

**DR. RUSSELL C. SCHNELL**  
**GERMAN FROM RUSSIA DESCENDENT**  
**CO-RECIPIENT 2007 NOBEL PEACE PRIZE**



I am the firstborn child (December 12, 1944) and only son of Annie (Traudt) and Henry Schnell and was raised in Castor, Alberta, Canada. I have two sisters, Lorna Jean Schnell, Ponoka, Alberta, who attends most AHSGR Conventions, and Brenda Faye Schnell Scott, Edmonton, Alberta.

Our father, Henry E. Schnell, was born April 22, 1916, at Stony Plain, Alberta, to Germans from Russia parents John Schnell and Amelia (Stertz) Schnell. Henry's parents left Norka in October, 1911, traveling across Europe, then departing from Southampton, England, on October 31, 1911, on the Cunard liner Ansonia, and arriving in Quebec City November 12, 1911. They took the train to Edmonton, Alberta, where they were met by Norka friends who took them to Stony Plain by horse and buggy. They farmed in the Stony Plain area for five years before purchasing a farm north of Castor, Alberta, in an area settled by 24 other families from Norka.

Our mother, Anna (Annie) Traudt, was born March 1, 1917, in Norka to Conrad Traudt and Christina (Giebelhaus) Traudt. They left Norka in September, 1924, and crossed the Atlantic on the Empress of Scotland, landing in Quebec City, Canada, on October 18, 1924, and then taking a train to Edmonton, Alberta. As well as Annie, there were two younger sisters and one younger brother who came with their parents. The Traudt family first settled near Spruce

Grove, Alberta, before purchasing a farm adjacent to the John Schnell farm north of Castor in 1928. Our parents grew up on the adjacent farms and were married on August 22, 1943.

In 1938 John Schnell purchased a blacksmith shop in Castor to service the farm machinery repair needs of the Germans from Russia who spoke Volga Deutsch and were more comfortable dealing with "one of their own." He was joined in the business by Henry Schnell (my father) in 1940 and another brother, Conrad, in 1946 after Conrad returned from five years of army service overseas in WWII. The business, John Schnell and Sons Garage Limited, was operated by the family until sold in 1988 when Henry retired.

The town of Castor never had a population exceeding 1,000 and was located 200 miles from the nearest metropolitan area, either Calgary 200 miles to the southwest or Edmonton 200 miles to the northwest. There were no paved roads in the area until the 1960s, and occasionally winter storms would close the school trapping school bused kids from farms in town. The students would be billeted with townfolk for up to a week until the roads could be plowed.

I, Russell Schnell, grew up in Castor, always living in the same two-story house near the road leading east out of town that descended down a coulee to a bridge that crossed Castor Creek. In winter, we sledged on the hill, in spring blocked it with snow dams, and in summer the hill led to the creek, a treed valley and fields and grassland that provided endless hours of exploring and hunting opportunities. In summer there were games to play late into the evening, bird nests to explore, farms to visit, gophers to chase, crocuses to pick, hikes, picnics and campouts. In winter there was skating on the creek with a burning tractor tire for light, tobogganing, hunting rabbits, and church and social functions on the weekends. There was never enough time to do even half the activities available. Castor was a perfect place for me to grow up, except for having to go to school. To me, school was a drudgery that took time away from more important and interesting life activities. I was always glad when school was over, be it for the day, the week, the year.

Part of what made growing up in Castor so special for me was the fact that both, sets of grandparents, 17 aunts and uncles, and numerous cousins lived in the Castor area. Most of the original German from Russia families from Norka settling around Castor had 6-12 children. As such, holiday celebrations were always large family gatherings, often associated with the church activities or religious holidays.

One illustration of the great opportunities Castor afforded me while growing up is given by the following anecdote, one of many possible. A friend and I were interested in scouting as we wanted to go to a scout jamboree. But, there was no scout troop in Castor. So we asked a minister to sponsor a troop, which he did. We had eight boys in the troop that met in a church basement. When the minister was transferred, we needed a new place to meet. I went to a school administrator and asked whether we could have an unused one-room schoolhouse for a scout hall. In a few weeks we were one of the few troops in Alberta that had our own building,

no strings attached. Later, the Castor town council gave my friend and me \$10 each to help defray the cost of going to the jamboree. In those days \$10 was about twice the daily wage of a laborer in Castor.

As soon as I was eligible (age 13), I joined the Royal Canadian Air Cadet squadron in Castor. I loved the marching, shooting, occasional flying and learning something practical. Through excursions and rifle competitions I met other cadets from bigger, more urban squadrons. I soon realized how much richer rural small town life was than the experiences of many of the suburban cadets. In shooting competitions, Castor cadets often won or ranked high as we had lots of outdoor practice as most kids had a .22 rifle at home.

Realizing that small town youngsters were not at any disadvantage compared to city kids, I applied for an Air Cadet flying scholarship which I was awarded and earned a pilot's license in the summer following grade 11. The following year I applied for an Air Cadet Exchange Scholarship in a Canada-wide competition. While waiting for various exams and interviews it was interesting to hear the urban cadets talk about their great exploits, the shops they visited, clothes they bought, cool cars they drove, and the music they listened to on their stereos. But in the interviews, the selection board asked about life experiences, family, and community, ability to get along in mixed groups, adversity and work experiences, and all things a small town boy was strong in.

Also, as I was a paper boy in Castor, I read a provincial newspaper each day. Lucky for me, many of the questions in the interviews seemed to come right out of the daily newspapers. Eventually I was selected to be one of two Cadets from across Canada to be on the first such exchange with Israel. It was a great "summer of 1963," being a guest of the Israeli Defense Forces, meeting Israeli leaders and military commanders, and traveling (flying) over all Israel. The other Canadian Cadet on the trip eventually became a general in the Royal Canadian Air Force. We still see each other.

While in high school I worked for three years as a printer's apprentice at the local small town newspaper, two hours after school and eight on Saturdays. This was a great job from which I saved enough money to pay for my first year at the University of Alberta, \$800 for tuition, books, room and board, and travel. At the University, I realized that many students did not know how to work long, hard and steady, something taught and valued by the Germans from Russia community I came from. By taking a double course load, Saturday classes, never skipping a class, nor partying, and studying hard every night and all weekends, I soon was getting top grades. Scholarships began being offered.

In the summers I worked with the Alberta Hail Studies Research Project. Part of my duties was to fly the project director over hail damaged fields in a 2-seater Piper Cub aircraft to chart the damage. But, most of the time I spent driving a truck in front of advancing hailstorms and then collecting rain and hail for later study. I came back to the hail studies program for six succeeding summers. This was the best job I have ever had, even to this day.

For my third year of University, I was offered an exchange scholarship to any university in Canada. I chose to go to Memorial University in St John's, Newfoundland, the farthest distance I could go in Canada by rail. It was a great year, and I took a heavy course load, a very busy one. Returning to Alberta, the University of Alberta looked at my combined courses and grades and awarded me a B. Sc. degree, with distinction (awarded the top five students in the year) even though I had only attended the University of Alberta for two years. Very decent of them I thought!

After a year of traveling, I was awarded a Rotary Club Scholarship to a university of my choice anywhere in the world. In the paperwork they asked me where I wanted to go. I thought it would be neat to go to Sweden and join the sexual revolution. My handwriting is atrocious, and when I filled in the "Place" blank on the assignment form, the only letters that the Rotary Office could make out were Sw..... . So, I ended up in Swansea, Wales, about as different from Sweden as possible!

After Wales, I met a professor from the University of Wyoming, Laramie, U.S.A., who was starting a new department of Atmospheric Science. He asked me to be the first student. Thinking it was time I learned something that would earn a living, I accepted after he told me he would pay me a professor's salary as a student. While in Laramie studying, I was able to purchase a new car and a new house on the funds they paid me. I rented out the extra bedrooms, and to this day I am still friends with some of the former tenants. One is a retired co-owner of an oil company, and another a retired executive of the largest steel company in Canada.

In the first month at the University of Wyoming, I was in a discussion about where the nuclei (seeds) that form the center of hailstones came from. Speculation ranged from mineral particles to cosmic dust particles. As I had watched many hailstorms form in Alberta, it seemed to me that the nuclei came from vegetation because that was all there was beneath the storms when they started. I collected tree leaves, decayed leaf litter, and soil samples from the area and soon found huge amounts of excellent ice (hail) nuclei in the decayed leaves. The most active ice nuclei were observed to be produced by only two out of the hundreds of species of bacteria isolated from the decaying leaves. This discovery eventually led to M.Sc. and Ph.D. degrees and a new field of science.

Needing a break from studies, and to see how globally widespread these ice nuclei were, I collected tree leaf litter samples across Canada from Vancouver, British Columbia to St. Johns, Newfoundland, and then did the same in Europe and Asia traveling east through Russia on the Trans-Siberian Railway and then taking a ship to Japan. From Japan I reversed direction passing west through Hong Kong, Burma, Thailand, East Pakistan, India, Nepal, and Iran back to the UK. This took about six months.

While in India on the above-mentioned trip, I ran out of money. The Bangladesh war was on, and India was in lockdown and under blackouts at night. In those days there were no international credit cards, no Internet, and in order to make a long distance telephone call you had to "book a call" sometimes many days in advance. In desperation, I wrote a check on a Lloyds Bank branch in Wales and presented it to British Airways (in those days airlines cashed personal checks for passengers). The problem was the account was essentially empty. British Airways wired Wales to see if the check was good. Thankfully, the check was authorized by the bank, "for payment in full"!

Some months later after getting out of India via Iran, I went to see the manager of the bank in Wales to make good on the bad check. I asked him why he had authorized payment on an account with few funds and how he ever expected to get paid back? He answered that he knew I must have been in real trouble to do what I did, from where I did, when I did, and that I was probably a good risk. I wrote a nice letter to the head of Lloyds Bank, London, lauding the bank manager's good sense, etc. Some years later I heard that he had been promoted to a high level in the bank.

Eventually one of the ice nuclei active bacteria species I found was grown in large quantities commercially and used to make snow for ski hills by adding it to the spray water. Every large ski hill in the world uses this bacteria concoction called SNOWMAX which is now a multi-million dollar industry. I neglected to patent this discovery and have never made a penny from it.

Interestingly, these same ice nucleus active bacteria produce frost damage in living crops. By removing the bacteria from crops such as strawberries, tomatoes and potatoes, the plants can be made frost resistant down to -2C to -4C. Commercial frost prevention treatments (Frostban is one product) are now used in California in winter to protect high value crops, especially strawberries, from occasional frosts. Again, others patented this process. You would think I would learn!

After receiving my Ph.D., I conducted research in Boulder, Colorado at the National Center for Atmospheric Research and the National Oceanic and Atmospheric Administration

and then worked for the United Nations in Africa for two years. Later I returned to Boulder to study how the composition of the atmosphere was changing and how this was affecting climate.

In 1992 I was appointed Director of the Mauna Loa Atmospheric Baseline Observatory, Hilo, Hawaii. This is the observatory where the increase of manmade carbon dioxide in the atmosphere was first discovered and which ushered in the "Greenhouse Global Warming" era. The observatory is at 13,000 feet above sea level and was a delightful drive through tropical forests then across lava fields of many different hues and textures up to the observatory, which was occasionally covered in snow. After eight years in paradise, I was asked to return to Boulder to become Deputy-Director of a U.S. government laboratory studying factors in the atmosphere that are causing climate change.

Part of my job was overseeing the observatories and cooperative sampling locations around the world. As such, I was fortunate to visit many countries (87 to date); including trips to the South Pole, where there also is an observatory operated by two people on one year assignments. At the South Pole, there are six months of continuous sunlight followed by six months of total darkness. It can get as cold as -80C in winter. Travel to and from the station is by ski equipped aircraft flying through New Zealand.

From study and publications on climate forcing issues, ozone depletion, aerosols, carbon dioxide, etc., I was asked to contribute to the writing of an Intergovernmental Panel on Climate Change (IPCC) report that for the first time produced a scientific consensus document that showed mankind was changing the Earth's climate through the burning of fossil fuels. For this work, Al Gore and the IPCC were awarded the 2007 Nobel Peace Prize for which I was honored as a co-recipient.

I am still working at NOAA in Boulder, Colorado. My current hobbies are centered on woodworking such as refinishing old furniture, and more recently, building steam era wooden model trains for children in the neighborhood. My wife, Suan and I have two grown children, Alicia and Ryan Schnell.