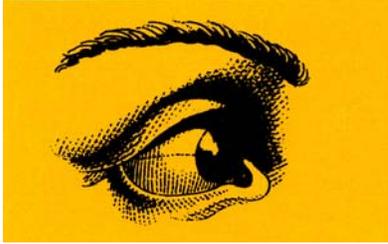


The Foundation of the American Academy of Ophthalmology
Museum of Vision & Ophthalmic Heritage

Conversation Between Alvaro Rodriguez, MD and Juan Verdaguer, MD
Chicago IL, November 11, 2012



Drs. Alvaro Rodriguez and Juan Verdaguer recorded this conversation on November 11, 2012 during the Annual Meeting of the American Academy of Ophthalmology, in Chicago, IL.



In this excerpt [Dr. Rodriguez](#) describes how his work with Charles Schepens, MD ended and he began his career in Columbia. (.mp3 file)

Here, [Dr. Verdaguer](#) discusses his current work with the Fundación Oftalmológica Los Andes and the availability of training for South Americans. (.mp3 file)

The Foundation of the American Academy of Ophthalmology
Museum of Vision & Ophthalmic Heritage

Conversation Between Alvaro Rodriguez, MD and Juan Verdaguer, MD
Chicago IL, November 11, 2012

JUAN VERDAGUER: My name is Juan Verdaguer. I am an ophthalmologist from Chile, a Professor of Ophthalmology and Academic Director, Fundación Oftalmológica Los Andes. I am a very good friend of Alvaro Rodriguez, who is from Colombia.

ALVARO RODRIGUEZ: I am Alvaro Rodríguez from Bogotá, Colombia, born there, and I am the founder of the Fundación Oftalmológica Nacional in Bogotá and good friend of Juan Verdaguer for many years.

JUAN: Well, Alvaro, tell me something about your family.

ALVARO: Well, my family is Colombian, on both my fathers' and mothers' side and we're a family of nine children. Two died very early and seven remained for education. So it was a hard time for my parents, mostly because of the political situation at home after the 1930 world economic crisis. Anyway, I was able, as well as my brothers and sisters, to get the desired education in primary and secondary school and at the university. I joined the National University medical school and finished my studies in 1950 in Colombia.

Juan, the same question, related to your family, tell us about it.

JUAN: Well, first of all, I am the son of an ophthalmologist. He was the son of a Spanish immigrant. All my ancestors came from Spain and all were immigrants. So my father was the first to have a professional career, and this opportunity was not available to him in Spain at that time. My mother is a descendant of a Spanish immigrant, a painter. I have only one sister, so it's a small family.

Alvaro, tell us, why did you become an ophthalmologist? Why did you study medicine in the first place?

ALVARO: My father was not a professional. He was not able to have a career because the orientation at those times, and after so many civil wars in my country, younger people were unable to get into universities. The National University, although founded back in 1870, really didn't accept many students until the early 1900s, so many of the younger population were not able to join the university at those times.

In the late forties, I was one of the few people that were able to obtain a medical education. I was going to be a lawyer at first, but then I changed my mind. I decided to go to medical school, not having any previous influence from relatives.

How about you?

JUAN: Well, my case was easier because my father was an ophthalmologist, and since I was a small child he took me to the hospital during holidays. Sometimes he left me in the car and forgot about me for hours! But at other times he took me into the wards and I saw him working with poor people at the general hospital, and this was a great influence, so I didn't have any doubt I wanted to study medicine.

To become an ophthalmologist was a different thing, because I had doubts. I was inclined to internal medicine, but just at the last moment I decided to be an ophthalmologist, and then enter a formal residency program. At that time we already had a very good two year residency program.

ALVARO: Did your father agree on your being an ophthalmologist, as well?

JUAN: Oh, certainly, he was most interested. It's different now. You know, I have four children. I didn't influence them. I said, "Well, you have to study what you want, what you like." But, nevertheless, I have a son and a daughter who are medical doctors, one is an ophthalmologist and the other is a pediatrician. But the other two girls, one is a lawyer and the other one is an economist. So we don't influence our children nowadays, but at that time the situation was different. My father was very much interested in me becoming an ophthalmologist. I finally became an ophthalmologist and my early years in ophthalmology were spent in Chile. At that time it was a two-year residency program and then I practiced for a couple of years in my country.

And then he recommended me to go to the [United] States, and this is another story that we can discuss later. But in your case, how did you become an ophthalmologist?

ALVARO: Well...

JUAN: Why not a pediatrician, an internist, or...?

ALVARO: I had many doubts as to what to be, but I decided to be a pediatrician because I had four sisters. They got married, had children and they used to call me at night, in the morning, you know, because as a medical student they believed I could solve pediatric problems. So my first books were in pediatrics and I became very friendly with the professors in pediatrics. I waited a long time, for the decision, but I finally decided to be an ophthalmologist thanks to a friend of mine - who later became one of the associates of Professor [Ramon] Castroviejo in New York – he had obtained a fellowship in France at that time and he asked me to replace him at the service of ophthalmology at the university hospital in Bogotá. At first I refused and I told him, “Look, I am not interested in ophthalmology really, I’d like to be a pediatrician.” He said, “Well, please, replace me in this service or I will lose the fellowship.” So I accepted the job and became in contact with ophthalmology as well as with ear, nose, and throat work, because the specialty in Colombia was combined then, as it used to be in USA.

When I finished medical school, I graduated from the university, including one year subspecialty internship in EENT at the end of 1950. I talked to my father and I said, “I don’t feel ready to get into practice because I don’t have enough experience, particularly in surgery.” So he said, “Well, why don’t you go to Europe or the United States?” Well, because of language problems and having friends in Europe, I planned my trip to Europe. I spent three days to fly to Madrid, Spain, that’s what it took back in the early 50s. My studies in Europe lasted for two years, searching for a place to be trained. I spent one year in Spain in different clinics, including the Barraquer Clinic. Then I visited several clinics in Italy, Switzerland, Germany, France, etc. until I arrived in London. In London I went to the Institute of Ophthalmology. [Sir Stewart] Duke-Elder was alive at the time, and many others, so I remained there for eight months and took several short courses. The idea was to obtain a formal training, a residency, unfortunately at the same time there were

many Second World War soldiers now veterans there. I asked for a position (residency) so that I could remain and study, but authorities refused. So not having a secure place to remain in London, I was advised to go to the United States. I came at the end of 1952 for a three year residency in ophthalmology in the Washington Hospital Center. At the time it was called the Episcopal Eye and Ear, one of the hospitals that merged with two others to become the Washington Hospital Center. That is the story of my going into ophthalmology in the United States.

JUAN: Well, my story is a little different, because I had a good residency. We had surgical practice, so I already was an ophthalmologist, but I wanted to perfect my skills and to learn more. I took the Harvard Course in Basic Sciences, and this was really a great learning experience in Boston. We had very, very good teachers over there. The professor of optics is the best I have ever known. His name was Paul Boeder, and he was not a physician, but he taught refraction and optics for ophthalmologists, and I think he was unique. You know, nowadays we teach optics to our residents but the professor is usually someone from the Department of Physics and what he teaches is quite far from practical ophthalmology. This was a very good course. I met Henry Allen, who was the director of the course, David Cogan, who was the head of the department, but he was a little distant; he was such a well-known person, we didn't have direct contact with him. And I met very nice people who worked with Charles Schepens.

When I was in Boston my wife was pregnant, and we thought we were expecting one child but then, let's say, 15 days before delivery, my wife went to an American obstetrician, and he realized that there were two babies instead of one! No echography at this time, but he heard two hearts! So my wife went alone to this doctor and she decided to call me. I was studying in the library of the Massachusetts Eye and Ear Infirmary and for the first time I heard my name in the paging system: "Dr. Verdaguer, Dr. Verdaguer, go to the paging system." And then my wife said, "We will have two children instead of one!" It was a big problem because we were not prepared for that.

Then I saw what a friendly hand that the American doctors offered to me. Now, Charlie Reagan - you probably remember Charlie Reagan, I was very close to him - he gave us a lot of things for the babies. A girl and a boy were born in the Boston Lying-in Hospital. So I have an American daughter and a son, and of course they have a double nationality.

The Harvard course was excellent, even Nobel Prize winners taught there. So it was a very, very good program. When I was in Boston, Ben Boyd, was the Executive Director, President, and everything in the Pan American Association, he obtained a scholarship for me at Columbia University in New York, with Algernon Reese, and I spent almost a year there at the Columbia Presbyterian Medical Center. That was what it was called at that time. Now it's the Columbia University Medical Center - great institution and great doctors. I spent some time with Dr. Reese, and did ocular pathology with Joseph Wadsworth, both very kind people.

Initially I had an indifferent or cold relationship with Algernon Reese. Dr. Reese was a world authority on ocular tumors, he wrote the first book on ocular tumors, he was a big personality. Gradually he changed his attitude towards me, to the point of inviting me to spend Christmas night at his home, and it was really a great experience. He had an apartment on Fifth Avenue and he told me several days before that it was a very important day for them, and I needed to wear a tuxedo for this occasion. Well, I said, "Okay, Dr. Reese, I will be there with a tuxedo, don't worry." Then later, before Christmas Eve arrived, he said, "Well, this must be difficult for you, I understand." "No, no," I said, "don't worry. I will be there properly dressed, with my tuxedo." They really had a very special Christmas family night dinner. Dr. John Dunnington, an old friend of his, was there also with his family. Dr. Reese had beautiful daughters, all very clever people and all very well dressed. But they did not have domestic service, because for that date, domestic servants were not available in New York, even though it was a great occasion. At some point Dr. Reese said, "Well, let's pick a topic of conversation." And the topic was "Importance of the English Language," and we all took part. It was like a roundtable. It was really a great experience. This explains why I love American ophthalmology and American doctors so much. When they get to know you, they're the most kind and helpful to young ophthalmologists from Latin America.

ALVARO: Well, you have mentioned many names very familiar to me, because I have had to deal with them through the years. How did I get into the Washington area? It was difficult to get a residency, obviously, particularly for a person that at the time didn't speak English too well. There was very little teaching of English in my country. I don't know how it is in Chile, but in Colombia, it was very difficult to learn other languages. Only

in recent years bilingual schools have been opened in the country, and there is now a desire for everybody to speak English. Children are being sent to bilingual schools now, but not at that time. I knew a little bit of French, and French was the way I communicated during my experiences in Europe. While I was there I had the occasion to meet many of the famous professors of that time, Professor [Louis] Paufigue in Lyon, [Marc] Amsler in Zurich and Adolf Franceschetti in Geneva besides those that I mentioned in Spain, and Duke-Elder, as well as many of the celebrities of the time, in London, at the Institute of Ophthalmology and Moorfields Hospital.

Then in Washington I worked under the influence of several people very important, one was Benjamin Rones. He was a graduate from Hopkins and he was leading the field of ophthalmology and eye pathology in Washington. Also there, at the time, was Frank Costenbader, expert in strabismus. He and Marshall Parks, I think, were the leaders in opening a new field in ophthalmology - pediatric ophthalmology. So I was influenced by them, and some others, like Lawrence Zimmerman. Fortunately, in the first year of residency in Washington, we used to have a rotation through the Armed Forces Institute of Pathology for six months and during these six months the Pathology Club met in Washington DC. So for the first time I met lady pathologists, Eleanor Campbell-Wilder, and another two pathologists from Chicago...Drs. Klein and Theobald. I met also Ed Maumenee during this rotation at the AFIP and at the Eye Pathology Club. Don Gass, Jerry Shields, Steven Ryan, Bradley Straatsma, later on - so it was a nice introduction to my life in the United States.

When I finished, or was about to finish the residency, my fellow residents asked me, "What do you want to do?" I said, "Well, I have to return home. They are expecting me back home, so I think I'm going back home." They said, "Well, why are you going back to Colombia? Now that your country is in the middle of a civil war, stay here with us." So I changed my mind then. I talked to my parents, and they said, "Why don't you stay there, at least for a few years, and wait and see what happens in the country." So then I asked the hospital, "What do I have to do to remain in this country?" And they said, "Well, number one, you have to get your visa. Two, go take a fellowship in one of the leading institutions in the country and then take your boards (state and subspecialty)."

The first fellowship offer that I got was from Marshall Parks and Frank Costenbader to remain at the hospital and go into pediatric ophthalmology. There were some others...I wrote to several institutions and they accepted me in all of them. The one that I wanted to go to was Harvard, at the service of Charles Schepens in Boston. I wrote to him and he said, "Well, come for an interview." So, I went there for the interview. He said, "I like you. You can remain here for three months. If you prove your knowledge, hard work and good manners - through the treatment of my patients, private patients mostly - and they receive good care from you, and if I am happy with you, you can remain here as long as you wish." So I went to Boston after been successful in requirements.

I decided then to move to Boston, still single. Funny enough, during my time in Boston my future wife's father went to Boston to die there. He came to Boston severely sick. I helped him to be hospitalized in the Peter Bent Brigham Hospital, helped to get him admitted to the hospital. I had a weekend invitation to go to Cape Cod and when I came back to Boston he had died. He was so severely ill that he died there.

But that was the way that I established communication with the person that would become my wife, Helenita, to whom I have been married for 53 years. I am the father of four children, one ophthalmologist, the eldest. My second child, a girl, she didn't go into anything related to medicine. She became a journalist, didn't go into medicine at all. And the third one, he went to medical school for two years, but he decided to quit. He moved to USA to study and to work. He married an American girl and has a daughter. He's now in private business, somewhat related to ophthalmology. The fourth one, he went to medical school, he graduated and he decided to join us in ophthalmology as a resident in a private ophthalmic foundation which I will mention later. Unfortunately, he decided to quit because he had decided to get married and go into something faster. So he abandoned medical studies, went into business administration, where he graduated, and now he's the successful administrator of our foundation.

JUAN: Well, Alvaro, I will ask myself two questions, and then I will ask you to answer the same questions. Who were the important people in American ophthalmology who were your fellow residents or friends, when you were in your formative years in the US? For me, I have at least three very well-known fellow companions at the Harvard course in 1962, Tom

Aaberg Sr., Tom Hutchinson, and George Garcia are nowadays leaders of American ophthalmology.

And the second question is: who are the persons who were the most influential in your career? I have to mention two persons. One is my father. My father was a retina specialist, and at that time, you know, in the US, they were looking at the retina with the direct ophthalmoscope until Charles Schepens came and changed everything by introducing the binocular indirect [ophthalmoscope]. In our country, we had the European school so we did indirect ophthalmoscopy, but monocular. My father was very good at finding tears and looking at the fundus through indirect ophthalmoscopy. So I think he's one of my important mentors. The second one is Dr. Algernon Reese. I stayed with him in 1963, as I said, and he taught me many things. In particular he taught me to keep very good records of all patients. After I stayed with him, I took photographs of every patient I saw, so I had a big photograph collection of patients, as he had, and followed through many years. So these are the most important persons during the early years of my career.

What about you, Alvaro?

ALVARO: Well, I mentioned some people that I met during the residency years in Washington: Dr. Benjamin Rones, Marshall Parks, Frank Costenbader, and being so close to Washington and to Baltimore I had the occasion to visit during weekends and to attend meetings at Johns Hopkins University. So I met Bernard Becker, Jonas Friedenwald, I mean, some very well-known people in the history of American ophthalmology. Being in Boston, I had also the occasion to visit New York. I used to go to visit Drs. Reese, Ellsworth, Castroviejo.

JUAN: That's where we met for the first time.

ALVARO: Well, I heard about you when your father had visited Bogotá to give lectures in retinal detachment before I met you, maybe in the early 60s. He went to Bogotá invited by the Colombian Society of Ophthalmology. Also, through the Pan American Association of Ophthalmology. I had already been very active in that organization since 1960.

You also mentioned another person, Paul Boeder, who was an optical engineer, and he was the mastermind behind the Charles Schepen's [indirect binocular] ophthalmoscope, because he used to work for the American Optical Company. And this is something that Charles [Schepens] told me. He said production of an instrument is difficult. One thing is to have ideas for a prototype, but he didn't succeed in getting this made in London. Probably, Charles Schepens went to London to get the help of Mr. Finsham, a famous optical engineer who helped Mr. Ridley to make the first intraocular lens. Charles Schepen's went to London by the end of the Second World War. He was escaping from France and the best place he could go was to London. But he didn't succeed in getting help to build his [indirect binocular] ophthalmoscope there.

JUAN: Let's talk about professional organizations. We both have been very active in professional organizations. I started my career in the Chilean Society of Ophthalmology, where I became President at a very young age. And then the most important international organization for me was the Pan American Association of Ophthalmology. I spent eight years there as Secretary General for Spanish language, and then became Executive Director for four years, then President-Elect, and then President of the Pan American Association of Ophthalmology, 1997 to 1999. This was a great experience. We had a combined meeting with the American Academy of Ophthalmology. Bill Tasman was the President at this time, and I had to deliver, together with Bill Tasman, an address at the opening session. It was a great occasion. Being President of the Pan American allowed me to do a lot of things. You know, we did a survey for diabetic retinopathy. We were able to organize a campaign to detect diabetic retinopathy in all Latin American countries, from the north of Mexico to the southernmost city in Chile, Punta Arenas. Many cities in Brazil participated, even in the remote places. It was very important because we realized that 70% of the diabetic patients we examined didn't have any diabetic retinopathy. 30% had some type of diabetic retinopathy, and the ones who needed vitreoretinal surgery was much smaller. We realized the importance of doing some kind of telemedicine or screening by photographic methods, because examining all diabetic patients is not logical, the majority of them don't need our assistance, so a simple photograph will solve the problem.

We had many more interesting programs. As you know, we have had since the beginning of the Pan American Association of Ophthalmology, the Pan

American Congresses. During my tenure we developed regional courses for the odd years when we don't have a big Pan American Congress. Many Latin American ophthalmologists cannot afford to travel to distant places. So we organized regional courses in cities that were easy to access for ophthalmologists of neighboring countries. We started in my country, in the northern part, in Arica, and nowadays there are several regional courses, not only in Latin America, but also in Europe. The next regional course will take place in Santiago de Compostela, Spain. So it was a great experience. I made many friends and connections. So the Pan American Association of Ophthalmology is my association.

Well, of course I have been working for many other societies, like the International Council of Ophthalmology. I was a representative of the Pan American Association of Ophthalmology on the Board of the International Council of Ophthalmology, and in the last years I was Chair of the Task Force on CME for the ICO. I will talk later on that because this was the most difficult part of my career, to achieve something in this complex position as a Chair of CME for the ICO. I belong to the Jules Gonin Club. I was on the Executive Council for a few years. And of course, the Academia Ophthalmologica Internationalis. We both belong to the Academia Ophthalmologica Internationalis and this is really a great experience to meet experts from all over the world. There is a very limited number of members and they are carefully selected each year. We are very few from Latin America. Alvaro is one of them. I became Treasurer of the Academia because Brad Straatsma, who is a great friend and a very influential as President of the Academia at that time, recommended me for a term as Treasurer. I then became Vice President for one period. Working with Koichi Shimizu was a great honor and pleasure. I also belong to National Academy of Medicine in Chile.

What about your experience in your professional societies?

ALVARO: Well, I know what Juan has mentioned about his career is very true. I can testify what a great effort it has been and the accomplishments he has obtained in his international career, from the early years through today. Similarly, I have been president of the Colombian Society of ophthalmology, the Pan American Association, member of the International Council of ophthalmology and the Academia Ophthalmologica Internationalis. In the United States I am a Member of The Retina, The

Macula and The Vitreous Society. In Colombia currently I am Emeritus Professor of Ophthalmology at the Rosario University and the Fundación Oftalmológica Nacional and the Military Hospital.

Well, going back to Boston, where I remained for two years, Charles Schepens became my second father, to such an extent...well, he had one son and three daughters. His son was very young, I don't know, but I felt that I became sort of another son for him, in some respects. He used to take me to his summer house, not far from Boston, a few miles, 35 miles up north in Nahant where I met his beloved wife Cette. So, I became a member of his family, particularly during the summer. I helped him get ready his first statistical reports in relation to retinal detachment. This fellowship was very excellent because we were able to become clinician as well as surgeons. I would have desired to remain for more than 2 years and he even offered me if I wanted to stay longer and to become one of his associates and take care of the numerous Spanish speaking patients, but I had accepted an offer in Washington DC to open the first retina clinic in the area. I also had the tremendous influence to return to DC from Marshall Parks, who became my closest friend.

Then everything changed in my plans. I had applied, asking for papers to become an American citizen. I was supposed to be going to Fort Sam Houston in San Antonio, Texas for my military service, and then obtain my official recognition as ophthalmologist in the United States by taking the board examination. So I took my boards, the written part, in Boston, and then the oral boards in San Francisco. So I thought I had everything ready to remain in this country and then the State Department said, "Well, we cannot give you the visa here. It's because of treaties between the two countries, so you have to go back to Colombia." I said, "Okay, how long?" They said, "Well, maybe in six months, you will be able to return with your visa."

So, I went back home, and the first thing that I did was to accept an invitation to speak, in Cartagena, in the Caribbean coast of Colombia, where I met Helenita in person, my future wife. That was the first problem for my return to USA. I began to change my mind! Then I went to Bogotá and I was offered to a joint venture, a new ophthalmological institution, with three older specialists. So I thought, "Well, if you are going to remain here for six months, or four months, why don't you earn some money?" You know, residency programs in the United States at the time didn't pay much. When I

first left home, my father helped me, for the expenses of the two years in Europe. But being in the United States, the residency program paid a salary, enough to survive as a single person. I didn't have your situation with a wife pregnant, etc. Then, I became in love with my country again; my future wife and I decided that I would remain in Colombia.

JUAN: Well, just commenting on what Alvaro said, staying in the US, never...it never crossed my mind. I came here to learn, but my decision was always to return to my country. And I love America, but I love my own country more, so I just returned.

In regards to the American Board of Ophthalmology examination, some comments. I also took it, just for the honor. To be a Fellow of the American Board of Ophthalmology does not help in my country, but it was a challenge. So I took the exam and I had no problem with the written part. I had an advantage, because I was already practicing ophthalmology, and I had been in Boston. And for that reason I obtained very good marks - the best mark, I was told. But the practical examination was a different thing. I was already practicing in Santiago, and I came back here to take the second part of the examination in Chicago. It was difficult because I had to do clinical refraction, they presented me a young boy, 15-years-old, that didn't cooperate at all. I had to do retinoscopy, I really don't know what the results were. One of the examiners was Professor Edward Maumaneé who told me to do a visual field examination in his presence. That was a great experience. Then they showed me several fundus photographs, and I had to tell what the diagnoses were. And they presented me with a picture of the bear track marks for congenital hypertrophy of the retinal pigment epithelium, and I didn't know the exact English name for the bear tracks, and I said, "Bear footsteps." I just invented the word! Well, the examiner smiled and accepted my answer.

One last point, being an active member of the Pan American Association for so many years, allowed me and Alvaro to make very good friends. We have very good friends in Latin America: Alvaro Rodríguez, Enrique Malbran, Francisco Contreras, Rubens Belfort, Rafael Cortez, and in the US, Brad Straatsma, Bruce Spivey, and many others. So the Pan American Association of Ophthalmology gave me a great opportunity for social and cultural interaction, one of the missions of the Association.

What about you, Alvaro?

ALVARO: I have been very close friends with all people Juan has named and their wives since the APAO is a big family through which we have been able to establish contact with the rest of the world.

Juan, why don't we mention your impression of coming to this country to attend the meeting of the American Academy of Ophthalmology? Certainly, both you and I trained in this country and each one of us in famous, first-class institutions - New York and Boston. Both of us were able to listen to the teachings of the famous people at that time, a little bit earlier for me, because I'm older than you are, and so that might make a difference of our impressions of the Academy meetings.

I had the occasion to attend in 1955 my first meeting of the American Academy of Ophthalmology in Chicago. I was sent by the Schepens Group and my task was to attend all of the lectures and presentations on retinal detachment at the time, and particularly those from people not related to Boston, from different cities in the country. So I did. But retina was not yet a popular specialty in those times because, as I have mentioned, it was Charles Schepens who revolutionized the knowledge of retinal detachment not only in North America, but, worldwide. At that time, 1955, [Academy] meetings were held permanently in Chicago. The site of the meeting was the Palmer House Hotel where in the absence of a convention center, lectures, meetings, social affairs, everything took place in this beautiful hotel. The activities mostly were regarding cataract surgery and that was the central idea under discussion. For instance, how should you remove the opaque lens? And there were three forceps: the Arruga forceps, the Castroviejo forceps, and there was one forcep designed by a Chilean. Do you remember that name, by any chance? I just skipped the name. There was a Chilean, who was the inventor of this special forceps to remove the cataract.

JUAN: It was Dr. Amenábar.

ALVARO: Yes, Amenábar. The subject for treatment was the flat chamber after surgery. Sutures were not used yet. At this meeting in 1955, we heard presentations from Dick [Richard] Troutman, [Ramon] Castroviejo, and some members of the Castroviejo Society dedicated to anterior segment surgery and they met at that meeting to speak about the use of sutures and

needles. There was not a place in the world making sutures with needles. So they spoke about needles, the type of needles that probably could be used, the curvature, size etc. as well as the type of materials that could be used for this purpose, not only silk, but some others. For instance, some people had used 7-0 silk sutures to suture the wound of cataract surgery. So there weren't that many retina presentations. The macula did not exist in the mind of the retina people nor the vitreous at that meeting, and so this is one of the memories that I have.

Since 1955 I have missed, maybe, four Academy meetings because of illness or other problems at home. You know, I almost didn't come to the meeting, this year, because of problems at home. However, I share a feeling when the date of the Academy Meeting approaches - an internal force in my mind moves me to come to meetings, I love to come. I meet friends, I see my fellow South American friends, friends from everywhere. I return home with an additional force after seeing the thousands of people interested in ophthalmology, I return home with more strength to keep up my practice and to communicate and teach to people that work with me. I enjoy coming here, as well as to many other meetings - in particular the smaller meetings for example of the Macula and the Retina societies, the Club Gonin, etc. I think, "Let us attend and hear the latest news, and even contribute with some small ideas that you may have."

JUAN: In regards to attendance at the American Academy of Ophthalmology annual meeting, I have to say that the first time I came here was when I was a fellow at Columbia University in 1963 and I have come every year since, with only one exception, when my wife was sick, but I come here every year. No doubt it's the best ophthalmological meeting in the world. If you go to other meetings you can see repetitions, but it's nothing really new, and that's the reason why so many Latin Americans come every year, in increasing numbers, to this meeting.

I think we should talk a little about changes we have witnessed during those years in our careers. I see the most changes, as you mentioned, in cataract surgery and in retina. In cataract surgery, of course, the surgery is completely different. We used to hospitalize the patients, put 5 to 10 sutures, and then they didn't have intraocular lenses. Now we have intraocular lenses, we have no sutures, we have phacoemulsification, the patient doesn't

stay at the hospital - just for two hours - the results are really spectacular. It has reached almost perfection, I think, cataract surgery.

In regards to retinal detachment surgery I started with scleral buckling and indirect binocular ophthalmoscopy, which I learned in Boston from Schepens and imported it to my hospital. I brought indirect [binocular] ophthalmoscopy to look for the tears and to follow surgically the whole scleral buckling procedure. But we were not able to cure a certain percentage of patients. We had patients with giant tears and everything we tried failed. We performed a spectacular buckling surgery and we didn't obtain anything. The positioning that McKenzie Freeman recommended, well, it didn't work very well. Now, with vitrectomy, it's much easier to repair complicated detachments and our younger doctors are obtaining much better results. They can cure almost every case of retinal detachment, it's incredible the progress.

I have seen also much progress in imaging, starting with fluorescein angiography, now with OCT, high-definition OCT, it has changed the field of medical retina completely. That's my own field and we really know what's happening inside the eye now.

So I have seen incredible progress in some areas. But there are areas that have not progressed at all, and I see many patients with retinal dystrophies, inherited retinal diseases, and we just talk. We give Vitamin A, and we comfort the patient, we're very compassionate, we talk about the prognosis, about the future, the research which is being done at the moment, that there is hope for the future, but really its nothing. And I can envision that in the future we will be able to genotype all retinal diseases, and then we will have gene therapy for most of them. We have gene therapy now for one type of retinal degeneration, but it's not used everywhere. So this is starting, but there are many patients we can still not cure in ophthalmology. There is much to do, there's much research.

A comment about ophthalmology in Latin America, and, in particular, in my country, Chile: I think clinical ophthalmology and surgery is okay. It's done just like in the United States or any other country with high standards, but we don't have significant research. There is basic research in many areas at the university, but nothing relevant or related to ophthalmology. So if we want to know advances, innovations, we have to come to the States. This is

the reality. But I think in Latin America we have state-of-the-art clinical ophthalmologists, and very able, very skilled surgeons. The cataract surgery there is identical to the cataract surgery done in the States or in Europe, and retinal detachment repair equipment is there. We spent a lot of money on equipment, state-of-the-art equipment, and clinical ophthalmology is done very, very well, but there's no relevant research. I don't know, how do you see this progress of ophthalmology and the situation in Latin America?

ALVARO: Well, coming over the years to attend the American Academy of Ophthalmology (initially with otolaryngology, as well) you increase your knowledge year by year. Initially, you might think that things might not change so quickly in medicine and comes to my memory the question how to treat retinal detachment. The ideas of Gonin first influenced people in Europe, and ideas came from Belgium to Boston, mostly through Charles Schepens. The development of the scleral buckling procedure, or similar ones, the type of procedure through which we could make an indentation and adhesion between the retina and the pigment epithelium, naturally started with the diathermy procedure coming from Europe, from Professor Weve in Holland. Then one of the persons that rotated with Charles Schepens, [Harvey] Lincoff, had the idea of using cryo. When he first spoke about cryo in early 1962–63 I heard about it and immediately after I went to New York, to Cornell, to see how the cryo was applied. So I learned very fast, so much so that I obtained one of the first cryo instruments and took it back to my country to use cryo coagulation.

In fact, one of the good things that happen when people attend the Academy is to bring knowledge to their countries, and it happened with me. I introduced in Colombia the first indirect [binocular] ophthalmoscope, Charles Schepens' ophthalmoscope, at home. I not only used it, but I taught others how to use it. This is what Charles Schepens told me: "Go back home and teach - you have to teach. Teaching is the secret of everything. You will become known, make money, you will receive honors, everything through teaching." Well, I had a friend at Harvard that used to think the opposite a neurologist... he said, "Well, when I come back home I will not teach anything. I will get into the operating room alone and won't let anyone know the ideas that I have learned." So I talked to Charles Schepens, I said, "Charles, look what this fellow told me." He said, "Oh no, don't pay any attention to that stupid guy. Teach!"

And this is what I did – I taught indirect ophthalmoscopy, cryo, vitrectomy, etc. and what Juan just mentioned, fluorescein angiography. I heard about fluorescein angiography from Ed Maumane, Ed Norton, etc. So I went to Bascom Palmer immediately. At that time I owned a condominium nearby the Bascom Palmer [Institute], where I used to spend vacations with the family and while my wife and the children went to the beach and I would run to Bascom Palmer to learn about fluorescein angiography, laser. Later, Dr. [Robert] Machemer visited my country. We had become very good friends when he was in Miami and then at Duke - we used to go to the Duke courses. So he said once to me, “Would you like to go to... do you ski?” I said, “I don’t have the slightest idea of skiing!” “Because I’m going to organize a meeting for skiers.” I said, “Well, I’m not...I hate that, and I hate the snow.” “But would you like to go to these courses?” I said, “Of course.” So I went to the Vail meetings for eight years, and there I learned vitrectomy and I did my first pars plana vitrectomy at the Hospital Militar in Bogotá. So I introduced vitrectomy to Colombia and faced all the problems that we had with the early instruments. A problem mentioned by Dr. Verdaguer is the difficulty for many people in our countries to come to the Academy meetings because of language barrier. Nowadays it’s easier to learn because of the many systems to communicate – there are several languages available [at the meeting] and as we already have trained younger generations of ophthalmologists, new teachers help to maintain good standard level of education, in the country enough, at least to have an answer for some of the eye care problems to be faced at home.

JUAN: Well, Alvaro, I agree with you. I think education for me is the main activity of my life. I am still Program Director at my institution and teach almost every day. With regards to the Academy and transmission of knowledge, the Pan American Association of Ophthalmology offers every year the Best of the Academy Meeting, a one-day meeting with all relevant material presented at the AAO Meeting in Spanish language. I’ve been a speaker there for 22 years which obliges me to go to every meeting related to certain specialty topics, and then to see all the posters. You become a real reporter, and you summarize and transmit the information to your fellow ophthalmologists in Latin America. It’s a very successful activity of the Pan American Association. Even in our national congress there is always one section, the Best of the Academy.

We are also interested, in prevention of blindness. This is another activity that is very important for me, not only to disseminate knowledge but take some action. We organized the first cataract-free zone in our country, with the help of Carl Kupfer, who was the head of the National Eye Institute. He had special interest in prevention of blindness. We started with this in our country, the cataract-free zone, because cataract is still the first cause of curable, treatable blindness in Latin America, as it is in many parts of the world and this must be a very important activity for all of us.

ALVARO: I think the Pan American Association of Ophthalmology is another way through which world ophthalmology has been able to spread knowledge all over the world, through the Pan American Association of Ophthalmology, the Asian Pacific, European Society, etc. For us in Latin America, the Pan American Association has been very important. Juan was the President...when were you president?

JUAN: 1997 to '99.

ALVARO: I was '81 to '83. And I think links between the Pan American, the International Council of Ophthalmology and the American Academy are an important way to improve the knowledge of ophthalmology. Links between the International Council and the other societies, means a lot in the fight - not only in the teaching - but in the fight against preventable blindness.

Would you like to comment about this, or you have another...?

JUAN: Well, I agree. I think the Pan American Association of Ophthalmology is the most, well-organized supranational society, and we have many educational programs, for many years now. We have a visiting professors program, we have education material, we have online courses, so there are a lot of educational activities, and these are all well organized.

At some time, we started to discuss what's the most difficult task you have been involved with, and for me it was working for the ICO in the CME Taskforce, because you have to divide the world into developed and developing countries. In developed countries, CME is well structured, well organized, but in the majority of countries this is not well organized. They all have CME activities—they all have congresses, they have newsletters,

they have journals—but there is no formal program, or a well-structured program, because recertification is not required in those countries. So I try very hard to bring to them a structured form of CME, Continuing Medical Education, with a system giving points for such-and-such activities...

ALVARO: Credits.

JUAN: Credits, credits or points, and, well, I hope this will be taken up by some societies. But it's quite difficult because many of these societies are not interested because, as I said, recertification is not required, but I envision that recertification will be required very soon in most countries, at least in Latin America. In Africa it's even more difficult.

I also organized for the ICO the Visiting Professors Program to developing countries, to Africa, in particular. And I think this was successful. We brought people, let's say, to Nigeria. It is not easy to find a doctor willing to go to Nigeria because nowadays it's dangerous to be there. But we convinced a doctor from The Netherlands who went there, brought equipment for phacoemulsification, and taught Nigerians to do phacoemulsification, and he left the machine there. So this was an accomplishment. A professor, a visiting professor, needs to be from South Africa or from Europe, in the case of Africa. So this was a very difficult task.

Now, my term at the ICO has finished, but I wasn't very happy with the results, for this reason: because the countries were not willing to give credits and have formal CME programs.

ALVARO: Well, my last message for this excellent program organized today by the American Academy of Ophthalmology, is what Juan Verdaguer has reminded me of during this talk. That is, the difficulties professionals have after returning to their own home countries, and to start in practice and to teach [ophthalmology]. I was able to survive and to succeed - creating a foundation, a non-profit organization 36 years ago, and it has been very successful. I'm the founder, together with the help of other people from private sectors very influential people. We didn't get any help from the government because in the long run it's dangerous to deal with government politicians, so we went entirely in a private way.

I have helped to create three teaching programs in ophthalmology at home, one at the San Juan de Dios Hospital that was the first one. Then at the Military hospital I created a second teaching ophthalmic institution, and the third one at the Fundación, our Fundación. We now have 16 teaching programs back in Colombia, accredited by the Sociedad Colombiana Oftalmología. Also, we have yearly a number of meetings, courses, congresses, etc. going on all over the country. The country is nearly 50 million people, so we have to a lot of work to do because the future of our country depends on what we do.

What I was able to obtain in the United States during my residency, my fellowship and the many trips there have provided me the knowledge and means to go back and teach. Which I still continue, at 88 years of age and hopefully will be maintained by the people I have trained, including two of my sons. They will continue the task in our Institution we created for many reasons, one, to facilitate training of young people and avoid them the many difficulties that I faced to get mine year years ago.

JUAN: Well, I have a similar experience. After working for many years at the university hospital, I am now working in a foundation called the Fundación Oftalmológica Los Andes, who is a very interesting model, because we have our offices there but we also give ophthalmological attention to the poor. The earnings from operating room fees, and laboratory and imaging exams, all go to pay for the service to the poor. So we have two sections. We have our practice there, but we also donate time to see patients free of charge, and surgery free of charge, and exams free of charge, and this is all financed well. So we are able to have medical students, we have residents and fellows; we have several fellows in subspecialties. And I think the time has come to have a south-to-south cooperation. Since many years ago people went first to Europe and then to the States. Now there are many high-quality institutions in Latin America, so ophthalmologists from Latin America can go to another Latin American country for a subspecialty or stay there for a few months to learn, because we are well equipped, and we have human resources able to teach. So I think the time has come for south-to-south education without neglecting north-to-south.