbott managed to ferret out a phone number for Robin's ex-wife, a fellow ballet dancer called Roma Egan.

Roma was Rachel's mother. Rachel had moved to Brisbane from New Zealand to reconnect with her in 1999 after making the shock discovery in her early 20s that she was adopted. She had been especially amazed to learn that her mother was a dancer, having been obsessed with ballet from a young age. It turned out Roma had been forced to put Rachel up for adoption because of touring commitments.

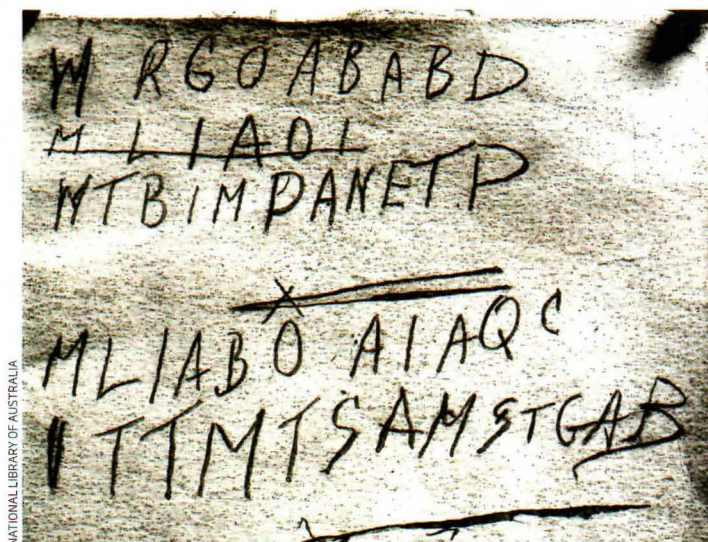
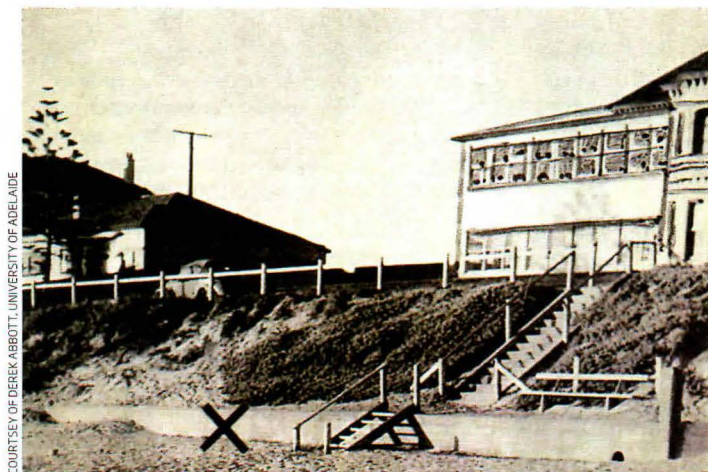
When Roma eventually picked up one of Abbott's calls, his news shook up Rachel's family tree once again. Rachel's biological grandfather – who everyone thought was Jo's husband, George – may in fact be the Somerton Man. "It came as a complete surprise," says Rachel.

As they emailed back and forth, Abbott told Rachel that he had unearthed birth and marriage certificates proving that Robin was born in 1947, three years before Jo married George, and 18 months before the Somerton Man died. Rachel had met her biological grandmother several times and could imagine her flouting social conventions, having a child with a man she was not married to or even operating in a spy ring.

Abbott flew to Brisbane to meet Rachel in May 2010, to see if they could dig up any more clues. And they fell in love.

By the end of his three-day trip, the two were engaged, and four months later they were

A man was found dead at Somerton beach in Adelaide in 1948. An indecipherable code was one of the only clues

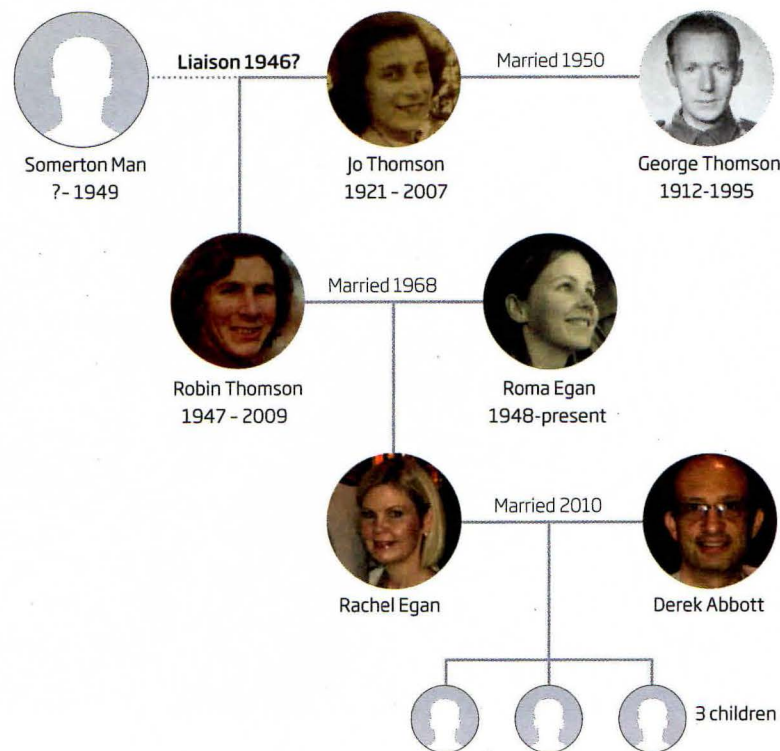


COURTESY OF DEREK ABBOTT, UNIVERSITY OF ADELAIDE

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Family affair

Identifying possible descendants of the Somerton Man could help pin down his identity



married. Rachel is still flummoxed by the turn of events. “We’re as different as Penny and Sheldon”, she laughs, a reference to characters from the TV comedy *The Big Bang Theory*. The couple now have three children who might be the Somerton Man’s great-grandchildren (see “Family affairs”, above). But Abbott dismisses any suggestion that his personal and professional interests are blurred. “I still treat it just like any other research project or difficult mathematical problem.” Rachel and their children don’t have the same ears and teeth as the Somerton Man and Robin, but that doesn’t mean they’re not related, says geneticist Sylvia Metcalfe at the University of Melbourne. No one has studied how these particular traits run in families, but many inherited traits have only a 50 per cent chance of passing from one generation to the next. Proving the bloodline between Rachel and the Somerton Man will require DNA tests. That’s the next project Abbott has thrown himself into with his usual tenacity—or “24/7 obsessiveness”, as Rachel puts it. In 2012, Abbott asked the attorney general of South Australia for permission to exhume the Somerton Man’s body from a cemetery in

Adelaide. He was denied on the grounds that it wouldn’t be in the public interest. Towards the end of last year, though, Abbott found several of the deceased man’s hairs stuck in the plaster cast of his head and shoulders, which is now at the South Australian Police Museum. Jeremy Austin, a forensic geneticist at the University of Adelaide, agreed to try to sequence the DNA and compare it with Rachel’s. Austin found both nuclear and mitochondrial DNA in the hair. The nuclear DNA links the Somerton Man with all his relatives, yet there’s only a minuscule amount left, and it has degraded into tiny fragments. The challenge will be to find markers in these fragments called single nucleotide polymorphisms that show where they go in the man’s genome, so it can be reassembled. “It’s like putting together a giant jigsaw puzzle,” says Austin.

“When Abbott saw a photo that showed Robin’s ears, he nearly fell off his chair”

The mitochondrial DNA is in better shape but it can’t be used to prove a family connection between the Somerton Man and Rachel, because it is passed exclusively down the maternal line. Austin has found only one clue: it belongs to a subtype known as H4a1a1a, which is found in less than 1 per cent of people with European ancestry. “But that’s still millions of people,” says Austin. In the coming months, Abbott is planning to submit another petition to exhume the man’s remains, which will hinge on proving that it is in the public interest to do so. He will argue that the investigation could help develop forensic tools that would be useful in similar cases. Another bonus is that it could finally end the wild speculation that has swirled around the case in South Australia for 70 years – the police still regularly field calls from people with their own theories. If the Somerton Man can be shown to be Rachel’s grandfather, that would be a major clue to his identity. If he is not, his DNA could still provide fresh leads. For example, it could be compared with the genetic data millions of people upload to genealogy websites. Sifting this data is a strategy already used by people looking for their biological families, and police have recently used the same approach to identify a serial killer who committed 50 acts of rape and 12 murders in California many years ago. If Abbott could find a match and track down the Somerton Man’s second cousin, for example, that person might know something. Or if several connections had the same unusual surname, it could be checked against passenger logbooks of ships arriving in Australia in the 1940s. It may seem a lot of effort for a long shot at identifying one man. But if the Somerton Man was a foreign spy murdered in an elaborate poisoning, that would be of historical significance. And if he was just a solo traveller who died suddenly, his identity would still be important, says Abbott. “That’s what we do as a civilised society – we identify our dead to bring peace to the living.” For Rachel, that phone call in 2010 set off the latest in a series of family upheavals. Exhuming the man’s remains might finally give her closure. Even if the Somerton Man turns out not to be her blood relative, he will always feel like family in a way, she says. “He has given me my husband and children, so now he’s bound up in all of us. We owe it to him to find the truth.” ■

Alice Klein is *New Scientist’s* Australasia reporter