

Publish and Perish

By Lesley L. Smith

After spending twelve hours 5000 feet underground, I was plumb worn out and all too happy to be home. My keys skittered across the butcher-block counter as I sank down on a stool and my wife came running into the kitchen, and gave me a hug.

"I'm so sorry, Ethan. Can I get you a beer?"

This was a new twist. "Sure."

Ashley quickly got a cold one out of the fridge, screwed the top off and handed it to me.

I took a swig as she looked at me expectantly. I set the bottle down on the counter. "Not that I'm complaining, but what's this all about?"

Her face fell. "You didn't get the message about Roy, did you?"

"You know my cell doesn't work down in the lab." I took another gulp. "What about Roy?" He was my mentor way back when I was a young Turk and we'd stayed close over the years.

Ashley sat down next to me, putting her hand on my shoulder. "He called here after he couldn't reach you. He said ...he's got prostate cancer."

All the taste leached out of the beer in my mouth. "Shit! How bad?" Prostate cancer. My pop'd had it and Ashley's too. My dad had kicked it and was a 'cancer survivor', but Ashley's hadn't. When he went, it about killed her, too. I guess she thought since she was a doctor, she should have been able to protect him from such things.

"I don't know any details," Ashley said, eyes downcast.

I stood up. "I better call him."

Roy answered on the first ring. "Hey, Ethan. I'm guessing Ashley gave you my news." He laughed weakly.

"Yeah. I'm real sorry to hear it, Roy. Is there anything I can do?" I blinked away the tears.

"I called my old buddy from the department and we're going to meet for beers at 8:00 tonight. Can you come? If you don't mind hanging out with a couple of old codgers, that is."

I nodded and cleared my throat. "Of course. I'll be there. Where?"

He laughed, genuinely this time. "You know where. And bring that doctor lady of yours. She's a Honey."

"Okay. See you soon."

I thought Ashley and I made good time over to the University Pub, but we were the last to arrive.

"Hi guys. I see you started without me," I said. "This is my wife, Ashley."

She waved. "Hi."

"Ashley, you know Roy. And this other joker is Karl, also an Emeritus Prof."

"Nice to meet you," she said.

"Pretty lady, sit next to me," Karl said.

I shook my finger at him. "Ah, ha, Karl. I know better than that." I put my arm around her. "She'll be sitting next to me." Karl fancied himself a womanizer and he was--about thirty years ago.

Ashley and I took our seats as the perky young waitress came up to our table. "Another round here?"

"Aye," Roy said.

"On the double," Karl said.

Ashley smiled at me as I handed the waitress a credit card. "And keep 'em coming." Turning back to Roy, I said, "Again, Roy, I'm so sorry about your news. That's rough."

He forced a grin. "Ah, don't worry about it, kid. I'm tough. I'll beat it."

Karl brushed his hand through his thick white hair. "I beat it, so you can too, Roy."

"Wow, Karl. I didn't know. My dad beat it too." My eyes met Ashley's and I squeezed her hand under the table.

She pressed her lips together, and avoided looking at Roy.

Karl rested his hands on the table. "Is it just me, or is cancer getting more common now? You know, I lost my Katie to breast cancer."

Roy nodded. "Yeah. It seems like everybody you meet has had some kind of scare."

Ashley nodded slowly. "You guys may be right. Medical science has advanced in other areas and people are living longer in general."

The waitress deposited the awaited pitcher and a couple more glasses. I got to work topping off everyone's drink.

"But enough gloom and doom talk," Roy said. "How's it going down at the detector? Have you seen any protons decay yet?"

Karl slapped the table. "Protons decay? What kind of new-fangled whatsit is that?"

"Yes, dear." Ashley turned to me with a grin. "What is that?"

"Apologies Roy, this will be a review for you, but the rest of you listen up." I rubbed my hands together. "Okay. Have you all heard of GUTs?"

"What? Like stomachs and intestines?" joked Karl, chuckling at his own witticism.

"Ha. No. Like Grand Unified Theories," Roy said.

I nodded. "Right. The Standard Model of Physics maintains that there are four fundamental forces: gravity, the electromagnetic force, the weak force, and the strong force."

"I recognize gravity and the electromagnetic force, but what are those others?" Ashley asked.

"The weak force is kind of esoteric, it's involved in stuff like radioactive decay. The strong force is responsible for holding particles like protons and neutrons together."

Karl nodded. "Even I know about protons and neutrons."

"Move along there, sonny," Roy said, "I don't have forever. So the idea of GUTs is that the strong, electromagnetic, and weak forces are actually different aspects of one grand force."

"What about gravity?" Ashley asked. "Why is it left out?"

I took a sip of my warming beer. "It's not left out, the term GUT just doesn't include gravity. If we include gravity, it's called a Theory of Everything, or TOE." I flashed a grin. "Anyway, we're having enough trouble with just the other three."

"Why is that?" asked Karl.

Roy looked at me. "May I?"

I nodded.

"If the strong, electromagnetic, and weak forces are united into one force, that means protons must decay," Roy said.

"Decay into what?" Karl asked.

"They decay into an anti-electron and a particle called a pion, which then decays and gives off a burst of energetic radiation," Karl said.

"So what's the problem?" Ashley asked.

"We have this underground detector filled with 50,000 tons of water, waiting to see a proton decay, and we haven't seen it yet." I sighed, and took another swig of beer.

"Well, there you go. We 'ugly bags of mostly water' just can't win," Karl said in a robotic voice.

We all took a sip of beer at the same time.

Karl jerked in his chair. "Check out that looker." As he swept his arm around to point at a fifty-something woman, it intersected the beer pitcher.

As if in slow motion, a tsunami of beer swept toward Roy.

He leapt up.

"Sorry," Karl said. "You move pretty fast for an old man."

"Who're you calling old?" Roy replied.

"Maybe you'd get better results if you used pitchers of beer for your detector." Ashley giggled.

I patted her knee absentmindedly. Something was brewing in my brain.

When the thought matured, I bolted out of my chair. "Does anyone know the population of planet earth?" I asked.

"Isn't it something like 6.5 billion?" Roy said.

I nodded. "That sounds about right." I did some quick calculations. "If the average weight of a person is 100 pounds, 6.5 billion people weigh about 300 million tons of 'mostly water'!"

My mind raced ahead thinking of scientific papers I could write: '300 Million Ton Proton Decay Detector.'

Roy's mouth had fallen open. "Are you thinking what I think you're thinking?" he asked slowly.

"If it's a paper called 'Proton Decay Detected' then yes." Suddenly the full implications hit me and I collapsed back into my chair. "Cancer. Shit."

"Oh, no," Karl said.

"What's wrong?" asked Ashley.

I reached out for her hand. "It's proton decay. Proton decay is causing cancer." I glanced at Roy and Karl.

Roy's eyes filled.

Karl's face was ashen. "I don't think she gets it."

I cradled both of Ashley's hands in mine. "Ash, all the protons in the universe formed at the same time—right after the Big Bang—and humans are made of protons. So, if they're starting to decay..." I couldn't continue.

"Oh. Is there anything we can do?" she asked in a small voice.

I met Roy's haunted eyes for a moment. "I don't think so."