Real Genius turns 35—celebrating this cult classic is a moral imperative

Enlarge / Mitch (Gabriel Jarret) and Chris (Val Kilmer) play young science whizzes trying to build a 5-kilowatt laser in the 1985 film *Real Genius*.
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Back to the Future justly dominated the summer box office in 1985, but it's too bad its massive success overshadowed another nerd-friendly gem, *Real Genius,* which debuted one month later, on August 9. Now celebrating its 35th

anniversary, the film remains one of the most charming, winsome depictions of super-smart science whizzes idealistically hoping to change the world for the better with their work. It also boasts a lot of reasonably accurate science—a rare occurrence at the time.

Real Genius came out the same year as the similarly themed films *Weird Science*—which spawned a 1990s TV sitcom—and *My Science Project*, because 1980s Hollywood tended to do things in threes. But I'd argue that *Real Genius* has better stood the test of time, despite being so quintessentially an '80s film—right down to the many montages set to electronic/synth-pop chart-toppers. The film only grossed $12.9 million domestically against its $8 million budget, compared to $23.8 million domestically for its fellow cult classic, *Weird Science.* (*My Science Project* bombed with a paltry $4.1 million.) Reviews were mostly positive, however, and over time it became a sleeper hit via VHS, and later, DVD and streaming platforms.

(Spoilers for the 35-year-old film below.)

Fifteen-year-old Mitch Taylor (Gabriel Jarret) is a science genius and social outcast at his high school. So he is over the moon when Professor Jerry Hathaway (William Atherton), a star researcher at the fictional Pacific Technical University, stops by the science fair to inform Mitch he's been admitted to the university. Even better, Hathaway has handpicked Mitch to work in his own lab on a laser project. But unbeknownst to Mitch, Hathaway is in league with a covert CIA program to develop a space-based laser weapon called "Crossbow," designed for precisely targeted political assassinations. The only remaining obstacle is the weapon's power source: they need a 5-megawatt laser and are relying on Hathaway to deliver.

The first act is a nerdier version of the classic fish-out-of-water tale, as Mitch arrives at Pacific Tech and tries to fit in. His roommate, Chris Knight (Val Kilmer), is a senior who

was once a bright young star like Mitch but has since rebelled against the high-pressure academic grind and embraced a goofy YOLO approach to life, urging his fellow students to allow themselves to blow off a little steam now and then. Mitch butts heads with Kent (Robert Prescott), a less gifted older protegé of Hathaway's who is jealous of the attention Mitch receives. He finds friends and allies not just in Chris, but also fellow science nerds "Ick" Ikagami (Mark Kamiyama) and Jordan Cochran (Michelle Meyrink), a hyperactive young woman who rarely stops talking or inventing gadgets, and by her own admission almost never sleeps.

Then there is Lazlo Hollyfeld (Jon Gries), a former star student who cracked under the pressure and is now an eccentric hermit living in the dormitory steam tunnels. Fun fact: Lazlo's steam tunnel hideout, accessible through Mitch's closet, is an elaborate homage to Leonardo da Vinci. As depicted when Mitch finally figures out how to gain access, it features a multidirectional elevator built out of a small car controlled by a rotating screw. The car descends to a horizontal track and is propelled forward by a hidden drive chain. The automated scribbler Lazlo uses to submit more than a million entries to the Frito-Lay Sweepstakes was inspired by a sketch in one of Leonardo's notebooks.

Eventually, Mitch and Chris succeed in solving the power problem for their laser, only to realize (thanks to Lazlo) that it will be used to build a powerful directed-energy laser weapon. The five of them team up to foil Hathaway's big military test of the system, in their usual eccentrically ingenious way.

- 15-year-old Mitch Taylor (Gabriel Jarret) is admitted to the fictional "Pacific Tech" to work on lasers.
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- Mitch's rival, Kent (Robert Prescott), and his rather shady mentor, Dr. Jerry Hathaway (William Atherton).

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- Mitch’s roommate is the equally brilliant but idiosyncratic Chris Knight (Val Kilmer).
  TriStar Pictures
- Jordan (Michelle Meyrink) surprises Mitch in the men’s room with the sweater she knitted.
  TriStar Pictures
- Lazlo Hollyfeld (Jon Gries) is a former genius who cracked and keeps mysteriously going into Mitch’s closet—and vanishing.
  TriStar Pictures
- Mitch discovers the passage to Lazlo’s secret lair.
  TriStar Pictures
- Conked out.
  TriStar Pictures
- Of course Chris sleeps like a pretzel.
  TriStar Pictures
- Chris engineers a “pool party” so everyone can let off some steam.
  TriStar Pictures
- Jordan and “Ick” Ikagami (Mark Kamiyama) help Chris and Mitch take revenge on Kent.
  TriStar Pictures
- “Is that you, Jesus?”
  TriStar Pictures
- Yes that is a giant pile of unpopped popcorn in Jerry’s foyer. All it needs is a bit of heat.
  TriStar Pictures
- Hacking a defense department laser weapon provides that heat.
  TriStar Pictures
- Hathaway realizes his system has been hacked.
  TriStar Pictures
- The team celebrates a job well done.
  TriStar Pictures

It fell to film consultant Martin A. Gunderson of the

University of Southern California (who has a bit part as a math professor) to help ensure that the science and campus culture depicted in the film were plausible, even if certain liberties were taken. Certain details were deliberately left out, according to Director Martha Coolidge, such as those for Mitch's flash-pumped ultraviolet laser at the science fair, and technical details pertaining to a directed-energy laser weapon. ("We didn't want to inspire any lethal tinkering.")

I've always appreciated how closely the laboratory laser setups hewed to reality: Gunderson himself provided the blue-green argon laser and tunable dye laser used in those scenes. Chris uses a cube beam splitter to create the laser light show announcing the Tanning Invitational pool party that incurs Hathaway's wrath. That said, a 5-megawatt laser had certainly not been achieved in 1985. While Chris' construction of a xenon-halogen laser to solve the power problem was purely theoretical at the time, the underlying scientific details were later outlined in a scientific paper—a fitting example of how science and Hollywood can both benefit from such collaborations.

For the "Smart People on Ice" scene, the crew used a frozen volatile gas, pumped through thousands of feet of tubing beneath the corridor flooring that was connected to a refrigeration unit to keep the gas cold. And as Ick explains when Kent asks him what will happen when the ice melts, the frozen gas shifts directly from a solid to a gaseous state, rather than melting into a liquid.

Then there is the famous popcorn scene that marks the group's triumph over Hathaway. Mitch, Chris, Ick, Jordan, and Lazlo fill his newly renovated house (accomplished with funds embezzled from his CIA grant) with unpopped popcorn covered in tinfoil. They place a prismatic-like piece of glass on the window sill and hijack the computer during Hathaway's big military test to redirect the laser energy through that window. The kernels start popping, expanding to fill the

entire house until it quite literally bursts at the seams.

[embedded content]
Real Genius movie clip: Jerry's House of Popcorn.
In a 2010 interview with the AV Club, Atherton revealed that the studio had six ten-foot-high air poppers devoted to popping popcorn all day for three months, filling a massive storage tank. Since the popcorn had been treated with fire-retardant to keep it from combusting, additional measures had to be taken to ensure the birds didn't eat it. All that popcorn was then carted out to a new subdivision being built in Canyon Country just northwest of Los Angeles and then stuffed inside a Victorian frame house specifically built for the film. That way the crew could pull the whole thing down in the climactic scene with the help of an elaborate network of conveyor belts, hydraulic lifts, airblowers, and vacuum hoses. "Now they'd do it digitally, I guess, but in those days, you had to pop the dang popcorn and put it in a truck and schlep it out to the valley," Atherton said.

As evidence of the film's enduring popularity with the nerdy set, the Mythbusters decided to test the feasibility of popping that much popcorn in 2009 with a laser and destroying a house. The initial test went well: the team successfully popped a single kernel wrapped in aluminum foil with a ten-watt laser. Unfortunately, they weren't able to get a sufficiently powerful laser for their scaled-up experiment, relying instead on a large pan used to cook the popcorn via induction heating. They also built a scaled-down model of the house in the film with a piston on the floor pushing popped popcorn upward to see if it could generate sufficient force to break apart the house. Alas, the Mythbusters determined it would require several tons of force. So myth: busted. But it's still an entertaining movie comeuppance.

Real Genius is admittedly a bit cheesy. The plot is predictable, the characters are pretty basic, and the dialogue can be clunky. And it goes without saying that the sexually

frustrated virgin nerds ogling hot cosmetology students in bikinis during the pool party reflects hopelessly outdated stereotypes on several fronts. But the film still offers smartly silly escapist fare, with a side of solid science for those who care about such things. And its yearning idealism is a good antidote to the current prevailing cynicism.

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