

## Curriculum Vitae

### Personal information Luis Landin

#### Work experience

---

2/2010 – CURRENT – Madrid, Spain

SPECIALIST IN PLASTIC & RECONSTRUCTIVE SURGERY – SERMAS (Servicio Madrileño de Salud)

Plastic & Reconstructive Surgery Division. We are attending cases of complex microsurgical reconstruction, including breast reconstruction, hand surgery and mangled extremities. Experience in vascularized composite allotransplantation.

2017 – CURRENT – Madrid, Spain

VICEPRESIDENT OF THE NATIONAL ADVISORY BOARD FOR SPECIALISTS' TRAINING –

Spanish Ministry of Health

Provide advise to the Ministry of Health with regard to training in specialties of different health professionals, including medical doctors, nurses, psychologists, physicist, chemicists and biologists.

2014 – CURRENT – Madrid, Spain

CHAIR OF THE NATIONAL ADVISORY BOARD FOR PLASTIC & RECONSTRUCTIVE SURGERY – Spanish Ministry of Health

Advisory service to the Ministry of health with regard to training in Plastic & Reconstructive Surgery

#### Education and training

---

1994 – 2000 – Madrid, Spain

MEDICAL DEGREE (MD) – Universidad Complutense de Madrid

2003 – 2011 – Madrid, Spain

MEDICAL DOCTOR (PHD) – Universidad Autónoma de Madrid & Universidad de València

2020 – CURRENT – Madrid, Spain

MAASTER SCIENCE IN HEALTHCARE MANAGMENT & ADMINISTRATION (MIM) – Universidad Europea de Madrid

2001 – 2006 – Valencia, Spain

TRAINING IN PLASTIC & RECONSTRUCTIVE SURGERY – Hospital Universitario La Fe

#### Additional information

---

##### Publications

Clinical Outcomes in Ring Avulsion Fingers and Systematic Review of the Literature

<https://pubmed.ncbi.nlm.nih.gov/33170583/> – 2020

Ring avulsions continue to be a challenge in reconstructive surgery. We conducted a retrospective study and reviewed all Urbaniak-Kay type IV degloving injuries replanted at our institution between 2011 and 2018. A systematic review of the literature was also conducted to assess the survival rates, functional, and sensibility outcomes. The results of our systematic review outline a survival rate of 79.50% (101/127). With 1 artery being repaired, 79% of the fingers survived, a value that increased to 87.50% when 2 arteries were anastomosed ( $P = 0.484$ ). Statistically significant differences ( $P < 0.001$ ) were found when comparing the survival rates of the fingers with 2 or more veins repaired (87%) with those with only 1 vein anastomosed (51.90%). In terms of nerve reconstruction, there was a significant difference ( $P < 0.001$ ) with the 2-point discrimination test in favor of the reconstructed group when nerve reparation was done ( $10.80 \text{ mm} \pm 2.95 \text{ mm}$ ) versus when digital nerves were not repaired ( $15.25 \text{ mm} \pm 0.50 \text{ mm}$ ). Fingers after secondary procedures did not obtain better mobility. The mean total active motion in nonreoperated fingers was 221 degrees (195-270 degrees), whereas the total active motion in the cases who received secondary surgeries was 152 degrees (110-195 degrees), with statistically significant differences ( $P = 0.02$ ). Therefore, we recommend attempting replantation of degloved fingers. All efforts must be done to carry out 2 vein anastomoses, and our results strongly recommend attempting at least some kind of nerve reconstruction. Secondary surgeries should be reserved for selected cases only, because of the extensive scarring in this kind of injuries. Early mobilization protocols must be encouraged to achieve a good functional result.

Unique Techniques or Approaches in Microvascular and Microlymphatic Surgery

<https://pubmed.ncbi.nlm.nih.gov/32892807/> – 2020

Several methods can be used for identifying tissues for transfer in donor-site-depleted patients. A fillet flap can be temporarily stored in other parts of the body and transferred back to the site of tissue defect, including covering the amputated stump of the lower extremity. Human arm transplant is rare and has some unique concerns for the surgery and postsurgical treatment. Cosmetics of the narrow neck of transferred second toes can be improved with insertion of a flap. Lymphedema of the breast after cancer treatment can be diagnosed with several currently available imaging techniques and treated surgically with lymphaticovenous anastomosis.

Outcomes of DIEP Flap and Fluorescent Angiography: A Randomized Controlled Clinical Trial

[https://journals.lww.com/plasreconsurg/Abstract/2020/01000/Outcomes\\_of\\_DIEP\\_Flap\\_and\\_Fluorescent\\_Angiography\\_1.aspx?context=FeaturedArticles&collectionId=2](https://journals.lww.com/plasreconsurg/Abstract/2020/01000/Outcomes_of_DIEP_Flap_and_Fluorescent_Angiography_1.aspx?context=FeaturedArticles&collectionId=2) – 2020

Breast reconstruction with the deep inferior epigastric perforator (DIEP) flap can be associated with complications such as fat necrosis. The authors' objective was to assess the safety and efficacy of fluorescent angiography with indocyanine green to reduce fat necrosis.

**Methods:** The authors designed a parallel, randomized, controlled clinical trial for unilateral breast reconstruction. The poorly vascularized tissues of the DIEP flap were removed based on a clinical evaluation in group 1 and based on angiographic criteria in group 2. The authors recorded the flap dimensions, perfusion in terms of fluorescence intensity, complications, reoperations, and BREAST-Q questionnaire scores for both groups.

**Results:** The study included a total of 51 patients. The flaps showed no size differences after the tissue was excised. The flaps of group 2 presented higher perfusion rates ( $p = 0.001$ ). The incidence of fat necrosis was 59.3 percent in group 1 and 8.3 percent in group 2 ( $p = 0.001$ ). Four cases of partial necrosis were recorded in group 1 (18.2 percent) compared with none in group 2 (0 percent) ( $p = 0.131$ ). Four patients underwent reoperation in group 1 (14.8 percent) compared with none in group 2 (0 percent) ( $p = 0.113$ ). The patients in group 2 reported higher scores in all domains of the BREAST-Q.

**Conclusions:**

Fluorescent angiography with indocyanine green significantly reduced the incidence of fat necrosis without diminishing the flaps' dimensions. The perfusion rates were significantly higher and the patients reported significantly greater satisfaction and quality of life. Fluorescent angiography with indocyanine green may be considered a safe and effective tool to enhance the outcomes of breast reconstruction with the DIEP flap.

Clinical significance of alloantibodies in hand transplantation - a multicenter study.

[https://journals.lww.com/transplantjournal/Fulltext/2019/10000/Clinical\\_Significance\\_of\\_Alloantibodies\\_in\\_Hand.33.aspx](https://journals.lww.com/transplantjournal/Fulltext/2019/10000/Clinical_Significance_of_Alloantibodies_in_Hand.33.aspx) – 2020

**BACKGROUND:** Donor-specific antibodies (DSA) have a strong negative correlation with long-term survival in solid organ transplantation. Although the clinical significance of DSA and antibody-mediated rejection (AMR) in upper extremity transplantation (UET) remains to be established, a growing number of single-center reports indicate their presence and potential clinical impact. **METHODS:**

We present a multicenter study assessing the occurrence and significance of alloantibodies in UET in reference to immunological parameters and functional outcome.

**RESULTS:** Our study revealed a high prevalence and early development of de novo DSA and non-DSA (43%, the majority detected within the first three post operative years). HLA class II mismatch correlated with antibody development, which in turn significantly correlated with the incidence of acute cellular rejection. Cellular rejections preceded antibody development in almost all cases. A strong correlation between DSA and graft survival or function cannot be statistically established at this early stage but a correlation with a lesser outcome seems to emerge.

**CONCLUSIONS:** While the phenotype and true clinical effect of AMR remain to be better defined, the high prevalence of DSA and the correlation with acute rejection highlight the need for optimizing immunosuppression, close monitoring and the relevance of an HLA class II match in UET recipients.

## Projects

### Memberships

1. Miembro de la Asociación Española de Microcirugía (AEM) desde 2021.
2. Miembro de la Sociedad Española de Senología y Patología Mamaria como miembro numerario desde 2015.
3. Miembro de la American Society for the Surgery of the Hand (ASSH) como miembro internacional, desde 2014-2018.
4. Miembro de la Sociedad Española de Cirugía de la Mano (SECMA) desde 2014.
5. Miembro de la European Society for Organ Transplantation de 2011 a 2014.
6. Miembro Fundador de la American Society of Reconstructive Transplant Surgery, en Filadelfia (EE.UU.), Julio 2008 hasta 2013.
7. Miembro de Sociedad Española de Cirugía Plástica, Reparadora y Estética (SECPRE) como aspirante desde el año 2001 y como numerario desde el año 2007.
8. Miembro numerario de la International Society for Hand and Composite Tissue Allotransplantation, desde el año 2007 hasta 2012.

### Other Relevant Information