

Curriculum vitae – Radu Olariu, MD

1. Personal information

Name:	Radu Olariu	Date of birth:	16.11.1980
Title:	MD	Marital status:	married, 1 child
OrcID:	0000-0002-0204-4432	Nationality:	Romanian

2. Education.

- 2006-2011: Residency in Plastic and Reconstructive Surgery at the University for Medicine and Pharmacy „Iuliu Hatieganu“ Cluj-Napoca, Romania (Prof. Dr. Alexandru Georgescu) and University of Bern, University Hospital Inselspital (Prof. Dr. Andrej Banic)
- 1999-2005: Medical studies at the University for Medicine and Pharmacy „Iuliu Hatieganu“ Cluj-Napoca, Romania with scholarship October 2003 – February 2014 at the Medical School of the „Heinrich Heine“ University Düsseldorf, Germany

3. Employment history including current position(s)

01.07.2016 – present: **Deputy Head of Department**, Clinic for Plastic, Reconstructive and Aesthetic Surgery, Inselspital Bern, Switzerland (Head of Clinic: Prof. Dr. med. Mihai A. Constantinescu)

01.07.2015 – 30.06.2016: **Senior Consultant**, Clinic for Plastic, Reconstructive and Aesthetic Surgery, Inselspital Bern, Switzerland (Head of Clinic: Prof. Dr. med. Mihai A. Constantinescu)

01.02.2013 – 30.06.2015: **Consultant**, Clinic for Plastic, Reconstructive and Aesthetic Surgery, Inselspital Bern, Switzerland (Head of Clinic: Prof. Dr. med. Mihai A. Constantinescu)

01.01.2012 – 31.01.2013: **Junior Consultant** (Stv. Oberarzt), Clinic for Plastic, Reconstructive and Aesthetic Surgery, Inselspital Bern, Switzerland (Head of Clinic: Prof. Dr. Andrej Banic)

4. Institutional responsibilities

Medical Head of the Operation Theatre, Representative Plastic Surgery in Head and Neck Tumor center, Sarcoma center and Skin cancer center, Responsible for Continuous Medical Education of Residents, Responsible undergraduate clinical teaching

5. Approved research projects

“Site-specific immunosuppression for long-term maintenance of vascularized composite allotransplantation: validation of efficacy and safety in a clinically relevant large animal model” – PI in Grant funded by the Swiss National Science Fund – approx. 400'000 CHF

“Effect of lymphatic tissue transfer on vascularized composite allografts” – Co-Applicant in grant funded by the American Foundation for Surgery of the Hand (PI: Adriano Taddeo) – 20'000 USD

"Targeting the Lymphatic System for Modulating Immune Rejection and Promoting Tolerance in Vascularized Composite Allotransplantation" – Key person in DoD RTRP Concept Award Number RT160136 – 193'563 CHF (PI: Adriano Taddeo)

"Lymph node Identification in skin Malignancy using Indocyanine green Transcutaneously (LIMIT) Study" – PI in project funded by the Bernese Cancer league – 20'000 CHF

6. Supervision of junior researchers at graduate and postgraduate level (summary information, the names of the junior researchers should be indicated)

MD thesis: Helene Moser: "An evaluation of the influence of arterial inflow and venous outflow on perforator flap survival in a rat model."

Master thesis: Raphael Biedermann: "Retrospektive Aktenstudie zur Entwicklung der Indikationen, Methoden und Resultate des freien Gewebetransfers in der rekonstruktiven Chirurgie."

7. Teaching activities (summary information)

Lecturer at the University of Bern, Medicine:

The management of Burn Injuries – 4th year
Plastic Surgery from head to toe – 6th year
Breast Reconstruction – 6th year

Lecturer at the BZ Pflege Bern:

Soft tissue injuries – Part of the postgraduate course in "Disaster Nursing"

8. Active memberships in scientific societies, fellowships in renowned academies

Swiss society for Plastic, Reconstructive and Aesthetic Surgery

Romanian Association of Plastic Surgeons

Romanian Society of Surgery of the Hand

Romanian Society of Microsurgery

Fellow of the European Board of Plastic, Reconstructive and Aesthetic Surgery

9. Prizes, awards, fellowships

2014: Scientific prize of the Swiss Society of Plastic, Reconstructive and Aesthetic Surgery with the project: "A single localized dose of enzyme-responsive hydrogel improves long-term survival of a vascularized composite allograft." (<https://plasticsurgery.ch/aerzte-fachpersonen/preise-und-stipendien/>)

2016: Best scientific oral presentation at the Congress of the Swiss Society of Plastic, Reconstructive and Aesthetic Surgery with the project: "Is the artery or the vein more important? An evaluation of the influence of arterial inflow and venous outflow on perforator flap survival in a rat model." (<https://plasticsurgery.ch/aerzte-fachpersonen/preise-und-stipendien/>)

2016: Best oral presentation at the Congress of the European Plastic Surgery Research Council with the project: "Intra-graft injection of tacrolimus may modulate local immune response promoting long-term acceptance of VCA in a modified Brown Norway-to-Lewis transplantation model" (<http://ps-rc.org/meeting/abstracts/2017-program.cgi>)

Research output – Radu Olariu, MD

Publications in international peer-reviewed scientific journals

1. **Radu Olariu**, Julie Denoyelle, Franck M. Leclère, Dzhuliya V. Dzhonova, Thusitha Gajanayake, Yara Banz, Michael Hayoz, Mihai Constantinescu, Robert Rieben, Esther Vögelin, Adriano Taddeo, *Intra-graft injection of tacrolimus promotes survival of vascularized composite allotransplantation*, Journal of Surgical Research, Volume 218, **2017**, Pages 49-57
2. Gajanayake T*, **Olariu R***, Leclère FM, Dhayani A, Yang Z, Bongoni AK, Banz Y, Constantinescu MA, Karp JM, Vemula PK, Rieben R, Vögelin E. *A single localized dose of enzyme-responsive hydrogel improves long-term survival of a vascularized composite allograft*. Sci Transl Med. **2014** Aug 13;6(249):249ra110. (*-Equal contribution)
3. Lese I, Graf DA, Tsai C, Taddeo A, Matter MT, Constantinescu MA, Herrmann IK, **Olariu R**. Bioactive nanoparticle-based formulations increase survival area of perforator flaps in a rat model. PLoS One. 2018 Nov 26;13(11)
4. Rothenberger J, Constantinescu MA, Held M, Aebersold DM, Stolz A, Tschumi C, **Olariu R**. *Use of a Polylactide-based Copolymer as a Temporary Skin Substitute for a Patient With Moist Desquamation Due to Radiation*. Wounds. 2016 Jul;28(7):E26-30.
5. Liu H, He Z, April SL, Trefny MP, Rougier JS, Salemi S, **Olariu R**, Widmer HR, Simon HU. Biochemical re-programming of human dermal stem cells to neurons by increasing mitochondrial membrane potential. Cell Death Differ. 2018 Aug 28.
6. Dumont CE, Keel MJ, Djonov V, Haefeli PC, Schmid T, **Olariu R**, Cullmann JL, Bastian JD. *The Pararectus approach provides secure access to the deep circumflex iliac vessel for harvest of a large sized and vascularized segment of the iliac crest*. Injury. **2017** Aug 8.
7. Müller M, Moser EM, Pfortmueller CA, **Olariu R**, Lehmann B, Exadaktylos AK. *Aetiology of adult burns treated from 2000 to 2012 in a Swiss University Hospital*. Burns. 2016 Jun;42(4):919-25.
8. Fiechter M, Fichtner J, Feiler S, **Olariu R**, Beck J, Raabe A, Ulrich CT. *"Dinosaur spine" in ankylosing spondylitis: case illustration*. J Neurosurg Spine. **2015** Oct 30:1-2
9. **Olariu R**, Shafiqhi M, Constantinescu MA. [*The risk-reducing mastectomy: unnecessary hysteria or life-saving prophylaxis?*]. Ther Umsch. **2014** Dec;71(12):759-64.
10. Baldea BI, Toader S, Orbai P, Barsan S, **Olariu R**, Grigorescu DO, Penciu M, Nagy AL, Georgescu AV. *The influence of diabetes mellitus on survival of abdominal perforator flaps: an experimental study in rats with slowly induced diabetes mellitus*. J Reconstr Microsurg. **2015** Feb;31(2):145-53.
11. Constantinescu MA, **Olariu R**, Shafiqhi M. [Surgical therapy for reconstruction of body shape and contour following massive weight reduction]. Ther Umsch. **2013** Feb;70(2):135-8.
12. Oliveira-Santos T, Baumberger C, Constantinescu M, **Olariu R**, Nolte LP, Alaraibi S, Reyes M. 3D face reconstruction from 2D pictures: first results of a web-based computer aided system for aesthetic procedures. Ann Biomed Eng. **2013** May;41(5):952-66.

13. Shafighi M, Constantinescu MA, Huemer GM, **Olariu R**, Bonel HM, Banic A, Ramakrishnan V. The extended diep flap: extending the possibilities for breast reconstruction with tissue from the lower abdomen. *Microsurgery*. **2013** Jan;33(1):24-31.

Oral contributions to international conferences (selection)

1. *Intra-graft injection of tacrolimus may modulate local immune response promoting long-term acceptance of VCA in a modified Brown Norway-to-Lewis transplantation model.* **Radu Olariu**, Adriano Taddeo, Franck Leclère, Mihai A. Constantinescu, Esther Voegelin. Presented at the Plastic Surgery Research Council, Durham, NC, May 2017 (invited talk as best European Plastic Surgery Research Council talk of 2016).
2. *Results of fibula free flap for mandibular reconstruction using a new approach for virtual surgical planning.* **Radu Olariu**, M. Constantinescu, T. Iizuka, M. Mottini, Congress of the Romanian Association of Plastic Surgeons, Cluj-Napoca, Romania, April 2017.
3. *Is the artery or the vein more important? An evaluation of the influence of arterial inflow and venous outflow on perforator flap survival in a rat model.* **Olariu R**, Moser H, Leckenby J, Sabau D, Constantinescu MA. Presented at the Congress Swiss Plastic Surgery 2016, Lausanne – **Prize for best presentation in the category Research.**
4. *Intra-graft injection of tacrolimus may modulate local immune response promoting long-term acceptance of VCA in a modified Brown Norway-to-Lewis transplantation model.* **Radu Olariu**, Adriano Taddeo, Franck Leclère, Mihai A. Constantinescu, Esther Voegelin. Presented at the Combined Meeting EURAPS Research Council and European Plastic Surgical Research Council Brussels, May 2016 – **Best presentation**
5. *Outcome of medial thigh lift with limited skin undermining and periosteal anchoring of dermal flaps in postbariatric patients.* **Radu Olariu**, T Hirschi, O Bleiziffer, MA Constantinescu. Swiss Plastic Surgery Congress Thun, Switzerland September 2015
6. The „safe“ propeller flap in lower leg reconstruction: technique and results in prospectively followed consecutive patients in a single center. **R.Olariu**, D Kiermeir, MC Constantinescu, M Shafighi, Swiss Plastic Surgery Congress Geneva, Switzerland September 2014
7. *A single injection of FK506 encapsulated hydrogel drug delivery system allows for prolonged graft survival in allogeneic limb transplantation in rats.* **Olariu R.**, Leclère F.M., Gajanayake T., Vemula P., Constantinescu M., Rieben R., Vögelin E. Congress of the European Association of Plastic Surgeons, Ischia, May 2014