

Dr. med. Reto Wettstein

**Leitender Arzt / BSS und KSO
Plastische, Rekonstruktive und
Ästhetische Chirurgie**

Reto.Wettstein@spital.so.ch

Berufliche Laufbahn

Centre de Chirurgie Dôle, Lausanne

Chirurgie Plastique, Reconstructive et Esthétique, Chirurgie de la main
PD. Dr. G.F. Maillard

1999

Inselspital Bern

Abteilung für Plastische Chirurgie, Prof. D. Erni (research fellow)

Clinique Longeraie, Lausanne

Chirurgie de la Main, Prof. D.V. Egloff

2000

Centre Hospitalier Universitaire Vaudois

Chirurgie générale et thoracique, Prof. Givel et RIs

2001

Department of Bioengineering, UC San Diego

Research Bioengineer, Prof. M. Intaglietta

Kantonsspital Luzern

Allgemeinchirurgie, Prof. M. von Flüe

2002

Universitätsspital Basel

Plastische, Rekonstruktive und Aesthetische Chirurgie, Prof. G. Pierer

2004

Ospedale Civico Lugano

Anästhesie, Dr. S. Castelanelli

Hôpitaux Universitaires de Genève

Chirurgie Plastique et Reconstructive, Prof. B. Pittet

2006

Chirurgie de la Main, PD Dr. D. Della Santa

Centre Hospitalier Universitaire Vaudois & Clinique Longeraie, Lausanne

Service de Chirurgie Plastique et Reconstructive

2009

Centre des Brûlés, Chirurgie de la Main

Solothurner Spitäler AG, Solothurn und Olten

Plastische, Rekonstruktive und Ästhetische Chirurgie

2010

Handchirurgie

Forschung

Pathophysiology and treatment of ischemic skin and muscle flaps

D. Erni, A. Banic, R. Wettstein, Y.D. Harder (SNF 32-65149.01)

Pathophysiology, prevention and treatment of critical muscle and skin ischemia
Y. Harder, R. Wettstein, D. Erni, J. Plock (SNF 32-108408.05)

Adipose Stem Cells, Wound Angiogenesis and Microcirculation of Diabetic Wounds. Erba P, Kalbermatten D, Raffoul W, Wettstein R (OPO Stiftung)

Mitgliedschaften

FMH	1999
European Society of Surgical Research	2008
Schweizerische Gesellschaft für Plastische, Rekonstruktive & Aesthetische Chirurgie	2008
Schweizerische Gesellschaft für Senologie	2009

Diplome und Titel **Staatsexamen Medizin**

1998

ECFMG

United States Medical Licensing Examination

2000

Dissertation Universität Bern

The effect of pedicle artery vasospasm on microhemodynamics
in anatomically perfused and extended skin flap extended skin flap tissue

2000

EBOPRAS

European Board of Plastic, Reconstructive and Aesthetic Surgery

2007

FMH

Plastische, Rekonstruktive und Aesthetische Chirurgie

2008

FESSH Diploma

European Diploma in Hand Surgery

2010

Publikationen

Localizing Perforators vessels by Dynamic Infrared Imaging and Flow Doppler without thermal cold challenge.

Tenorio X, Mahajan AJ, **Wettstein R**, Harder Y, Elias B, Pawlovski M, Pittet B.
Ann Plast Surg In press

Split thickness skin graft harvested with saline moistening.

Wettstein R, Betsy E, Racine C, Raffoul W, Kalbermatten DF.
J Burn Care Res in press

Superior pedicle breast reduction for hypertrophy with massive ptosis. Wettstein R, Christofides E, Pittet B, Psaras G, Harder Y.

J Plast Reconstr Aesthet Surg. 2010 Jun 24. [Epub ahead of print]

Erythropoietin-induced upregulation of endothelial nitric oxide synthase but not vascular endothelial growth factor prevents musculocutaneous tissue from ischemic damage.

Rezaeian F, **Wettstein R**, Egger JF, Sandmann F, Rücker M, Tobalem M, Vollmar B, Menger MD, Harder Y.
Lab Invest. 2010 Jan;90(1):40-51

Gender-specific ischemic tissue tolerance in critically perfused skin.

Harder Y, Amon M, **Wettstein R**, Rücker M, Schramm R, Menger MD.
Langenbecks Arch Surg. 2010 Jan;395(1):33-40

Fibrin sealant for fasciocutaneous flaps.

Erba P, Di Summa PG, **Wettstein R**, Raffoul W, Kalbermatten DF.
Journal of Reconstructive Microsurgery 2010 May;26(4):213-7

A comparative study of two surgical treatment strategies for painful neuroma

Balci H, Erba P, **Wettstein R**, Schaefer DJ, Pierer G, Kalbermatten DF
J Bone Joint Surg Br. 2009 Jun;91-B(6):803-808.

Silicone molding for pressure sore debridement.

Erba P, **Wettstein R**, Pierer G, Kalbermatten DF
J Plast Reconstr Aesthet Surg 2010 Mar;63(3):550-3.

Body taping for contour surgery.

Kalbermatten DF, **Wettstein R**, Erba P, Rieger UM, Pierer G, Raffoul W.
Aesthetic Plast Surg 33(3):324-6, 2009

Donor site morbidity of the posterior conchal region.

Erba P, **Wettstein R**, D'Arpa S, Kalbermatten DF.
Dermatol Surg 35(6):960-4, 2009

Early detection of flap failure using a new thermographic device.

Tenorio X, Mahajan AJ, **Wettstein R**, Harder Y, Pawlovski M, Pittet B.
J Surg Res 151(1):15-21, 2009

Neurocutaneous sural flap in paraplegic patients.

Erba P, **Wettstein R**, Tolnay M, Rieger UM, Pierer G, DF Kalbermatten.
J Plast Reconstr Aesthet Surg 62(8):1094-8, 2009

Erythropoietin protects critically perfused flap tissue from necrosis.

Rezaeian F, **Wettstein R**, Amon M, Scheuer C, Schramm R, Menger MD, Pittet B, Harder Y.
Ann Surg 248(6):919-29, 2008

Does abdominoplasty with liposuction of the love handles yield a shorter scar? An analysis with abdominal 3D laser scanning.

Rieger UM, Erba P, **Wettstein R**, Schumacher R, Haug M, Pierer G, Kalbermatten DF.
Ann Plast Surg 61:359-63, 2008

Microvascular experimental evidence on the relative significance of restoring oxygen carrying capacity vs. blood viscosity in shock resuscitation.

Salazar Vázquez BY, **Wettstein R**, Cabrales P, Tsai AG, Intaglietta M.
Biochim Biophys Acta 1784(10):1421-7, 2008

Marjolin's ulcer revisited – Basal cell carcinoma arising from grenade fragments?

Rieger UM, Kalbermatten DF, **Wettstein R**, Heider I, Haug M, Pierer G.
J Plast Reconstr Aesth Surg 61(1):65-70, 2008

A study of the effect of sartorius transposition on lymph flow after ilioinguinal node dissection.

Erba P, **Wettstein R**, Rieger UM, Haug M, Pierer G, Kalbermatten DF.
Ann Plast Surg. 61(3):310-3, 2008

Sensate lateral arm flaps for defects of the lower leg.

Kalbermatten DF, **Wettstein R**, von Kanel O, Erba P, Pierer G, Wiberg M, Haug M.

Ann Plast Surg 61(1): 40-6, 2008

Posterior auricular perichondrial cutaneous graft combined with cartilage strip in nostril reconstruction.

Schmid DW, Di Summa PG, **Wettstein R**, Erba P, Raffoul W, Kalbermatten DF.
Eplasty 412-18, 2008

Successful therapy for a patient with an infected ascending aortic graft and sternal osteomyelitis without graft removal.

Schmid DW, Orasch-Jörg Ch, **Wettstein R**, Kalbermatten DF, Todorov A, Pierer G.
Eplasty 419-22, 2008

Reducing the learning curve for the treatment of morphoeic (sclerosing) basal cell carcinoma of the face.

Erba P, **Wettstein R**, Rieger UM, Beltraminelli H, Pierer G, Kalbermatten DF.
Scand J Plast Reconstr Surg Hand Surg 42(3):122-6, 2008

Incomplete excision of basal cell carcinoma in the subunits of the nose.

Wettstein R, Erba P, Farhadi J, Kalbermatten DF, Arnold A, Haug M, Pierer G.
Scand J Plast Reconstr Surg Hand Surg 42(2):92-5, 2008

Review of 197 consecutive free flap reconstructions in the lower extremity.

Wettstein R, Schürch R, Banic A, Erni D, Harder Y.
J Plast Reconstr Aesthet Surg 61(79):772-6, 2008

Hemiface Rhytidectomy.

Kalbermatten DF, Erba P, **Wettstein R**, Pierer G.
Aesthetic Plast 32(2):227-33, 2007

Morphoeic basal cell carcinoma of the face.

Erba P, Farhadi J, **Wettstein R**, Arnold A, Harr T, Pierer G.
Scand J Plast Reconstr Hand Surg 41:184-8, 2007

Laser scanner analysis in reconstruction of traumatic laceration of the facial nerve.

Kalbermatten DF, **Wettstein R**, Erba P, Schumacher R, Dagorov P, Pierer G.
Laser Physics Letters 4: 476-9, 2007

Hemoglobin vesicles to treat critical ischemia.

Erni D, **Wettstein R**, Contaldo C, Plock JA, Rafatmehr N, Sakai H, Tsuchida E. *Artificial Blood Vol 15, No2. 58-64, 2007*

An old dream revitalised: preconditioning strategies to protect surgical flaps from critical ischaemia and ischaemia-reperfusion injury.

Harder Y, Amon M, Laschke MW, Schramm R, Rücker M, **Wettstein R**, Bastiaanse J, Frick A, Machens HG, Küntscher M, Germann G, Vollmar B, Erni D, Menger MD.
J Plast Reconstr Aesthet Surg, Dec 27, 2007

Selective blockade of endothelin-B receptor improves survival of critically perfused musculocutaneous flaps.

Wettstein R, Morsdorf P, Bachle A, Amon M, Pittet B, Menger MD, Harder Y. *Langenbecks Arch Surg* 392:331-8, 2007

An effective blood replacement fluid that targets oxygen delivery, increases plasma viscosity, and has high oxygen affinity.

Tsai AG, Sakai H, **Wettstein R**, Kerger H, Intaglietta M. *Transfusion Alternatives in Transfusion Medicine* 5(6):507-15, 2004

Laser surface scanning analysis in reconstructive rhytidectomy.

Wettstein R, Kalbermatten DF, Rieger UM, Schumacher R, Dagorov P, Pierer G. *Aesthetic Plast Surg* 30:637-40, 2006

High magnification assessment improves complete resection of facial tumors. **Wettstein R**, Kalbermatten DM, Rieger U, Farhadi J, Harr T, Pierer G. *Ann Plast Surg* 57:517-20, 2006

Early resuscitation with polymerized bovine hemoglobin reverses acidosis, but not peripheral tissue oxygenation in a severe hamster shock model.
Wettstein R, Tsai AG, Harder Y, Erni D, Intaglietta M. *Shock* 26:496-503, 2006

Rapid restoration of microcirculatory blood flow with hyperviscous and hyperoncotic solutions lowers the transfusion trigger in resuscitation from hemorrhagic shock
Wettstein R, Erni D, Intaglietta M, Tsai AG. *Shock* 25:641-6, 2006

Effective treatment of permanent tattoos with combustible particles due to blast injuries with a V-shaped device.
Kalbermatten DF, **Wettstein R**, Haug M, du Croo de Jongh NT, Pierer G. *J Plast Reconstr Aesthet Surg* 59:398-403, 2006

New posterior auricular perichondrial cutaneous graft for stable reconstruction of nasal defects.
Kalbermatten DF, Haug M, **Wettstein R**, Schaefer DJ, Pierer G. *Aesthetic Plast Surg* 29:489-95, 2005

Resuscitation from hemorrhagic shock with MalPEG-albumin: Comparison with MalPEG-hemoglobin.
Wettstein R, Cabrales P, Erni D, Tsai AG, Winslow RM, Intaglietta M. *Shock* 22(4):351-7; 2004

Improving microcirculation is more effective than substitution of red blood cells to correct metabolic disorder in experimental hemorrhagic shock.
Wettstein R, Tsai AG, Erni D, Torchilin VP, Intaglietta M. *Shock* 21(3):235-40, 2004

Improved oxygenation in ischemic hamster flap tissue is correlated with increasing hemodilution with Hb vesicles and their O₂ affinity.
Contaldo C, Schramm S, **Wettstein R**, Sakai H, Takeoka S, Tsuchida E, Leunig M, Banic A, Erni D. *Am J Physiol Heart Circ Physiol* 285:H1140-7, 2003

Resuscitation with MalPEG-Hemoglobin improves microcirculatory blood flow and tissue oxygenation after hemorrhagic shock in awake hamsters.
Wettstein R, Tsai AG, Erni D, Winslow R.M, Intaglietta M. *Crit Care Med* 31:1824-30; 2003

Normovolemic hemodilution with Hb vesicle solution attenuates hypoxia in ischemic hamster flap tissue.
Erni D, **Wettstein R**, Schramm S, Contaldo C, Sakai H, Takeoka S, Tsuchida E, Leunig M, Banic A. *Am J Physiol Heart Circ Physiol* 284:H1702-9; 2003

Systemic and microvascular responses to hemorrhagic shock and resuscitation with Hb vesicles.
Sakai H, Takeoka S, **Wettstein R**, Tsai AG, Intaglietta M, Tsuchida E. *Am J Physiol Heart Circ Physiol* 283:H1191-9;2002

Radical sternectomy and primary musculocutaneous flap reconstruction to control sternal osteitis.

Wettstein R, Erni D, Berdat P, Rothenfluh DA, Banic A.
J Thorac Cardiovasc Surg 123:1185-90; 2002

Acute normovolemic hemodilution improves oxygenation in ischemic flap tissue. Schramm S, **Wettstein R**, Wessendorf R, Jakob SM, Banic A, Erni D.
Anesthesiology 96:1478-84; 2002

Endothelin Receptor Blockade Improves Oxygenation in Contralateral TRAM Flap Tissue.
Erni D, Wessendorf R, **Wettstein R**, Schilling MK, Banic A.
Br J Plast Surg 54:412-8; 2001

The effect of pedicle artery vasospasm on microhemodynamics in anatomically perfused and extended flap tissue.

Wettstein R, Wessendorf R, Sckell A, Leunig M, Banic A, Erni D.
Ann Plast Surg 45:155-61; 2000