



**NAME** AMARYLLIS VAN CRAENENBROECK

**DATE OF BIRTH** April 2<sup>nd</sup> 1983

**NATIONALITY** Belgian

**ADDRESS** Department of Nephrology  
University Hospitals Leuven  
Herestraat 49, B-3000 Leuven, Belgium  
Tel: +32-16-34 19 72

**E-MAIL** amaryllis.vancraenenbroeck@kuleuven.be

**ORCID** 0000-0003-4728-9406

## WORK EXPERIENCE

---

September 2020 - present **Assistant professor**  
KULeuven (Belgium)

January 2019 - present **Deputy head of clinic**  
University Hospitals Leuven (Belgium)

April 2016 – January 2019 **Staff member**  
Antwerp University Hospital (Belgium)

October 2015 – April 2016 **Postdoctoral researcher**  
Karolinska Institute (Sweden)  
ERA-EDTA Fellowship

## EDUCATION AND TRAINING

---

October 2008 – July 2016 **Fellowship in Internal Medicine and Nephrology**  
University of Antwerp (Belgium)

August 2010 – June 2015 **PhD in Biomedical Sciences**  
University of Antwerp (Belgium)

October 2001 - June 2008 **Medical Doctor**  
University of Antwerp (Belgium)

## BOARD MEMBERSHIP OF RESEARCH CONSORTIA AND SOCIETIES

---

- 2019- Board Member of the **Young Nephrologists' Platform** (ERA-EDTA Committee)
- 2019- General Secretary of the **European Association of Rehabilitation in Chronic Kidney Disease** (EURORECKD)
- 2018- Board Member of the Local Organizing/ Scientific Committee of **Transplantoux**
- 2017 Board Member of European Association of Rehabilitation in Chronic Kidney Disease (EURORECKD)

## CLINICAL EXPERTISE

---

Kidney transplantation and combined kidney-liver and kidney-pancreas transplantation  
 Hemodialysis  
 Acute kidney injury  
 Membranous nephropathy, MGRS  
 Rehabilitation in chronic kidney disease

## RESEARCH EXPERTISE

---

### **Academic Theses**

- 2015 PhD thesis: "*Vascular dysfunction in chronic kidney disease: relevance and reversibility with exercise.*" Univeristy of Antwerp. Promotor prof Dr. V. Conraads (†), em. prof. Dr. G. Verpooten, Prof. Dr. M. Couttenye, Prof. Dr. C. Vrints

### **International research collaborations**

- 2016- "Clinical models for premature vascular ageing." Glasgow Ageing Research Network, Institute of Cancer Sciences, University of Glasgow. Collaborator: prof. Dr. P. Shiels. Ongoing collaboration.
- 2015- "Chronic kidney disease: a clinical model of premature vascular ageing. Focus on miRNA dysregulation." Karolinska Institute, Stockholm. PI: prof.Dr. P. Stenvinkel. Ongoing project.
- 2015- "Beta-trace protein as marker for residual renal function." Karolinska Institute, Stockholm. Investigators: prof. Dr. P. Stenvinkel, prof. Dr. B. Lindholm, Dr. P. Barany, Dr. O. Heimbürger. Ongoing project.

### **(Co-) Supervisor PhD Students**

- 2020- Jan Van Eijgen, "*Keeping an eye on the body: retinal biomarkers for systemic diseases.*" KULeuven
- 2020- Elisabet Van Loon, "*Clinical use of non-invasive diagnostic biomarkers for antibody-mediated rejection and integration in the risk assessment pipeline for renal transplantation management.*" KULeuven
- 2020- Dries Deleersnijder, "*Focal segmental glomerulosclerosis (FSGS) in the Flemish population: overview of epidemiological characteristics and pathophysiological analysis using single-cell and single-nucleus RNA-sequencing techniques.*" KULeuven
- 2018- Karsten Vanden Wyngaert, "Physical exercise in chronic kidney disease." Ghent University
- 2016- Isabel Witvrouw, "*MicroRNAs in exercise training for chronic heart failure: tools in mechanistic discovery, tailored medicine and novel therapeutic strategies.*" University of Antwerp

### **Research grants**

- 2020 Partner in ERA-CVD JTC 2020 program ENRICH – PI KULeuven
- 2020 KOOR UZLeuven 'The role of endothelial dysfunction and heart function in graft failure after kidney transplantation

- 2019 KOOR UZLeuven 'Serum BTP as marker for RRF in PD patients'  
 2015 ERA-EDTA Short Term Fellowship

### **Prizes and Awards**

- 2017 NephroUpdate Vienna. Best abstract. "Plasma beta-trace protein predicts mortality in CKD: relation with endothelial dysfunction."  
 2016 Grant to support young researchers. Faculty of Medicine, University of Antwerp.  
 2016 ERA-EDTA Travel Grant, 53th ERA-EDTA Congress, 21-24/05/2016, Vienna, AUSTRIA  
 2014 FWO Travel Grant for participating in the ASN Kidney Week, 11-16/11/2014, Philadelphia, USA  
 2014 ISN Travel Grant for participating in International Vicenza Course on CKD, Haemodialysis and Peritoneal Dialysis, 10-13/06/2014, Vicenza, ITALY  
 2013 ERA-EDTA Travel Grant for participating in the CME Course "Cardiovascular and renal interactions in chronic kidney disease (CKD)" 16/03/2013, Naples, ITALY  
 2008 Second prize of the Faculty of Medicine 2008. University of Antwerp.  
 2008 Best abstract/ERA-EDTA Travel Grant presented by young authors, ERA-EDTA Congress, 10-13/05/2008, Stockholm, SWEDEN

### **Invited presentations at international scientific conferences**

- 2020 'The bone-vascular axis in CKD: role of vitamin D in vascular biology.' Research seminar in the context of the Harmonia project (bone phenotype in ADPKD), 27/01/2020, Gdansk, POLAND  
 2020 'Role of Vitamin D in vascular (patho)biology.' EUROD Wintermeeting/CME course ERA-EDTA, 16-18/01/2020, Leuven, BELGIUM  
 2019 'Can exercise training affect cardiovascular morbidity in patients with CKD?' Mini lecture, 56<sup>th</sup> ERA-EDTA Congress, 13-16/06/2019, Budapest, HUNGARY.  
 2018 'Residual kidney function: a diagnostic challenge.' Siemens Days, 16/01/2018, Nyborg, DENMARK.  
 2017 'What should nephrologists know about microRNAs in chronic kidney disease?' Mini lecture, 54th ERA-EDTA Congress, 03-06/06/2017, Madrid, SPAIN.  
 2017 'Physical activity intervention - is it realistic in sedentary dialysis patients?' 54th ERA-EDTA Congress, 03-06/06/2017, Madrid, SPAIN.  
 2015 'Vascular dysfunction in chronic kidney disease: relevance and reversibility with exercise training.' Annual meeting Swedish Renal Associations, 18-20/11/2015, Stockholm, SWEDEN.

### **Selected articles in international peer-reviewed scientific journals (50 publications, H-index 14)**

1. Van Loon E, Lerut E, Senev A, Coemans M, Pirenne J, Monbaliu D, Jochmans I, Sainz Barriga M, De Vusser K, **Van Craenenbroeck AH**, Sprangers B, Emonds MP, Kuypers D, Naesens M. The histological picture of indication biopsies in the first 2 weeks after kidney transplantation. *cJASN* 2020 Oct 7;15(10):1484-1493.
2. Vanden Wyngaert K, Celie B, Calders P, Eloit S, Holvoet E, Van Biesen W, **Van Craenenbroeck AH**. Markers of protein-energy wasting and physical performance in haemodialysis patients: a cross-sectional study. *PLoS One* 2020 Jul 30;15(7):e0236816
3. Vanden Wyngaert K, **Van Craenenbroeck AH**, Holvoet E, Calders P, Van Biesen W, Eloit S. Composite uremic load and physical performance in hemodialysis patients: a cross-sectional study. *Toxins (Basel)*. 2020 Feb 22;12(2).
4. *BMC Nephrol*. 2020 Jan 6;21(1):7.
5. Van Loon E, Bernards J, **Van Craenenbroeck AH**, Naesens M. The causes of kidney allograft failure: more than allo-immunity. A viewpoint paper. *Transplantation*. 2019 Oct 17. doi: 10.1097/TP.0000000000003012. [Epub ahead of print]
6. Van Regenmortel N, Hendrickx S, Roelant E, Baar I, Dams K, Van Vlimmeren K, Embrecht B, Wittcock A, Hendriks JM, Lauwers P, Van Schil PE, **Van Craenenbroeck AH**, Verbrugghe W, Malbrain MLNG, Van den Wyngaert T, Jorens PG. 154 compared to 54 mmol per liter of sodium in intravenous maintenance fluid therapy for adult patients undergoing major thoracic surgery (TOPMAST): a single-center randomized controlled double-blind trial. *Intensive Care Med*. 2019 Oct;45(10):1422-1432.
7. Witvrouwen I, Pattyn N, Gevaert AB, Possemiers N, **Van Craenenbroeck AH**, Cornelissen VA, Beckers PJ, Vanhees L, Van Craenenbroeck EM. Predictors of response to exercise training in patients with coronary artery disease - a subanalysis of the SAINTEX-CAD study. *Eur J Prev Cardiol*. 2019 Jul;26(11):1158-1163.

8. Ledeganck KJ, Gielis EM, Abramowicz D, Stenvinkel P, Shiels PG, **Van Craenenbroeck AH**. microRNAs in Acute Kidney Injury and Kidney Transplantation. *Clin J Am Soc Nephrol*. 2019 Mar 7;14(3):454-468.
9. Gevaert AB, Beckers PJ, **Van Craenenbroeck AH**, Lemmens K, Van De Heyning CM, Heidbuchel H, Vrints CJ, Van Craenenbroeck EM. Endothelial dysfunction and cellular repair in heart failure with preserved ejection fraction: response to a single maximal exercise bout. *Eur J Heart Fail*. 2019 Jan;21(1):125-127.
10. Vanden Wyngaert K, **Van Craenenbroeck AH**, Wim Van Biesen W, Dhondt A, Tanghe A, Van Ginckel A, Celie B, Calders P. The effects of aerobic exercise on eGFR, blood pressure and VO<sub>2</sub>peak in patients with chronic kidney disease stages 3-4: A systematic review and meta-analysis. 2018, PLoS ONE 13(9): e0203662.
11. Gevaert AB, Witvrouwen I, Vrints CJ, Heidbuchel H, Van Craenenbroeck EM, Van Laere SJ, **Van Craenenbroeck AH**. MicroRNA profiling in plasma samples using qPCR arrays: recommendations for correct analysis and interpretation. 2018, PLoS ONE. 2018 Feb 23;13(2):e0193173.
12. **Van Craenenbroeck AH**, Bragfors-Helin AC, Qureshi AR, Lindholm B, Sjöberg B, Anderstam B, Heimbürger O, Stenvinkel P, Bárány P: Plasma Beta-Trace Protein as a Marker of Residual Renal Function: The Effect of Different Hemodialysis Modalities and Intra-Individual Variability over Time. *Kidney Blood Press Res*. 2017;42:877-885.
13. Van Regenmortel N, De Weerd T, **Van Craenenbroeck AH**, Roelant E, Verbrugghe W, Dams K, Malbrain MLNG, Van den Wyngaert T, Jorens PG: Effect of isotonic versus hypotonic maintenance fluid therapy on urine output, fluid balance, and electrolyte homeostasis: a crossover study in fasting adult volunteers. *Br J Anaesth*. 2017;118:892-900.
14. Philipse E, Lee APK, Bracke B, Hartman V, Chapelle T, Roeyen G, de Greef K, Ysebaert DK, van Beeumen G, Couttenye MM, **Van Craenenbroeck AH**, Hellemans R, Bosmans JL, Abramowicz D: Does Kidney Donor Risk Index implementation lead to the transplantation of more and higher-quality donor kidneys. *Nephrol Dial Transplant*. 2017;32:1934-1938.
15. Witasp A, **Van Craenenbroeck AH**, Shiels PG, Ekström TJ, Stenvinkel P, Nordfors L: Current epigenetic aspects the clinical kidney researcher should embrace. *Clin Sci (Lond)*. 2017;131:1649-1667.
16. Mudrovic N, Arefin S, **Van Craenenbroeck AH**, Kublickiene K: Endothelial maintenance in health and disease: Importance of sex differences. *Pharmacol Res*. 2017;119:48-60.
17. **Van Craenenbroeck AH**, Van Craenenbroeck EM. Osteocalcin: A stiff challenge for arteries. *Int J Cardiol* 2017;239:17.
18. **Van Craenenbroeck AH**, Van Craenenbroeck EM, Van Ackeren K, Hoymans VY, Verpooten GA, Vrints CJ, Couttenye MM: Impaired vascular function contributes to exercise intolerance in chronic kidney disease. *Nephrol Dial Transplant*. 2016;31:2064-2072.
19. **Van Craenenbroeck AH**, Ledeganck KJ, Van Ackeren K, Jurgens A, Hoymans VY, Fransen E, Adams V, De Winter BY, Verpooten GA, Vrints CJ, Couttenye MM, Van Craenenbroeck EM: Plasma levels of microRNA in chronic kidney disease: patterns in acute and chronic exercise. *Am J Physiol Heart Circ Physiol*. 2015;309:H2008-16.
20. **Van Craenenbroeck AH**, Smits EL, Anguille S, Van de Velde A, Stein B, Braeckman T, Van Camp K, Nijs G, Ieven M, Goossens H, Berneman ZN, Van Tendeloo VF, Verpooten GA, Van Damme P, Cools N: Induction of cytomegalovirus-specific T cell responses in healthy volunteers and allogeneic stem cell recipients using vaccination with messenger RNA-transfected dendritic cells. *Transplantation*. 2015;99:120-127.
21. **Van Craenenbroeck AH**, Van Craenenbroeck EM, Van Ackeren K, Vrints CJ, Conraads VM, Verpooten GA, Kouidi E, Couttenye MM: Effect of Moderate Aerobic Exercise Training on Endothelial Function and Arterial Stiffness in CKD Stages 3-4: A Randomized Controlled Trial. *Am J Kidney Dis*. 2015;66:285-296.
22. Van Craenenbroeck EM, Frederix G, Pattyn N, Beckers P, **Van Craenenbroeck AH**, Gevaert A, Possemiers N, Cornelissen V, Goetschalckx K, Vrints CJ, Vanhees L, Hoymans VY: Effects of aerobic interval training and continuous training on cellular markers of endothelial integrity in coronary artery disease: a SAINTEX-CAD substudy. *Am J Physiol Heart Circ Physiol*. 2015;309:H1876-82.
23. **Van Craenenbroeck AH**, Van Craenenbroeck EM, Kouidi E, Vrints CJ, Couttenye MM, Conraads VM: Vascular effects of exercise training in CKD: current evidence and pathophysiological mechanisms. *Clin J Am Soc Nephrol*. 2014;9:1305-1318.
24. **Van Craenenbroeck AH**, Van Ackeren K, Hoymans VY, Roeykens J, Verpooten GA, Vrints CJ, Couttenye MM, Van Craenenbroeck EM: Acute exercise-induced response of monocyte subtypes in chronic heart and renal failure. *Mediators Inflamm*. 2014;2014:216534.
25. Van Craenenbroeck EM, **Van Craenenbroeck AH**, van Ierssel S, Bruyndonckx L, Hoymans VY, Vrints CJ, Conraads VM: Quantification of circulating CD34+/KDR+/CD45dim endothelial progenitor cells: analytical considerations. *Int J Cardiol*. 2013;167:1688-1695.
26. Hoymans VY, **Van Craenenbroeck AH**, Bruyndonckx L, van Ierssel SH, Vrints CJ, Conraads VM, Van Craenenbroeck EM: TransFix(R) for delayed flow cytometry of endothelial progenitor cells and angiogenic T cells. *Microvasc Res*. 2012;84:384-386.
27. **Van Craenenbroeck AH**, Camps K, Zachee P, Wu KL: Massilia timonae infection presenting as generalized lymphadenopathy in a man returning to Belgium from Nigeria. *J Clin Microbiol*. 2011;49:2763-2765.
28. **Van Craenenbroeck A**, Gebruers M, Martin JJ, Cras P: Hallervorden-Spatz disease: historical case presentation in the spotlight of nosological evolution. *Mov Disord*. 2010;25:2486-2492.