

Chile Online
July 18 to 21, 2022

FIRST TIME IN SOUTH AMERICA
20TH INTERNATIONAL
CONFERENCE
ON PLASTINATION

4th International Congress on Anatomical Techniques

UNIVERSIDAD DE LA FRONTERA
INTERNATIONAL SOCIETY FOR PLASTINATION (ISP)

HOSTED BY:
Laboratory of Plastination & Anatomical Techniques
Faculty of Dentistry - CEMyQ
Universidad de La Frontera,
Temuco - Chile

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International Society for Plastination

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LECTURE ABSTRACT

"40 Years of Reality"

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Plastination: Forty years of reality! This reality started nearly 40 years ago, almost back to when Dr. von Hagens was developing the plastination polymers and process. Along for the ride, it has been a most wonderful journey which has taken me around the World and met many of you or your colleagues along the way. Hopefully, today, this is much more than just a reality show but I want to show plastination progress. It all started in San Antonio in April 1982. Dr. Harmon Bickley put a program together to present an amazing preservation technique to North America - "Plastination". Dr. von Hagens, of course, was the keynote speaker. Chalk and Blackboard were the lecture media and "did the dust fly"! The message of the meeting was "cold silicone plastination". Some went home with "grand thoughts" and others with wonder. I was fortunate and purchased the small vacuum chamber and pump which von Hagens had brought as a demo. However, I used my own 30" vacuum gauge and 1/2" water gate valve to adjust vacuum. Probably most of us had no real idea of what was about to happen. So polymer was ordered and specimens dissected, fixed, dehydrated in cold acetone and % acetone checked with an alcoholometer I found in the lab. I suspect only a few had any idea of the power that was inside that chamber and - the "great addition" to teaching and the force generated by near "0" mm Hg pressure or what toughened glass could do! A colleague suggested that he could build me another

vacuum chamber for me with little cost from Plexiglass. It looked great, but I knew it would never work and before 5 inch decrease of pressure it began to creek and groan. Pressure was returned to atmosphere and it remains a curing chamber ever since after 38 years. Then epoxy came along for body slices and polyester for brains. Dr. Latorre came and we sliced an entire cat and impregnated with P40. Most impregnated slices turned out pretty good and are still on display in the Museum in Murcia. Along about this time in Hawaii, Dr. Marietta Nelson started plastination by using cold method silicone products (S10 + S3) at room temperature. Perfect specimens resulted as were produced in the deep freezer with the same impregnation-mixture. Hence the first room temperature was introduced. Interim and International meetings and workshops sprung up like Spring flowers. The society was formed and what an enthusiastic time. Plastination was on a roll around the World! New local polymers were concocted and the "real room temperature plastination was introduced which combined S10 plus S6 (cross-linker) as the impregnation-mix. Improved epoxy and polyester resins have been introduced; however, silicone remained the "Gold standard". A less viscous polymer (S15) hit the market and was not such a hit even though it was considerably less viscous. Exhibitions and Teaching Specimens moved on as this process became more known. Silicone prices have not risen in 20 years. Several Countries now have their own silicone polymers available. A new revised silicone is not available which has its own red tint in it and helps specimens to have a nicer color. You are still getting in on the "cutting edge" of the "Plastination Hoorah"! Seize this opportunity to preserve normal anatomical specimens as well as, unique specimens. I really hope that your journey is just one-half as wonderful as mine. All the best!

Monday, July 18, 2022, 7:10 a.m. (Chile time)