

Interview with Charlie Pedersen **Author of *Turn of the Century: 2100***

Charlie Pedersen, author of the sci-fi suspense novel “Turn of the Century: 2100” is being interviewed by Juanita Watson, Assistant Editor of Reader Views.

Juanita: Thanks for taking the time to talk with us today Charlie. We are interested in hearing about your book “*Turn of the Century: 2100.*” Would you start by giving us an overview of your story?

Charlie: Turn of the Century 2100 is a sci-fi based international suspense about what happens when a Berkeley, California quantum physics lab, and 12 other labs around the world are visited by a “photon probe”, an “electro-magnetic wave” state entity in a hologram, from a Geneva Switzerland physics lab from the year 2108.

The story straddles both the 21st and 22nd century and is centered around Alyson Higgs, in our time, and her great granddaughter (to be), Aly, in 2108. When it’s proven that “futuresight” is at hand, science, the CIA, and Interpol agents around the world are drawn together in a quest to deliver five oracles to the UN General Assembly. When white collar criminals and terrorists discover this closely guarded secret, the stage is set for a confrontation between the forces of positive change and the evil defenders of the status quo. Knowledge of the future is positive at best, but potentially a great threat to those of power and wealth.

Strong female and male characters in two centuries and on three continents engage in romantic intrigue with the future of the world in balance. The reader is taken into the amazing world of quantum science and its potential, but also is confronted by the economic, human rights, environmental, multi-cultural, and militaristic imbalance that is our present time. But this is not a search for the guilty or evil doers. This story faces you with the reality that it will take the collective will and positive action of the citizens of the earth to move from the significant state of denial and paralysis that is our times.

Turn of the Century: 2100 walks the reader down the path of “science fiction” that path between fact and fiction that can only be traveled by the imagination. Be drawn by the story, enlightened by where quantum science is taking us, and be ready to be challenged by the realities we are facing as a human species. It’s a new Century and it’s our turn.

Juanita: Is this your first novel? Would you tell us about your interest in science-fiction?

Charlie: Yes, I have spent over 40 years involved in large scale technologies from the space program to the massive networks of banking systems. But most of all, I've been involved in large scale change.

Like many people my age, I considered what I was going to do after a successful career. You would have to be living in a cave to not see that we're living in very transitional times, to put it lightly. So I looked at the present and considered the future. I asked myself, if someone came to us from 100 years in the future, what do you think they would say and how would the world react? I began to study the future and was drawn to look at the past. This took me to what I prefer to call "Science fiction". After all, 100 years is not Star Trek. However, look at the change in the last 100 years? Could I create an entertaining story that could draw you into a higher level of consciousness? Now that's a challenge worth writing for!

Juanita: Why did you choose to set "*Turn of the Century: 2100*" on the international stage?

Charlie: My research and observation brought me to the obvious. The most startling fact of this new century is that the shrinking global village is at hand and we're going to have to re-think our assumptions....AIDS, Terrorism, China, Mad cow, SARS, West Nile, genocide, human trafficking, Tsunami's, hurricanes, global warming, energy and water crises,...the fall of the USSR, the list grows. There aren't walls that can be built high enough to keep the international stage out of our lives. At the turn of the 19th century, there were over 1 billion people on the planet. It's grown to 6.4 billion, is projected to 9.5 billion, and I see scenarios that could get us between 10-11 billion. The cultures and environment of the earth: ecologically; socially; and economically are changing, whether we like it or not.

Juanita: Would you tell us more about the photon probe discovered at the beginning of your book? What is it and how did you come up with this technology?

Charlie: In my research on technological change, I examined what is called Moore's (one of the founders of Intel) law. Over forty years ago, he projected that every two years, the density of computer transistors would double. This continues to be true. I projected this law out for 100 years and realized that from today's computers with speeds of two to four billions of cycles per second (that's 9 zero's), we were going toward a million- trillion-trillion cycles per second (30 zeroes).

That drew me into quantum science and quantum computers, which are already in study in places like IBM's Almaden labs in Northern California. That's computational logic and storage that exists in the particle state, essentially manipulating atoms). This state can exist as matter or wave energy. By transforming a navigational, intelligent, computer into a wave state that exists inside a photon or light based gaseous- like (for illustration purposes) entity and being able to intelligently propel and navigate it at near light speeds, you have created a photon probe.

Juanita: What are the current global issues facing us today that you tie into your story?

Charlie: When I looked at the energy crises that is visible in our lives in so many ways, then looked at the various proposals for bio fuels, etc., it seemed that most people can't visualize the size of

consumption (ie. 439 quadrillion (1000 trillion) BTU's of energy or 78 billion barrels of oil equivalents (3.7 trillion gallons) with a projected two and three fold projected growth. The second is the enormous stress on fresh water projected and the close inter-relationship between these two problems. For example to produce massive bio-fuels you need lots of land, and guess what, fresh water. I looked at world health and schism between chemical and organic medicine. Then there is genocide, terrorism, and human trafficking, a massive cultural divide, and the continued reliance on military solutions.

So, when I stepped forward 100 years and looked back, I could see that these problems need to be addressed together, not in individual causal trains, if you will. They are inter-dependant problems that need synergistic solutions. There are many issues in our modern world, and plenty of talk about political and military tactics and philosophies, but the world needs to consider that the core paradigms (or rules of living) of existing in a world of 6.4-9 billion people are changing. I'm not talking about socialism or trading off freedoms, I'm talking about the collective will of society recognizing that to survive as a species, we are going to have to take collective action that is sensitive to the reality that global co-dependence is at hand, and we must see ourselves in a village with a new level of kinship.

Juanita: "Global co-dependence" is a very interesting term. Would you explain in your words and context?

Charlie: Yes, as I've said, we live in a global village but in more ways than you may think. We are economically, politically, socially, and environmentally co-dependent. The world emits carbon dioxide from fossil fuels, the oceans warm, and you have Katrina. What labels are on your clothing, you entertainment systems, automobiles, and even food...perhaps China, Japan, Germany, and Mexico? The flowers in the shops in Europe are delivered daily from Africa. Africa gets sick and the world is the patient..,West Nile, Aids? Mad cows in England, bird flu in Asia, rock and roll in the USA. The USSR couldn't hide the disparity between East and West Germany in 1990. Satellites were raining down prosperity in the west as Japan and West Germany emerged. The Berlin wall came down. China increases its energy consumption by 47 % in 2005, and gas prices go to \$3.00 per gallon. Iraq has the second largest oil reserves in the Middle East, and where are our troops? But, at the same time, genocide in Africa, the world under-reacts. Build a wall between the US and México. I have three words: airplanes, boats; and tunnels. In a co-dependent world, we need to stimulate opportunity and protect our health and safety by redefining the world energy, water, and health infrastructure and finding the common ground between our religions, cultures, races, and creeds.

Juanita: Who are your main characters?

Charlie: Ah yes, back to the story. As you can see, I can really can get going on the science and the issues. But you'll find that this story is all about people, good and bad, across the world and between two centuries.

In 2085, nine year old Aly visits her 105 year dying great grandmother, Alyson, and is told that their destinies will be linked in about 20 years. Then we return to our time and find young Alyson (yes

great granny of 2085) as a budding quantum physicist in a Berkeley California science lab. When a “photon probe” from the future shows up, she begins to have an “inter-action” with Jacque, a Geneva (Switzerland) scientist from the year 2108...kind of like quantum email across the space-time continuum. When Harry Crocker from the CIA comes in to aid the science team, the making of a love quadrangle begins between Alyson, Harry, Jacque, and Aly.

Then the evil doers show up headed by James T. Slaber, New York head of Withinsight (in sight from within). His international band of technology mafia engage our scientists and CIA, and Interpol agents from New York, Geneva, London, Hamburg, Moscow, Beijing, and Tokyo... to try to prevent world changing directives from reaching the UN General Assembly.

Behind the central cast, male and female scientists, agents, terrorists and other bad people make a colorful band of characters that take us on a global trek converging on New York City. Meanwhile, we meet Jacque, Christina, Philippe, and Gabriella in 2108 and get a taste of life in the twenty second century, how they learn how to send and receive messages through a space-time gateway in a parallel dimension, and why they are very motivated to offer a change in direction to the people of the 21st century.

Through our cast of characters, all of our issues are explored. You’ll meet the President, dine with diplomats from all over the world, and yes there’s plenty of romance, action, death, and redemption. But most of all, our benefactors from the future offer us answers and make us face the seemingly strongest force in our world, our own denial.

Juanita: What are the five oracles?

Charlie: Our 2108 science team consults with their International Council of Freedom (IFC), a global overseer of human rights and privacy on behalf of the United Nations. After much apprehension and fear that “time-travel” could disrupt their own present with a space-time paradox, the IFC decides to transmit five oracles to our time. They decide that we have to earn our own future, but agree to provide guidance in core areas that when considered holistically give us a chance to “save more lives than lost in all the wars, pandemics, and genocides in the 19th and 20th centuries combined.”

They address:

- identity rights including terrorism, genocide ; and human trafficking;
- energy, water, and the environment;
- world health and the schism between organized and organic medicine;
- multi-culturalism;
- and militarism;

and the need for new paradigms in the social contract for the human species in our shrinking global village. Other than that, they don’t have much of an opinion.

Juanita: Who wants to destroy the potential for change?

Charlie: At one point in the book, Alyson considers and jots down all the potential organizations, people, events, and issues that could be disrupted by advanced knowledge of the future: “Energy, military, politics, unknown inventions, international balance of power, religion, terrorists, criminals, captains of industry, the economy, genocides, plagues, the environment, jobs, American Medical Association, world physicists, stock markets, weather-hurricanes, floods, tsunamis, global warming, Las Vegas gambling, DNA, cloning, gene splicing, stem cells, priorities, evolution, money, bureaucracy, ...mafia, CIA, FBI, military industrial complex,...drug lords, the congress, Africa, the Middle East, relationships, war,....fusion, fuel cells, the press. etc. etc.....eventually she wearies and stops writing.

Juanita: What are your thoughts on time travel and quantum physics?

Charlie: I did a lot of research, including fiction and non-fiction reading on this subject including Einstein, Stephen Hawking (the leading physicists that introduced many to black holes and wormhole etc. in *A Brief History of Time* (over nine million copies sold), and others. I credit several authors for background and inspiration in my bibliography. I also took a DVD course, *Einstein and the Quantum Revolution* (The Learning Company, 2004, Professor Richard Wolfson, Middlebury, College). After my head almost exploded from very heady input, I began to consider, if time travel could occur, what might be a plausible scenario? This is covered from several angles in the book and appendices II and III, if the reader really wants to get into it.

But let me take you down the quantum yellow brick path just a little. Consider that the chair you’re sitting on and the table that’s probably in front of you is mostly “empty space” You could put the library of congress (that’s all the books and other things copyrighted in the U.S.) and more into a one cubic meter wave pattern and not even see it. Did you even consider that when you walk outside and face certain satellites ...hundreds, probably thousands of movies, songs, and yes, talk shows are raining down on you hoping you’ll put up an antennae? (Maybe this is why so many kids have attention deficit syndrome). You didn’t think antennas are causing signals to twist in your direction, did you? No, each meter in the line of sight of the satellite is filled with all this stuff. Satellite radio antennas are only a few inches wide. Have you seen the 1-2 gigabyte (billion characters) micro SD cards that fit in your cell phones or MP3 players, about as big as your pinky finger nail? And this is 2007. None of this is theory, it’s scientific and commercial fact. So putting computer intelligence into a microwave and being able to navigate it at near light speed? Not even a stretch! At one point, Alyson explains this to the President (of the US), and he exclaims he’s starting to get a headache. Harry points out “Good that means your starting to get it!” It’s about accepting counter-intuitive beliefs (ACB). Once you realize that the assumptions of the world may not be as simple as ABC, you’re starting to get it.

So, if time travel were possible, there must be a parallel image of our arrow of time (our path in the expanding universe), that is a record of our existence. Mirror image, in the quantum sense, is not a reflection, but a quantum level parallel duplication, held together by very strange attractors that prevent all the matter and energy in the universe from blowing apart. If you fire a photon probe through the exact reverse trajectory of the earth’s forward movement in the universe, you’re moving toward our past. Every unique moment in our lives occupies a point in space and time. As you approach light speed, you enter, through a web of quantum foam, a gateway into our

parallel dimension. As you navigate through quantum change that is the physical life of all matter and energy, when you stop and observe it, you become a participant. No, I'm not talking about Star Trekian teleportation; I'm talking about intelligent navigation of a very dynamic computer in an electromagnetic wave.

Well, you asked! If you're getting a headache, maybe you're ready for an acceptance of ACB, and you're ready for a science fiction adventure.

Juanita: Why do so many choices made today, globally, politically and right down to each individual, seem to lack foresight or consideration of the future?

Charlie: We make many decisions and live our lives with constant consideration of consequences. If you're any good at living, practice makes some of it instinctive. Every once in a while, catastrophic things occur that force mid-course adjustments. We've suffered two world wars in the 20th century and many semi-wars and conflicts, primarily because of greed, cultural mistrust, and perceived self interest. Now, most of the combatants are world class trading partners. These conflicts, as well as the pandemics and climatic catastrophes are bellwethers of the growing need to change our approach in a world of growing population and increasing co-dependency on all levels. We, in varying degrees, defer to others, because it's too complex, we perceive money and power to be beyond our control, and we are, for the most part, just trying to pursue happiness and good health under an umbrella of denial

What the future is trying to tell us is that the collective will of and within the common ground between people, cultures, and government is a bridge to positive action over denial. "Change the mix. Leadership will respond to the currency of votes." The mix? ...Energy, human rights, health and water, the environment, acceptance of both: other cultures; and the customs of sovereign nations. But take a wider acceptance and responsibility of what it is going to be required between borders to survive as a species in humanity's global village.

Look at the first 25 years of the 20th century. Great invention, but over 15 million died in war and 40-100 million (yes a wide range because no-one knows the #) died in two years (1918-1919) from the Spanish Influenza. The disease spread from sick carriers going to the war, and then the war participants carried the disease back to their homelands. Consider that the world population has increased four to five fold, and the degree of inter-border interaction is escalating at even a more intense rate. The future came to us to give us a better chance. Remember, in the story, the future survived and progressed. But they learned that the price was high and ugly enough to compel them to offer their hindsight as our foresight.

Juanita: Denial is a significant theme in "*Turn of the Century: 2100.*" What statements are you making?

Charlie: That the real battle is not against money and power, good and bad people, businesses, and governments...but our collective will through positive action versus collective denial, particularly amongst the large resource consuming nations. If you think about it, are people working toward specific strategies with goals and timelines to truly "change the mix" of: energy; fresh water with

good sanitation; human trafficking and genocide; world health; and cultural co-existence? We again have to hunker down to focus on the needs of our global village. You won't have a chance against terrorism, illegal immigration, and global warming until you commit to the distribution of low cost energy, fresh water, and health, i.e. "change the mix", of what is required to engage more of the world population in the growing economy. This effort will pay for itself.

You can no longer hide from the co-dependency of the industrial world's pursuit of happiness and the problems in the global village. 47 % of the world's population is in economic and health stress. "Change the mix. Leadership will respond to the currency of votes."

Juanita: Charlie, you have blended suspense and romance into this sci-fi adventure. Who would enjoy reading "*Turn of the Century: 2100*"?

Charlie: I've tested the book with a variety of readers. The bottom line seems to be people who enjoy being "engaged" in reading and love a good read. Though I understood from the outset that I was risking segments in a genre blend, I am trying to entertain the reader into a higher level of consciousness. If you trust those that say that I've helped them get over feelings of being science challenged, and when "science enabled" people are willing to travel down the path of accepting counter intuitive beliefs, and the science fiction reader can be engaged by science fiction, then they would enjoy reading *Turn of the Century: 2100*. If you don't like to think, then forget it. If you want just escapism, forget it. But if you want to escape into the future through an international suspense, come on in.

Juanita: Do you think if people really knew the future, they would be willing to make changes?

Charlie: Yes they would. I am totally a believer in the power of positive thinking and the power of positive action. If you occupy positive space, the odds of intersecting with positive outcomes is very high. If you occupy negative space then the odds are way against you. Nothing in this world is guaranteed, and there is such a thing as bad luck. But most good luck is made through your actions while being in the space of positive opportunity.

Juanita: Charlie, what is the underlying message of "*Turn of the Century: 2100*"?

Charlie: The positive force of collective will can defeat the seemingly strongest force in our universe of the human species: denial! If collective positive will doesn't win, it will be ugly. But it will require "SISU" (pronounced sea-sue), the Finnish concept that combines inner strength, determination, perseverance in the face of adversity, and a strong work ethic. There is no direct English translation, but the concept can be fairly accurately expressed as 'tough as nails' or "hard-bitten". To anthropologists, it is an appropriate invention for a cold northern land, fractured by thousands of lakes, and long under threat of being overwhelmed, linguistically and other wise, by more powerful neighbors. Our more powerful neighbors seem to be the guardians of the status quo.

Juanita: Charlie, do you think leaders on the world stage would ever come together and face the issues your book brings up?

Charlie: A few months ago, renowned physicist, Steven Hawking put a question into “Yahoo” asking, essentially, “In a world of political, social, and environmental chaos, how can the human species survive the next 100 years?” It created millions of “web hits.” When JFK challenged us to go to the moon, it was accomplished. If our leadership can really come to grips with the size and scope of the challenge, and lead us, people, business, and government will respond with innovation, effort, and good will.

I pointed out that Alan Greenspan testified that the world changed transportation energy from wood to coal and from coal to petroleum way before we were running out of those fuels. What changed was that airplanes and automobiles were a new paradigm that simply needed lighter, more efficient fuels. Or the knowledge of petroleum and its capacity led to the invention of the internal combustion and jet engines. But how fast would that have progressed without government funded highways and airports. Well, we know we have energy and fresh water alternatives. We do need the infrastructure and commitment to deliver it. If I didn’t believe in our ability to change, I wouldn’t have written the book.

Juanita: What questions do you hope your book inspires in its readers?

Charlie: I hope that people believe that major change is possible without overwhelming calamity. Although the Russia story isn’t over yet, look at the courage Gorbechov and his peers had to muster to change an economic doctrine that pitted the world against each other. Change occurred without a major war. My grandest hope is that the collective consciousness of my readers and the “consuming” world’s citizens will insist that we change the mix of world opportunity by insisting we invest in a new mix of energy, water, health, and attitudes, and make them available throughout the world.

Juanita: Charlie, you have an impressive professional background that spans many fields, all which contributed greatly to “*Turn of the Century: 2100.*” Would you elaborate?

Charlie: In the early sixties, while obtaining a math degree, I received training in computer programming. I was told computers were the wave of the future. I met someone in school who then got me into Grumman Aerospace in New York, and before I knew it, I was working on the Apollo Lunar Module and airborne traffic computers. My early foray into this lofty technology led me to an advanced technology planning job in a whole different world - banking and finance. This led me to the west coast and my ascendancy into advanced banking systems including Automated Teller Networks.

I was meanwhile developing a competency in influencing people to invest in large scale change. This, of course, with lot’s of peer contribution, led to the formation of what has become the largest US ATM network, the Star System, which switched over two billion ATM and point of sale transactions per year. I was also a player in the large scale check processing business and check image switching networks. I was also fortunate in working for a financial institution that was twice named by the department of labor as the most ethnically diverse large company in the US. So from high tech beginnings, I became deeply involved in the organizational and cultural dynamics

involved in large scale change, including technology, investment, and cooperation amongst peers, people, and yes, government.

Juanita: Do you have plans for more novels in the future?

Charlie: In the last chapter of *Turn of the Century: 2100*, due to several iterations of space time do-overs that save lives, the life of the book's primary antagonist is also saved. Looking at all the opportunity associated with the implementation of the five oracles, he declares a renewed quest for power and the goal of forcing a "sixth oracle" on the world, and just to show he's not all bad, going back and killing Hitler. What is the sixth oracle? How is Hitler involved? Can nothing get done without the force of power? What will it really take to move people and governments from agreement in principle to action? What would our heroes in two centuries have to do to thwart villains' intent on exploiting the world's commitment to change? What if the wrong people got a hold of the probe technology? Stay tuned for *Turn of the Century: The Sixth Oracle*.

Juanita: How can readers find out more about you and your endeavors?

Charlie: Read *Turn of the Century: 2100* - If you don't read it, it doesn't matter. Also, www.outskirtspress.com/turnofthecentury, barnesandnoble.com, and amazon.com.

Juanita: Charlie thanks for talking with us today. We have enjoyed hearing about your fantastic new novel. You have certainly given us much to think about, and we encourage readers to look for *Turn of the Century: 2100* at local and online bookstores. Do you have any last thoughts you'd like to share?

Charlie: Yes Read it! Get it! Live it! It's a new century and it's our turn! Juanita, thanks so very much.