Reflections on the Life of Ryuzo Yanagimachi

By now, the SSR membership has heard of the passing of one of our greats, Ryuzo Yanagimachi. Most of the eulogies have detailed his many awards, and most of us are aware of his seminal contributions to the worlds of fertility, human ART, cloning and much more. We have had the privilege of working alongside "Yana" for more than 23 years, benefiting from his fountain of knowledge on the fertility of so many taxa that we could not keep count. One of us once asked him about obtaining sea urchin embryos for an obscure experiment and within a week a postdoc, instructed by Yana, was collecting sea urchins from the Pacific Ocean at a Honolulu shore. Yana was a man of immediate action.

During the forty years or so in the last century that Yana was building his reputation for excellence in our field, a stream of scientists came to visit his laboratory in Honolulu. He would collaborate with almost anyone who requested it, and these collaborations were very often productive. Yana's laboratory was initially located in an old warehouse, an Auxiliary Services building on the university campus, with no windows, but lots of rooms. Yana loved this ancient building because of the ample space he had for experiments and its proximity to a vivarium, called then a "mouse room" – the only real concern he had. The absolute lack of windows did not faze him. His group of postdocs and visiting scientists were always close and worked well together. Yana's many visitors included Nobel Laureates Garth Nicholson and Robert Edwards, as well as other prominent figures in our field, like Anne McLaren, Ian Wilmut, and many more to name.

In 1999, when the people of Hawaii suddenly realized they had a world-famous reproductive biologist at their flagship university – one that the rest of scientific world had long before recognized as such – the University of Hawaii Board of Regents established the Institute for Biogenesis Research (IBR) with a new facility and five new faculty positions. Overnight, Yana went from a hidden-away scientist whom his chair had protected to do only science, to a scientist with administrative duties. The latter responsibility never took hold on him, and he continued to focus on science. After being for so long in his expansive warehouse lab, he resisted moving into the state-of-the art new facility across the street. After everyone else had already moved and started performing experiments there, Yana finally gave up and relocated, but only after the lab members moved his ten large filing cabinets containing his extensive library of reprints. It took several more years for Yana to move the last active lab – histology room – from the warehouse to the IBR.

In 2004, Yana "retired" as the IBR Director and shortly afterward "retired" altogether. He was only 74 at the time. The IBR suffered a flood that year that brought 4 feet of stream water into the IBR on a Saturday night. We were at the Halloween Party when Yana called to tell us there was a flood. We first thought it was minor, but when he called a couple more times, we left the party and came to the campus. When we arrived, Yana was standing in 3 inches of mud brought by the flood, already blowing dry some of his most precious books with a hair dryer. WE managed to convince him to go home but only by promising that we would start repairing the damage the next day. During the flood Yana lost all his printed papers, which he called his accumulated wisdom. His response to this loss was two-fold. He said, "Well, I lost all my files on mammalian fertilization." Then a moment later, he said, "I guess I am going back to fish!" This was his first love, and he enjoyed many additional years of research focusing on fish and other non-mammalian species.

Yana turned 95 this year. The day he called the ambulance to take him to the hospital that would become a three- and half-week battle for survival to which he ultimately succumbed, he had driven himself to and from work. On that day, he had been working on a new manuscript, and his acceptance address for the prestigious Kyoto Prize. Few days ago one of us noted that in his small laboratory dedicated to his own projects, there were several small bottles with new stains that had been made in late August. This was so Yana! At 95, he was still doing experiments with his own hands, from the beginning to the end, just playing around with ideas that tickled his very experienced curiosity.

Yana's vitality and curiosity was amazing and reached outside of science. After his wife passed, he often joined us for family dinners. He loved talking to our sons and playing with them. About a year or so ago one of our sons had a new toy, a virtual reality headset. Neither of us, parents, was tempted to play with it. Yana, having been told about it, immediately requested trying. We were granted with a unique display of his "dancing" performance to some virtual samurai fight. In the summer of 2022, one of us missed Yana's birthday party due to travel and sent him wishes from Alaska. Upon seeing some photos from this adventure, Yana's immediate course of action was to buy a ticket for himself for October the same year so that he can also "see bears and catch salmon". He ended up cancelling this trip after realizing that October is an 'after-season" in Alaska, but promising that he would do it next year. Last Christmas our other son received a ping-pong table. Yana, after admitting that the last he played was about 50 years ago, eagerly accepted a ping-pong match.

The people with whom Yana worked enjoyed his presence, and were constantly inspired by his example. He was both the man who generated world-altering ideas in our field, and the man who swept the leaves off the outdoor entrance when it was just too cluttered for his liking. He was the man who hung a sign on the IBR's pristine walls that said "Be Outstanding. Excellent is not Enough!" (a sentiment most of us will recognize as reference to the NIH's scoring system). The importance of the admonition to be our best was so far above the integrity of the wall and any sense of décor to our new building that marring it for the effect did not cross his mind.

Yana left his mark on the IBR not only on walls (which he also liked to "quick-fix" with an unmatched paint color when spotting some dirt), but also in minds of all that visited, worked, and still work here. We will always remember his ever-constant presence in the lab, his never abating desire to know more about essentially everything, and his unique, and often hilarious, speed of action. We miss you, Yana!