Curriculum vitae

Dr. Bruno Vogt Bern, 02th of October 2012

1 Personal details

Last name: Vogt

First name: Bruno

Date of birth: 13th of August 1961

AVS No: 917.61.344.116

Nationality (Canton of origin): Switzerland (Schwyz)

1.2 Professional address

Chairman and Head Department of Nephrology and Hypertension Inselspital, Bern University Hospital CH-3010 Bern

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2 Executive Summary

I'm trained in **Internal Medicine, Nephrology** and **Hypertension** with clinical background in the whole spectrum of Nephrology and Hypertension, with special focus on **General Nephrology**.

Present position: **Chairman and Head**, **Department of Nephrology and Hypertension**, **Inselspital, Bern University Hospital**, in Bern, Switzerland.

At present, I assume the clinical and the executive function as:

- Chairman and Head of the Department of Nephrology and Hypertension, including:
- - outpatient clinic of general nephrology
- - inpatient clinic of general nephrology
- - acute dialysis unit and treatment of acute renal failure
- - plasmapheresis- and other extra-corporal therapies
- - hypertension unit
- - consultant at the intensive care, immediate care and the emergency unit
- - consultant for the inflammatory diseases unit
- - Principal investigator of clinical research program in hypertension, BOLD-MRI and perfusion MRI studies
- - Principal investigator of basic research program on renal sodium retention in liver cirrhosis
- - Executive secretary of the Swiss Society of Nephrology (2006 to 2012)

Since 1988 I have been working on the clinically relevant problem of **renal sodium retention and edema formation** in **nephrotic syndrome** and **cirrhosis of the liver**, and developed a new mice model for this purpose. In clinical research I focus on the problem of **renal oxygenation and perfusion** using magnetic resonance techniques and classic renal hemodynamic studies in human. For both, basic and clinical research, I have international collaborations.

Contents

3 Education

3.1 Under-graduate education

- 1981 Federal Matura type B, Collegium, Nuolen (SZ)
- 1981-1983 Medical school, University of Fribourg
- 1983-1984 Medical school, University of Geneva
- 1985-1986 Medical school, University of Paris, France
- 1986-1988 Medical school, University of Geneva

3.2 Post-graduate education

3.2.1 Main employment before obtaining doctorate and/or specialist qualification

- 1988-1990 : Resident (research, 2 years), „Laboratoire de Néphrologie et de Physiopathologie Rénale“, Nephrology Unit, Prof. H. Favre, Geneva University Hospital and University of Geneva.
- 1989 Resident (research, 6 months), „Laboratoire de Physiologie Cellulaire“, Prof. F. Morel et Prof. A. Doucet, Collège de France, Paris, France.
- 1991 Resident (clinic, 6 months), Department of Urology, Cantonal Hospital of St. Gallen, Prof. K. Bandhauer, St. Gallen.
- 1990-1993 Resident (clinic, 30 months), Internal medicine, Regional Hospital of Lachen (SZ), Dr. A. Mäder, Lachen.
- 1993-1995 Resident (clinic, 2 years), Internal medicine, Department of Internal Medicine, Cantonal and University Hospital of Geneva, Prof. A.F. Junod, Geneva.
- 1995-1996 Resident (clinic, 1 year), Nephrology Unit, Department of Internal Medicine, University Hospital „Inselspital“, Prof. F.J. Frey, Berne.

3.2.2 Post-doctorate and post-speciality employment

- 1996-2004 Attending (chief resident; 8 years), Department of Nephrology and Hypertension, University Hospital „Inselspital“, Prof. F.J. Frey, Berne.

- 2004-2005 Senior researcher and lecturer (1 year), „Laboratoire de Physiologie et Génomique de la Cellule Rénale“ (CNRS UMR7134), University of Paris, Institut „Les Cordeliers“, Prof. A. Doucet, Paris, France.

- 2005-2006 Attending and Deputy Chief of Nephrology (15 months), Service of Nephrology and Hypertension, Department of Internal Medicine, Centre Hospitalier Universitaire Vaudois (CHUV) et Université de Lausanne (UniL), Prof. M. Burnier, Lausanne.

- 2007-07/2012 present Senior Attending and Deputy Chief of Nephrology (Médecin adjoint - Leitender Arzt, und Stellvertreter Klinikleiter), Service of Nephrology and Hypertension (ESH Hypertension Center of Excellence), Department of Internal Medicine, Centre Hospitalier Universitaire Vaudois (CHUV) et Université de Lausanne (UniL), Prof. M. Burnier, Lausanne.

- 08/2012 present: Chairman and Head, Department of Nephrology and Hypertension, Inselspital, Bern University Hospital, Bern.

4 Current institutional and academic qualification and function

4.1 Current institutional function

Chairman and Head, Department of Nephrology and Hypertension, Inselspital, Bern University Hospital, Bern

4.2 Academic qualification and function

- 1988 Federal Diploma in medicine, Faculty of Medicine, University of Geneva.
- 1990 Thesis of Medical Doctor, Faculty of Medicine, University of Geneva (09.01.1990).
  Title of thesis: „Na,K-ATPase activity and hormones in single nephron segments from nephrotic rats.“
- 1995 Board certification FMH Internal Medicine.
- 1996 Board certification FMH Nephrology.
- 2003 Privat-Docent, University of Berne (internal medicine and nephrology - date 04. 02. 2003)
  Title of thesis: „Renal sodium retention in nephrotic syndrome and liver cirrhosis“.
- 2006 Privat-Docent and „Maître d'Enseignement et de Recherche“ (MER I), University of Lausanne (internal medicine and nephrology - date 01.09.2006).
  Title of thesis: „Renal sodium retention in nephrotic syndrome and liver cirrhosis“.
- 2012 Professor of Medicine and Chairman and Head, Department of Nephrology and Hypertension, Inselspital, Bern University Hospital, Bern.

5 Recent and current activities

5.1 Organization activities

Organization activities include clinical, teaching, research and management responsibilities.

- Chairman and Head of the Department of Nephrology and Hypertension
- - outpatient clinic of general nephrology
- - inpatient clinic of general nephrology
- - acute dialysis unit and treatment of acute renal failure
- - plasmapheresis- and other extra-corporal therapies
- - hypertension unit
- - consultant at the intensive care, immediate care and the emergency unit
- - consultant for the inflammatory diseases unit
- - Principal investigator of clinical research program in hypertension, BOLD-MRI and perfusion MRI studies
- - Principal investigator of basic research program on renal sodium retention in liver cirrhosis
- - Executive secretary of the Swiss Society of Nephrology (2006 to 2012)

5.2 Teaching

5.2.1 Under-graduate Teaching

- UniL Faculty of Medicine: 2nd year medical students: 1h, nephrology
- UniL Faculty of Medicine: 3rd year medical students: 2h, nephrology; 1h pathophysiology
- UniL APP (clinical problem solving) 2nd and 3rd year medical students: 4h
- UniL Faculty of Medicine: 6th year: 2h, nephrology
- HES-Haute école cantonale vaudoise de la santé: 2h teaching course for nurses on renal insufficiency (2008)

5.2.2 Post-graduate Teaching

- Responsible for the continuous medical education in the nephrology unit (4-5h per week postgraduate education)
- Swiss Society of Nephrology: invited lectures, oral presentations, poster presentations (national)
- Swiss Society of Internal medicine: workshops, invited lectures (national)
- Swiss Society of Endocrinology : workshops (national)
- Organization of local and regional scientific meetings: nephrology meetings Lausanne-Geneva 2-4 times per year
- Co-organization of the Swiss Society of Nephrology Annual Meeting since 2006 till today
- Co-organization of the official CME (continuous medical education) course of the Swiss Society of Nephrology
- Co-organization of the Swiss World Kidney Day
- Organization of the continuous medical education courses on Nephrology and Hypertension *Chateau Mercier*, Sierre (every other year)
- Lectures on pathophysiology of renal disease (2h per year, 2004-2009, part of Prof. A. Doucet teaching on renal physiology at the University of Paris, Institut „Les Cordeliers“, Paris, France)

5.2.3 Education in teaching

- 1999 : Education program in didactic and University teaching („Hochschuldidaktik-Kurs: Methoden der Wissensvermittlung“); 5 days, Prof. H.O. Gralki, Freie Universität Berlin, Germany
- 2007: Techniques for Successful Communication (BCF-Business Communication Forum); 1 day course, Lausanne

5.3 Research

Besides clinical investigations related to my practical clinical activities, my main research is focused on three topics, first on the clinically relevant phenomenon of **sodium retention in disease states**, specifically in nephrotic syndrome and in liver cirrhosis with ascites formation, second, on the problem of **renal tissue oxygenation in human**, and third, on clinical research in **hypertension**.

5.3.1 Basic research: Mechanism(s) of renal sodium retention in disease states - nephrotic syndrome

The nephrotic syndrome (NS) is associated with a disturbed volume regulation characterized by abnormal salt retention by the kidneys leading to the development of edema. We could demonstrate in animals with NS that the mechanism of tubular sodium retention is located in the cortical collecting tubule (CCD), and - for the first time - that adrenalectomy does not prevent this abnormal renal sodium retention [1]. In collaboration with the group of F. Morel and A. Doucet from the Collège de France in Paris we studied further the enhanced Na,K-ATPase activity observed in micro-dissected CCD [2]. We showed that **aldosterone - independent** and **adrenal - independent mechanism(s)** occur in CCD of nephrotic animals, a finding confirmed by others.

In studies conducted at the University Hospital „Inselspital" in Bern we studied aldosterone independent activation of the mineralocorticoid receptor (MR). Studies in humans suffering from NS and in nephrotic rats confirmed that aldosterone independent activation of MR mediated by an inhibition of the enzyme 11β-HSD2 is present [3]. Using the difficult and even more specific unilateral model of PAN-induced nephrotic syndrome, the aldosterone regulated sodium entry channel ENaC escaped from regulation by aldosterone suggesting more complex regulatory mechanisms for sodium retention in nephrotic syndrome [4].

5.3.2 Basic research: Mechanism(s) of renal sodium retention in disease states - liver cirrhosis

Renal sodium retention in cholestatic mice: SNF 3200-057205 in 1999; SNF PIK033-108768 in 2005; SNF 31003A-120406 in 2008; and SNF 2011 31003A-135417 (in evaluation).

We studied the effect of increased bile acids in bile duct ligated (BDL) - rats and in patients with obstructive jaundice [5]. The observed down regulation of the 11β-HSD2 activity allowing increased access of cortisol to the mineralocorticoid receptor (MR) partially account for the enhanced mineralocorticoid effect in cirrhosis. To investigate the renal mechanisms as well as the site(s) of sodium retention in liver cirrhosis, Dr. D. Ackermann and myself developed the bile duct ligation induced cirrhosis model in mice. In 2004/5 during a one-year period in the research unit of Prof. A. Doucet in Paris, we showed that cirrhosis and sodium retention could be

[1] Vogt B, and Favre H. *Clin Sci* 1991

[2] Féraille E, Vogt B, et al. *J Clin Invest* 1993

[3] Audigé A, et al. *Clinical Sci* 2003

[4] Yu Z, et al. *Nephron Physiology* 2005

[5] Yu Z, et al. *Nephrol Dial Transplant* 2005; Ackermann D, et al. *Hepatology* 1999; Quattropani C, Vogt B, et al. *J Clin Invest* 2001

reproduced in mice [6]. This was an important observation that opened the field for further studies in transgenic mice. In these cirrhotic mice sodium transport was selectively increased in the CCD and not in the other segments of the aldosterone sensitive distal nephron indicating that aldosterone and other MR-mediated mechanisms might not or only partially be responsible for sodium retention in this specific animal model. We obtained identical results in adrenalectomized cholestatic mice with continuous and fixed aldosterone and dexamethasone substitution, an animal model we developed for this study.

At the University of Lausanne, we took advantage of the existing CCD specific αENaC KO mice. These mice offer a unique opportunity to discover other sodium entry mechanism(s) in the absence of ENaC. Despite lack of αENaC in CCD cirrhotic animals developed sodium retention, demonstrating that ENaC function in the CCD is not required for ascites formation. The absence of ENaC in the CCD was confirmed by immunohistochemistry (collaboration with Prof. J. Loffing, Institute of Anatomy, University of Zürich). These observations support the hypothesis of **aldosterone - independent** and **adrenal-independent mechanism(s)** responsible for the increased sodium retention in CCD in cholestatic mice.

These findings in cholestatic mice with liver cirrhosis represent a fundamental problem in renal physiology and pathophysiology. It opens a new view on sodium transport in CCD in disease states. The new submitted SNF grand proposes to investigate these mechanism(s).

5.3.3 Clinical research: Oxygenation and perfusion of the human kidney in healthy volunteer and in patients with kidney diseases

BOLD-MRI and the kidney: SNF 32003B-132913; Prognostic value of renal tissue oxygenation on renal disease progression in patients with hypertension and renal disease; Principal investigator Prof. M. Burnier, co-investigator B. Vogt.
There is evidence for a role of hypoxia in the development of acute and chronic renal damages in human renal diseases. A relatively new technology called **„Blood Oxygen Level Dependent Magnetic Resonance Imaging (BOLD-MRI)“** offers the possibility to assess renal tissue oxygenation non-invasively in humans. With the kind help of P.V. Prasad who provided his new MRI-algorithm for BOLD-MRI of the kidney and his support, we performed the first BOLD-MRI analysis at the University Hospital „Inselspital“, Bern, in the late nineties. The first study allowed to identify the known cortico-medullary gradient of oxygenation and suggested that medulla is more hypoxic in older than younger individuals [7].

[6] Ackermann D, et al. *Hepatology* 2007
[7] Simon-Zoula SC, et al. *NMR in Biomedicine* 2006

In further studies we analyzed the acute effects of nephrotoxic xenobiotics on renal oxygenation and showed for the time in human, that injection of iodinated radio contrast media decreased renal medullar oxygenation [8]. At the University of Lausanne, Prof. M. Burnier and myself created a group of functional MRI for renal imaging investigations. In collaboration with Prof. M Stuber, from the „Centre d'Imagerie Biomédicale" of the CHUV University Hospital, we developed functional MRI in human kidneys. We developed a new study protocol that combines precise renal hemodynamic measurements with BOLD-MRI. Using this technique we studied the effect of high/low salt intake in healthy volunteers and in hypertensive subjects. We could demonstrate that high salt when compared to low salt intake induces renal medulla hypoxia in volunteers and in hypertensive patients [9].

To take full advantage of the MRI techniques, we now use the renal perfusion measurements without contrast media with the kind help of Prof. Petros Martirosian from the Experimental Radiology Section of the University Hospital of Tübingen, Germany, and try to match the perfusion images with the oxygenation measurements for specific regions of interest.

5.3.4 Clinical research: Hypertension

I conducted or participated in several clinical studies mainly at the CHUV University Hospital in Lausanne focussing on precise investigation of new or currently available drugs on renal function and hemodynamics [10]. Similar studies are ongoing or in preparation.

5.3.5 Clinical research: Treatment of IgA glomerulonephritis

The optimal treatment for IgA nephropathy (IgAN) remains unknown. I participated to two randomized, multi-center, controlled trials to determine whether adding azathioprine to steroids improves renal outcome. Adding low-dose azathioprine to corticosteroids did not provide additional benefit to patients with IgAN and may increase the risk for adverse events. A second study on patient with severe impaired renal function is ongoing [11].

5.3.6 Research collaboration - national and international

- **Basic research:** Prof. E. Hummler and Prof. B. Rossier, Pharmacology and Toxicology, University of Lausanne, transgenic mice (on-

[8] Hofmann L. et al. *Kidney Int 2006*

[9] Pruijm M. et al, *Hypertension 2010*

[10] Serra A, et al. *J Am Soc Neph* 2002; Pruijm M. et al, *Hypertension* 2010; Coltamai L, et al. *J Hypertens* 2010; Coltamai L, et al. *Clin Pharmacol Ther*; Smolander J, et al. *Clin Pharmacol Ther* 2009

[11] Pozzi C, et al. *J Am Soc Nephrol* 2010

going).

- **Basic research:** Prof. J. Loffing, Institute of Anatomy, University of Zürich, kidney immunhistochemistry (ongoing).
- **Basic research:** Prof. A. Doucet, „Laboratoire de Physiologie et - Génomique de la Cellule Rénale“ (CNRS UMR7134), University of Paris, Institut Les Cordeliers, Paris, France, liver cirrhosis in mice, SAGE and SADE analyses (ongoing).
- **Basic research:** Prof. J. Leipziger, „Biomedical Institute“, University of Aarhus, Denmark, „in vitro“ microperfusion techniques (ongoing).
- **Basic research network:** Member of the Transatlantic Network on Hypertension - Renal Salt Handling in the Control of Blood Pressure of the Leducq's Foundation (BC Rossier, University of Lausanne, and R Lifton, Yale University, New Haven)
- **Clinical research:** Dr C. Pozzi and Prof. F. Locatelli, Lecco, Italy, IgA clinical studies and IgA network [12].
- **Clinical research:** Prof. M Stuber, from the „Centre d'Imagerie Biomédicale“ of the CHUV University Hospital, SNF grant on BOLD-MRI and perfusion MRI.
- **Clinical research:** Prof. Petros Martirosian, Department of Radiology, Section Experimental Radiology, University Hospital, Tübingen, Germany, Renal perfusion measurement with MRI.
- **Clinical research:** Dr. A. Schneider and Prof. R. Bellomo, University Hospital of Melbourne, Australia, Renal perfusion by contrast enhanced echography in critically ill patients.
- **Clinical research:** Swiss Lupus Cohort Study.
- **Basic research - old collaboration:** Prof. O. Staub, Pharmacology and Toxicology, University of Lausanne, Nedd4-2 mutation and ENaC [13].
- **Basic research - old collaboration:** Dr B. Corman, Service de Biologie Cellulaire, Gif-sur-Yvette, France, aging and old animals [14].
- **Basic research - old collaboration:** Dr Jaap Joles, Utrecht, Netherland, analbuminemic Nagase rats [15].

[12] Pozzi C. et al. *J Am Soc Nephrol* 2010
[13] Fouladkou F, et al. *Am J Physiol* 2004; 287:F550-F561
[14] Audig A, et al. *Eur J Clin Invest* 2002
[15] Yu Z, et al. *Nephron Physiology* 2005

5.3.7 Research founded by Swiss National Science Foundation - Principal investigator

- **SNF 3200-057205** - Liver cirrhosis: Mechanism on renal sodium retention (1999-2003; 36 months, SFR 151'354.-).
- **SNF PIK033-108768** - Localization and molecular basis of renal sodium retention in liver cirrhosis analyses of transcriptome of the cortical collecting duct (2005; 2 months; SFR 9'000.-).
- **SNF 31003A-120406** - Renal sodium retention in cholestatic mice (2008-2011; 36 months, SFR 262'193.-).
- **SNF 31003A-135417** - Renal sodium retention in chloestatic mice.

5.3.8 Research founded by Swiss National Science Foundation - Co-investigator

- **SNF 32003B-132913** - Prognostic value of renal tissue oxygenation on renal disease progression in patients with hypertension and renal disease (Principal investigator: Prof. M. Burnier, Lausanne)(2010-2013; 36 months, SFR 375000.-).

5.3.9 Research founded by Foundations (not SNF)

- **Principal investigator:** 2000 Novartis Research Foundation: Glycyrrhetinic acid in anuric patients: no effect on blood pressure but important decrease in serum potassium (SFR 20'000.-).
- **Principal investigator:** 2000 Price for Diagnostic and Therapeutics of the University of Berne: Pre-emptive hemodialysis after radio contrast media in patients with renal insufficiency (SFR 15'000.-).
- **Principal investigator:** 2003 Sanofi-Synthelabo research Foundation: Urate-oxidase (rasburicase) for treatment of severe tophaceous gout (SFR 30'000.-).
- **Principal investigator:** 2003 Novartis Transplantation Foundation: BOLD MRI for the assessment of renal oxygenation in humans: Acute effect of nephrotoxic drugs (SFR 55'000.-).
- **Co-investigator:** 2003 (Primary investigator Prof. A. Doucet, Paris), Genzyme Renal Innovations Program: Renal site and molecular basis of sodium retention in edematous diseases: Search for new candidate genes and drug targets through functional and transcriptome analysis. (Euro 300'000.-).

- **Principal investigator:** 2004 Novartis research Foundation Medizinische Biologische Stiftung: Sodium retention and ascites formation in liver cirrhosis : Gene target and transcriptome analysis (SFR 50'000.-).

- **Principal investigator:** 2007 Swiss Kidney Foundation: Effects of sodium loading/depletion on renal oxygenation in young normo- and hypertensive men measured with BOLD-MRI. (SFR 30'000.-).

- **Principal investigator:** 2008 Hypertension Foundation and Bracco research: Renal perfusion quantification with contrast echography. (SFR 20'000.- and 4'000.- respectively).

- **Co-investigator:** 2009 (Primary investigator Dr O. Bonny and Dr D. Firsov, Lausanne) Faculty of Biology and Medicine, Lausanne: sFRP1 as a molecular diagnostic tool in renal diseases (SFR 200'000.-).

- **Co-investigator:** 2009 (Primary investigator Prof. F. Spertini, Lausanne): MYCYC-MMF vs cyclophosphamide for remission induction in vasculitis. European Vasculitis Study Group.

5.3.10 Research founded by Industry (list not exhaustive)

- **Principal Investigator:** 1997 Short-term combination of mycophenolate mofetil with cyclosporine as a therapeutic option for renal transplant recipients: A prospective, multi-center, randomized study (Novartis) [16].

- **Principal Investigator:** 2001 Recombinant α-galactosidase for the treatment of Fabry disease (TKT-5S; SRF 20'000.-).

- **Principal Investigator:** 2002 Recombinant α-galactosidase for the treatment of Fabry disease (TKT-5S; SRF 20'000.-).

- **Principal Investigator:** 2003 Recombinant α-galactosidase for the treatment of Fabry disease (TKT-5S; SRF 20'000.-).

- **Principal Investigator:** 2006 Renal effects of the endothelin receptor antagonist avosentan in healthy subjects [17] (Speedel; SFR 500'000.-).

- **Principal Investigator:** 2007 Vitamin B6 (pyridoxine) deficiency in patients with chronic kidney disease stage 3 and the contribution to anemia. Roche Pharma (SFR 10'000.-).

[16] Sadek S, et al. *Transplantation* 2002

[17] Smolander J, et al. *Clin Pharmacol Ther* 2009

- **Principal Investigator:** 2010-2012 Fer-CKD-01 study: An open-label, multi-center, randomized, 3-arm study to investigate the comparative efficacy and safety of intravenous ferric carboxymaltose (Ferinject high- low-dosage regimens) versus oral iron for the treatment of iron deficiency anemia in subjects with non-dialyses-dependent chronic kidney disease. (Vifor Pharma).

- **Principal Investigator:** 2009-2012 Effect of aliskiren on renal oxygenation in human assessed by BOLD-MRI (Novartis; SFR 200'000.-).

- **Co-Investigator:** 1999 Randomized prospective study of sirolimus vs. cyclosporine in renal transplant patients (Wyeth).

- **Co-Investigator:** 2000 Prospective study of Myfortic (ERL080) in renal transplant recipients (Novartis).

- **Co-Investigator:** 2002 Randomized prospective study of FTY720 in renal transplant recipients (Novartis).

- **Co-Investigator:** 2006 Vascular effect of RWJ-676070, a selective combined V(1a)/V2 vasopressin receptor antagonist (Johnson and Johnson; SFR 980'000.-) [18].

- **Co-Investigator:** 2008-2009 A phase I, randomized, double-blind, dose escalation trial of the safety and pharmacokinetics of a single intravenous injection of I5NP in patients undergoing major cardiovascular surgery (Quark, USA).

- **Co-Investigator:** 2008-2011(Principal investigator: Prof. M. Burnier): A phase 1, single-center, randomized, parallel-group, placebo- and naproxen- controlled, double-blind study to evaluate the effect of naproxcinod 750 mg bid administered for 8 days on the renal hemodynamics, natriuretic and renin responses to a single bolus IV dose of furosemide 40 mg in male healthy normotensive Volunteers (Nicox S.A., Nice, France) [19].

- **Co-Investigator:** 2009 An open-label, multi-center controlled clinical trial of eculizumab in adult patients with plasma therapy-resistant atypical hemolytic-uremic syndrome (AHUS). Four different protocols: C08-002A and C08-002B, C08-003A and C08-003B (Alexion Pharmaceuticals, USA).

- **Co-Investigator:** 2011 A single-center, randomized, double-blind, multiple-dose,placebo-controlled, 2-way cross-over study to investigate the effects of RO4998452 and sodium intake on the renal hemodynamics,

[18] Coltamai L, et al. *Clin Pharmacol Ther* 2009

[19] manuscript in preparation

tubular sodium handling and interaction of RO4998452 with the renin-angiotensin system following oral administration in healthy subjects (F. Hoffmann-La Roche LTD, Basel).

6 Publications

6.1 Original articles in peer-reviewed journals

1. **Vogt B**, Favre H. Na,K-ATPase activity and hormones in single nephron segments from nephrotic rats. *Clinical Sci* [20] 1991; 80:599-604. IF: 3.98

2. Féraille E, **Vogt B**, Rousselot M, Barlet-Bas C, Cheval L, Doucet A, Favre H. Mechanism of enhanced Na,K-ATPase activity in cortical collecting ducts from rats with nephrotic syndrome. *J Clin Invest* 1993; 93:1295-1300. IF: 15.4

3. Escher G, **Vogt B**, Beck T, Guntern D, Frey BM, Frey FJ. Reduced 11β-hydroxysteroid dehydrogenase activity in the remaining kidney following nephrectomy. *Endocrinology* 1998; 139;1533-1539. IF: 4.75

4. Fuster D, Escher G, **Vogt B**, Ackermann D, Dick B, Frey BM, Frey FJ. Furosemide inhibits 11β-hydroxysteroid dehydrogenase type 2. *Endocrinology* 1998; 139:3849-3854. IF: 4.75

5. **Vogt B**, Dick B, N'Gankam V, Frey FJ, Frey BM. Reduced 11β-hydroxysteroid dehydrogenase activity in nephrotic syndrome in man. *J Clin Endocrinol Metabol* 1999; 84:811-814. IF: 6.20

6. Mohaupt MG, Perrig M, **Vogt B**. 3D-ultrasound imaging, a useful non-invasive tool to detect av-fistulas in transplanted kidneys. *Nephrol Dial Transplant* (Technical Note) 1999; 14:940-943. IF: 3.31

7. Ackermann D*, **Vogt B***, Escher G, Dick B, Reichen J, Frey BM, Frey FJ. Inhibition of 11β-hydroxysteroid dehydrogenase by bile acids in rats with liver cirrhosis. *Hepatology* 1999; 30:623-629. *Both authors contributed equally. IF: 10.9

8. Pfister M, Chatterjee T, Walther F, **Vogt B**, Baumgartner I. Kissing balloon technique for bilateral iliac artery obstruction in retroperitoneal fibrosis. *Eur J Vasc Endovasc Surg* 2000; 20:394-396. IF: 2.92

9. Reber PU, **Vogt B**, Steinke TM, Patel AG, Kniemeyer HW. Surgery for aorto-iliac aneurysms in kidney transplant recipients. *J Cardiovasc Surg* 2000; 41:916-925. IF: 1.16

10. Mohaupt MG, **Vogt B**, Frey FJ. Sirolimus-associated eye lid edema in kidney transplant recipients. *Transplantation* 2001; 72:162-164. IF: 3.50

[20] IF 2009, or 2010 if available

11. Odermatt A, Audigé A, Frick Ch, **Vogt B**, Frey BM, Frey FJ, Mazzuchelli L. Identification of receptor ligands by screening phage-display peptide libraries ex vivo on microdissected kidney tubules. *J Am Soc Neph* 2001; 12:308-316. IF: 7.69

12. Quattropani C*, **Vogt B***, Odermatt A, Dick B, Frey BM, Frey FJ. Reduced activity of 11β-hydroxysteroid dehydrogenase in patients with cholestasis. *J Clin Invest* 2001; 108:1299-1305. *Both authors contributed equally. IF: 15.4

13. **Vogt B**, Ferrari P, Schönholzer C, Marti H-P, Mohaupt MG, Wiederkehr M, Cereghetti C, Serra A, Huynh-Do U, Uehlinger DE, Frey FJ. Pre-emptive hemodialysis after radiocontrast media in patients with renal insufficiency is potentially harmful. *Am J Med* 2001; 111:692-698. IF: 3.73

14. Sadek S, Medina J, Arias M, Sennesael J, Squifflet J-P, **Vogt B**; on behalf of the Neo INT-05 study group. Short-term combination of mycophenolate mofetil with cyclosporine as a therapeutical option for renal transplant recipients: a prospective, multicenter, randomized study. *Transplantation* 2002; 74:511-517. IF: 3.50

15. Serra A, Uehlinger DE, Frey BM, Ferrari P, Dick B, Frey FJ, **Vogt B**. Glycyrrhetinic acid in anuric patients: no effect on blood pressure but important decrease in serum potassium. *J Am Soc Neph* 2002; 13:191-196. IF: 7.69

16. **Vogt B**, Dick B, Marti HP, Frey FJ, Frey BM. Reduced 11β-hydroxysteroid dehydrogenase activity in experimental nephrotic syndrome. Nephrol Dial *Transplant* 2002; 17:753-758. IF: 3.31

17. Audigé A, Dick B, Frey BM, Frey FJ, Corman B, **Vogt B**. Glucocorticoids and 11β-hydroxysteroid dehydrogenase type 2 gene expression in the aging kidney. *Eur J Clin Invest* 2002 ; 32:411-420. IF: 2.64

18. Ferrari P, Schroeder V, Anderson S, Kocovic L, **Vogt B**, Schiesser D, Marti HP, Ganz R, Frey FJ, Kohler HP. Association of plasminogen activator inhibitor-1 genotype with avascular osteonecrosis in steroid-treated renal allograft recipiens. *Transplantation* 2002; 74:1147-1152. IF: 3.50

19. Audigé A, Yu ZR, Frey BM, Uehlinger DE, Frey FJ, **Vogt B**. Epithelial sodium channel (ENaC) subunit mRNA and protein expression in rats with puromycin aminonucleoside-induced nephrotic syndrome. *Clinical Sci* 2003; 104:389-395. IF: 3.98

20. Nicod J, Bruhin D, Auer L, **Vogt B**, Frey FJ, Ferrari P. A biallelic gene polymorphism of CYP11B2 predicts increased aldosterone-to-renin ra-

tio in selected hypertensive patients. *J Clin Endocrinol Metabol* 2003; 88:2495-2500. IF: 6.20

21. Nadège L, Ferrari P, Frey FJ, Kappeler A, **Vogt B** and Marti HP. Angiotensin Converting Enzyme Inhibition but not Angiotensin II Receptor Blockade Regulates Matrix Metalloproteinase Activity in Patients with Glomerulonephritis. *J Am Soc Nephrol* 2003; 14:2861-2872. IF: 7.69

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28. **Vogt B**. Urate oxidase (rasburicase) for treatment of severe tophaceous gout. *Neph Dial Transpl* 2005; 20:431-433. IF: 3.31

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    *) both authors contributed equally. **) with **editorial comment**.

37. Coltamai L, Bucher M, Maillard MP, Shukla U, Bohidar N, Haskell L, Bertelsen K, Fedgchin M, **Vogt B**, and M. Burnier. Vascular effect of RWJ-676070, a selective combined V(1a)/V2 vasopressin receptor antagonist. *Clin Pharmacol Ther* 2009; 85:145-148. IF: 6.96

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6.2 Review articles in peer-reviewed journals

1. Féraille E, **Vogt B**, Storemann C, Favre H. New insights in the pathogenesis of nephrotic oedema. Int Yearbook of Nephrol Dial and Transplant. *Nephrol Dial Transplant* 1995; 10:16-26. IF: 3.31

2. Meier P, **Vogt B**, Blanc E. Rethinking the triggering inflammatory processes of chronic periaortitis. *Nephron Exp Nephrol* 2007; 105:e17-24. IF: 2.01

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4. **Vogt B**, Burnier M. Aldosterone and cardiovascular risk. *Curr Hypertens Rep* 2009; 11:450-455. IF: 2.38

5. Smolander J, **Vogt B**, Wuerzner G, Maillard M, Burnier M. Endothelin receptor antagonists as renal protective agents. *Clinical Medicine Reviews Vascular Health* 2010; 2:1-9.

6.3 Book chapters

1. 11β-Hydroxysteroid Dehydrogenase: Pathophysiology.
Vogt B, Frey BM, Frey FJ.

In: *Adv Nephrol Necker Hosp* 1999; 29:127-148. Editor: Flammarion, Paris 1999.

2. Down-regulation and inhibition of 11β-hydroxysteroid dehydrogenase: another explanation for sodium retention and ascites formation in bile duct-ligated rats.
   In: Reichen J, **Vogt B**, Frey BM, Frey FJ. *Hepatology 2000* (Falk Symposium 117). Editor: Gerbes AL, Beuers U, Jüngst D, Pape GR, Sackmann M, Sauerbruch T. Kluwer Academic Publ. 2001, p 13-19.

3. Betablocker.
   Burnier M, Bullani R, **Vogt B**.
   In: *Atherosklerosepräv*ention: *Diagnostik und Therapie von Risikofaktoren*. E. Battegay, G. Noseda, W.F. Riesen. Ed 1st, Bern, Verlag Hans Huber, 2007.

4. ACE-Hemmer und Angiotensin-II-Rezeptor-Blocker.
   Vogt B, Bullani R, Burnier M.
   In: *Atherosklerosepräv*ention: *Diagnostik und Therapie von Risikofaktoren*. E. Battegay, G. Noseda, W.F. Riesen. Ed 1st, Bern, Verlag Hans Huber, 2007.

5. Hormonal control of sodium balance.
   Burnier M, Coltamai L, **Vogt B**.
   In: *Sodium in Health and disease*. Edited by M. Burnier, 2008. Pages 103-125. Editor: Infroma healthcare, New York and London.

6. Transport du sodium: implications dans l'hypertension artérielle.
   Burnier M, Bochud M, **Vogt B**, Maillard M.
   In: *Actualités Néphrologiques Hôpital Necker* 2009; 39: 259-271 (article in French, English version: *Adv Nephrol Necker Hosp* 2009; 39. Editor: Flammarion, Paris 2009.

6.4 Other publications

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2. **Vogt B**, Frey FJ. Inhibition of angiogenesis in Kaposis sarcoma by captopril (letter). *Lancet* 1997; 349:1148. IF: 30.8

3. Pfister M, **Vogt B**. Kaposis sarcoma. *Ther Umsch* 1998; 55:583-585 (article in German).

4. Gabutti L, Stoller R, **Vogt B**. Omeprazole-induced agranulocytosis in a kidney transplant recipient (letter). *Nephrol Dial Transplant* 1999; 14:523-524. IF: 3.31

5. **Vogt B**, Reichen J. Rationale Diuretikatherapie bei Patienten mit Leberzirrhose. *Ther Umsch* 2000; 57:355-60 (article in German).

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9. Ferrari P, **Vogt B**. Hemofiltration and the prevention of radiocontrast-agent-induced nephropathy. *N Engl J Med* 2004 Feb 19; 350:836-8 (letter). IF: 47.1

10. Saner E, **Vogt B**, Mohaupt MG. Irritant cough and sub-febrile temperature under immunosuppression. *Schweiz Rundsch Med Prax* 2004; 93:197-199 (article in German).

11. **Vogt B**, Gugger M, Frey FJ. Rasburicase. *Ther Umsch* 2004; 61:579-582 (article in German).

12. **Vogt B**. Oedeme **(editorial, and responsible for edition of the November 2004 issue of the journal „Therapeutische Umschau", main topic: oedema)**. *Ther Umsch* 2004; 61:641 (article in German).

13. Klein M, Henschkowski J, Yu Z, **Vogt B**. Oedeme und nephrotisches Syndrom. *Ther Umsch* 2004;61:655-660 (article in German).

14. Henschkowski J, **Vogt B**. Kristallurie. *Ther Umsch* 2006; 64: 591-594 (article in German).

15. Mathieu C, Teta D, **Vogt B**, Burnier M. Obesité: Impact sur la fonction rénale. *Rev Med Suisse* 2006; 2:576 (article in French).

16. Rotman S, Venetz JP, **Vogt B**. The crucial role of the pathologist in renal disease (Article in French). *Rev Med Suisse* 2007; 3:1723-1735 (article in French).

17. Kissling S, **Vogt B**, Burnier M. Previous and new concepts in the management of symptomatic hyponatremia. *Rev Med Suisse* 2007; 3:583-587 (article in French).

18. Pruijm MT, Cherpillod A, **Vogt B**, Burnier M. Plasmapheresis: technique, complications and indications. *Rev Med Suisse* 2008; 4:581-588 (article in French).

19. Pruijm MT, **Vogt B**, Cherpillod A, Burnier M. Plasmapheresis, a safe treatment when applied to the correct indication and with the awareness of the complications. *Ned Tijdschr Geneeskd* 2008; 152:2261-2266 (article in Dutch).

20. **Vogt B**, Meier P, Burnier M. Retroperitoneal fibrosis: M. Ormond, periaortitis ? *Ther Umsch* 2008; 65:265-268 (article in German).

21. Cherpillod A, Burnier M, **Vogt B**. Le rein du sujet âgé: conséquences des modifications structurelles et fonctionnelles. *Gériatrie pratique* 2008; 1:6-8 (article in French).

22. **Vogt B**. Chronische Niereninsuffizienz: Frühzeitig erkennen - Überleben sichern (German). And: Insuffisance rénale chronique: Diagnostic précoce pour assurer la survie. *Nephro Aktuell - Néphro Actuelle* 2008; 1:3.

23. Schneiter S, Berwert L, Bonny O, Teta D, Burnier M, **Vogt B**. Anorexia nervosa and the kidney. *Rev Med Suisse* 2009; 5;440-444 (article in French).

24. Kissling S, Schneider A, Eggimann P, Que YA, Burnier M, **Vogt B**. Intermittent hemodialysis in the intensive care setting. *Rev Med Suisse* 2009; 5;445-450 (article in French).

25. El Housseini Y, Phan O, Burnier M, **Vogt B**. Smoking and the kidney. *Rev Med Suisse* 2009; 5;457-462 (article in French).

26. **Vogt B**, Berwert L, Burnier M. Hypernatremia. *Ther Umsch* 2009; 66:753-757 (article in German).

27. Berwert L, **Vogt B**, Burnier M. Hypernatremia: a matter of water. *Rev Med Suisse* 2010; 6:444-447 (article in French).

28. Gobin N, Coltamai L, Burnier M, **Vogt B**. Resistance to loop diuretics in clinical practice. *Rev Med Suisse* 2010; 6:438-442 (article in French). **Editor price for best article 2010 in Rev Med Suisse**.

29. M. Priujm, B. Ponte, L. Hofmann, **Vogt B**, Burnier M. Nouvelles techniques radiologiques pour les patients insuffisants rénaux. *Rev Med Suisse* 2011; 7:505-509 (article in French).

30. Mani LY, **Vogt**, Burnier M, Golshayan D. Rituximab dans le traitement des maladies rénales glomérulaires: indications et évidences cliniques. *Rev Med Suisse* 2011; 7:819-824 (article in French).

31. Kissling S, Wilson P, Ridel C, Burnier M, **Vogt**. Quelles applications raisonnables pour l'anticoagulation régionales au citrate en épuration extrarénale? *Rev Med Suisse* 2012; 8:452-456 (article in French).

32. **Vogt**, Maillard M, Burnier M. Hypertoniebehandlung bei Nierenarterienstenose. *Ther Umsch* 2012; 69:279-281 (article in German).

7 Research methods

7.1 Basic research methods

- Knowledge of animal care, metabolic studies in mice and rat, anesthesia, microsurgery techniques, adrenalectomy in rat and mice, bile duct ligation in rat and mice, uni- and bilateral nephrectomy [21].
- Single kidney perfusion models and unilateral kidney perfusion model [22].
- Single nephron microdissection methods and biochemical analyses of single nephron segments [23].
- Basic knowledge of *in vitro* micro perfusion.
- Implantation of intra-arterial telemetric blood pressure measurement device in rat [24].
- Basic knowledge of DNA- and RNA extraction, RT-PCR by Lightcycler and TaqMan, basic knowledge of Western blot analyses.
- Basic knowledge of SAGE and SADE, transcriptome analyses in whole kidney and in single nephron segments.
- Basic knowledge of gas chromatography mass spectrometry analyses.
- Basic knowledge of non-linear dynamics.

7.2 Clinical research methods

- Design and perform clinical studies. Knowledge of ethical committee principles and of good clinical practice guidelines.
- Classical pharmacokinetic and pharmacodynamic in human.
- Inulin clearance, PAH renal plasma flow, lithium clearance.
- Data management for clinical studies (MS Excel).

[21] Ackermann D, et al. *Hepatology* 2007
[22] Yu Z, et al. *Nephron Physiology* 2005
[23] Vogt B, and Favre H. *Clinical Sci* 1991
[24] Yu Z, et al. *Nephron Physiol* 2006

7.3 Informatics

- Operating systems: Linux (ubuntu, Mint, Slackware), Unix (MacOS, OpenSolaris, OpenBSD)
- MS office, Open office, Apple office.
- ImageJ for image analyzes.
- Shell, program languages (C, C++, java, PERL).
- Basic statistical analyses with R CRAN.
- Tex and LaTeX, presentations with LaTeX[25].

7.4 Specific education for research

- 2002 Microsurgery for plastic and reconstructive surgery, and animal microsurgery; 5 days, Dr. D. Erne, Inselspital Berne.
- 2004 Ultrasound basic of the abdomen; 2 days course, Dr. M. Essig, Zweisimmen.
- 2010 Ultrasound in Nephrology, advanced module; 2 days, Swiss Society of Ultrasound in Medicine, Zürich.
- 2007 Transgenic mice and the application in biomedical research. Prof. E. Hummler, Institute of Pharmacology and Toxicology, University of Lausanne.
- 2009 Programming PERL for scientific work; 3 days, Informatics, University of Lausanne.

[25]This document was typeset with LaTeX

8 Varia

8.1 Lecture invitations - only national or international and over the last 5 years

8.1.1 Lectures national or international in 2007-today

- 2012 University of Aarhus, Danemark "Pathophysiology of renal sodium retention in disease states„.
- 2012 Société de Néphrologie et Société Francophone de Dialyse, 14ème réunion commune, Geneve: "Plenary lecture: quoi de neuf en néphrologie?„.
- 2012 8. Paul Klee Symposium für Medizin, Bern: "Nierenfunktion und kardiovaskuläres Risiko„.
- 2012 Annual Meeting of the Tunesis Society of Nephrology, Sfax, Tunis: „Membraneous Glomerulonephritis pathophysiology and therapy". And „What is new in nephrology?".
- 2011 1er Congres Européen Francophone et 5e Congres National de la Société Francaise de Tabacologie: "Maladies rénales et tabac„, Nancy, France.
- 2011 Annual Meeting of the Swiss Society of Internal Medicine: „Literature review in nephrology", and workshop „Hypertension and the kidney", Lausanne.
- 2011 Centre de Recherche des Cordeliers, Université de Paris: Physiologie rénale et cardiovasculaire: „Retention hydrosodée dans la cirrhose biliaire experimental chez la souris".
- 2011 11ème Clinical Update et Formation des Formateurs. „Rein et fonction rénale". Münchenwiler, Bern.
- 2011 7ème Réunion Franco-Suisse des Néphrologues Transalpin, Chamonix, France: „Microangiopathie: nouveaux traitements".
- 2011 The 1st Kidney Student's Day. Swiss National Centre of Competence in Research. Bern: „From physiology to clinical nephrology".
- 2010 Swiss Society of Nephrology Annual Meeting, Lugano: State of the Art Lecture: „Renal sodium retention in liver cirrhosis".
- 2010 Swiss Society of Internal Medicine, Basel: workshop „Kidney disease and Hypertension".
- 2009 University of Zürich, Department of Nephrology and Institute of Physiology: „Renal sodium retention in liver cirrhosis".

- 2009 Académie National de Médecine, Paris, France : „Observance thérapeutique du patient et prévention rénale: Observance dans l'hypertension artérielle“. Journée Mondiale du Rein.
- 2009 Swiss Society of Internal Medicine, Basel: workshop „Kidney disease and Hypertension“.
- 2008 University of Göttingen, Nephrology Department, Germany: „Mechanisms of renal sodium retention in disease states“.
- 2008 University of Fribourg, Physiology Department and Anatomy Department: „Renal mechanism(s) of sodium retention in nephrotic syndrome and cirrhosis of the liver“.
- 2008 Rhône-Alpes Meeting, Crans Montana: „BOLD-MRI and the kidney“.
- 2008 Nephrologie Fortbildung, St. Anna Klinik, Luzern: „Kontrastmittelnephropathie: Neue Aspekte“.
- 2008 First Meeting Programme national d'Arret du Tabagisme, Bern: „Smoking and renal function“.
- 2008 Swiss Society of Internal Medicine, Basel: workshop „Kidney disease and Hypertension“.
- 2008 Sierre - Symposium: „Néphropathie aux produits de contraste“.
- 2007 IgA Symposium, Lecco, Italy: „Trial IgAN2: risultati e problemi nei pazienti con creatininemia meo di 2 mg/dl“.
- 2007 Ospedale di Bellinzona: „Nefropatia e mezzi di contrasto“.

8.2 Conference papers - only at the national or international level over the last three years

- 2011 Swiss Society of Nephrology Annual Meeting, Montreux. „Comparison of renal gene expression between control and cirrhotic mice with ascites“. *Oral presentation.*
- 2011 Swiss Society of Nephrology Annual Meeting, Montreux. „Effects of Blockers of the renin-angiotensin System on renal tissue oxygenation in type 2 diabetics as measured by BOLD-MRI“. *Poster presentation.*
- 2011 Swiss Society of Nephrology Annual Meeting, Montreux. „Effec of one week naproxcinod treatment on sodium blance and acute natriuretic effect of furosemide: a randomized double-blind placbo and naproxen-controlles trial in healthy volunteers“. *Poster presentation.*

- 2011 European Meeting on Hypertension and Cardiovascular Prevention, Annual Meeting in Milan, Italy. „Blood pressure, urinary output and sodium excretion response to lower body negative pressure in obese patients“. *Poster presentation.*
- 2011 European Association for the Study of the Liver EASL, Annual Meeting in Berlin, Germany. „Renal sodium retention in cholestatic mice is independent of ENaC in CCD“. *Poster presentation.*
- 2011 European Meeting on Hypertension and Cardiovascular Prevention, Milan, Italy. „Blood pressure, urinary output and sodium excretion response to lower body negative pressure in obese patients“. *Poster presentation.*
- 2011 Journées Francaises de Nutrition, Reims, France. „Impact de l'organisation institutionnelle sur le deficit protéino-énergetique des patients dialysés hospitalisés“. *Poster presentation.*
- 2010 European Dialyses and Transplantation Association, Annual meeting in Munich, Germany. „Renal sodium retention in cholestatic mice is independent of ENaC in CCD“. *Oral presentation.*
- 2010 American Society of Nephrology Annual Meeting, Denver, USA: „Renal sodium retention in cholestatic mice is independent of ENaC in CCD“. *Poster presentation.*
- 2010 Swiss Society of Nephrology Annual Meeting, Lugano: „Renal sodium retention in cholestatic mice deficient of ENaC in CCD“. *Oral presentation.*
- 2010 Swiss Society of Nephrology Annual Meeting, Lugano: „Renal microcirculation assessment with contrast enhanced ultrasonography“. *Oral presentation.*
- 2010 Swiss Society of Nephrology Annual Meeting, Lugano: „Hypertensive crisis as a first presentation of retroperitoneal fibrosis“. *Poster presentation.*
- 2010 Swiss Society of Nephrology Annual Meeting, Lugano: „Protein and energy intake in patients with chronic kidney disease stage 3“. *Poster presentation.*
- 2010 Swiss Society of Nephrology Annual Meeting, Lugano: „Does vitamin B6 (pyridoxine) deficiency contribute to anemia in patients with chronic kidney disease stage 3?“. *Poster presentation.*
- 2010 Swiss Society of Nephrology Annual Meeting, Lugano: „Protein-energy deficiency in hospitalized patients requiring haemodialyses“. *Poster presentation.*

- 2010 International Society of Renal Nutrition and Metabolism, biannual meeting, Lausanne: „Does Vitamin B6 (pyridoxine) contributes to anemia in patients with CKD 3-5?“ *Poster presentation.*
- 2009 International Society of Nephrology World Congress, Milan 2009, May 22-26. „Corticosteroids and azathioprine vs corticosteroids in IgA nephropathy: a randomized, controlled trial“. *Oral presentation.*
- 2009 - 29èmes Journées de l'Hypertension Arteriélle 3rd International Meeting of the French Society of Hypertension. Paris, France. „Effect of sodium intake on renal oxygenation in normo- and hypertensive men measured with BOLD-MRI“. *Oral presentation - selected for the Hot Topics Session.*
- 2009 European Society of Hypertension, Milan, Italy: „Effect of sodium loading/depletion on renal oxygenation in human measured with BOLD-MRI“. *Poster presentation.*
- 2009 - 63rd High Blood Pressure Research Conference, Chicago, USA: „Effect of sodium loading/depletion on renal oxygenation in young normo- and hypertensive men measured with BOLD-MRI“. *Poster presentation.*
- 2009 Annual Meeting of the Swiss Society of Nephrology, Interlaken: „Effect of sodium loading/depletion on renal oxygenation in young normo- and hypertensive men measured with BOLD-MRI“. *Oral presentation.*
- 2009 Swiss Society of Intensive Care Medicine, St. Gallen: „Renal perfusion quantification with contrast echography“. *Oral presentation.*
- 2009 Swiss Society of Internal Medicine, Basel: „Effect of sodium loading/depletion on renal oxygenation in human measured with BOLD-MRI“. *Poster presentation.*
- 2008 American Society of Nephrology Annual Meeting: „Dose-depedent acute and sustained renal effects of the endothelin receptor antagonist avosentan in healthy subjects“. *Oral presentation.*

8.3 Other National activities on invitation - only the last four years

- Co-organizer, chairman of the state of the art lecture, and chairman symposium. Annual Meeting of the Swiss Society of Nephrology, 2007 Lausanne.

- Co-organizer, chairman of the state of the art lecture, and chairman physiology symposium. Annual Meeting of the Swiss Society of Nephrology, 2008 St. Gall.
- Co-organizer, chairman of the state of the art lecture, and chairman symposium. Annual Meeting of the Swiss Society of Nephrology, 2009 Interlaken.
- Co-organizer, state of the art lecture, and chairman physiology symposium. Annual Meeting of the Swiss Society of Nephrology, 2010 Lugano.
- Co-organizer, and planned chairman of state of the art lecture. Annual Meeting of the Swiss Society of Nephrology, 2011 Montreux.

8.4 Scientific or technical functions

- 2001-2008: Member of the Editorial Board of Nephron Physiology.

8.4.1 Reviewer

- Nephron Physiology
- Nephron Clinical Practice
- Nephrology Dialysis and Transplantation
- American Journal of Physiology
- Kidney International
- The Lancet
- Hypertension
- American Journal of Hypertension

8.4.2 Expert for thesis (list not exhaustive)

- Doctorate thesis PhD 2006: Dr G. Favre, University of Paris, Institut des Cordeliers, Paris, France.
- Doctorate thesis PhD 2010: Dr N. Rognat, University of Lyon, France.
- Habilitation (privat-docent ès science) 2007: Dr Anne Prevot, Institute of Physiology, University of Fribourg.

8.4.3 Scientific committees

- Scientific committee Swiss Society for Organ Transplantation (2001-2006).
- Scientific committee of the Swiss Society of Nephrology Annual Meeting (2006 - today).
- Scientific committee „World Congress of the International Society for Nutrition in Kidney diseases“; 2010 Lausanne.

8.5 Scientific societies

- Swiss Society of Nephrology (member steering committee)
  - General Secretary 2006 - today
  - Delegate and committee member of the Swiss Kidney Patient Association
  - Delegate for the German Society of Nephrology
  - Delegate for the International Society of Nephrology
  - Founder and member of the ultrasound commission
- Swiss Society of Internal Medicine
- Swiss Society of Hypertension
- Swiss Society for Organ Transplantation
- French Society of Nephrology
- European Society of Nephrology, Dialysis and Transplantation
- European Society of Hypertension
- European Association for the Study of the Liver
- American Society of Nephrology
- International Society of Nephrology (Swiss delegate)

8.6 Education in management

- 2001 Management in medicine „Kurs Managementgrundlagen für Ärztinnen und Ärzte“; 5 days, College for Management in Health Care, Prof. P. Berchtold, Inselspital, Bern
- 2009 „Leading at the Speed and Trust“, one-day management seminar - S. Covey teaching, IMD Lausanne

- 2006-today: Specific management courses, discussion rounds and forums, special manifestations; 2 days per year, IMD Lausanne
- 2011 Community management (half-day), Swiss Marketing Lausanne and IMD Lausanne
- Knowledge of the principal works of P. F. Drucker, W. A. Cohen, F. Malik and E. Haas Edersheim

8.7 Awards

- 2000 Price of the Medical Faculty of the University of Berne for the **best clinical research paper** (Vogt B, et al., Am J Med 2001; 111:692-698).
- Editor's price for best article 2010 in Rev Med Suisse (Gobin , Coltamai L, Burnier M, **Vogt B**. Resistance to loop diuretics in clinical practice. *Rev Med Suisse* 2010; 6:438-442.

8.8 Languages

- German, Swiss-German (mother-language, written and spoken)
- French (written and spoken)
- English (written and spoken)
- Italian (written and spoken)
- Basic knowledge in Spanish and Portuguese