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The Arecibo Observatory has one of the world's biggest single-dish telescopes.

ASTRONOMY

Arecibo Observatory hit with discrimination lawsuit

Two former workers say that they were treated unfairly on the basis of age and disability.

BY TRACI WATSON

Two former researchers at the troubled Arecibo Observatory in Puerto Rico have filed a lawsuit claiming that illegal discrimination and retaliation led to their dismissal.

James Richardson and Elizabeth Sternke are suing the Universities Space Research Association (USRA), which oversees radio astronomy and planetary science at Arecibo, and the observatory's deputy director, Joan Schmelz — a

prominent advocate for women in astronomy.

Richardson and Sternke, a married couple in their mid-50s, allege that Schmelz discriminated against them because of their age and because Richardson is legally blind. Sternke revealed in November 2015 that she planned to file a complaint with the US Equal Opportunity Commission (EEOC), which investigates workplace bias; soon afterwards, USRA announced that her contract job with Arecibo's education programme would end early. Richardson filed his own EEOC complaint, and in

April 2016, USRA terminated his employment as a staff scientist.

The EEOC ultimately found evidence of discrimination against Sternke and Richardson, and that the pair were terminated in retaliation for their complaints. In their lawsuit, filed on 4 October in the US District Court in Puerto Rico, Richardson and Sternke are seeking more than US\$20 million in back pay and damages.

Schmelz says that she cannot comment on the lawsuit, and she declined to answer *Nature's* questions. But USRA, her co-defendant and ▶

► employer, “firmly denies these allegations and plans to vigorously defend this matter”, it said in a statement to *Nature*.

The legal challenge comes as the 53-year-old observatory battles to survive. Its single-dish radio telescope, one of the world’s biggest, is still in high demand. But the US National Science Foundation (NSF), which provides roughly two-thirds of the observatory’s \$12 million funding, is facing a budget crunch. The agency is now conducting an environmental review of major changes to the site, a possible prelude to mothballing or even demolishing the facility. Its decision on Arecibo’s fate is expected in 2017.

Some Arecibo supporters worry that the lawsuit could nudge the observatory closer to the edge. “With all those budget difficulties they’re having now, getting bad press is not going to be good for them,” says Alan Harris of the planetary-science consulting firm MoreData! in La Cañada, California.

LEADERSHIP CHANGES

USRA hired Richardson in 2014 as a scientist with Arecibo’s planetary radar group, which observes potentially dangerous asteroids and other Solar System bodies. He did not follow the typical academic path: according to Richardson’s website, he worked as a nuclear engineer before being blinded in a chemical accident and retraining as a planetary scientist. Sternke, a sociologist, began working at Arecibo on a short-term contract in 2015.

According to EEOC determinations issued in June, Sternke and Richardson’s work initially drew no complaints from management. After Richardson’s boss, the head of planetary radar, announced his resignation in early 2015, Richardson sought the job.

Several months later, Schmelz came to

Arecibo. From the start, the lawsuit says, she “ignored and/or chose to avoid all contact” with Richardson, assigned duties to younger colleagues rather than to him, and “marginalized and ostracized” Richardson and Sternke.

The EEOC report also says that USRA altered the description of the job Richardson wanted “to make it more suitable for another internal candidate to qualify”. USRA subsequently promoted an Arecibo staffer in his 30s.

Sternke submitted her resignation in November. She later told USRA that she planned to file a complaint with the EEOC, the agency’s report says, and her employment was terminated on 4 December, eight days before her scheduled last day.

The lawsuit alleges that in December 2015, officials from the USRA human-resources department accused Richardson of “angry behavior, bullying, and prejudices”. His employment was terminated in April 2016, after USRA determined that he failed to meet the terms of its “Performance Improvement Plan”. (Richardson disagrees with that assessment.)

In its report on Richardson’s case, the EEOC said that Schmelz “made direct discriminatory age based comments”, writing in her own performance evaluation that she had recruited “a set of effective young leaders”.

The EEOC also found that Richardson was “disciplined and terminated from his employment” on the basis of his age and disability, and in retaliation for his association with Sternke and for filing an EEOC charge. In a separate report, the agency found that USRA terminated Sternke’s employment “due to her age (over 50) and in retaliation for complaining about illegal discrimination”.

The EEOC suggested that USRA pay Richardson \$400,000 in damages, plus back pay, and give Sternke \$200,000. But settlement talks with the EEOC failed, and in late July the agency notified Richardson and Sternke that they had 90 days to file suit.

SADNESS AND SURPRISE

Richardson’s former colleagues say that he is not a bully. “I never heard him raise his voice, let alone get angry,” says Phillip Nicholson, an astronomer at Cornell University in Ithaca, New York, where Richardson did research.

Richardson’s postdoctoral supervisor at Cornell, astronomer Joseph Veverka, describes him as courteous and kind, if demanding. “If anyone asked Jim to do something which he did not consider completely scientifically proper, he would strongly object.”

Former Arecibo director Robert Kerr says that his USRA colleagues — including Schmelz — displayed “the utmost professionalism”. “Joan was no different from the rest,” he adds.

Meg Urry, an astrophysicist at Yale University in New Haven, Connecticut, notes that Schmelz is a tireless advocate for the right of female astronomers to work without harassment. “She’s devoted a lot of time to justice,” says Urry, the past president of the American Astronomical Society. In one notable case, Schmelz helped to bring harassment complaints against astronomer Geoff Marcy; after the University of California, Berkeley, found that Marcy had violated its policies on harassment, he retired in late 2015.

The district court in Puerto Rico has not yet scheduled a hearing on the Arecibo lawsuit. In the meantime, Nicholson is struggling to make sense of the situation, given what he knows of the parties. “Nothing seems to ring true to the character of the people,” he says. ■

US ELECTION

Scientists who back Trump

Science policy fades into background for many who support the Republican candidate.

BY SARA REARDON

Kaylee, a structural biologist at Yale University in New Haven, Connecticut, stays quiet when her colleagues talk about politics and religion. As a Catholic with conservative tendencies, she feels that her beliefs are unwelcome in academic institutions, where liberal views often prevail. The strain is particularly acute this year: Kaylee favours Donald Trump for US president.

Trump, a Republican, has a run a brash, often divisive, campaign that has prompted

some leading members of his own party to disavow him. He has drawn criticism for his treatment of women, his pledge to block Muslim immigration to the United States, and his plan to build a wall along the US–Mexico border. Still, Kaylee says, “I am 100% certain I will not vote for Hillary Clinton,” Trump’s Democratic opponent, despite her fears that supporting Trump could harm her job prospects. (For this reason, Kaylee — a postdoc — asked *Nature* to refer to her by a pseudonym.)

Her fears do not surprise Neil Gross, a sociologist at Colby College in Waterville, Maine.

Surveys have shown that conservative faculty members are a minority in US universities, although the proportion varies by field (see ‘Field reports’). “My sense is that the candidacy of Donald Trump has really intensified disputes that were there already in academic life,” Gross says. “If Republicans in academia and science felt uncomfortable before, I think the candidacy of Mr Trump has made them all the more uncomfortable.”

Many of the researchers interviewed for this article say that Trump and Clinton’s positions on science have not influenced their