

**American Philosophical Society  
Oral History Interview  
Nina Jablonski  
session 1  
07/05/2023**

Anna Doel:

Today is July 5th, I am Anna Doel talking with Nina Jablonski online. Nina, where are you connecting from?

Nina Jablonski:

I'm connecting from State College, Pennsylvania today. This is my home and it's where I've worked. State College is the home base for Pennsylvania State University where I've worked for the last 17 years.

Anna Doel:

Did I say your name correctly?

Nina Jablonski:

My family has always said it with a hard J because most people don't understand the soft J of Jablonski, and so I go by Nina Jablonski with the hard Jill, so a more Americanized pronunciation.

Anna Doel:

What is your current academic status?

Nina Jablonski:

My current academic status is actually, as of four days ago, recently retired. So I have two titles. I'm Evan Pugh University Professor, Emerita, of Anthropology at Penn State, but I also gained on July 1st the new title of Atherton Professor, which is a newly created position for retired Evan Pugh University Professors. These are the top tier professors who have a history of impact and important research, and it was decided last year that there should be this special professorship created, this Atherton position, created for Evan Pugh professors who were retiring. I have two titles now and that's fine.

Anna Doel:

How do you usually describe the discipline and the subfield that you work in?

Nina Jablonski:

It's interesting, Anna. I describe it differently to different audiences. Generally, I call myself a biological anthropologist. 15 or 20 years ago, I would've called myself a physical anthropologist, and in some contexts, I call myself a paleoanthropologist.

But I think the broadest, most accurate term that is understandable today is biological anthropologist because that is an anthropologist who deals more with the biological sides of the human condition, including our evolution from pre-human primate forms into what we are physically and behaviorally today. It also deals with a wealth of subjects, including human genetics and genomics and human physiology as it refers to the process of human adaptation to different environmental circumstances over time. So that's a bit of a long-winded answer, but biological anthropologist is probably the most accurate title now in wide use.

Anna Doel:

When were you born?

Nina Jablonski:

I was born on August 20th, 1953. As we speak today, I'm just about a month and a half shy of my 70th birthday.

Anna Doel:

Where did you grow up?

Nina Jablonski:

I grew up in upstate New York, in a small town called North Boston south of Buffalo, in western New York, and not too far from the shore of Lake Erie. It was a rural area. My parents moved out there from having lived in the city of Buffalo for all of their lives. And they moved when I was a small child, about three years old, because they wanted to be able to live and raise their child, me, in a nice non-urban setting.

Anna Doel:

Could you tell me a little bit about your parents?

Nina Jablonski:

My parents are both from immigrant parentage. My mother was of Sicilian heritage. Her own parents were first-generation immigrants from Sicily, and my mother was born in 1918, and she was born in very modest, really poverty ridden circumstances in what was essentially an Italian ghetto, or Sicilian ghetto, in Buffalo, New York. Buffalo, like many cities on the Great Lakes in the early 20th century, was a hub for immigration and so many immigrants looking for work, including my grandparents. My grandparents on my mother's side came to Buffalo.

On my father's side, my father was born in 1924, so he was younger than my mother, and he was actually a third generation of immigrants from Poland. He came from a more educated, somewhat more professional background, at least on his mother's side. And he was born not exactly into privilege, but he wasn't in poverty. He was brought up in what we would now call a middle-class home in Buffalo, New York.

And my parents met when they were both working on the Manhattan Project at the facility north of Buffalo. That was one of the substations for the secret work on the Manhattan Project. They were both lab technicians who had been recruited into the project because they were very smart.

Neither of them had a college education. My father had started college but dropped out after one year because of his own problems with discipline and not being able to finish assignments. My mother desperately wanted to go to college, but her family was so poor that she couldn't. And so my mother was a classic American case of someone who really wanted to improve themselves through learning. So after she got her high school education, she took a lot of night school classes in math, physics, chemistry so that she could get a better position and move on in life even though she couldn't afford to go to the university.

So she distinguished herself in these courses and she was eventually recruited in the late 1930s into the US Army Ordnance as an arms inspector. And then following that, she was recruited into the Manhattan Project in the early 1940s at Linde Air.

My father had a similar course of self-improvement after he left his first year of university and didn't go back. He also took some extra courses, although I never knew exactly what the nature of these was. He did a lot of reading on his own. Both my parents were avid readers, and he went on to get a technician's job at Linde Air in Buffalo, New York, and was later recruited into the Manhattan Project when it started up at Linde in late 1942 or early 1943.

Anna Doel:

This is a fascinating story. How do you know it?

Nina Jablonski:

Well, my parents were both very proud of having sort of pulled themselves up by their bootstraps. They came from challenging circumstances, especially my mother, and she was always proud of the fact that she was an avid reader, a self-learner. My father was too, although he had problems with discipline throughout his life, but they were well-matched.

My mother was very optimistic and quite goal directed. My father was very bright, rather undisciplined and extremely creative. And when they were raising me, they wanted to give me the best that they could afford. My parents together, when I was a tiny child, had very little money. My father went, after the conclusion of World War Two, he went into the Army Military Corps to do mandatory military service. And then in 1948, my parents, my father was looking for a job.

They got married in 1948, and they lived a very modest life in their early years, and they decided in the early 1950s that they really needed to move out of my father's mother's home. They were living in a little what would be called an in-law flat in the house of my grandmother. And for a variety of reasons, they really wanted to move out of the city. My father hated the white picket fences of the city and the pollution and the noise that the city represented.

He had spent a lot of time when he was a young man in countryside of Western New York, and he knew that he really liked being in the countryside, even though he didn't know exactly what he would do when he got there. My parents started making the move to what would be our home in North Boston in 1955 and early 1956 when they were both well fed up with living in the city of Buffalo in my grandmother's house.

Anna Doel:

How did your parents make a living in North Boston?

Nina Jablonski:

Yeah, my father got a job after coming out of military service at Buffalo Children's Hospital, which at the time was one of the best children's hospitals in the country, and he was hired by someone who would come to play a major role in my life. He was hired by a very remarkable German pediatrician, named Erika Bruck.

Erika had come to the US herself as an immigrant in 1939, having been expelled from Germany late in her medical school career by the Hitler regime, and she finished her medical training and residency in Turkey, where she lived for six years before immigrating to the United States in 1939. She made her way eventually to an important position as the head of the clinical chemistry lab at Buffalo Children's Hospital, and that is where she hired my father.

It was prescient because she could see in my father a lot of knowledge, a lot of creativity, a lot of organizational ability. And so she hired him and my father actually worked all of his working life at Buffalo Children's Hospital in various positions dealing with biological chemistry, clinical chemistry.

My mother was, as what we would now call a stay-at-home parent, which was common in the 1950s. When my parents moved to North Boston, she was a bit of a fish out of water, having been raised in a very urban environment and having lived in this Italian ghetto of the west side of Buffalo. She moved in 1956 into our home in North Boston, and she basically took care of me when my father was working, and he worked a lot, including a lot of overtime to try to make ends meet. And she was trying to figure out how to live in this very old, falling apart farmhouse that we had bought on 26 acres.

She was a very creative person and she made it all work, but she had to sort of learn how to do a garden and chickens. What's a chicken? She'd basically figured out how to be a farmer's wife, even though she wasn't married to a farmer, but she was effectively living the life of a farmer with a little three-year-old girl who wanted to know about everything. So my mother didn't work until much later in my teen years. She stayed at home, did various things, not only keeping the household together, but she also did a lot of her own creative work when time permitted. And my father was working basically full-time and a lot of overtime when conditions permitted.

Anna Doel:

Would you like to say their names?

Nina Jablonski:

Yes. My mother was Grace Isabella Catanzaro Jablonski, and my father was Ernest Severyn Jablonski.

Anna Doel:

Are you an only child?

Nina Jablonski:

I am. My parents both wanted to have more than one child, but I think partly because my mother was fairly advanced in years when she got married (she got married when she was 33 years old), which at the time was considered to be super old. Now it would be pretty normal, but then it was

considered to be pretty old. She had me when she was 36, and they tried to have more children, but they were not successful.

So I was raised as an only child. I got a lot of attention. I like to say that I wasn't spoiled with a lot of stuff, but I certainly did get a lot of attention and a lot of care paid to my education. My parents always made sure that I had some stimulating things to do, and one of the most stimulating things to do was to be outside. So I was outside all the time, rustling around on our little farm, but also in the adjacent woods with our dogs. And I was a cautious kid, so my parents weren't too worried about me wandering off. So I spent a lot of time outside.

And my mother taught me how to read at quite a young age, so that by the time I was going to kindergarten I had some introduction to the alphabet and had begun the rudiments of reading. And by the time I finished kindergarten and was in the first grade, about the ages of five and six, I was a really avid reader and I spent much of my childhood reading. My parents would make sure that I had access to library books, and my father would go to used bookstores and buy lots of used books mostly for himself, but I would end up reading them as well.

My trips to the library as a child were some of the most memorable trips that I had. When we would go into the city of Buffalo to see my relatives, especially my grandparents, we would make a point of going to the library, especially the one near my paternal grandmother's house. This is an old library, the Buffalo Public Library on Clinton Street where I got many, many books that I can recall, looking for books on the shelves, at first children's books and then books about science, and I didn't know what science meant, but I was really interested in nature.

And when we weren't going into the city, the Buffalo Public Library system offered what was called a bookmobile, which would come into a corner intersection in our little town once every few months at a particular time. And we would make sure that we intercepted the bookmobiles so that I could get books out from the traveling library.

My memories of childhood libraries are so fond and so important, I can remember what the stacks looked like, including those in my elementary school, slightly later. So these library experiences were really important to me. When I wasn't outside playing with my dogs, when I wasn't being with my mom doing something, I would be reading.

Anna Doel:

What kind of books did you like to read?

Nina Jablonski:

I read a lot of children's books. The Ludwig Bemelmans series of Madeline books were some of my first books that I read. These are kids' stories, but about a little girl named Madeline who would have adventures in Paris and other places. It was quite exciting.

And then early in my childhood, I can remember going to the elementary school library and reading about scientists because my mother would encourage me, as did my father, to read about nature, but read about nature through the experiences of people. So I would read biographies of famous women in science, Marie Curie, Maria Mitchell, the astronomer.

I remember reading when I was just a little bit older, 10 or 11, a book by Enrico Fermi's daughter, called *Atoms in the Family*. These books had tremendous impact on me because they showed me the lives of real people, and not all these people being featured in these books were

people who had gone to fancy prep schools or who had privileged lives. Some of these individuals were really like me and I could relate to them.

Those biographies, especially by female scientists or the female members of scientific families were really, really important to me. And I read super-avidly and abundantly. I remember when I was, let's see, seven years old in second grade, I won the award for most books read by any child, not the greatest of awards, but for me then it was like, "Oh, yes."

I went from there to read fiction books, which I always did like. I remember enjoying greatly *The Hobbit* and the *Lord of the Rings* trilogy when I was in middle school and high school. Those books were important to me. I was just always reading.

Anna Doel:

Did your parents belong to a religious congregation?

Nina Jablonski:

My parents were, to be generous, born into Catholic families. My father was certainly a very lapsed Catholic, as he would call it. He broadly believed in the importance of religion, but did not follow any; I never knew him to go to church except for a family funeral.

My mother was much the same, but by the time I was around nine or 10 years old, she felt it was... Actually, a little bit before that. By the time I was really quite young, she joined a congregation in the town of Boston, New York, because she felt that it was important that I have some organized religious background and instruction. And I went with my mother to St. John The Baptist Roman Catholic Church where I took my first communion when I was about seven or eight, and I was confirmed in the church through a confirmation ceremony when I was about nine and a half, almost 10 years old.

So, I did have this background in Catholicism, but I didn't go to a Catholic school. I went to public schools, which were very high quality in that area at the time. The religious instruction that I received in Sunday school and in so-called release time, religious instruction later, never really resonated with me. Firstly, it was very unscientific, and I was regularly reprimanded by nuns for disagreeing with their view of how the cosmos was created and the place of humans in nature.

I remember one particularly memorable incident when I was listening to Sister Regina Paul talk about the angels painting the sky blue, and I raised my hand and I said, "Sister, the angels didn't paint the sky blue. My father told me that the sky is made blue by the refraction of light off dust particles, which imparts a blue color to the human eye."

Needless to say, I was not popular. I got slapped on the knuckles and put in a corner, and the nuns who gave us religious instruction on Sunday really played very strong favorites. I was always relegated to the back of the room, and at Christmas or Easter time, I would get the most trivial and meaningless of the presents, whereas the children who were more supplicatory to the nuns would get these grand rosaries and prayer books and so forth. I realized then that I cut a path for myself that wasn't going to necessarily be popular.

Anna Doel:

You mentioned that you went to public schools. Could you tell me a bit more about your school time?

Nina Jablonski:

I was very fortunate. My parents, living in this rural area, wanted to make sure that I went to a good public school system. And in the town of Hamburg, which was close to North Boston, the schools were noted for high quality. And remember, we're talking here at a time I was entering kindergarten in 1958, so we're talking immediately post-Sputnik, when American education was undergoing a major revolution. It was "let's put money into early childhood education because we needed to be competitive on the international stage, including in science, in the sciences." And I benefited from really good public school education.

I went into the town of Hamburg for kindergarten, but then when I started first grade, we actually had a new elementary school quite close to our home that had been built post-Sputnik. This was the Boston Valley Elementary School, and I went there for grades one through six. It was an excellent school, and we had really first-class teachers.

After that, I went to what was then called the Hamburg Central Junior High School in the town of Hamburg, and then the Hamburg Senior High School. So I was in the Hamburg, New York school system throughout, but in a series of four different schools, including the one year that I had in kindergarten at the Charlotte Street Elementary School in Hamburg.

Anna Doel:

How would you get to school and back home?

Nina Jablonski:

In kindergarten, my parents brought me to school because there was no bus service, so I went in my parents' very, very falling-apart old Chevy van. Then when I started going to first grade, I went to school on the school bus. This was very difficult for me initially because, to be honest, I was not very well socialized as a child. I grew up with my mother, and I was very articulate from a young age. She was extremely well-spoken, so I could speak well, but I had very little experience in socializing with children of my own age. I had known my cousins, I would meet them occasionally for family gatherings, but I didn't know how to play with kids.

So the whole idea of getting on the school bus was a major trauma. I remember being really seized with panic. When we started using the school bus, my mother brought me to the bus stop and I would get on the bus, and I remember being just riveted with fear that I had to sit on this bus with people I didn't know. The bus driver was extremely nice, very, very kind and solicitous to all the children, and he recognized that I was quite terrorized by this experience, and he did his level best. But for the first few weeks, I was pretty much a nervous wreck.

I remember, as one does, these vivid little experiences that cause great anxiety. All the kids going to elementary school had these big manila name tags so that they wouldn't get lost. It was with our name, the name of our home room teacher, and the number of the bus. I was on bus 62, and I had this little manila tag. I remember being so seized with anxiety that I was chewing this tag. So I had this wet dog-chewed tag around my neck for weeks. You may laugh at it now because you realize this was such a small thing, but for a little girl not knowing how to comport herself in company, this was a big thing.

Needless to say, I got over it. I figured it out, and I made friends eventually. I was never a popular girl in elementary school. I was always reading, being studious, and it took me a while really to socialize, to figure out how to be friends, how to help other people, and to accept help from others. I was very good with my teachers, because teachers were like my mom, my doctor Erika, and my father. Teachers, I could get along with famously. But with kids, it was a far greater challenge. But I really liked school, and by the second grade I was doing really well.

Anna Doel:

What did you like about school the most?

Nina Jablonski:

I loved learning. I just loved it. I just loved learning stuff. To be honest, I also liked being rewarded for achievement. I liked getting A's, and little gold stars, and all this. I wasn't good at social things. On Valentine's Day, I wouldn't get very many valentines, because I wasn't so good at associating with my peers. But I gradually learned more about this. But mostly, I didn't go to school for socializing.

I just loved learning, and I especially liked learning about science, but also history. Math, I did okay, and I liked math early on, but girls didn't get a lot of reinforcement for studying math back in the 1950s and early 1960s. Some of my teachers were very encouraging in math, but others were, "It's not so important." I feel badly that I think, partly as a result of them not pushing me hard on math, I was never as interested in math as I could have been.

But certainly, there was a lot of stimulation, and we were encouraged to learn. It's like, "Okay, you're interested in astronomy? Go look at the stars. Go read a book about astronomy. Chemistry? Here." The teachers were really excellent, and they worked with the librarians to make sure the kids could fulfill their interests. To this day, I treasure the fact that I had these elementary school teachers who were basically like surrogate parents, providing all these learning opportunities for me. I had no clear idea of what I wanted to do when I grew up. In fact, I didn't have a clear idea for a very long time. I just knew that I wanted to learn.

Anna Doel:

How much did your life change in middle school?

Nina Jablonski:

It changed a lot because, in middle school, you are really trying to figure out what it means to be something approaching an adult. I had really flown through elementary school, doing very well, and being rewarded as an avid learner. When I was in middle school, there was so much more importance that was placed on developing good peer group relationships, and having a social life, and this being a really important focus of life.

I think coming around to being a social animal, and also coming into physical maturity in the ages 13, 14, 15, the combination of these, the sort of social, and physical, and physiological changes were really quite dramatic. Like every teenager, I went through major ructions with my parents at the time. I wanted to talk over the phone with my friends. They didn't want me to talk over the phone so much. They didn't want me to listen to my transistor radio. I was still reading avidly, but I was developing all of these teenage interests.



I also wanted to look cool, look nice. Now, I had been taught how to sew by my mother, and I learned how to sew well when I was 14 years old in our home economics class. So I actually spent a lot of time sewing outfits for myself, for my mom, and basically for anybody. It was something that I was really good at, and that I enjoyed. So the whole scope of activity really changed. I became more social. I learned, haltingly, but effectively, how to become more social, how to become part of an organization, and work effectively with other young women especially.

I was in the school orchestra, I forgot to say that, at age nine, I had begun learning the violin, which was part of our wonderful elementary school opportunities. We actually had violin lessons, and other instrument lessons that were provided, and children could become parts of early ensembles. I carried this through junior high school and high school. So I was playing in a string quartet, and an orchestra in middle school and in high school.

I was becoming a more well-rounded individual continuing to read and to study. But things had definitely broadened out, and I was becoming more of a social animal, even though still quite awkwardly social, and enjoying a lot of a physical activities and sewing, which turned into its own social currency because I could sew things for people. I could sew my own outfits that would look cool, at a time when we couldn't afford to buy anything from the store.

So it was an interesting time. I don't know of any teenager who has an easy time of it, especially during their early teens. It's just the time of turbulent readjustment and trying to figure out what it means to be an adult. If truth be told, for most people, this is always an act in progress.

Anna Doel:

This is a bit of a left-field question, but when you mentioned your skills in sewing, I became curious. What would be considered a cool outfit at that time for you?

Nina Jablonski:

This was the height of the Mary Quant miniskirt fashion series in the UK and in the US. So I would make myself short skirts, short dresses. I got in trouble in the 9th grade for having a dress that was too short, because we had a very strict “no shorter than four inches above the knee” dress code. I was sent home once for having a self-made dress, it was great, but it was too short according to the martinet who measured these things at our school.

I sewed lots of blouses, dresses, especially skirts. I remember vividly, one really rocking pair of hot pants that were made out of a dark brown twill material, all cotton, with white top stitching. They were impeccable. I looked like the bee's knees because these things were important. Being able to sew these things and have them look like they were store-bought were very important. But it was definitely the miniskirt, short hot pants time. I was basically a skinny teenager, so I could wear these things and look fairly reasonable.

Anna Doel:

I'm also curious about your geographic mobility at the time you were in high school. Where could you go?

Nina Jablonski:

Well, a lot of my upbringing through high school was spent at home. My parents couldn't afford to go on very many vacations and, when we did, they were car vacations, often tied to one of my

father's conference trips. We went once to Cleveland. We went a few times to Montreal, which I really enjoyed. But mostly, I was around the home. When I was nine, our family friend Erika took me on my first airplane flight, a series of flights, to the Canadian Rockies.

Beginning then, I really got a taste for travel because I thought it was marvelous to be able to see completely different geography, topography, nature. Even though my parents could not afford to go on airplane trips at the time, I was always looking for opportunities to travel more. When I was a junior in high school, I applied to be a foreign exchange student.

In my junior year, my father experienced a heart attack. Or it might have been my sophomore year. Anyway, he had experienced a heart attack, and my parents didn't want me to go away for a full school year. But I applied to the American Field Service to be an exchange student for the summer after my junior year, and I was accepted, and I was an exchange student during that summer. That was the summer of 1970.

I was an exchange student to Belgium, and I completely fell in love with that experience. I loved my fellow exchange students because, by that time, I was much better socialized. I could hobnob and be a good friend and chat with my age mates. I made friends among the ranks of the exchange students. I loved being put into this new culture because you go into family circumstances as an exchange student and, basically, you become part of the family. I didn't go to school, but I engaged fully with the family and a young teenage daughter.

Also, it's all about language study. I not only enjoyed being in the Flemish-speaking part of Belgium, but I enjoyed learning how to speak Flemish. When you have a young teenage brain, you can learn languages very quickly. I really enjoyed that opportunity, and I brought that back with me, and I really wanted to learn more languages. I had spent some time in junior high and senior high learning Latin, and I'm very grateful for that. But I really wanted to learn more spoken languages when I got back from Belgium.

Anna Doel:

Did that connection that you mentioned with Erika Bruck continue through the years?

Nina Jablonski:

Yes. The connection with Erika Bruck continued throughout the rest of her life. She died at nearly 104 years old, and she continued to be a strong influence on me through my high school, college, and graduate school years. She outlived my parents, so the continuity with her was extremely important. She was always an influence in my life, providing educational materials, not only books, but she would do things like buy me a little microscope, and then a bigger microscope.

She cultivated my interest in music. She took me to concerts. When my parents couldn't afford to go to Kleinhans Music Hall in Buffalo to hear the Buffalo Philharmonic, or visiting guest artists, Erika would take me to concerts. It was through Erika that I listened to Pablo Casals, Julian Green, and other famous musicians, as well as listening to famous string quartets, like the Budapest String Quartet. I can't overestimate the importance of Erika in my life as someone who really reinforced the importance of capital C culture and learning.

She also exerted tremendous influence over my family in my choice of college, when that choice came upon me. My parents very much wanted me to stay at home. As an only child, they were worried about me going away to college, and what would happen to me in the big wide world.

But Erika wanted me to go to the best place that I could get into. I applied to a wide variety of colleges, including what were, at that time, called the Women's Ivy League Colleges, Vassar, Bryn Mawr, as well as Cornell, Swarthmore, and other private colleges, and the University of Buffalo, really just to suit my parents.

I had won a New York State Regents Scholarship to help me go to the University of Buffalo, so that was another reason they really wanted me to stick at home. But Erika was extremely influential, and she said, "Nina, if you can get into these better private colleges, you should go there, and I will help you." To make a long story short, I got into most of these colleges, and I decided that I wanted to go to Bryn Mawr, largely because when I visited there, the young women looked the happiest of all of the institutions that I visited. So I figured, "Okay, they must be doing something right." So, that really swung my choice.

Erika was remarkable insofar as she helped my parents pay for my education. So, she really did put her money where her mouth was when the well ran dry of my parents' own savings, because Bryn Mawr at the time was as relatively expensive as it is today, extremely expensive. When my parents ran out of their own savings, she pitched in her own money, as well as organizing a collection among the physicians at Buffalo Children's Hospital who knew my father. Basically, in the era of the early 1970s and mid-1970s, this was a GoFundMe campaign that Erika organized on my behalf.

I made it through the last year of college largely with Erika's financial support and the support of about a dozen other physicians who contributed anywhere from \$50 to \$500 toward my education. A remarkable thing to organize, and a remarkable thing to happen. As a small sideline to this, one of those physicians is still alive, and I've had the great pleasure of being able to thank him over the phone on a few occasions for what he did for me in 1974.

Anna Doel:

That's an amazing story.

Nina Jablonski:

It was an amazing thing to have happen. When you look back at it, it's even more amazing than it was at the time. At the time I thought, "Oh yeah, some people are helping. That's really nice." But you realize just how exceptional that was at the time. Physicians at Children's Hospital really liked my father. They recognized that he was trying his level best to put me through an extremely expensive course of college. There was some financial aid available, but I was taking out loans, I was working as a student. I was doing all this stuff to get myself through, but we were still running short, and people recognized, "Hey, this young woman has promise. Let's do what we can to help her through."

Anna Doel:

Did Bryn Mawr live up to your expectations?

Nina Jablonski:

Yes, as it was a superb place for me to learn how to learn. I didn't fulfill Bryn Mawr's expectations, because I lacked the discipline necessary, at least initially, to be successful. I was a very bright teenager, having been a bright child, an avid reader, and I was good at stuff, and

learning came easily. When you go to a highly competitive college/university environment, like Bryn Mawr, you realize everybody here is super bright, so you really got to pick up your game.

I had problems making a social adjustment to being completely on my own and having all the usual distractions of social life being offered to me. In my school life, in my academic life, I tended to put off writing term papers and finishing assignments until the last minute. Of course, that's a recipe for disaster. My freshman year was a series of crash and burn episodes. I got through it, but not in good shape. I never had a high grade-point average at Bryn Mawr, largely because, first of all, Bryn Mawr considered a C to be an average grade.

There was no grade inflation back then. Because I was being graded strictly, and my professors were strict, they were supportive of me, but they basically said, "Nina, you've got to get your act together here, and you've got to learn how to gradually work on assignments, like a complex term paper well in advance." By the time I was a junior and a senior, I had gotten the hang of it more, but I still was very much an act in progress in terms of personal discipline because I found it hard, especially with subjects that I didn't like, when I was taking calculus, and organic chemistry, and really genuinely difficult subjects. When I didn't want to study, I tended to privilege work on other things.

By that time, I was really getting into biology. I was a biology major. I had declared late in my sophomore year, and I was really avid about learning more biology. I spent hours sitting in the stacks of the biology library, which was a separate library on the Bryn Mawr campus, in the Science Building. I spent hours sitting in the stacks on the floor, in the chairs, just reading books, things that really excited me, looking at books that were next to books that I was looking for, the casual serendipitous discovery that one has in a library when you are really eager to learn.

Anyway, I mean that serendipity has served me well in the long term. But in the short term of doing well in my calculus course, or maybe through organic chemistry, it didn't serve me well because I tended to work on those biology projects that I was really interested in and tended to relegate these other subjects pretty much to the gutters. So, getting through Bryn Mawr was not easy for me. Bryn Mawr, however, provided this beautiful attention because my professors recognized, "Okay, this young woman is smart. She is a creative thinker. She can put a lot of interesting stuff together. She can write really well."

I benefited from having professors who would give me individual lessons in writing, they would blue-line my term papers, just like they were refereeing a peer-reviewed paper. I learned literally at the desk of multiple biology professors who were patient, tuned, and their job was to refine, and make even more acute the thinking processes of young promising scientific women. I benefited from them immeasurably.

When I think about what Bryn Mawr did for me, at some level, I failed to live up to the full dream of an Ivy League education. But what it did for me was that detailed personal instruction as to how to be a rigorous scientific thinker and writer, and that I will always value. I learned it when I was young. I learned the craft. I learned the logic well, and that has served me extremely well ever since.

Anna Doel:

By your senior year of college, did you know where you wanted to go next?

Nina Jablonski:

It was becoming clear to me. One of the things that I failed to mention early on was that I'd become really interested in evolution. By my senior year in college, I was taking courses in anthropology at Bryn Mawr, in addition to biology. I was transfixed by human evolution. I need to back up a little bit because I failed to mention that, when I was a little kid and growing up, I was very interested in fossils, in the physical remains of past life. We had fossils on our property in North Boston. I would pick up these ancient remains of animals, and I would show them to my parents. And I remember clearly my father telling me when I was literally three and a half, four years old, one of my first memories, "These are the remains of animals who lived in a great inland sea almost 400 million years ago." And I would look at them like, "Huh? What's a million? What's an inland sea? We're living in the hills here." Kids can't make sense of it.

But what I did make sense of was that there was an incredible beauty and mystery to these things, and I wanted to learn more about them. When we would go into Buffalo, I would bring the fossils into the Buffalo Museum of Science when I was six, seven, eight years old, and we would talk to the curator about the fossils. There was this low level interest in fossils and evolution.

When I was in junior high school at the age of 14, I watched a program, a National Geographic special as it was then, on one of our three channels of normal broadcast TV. I watched a special about Louis Leakey at Olduvai Gorge, which was incredibly influential, because I hadn't realized until then that one could actually study the remains of human ancestors. This blew my mind. I was 14 years old. I was in rapt attention watching this program of Louis and Mary Leakey with this so-called Zinjanthropus specimen and stone tools and talking about life back then as it existed for these human relatives or ancestors. And I said to my mom immediately at the time, "That's what I want to do when I grow up." And she was very nice. She said, "Yeah, of course, honey," like moms do. And my mom was always very supportive when I wasn't trying to come back at her about washing dishes or something.

And so that interest in human evolution, I brought into my undergraduate years at Bryn Mawr. But it really wasn't activated until late in my junior year and early in my senior year, when I realized I could put my biology background together with my interest in human evolution.

My parents desperately wanted me to be a physician and to follow in Dr. Erika Bruck's footsteps, because when you're a lower middle-class kid coming from a modest background, being a physician is not only remunerative, but it's also the major social escalator, how you get out of not necessarily a poverty ridden, but certainly a modest background and propelled fully into the middle class.

And so when I decided that medical school wasn't for me and also that it would be difficult for me to get into medical school with a not terribly stellar background, I decided that I would look for graduate schools that would be more accommodating of my interests. And there were graduate schools that were very much interested in this young woman with unusual background, because I was coming from a very good college background with an AB in biology and I wanted to study human evolution.

I was grabbed up by the University of Washington Department of Anthropology that had one of the most biologically oriented programs in what was then physical anthropology. And I leapt at that opportunity. My parents thought it was foolish, and they didn't want me to go to Seattle, Washington, firstly. And then they thought that it was foolish of me to cast my lot doing something that was so impractical as physical anthropology.

And I basically made a deal with them. I said, "Listen. Let me see how the first year goes and we'll take it from there." And they tolerated it. They didn't provide me with any financial support, my parents. Their funds were exhausted, and they didn't want to support me in what they considered to be basically a folly.

But I felt strongly that this was the right thing to do, so I went to graduate school. I was working a lot during graduate school in order to, at first, pay my own tuition and keep a roof over my head. By the end of my first year in graduate school, I was able to get tuition relief and a small stipend. And by the second year, I was fully supported. So that was a great relief.

But I still had to work throughout graduate school. I was always working in the library, working some part-time jobs somewhere, mostly in the library system, and then being a teaching assistant. And also, importantly, I knew after about the first three weeks in graduate school that I had made the right decision. I was taking courses in primate anatomy and population genetics and learning more about the details of human evolution. And I was just eating it up. It was like, "Oh my." And I was with these professors who knew so much and were so interested in me, and I felt like this was academic heaven for me.

I knew straight away that I had made the right decision for me. I never wavered. And I can't say I had an easy time in graduate school, but I loved what I was doing.

Anna Doel:

Did your parents visit you in Seattle?

Nina Jablonski:

My mother came to visit me once, close to the end of my stay there. As I indicated earlier, my parents didn't have a lot of money for air travel.

Anna Doel:

Traveling. Yeah.

Nina Jablonski:

They hardly ever took trips. And when they did later in their life, it was mostly with our friend Erika and with her financial support, because they had so little money that they wanted to put toward what they considered to be frivolous vacations. Also, my father's health by the time I was in graduate school was seriously compromised. He had a heart attack when I was in my teen years, and his heart was seriously compromised. And he was advised against air travel.

Although my parents did make some trips together in the mid-1970s, by the time I was in graduate school from '75 to '81, my father wasn't traveling by air. My mother did travel. But as I said, she only visited me once. One of my cousins visited me. But I think we have to remember that back in the 1970s, air travel was still quite rare and transcontinental air travel was seen as going to Antarctica, the equivalent of today. It wasn't an everyday occurrence. Airports were far fewer, smaller. Flight schedules were far more restricted. I traveled back home very sparingly, and I saw my family on a rare basis.

Anna Doel:

What was your life like in Seattle?

Nina Jablonski:

I loved Seattle. I loved being in a new place. And the Pacific Northwest, with which I'd had no previous experience, I thought was quite marvelous. My classmates and sometimes my professors would complain about the overcast and the drizzle. But for me, compared to the meters deep snow that I had come to experience in Buffalo when I was a child and the not very much warmer conditions outside of Philadelphia at Bryn Mawr, I thought Seattle was Valhalla in terms of climate. I really liked living there.

And I had a nice social life with my fellow graduate students and with friends. And by then, I was a pretty well socialized human being. And I lived a very modest life in my early years as a graduate student, because I had such small amounts of money to play with. I was living in tiny apartments or sharing rooms and sharing parts of houses with friends. And it was really catch-as-catch-can until I was in my last few years, when I actually could afford my own real apartment. And that was nice.

But I had a great life as a graduate student, in so far as I made some wonderful friends with my fellow graduate students. I think at this time, in your early adulthood, in your mid-twenties, you really make strong friendships. I made strong friendships in college, but I also made strong friendships with my graduate school cohorts and people on either side of that cohort. And many of those people, I'm still in touch with today.

And I learned how to be a real scholar in my own chosen discipline. I think one of the most important things I did was I chose as a supervisor a man who was a very good paleontologist, but who wasn't particularly well known. His name was Gerald Eck, and he himself was just finishing his PhD. I was his first PhD student. He was a young, avid, quite reserved professor, but a very, very good guide for me in learning the basics at paleoanthropology and everything that went into it.

And he gave me some really good advice. Although I was super interested in human evolution and human fossils, he said, "Nina, don't start out trying to study human fossils and human evolution. It is a crowded field. It is a competitive field. And it is, when you get down to it, quite an ugly field because the competition is fairly cutthroat to get access to study fossils and to be able to get into the field to do field work."

He said, "There's a lot of really, really interesting problems in the fossil record of non-human primates, especially Old World monkeys." He had studied these himself for his own dissertation work. And so I got to know a lot about the fossil record of Old World monkeys through him. And I became rapt in interest studying lineages of Old World monkeys. And that's what I ended up doing my PhD studies on, really combining my interest in comparative anatomy and in paleontology in the study of the evolution of the lineage of monkeys belonging to the genus *Theropithecus*.

So this was, it turned out, quite a wild ride, because it was super interesting and it involved me having to travel to visit various places where there were collections of skeletal and fossil materials. So I spent time as a predoctoral fellow at the Smithsonian Institution in 1977 and '78. And then I spent time working overseas as really doing basic kinds of anatomical studies at one of the few places, the few anatomical collections of the living species of *Theropithecus*, *Theropithecus gelada*, that were housed at the University of Hong Kong of all places.

That was to turn out to be a precious visit because the whole study of *Theropithecus* and the visit to dissect cadavers of *Theropithecus gelada* materials at the University of Hong Kong turned out to be an important pathway to the next step in my academic future.

I finished graduate school after six years, which was considered quite speedy at the time. I really enjoyed writing a long hand dissertation in number four pencil and then typing it into an IBM Electric typewriter in 1981, and finishing this hand typed, hand illustrated dissertation in 1981.

Anna Doel:

When you were beginning your career, how much presence and visibility did women researchers have in your field?

Nina Jablonski:

As an undergraduate, there were some really important women who had influence over me. I would point to two women scientists. One of them, and the more important of the two, I would say was Professor Jane Oppenheimer, from whom I learned embryology as a freshman biology student at Bryn Mawr. And then I studied history of science under her for two independent study courses later at Bryn Mawr. I also studied physiology under Professor Mary J. Koroly, and she was a young, extremely enthusiastic, young investigator who was committed to educating young women.

Between the two of them, Jane Oppenheimer, the older professor, Mary J. Koroly, the younger, they set these really dynamic examples of women who loved science, who saw their lives in science, who loved being absorbed by science unapologetically. And they were enormously important influences.

When I got to graduate school, women were rare in the professoriate at University of Washington at the time. And in fact, the single woman on the faculty of biological anthropology or physical anthropology at University of Washington was... And I won't name her because she was not a role model. She was, in fact, what I would consider the opposite of a role model, the classic person who was overly strict with students and seemed to punish students simply for being students and for inquiring. And she held people to unrealistically high standards. Most especially, she held the female students to these unrealistically high standards. Such female examples are really unfortunate, and I did not get along with this individual.

I had female role models of great importance during my undergraduate life. I still had Erika in my life during graduate school, who was a lifetime beacon of an example. And I was beginning to meet other women as I started mixing with other students and graduate students and their supervisors and started attending professional meetings. But at my graduate institution, I had relatively few examples.

The one person I will single out, who is actually extremely important to the APS, is Estella Leopold. Estella was someone I absolutely idolized as a graduate student. She was head of the Quaternary Research Center at University of Washington while I was there. And I would go regularly to the weekly or biweekly seminars of the Quaternary Research Center, and they would be introduced every week by Estella in her inimitable way with these beautiful, scientific, valuable introductions to the subject matter and to the person who was giving the seminar. There she was in her glory as a quite young female scientist, articulate herself, this presence of a



scientific exemplar. If there was any woman in my graduate school who was a real role model, it was Estella Leopold.

Anna Doel:

She is Aldo Leopold's daughter, correct?

Nina Jablonski:

Yes. She is still alive and kicking. I have been in contact with her in the last few years, and we now correspond mostly by email. I can't remember when I last saw her at the APS. I think she attended a meeting back in 2018, and it was just a precious reunion. I, later in my life, got to know her brother Luna Leopold when I was working in San Francisco, and he was living in the Bay Area.

And I feel that my connection with the Leopold family was extremely important, because they were just such luminaries. They were accomplished and yet modest. And they were supremely accomplished. Yes, they had the silver spoon of Aldo Leopold's genealogy in their mouths, but they were accomplished as scientists in their own right and remarkable people. So they both played enormous roles.

And I would say Estella really set an example for what a female scientist could be, this self-realized, self-actualized scientist who knew her own mind and who could make original contributions.

Anna Doel:

When you received your doctoral degree, what were your priorities, your expectations for the future?

Nina Jablonski:

Well, it's really interesting that you asked that, Anna, because I always did things fairly deliberately and I took opportunities as they came. I didn't have some glowing orb on horizon that I was heading toward. I just figured, "Let's just put one foot in front of the other and do the best we can."

When I got my PhD, my supervisor had very wisely encouraged me to study human anatomy very diligently. He knew the landscape for jobs in anthropology and paleoanthropology, and he knew at that time that the landscape was bleak for jobs in anthropology departments. And he said, "Nina, if you learn human anatomy well, and you have to learn this anyway for your comparative anatomy study, if you learn it well, you can actually teach human anatomy when you leave graduate school."

And a large part of my scientific training during my graduate years was learning to be not only knowledgeable, but proficient at teaching human gross anatomy. This was at an important time in biomedical research, because a lot of people who were employed in anatomy departments in medical schools wanted to do research in molecular biology and immunology or ultra structure biology, which all of these things were just emerging as major subjects of inquiry. There were few people who really could and were interested in teaching human gross anatomy.

And during these years of the 1980s, paleontologists who were trained in anthropology departments or in paleontology departments often got jobs teaching human gross anatomy. So I was one of these people who was ready and raring to go as a human gross anatomy teacher. I applied for anthropology jobs and didn't get anywhere. But I applied for anatomy jobs and I got somewhere.

And it was interesting. I think probably one of the most important episodes of my life happened early in 1981 when I was interviewing for jobs. And at that time, I was called by Florida State University and I was called by the University of Hong Kong by one of their American deputies. And I was called to attend interviews for both these places. The interview was going to be done in Florida. The interview was going to be done in Los Angeles for the University of Hong Kong. And I said to myself at that point, "Nina, you can go to Florida when you're 50. Go to Hong Kong now." I threw my lot in with the opportunity in Hong Kong. I had really gotten interested in living in Hong Kong when I visited there in the late 1970s when I was doing some important research work for my dissertation.

And the head of the anatomy department, where I was actually doing this work during my graduate career, asked me, "Nina, would you be interested if a job ever came available in Hong Kong? Would you be interested in me coming here as a beginning lecturer?" And I looked at him and I said, "Yeah, I think I would." Again, I've never thought about, "Oh, I've got to have a professorship here, whatever, there." It was like, "Oh, sounds good. I'll give it a try."

So by the time I finished my dissertation, I realized this study of the evolution of Old World monkeys can be done in many different places. I can continue to study it in the United States, but I could also study it from overseas. And I realized then in 1981 that China was just beginning to open up to Western business, Western science, Western academia, after the Cultural Revolution years. And I thought, "This is an excellent opportunity, because there are so few people who have the opportunity and who have the home base to allow them to work in China."

And when I interviewed successfully for the job at the University of Hong Kong, I was offered and I accepted the job. And one of the best things that I did before leaving Seattle was to take an intensive course in Mandarin Chinese during the summer of 1981, after I had finished my dissertation. And those were two and a half months extremely well spent. This intensive course was really intensive. But it was at this time that I learned the rudiments of written, spoken, and conversational in Chinese. And being able to read, write, at least in a basic way, and converse in Mandarin Chinese was going to be, I didn't know at the time, but it proved to be the passport to future work in China. So that when I actually did relocate to Hong Kong in either late August or early September in 1981, I had this instruction in Mandarin Chinese under my belt, and I immediately started taking intensive ... or not intensive because I was trying to hold down a full-time job. But I was taking actual lessons with a tutor at the University of Hong Kong so I could keep up and improve my Chinese language skills as a beginning lecturer in the Department of Anatomy at the University of Hong Kong.

Anna Doel:

What did your job involve in Hong Kong?

Nina Jablonski:

The job involved teaching gross anatomy to medical students. And within a year or so I was teaching medical students and dental students gross anatomy because we had a newly open dental school at the University of Hong Kong. I specialized in the teaching of head and neck anatomy because this had been really important to me in my own PhD research. It was natural that I would teach head and neck anatomy to medical students and to dental students. And eventually, over many years, I was at the University of Hong Kong for a total of nine years, during which I taught many aspects of gross anatomy. I was teaching medical, dental students, physical therapy students, sports therapy students, and becoming involved in many other activities as well. But my teaching was focused on the teaching of gross anatomy.

Now I was viewed as something of an oddity in my department, in my Department of Anatomy, because most of the people working there didn't teach gross anatomy. But then they went back to the lab and did gross science in embryology or experimental organismal biology of some kind. They really didn't know what to do with a paleontologist. When I was asking to go to China or go to Africa to work on collections of fossils, it was met with some skepticism. And when I would go away to these places to work, I would invariably be asked when I got back, "Nina, how was your holiday? How was your vacation?" Of course, it wasn't a holiday, it wasn't a vacation. It was work. Because you had to study fossils in the countries in which they were originally found. And this went very strongly for China, as I was come to learn, and certainly also for countries in Africa; it was no longer a case where western visiting paleontologists could take fossils with them back to their home institutions.

I was the odd man out in my Department of Anatomy for many years. And my research progressed gradually, and I figured out the ropes of being an independent researcher, the parameters for advancement in a commonwealth university, like the University of Hong Kong, were different from those in an American institution. The tenure system was different. And I was fortunate that I received tenure at the University of Hong Kong after two years of conscientious work teaching and beginning my independent research career. But after two years, if I had been in the American system, I think I would've probably gotten a very harsh review because I was trying gradually to make some research connections in China. Very, very slowly. And continuing my work on East African living primates, old world monkeys and fossil primates. And this work was going slowly because it required travel to Africa. It required money that I didn't have.

And one of the things I didn't realize when I went to the University of Hong Kong was that I couldn't apply for very many grants. The university had a small granting program for young faculty, but I mean, really small. Very modest. And I couldn't apply for funds from the National Science Foundation in the United States because I was based at an overseas institution. So I ended up casting around looking for money. I was very fortunate to begin to get funding from the Leakey Foundation early in my research career. And that was to prove of terrific importance to me, having some financial support, which was then hundreds, not thousands, of dollars, but the difference between being successful in getting into a field or museum collection or not. And I was doing research when I could, where I could, and I was teaching gross anatomy to keep body and soul together.

Anna Doel:

What were some of your research questions at that time?

Nina Jablonski:

I was really interested in trying to figure out how this lineage of *Theropithecus* monkeys, which really starts to flourish around four million years ago and especially three million years ago. We see different species are beginning in East Africa and in South Africa, doing things. By a million and a half and one million years ago, these big *Theropithecus* monkeys are literally all over sub-Saharan Africa doing really remarkable things. They were primarily a lineage of grass eating monkeys. What we now see is the ungulates on the East African savannah, if we could put the time machine in gear back to a million years ago, we would substitute a lot of grass eating monkeys for the grass eating ungulates. It was a different landscape. And I was fascinated by how these animals made a living. What were they doing? Why were they so successful? And what happened to them? a lot of my research questions were really having to do with how did this lineage of monkeys become so successful, so geographically widespread, so common in the fossil record, so often in co-occurrence with human fossils, members of the human species.

And then why was it that the living species of these monkeys live only in the highlands of central and northern Ethiopia? What happened? A lot of my research questions were built around what happened to I? How did this diversification occur, anatomical and evolutionary diversification, into different ecological regions and zones? And then how did this very successful lineage become relegated to this tiny little refuge in Ethiopia after having been so successful and so numerous? At the same time, I was beginning in the early and mid-1980s to really try to make inroads into the study of non-human primates in China. This was a very, very slow road because communication with scientific institutes in China was very difficult. I had some connections through my head of department at the University of Hong Kong. A man named Peter Lisowski, who was the professor of anatomy during my early years at the University of Hong Kong.

He provided me with an important entry into the Institute of Vertebrate Paleontology and Paleoanthropology in Beijing. And also a preliminary introduction to the Kunming Institute of Zoology in Yunnan province in southwestern China. Both these institutes were to become extremely important to me in subsequent years. But making initial connections to begin to be able to look at some fossils and begin to do some collaborative research took years and took many preliminary visits. During which a lot of trust had to be built over many cups of tea before any kind of real official research work could be done. The Chinese scientific establishment, you have to recognize, in the early 1980s, was new to international collaboration. And after the depredations of the Cultural Revolution, a lot of scientists were very hesitant to engage with westerners because they were worried that these associations would tarnish them seriously or even imperil their lives.

And so the abilities that I had to be patient and to speak Chinese really served me well during these early years. Because the fact that I was willing to come back repeatedly on visits to basically make social connections with scientists and that I could speak Chinese and I could read their literature in their own language, in Chinese characters, these facts showed them that I was going to be a collaborator in good faith and that I was going to be willing to do science on their terms. And these agreements that were reached in 1984, 1985, 1986 were of supreme importance to me going forward. By the mid-1980s, I was pursuing paleoanthropological research questions that related to the evolution of Old World monkeys in Africa, all of this my old friend *Theropithecus* and what happened to them. And then all this work on the unique endemic species of monkeys that had evolved in China, about which very little was known.

Anna Doel:

I'm trying to picture your life in Hong Kong, and it sounds fascinating, professionally demanding, and I wonder if it was also lonely.

Nina Jablonski:

That was the word I was going to answer back to you. It was lonely. When I left graduate school, I left behind quite a good boyfriend with whom I had been associated for a few years. And we saw one another occasionally after I moved. I went back to see him, and we met in Hong Kong a few times, but he didn't move with me. And he was really pursuing his own life back in California where he was living. And by the time I was at the end of my first year at the University of Hong Kong, we had broken up amiably, amicably, and had gone our separate ways. For much of those first years, first few years, I was trying to figure out how to live as a single Western woman. I moved there at age 27, so I was in my late twenties, with a fresh PhD in hand, but with no real ties to anyone there. By that time, thank goodness, I had the ability to make good friends.

And I did make some wonderful good friends among my faculty members at the University of Hong Kong Department of Anatomy. Many of them in the nascent dental school, the Prince Philip Dental Hospital and the University of Hong Kong Dental School, which was newly founded in 1981. And the other area where I developed a lot of important social relationships was in the community of forensic pathologists, an unlikely set of associations, which requires some explanation. Early in my career at the University of Hong Kong, I became associated with a very prestigious oral anatomist who had been recruited by the University of Hong Kong to teach oral anatomy to these new dental students. Professor Ronald Fearnhead, a very noted professor of oral anatomy, oral histology, and forensic science in the UK at University College, London. Had been recruited after he had retired in London to the University of Hong Kong. And I fell under his supervision, especially as I was working to teach dental students.

And Professor Fearnhead was a remarkable mentor for me. Probably after Jane Oppenheimer, and my PhD supervisor, Gerald Eck, he was the next big influence, professional influence in my life. He was a real salt of the earth guy who was a World War II veteran. He had been captured as a British soldier. He had been captured four times as a POW and had escaped from Polish and German POW camps on every occasion. He rolled his own cigarettes. And there was hardly a time when I was in his company when he wasn't rolling a cigarette and getting the tobacco from his beautiful little silver pouch. Anyway, he was a remarkable scientist. And early in his own work at the University of Hong Kong, the forensic pathology service had gotten in touch with him. The government Forensic Pathology Service had gotten in touch with him because he was a noted forensic anatomist. He had helped solve many important cases, including the Christie case in the UK. And when he came to Hong Kong, he was interested in doing forensic work, and he became involved with doing some consulting for the Forensic Pathology Service.

But early, or I guess it was toward the middle or late part of 1982, he called me into his office, and he said, "Nina, you know something about human anatomy and skeletal biology, don't you?" And I said, "Well, yes, of course. I had to learn this in my training as a physical anthropologist and as a gross anatomist. So yes, I know something about it." And he said, "So you can learn how to tell one skeleton from another and the age of skeletons?" I said, "Yeah. I've got some of the tools anyway." He said, "Well, we have an interesting challenge that was given to us by the forensic pathologists." This was the first I'd heard of his association with the forensic pathologists. He said, "They contacted me a few days ago because, after the last big rainstorm ...

" I think it was actually a typhoon. What had happened was that many of the secondary burials in the new territories of Hong Kong, these are burials that were in urns, bones that were contained in funerary urns and placed on hillsides in designated burial areas in Hong Kong.

Many of these had washed down the hillside and there was a deposit of bones and broken pottery at the base of this hillside. And he said, "The forensic pathologists are at wits end because they can't tell. There appear to have been somewhere between 18 and 20 individuals or collections of bones that are all now commingled at the bottom of this hillside. And the relatives are eagerly trying to get the remains of their ancestors back." And he said, "Do you think you can help?" This was the beginning of Nina's hesitant career as a forensic anatomist and working with the Forensic Pathology Service. I say hesitant because this certainly wasn't planned. But as I said earlier, I've always liked challenges and I take opportunities as they come. And this was seemingly an interesting opportunity. And I wanted to please my new professor of head and neck and oral anatomy and show him that I was eager and able.

So I worked on this forensic case. The first of what were to be many forensic cases that I ended up working on in Hong Kong with a group of absolutely wonderful forensic pathologists with whom I am still in contact in fact. Wonderful people, excellent scientists. And if you have ever met a forensic pathologist, they have seen everything in life and death, and they have an extremely good perspective on human existence. And to a person, they have good senses of humor, they have to. So I've been associated with forensic pathologists as well as ... socially and not just professionally, as well as friends who I gathered from the University of Hong Kong Dental School and Medical School over the years.

And some of those friendships were extremely important to me, and they included future romantic relationships, and all manner of professional and personal relationships were really formed in that crucible of the University of Hong Kong and the Forensic Pathology Service. I think living in Hong Kong as an expatriate, you realize that you have to make a family around you, just like a foreign diplomat or someone working for a bank or an insurance company. You don't have any family, so you make a family out of the people around you. And so we had, those of us who worked for the university and were of a certain age, all grew up as young adults and to adults together. And we had a rich social life, which was a lot of fun.

Anna Doel:

What made you leave Hong Kong and how did the shift to human anthropology come about?

Nina Jablonski:

In 1987 ... Let's back up. In 1984, the government of Hong Kong began negotiating with China for the peaceful transfer of Hong Kong to China, which would be affected after the expiration of the 99-year lease. These negotiations began in 1984 and they were completed in 1987 with the issuance of a formal declaration and white paper about what would happen in Hong Kong in the next 50 years. Going forward from late 1989, for the next 50 years. In 1987, after this agreement was reached, there was tremendous tumult in Hong Kong. And many people, including many of my students, were up in arms over their future because they saw their lives ahead of them under the specter of Chinese communist rule. And they were fearful of their own futures, anxiety ridden about their own futures. And although they continued to thrive in their education at the University of Hong Kong ... Very, very smart kids.

Some of them would turn to me and say, "Professor Jablonski, it's easy for you to say that everything's going to be okay because you have a foreign passport. I don't. I am going to be at the whim of the Chinese government as I go forward as a young physician or dentist." In these years, I felt a certain amount of pressure from my students that I had never felt before. And a level of anxiety and a very low level of resentment that I had never experienced before. I met the man who was to become my husband in 1989, and I can tell you more about this. We got married in August 1989. By the time that we got married, we realized both of us had been in Hong Kong for years. And we realized that it was really time to move on. Hong Kong is physically small as well as socially small, and we had really gotten as much out of the experience of being in Hong Kong as we could.

We'd both done a lot of traveling independently. And from 1988 onward, we had done a lot of traveling together, but we realized things were changing and they were changing rapidly. And in the lead up to the handover of Hong Kong, the anxiety was only going to get worse. I was fortunate to be offered a position at the University of Western Australia. One of my longtime colleagues and mentors who had worked all over the world, in the UK, in the US, and then in Australia, was interested in employing at the University of Western Australia, in the school, what was then the Department of Anatomy and Human Biology. And I was interested in this position for many reasons, getting out of Hong Kong being one of them. And the opportunity to finally be able to teach much more of my evolutionary background. Human biology is, for all intents and purposes, biological anthropology. And I saw this as a wonderful opportunity for me to really become what I had always wanted to become, albeit some years delayed.

It took a while for us to be able to relocate to the University of Western Australia. This is partly because in 1989, the Tiananmen Uprising in June 1989 had led to a surge of visa applications for Chinese people wanting to emigrate to Australia. We had to wait in the queue with everybody else. Fortunately, I was offered the job. The University of Western Australia arranged for my work visa. And we were able to relocate to Western Australia not long after the issuance of that visa. And we were there I think beginning from about September 1990 onwards. I left Hong Kong basically because the place had run its course for me and for us, me and my husband George. And because of this underlying uncertainty and incipient resentment that existed around people who had the right to leave because they had a foreign passport and those who would have to stay because they had been born in Hong Kong.

Anna Doel:

Was it a big shift, a big difference, moving to Australia?

Nina Jablonski:

By that time, I had the hang of being a faculty member. I had been at the University of Hong Kong for nine years and I had learned the ropes of being a faculty member. What I had to learn there was teaching both anatomy and human biology and becoming much more active in writing grants. As I mentioned at the University of Hong Kong, my ability to write grants was limited because there were very few granting agencies or foundations that would accept applications from me. At the University of Western Australia, writing grants was the thing. And I became what is now commonplace, a more or less permanent, almost full-time writer. I think in the second or third year of my employ at the University of Western Australia, I wrote 16 different

grant applications for Australian Research Council, the Australian Medical Research Council. Basically, anybody who would possibly give me money I was writing grants for.

I felt at home insofar as the work was familiar. And there were other biological anthropologists around me. Not only the person who had hired me, Professor Charles Oxnard, but other colleagues who were also trained in biological anthropology. So that was really nice because we could all speak the same language.

And I was able to continue my paleontological work there. Very importantly, I was able to start my work unexpectedly on the evolution of human skin and skin pigmentation during those years.

Anna Doel:

I'm curious about this next page of your career, and I'm also wondering about your collaboration with your husband.

Nina Jablonski:

All of this will become clear.

I started working in the University of Western Australia in Perth in late 1990. In 1991, I was asked by one of my colleagues, Professor Bill Blumer, if I would basically fill in for him for a lecture on skin to be given to the class he was teaching in Introduction to Human Biology, literally 101. He asked me, because it's normal for people to ask their colleagues, will you fill in for me while I go to a conference? He was going to a conference somewhere. He was going to be away for a particular lecture. And he thought, okay, Nina can teach this class on skin.

When he asked me, I said, "Well, okay. I'll figure it out somehow." And he said, "Oh, you certainly know something about skin." Of course, I didn't know all that much, but I had books on anatomy, and I looked at books on histology. I also went through my physical reprint collection that I had brought with me carefully from the University of Hong Kong and looked through the papers that I had that pertained to the evolution of skin.

I was talking to human biology students, so I wanted to talk to them about something relevant to anatomy and evolution of skin. How did humans get naked skin? How did humans get skin that came in colors? I was terrifically frustrated when I was preparing this lecture by the dearth of knowledge on these evolutionary subjects. I just did the best I could. Giving a lecture that was mostly about structure, but also about the evolution of the function of skin.

So, okay, I put that behind me. Literally three weeks after giving that lecture, I was in my home department of anatomy and human biology at one of our biweekly seminars. The person giving the seminar that week was Professor Fiona Stanley, a renowned epidemiologist who was a clinician working on the epidemiology of one of the most common kinds of birth defects, namely neural tube defects such as spina bifida.

Professor Stanley's lecture was going into especially the important role played by folate, one of the B vitamins, in the normal development of human embryos, and how folate deficiency could lead to neural tube defects. And she and her collaborator, Dr. Carol Bower, had been working to show using really good case control study frameworks. That in fact folate deficiencies were causally related to neural tube defects. Professor Stanley's group had been one of the first in the world to recommend what is now common, which is folate supplementation for women during pregnancy.



Anyway, I'm sitting there in the back of Professor Stanley's lecture. I started to get very excited when I realized that folate deficiency was related to this very critical type of birth defect, which could cause immediate mortality, and certainly a high level of morbidity and compromised life circumstances. The reason I got excited was that one of the papers that I had read three weeks before for the preparation of that skin lecture had been about the sensitivity of serum folate to simulated sunlight.

So I was sitting there saying, hold on. If you have a physical environmental factor like sunlight, like ultraviolet radiation from sunlight, that can break down or partly break down a vitamin folate that is necessary for normal cellular duplication, including DNA duplication, and thence early embryonic development, if you have something that is so potent with respect to evolution, this has to be the root of understanding the evolution of human skin pigmentation. Because you would need naked skin, some method to protect skin from the harmful effects of ultraviolet radiation. I knew from my reading weeks before that the melanin, or more accurately the eumelanin polymer, the pigment that imparts dark color to skin, was in fact a very powerful absorber of ultraviolet radiation.

Literally, it was one of those real light bulb moments. I was bouncing around in my seat and I almost launched at Professor Stanley. At the end of this lecture, I said, "Have you thought about this? Have you thought about the role that..." I mean, a very, very bright and engaged scientist, and she looked at me with sort of bemused interest. She said, "Well, you really should come and talk to me and Dr. Carol Bower," which I did.

But the key thing is that this research program started by complete accident. I never set out to study human variation, just even really study very much about humans, let alone something potentially as controversial as studying skin pigmentation variation. When I had to teach courses or classes in human variation while I was a graduate student, this was one of our requirements. We teach a course and introduction to physical anthropology, including the basis of human variation.

When I had to speak about human variation to students previously, I dreaded it because I thought, I'm going to do some misstep. I'm going to say something wrong. Because talking about human diversity in the context of race was as fraught then as it is now, and getting the right vocabulary and framing things correctly is difficult. I had gotten somewhat better at it teaching human biology students early on in my years at the University of Western Australia.

But I realized, okay, this topic is too important to put down if we can really begin to understand the biological basis for the variation in human skin pigmentation. If future generations of teachers and scholars and students don't find this dried gulch of information about evolution, instead they can find some working hypothesis, some theoretical framework, this is worth pursuing.

So the skin program, the skin pigmentation research program, started then. It started slowly, and it started in this very sort of funny and very higgledy-piggledy way. Thank goodness Dr. Carol Bower, and less so Professor Fiona Stanley, helped me a lot in those early years. We did some preliminary studies. Carol helped me frame some hypotheses that were sensible in epidemiology. We got some students working on this. But the lead up to really a big program in the evolution of human skin and skin pigmentation was to be some years off still.

But you asked importantly about the role played by my husband, George Chaplin. It's important for me to back up a little bit to say that George and I got together first as friends. We were

introduced by a mutual friend, and neither of us had romantic intentions about the other. We simply loved talking about the world, about science, about things that were not well understood. He came from a completely different background. He had a background in business, in all kinds of business and in banking. He had been working in Hong Kong in publishing, so I didn't expect him to be interested in science. But he was riveted by scientific questions. As it turns out, he always wanted to be a geologist. And we were talking about lots of things. He wanted to know everything in our early conversations about human evolution, about the evolution of human bipedalism, about the environmental context for human evolution.

He had an insatiable intellectual appetite for all these things related to human evolution. Our conversations would just go on for hours and hours and hours. He was not only attentive and interested, but also, he had a creative mind of his own. So even though he wasn't so-called trained in science, he had a very rigorous, logical, and scientific mind, and he would ask great questions.

We end up working on research projects together prior to our work on skin pigmentation. But in Australia, I realized he might be brought usefully into this research program. In 1991, I began to be extremely interested not only in this all the skin stuff, but I began to be really interested by the prospect of doing spatial analyses of data using geographic information systems technology, which was relatively new.

The University of Western Australia was a hub of GIS development. Initially I wanted to be able to use geographic information systems, including spatial statistics, to look at the interaction of different environmental circumstances with the distributions of species of primates in the present and in the past.

But I realized also when I started this interest in skin and skin pigmentation that these GIS technologies could really be usefully applied to these questions of the evolution of skin pigmentation with reference to the patterns of ultraviolet radiation on the Earth's surface. I started taking some courses in geographic information systems.

But as soon as George saw what I was beginning to learn, he gravitated immediately to it. He was born an Englishman. Like many English kids growing up, he had a globe with all of the British colonies in pink on it. He used to spend a lot of his time looking at this globe, spinning it by the side of his bed. And so he had a human interest, an incredible depth of knowledge in geography, when I met him.

When he realized that you could basically do computerized mapping and that you could interrogate different phenomena, topography, environmental parameters, including sunlight intensity, precipitation, and the distributions of people and animals on the Earth's surface, it was like, "Whoa!". We can look at this in a computer-aided format. He not only got interested in GIS, he started learning it more rigorously and more formally while we were in Australia. We realized that GIS was going to be an enormously important tool for working on questions of skin pigmentation evolution going forward.

Really, the collaboration between me and George became really important and tight when we started working on the evolution of skin pigmentation.

In 1990... Well, actually to back up a little bit, we ended up moving to the United States in the mid-1990s. This was because, not long after we arrived in Perth, Australia, my mother told me over the phone in a conversation, we had barely gotten to Australia, and she said, "Nina, I have

inoperable breast cancer. I didn't want to tell you when you were getting ready to go to Australia." I'm at the other end of the phone pulling out my hair. But she said, "I didn't want to worry you. Everything will be all right."

Of course, everything wasn't all right, but I knew that she was in good medical hands. To make a long story short, we knew, George and I, that we had family ties. Both of us had parents who were getting older. My father had already died, but my mother was obviously ailing. Living in Perth, Australia with my mother being in Buffalo, New York, the geographic problems were formidable in the days before cheap phone calls. No Skype, no FaceTime, no nothing. Everything was really expensive, including a stamp. Flying home was prohibitive.

We realized that in order for us to basically help take care of my mother and take care of George's parents who were aging, still in good form in the UK but getting older, that we really had to move back to the Northern Hemisphere. I started looking for jobs. George helped me go through the backs of magazines looking for jobs in the United States.

In late 1994, we found a job at the California Academy of Sciences that looked appropriate. Long story short, I went there for an interview. I interviewed successfully. They really wanted a female curator in their ranks at the time. And we prepared in late 1994 to relocate to San Francisco.

This came right as our work on the evolution of skin pigmentation was getting rolling. That research program had a slow start because we realized that in order for us to be able to test any rigorous framework for the evolution of skin pigmentation, we had to gather a lot of information on the color of people's skin worldwide. And on the physical forces that people were subjected to: sunlight, including ultraviolet radiation, precipitation, temperature. These databases of physical environmental factors were just being assembled in a digital form.

It turned out to be extremely important that in, I think it was 1997, we contacted a woman at the National Oceanic and Atmospheric Administration, Elizabeth Weatherhead, Betsy as she's known. Very graciously, we wrote to her, and she very graciously sent us what was to be our version of the Rosetta Stone. She sent us a DVD of data from the NASA TOMS-7 satellite total ozone mapping spectrophotometer satellite that showed measurements of ultraviolet radiation at the Earth's surface as collected by NASA.

Before this, there were no digital resources for solar radiation or ultraviolet radiation of the Earth's surface. People have been able to directly measure these things from a few points on the Earth's surface. They knew that there was a probably very strong relationship between the intensity of ultraviolet radiation and the darkness of skin pigmentation. That much people had been able to work out quite nicely by the 1950s, but especially by the early 1980s.

But we couldn't really put on a global framework by interrogating all of ultraviolet radiation on the Earth's surface with all available information on human skin pigmentation until we came along and had access to this massive database.

So this is where George's expertise in GIS, and really in database and IT, really came to the fore. Because when we got this enormous database of 191 million data points from NASA, I looked at it like, this is way beyond my abilities.

But he said, "Hold on." By this time, he had advanced in his own knowledge of GIS. He had taught himself a lot having taken some preliminary courses. He knew a lot about importing data,

processing data, and visualizing geographic data. And he started to prepare these visualizations of ultraviolet radiation at the Earth's surface.

When he showed me these, I was terrifically excited because he said, "Yeah, we can not only look at these patterns of ultraviolet radiation intensity, but we can also do spatial statistics. Look at the strength of correlation between ultraviolet radiation and skin pigmentation as measured by skin reflectance at various parts of the Earth's surface."

This was really the key to going forward. Because we could test hypotheses about the relationship between skin pigmentation and ultraviolet radiation on a global basis. This truly, that's why the collaboration with George and the use of GIS was central to this research program. We could not have unlocked really the keys to the strength of correlation and ultimately to the explanatory frameworks behind this correlation without that empirical work.

Anna Doel:

I have a cluster of questions about the skin pigmentation program. I'll try to separate them and have them make sense.

Like for example, did the new technologies that you employed, new methods, help in any way with the skepticism in the field, in anthropology, about studying human skin evolution in general?

Nina Jablonski:

It definitely helped. Because up to that point, hypotheses about the evolution of skin pigmentation were, for lack of a better expression, done on a more or less seat-of-the-pants basis. People had certainly noted the longitudinal gradient in skin pigmentation whereby most people, indigenous people living near or at the equator, were more darkly pigmented than those living closer to the poles. This had been noted for a very long time and had been documented.

But no one had really come up with a strong hypothesis. There were lots of ideas out there about how ultraviolet radiation might be affecting skin pigmentation evolution, including by causing skin cancer in individuals. This hypothesis had been disproven by the 1960s. There were other things that were coming forward. That human pigmentation had evolved as a mode of camouflage for humans living in dense, tropical forested environments. That the melanin in skin pigmentation imparted antimicrobial properties to skin, and this was very important in tropical environments. There were all sorts of these hypotheses which have been put forward, again without much of an empirical basis.

And when we came into this, we recognized firstly that the bar was high. That in order to put forward a possible explanation that there would have to be a clear testable framework, a clear hypothesis about the relationship between the strength of ultraviolet radiation and the darkness or lightness of pigmentation. And that we had to frame these discussions very strongly in the context of natural selection.

I think this is where a lot of my early scientific training in logic and explanation really came to the fore because I realized that a paper like this had to be ironclad. Thank goodness George had a similar logical framework coming from his background in business and management and banking. He was an extremely logical organizer of facts. And the two of us together were really good at creating what was to be, I don't want to say an unassailable framework, but certainly, a robust testament framework upon which we were able to do our preliminary work, write our

paper, published in the year 2000, which was to be, if I do say so, a seminal paper in the field of biological anthropology, because it was so empirically strong, and it had the explication of the ramifications of skin pigmentation evolution clearly laid out so that it provided a way forward for the research program of ours, but of other peoples as well.

So yes, the GIS, the data frameworks, the hypothesis testing, these were critical in sort of selling, as it were, the hypothesis within anthropology and beyond. And it's important to say that this hypothesis was grasped and accepted much more readily among sort of general zoologists, comparative biologists, physicians and epidemiologists before it was accepted among anthropologists. Anthropologists tend to be very skeptical about sort of new breakthrough hypotheses. They figure, oh, it's too good to be true, this can't be. But gradually, colleagues looked at this carefully, interrogated it, and recognized that there was something there of value upon which much more could be built.

Within a few years of our publication, by 2001, certainly early 2002, interest in our work had really begun to take off. And I was astonished by how many different constituencies from neurology to epidemiology, to science education were coming forward. People were approaching us and saying, what difference does this make? Can you explain this more fully? Can you help us understand the implications of this for our understanding of human evolution and for the understanding of health?

Anna Doel:

How strenuous was it to secure funding for this program?

Nina Jablonski:

I know to this day it's been almost mission impossible. Apart from donations of software, this research program has gone almost without funding in itself. The early trail of unsuccessful research grants started in Australia with research grants written to the Australian Research Council, to the Australian Medical and Health Research Council. And basically, we were ... I don't want to say laughed out of court, but we were basically told that this hypothesis about the connection between skin pigmentation and ultraviolet radiation intensity was fanciful and you really couldn't test it, and you need huge samples of humans, and you couldn't test it empirically because you can't put a lot of people under ultraviolet radiation, let alone pregnant women being exposed to ultraviolet radiation early in their pregnancies.

Our approach, which was basically to do a variety of different epidemiological studies to try to really unlock the causality by looking really rigorously at epidemiological data within and outside of Australia, all of our research grant proposals were failures. And similarly, when I came to the United States and began applying for grants, there was no one who on the American side of the ledger who was really interested in this, certainly the experimental work for reasons of human subjects clearance was completely off. I did not want to engage in experimental work, exposing experimental nude mice or nude dogs to ultraviolet radiation. I didn't think that this was humane or warranted. So our attempts to secure funding for epidemiological studies through government and private foundations were unsuccessful because the people didn't see how this might be relevant to human health today.

It was very difficult. Thank goodness, I was getting smart sort of dribbles of money from my own institution, the California Academy of Sciences, and thank goodness doubly for the fact that

this research didn't require a lot of money. We had the software donations, we were doing the studies that we needed to do, we were collecting data basically as part of our own research time, we were collecting the necessary data on skin pigmentation in indigenous peoples in the world. And this was basically a research program that was very oriented toward library work, the collection of data that had already been collected. So basically creating huge databases of previously collected data and the supporting materials doing huge data and data interrogation efforts, and these things by themselves didn't take a lot of money.

So to this day, the only money that I've ever received for this research was in 2005, the Alphonse Fletcher Senior Fellowship Award that I got as a result of having my research noticed by Henry Lewis Gates, Jr., and colleagues who were vetting the applications for the Alphonse Fletcher Senior Fellowship Awards, which announced first in 2004. It's funny, I received ... basically won one grant, one fellowship award for this in 2005. That was the first award. The second award was a Guggenheim Fellowship in 2012 to follow up on some of the health implications of our research. But all of the early work, all of the basic research was basically done on a catch-as-catch-can on the basis of little dribbles of money that I was able to get from my home departments, and basically just using our research time to put the necessary data together and conduct the necessary analysis.

Anna Doel:

Did you invite your students to participate in this program?

Nina Jablonski:

Yes, yes. And especially at the University of Western Australia, I've had access to students who wanted to pursue honors degrees and other projects. And I did get some students to work on these materials. And in fact, I was just reviewing the other day in my office, a few preliminary student projects and so forth. But again, I couldn't get any dissertation students interested. The primary reason being that I couldn't secure research funding for what would have to be their own epidemiological research projects. This was a great disappointment because I was hoping that I could get a PhD student or two who could work with me and Carol Bower and Professor Fiona Stanley on really expanding our epidemiological research program.

We did manage between just the two of us, me and Carol, to do quite a bit. We wrote lots of grants and we tried our level best to get money, including money for support of dissertation writing and researching students, but without success.

Anna Doel:

Nina, I wonder if you'd be comfortable with this kind of exercise, but oddly enough, it's been good practice in my field—the history of science—to share grant failures as well as grant successes. Would you be comfortable in saying which institutions turned you down?

Nina Jablonski:

Yeah.

Anna Doel:

I would think, the NIH.

Nina Jablonski:

Yes. But NIH, NSF, and before them, the Medical and Health Research Council of Australia, and the Australian Research Council, and the March of Dimes foundation in this country, all of them turned me down. And I think there were some other private foundations. I'm now trying to remember the health-related foundations that specifically dealt with neural tube defects to which we made applications in the mid and late 1990s. So yes, George used to joke that we could have started a recycling company with all of the failed grant applications that went out, as well as the failed job applications that we had generated over the years.

I mean, this was a private joke that later got widely disseminated, but back then there was no virtual transmission, electronic transmission of anything. You sent 10 copies of a grant proposal or whatever, often at great expense by fledgling courier services overseas or within the country, and just hoped for the best. And it became something of a running joke that most of these were unsuccessful.

Anna Doel:

I know funding in anthropology per se is tight. You didn't expect too much to come from that?

Nina Jablonski:

No. And what's interesting is that when our work became well established and accepted, and by the time, quite honestly, when we didn't need ourselves, the money for the continuation of the research programs, then that the foundation such as the National Science Foundation and NIH and private foundations began to recognize that this was a worthwhile subject of inquiry. And so for instance, one of my last PhD students, Dr. Tina Lasisi, who's worked on the evolution of human hair texture, she was able to get a series of good grants largely built on the framework that we had built studying the evolution of human skin pigmentation. Dr. Lasisi had herself used that framework of the evolution of human skin pigmentation to frame her own inquiries about the evolution of human scalp hair and hair texture. And by the time she was applying for grants in the 2000s, it was like, yeah, oh, this is old hat. This is well accepted. Yeah, okay, we'll go for it.

But when we were looking for money, we were very much out of luck. We were quite philosophical about these things because we realized that we could do a lot with little, as long as we got donations of expensive software. And here, we really benefited from having an association with ESRI, Environmental Systems Research Institute, which provided a lot of free GIS software to us in our early years. Without that boost of computing infrastructure, we would've been lost. But after that, it was a matter of basically putting in shoe leather, going to libraries, finding the resources, and doing the analysis. And many of these, the actual GIS analysis and the spatial statistical analysis, were all done by George as I described your

Anna Doel:

What made your choice to leave California and move to the East Coast?

Nina Jablonski:

Well, it was interesting. I was at the California Academy of Sciences for 12 years. They were 12 very profitable years. We arrived in late 1994, and we stayed until mid-2006. And I loved being

in a museum because, for the first time, I could go off into the field without having colleagues wondering why I wasn't at the lab bench. When you work in a typical medical school framework, people expect you to be in the lab, be running assays, be having students in lab coats, pipetting stuff. I wasn't doing that.

I could finally, for the first time, be a paleoanthropologist. I was hired primarily at the California Academy of Sciences, not on the basis of my fledgling skin color work, which was just beginning in 1994, but rather for all of my strong paleoanthropological research from Africa and Asia. And this was a museum that was dedicated primarily to systematics and taxonomy.

So my work on the evolution of Old World monkeys fit perfectly into the research program, and they loved me, and I loved being there. And I did, while I was there, a lot of fieldwork. George and I got a Fulbright Award to do work exploring for fossil primates in Nepal. We did field work with the Harvard Peabody Museum team in Pakistan. We did research in museums in Calcutta, in India. We did a lot of work there in these countries, and I was able to go to China regularly. By that time, I had a booming research program in China based mostly at the Kunming Institute of Zoology and at the Yunnan Cultural Relics and Archeology Institute, but also sometimes time spent at the Institute of Vertebrate Paleontology and Paleoanthropology in Beijing.

I was getting money for all of those projects and spending a lot of time in the field, and museums loved people who go to the field. So finally, I had a good match. But over the years, the match became less good, partly because a museum is a small intellectual community. While I was a curator, I was doing what's now called adjunct teaching at Stanford. I was an honorary professor of biological anthropology at Stanford. I was teaching courses once every semester, primate evolution, primate ecology. Basically, they needed somebody to teach this body of work that was not represented in their own faculty. And I happily leapt on the opportunity because Stanford paid well, my museum didn't, and also I liked being around university students. I realized, especially over the years of teaching at Stanford, that I really missed being around university students and the challenge of their questions.

By 2005, things at my museum had gotten to the point where I was ready to take the leap and leave. I wanted to be in a bigger intellectual environment, a more challenging intellectual environment. And I've begun to run into some real barricades not to my research program so much as to my engagement with the California Academy of Sciences as a scientist. There was some degree of, let's just put lack of interest, and sometimes an animated lack of interest in bringing humans into the exhibits at the California Academy of Sciences. I saw this as a key to the success of the institution. People want to learn about themselves. They want to learn about themselves as products of evolution, and they want to learn about cool stuff, you know, can teach them about diatoms and nematodes and orchids and other products of the natural world once you get them in the door with dinosaurs and mummies and human evolution.

So to make a long story short, I felt by 2005 that I was getting a lot of recognition for the skin color work, as well as my paleoanthropological work that I was by then considered a leader in biological anthropology, albeit an unlikely one by my own estimation. And I could no longer grow in a meaningful way. So I started looking for jobs, and we spied this job that was advertised in the back of *Science* magazine for the head of the anthropology department at Penn State. And I knew from talking to my colleague, the late Alan Walker, a famous paleoanthropologist who had gone to Penn State himself after a storied career at Harvard and Johns Hopkins, I knew from



him that Penn State was really good in anthropology, even though it was just another land grant university.

He said, "Nina, don't judge a book by its cover. Penn State has got what you want in terms of research strength and research commitment, and a commitment to multidisciplinary research." And again, I made the move because I knew it was the right intellectual move. Also, I made the move because my salary at the California Academy of Sciences was low. We were kept in these very uncompetitive income brackets for a very, very long time. Curators were not well paid. This is not uncommon in museums. Natural history museums tend to not be flush with cash, and they certainly don't pass their spoils along to the scientific staff. It was for a combination of professional and financial reasons that I moved to Penn State in 2006, and I am so glad that I did. It gave me a rocket boost in my career because I had the platform at Penn State for doing good research, for interacting with world-class researchers in my own department and university, and for beginning to write bigger and different grants in paleoanthropology, in science outreach, do all sorts of things that would have been impossible.

I had the very strong backing, not only of my Department of Anthropology, but of the Dean of the College of Liberal Arts at Penn State at the time, Dr. Susan Welch. Sadly, she died a little bit more than a year ago, but she was another one of these principal mentors in my life who was extremely influential. She, along with Alan Walker, were the people who really recruited me to Penn State, and I've never looked back. This university, for all of the foibles of any big university does have its failings, I have done extremely well by Penn State. I've been able to do the research, do the teaching, get teaching releases, apply for grants, have excellent logistical support at Penn State, whereas many of my colleagues in similar positions at other universities, including big state universities, have not been able to boast of such support.

Anna Doel:

I feel like this is a good logical point to maybe pause the conversation till tomorrow.

Nina Jablonski:

Yes.

Anna Doel:

I do have to say that I'm so curious about many things. I know that Penn State encourages faculty to do scientific outreach. It encourages public appearances, and we know you've participated in that. And I guess one of the questions for tomorrow would be your life as a public intellectual.

Nina Jablonski:

Yes. And I think what we will also explore on that is something that I haven't brought in here to the fore, which is the research and public outreach program that I've engaged in South Africa from 2006 going forward, and that has been influential up to the present moment in my life and career because the whole sort of package goes together, as you'll see.

Anna Doel:

That's wonderful. Are there any other subjects that you would like to make sure are included in tomorrow's conversation?

Nina Jablonski:

Anna, I think you need to follow your good instincts. For me, "How long is a piece of string?", I could talk to you forever, but I think we need to be realistic and given our time, I want you to guide the conversation. If I feel that we've left something out, I will make sure that I bring it in. But I think many of these things will naturally come out in our conversation tomorrow.

Anna Doel:

I would appreciate that.

Nina Jablonski:

Great. I've enjoyed speaking with you, and again, thank you for being well-prepared and for being such an exquisitely good listener.

Anna Doel:

Thank you, Nina. I'll see you tomorrow.

**American Philosophical Society**  
**Oral History Interview**  
**Nina Jablonski**  
**session 2**  
**07/06/2023**

Anna Doel:

Today is July 6th, 2023, we are having a second session of an oral history interview with Nina Jablonski, and I'm Anna Doel. Nina, where we left off yesterday was focusing on your big research projects. And I think it would be important now to talk more about the essence of your research and the scope that you gave it.

Nina Jablonski:

Yes. Yesterday we touched on really the primordial foundations, the basic data that we used, the information on skin color as measured by skin reflectance in human populations that we gathered from the literature. And the very important NASA satellite data on ultraviolet radiation at the earth's surface that we also combined with other global climate databases to look at how skin color might be related to temperature, rainfall, humidity, and other parameters. Because we knew that ultraviolet radiation was probably the major player, but we wanted to be sure of it. And we interrogated that very carefully.

And this work took a long time. The work that George did on actually distilling and visualizing the environmental databases was considerable, years in the making. And in fact, while he was doing this, he was enrolled in a certificate program to get a professional certification in GIS and eventually in a master's degree program in order to use his expertise to actually get a certified degree. All of this work was being done as part of George's professional and academic credentialing, as it were. Credentialing, I don't know, what a horrible word that is.

And it worked out well because he was very disciplined about the work. And at the same time that he was working on the refinement of the analysis of the physical parameters, I was working on the nature of the biological questions. And really what it came down to was, what was so special about ultraviolet radiation? What was it that required protection and what possible good might it do? Because scientists had known for decades, more than a century, in fact, that ultraviolet radiation was mostly harmful to living organisms and that lots and lots of organisms, from fungi and plants to all manner of animals, had evolved to protect themselves and protect their DNA from ultraviolet radiation.

What we discovered in our literature search, and I mentioned this briefly yesterday, was that ultraviolet radiation, in fact, did impact human skin very profoundly, and that it caused direct changes to DNA in the skin. And it also caused chemical changes in the skin that would cause indirect changes to the skin's DNA, thereby predisposing an individual to skin cancer. And this is serious, and of course people are very concerned about this. From an evolutionary perspective, however, these skin cancers have little or no meaning insofar as the vast majority of them afflict people when they're past their reproductive age. You accumulate all of these errors in your skin DNA, almost like a bad debt that you collect over your lifetime, but the bad debt actually doesn't show itself until, and it can't really affect your life course generally, until well after your reproductive years.

We knew that we had to search for this other mechanism. And having had the insight into folate and the breakdown of bioavailable folates, I sought in the late 1990s to really try to figure out, "Okay, what's going on? What's ultraviolet radiation doing at a molecular level?" And this turned out to be very complicated. And I realized that one of the shortcomings that I had was I wasn't an experimental scientist. I couldn't subject lab animals, let alone humans, to strong ultraviolet radiation. And thank goodness, as a result of this 2000 paper that we had written, many workers had approached us. And one of the workers who had approached us was a professor, I believe his Christian name is Johannes or Johann Off from the University of Oslo in Norway.

And he said, "I really want to test your hypothesis about folate transformation or destruction in an *in vitro* or entirely laboratory *in silico* study." And that is what he did over the course of five years. And he and his students, a doctoral student and some postdocs, did some very distinguished work on this and showed exactly what happens, at least in an *in vitro* situation, when ultraviolet radiation impinges a simulated skin model and what does happen, what kind of molecular breakdown occurs. And he showed, not surprisingly, that the process was more complex than we originally thought. This work, ours and the work done in Oslo, catalyzed other workers to look at this. Because we had sort of put the cat amongst the pigeons, as it were, in the field of dermatology.

Ultraviolet radiation is considered very, very harmful. However, dermatologists actually use it for therapeutic procedures. They subject people to strong ultraviolet radiation often as a treatment for psoriasis or severe acne, and a variety of other skin diseases. And they wanted to know, does strong ultraviolet radiation affect folate? Are we endangering our patients when we subject them to these treatments that are supposed to improve their health? And what was discovered was, again, a mixed bag of results. Some people experienced very marked declines in serum folate, other individuals didn't, which suggested that the process was far more complex and that there was probably individual variation in the enzymes in the body that regulate folate levels.

Folate turns out to be one of the master molecules in the body. It's needed for so many processes, not only the production of DNA, but the repair of DNA, the regulation of DNA, as well as myriad other very fundamental processes within a cell. And we figured, well, probably there is a lot of variation in the regulation of folate metabolism. But again, we needed some help with this because this was way out of our areas of expertise. And as has happened repeatedly, basically someone approached us, and we began a collaboration. This was a professor, Mark [Lucock], at the University of New South Wales in Australia. He had published some interesting work on the importance of folates. And when he discovered our work, he was very interested in this. And he had a lot of ways and means, being in a medical school, he had a lot of practical ways and means of actually carrying out some of these larger epidemiological and genetic projects.

Those projects ran from about, let's see, 2007 or 2008 basically to last year, 2021 or 2022, when Mark retired. And they spawned a series of other doctoral dissertation projects and so forth, which were very productive. And the offshoot of this was that there is considerable genetic variation in folate metabolism. And again, to create an easy, digestible sentence, that these variations are related to the ultraviolet radiation regimes under which people's ancestors have evolved. Again, when you think about it, this is not surprising when you recognize that skin is the primary interface and has been the primary interface between the environment and the interior of our bodies for millions of years. And naked skin has been the likely interface for a million and a half years of our evolution. Stuff is going to vary according to... Not just stuff,

that's terribly casual. Many different essential biochemical processes are going to be regulated through the skin, through molecules present in the skin. And enzymes controlled by genes that affect the property of these molecules will vary according to the solar regime and possibly to other parameters as well.

I like to describe this research program that the fundamental biology is growing like Topsy, because it just started to sprout all of these different remarkable and interesting tendrils. The other part of the biochemistry of this that was fascinating and developed quickly was that ultraviolet radiation is not all bad. In fact, all organisms with modern skin need some kind of ultraviolet radiation in order to make vitamin D to support the needs of terrestrial life. Whether we're talking about reptiles, birds, or any kinds of mammals, including ourselves, we use ultraviolet radiation coming from the sunlight to produce vitamin D in the skin, which is essential for building a skeleton, teeth, the musculoskeletal system. And it turns out that vitamin D is important in the normal regulation of function of most of the organs in the body, whether we're talking about the brain, which has vitamin D receptors, or different parts of the gut, or even the skin itself. All these organs have vitamin D receptors.

It all began to click into place over time in the late 1990s that skin pigmentation levels had evolved to "maximize" or "optimize." And I use those words in inverted commas because evolution never does anything to optimize or maximize anything. It does the best it can under the circumstances. It does what it can. And what it did in this case, in the course of human evolution, was balancing the forces of having to protect the body with the forces that actually needed some UV in order to produce vitamin D in the skin. The amount of eumelanin, the natural sunscreen, the amount of eumelanin in the skin would be directly related to the strength and seasonal pattern of ultraviolet radiation.

And so that's basically what we put forward in our 2000 paper. And I had done all this background work on the biology, including the folate metabolism and the vitamin D, and George had been working really on the physical parameters, the environmental parameters. And the whole thing came together in this paper. And it continued to be elaborated in a very serious way for the next decade. From 2000 to 2010 we did a lot more fundamental work as well as more applied work. George was approached by an important clinical neurology group at the University of Oxford. They were working on the etiology of multiple sclerosis, which is one of the most damaging, and in Europe one of the most common autoimmune diseases. And the professor, Professor George Ebers, now retired, approached us, and approached George especially because he had a hunch that vitamin D and ultimately ultraviolet radiation levels might be related to the prevalence of multiple sclerosis.

George started working with George Ebers and his research group, including various postdocs over time. And what they were able to show is that in fact low UV levels in the UK, which are always low for most of the year, but the low UV levels that many people experienced in the UK, as well as other environmental and genetic factors, worked as a complex cascade of causality to predispose someone to developing multiple sclerosis. And that vitamin D deficiency triggered by ultraviolet radiation, a lack of ultraviolet radiation at key points in early development, would trigger various manifestations of multiple sclerosis. And they wrote a very influential paper that's gone on to be cited in many places. And that work in itself has gone on and had a big life, especially in clinical practice and with respect to prevention of multiple sclerosis in vulnerable populations through vitamin D supplementation, something that is still ongoing as a public health work in progress.

What was fun at this time and actually continues to be fun is that there were all these people coming into our radar screen, as it were, and saying, "Have you thought about this? Can we talk about this?" It was fun because we realized this project was far bigger than just a little explanatory paper of human evolutionary biology. This had a lot of ramifications for human health and wellbeing.

And if I may transition, it was in this decade between 2000 and 2010 that really the public education aspect of this and the public outreach really took on a life of its own. Because our research was attracting attention and people were asking us to come and give lectures on these topics. One of the most important lectures that I was asked to give turned out to have been in 2004 or early 2005 at Caltech in southern California, where a man who was to come to be one of my colleagues in South Africa, Professor Wilmot James, was a visiting scientist. Professor James invited me to come to Caltech to lecture on the evolution of skin pigmentation because he was really fascinated by this as a native South African, and knowing that skin color in South Africa, like in the United States, had really been an arbiter of human fate for the previous century.

So he heard my lecture, and not long after that I received an invitation through him to come to a major workshop, was actually a major confluence, not a workshop, on race, biology, skin color, and related topics in South Africa. This was held in mid-2006, I think March or April 2006. And so that was my first trip to South Africa. At that conference I presented our findings and talked about the ramifications of skin pigmentation for health. I didn't really talk about the implications of this so much for understanding race because I was still at that point shying away from the topic. But not surprisingly, in South Africa people were drawing me out. "What does this mean for our understanding of the concept of race?" And really that began a whole series of other ruminations and study on my part on the relationship between skin color and concepts of race.

I was invited in 2009 back to South Africa and again in 2010, and at those times my colleagues were saying, "Nina, you've summarized all this biology and health stuff beautifully, but you can't get away that easily. You've got to grasp the nettle," as I like to say, "and talk about skin color differences and human social conditions." And so really it was in 2009 and 2010 that my research program really switched gear or expanded more fully. I not only became more involved in public outreach and public education, but I began to fill in the holes in my own education in the history of science, in the history of philosophy, in the history of taxonomy, and in the history of race nomenclature and race and racism, a huge body of work that was extremely challenging for me to grasp because of its size, because there were just so many different kinds of literature that I had to try to get ahold of.

But I was excited about this, because I realized that we could understand this. Just as we had understood the prehistory of the evolution of skin color and making skin before that, we could also historically unpack for ourselves and for others how skin color had come to be associated with race and how they had come to be not just casually associated, but almost indelibly bonded to one another. And to make a very long story short, this really led to a great expansion of my research program and to what would be the focus of a lot of my work leading up to the publication of my second book. I guess I should have mentioned perhaps earlier this morning or yesterday that this skin research program had led me to want to write a book about this for a popular audience. And when I was approached by the University of California Press and a really fine acquisitions editor named Blake Edgar, who I had known through my work at the California Academy of Sciences, when Blake approached me and I said, "I want to write a book on skin color."

And he said, "Nina, write a book on skin first." And I said, "Okay." And I did that. Again, there was a lot of learning involved in that, but I undertook that wonderful job and published *Skin: A Natural History* in 2006, a book that amazingly is still being bought, that has been reprinted and translated. I am delighted it still has a life of its own even though now it's somewhat 17 years old. But the book *Living Color: The Biological and Social Meaning of Skin Color* was really my distillation of what skin color meant in terms of our biology and what it had come to mean in terms of human social relations. And this was fascinating.

It was also traumatic to write this because any time you begin to explore the literature on skin color, and especially when you look at Western so-called scientific attempts to understand variations in skin color, you begin to realize that not only are people emotionally prejudiced. I'm speaking here of many European naturalists and philosophers who have been steeped in a very lightly pigmented European culture throughout their own upbringing, that when these individuals were encountering Blackness for the first time, that they found it very foreign, very cognitively alarming.

And also, some of the more scientific ones undertook dissections of darkly pigmented people, especially darkly pigmented Africans, and sometimes vivisections, especially of enslaved individuals in the United States and elsewhere, to understand the structure of Black skin.

What happened in 2009 and '10 is important because what occurred was this moving forward of my own race education, learning these various facts about the transatlantic slave trade, as well as the history of taxonomy. And realizing that the basic framers of the modern taxonomy, which is used in most parts of the world, the human taxonomy was done by Western European men between roughly 1743 and 1780. Among these were Carl Linnaeus, Immanuel Kant, Count Buffon, Johann Blumenbach and others. They are variously labeled as taxonomists, systematists, natural historians, philosophers. Basically, we're talking about a time in the history of science when all of these fields were basically commingled.

What we see in this literature is that first of all, color is seen as an essential quality of human beings. And I think a lot of this comes from the Greek humoral theory of the human constitution. That basically the color of the exterior of the body, as well as the color of the interior of the body reflects the climatic conditions under which someone lives. And this wasn't a mechanistic, physiological explanation so much as black skin and black bile and so forth were associated with the burning effects of the sun. And similarly, white elements, yellow elements, red elements, these humors were all affected by climate. And these were manifest physically on the surface and within people's bodies.

The taxonomists of the 18th century were aware of what had been written by Hippocrates and Aristotle and others on this topic and they more or less remodeled it. And what they did was, and Linnaeus was the first to do this, he assigned people from different continents to different colors. So people from Europe were white, people from Africa were black, people from North America were red and people from Eastern Asia were yellow. And his original taxonomy of human types, not species, types, was not hierarchical, but it was based entirely on color and geography.

Immanuel Kant, working at the same time, who had an extremely fertile mind and a deep intellect, was very much interested in how the human body reflected the climatic conditions, but also how the climate and the body affected a human being's capacity for moral behavior and coaching and civilization. And Kant's ruminations on human variation, including skin color, are fascinating. And most people don't read them because they're in German. I had the benefit of

knowing one of the main translators of Kant's works, who happened to work at Penn State, Professor Robert Bernasconi, who has recently retired. And he helped me through his own translations of Kant to understand the details of what Kant was saying. And he said, all of the conditions in Europe favor the production of light skin, of white skin, and a particular disposition that allows, although for some negative things, basically for a lot of time for thinking and reflection and excellent capacity for developing a complex sense of morality.

And he felt unequivocally that the white race, and he used the German word [foreign language] to designate races. He said the white race was superior. He created a hierarchy of color and people. Significantly, he placed in second place, the black people from Africa who he considered to also have a very elevated culture and capacity for civilization. But they had been compromised by the excess heat to which they had been subjected for many generations. He saw the heat and the sunlight as being a deleterious influence. And then he had two other categories. He didn't treat North American Indians, as did Linnaeus, but he isolated Hindustanis and Carpathians, basically groups from Eurasia as being distinct and lower than whites and blacks. Now these treatments that Kant wrote between 1775 and 1778 were very influential to his own writings. But Kant also was influential to others, and they had influences on him.

We know that he read and was familiar with the writings of David Hume, the Scottish philosopher. And Hume had written earlier in the 1700s about the clear primacy of the white race and that basically no other group of people has ever done anything civilized in the world except those belonging to the white race. It is becoming very clear that the world was being divided according to skin color and that some of these thinkers were making a clear hierarchy of human types that were partitioned along the lines of skin color. And really importantly with Kant in his early years is he saw these races as immutable, that they couldn't blend with one another. Even though he was presented with lots of evidence from other philosophers and naturalists at the time that indicated that there were lots of intermediate populations all over the world, Kant actually did not change his ideas about human diversity and this partitioning of races until the 1790s. After he had written a lot of books and all his major philosophical tones had been written before he recanted his ideas about the sanctity of the four races.

This was fascinating to me. But one of the real smoking guns that really came to play was how these ideas about human groups and well-defined human groups, and I've touched only on a few of the taxonomists here, but others chimed in in various ways to reinforce this structure or very similar hierarchical structures. What really clicked for me at this time was just how important the transatlantic slave trade and the abolitionist movement was to the solidification of race concepts. Because all of these scientific developments, human diversity, were occurring at a time in the late 18th century when the slave trade was being heavily scrutinized in Europe as being an appalling, unnecessary, basically a crime against humanity. Although there was no such thing as that, it was labeled as such.

But the nascent abolitionist movement was getting strong, it was gaining traction in many parts of Europe, notably in England. And what we see working in concert in the late 18th century and the early 19th century, is this concerted interdigitation of mercantile and capitalist interests of the transatlantic slave trade with the racial hierarchies. Because it is much easier to justify the enslavement of people if you can claim that those people are inferior in some way. And this was the argument that was made. And there were many kinds of scientific arguments made about the characteristics of black people from Africa and red people from North America to indicate their inferiority and suitability for slavery. And then working also in support of this was an entire wing



of what I call pseudo-theological reasoning. That was Christian based, that was asserting that in fact these four races, we could find traces of these in the Bible.

The sons of Noah had different colors according to their qualities of personality. And the son of Noah that had caused shame to the family, the son called Ham, had been cursed with black skin and made to serve others. None of this is actually in the Bible, but there was rich interpretation of this that was done, again, in order to further support from a different set of angles, the enslavement of black people. That they had been cast out by Noah and clearly were on the wrong side of God and that they were suitable only for serving others. So I mean, this was really interesting work, but I must say going through all of this between 2009 and 2011, when the book *Living Color* came together was quite a harrowing experience when you have to read all of this history, including all of the slave narratives that had been collated after the abolition of slavery and the freeing of the slaves in the 19th century in the US. Reading all of these texts was really emotionally harrowing for me.

But I feel that I was able to put all that work together in the book *Living Color*. And possibly more importantly for the public and for me, I was able to put it together in a way that it made sense, I could talk about it. I learned the stuff thoroughly so that I could talk about the major dates and what had happened and who had done what, where, and who had corresponded with whom, who had traded letters or books with whom. Looking at the intellectual nexus and network of people who had come together to solidify race concepts, not only in Europe, but in the colonies and later in the nascent United States. And not surprisingly, many of the Founding Fathers subscribed to these ideas about race.

I've written something about Thomas Jefferson and his own very conflicted life with human diversity, which is now well appreciated with his long-term relationship with Sally Hemings and their many offspring. But his intellectual fascination with what he contended was the clear intellectual inferiority of Black Africans. With many of the Founding Fathers, we see this clear conflict of interest, seeing people who were enslaved as real people, but then wanting to not accord them full personhood because they were doing what was considered to be essential physical work on their properties and they couldn't get anyone else, or they thought they couldn't get anyone else to do this work. To make a long, arduous story a little bit shorter, what I realized is that people all around needed to hear more about this story. I put a lot of it into *Living Color*. But beginning around 2012, I completely reformed my public lectures so that I was now talking as much about race formation, color-based race, and the manifestations of racism in modern society as I was about the prehistory of skin color.

And that by putting these things together actually, by understanding the evolutionary history and what people had done in historical times with their own imperfect understanding of human diversity and their own cultural biases, by putting all this stuff together, I could help people see what had happened to all of us. We've all globally been affected by the partitioning of the world into designated races in the 18th century. And all of us, to greater or lesser extents, have had to live with the legacy of this quite horrible furniture that has been installed in the social and political and economic frameworks of our countries. This has been, I think, one of the reasons why my work has gained some visibility, because I don't come across as some proselytizing, non-scientific individual. I come across as providing a straightforward body of scientific facts and historical facts that are very hard to contest. People can contest them of course, but when you go back to the primary literature, it's really hard to take this all apart.

And I was proud of being able to put that together and I was proud of the fact that people found it useful. And by the early 2010s, I was lecturing all over the country, all over the world on these topics. I was lecturing in South Africa, more in East Africa. I was lecturing in the American South. I'll never forget, I was lecturing in Richmond, Virginia at the Museum of Natural Science in Richmond. And at the end of my lecture, two very lovely women came up to me, they were older African American women, and they said, "Thank you, Dr. Jablonski for this lecture. I understand now so much of my own family's experience." And one of them said, "And I understand now why I had rickets when I was a child because I had vitamin D deficiency when I was a little kid." And the other one said, "And I understand why I had TB as a child because my immune system is depressed."

It had given them this useful information to understand how they had been relegated to second class citizenship for much of their lives as adults in the South, but also why they had experienced various physical maladies as children as a result of vitamin D deficiency. So this is just one of many anecdotes. But among the things that came up at this time was the work in South Africa. People in South Africa became extremely interested in this work. And as riven as the United States has been by race concepts and racism, South Africa arguably has been more so because of the effects of the legislated and strictly enforced apartheid rules and laws of the mid-20th century.

When South Africans approached me about being more of a presence in South Africa, I accepted with alacrity and I became associated with the Stellenbosch Institute for Advanced Studies and I became a fellow and eventually a permanent fellow. And through that association with STIAS, as we call it, I became familiar with many of the intellectuals who had been working on race and race concepts and racism in South Africa, including several members of Nelson Mandela's original cabinet and other people who had been very influential in the anti-apartheid movement. I look back at those years as extremely important for having met these people who were not only incredibly intellectually acute and well-spoken, but incredibly brave, who had in many cases sacrificed their own liberty, their own health for human dignity. This was a life-changing experience.

The Director of STIAS at the time, Professor Hendrik Geyer, invited me to put forward a proposal for a new series of workshops on understanding race and the legacy of racism in South Africa. And this grew into a multi-year project that was supported by STIAS, that brought scholars together. The same core of senior scholars, as well as junior scholars, mostly from South Africa, who were working on race education and race awareness in South Africa. This was a life-changing experience for me because I was hardly talking about any of the biological pre-history stuff that I had been worried about in the previous decade. I was thinking entirely about what skin color had come to mean and all the ramifications of it for the ordering of human societies. This was a very important formative time. We had this Effects of Race project running at STIAS formally from 2015 through 2018. But actually it occupied much of my time beginning in late 2012 and extending all the way through early 2020. The best part of the decade.

And lots of other stuff came out of that work in South Africa. In 2006, in my first trip, one of the people that I met who very modestly introduced himself in that skin color and race workshop that I attended or conference, was a man named Mr. Koos Bekker, who was the head of a major media group. He didn't act like any kind of big shot, but in fact he was. And over the years, he corresponded with me, he brought me down to South Africa again for lecturing in 2009 at STIAS. And I believe he was quite influential in me receiving an honorary degree from the

University of Stellenbosch in 2010. But I don't mention him so much in the context of my own aggrandizement, but rather in connection with him stimulating me to write a book for children. He said, "Nina, this work absolutely must be transmitted to children all over the world, but especially in South Africa. Can you write some kind of graphic novel, some illustrated thing for kids?"

And I looked at him and I had thought about childhood education, but having no background in this, no ability as a cartoonist or graphic artist, I thought, "Okay, I think I can do this, but I'm going to have to get some team players on board." So that whole process began in 2012 and by 2014, I had assembled a little team to work on this book for children that had been inspired by Koos Bekker's request. And I had asked one of my colleagues in the Effects of Race project, I said, "Njabulo, can you help me? I have no idea who can co-author this with me because I need a good storyteller. I need someone who has real familiarity in a South African audience who can do this."

And he suggested his close friend, in fact, he called her a cousin, Sindiwe Magona, the famous South African writer for children and adults. Much heralded for her dozens of books on the issues of race and class and human struggle in South Africa. She's written many fiction works and semi-autobiographical works that have changed the landscape of how people think about race in South Africa. So he recommended me to Sindiwe. Again, to bring this into a digest, we had wonderful conversations, I got together with her and she said, "Nina, I don't know the first thing about science." I said, "Don't worry, we'll do this." And in fact, we did it and the book *Skin We Are In* was born. It took us a long time to get it published because of slowness in moving the illustration program and finding an appropriate publisher, but we got it.

My long-term colleague, Lynn Fellman, a superb natural history and medical illustrator, did the illustrations for the book. And the book went on to be published in 2018, not only in English and in Afrikaans, but in all 11 official languages of South Africa. And that was made possible by the philanthropic donation of Koos Bekker. Koos, who was the head of this Naspers conglomerate, by the course of the 2010s, had become the wealthiest man in South Africa because of his astute investments in China in the early 2010s. He had invested in software like the WeChat tool that is used widely in China that had taken off very well. Anyway, Koos did a lot of the financial support of the illustration program, the translation program, and, importantly, financing the free distribution of the book through a nonprofit organization called Biblionef South Africa, the free distribution of the book throughout the Western Cape and much of the rest of South Africa. And I will be forever grateful to him for getting me involved in this more in this work in South Africa and for providing some serious financial support to this major educational program, which he thought was absolutely essential to the future of his own country.

And so, that was fun. It was fun, it was incredibly time-consuming to do this. I had never written a kids' book before; I didn't really have a clue. But I figured it out and I'm pretty good at explaining stuff, so we made it work. I wanted to bring the work to an American audience. When I tried to sell it to American publishers, they all pulled their hair out. They said, "You can't do this, you can't do that."

Long story short, again, I ended up getting an American publisher for the book that is just going to come out for kids in North America called *It's Just Skin, Silly!*, a book co-authored by the American historian and Afro-American Scholar, Dr. Holly McGee, and illustrated by Karen Vermeulen from South Africa. Another sort of international effort, but a beautiful little book,

which we hope will assist parents, kids, and teachers in understanding how the skin color is such a wonderful evolutionary thing and so important to our physical wellbeing, and how it has been so terribly misunderstood and misapplied in human history.

You asked yesterday about the public scholar bit. There was no grand design to any of this. My life is bereft of grand designs. But when I see good opportunities, I take them. I do take risks. They're always calculated risks, but I do take them because if they are to bring forward a body of knowledge that is important and potentially transformative to people, and these days if I see that they have any potential benefit to people at large, including children, I just go for it because it's important.

Over the years, my paleoanthropological research program, the fossil work has increasingly taken the backseat. I've certainly continued it. I had NSF funding to continue work in China through 2015 and 2016. We're just finishing up our final papers on the fossil record of some of the Chinese fossils that we found, as well as African materials that I had been studying. I'm still working and completing that work, but it is now no longer active and I'm no longer seeking new projects.

Because I realize, being, I think, quite a realistic person, I'm getting older. I'm going to be 70 years old in a few months, and I need to trim my commitments and be realistic about what I can do and what I can do well. And I know that I'm being listened to in things related to skin, skin color, race, and racism. And so, that's where I'm putting most of my energy now.

Anna Doel:

Have you ever been confronted about the connections that you make between your findings, your research findings, and the history of race construction?

Nina Jablonski:

Yes. I remember one notable one, well, actually a few things. In a lecture in Nairobi, Kenya, many years ago, a young man came up to me and very earnestly asked me, "Why are you, as a white American woman, working on skin color?" And I said, "I'm working on this because I'm a biological anthropologist and I'm interested in understanding human evolution. And human evolution involves understanding skin and changes in skin, including skin pigmentation. I'm working on this because it's part of the story of human evolution, and it has now ramifications for our understanding of how human differences have been viewed by people in different places and how they have served the power structures of the world at various times in the recent past." The young man was still sort of perplexed and he felt that I somehow shouldn't be doing this. But he was mollified, and he understood that, in fact, this information could be broadly liberating to people, all people.

Another interesting interlude occurred in Cape Town South Africa when I was lecturing in 2013, I believe. And I was talking to an absolutely packed house at the University of Cape Town. And at the end of the lecture, two young men came down to the dais. And they were not only earnest, they had a very sincere look in their faces, but also they were young, powerful men. And they came and they stood in front of me, and I thought, "Oh dear, oh dear."

But they said, "Why is this not being taught in every schoolroom in South Africa? Why do we have to live under this mystery? Why don't children learn this?" And I engaged them in conversation for quite a long time. They were clearly quite fervent Marxists because they said,

"Are you part of a vanguard movement?" I said, "No, I'm not really part of any kind of vanguard. I'm just a scientist trying to get the word out and you can help in this too."

And so, that really sort of fortified my resolve to enhance public, especially childhood education efforts. Because I realized, through those encounters, that if we could educate children better worldwide, there was a chance that we would lessen the cognitive bias that so many of us grow up with because of the ultimately racialized nature of modern societies in most places. We don't even realize how profoundly the race structures of the 18th century affect us in our everyday lives. So putting energy into childhood and youth education has meant a lot to me.

And the last piece, I have received some ugly emails and one death threat from an organization or an individual in South Africa who sent me a DVD, very cleverly had been transferred from South Africa to the UK, and then re-mailed and sent to me through an anonymized courier service. But a very thinly concealed death threat, which I did forward to the authorities at my university and they onward to the FBI.

But those, the first two of these interactions, I saw as very constructive and very positive. The negative emails, sort of the hate mail has been very, very, very limited. And I think it is because I've taken pains over the years to be very careful in my vocabulary and not to use words that have race or racist connotations. I avoid using white and Black, for instance. When I'm talking about skin, I'm always talking about lightly pigmented and darkly pigmented. I only use white and black when I'm actually quoting other individuals, especially in connection with race nomenclature.

I think people have generally accepted what I have to say and what we have written because we have been careful in choosing the vocabulary. This is always a challenge because the vocabulary of human diversity is very limited and it's been trimmed down over time, so more and more words are sort of off limits to us. But we just continue to be inventive about developing longer descriptive terms and they work. And I've just resigned myself to not being boxed into a nomenclatural corner, but just trying my best to continue to be descriptive, empirical, and straightforward as I talk about what has happened to us over the last 2 million years.

Anna Doel:

When you were educating yourself on the history of the construction of race and related issues, and the history of biology, obviously, did you find any specific authors, books, or ideas particularly helpful?

Nina Jablonski:

There were, in fact, some marvelous compilations. People had been writing, anthropologists, sociologists, cognitive psychologists, social psychologists had been writing about race, constructions of race, cross-cultural concepts of race, race in North America, et cetera, for generations. The books by Audrey Smedley were very important to me. Also, a lot of the writing, the early writing and speaking of Henry Lewis Gates, Jr., who I'll come back to presently. And there are now so many of them, and I'm just trying to recall all the names.

Anna Doel:

That's fine.

Nina Jablonski:

But all I can say is if you come into my library, you will see shelves of books filled with all my own self-education in this realm and also just some related books. I guess I just read so much, and it's hard to put my finger on the most salient things because there were just so many.

Certainly, the translations of the African slave narratives and the writing on the transatlantic slave trade by the historian David Eltis. His documentation of the details of the slave trade and sort of the parameters of enslavement were extremely important because it helped me really interdigitate the chronological story of the slave trade with concepts of human difference and race and racism.

And I want to come back to Henry Lewis Gates, Jr., because I mentioned yesterday that Gates had been influential in my receiving, in 2005, an Alphonse Fletcher Sr. Fellowship for continuation of my own research. This started a long association with Gates, Skip Gates, that continues to this day.

When I moved to Penn State in 2006, not long after, I invited Skip to our campus to give a lecture on what he was doing. And he had just begun his project on African American lives, which was to become the *Finding the Roots* series. And in 2007, when he came to the campus of Penn State, at the end of the lecture, he said, "I have a dream that we can create a curriculum for children about genetics and genealogy, putting these things together so that kids can understand their own evolutionary history and the history of their physical diversity, as well as their individual family histories. They can learn the tools of genealogical research just by researching historical documents, census records, and the like." He said, "Wouldn't that be fun if we could do this?"

I came up to him, as did one of my colleagues at Penn State, Mark Shriver, and we said, "Skip, we'd like to work on this curriculum." Little did I realize that this would begin what would be a 15 plus year project on developing a curriculum for young people that could be used in a variety of different contexts in the US.

When you asked yesterday about getting money for projects, I can vouch that when we brought these concepts to the National Science Foundation and private foundations, we were initially met with the most solid of brick walls. How dare we try to put together biology and history and teach them to middle school kids. Possibly do this. How are we going to get permission to take DNA samples to study, to have kids look at their own DNA? And then how are we going to get permission to have them integrate some of this information with some of their own genealogy? We got incredible amounts of pushback.

After trying these legitimate sources, not that we went to illegitimate sources, but after years of banging our head against brick walls and getting some private donations but not significant private donations, I talked to Skip and I said, "Listen, we really need some help. Can you talk to some of your colleagues?" Skip is incredibly well-connected, not only because of his position at Harvard as a professor, but he is head of The Hutchins Center for African and African American Studies at Harvard and the WEB Du Bois Research Center within that. He has a lot of influence and quite a bit of money. And he has been able to tap into lots of people who are influential in different foundations.

And so, to Skip's everlasting credit, he talked to his friends in the Rockefeller Foundation and the Robert Wood Johnson Foundation and got them interested in our project. And by then, we had really, through a series of workshops and meetings, we had streamlined our ideas and we had a

very good concept of how this could be done in a real classroom or in a summer camp or afterschool program. This wasn't a fly by night program, we had something that was really good. And he knew it, and he basically said, "Listen," to the Rockefeller Foundation and the Robert Wood Johnson Foundation, "I want you to listen to this project." And they listened. They invited our proposal. We submitted proposals, we went through the normal review process for the proposals, and we got money.

And what we did with the money, beginning in 2015, was we created what is now the Finding Your Roots curriculum, which you can find online, [fyrclassroom.org](http://fyrclassroom.org). Which was a curriculum that was tailored to a summer camp format, but it can be done at home, it can be done as an afterschool program. We created it as an informal education module, series of modules, because we realized that there would be difficulties in getting DNA sampling to be done in any kind of even voluntary setting in a public school or a regular school classroom. That we needed to go to an informal setting, where kids and their parents could opt in. They didn't have to opt out.

This worked. And we worked out to run these summer camp programs at Penn State, at the American Museum of Natural History, and at the University of South Carolina. And we did these as full-blown experiments. We had, among our many investigators who were in this sort of team of people working on it, were education professionals and educational psychologists who could tune the content to the kids who we would be encountering.

And if you go to that website that I described, you'll see one of the cohorts of kids that we used, not as research subjects, the ones that actually went into our PBS online documentaries were not our research subjects, but they were exposed and participated in the same exercises. And this was so exciting because we had taken Skip's ideas about, we can do this, we can put genetics and genealogy together. We have made it real.

We're very happy that we won three Mid-Atlantic Emmy Awards for our PBS series, for different episodes in the PBS series. And although the Covid pandemic slowed down our progress, as did the backlash against critical race theory, don't get me started on that, we are still intent on continuing our public education programs.

Anna Doel:

What are your plans for the future? What are you looking forward to?

Nina Jablonski:

Well, as of five days ago, I'm officially retired, so I'm looking forward to not serving on committees that I don't really want to be on and devoting my remaining physical energy and intellectual effort to things that I really want to work on. And these include more books. I like writing books, I like learning.

And so, I'm queuing up a long-awaited book on hair. People started asking me to write a book about hair almost as soon as the Skin book came out in 2006. And I was nearly ready in 2013 to write this book, but one thing after another came up and it didn't get written, but now I'm ready. The hair book will get written.

And I've also got other ideas for other books, as well as major initiatives now in how to change nomenclature that is used to describe people in formal governmental and medical settings. I realize that one of the reasons that race and race names continue to be such a fixture of society is

that these are used by many governments and many biomedical research and other agencies to classify people for censuses in this country, for medical treatments or for studies involving human subjects.

And so, right now, in fact, at this very moment, I'm in the middle of these multi-peer conversations with a variety of different medical constituencies, as well as medical legal entities and corporations that are involved in basically the naming of stuff. What do we call skin color? What do we call a person who has a particular color of skin? All these things have gotten all messed up over the last hundred years, and we've ended up with a mess, a really grand mess of names that are really confusing. They're not only confusing within any country like the United States because they've changed over time. But when you begin to compare countries, America with France, with Brazil, with India, it's like, "Huh? Hold on. We all belong to one species. Why is it that we've come up with this enormous [inaudible] and a totally bewildering swamp of names to describe color, skin properties, and human groups?"

A lot of my energy right now is going into trying to be part of this collaborative machine to bring together all of these different entities and groups, so that there can be some kind of almost United Nations series of meetings to discuss how we should talk about human diversity going forward, so that it doesn't turn into an unholy mess of conflicting terminology that's irreconcilably confused.

Anna Doel:

Do you also find this terminology somewhat unhelpful? What purpose does it serve? Do you ask these kinds of questions?

Nina Jablonski:

I think unhelpful is a generous term, Anna. I think in the US and South Africa, arguments have been made about the importance of retaining race names for the purpose of restorative justice and broadly of affirmative action. We can right the wrongs of the past only if we can identify the people who have been most egregiously wronged. And so, the designation of people by race names has been considered to be great importance.

I would argue at this point that the designation of race names is not productive because it is creating the grounds for the reinstating, the redefinition of difference as opposed to the ultimate diminution of difference. And that possibly, in both the countries that I just mentioned, examining people with respect to class or income may be a better way to redress social inequities.

But also in medicine, these names have become positively unconstructive, in fact destructive. Because when we look at the genetic diversity of any one of these name groups, we find this tremendous overlap, first of all, because all humans are so similar and many so-called white people, especially in this country, have African American or black and Native American genetic inputs among others. And certainly, many of the so-called black or African American people similarly have white or European backgrounds as well as some of them having Native American and other ones. So, you end up really trying to, you think you have these clean categories in a biomedical survey or in a series of physiological tests or tests of new cancer drugs or blood pressure medications, you think you are testing two different groups when you're not. And you're testing groups that have tremendous amounts of genetic overlap and probably in the areas that



you think are salient, cancer susceptibility, blood pressure or whatever, there may be the wrong people getting placed in the categories that look right according to color. We now know that many of these physiological attributes don't map onto color, because all of these genes had their independent evolutionary histories through human history.

So this is a long row to hoe, needless to say, and I think I'm happy that I've chosen to do this at the end of my formal academic career when I don't have to worry about tenure, I don't have to worry about advancement, I don't have to worry about any more honors or anything, I'm just doing this because it needs to be done. And because I think an anthropologist is well suited to serve as at least one of the hubs around which the spokes of this wheel can turn or one of the intersection points in a network that can be useful in bringing people together. As to avoid future chaos and misunderstanding, and possibly to lead to better healthcare, better understanding of human diversity, and possibly even greater happiness, although I would be very hesitant to ever say that in a formal context.

Anna Doel:

Who are the people in your life who support you?

Nina Jablonski:

Among the closest in my life now, the first person by far is my husband, George. And I really wanted to bring him up today because George has been a key part of my life for almost 35 years. In fact, we've known each other for more than 35 years, we've been married for just about 34. And I want to bring him up just because, in the history of women in science, you find a lot of bad marriages or marriages that didn't really work out very well or people who were mismatched. And you also, in part of that game that you find husbands who resent the intelligence or ambition of their wives and who in some way feel that they have to rein those women in somehow or hobble them and make it difficult for them.

George has happily never been of that persuasion, and he often says to me, "My grandmother was a suffragette, she really was one of those people who chained herself to the railings and who broke the law for women's suffrage in England." And his own mother was a very, absolutely lovely genteel woman who was in her own way a staunch feminist. He said, "I was brought up by women who knew their minds, who were very strong and smart. And I realized from my own personal experience that women were full partners in life and that they were full partners in every aspect of life." And George has been that full partner with me in my adult life.

When we got together, we were both 34 years old, we decided not to have children before we got married because we figured we'd been past that. He had been married once before, he had a child, and we both figured, well, we want to do things together, we want to maybe do stuff for the world. We want to travel, we want to do things, we don't want to be tied down. And so, we've always had a good understanding of what we wanted to do.

And although, as I mentioned, I've never had any grand design about what I was going to do with my own life, George recognized that I would be taking these interesting risks and putting things together and reading and reading and doing more reading and putting things together and taking a few more risks, and that this was going to be the way that I would go and that he wanted to be with me, that he found me a stimulating partner. We had really engaging conversations. We have worked on and continue to work on projects in collaboration. That's not to say that that

collaborative work is easy because we butt heads all the time, and he's often complaining to me about, "Nina, you've always got to go prepare a lecture or be on some committee or do something for somebody, when are you going to get down to the business of finishing this paper?" These things do come up, they happen naturally, but they have never led to any serious long-lasting rifts.

And the real friendship that I've had with George, the deep intellectual communion that we have had and the spiritual communion that we have had has been extremely important to me. Humans are social animals. I was raised as an only child and I was sort of imperfectly socialized as a kid just because I had so few people around me. But through George, I think I finally finished growing up and finished my last phase of socialization, as well as learning how to discipline myself much better, to fully recognize that other people are dependent on what I do, and I can't just go off on my own toot somewhere and disappear into the woods, I have to pay attention to what other people are doing and thinking and how my work and life affects them.

George, by far, is the most important person now. In the past, my parents, Dr. Erika Bruck, who I mentioned, Professor Jane Oppenheimer and other professors at Bryn Mawr, including Professor Robert Connor and Mary J. Koroly, whom I also mentioned yesterday, Professor Ronald Fearnhead—sadly, nearly all of these people are now dead. And good friends of mine who have supported me, sadly, also including many of these individuals my own age, who have recently passed on.

One of the things that has led to my prioritization of life activities now is that I've lost most of my good friends in the last five years. The people with whom I went to college and had close relationships. The people in San Francisco with whom George and I have become very close. And this has been a real blow to us, because it was unexpected, they were our age, they shouldn't just die. Of course, life doesn't work like that. So right now, we have a very small network of friends. We have a few good friends in state college. Professor Stephen Benkovic, who's a member of the APS, and his wife, Pat, have become very good friends over the years, and they're dear friends. They're close to us. There are a few other individuals, but to be honest, we don't have a big circle. We have a large circle of acquaintances, but we've always been quite exacting about the people that we call friends.

And one of the things, from a personal side, that has, I think self-limited us, is that we're vegetarians and teetotalers. And so, although we're not prudes by any stretch of the imagination, and we're not martinets about wagging our finger at other people's habits, a lot of people feel self-conscious about drinking alcohol or eating meat in our company. And so, our own practices have been sort of self-limiting with respect to our social circle, and we just accept that.

So, I think George and I both benefited a lot from the fact that we spent long periods of our adulthood alone. I, in Hong Kong, he, in Hong Kong on our own. And when we came together, we were two strong individual adults who knew our own minds and we could come together and be a strong union. And we also knew that we could, if necessary, survive on our own again. It wouldn't be easy or fun, but we could do it. And that's made it easier for us to live with the loss of friends over the years.

Anna Doel:

Are you active in professional societies?

Nina Jablonski:

Yes. Well, I've just taken on the vice presidency of the APS. And I've always, always cherished the APS from the moment I was elected, I've enjoyed going to meetings and enjoyed being part of the nominating committees for Class Two, the council more recently, and then being elected to the office of vice president. I've always felt that the APS really held a special position in American society and also that it was a remarkable society to belong to, incredibly interesting and fun. The conversations that one can have there, you can't have anywhere else, it's an amazing place. So, I've been active, and I'll continue to be active, and I want to be active.

I've been active in the American Association of Arts and Sciences in working to nominate individuals for membership and to serve as screening of nominations on those membership screening committees. Similarly, since I've been elected to the National Academy of Sciences in 2021, I've been working to support the nominations of individuals and nominate worthy individuals and be as active a part of that as possible. The NAS is a very hungry institution, and I'm fighting to not become too engrossed in activities right now when I have so many other things going.

Another thing which I haven't mentioned, is that over the years I've become involved in professional consultancies as a result of my academic contributions, and I've increasingly spent time working on the advisory boards for the L'Oreal Group, which is the biggest world group for the manufacturer of beauty products, of hair, body, skin, everything that you can put on your body as opposed to inject into your body is made by L'Oreal, or in one of its subsidiaries. And I was encouraged and persuaded to become part of the Scientific Advisory Board back in late 2012, and I joined in 2013. And I've really enjoyed that work, because the scientists and the managers are so good. And also, I realized very early in the piece that I could do a lot for human wellbeing through the background of the products that they used to put on their face or to protect themselves from sun, or to wash their hair. And that I could influence, to some extent, how people thought of themselves in terms of self-actualized humans who were worthy of human respect, who were beautiful in their unique ways, regardless of skin color, regardless of age.

And when I first joined the Scientific Advisory Board, or actually just before I joined, I talked at length to Dr. Jacques Leclaire, who was then the Head of Advanced Research at L'Oreal Research and Innovation. And I said, "I'm interested in doing this scientific advisory board work, but only if you recognize that I'm going to be telling you a lot of things that you might not want to hear about skin bleaching practices, skin color nomenclature, how human groups are treated and how we talk about aging." I said, "I'm going to put you into your discomfort zone." And he said, "That's why we want you." And that's why I've had a good relationship with L'Oreal for 10 years, because they continue to want to be challenged, and they continue within the constraints of a profit-making corporation, they continue to try to do the right thing.

And I've accepted positions on more and more boards at L'Oreal, including their Global Diversity, Equity and Inclusion board and one of their survey design boards for this express purpose, to provide that kind of scientific input and constructive discord, as it were, that keeps their sights sharpened, that helps them, I think, tune their products and how they talk about them to the modern world.

Anna Doel:

Is addressing skin differences part of this expertise as well?

Nina Jablonski:

Yeah, it is. It's talking about skin differences in a constructive way, talking about the different vulnerabilities of skin to ultraviolet radiation, the different vulnerabilities to problems with the skin barrier. Problems like psoriasis or dermatitis that are caused by underlying, often genetic issues. So yeah, basically talking about diversity in a constructive way is what I do really well, if I do say so myself. Because you can talk about these things without getting people's defenses up. You can simply talk about them in a factual, straightforward way and just say, "There are these differences, they're probably due to this and this is how we can address them. And especially when you're talking about products, you can talk about how to address these things in a very constructive way that doesn't relegate people to any second-class status.

Anna Doel:

Is there anything you would like to mention here that I haven't asked you about, that hasn't come up?

Nina Jablonski:

Yeah. Well, I could really talk forever on various things. But there is one thing that I didn't mention, it was actually quite important. When I was working at the University of Hong Kong, I mentioned that one of the people who had been important in my professional career and introducing me to forensic work was Professor Ron Fearnhead, the UK oral anatomist and famous forensic scientist. Professor Fearnhead was a very down to earth guy and brilliant, but he recognized in me that there was, and we were having these conversations in the early 1980s when I was really fresh out of my PhD. I hadn't done a postdoc, because postdocs simply almost didn't exist at that time. So, I was really trying to figure out what I wanted to do in life in research. And we talked about various things that I'd like to do, and most of those were not practical in the situation in which I found myself in Hong Kong.

And he said, "The most important things in life is don't work for recognition, work on the things that you find most interesting to the very best of your ability and recognition will flow naturally to you." And that idea has been really important to me. Don't work for the goal of getting some award or recognition, work fully engaged in a creative way with all your heart and recognition will flow to you. And that was a really important message from him. I heard it and I really internalized it because I recognized that at that point, this was 1982, 1983, I was still figuring out what I was going to do and trying lots of different avenues, but that I did know the difference between stuff that would engage me and stuff that wouldn't. And when I was fully engaged, I could bring lots of things to bear on a problem that would be helpful and possibly were unique, and that what he was saying really would ring true for me.

And it has proven to be probably the single best piece of advice I ever received. So, I am very grateful for that, because I think I've never had specific goals, "I'm going to do this. I'm going to be that. I'm going to be this person." I've tried to always continue to engage my brain in useful learning and putting things together that other people haven't put together before in a sensible way, in an intellectually compatible way.

And when it has brought recognition, mostly it's been a surprise to me. It's not that I'm unhappy with recognition, but I've never worked for it. It's like, "Okay, this is nice.", but I just want to

continue to do these things because I think they're important and I can make some kind of contribution. So, that's where I am now and that's where I'm continuing to be.

And I think now as I enter retirement and look forward to the projects that I have, as well as to looking forward to traveling with my husband and getting old with my husband, that's what I'm looking forward to, is just doing what I've been doing, basically, since I started picking up fossils on my driveway when I was three years old, wondering about the natural world, wondering how we all got here in the forms that we are and why we do the things that we do. So, it's been a great life. I feel enormously privileged to have led the life that I did.

Anna Doel:

I think this is a wonderful finishing note for our conversation. Thank you so much, Nina. And I do want to mention that we won't release any of this without your explicit permission, which means for me that I will send you the transcript of our conversation as soon as it's done. And I will wait for your approval and edits, and it will enter the APS collections.

Nina Jablonski:

Wonderful. I feel so honored that my materials are going to be in the APS. When I was first approached about donating my materials to the APS archive and participating in this process of archiving American science and scholarship, I looked and I said, "You mean me? You want my things? Okay." I've never had a huge stable of graduate students. I've never worked at one university and created a huge legacy of activity in my own name. I've just sort of humored myself, tried to do the best I can, training, mentoring people when and where I can.

Anna Doel:

You have advised a tremendously long list of people.

Nina Jablonski:

Yeah. And I realize now that it's all this sort of Brownian movement, sort of random walk somehow worked out and people would want my papers. So, I'm just really happy. I'm in fact, tremendously, deeply honored by the whole process. Thank you.

Anna Doel:

Thank you so much for the conversation.