# José Carlos Martins da Rosa

*The interviewee of this issue is a highly respected professional of excellent reputation in modern Brazilian Dentistry.*

*He graduated from the Federal University of Santa Maria/RS (UFSM) in 1988; received his specialist degree from the Association of Dental Surgeons/Bauru - São Paulo (APCD) in 1991; and his specialist and Masters degree in Prosthesis from the Dental Research Center São Leopoldo Mandic/Campinas – São Paulo in 2005. At present, he is a PhD resident in Implantodontics also at São Leopoldo Mandic.*

*Our interviewee is the author of "Restauração dentoalveolar imediada — Implantes com carga imediata em alvéolos comprometidos" (Immediate dentoalveolar restoration - Immediately loaded implants in compromised sockets) issued by Ed. Santos in 2010. His book has also got a Spanish (2012) and an English version (2014). Furthermore, he has several articles published in outstanding national and international journals.*

*José Carlos Martins Rosa is from São Vicente do Sul, a little town located in the countryside of Rio Grande do Sul. He is married to Ariádene Cristina Pértile Rosa who is also a dentist, his partner and contributor. According to Dr. Rosa, she is the active and essential author of the happiest moments of his professional and personal life. His wife is his balance.*

*His family and friends are responsible for a considerable portion of his emotional master pillar. For him, they are indispensable in his decision-making processes, as they always encourage him to move towards the correct direction.*

*Thus, Dental Press Implantology brings to the reader the outstanding profile of a young, competent talent of Brazilian Dentistry who also stands out for his polished civility and diplomatic genteelness not only in day-to-day social life, but also with those who are around him. Dr .Rosa is a strict professor and sensitive researcher. Methodical and organized, he is able to selectively identify and associate the skills that effectively contribute to add and multiply potential results.*

*He is the owner of an avant-garde dental center equipped with modern facilities strategically associated with important hospital resources planned with a view to working with excellence, biosafety and high technology. His clinic also has a center for professional enhancement and qualification consisting of an auditorium with integrated clinics for events, immersion courses, as well as study and research groups. Renowned professionals from all around the world have taught courses and given workshops at the dental center owned by Prof. Rosa.*

*In this interview, José Carlos Martins Rosa talks about the administrative vision and management model employed at the dental center he founded. Furthermore, he helps us understand the IDR protocol, a technique he strongly advocates.*

*He also talks about family, his greatest influences, the professors who inspired him, his publications, courses, and future plans. This interview is an interesting, productive and illustrated journey across human and scientific values that directly display the pathways of good example, simplicity, interest in research and deep love for everything that is done.*

*While talking about his plans for the future, Prof. Rosa mentions:*

*"...I intend to develop other projects inside and outside the field of Dentistry, activities that will contribute to our growth as human beings, helping people in need or difficulties. I intend to spend more time with my family, to be more present by giving and valuing the simplest things. I believe this is the essence of life. Life! God has bestowed on me so many good things! It is high time I gave it back...".*

*We are certain that such gratitude is partially achieved by the generous sharing of information provided in the following pages.*

*Franklin Moreira Leahy*

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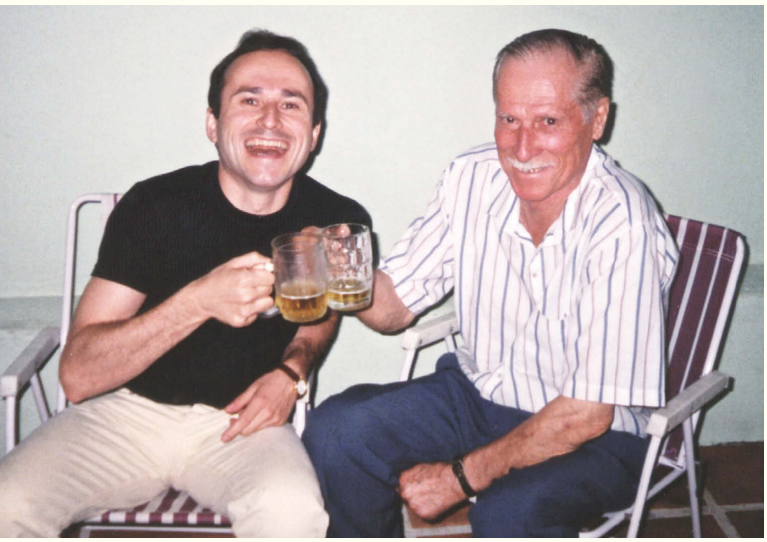
How and when did you become interested in Dentistry?

I come from São Vicente do Sul, a little and calm town in the countryside of Rio Grande do Sul where I lived until the age of ten. My parents, Darcy and Maria, decided to move to Santa Maria so that their eight children could go to school. I was the youngest, and was privileged to have Luiza, Arlei, Helena, Marlene, Milton, Jane and Darcymar as my siblings who broke down the barriers and opened the way for me. Our parents were indefatigable and always encouraged us to study, as they believed this was the only way to achieve a better future. They went through times of difficulty to have their dream of seeing their children graduated from a university come true.

I have three siblings who are odontologists: Luiza, Arlei and Darcymar. And they are the reason of my professional choice. My passion for Dentistry arose before I entered the Federal University of Santa Maria, as I helped my siblings at their clinic. Before university, I had the opportunity to understand the functional, esthetic and psychological benefits of Dentistry. My family always supported me and were determining as I followed that road with success. Dentistry became my career and the reason behind my personal satisfaction.



With his father, Darcy Pilar da Rosa, at an informal gathering.

In Caxias do Sul, you founded a modern private dental center named after you. It was developed with a highly respected infrastructure that meets the present technological, ergonomic and biosafety requirements. Could you tell us about the history and planning of such task until it reached its current quality and excellence status?

At a given point of my career, in the 90s, I was presented to the universe of teaching. I taught a few courses on the specialties I work with (Periodontology, Prosthesis and Implantodontics) and coordinated specialization programs in Implantodontics in the 2000s. Passing on what we learn is very gratifying. Having a building where I could put this project into practice with autonomy had always been a dream.

Furthermore, since I worked at much smaller premises, I depended on a hospital where I could carry out more complicated surgical procedures. I had always wished for a building that offered safety and comfort during such procedures. Should it allow us to practice all dental specialties, including a prosthesis lab with which we could speed up prosthetic cases, my dream would be fulfilled.

That was when, in 2001, my wife Ariádene and I decided to invest in a dental center which we opened in 2006. During the last few years, we were privileged to have a multidisciplinary group in which Marcos Alexandre Fadanelli, our colleague and

friend, is a key figure. In addition to acting in the clinical practice, he also helps my brother Darcymar Martins da Rosa to develop the courses we offer. Together, we receive students from all around the world. We also have the opportunity to welcome nationally and internationally renowned professionals who teach at our courses and with whom we have partnered at several publications. We have given courses to Spanish-speaking students, and our next goal is to teach English-speaking students. It certainly is a very demanding, but rewarding task.

Good management, organizational and methodological skills combined with a creative and competent management model are key to success. As a highly respected professional within the Dentistry field, what are your main concerns and recommendations?

Running a business is always challenging, and a dental business is not different. We work; above all, with the promotion of health and, for this reason, we have to know how to deal with patient's pain, whether physical or psychological. Cosmetic Dentistry — highly valued nowadays — adds the challenge of dealing with patient's expectations which sometimes are unattainable. Managing expenses and people is a daunting challenge, especially when the goal is to provide them with high-quality treatment that yields excellent esthetic results. Implementing dental care and biosafety protocols as well as carrying out clinical and surgical procedures, all of which are activities related to the organization of a dental center, provide rendering of services that are safe and efficient, and build patient's and employee's trust.

With his mother, Maria Adelina Martins da Rosa, and his seven siblings.

Nevertheless, none of the above is possible without a good and harmonious team. Assembling and keeping a team of people who look at the same direction demands great effort. They need to share the same goals and continuously reinforce their ideals so as to keep everyone motivated and satisfied. Whenever one loses, everybody else does. Whenever one wins, everybody wins. To my view, the human factor is the most important.

Using a very cliché term, we can say that entrepreneurship is part of the professional profile of those who aim at succeeding and prospering in life. Your working facilities include hospital resources that provide patients and professionals with safety, comfort and convenience. Do you believe that your achievements can be considered as benefits and effective advances in Dentistry? What would you highlight as an example of administrative efficiency within the Dentistry field?

The goals of any business, regardless of the field, must be clearly established even

With his three siblings who are odontologists: Arlei, Luiza and Darcymar who strongly influenced his professional choice.

before they are written down on paper. As you have mentioned, counting with a hospital infrastructure is convenient for both professionals and patients, and it certainly is an advance. However, it also requires odontologists to responsibly meet a few requirements and seriously carry out a few protocols they are not used to. The exchange established with physicians and nurses is what makes our work feasible. Such communication must continuously flow.

Our goal has always been very clear: enjoy comfort while performing treatment protocols with responsibility. It is a two-way road. I believe that the contribution I have given to Dentistry as a result of my achievements includes rights and obligations; accommodation and "disaccommodation".

Your interest in studying and disclosing the IDR (immediate dentoalveolar restoration) protocol made you well-known nationally and internationally. It also influenced you to engage in Implantodontics as an eager researcher and author of a book named after the technique. Immediate dentoalveolar restoration (IDR) is considered by many as an extremely important branch of modern Implantodontics due to being easily performed with low morbidity and proven clinical efficiency. For the most enthusiasts, it should certainly comprise the therapeutic arsenal of any up-to-date implant dentist who aims at optimizing rehabilitation results — especially when the clinician chooses to work with osseointegrated implants placed in compromised socket in esthetic zones. In this context and based on your experience, do you believe that the IDR technique is the first treatment option nowadays? Is it able to replace classical techniques such as autograft, GBR, biomaterial or xenografts?

No surgical technique is universally indicated for all cases. Nor can it be considered as good as or worse than others. To my view, all techniques are valid and have advantages as well as disadvantages. Whenever more than one technique is indicated for a given case, the clinician must choose the one he is skilled at performing, the technique that proves feasible to him and which is affordable for the patient.

The IDR, first developed 7 years ago, is a surgical technique used to treat compromised sockets. It combines bone reconstruction and immediate implant placement. Its main advantages are: maintenance of gingival architecture due to being a flapless procedure; reduction in the number of interventions due to being a single procedure; and reduction in final treatment costs, given that it makes use of autograft. The use of autograft harvested from maxillary tuberosity, a structure rich in medullary bone,

enhances treatment results. Provided that it be properly handled, medullary bone has osteoconductive, osteoinductive and osteogenic properties, all of which are desired to optimize bone repair.

Our team has treated more than 300 cases, and has clinically, radiographically and tomographically monitored them with high enthusiasm. Photomicrographic analysis and scanning electron microscopy of repaired bone let us deeply understand the results yielded, not only in terms of quicker bone repair, but also with regard to bone stability over time. Due to the large amount of feasible osteoprogenitor cells found in this type of bone, I dare to say that it is considered as "bone transplant". To this end, strict criteria for removing it from the donor site and handling as well as inserting it into the receptor site must be accurately met. Proper training on how to employ the technique, as well as any others, allows us to fully benefit from its essential properties. Credits must be given to our Mother Nature.

Today, based on my own and my study group's experience, as well as on the results produced by other groups, students, colleagues and friends; I assure that the IDR is my first technique of choice, provided that indications and contraindications be respected. Several groups, linked or not to universities, have been conducting researches on the IDR technique, and aim at including it in their therapeutic arsenal as another treatment option available for professionals and patients.

We know that to devise, develop and improve a clinical or surgical protocol it is necessary to study, research and develop an acute sense of observation and, above all, strictly, systematically and multicentrically repeat the experiments and their results always based on previous trials and researches. In this context, what were your major influences? Which professors, mentors, authors or researches were your direct sources of theoretical and practical inspiration, and decisevely contributed to give support and scientific credibility to the well-conceived IDR technique?

José Carlos, his wife Ariádene and his brother Darcymar with Prof. Waldyr Antonio Janson in Bauru/SP.

I have worked in the Dentistry field for more than 25 years. During this period, many professors crossed my path, leaving their footprint, smoothing the rough edges and shaping my course in life. The Federal University of Santa Maria provided me with


During his first lecture on immediate dentoalveolar restoration, in 2007, at the auditorium of the P-I Brånemark Institute (Bauru/SP) delivered at the event organized by Prof. José Scarso Filho.

a good educational basis. Its academic staff counted with Prof. Ney Mugica Mutti, one of my greatest sources of inspiration, a professor who strongly insisted that I entered the postgraduation program in Bauru/SP. In the late 80s, I met Prof. Waldyr Antonio Janson in Bauru. Having him as my professor definitively changed my professional life, not only for his extensive knowledge on Periodontology and Prosthesis, but also for his precious life lessons. Since then, I became his follower and have pursued his example of motivation to continuously go on a quest for knowledge and excellence in clinical results.

In 1991, I became involved with Implantodontics in Caxias do Sul where I was advised by Profs. Luiz Henrique Zaniol and Edemar Locatelli. I also had Prof. Cezar Augusto Garbin's excellent research on rehabilitation as one of my sources of inspiration. During that period, Drs. Darcy Locatelli and Sérgio Abraham were two key figures who strongly encouraged me. After that, between 1990 and 2000, I was deeply influenced by professors who worked with bone surgical reconstruction and soft tissue manipulation: Profs. Deoclécio Nahás, José Scarso Filho and Glécio Vaz de Campos.

Since 2008, I have had the chance to strengthen the bond with Prof. Carlos Eduardo Francischone, a fatigueless professor and full-time supporter. I have always admired and respected his work and, today, it is a pleasure and an honour to have him advising me as I write my PhD dissertation. During my PhD residency, I also had the opportunity to meet Dr. Alberto Consolaro who has expended my knowledge and understanding on several topics, including the IDR technique. Our doctorate programm resulted in a strong research group — initially set up in Bauru and, nowadays, established at São Leopoldo Mandic College in Campinas/SP — consisted of professors and students who provide the scientific community with an ongoing network of exchange and inspiration.

Prof. Luís Antonio Violin Dias Pereira was also key in helping me understand the biological behaviour of IDR. Today, he integrates the academic staff of our immersion courses.

The aforementioned professors as well as other professors, friends and colleagues who I have not mentioned in this interview

were essential not only for the continuously exchange of information we established, but also because they opened me the doors and provided me with trust and credibility.

The knowledge I acquired and the influences I had over time helped me set the boundaries of my carreer of which focus is on Implantodontics, immediate implant function and esthetic priodontal surgery.

Several cases of immediate implant placement in sockets with immediate provisional crown were performed and published by Peter Whorle in 1998. Since then, new guidelines for replacing single teeth began to guide my daily practice. In 2001, I gave my first lecture on the topic.

As time went by, other publications and discussions about filling the gap between immediately placed implants and intact sockets, and the use of connective tissue graft to maintain the volume of peri-implant tissue encouraged me to pursue better esthetic results. The experience I acquired with my study group resulted in a treatment protocol for immediate implant placement that included autogenous bone harvested from the maxillary tuberosity and used to fill the gap between the implant and the socket, as well as an immediate provisional crown with proper emergence profile.

Seven years ago, we adapted the treatment protocol developed for intact sockets and began to use it with compromised sockets. The satisfactory results yielded in the first case were repeated in following cases, which allowed us to employ the technique in even more complex cases, with different degrees of bone damage, until we began to use it in cases of gingival recession.

We improved the IDR surgical-prosthetic protocol and, in 2007, I demonstrated our prelminary results during

The IDR team: Darcymar, Marcos, Ariádene and José Carlos.

With the first group of the immersion course in IDR carried out at the convention center of Rosa Odontologia in Caxias dos Sul/RS, in 2010.

a lecture I gave at our convention center. Following Prof. Janson's advice, I presented the technique protocol and its results during lectures I gave outside Rio Grande do Sul in 2008. That happened during a meeting of Prof. Scarso's students and former students held at the Brånemark Institute in Bauru. On that occasion, we had the opportunity to present our project to Dr. P. I. Brånemark. He was excited with the results yielded with autograft used in association with the IDR technique and, later on, honored us with the preface of our book.

We have noticed that you have some preferences regarding the type of implant used, not only in terms of implant profile, but also the type of prosthetic connection. Does the IDR protocol allow external hexagon implant placement? Are there any significant biological differences regarding the esthetic results yielded in the long run?

In general, all types of implants can be used. We have treated some cases by means of the IDR technique performed with cylindrical and external hexagon implants successfully placed in the posterior region.

In spite of that, we currently have a preference for implants that provide high primary stability and resitance to vertical movement, both of which are important factors that favor implant immediate function, especially in fresh sockets. Conical or hybrid implants (cylindrical-conical) are more indicated for cases of fresh sockets. They laterally compact the trabecular bone during placement and, as a result, increase primary stability and allow better dissipation of the occlusal load.

As for the prosthetic connection, it has been proved that prosthetic platforms of smaller diamater in comparison to the implant (platform switching) decrease the stimulus for bone loss around implants while stimulating gingival sealing. Associating immediate bone graft with implants that allow the use of a platform switching connection provides greater long-term stability of peri-implant tissues.

I once had the opportunity to take part in a research coordinated by Prof. Luigi Canullo, in which he compared implant/*abutment* external hexagon connections with platform switching connections, and investigated stability at the marginal bone level. His results favored platform switching connections.

Since then, some cases of IDR were performed with abutments of smaller diameter than the implant platform. The idea was to


IDR book launch ceremony at Villa bookstore in São Paulo/SP, in 2010, with some of the coauthors: Marcos Fadanelli, Luís Antônio Violin, Dario Adolfi and Ariádene Rosa.

increase the distance between the grafted bone and the seating base of prosthetic connections. In these cases, there was a significant increase in volume of peri-implant tissues and gingival sealing, regardless of the product trademark. Therefore, platform switching implants and prosthetic connections are, today, my first choice for IDR cases, especially in esthetic zones.

### Do you believe that implant surface treatment affects bone repair and, as a consequence, the positive results yielded by the IDR technique?

Implant surface treatment significantly affects how the implant behaves inside the bone. For this reason, this procedure plays an important role when implants are placed in areas of low bone density, as well as in grafted and, as a consequence, IDR-treated sites.

To my view, since the IDR technique uses essentially medullary bone, it offers a large amount of cells that favor bone incorporation and osseointegration. If the implant surface provides great cell proliferation and adhesion, bone matrix sinthesis onset time reduces and so does its association with the implant, which is significantly favorable for IDR.

The IDR technique favors immediate implant function. For this reason, it requires an implant surface that speeds up bone repair and, as a result, increases treatment previsibility. Nevertheless, similar attention must be given to implant macrogeometry, which must significantly favor primary stability.

Despite being a process of paramount importance for IDR repair, implant surface treatment should not be considered as essential. Several other factors affect the positive results yielded by the

José Carlos and Ariádene with Prof. P.I. Brånemark who wrote the preface for the IDR book.

IDR technique, namely: the flapless procedure that maintains nutrition of the periosteum in the receptor site; the macro and microstructure of the tuberosity bone used as graft; the implant primary stability; the controlled and low-intensity stimulus promoted by provisional crown immediate placement; and the crown anatomical shape, with a slightly concave emergence profile that allows proper fitting of peri-implant tissues.

### Does the IDR technique require the use of a specific implant surface or do all implant surfaces behave similarly?

There is no such thing as a specific implant surface required for the IDR technique. We have conducted several cases

Rosa Odontologia in Caxias do Sul/RS.

Demonstration IDR surgery performed during one of the immersion courses offered at Rosa Odontologia.

with different implant surface treatments and all of them yielded similar results.

The only exception is with regards to the commitment of the company fabricating the product. Some researches have investigated different implant surface treatments and found increased contact surface between the bone and the implant, formation of a natural structure for biomechanical tissue integration and quicker induction of the differentiation cascade of bone tissue. There is a wide offer; however, we have to value high-quality products of which excellence is proved by long-term, serious researches.

What is your opinion about the current status of biomaterial used as a therapeutic resource to treat esthetic cases? Canbiomaterial be associated with the methods employed in IDR cases?

Biomaterial have significantly developed and, except for a few marketing exaggerations, they are responsible for important achievements. Whenever necessary, I make use of this therapeutic resource. However, it is not generally applicable for all cases.

In cases of loss of buccal bone wall, it has been proved that subepithelial connective tissue graft yields more predictable results than the guided bone regeneration technique, which minimizes potential morphological changes in the gingival tissue including reduction in volume, as well as apical migration of gingival margin or papillae. Thus, in cases that require access to a donor site for removal of connective tissue graft, I prefer, whenever possible, to access the maxillary tuberosity and solve the case with autogenous bone graft taking advantage of the properties this type of graft has to offer.

Cases of defect of two or more bone walls, in which the use of biomaterial is

needed, require that we perform treatment at different stages, associating it with late implant function. Should there be a donor site available, I personally prefer and consider the immediate implant function as more advantageous. Additionally, whenever necessary, I also use autograft associated or not with connective tissue graft.

In response to your question, when biomaterial are used, I do not recommend that the concepts related to the IDR technique be employed, for instance: flapless surgery, graft stabilization by means of juxtaposition, single surgical procedure and immediate implant function. Should biomaterial be used in cases of major defects, other methods must be employed.

José Carlos with one of the groups of the immersion course on IDR during a hands-on session at his clinic.

Is there any specific instrumentation procedure you recommend for the technique you propose?

The IDR technique is a sensitive procedure that requires proper knowledge and training, as well as the correct use of instrumentation tools that must be of high-quality and, in some cases, with a delicate and precise active tip. This is the only way we can produce the desired results, especially with regards to harvesting and fitting the bone graft into the receptor site.Throughout the development of the technique protocol, we had the opportunity to contribute with improvements in the instrumentation tools. This partnership with the German company led to the development of the IDR kit, which significantly eases the completion of the procedure.

José Carlos delivering a lecture at a national congress held during a tour organized to promote the IDR technique, in 2011.

Considering the participation of the provisional crown in the repair processes established during immediate cases, what is the importance of the stabilization of blood clot?

José Carlos during a symposium on "Immediate Extraction and Implant Placement in Esthetic Zone" held in São Paulo, in 2011, with Profs. Guaracilei Vidigal Jr., Roberto Sales e Pessoa, Mário Groisman and Joseph Kan.


At an event held in São Paulo, in 2012, during which the IDR group (Darcymar, Marcos and José Carlos) gathered with friends from the ImplatePerio Institute (Júlio Cesar Joly, Robert Carvalho da Silva and Paulo Fernando M. de Carvalho).

It it possible to say that the prosthesis conditions of the gingival tissue contributes to an ideal contour?

The stabilization of the blood clot is essential for the repair of any grafting or implantation procedure. Proper graft bone modelling and fitting into the receptor site are key factors to achieve the technique success. Cortical-medullary bone graft must fit into the remaining socket walls and stabilized by juxtaposition. It must not be superimposed, so as to prevent its edges from interefering in the correct fitting of soft tissues, as well as from being lose and, as a result, not achieving the necessary stability.

After primary stabilization of the cortical-medullary graft, which aims at reconstructing the lost alveolar wall, fragmented medullary bone is inserted in the gap between the "new" alveolar wall and the implant. This second step will ensure secondary stabilization of the graft.

Final stabilization, however, only occurs after the provisional crown is installed. Should it have a correct emergence profile, slightly concave in the proximal and buccal subgingival areas, it will provide proper space for graft fitting. The provisional crown, associated with the correct apico-coronal positioning of the graft in relation to the gingival margin, functions as a "guide" for the soft tissues during the repair process, thus providing the necessary nutritional support and avoiding undesired tissue contraction.

There are cases in which implant placement by means of immediate function in esthetic zone is considered a critical procedure. How does the IDR technique behave in atypical cases? Does this protocol allow implant placement by means of late loading?

After a few years of experience, our group has reached a consensus with regard

to the three characteristics of critical cases that make the use of the IDR technique unfeasiable: Absence of residual bone necessary for implant placement and stabilization within 35 N/cm² or more; absence of gingival papilla; and recession above the mucogingival line. These cases require a multidisciplinary treatment approach that associates different techniques and, most of the times, two or more surgical procedures.

Even cases of gingival recession not greater than 5 mm and associated with loss of one or more than one alveolar bone wall allow the use of the IDR technique. Nevertheless, these cases require the protocol with triple graft (connective, cortical and medullary tissue graft). Several cases have been treated with this protocol and have yielded highly satisfactory results.

In some extreme cases, with defect of three or four alveolar bone walls, implants were stabilized as a result of the presence of residual bone in the apical region of the socket, with satisfactory results yielded after employing the IDR technique. These first highly complex cases have been monitored for more than 5 years and prove stable from an esthetic and functional point of view.

Late loading is not included in the IDR planning; however, it must be considered when desirable primary stability of the implant is not achieved. In these cases, we perform the technique and, as an alternative, we install a customized healing abutment that meets the requirements — related to a proper emergence profile — for fabricating the provisional crown. Nearly 4 months after surgery, we install the provisional crown.

## What is the importance of computed tomography to the follow-up of these cases?


Ariádene and José Carlos with Prof. Carlos Aparício during the Spanish-version book launch ceremony in Barcelona, Spain, in 2012.

## Do you believe that the cone beam imaging technique decisively contributes to change implant treatment planning?

Computed tomography was essential for the development of the technique not only because it favors early diagnosis, but also because it allows the follow-up of cases, especially with regards to the stability of reconstructed bone walls. Cone beam computed tomography is, without a doubt, our great ally due to its accuracy and accessibility.

Since the first articles about the constrast enhancement of soft tissues in cone beam computed tomography were published by Alessandro Januário et al in 2008, implant esthetic treatment planning have

become increasingly precise. This method allows us to easily identify patient's periodontal biotype, in addition to favoring the "mapping" of the alveolar bone defect, which is essential for IDR planning.

What is the current status of the first cases treated by means of the IDR technique? How long have they been monitored for? Are they considered stable from an esthetic point of view?

The IDR technique was first employed in October, 2006. We adapted the treatment protocol developed for intact sockets and used it with compromised sockets. Although it was a case of total buccal bone loss, we performed extraction, implant placement, bone reconstruction and immediate fabrication of provisional crown. All procedures were flapless and carried out in a single session, which partially refuted the literature of that time.

First IDR hands-on session in the USA at the University of Rochester, in 2012. In the photograph, Ariádene and José Carlos with the class of the course coordinated by Prof. Luís Meirelles (standing on the left).

Today, after a 7-year follow-up, the case proves stable from an esthetic and functional point of view, similarly to other cases of which treatment began shortly after the first case. Stability of the gingival margin, papilla height and tissue volume have been constant in the cases treated by means of the IDR technique. Few complications were observed during the development of the technique protocol, however, after establishing a strict protocol, we are able to avoid and properly solve them.

What are your futures expectations with regard to advances in the IDR technique?

Having the opportunity to publish our book in the English language opened us many doors to American and European countries. We have been working on a training protocol for these countries, which involves a large working team.

We have set up a research project in partnership with Loma Linda University (California) under the coordination of Prof. Jaime Lozada who will constantly require us to be present at the university. It is a multicentric international research that helps us achieve recognition for our work. Several institutions from all around the world have been researching this protocol, which significantly contributes for its development.

What can you tell us about your publications? Has the IDR technique been internationally recognized? How do you deal with the resistance of international researchers to recognize Latin-american researchers' achievements?

The first article on the IDR technique was published in March, 2008. Since then, other articles have been published in national and international journals. The IDR

technique is the theme of eight of our articles. Three other articles have already been submitted and aproved, we are just waiting for them to be published. We are going through a phase of intense scientific production, and other projects will be disclosed soon.

Our book on the IDR technique was published in Brazilian Portuguese in 2010. In 2012, we published its Spanish version. The book was disclosed during lectures and courses we gave all round Brazil, Latin and Central America, and Spain. During 2012 and 2013, our group also offerred courses in the United States, which originated the English version of the book published in New York, in March, 2014.

Presenting the technique to the scientific communities in the Middle East and Asia is also part of our plans. Moreover, some Brazilian, American and European centers and universities included the IDR technique in their therapeutic arsenal, which aroused the interest of at least five universities in conducting further researches on this technique.

Fortunately, I have noticed that the international scientific community has had an increasing respect for the Latin-american, especially the Brazilian researchers. The IDR technique has attracted the attention of important and renowned groups, which is a great honour to us.

At the Andrés Bello University, in Santiago (Chile), in 2012 during the Spanish-version book launch ceremony coordinated by Prof. José Valdívia Osório.

## What is your opinion about the researches on recombinant human bone morphogenetic protein and stem cells used as adjuncts in dental surgical procedures?

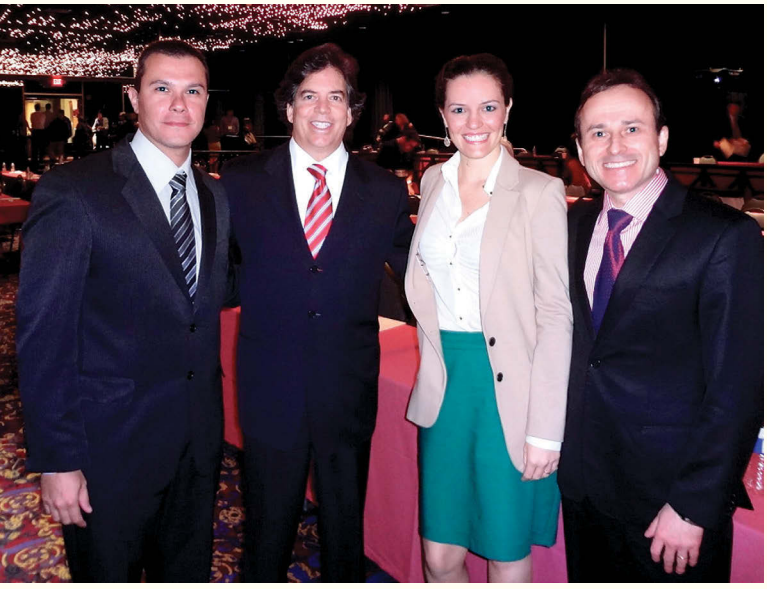
Any research is valid and must be encouraged. Nevertheless, it is a one-way journey. I believe that the use of recombinant human bone morphogenetic protein

During an event held in 2012, in the USA, with Profs. Maurice Salama and Henry Salama.

(rh-BMP2) may be a reality of every-day clinical practice, either for being as effective as hoped or as a result of economic pressure (or a result of pressure exerted by the researches funding agencies).

We cannot deny the role BMP plays in inducing bone formation: it is biological. I would be irresponsible to say that the association between rh-BMP2 and reconstructive therapies does not produce any different results. In spite of that, I believe that we are going through a very delicate moment. There has been too much fuss about it, and an unfavorable cost-benefit for the patient. Additional studies are warranted to further investigate the topic.

Conversely, the use of stem cells is something else. I believe that we will "get there" someday; however, I follow the news with caution. We might get to the point where we use stem cells not as adjuncts of dental treatment, but as the main solution for cases of tooth loss. Perhaps. We are still very far from that. I am aware that I will not be able to see such scientific advances in the dental specialties. That will be a privilege of future generations. Today, even though the media has made a big fuss about it, there is no safe, concrete or formal therapeutic protocol that authorizes the use of stem cells in humans. Nevertheless, the hopes are high.



The group during an IDR course taught in Miami (USA), in 2013. The event was organized by Prof. Anthony Sclar.

You are a renowned dental surgeon, professor, lecturer of well-attended courses inside and outside Brazil, book author and owner of a reference dental clinic. In addition to that, you also manage your family and personal life. What are your plans for the future?

I intend to go on improving, researching and disclosing the IDR technique, however, I also have other professional projects.

Outside the professional sphere, I am going through a phase of reflection. I have a great wife who helped me succeed in my professional career in all respects. Now, I intend to develop other projects inside and outside the field of Dentistry, activities that will contribute to our growth as human beings, helping people in need or dificulties. I intend to spend more time with my family, to be more present by giving and valuing the simplest things.

I believe this is the essence of life. Life! God has bestowed on me so many good things! It is high time I gave it back.

We know you are about to receive a Doctorate degree in Implantodontics. In which line of research have you written your Doctor's dissertation?

My dissertation is based on a clinical research that aims at assessing the stability

of hard and soft tissues subjected to the IDR technique employed in different periodontal biotypes, with follow-up periods of 51 to 73 months. All cases had total absence of buccal bone wall and were treated with the IDR technique.

Standardized photographs were used to assess the maintenance of gingival margin and papillae as well as soft tissue volume. I also assessed patient's esthetic parameters. Standardized photographs were also used to assess the stability of proximal crests, whereas cone beam computed tomography was used to assess the stability of buccal bone wall in the apicle, middle and vervical thirds.

Partial results produced by my research led to an article that was published in the International Journal of Periodontics and Restorative Dentistry, in March, 2014.

José Carlos with Prof. Carlos Eduardo Francischone who advises him on his Doctorate dissertation in Implantodontics.


José Carlos in front of Loma Linda University (California) with Prof. Jaime Lozada, in 2013. Together, they set up a research project on IDR.

**Interviewers**

**Luis Rogério Duarte**

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» Dental Press Implantology assistant editor.
» Dental surgeon at the Renaissance Institute — Oral rehabilitation with implants.

**Franklin Leahy**

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