Regeneration of irradiated salivary glands by stem cell therapy
Lombaert, Isabelle Madeleine Armand

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ONE SHOULD ALWAYS BE IN LOVE; THAT IS THE REASON ONE SHOULD NEVER WORRY.

(Oscar Wilde)
Four years ago, I first laid my eye on a little spot called Groningen, somewhere 400 km from my hometown of Ghent in Belgium. As a child, I had never been in contact with many “Hollanders”, though I thought I had a pretty good idea of how distinct they were from “Flemish” people. Dutch plebs were known to us as “yellow-headed cheese eaters” with a funny accent, and as extremely tall beings. However, upon my first visit to this northern city, it didn’t feel uncomfortable at all, in addition, it was fun to encounter the reactions of Dutch people who, when hearing Flemish, desperately longed to hear more of our lovely language. Since then, amazing times have been spent puzzling the meaning of certain words or phrases in both our language and dialects, often leading to comical (mis)understandings. You Dutch people find us Belgians amusing and adorable, but we think you are amusing and adorable too! And let’s clear up one thing once and for all: Belgians are just as greedy as the Dutch, especially for the free or low-priced stuff!

The road to spit is long. But, it’s so worthy. Sometimes I think the people in the room next to me could even hear and see my spit waving from my mouth while I was discussing or laughing with my lovely colleagues. It is worth mentioning that my co-promotor Rob (Coppes) and unofficial (what’s in a word?) supervisor Piet (Wierenga) both had their desks in that neighbouring room. I don’t even want to start thinking about what they thought while they once again looked at each other with raised eyebrows, listening to me yell while chasing someone in the aisle. Nonetheless, despite the fact I was feeling quite safe by believing neither of them could spy on me through the wall (yes, this is the reason why I put posters on the wall), I was, and still am, delighted to have them close-by. Rob’s explosive inspirations mostly needed my “gentle touch” to be cut down to size, but all in all he successfully guided me through these four amazing years. I hope I didn’t disappoint you, but judging from the many victorious moments we shared in that lovely room of yours, and the well-earned prizes and invited presentation opportunities, I believe you turned me into a decent saliva researcher. Please do forgive yourself if I haven’t reached every quality of a top-scientist. Sometimes Belgians are a little stubborn, but eventually, like they say, a little change in the quality of cocoa powder may turn into that one perfect chocolate flavour you’ve been looking for. I believe both you and Piet have done a fantastic job on this project. Looking back, I wouldn’t have had it any other way. When I remember all of the moments I walked into that room with complaints about all the downs in our research (isn’t it in any?) or when struggling with outcome of results, I do realize now why I was never asked to participate as a psychological (and always funded!) research subject.

Mix saliva science with my brain and it gets such a mess of signals racing in uncoordinated ways that I can barely understand that my brain is properly functioning. Nevertheless, there was only one solution during these freaking-out moments: entering that ‘special’ room next door. While any psychologist would have given up on me, there was only one person to turn to. Only five minutes, no longer, of calm conversations, scratches and drawings on the white board on the wall, and the light was there again. Oh, how I did (and still do) miss you when you retired, Piet. You made research seem like everything was a piece of cake. Your cooperation with Rob was the start for my interest in stem cells and salivary glands, and I’ll always be grateful for both your input, both, socially and at work.

Despite the many visits next door, there were some serious meetings as well with my “bosses” Gerald (de Haan) en Harrie (Kampinga). I do remember always being prepared with lots of graphs and outlines of the data, gathering the sheets just in time for a quick cup of strong coffee before entering that impressive, science-sparkled (or was it just my imagination?), room of Harrie. Drifting away during these brain-storming moments, I felt jealous of not having such a big room of my own (but then with an enormous white board!). But seriously, I do hope one day I’ll become just as good as both of you. Your insights in science are of exceptional quality, and although it might have looked as I was intimidated by that (well, sometimes I was), I sure tried to defend my ideas. Maybe I didn’t put forward my opinions strong enough according to you, but, hé, I’m Belgian, I’ll learn eventually. You’ve both put a great effort into me, and your guidance in the past years (especially at the writing level) certainly had considerable input, not only in the obtained data but also the person I am now.

Besides that dream of having a single room and that white board (which I did get eventually!), I was kept in good shape by Jeanette (Brunsting). If you saw two people chasing each other in these labs, and you finally heard someone cheering ‘There you are!’, it would have been us. The hours we’ve spent on "re"search – actually searching for each other- are not countable. Many moments of laughter, joy, and sometimes frustration filled our days. We guided graduate students (Ksenia Poliakova, Bas Postema, Chantal Batenburg, and Karin Ruitenbeek), and we hope we have provided you the scientific knowledge of this special saliva world, and much joy during lab experiences. Jeanette and I were also regularly busy at the PDU (Animal Service Unit,) handling these charming little mice (not including the bloody scream after being bit at the start) in the early mornings and eagerly trying to wake up by turning up the volume on the radio. Thanks to the flexibility of Tjapko (Jeanette’s husband), mother-in-law and son Matthijs, we always perfectly managed to meet our schedule.
ACKNOWLEDGEMENTS

I do want to stress that without them and Jeanette’s fantastic inspirations, laughter and courage, I wouldn’t have come this far in presenting this lovely thesis. Our mutual coordination and complements have led to miraculous findings, and nobody will disagree as I say: together we are GOLD! It will be hard to ever experience such a match, and I hope it is clear to you, Jeanette, how much I’ll miss you in the forthcoming years, both on professional and social level.

After Piet’s retirement, a young, but very busy man, namely Hette (Faber) had to take over the saliva flow rate experiments at the CDL (Central Animal Laboratory). His schedule was constantly filled up, and he was certainly not anxious to take over these tasks as well. But, there is one thing that men forget, and that is the power of the female eye. All it would take was some sultry looks from the doorway, and the schedule for the next month was arranged in no time. Looking back though, I’m not too sure whether I actually accomplished this through my funny smile or because Hette is just such a nice guy. Anyway, the flow rate productions of the mice were more than superb; I can only assume he was using his own sultry look to impress the female mice. Or, could it have been that he filled the cups with his own spit?

Other new changes crossed my research path in the last year. All of a sudden we received human salivary glands from the Oral and Maxillofacial Research group (UMCG). A shining blond-headed Dutch lady (see, I was right – funny yellow-headed cheese eaters), Monique (Stokman), entered my room and presented herself as the new colleague in our saliva group. Sure, I was pleased to have such a lovely lady. I was short-handed and desperately wanting to expand my research to human glands. I do hope Monique that Jeanette and I have passed on to you all our expertise (and laughter), and I’m looking forward to any future scientific cooperation we might have. The road might be hard, but by enforcing our clinical and biological insights, our group can hopefully put saliva on the map! Of course this includes an active group of radiobiologists, radiotherapeutics, pathologists, and clinicians such as Peter (van Luijk), Erwin (Wiegmans), Hans (Langendijk), Fons (van den Berg), Arjan (Vissink), Fred (Spijkervet), Monique (Stokman), Anke (van den Berg), and Jacqueline (van der Wal). Thanks for all the joy at work and during conferences, talks and guidance!

Unfortunately, in the middle of my four years, I had to say goodbye to two lovely colleagues, Willy (Visser) and Tineke (Kok). I spent many months with Willy trying to set-up an in vitro culture system, which eventually led to the salisphere culture. Unfortunately, you left just before we actually realized what we had in our hands, and I hope that you can seek comfort in the knowledge that we wouldn’t have reached this without your help and efforts. So partly, please consider this work as yours as well. As for Tineke, we became roommates, friends and saliva-colleagues on the European FIRST project.

I’m pleased you could cope with my presence, laughter, and some frustrating moments as you experienced me in the transition period where ‘Willy’ all of a sudden became ‘Jeanette’. Although not many successful results came out of our research, I believe we still had a great time together back then in our exclusive two-person room, which is now crowded with men (well, I’m not complaining of course!).

Then, during my journey of spitting saliva in culture dishes and stroking mice, I had the lovely help of two guys at the FACS cell sorter, Geert (Mesander) and Henk (Moes). You were always interested in sending me back to Belgium, not for visiting my family or for finally taking some vacation days, no, no, only for the chocolates! I should have known it from the start of course. With Belgian chocolates, you can achieve anything! But, even without them, you guys simply captured my salivary gland cells, and no, there were no sultry looks involved.

Further regards to the lovely Jane Briggs (Dept. of Pathology, UMCG), the club of France (Laboratoire d’Hématopoïèse, Faculté de Médecine, Tours – Pierre Charbord and Thierry Dominique), England (King’s College, University of London, Dental Institute, Saliva Research Unit – Gordon Proctor and Guy Carpenter), and other people from the EU FIRST project (Jan Wondergem, Mohi Rezvani, Michèle Martin, and Lisette Eijdems) since without their help some techniques involving FISH, culturing mesenchymal stem cells and intra-ductal injections would never have been accomplished.

Then, my dear Stem Cell and Radiation & Stress Cell colleagues: Ronald (van Os), dear Mister Ronald. What an amazing time we had in Whistler, Canada. Picture high mountaintops covered with metres of snow, a conference center in the middle of it, some bars with twinkling lights in the evenings, and some odour to fall in love with. It was my first big conference overseas, and I was sure amused by your, and others of course ;), presence. You were a superb chaperone! One year later, in Australia, your job was succesfully taken over by Bart (Eggen), Suzanne (Kooistra), Vincent (van den Boom), Alice (Gerrits), and Gerald (de Haan). Ellen (Wiersema), Bertien (Ausema), and Bert (Dontje), I do appreciate the techniques you taught me and the many funny moments we had in the lab. Alice (Gerrits), Lenya (Bystrykh), Leonie (Kamminga), Alexandra (Rizo), Karin (Klauke) and Anita (Wiersema), sometimes a bit of laughter or a good scientific talk, you all definitely contributed to the good spirit in our lab and my research years in your group. Brad (Dykstra), you continuously reminded me of the lovely Western Canadian accent in all its glory, and of the beautiful time I had experienced in Vancouver. Belgian chocolates certainly became handy with you as well (and with Mollie) – you see, sometimes I don’t have to do anything, the chocolates speak for themselves.
Different office mates have passed the review: Alena (Jiresova), Tineke (Kok), Tom (Rozema), and later on the lovely Vincent (van den Boom) and Maarten (Niemantsverdriet).

I enjoyed the work-related discussions we had in addition to all the other joyful moments with lots of laughter. You were the perfect colleagues, at the right time, at the right place; both at work as on social level!

Further memorable moments were shared with some Radiation & Stress Cell people. My fellow weekend warriors, the ever shining Maria (Rujano), and ‘darling’ Floris (Bosveld) -- two most adorable people of whom I admire their scientific romance -- thanks for the many joyful moments, sometimes with beer, wine or a good Scotch. May we have more of these moments in the future, either in Paris or in America.

Old crew members Ria (Hut), Ody (Sibon), Rita (Setroikromo), Florian (Salomons), Bianca (Brundel), Jurre (Hageman), my ‘morning-hugger’ Michel (Vos), and also the new generation of lab members Xia (Yi), Kasia (Siudeja), Anil (Rana), Erwin (Seinen), Marianne (Zijlstra), Anne-Jan (Dijkhuis), Ke (Lei), Karin (Klauke), and to my successors on the project Ewa (Przybyt) and Jielin (Feng): I wish all of you the best in the forthcoming years! Further, lab members such as Maria (van Waarde), Bart (Kanon), Jeanette (Brunsing), Martha (Ritsema), of course Willy (Lemstra), and the secretary Annet (Vos) put every little struggle or complaint place in perspective. Without cornerstones like you all, no lab can functionally work.

In projects like these, there are of course many more persons involved. Many thanks for the little chats to people from the 8th floor (Nieske Brouwer, Ietje Mantingh-Otter), 7th floor (Freark Dijk, Sonja Janmaat, Ruby Kalicharan, Han van der Want), and 13th floor (Theo van Kooten) at the RUG, the animal care crew at the CDL, and the Hematology group at the UMCG.

Besides work, I was delighted to be a member of the Party Committee of the Stem cell & Radiation group in the year 2004-2005. I’ve never experienced so much fun in organizing a lab day. Together with Rita (Setroikromo) I deceived the Groningen police officers (yes, I do profit sometimes by my acting skills and not by chocolates) in order to get the boat to the Dutch island Schiermonikoog. There, we designed a bicycling route in a rainstorm while capturing a picture of cow number 357’s bottom. Rita, may we always remember this joyous period, which nobody else can understand but us. In the past years, many lab crew members (e.g. Floris, Maria, Maarten, Karin) tried to let me escape from the saliva world. I believe the joyful moments we experienced together are framed into pictures and in our memories.

I’m delighted, though, to move on to the group of Matthew (Hoffman) who gave me the opportunity to continue my work on embryonic salivary glands, and I’m looking forward to spending some spectacular time with all of the NIH (National Institute of Health) crew.

I experienced my first home in the Netherlands in Zuidhorn, under the lovely shelter of Betsy (Meijer) and the ever so colourful life of her son and two daughters. Later on, thanks to an offer from Bart (Kanon), I experienced the (dis?)advantages of living close to work. Thanks to both of them for the tea-visits and opportunities they gave to me in terms of living in luxury.

Further, I can’t put to words how much my “Mal”, Martha (Ritsema), and “Sussie!”, daughter Mariken, lit up my life in the last years. Sunday afternoons became a standard time of repose under the garden-patio, and the full-hour run with the dog Mazzel made me forget the hardworking days. The unconditional love of all the dogs (Mazzel, Jochie, Rifka†), the cats (Troela†, Pebbels†, Knulleke†, Scooter, Herrie and Elmo), the hamster†, the ferrets† the chickens, the fish, and horses Ise & Rowan were heart-warming. There are so many tales to tell (also our Australian adventures!), but there aren’t enough lines in this part to explain how much I’ll miss and appreciate their tender devotion towards me and how they embraced me in their life. There is certainly no shortage of major experiences in your lives, so, I would say: enjoy like we’ve done together in the past. I can only hope that I’ll be able to experience such a loving home of my own sometime in the future.

Finally, despite Holland becoming my new home, I cannot neglect mentioning my oldest and dearest friends: Sven (Allemeersch) and Ilse (De Vos) with accompanying partners Marc (Lallemand), Bram (de Craene), son Zenn, and their closest family relatives. I hope I can continue to be involved in your lives, and I do appreciate your undoubted friendship while I was (and still will be for a while) far away. Your stop-overs in Groningen always pleased me, as well as the many visits of my parents who unconditionally believed in me, and continued to take care of me in every way possible. May everyone have such cornerstones in their life as I have with all of them.

And finally, I would like to end, by saying the words:

SALIVA ROCKS !

So whenever you spit, just think of me.