Eur Heart J 2019;40:3010-3012. PMID: 31541549

8. Hollan I, Ronda N, Dessein P, Agewall S, Karpouzas G, Tamargo J, Niessner A, Savarese G, Rosano G, Kaski JC, Wassmann S, Meroni PL.

Lipid management in rheumatoid arthritis: a position paper by the Cardiovascular Pharmacotherapy Working Group of European Society of Cardiology.

Eur Heart J Cardiovasc Pharmacother 2020;6:104-114. PMID: 31397840

- 9. Drexel H, Rosano GMC, Lewis BS, Huber K, Vonbank A, Dopheide JF, Mader A, Niessner A, Savarese G, Wassmann S, Agewall S. The age of RCT's 3 Important Aspects of RCT's in Cardiovascular Pharmacotherapy with examples from Lipid and Diabetes Trials. Eur Heart J Cardiovasc Pharmacother 2020;6:97-103. PMID: 31298686
- 10. Sulzgruber P, Wassmann S, Semb AG, Doehner W, Widimsky P, Gremmel T, Kaski JC, Savarese G, Rosano GMC, Borghi C, Kjeldsen K, Torp-Pedersen C, Schmidt TA, Lewis BS, Drexel H, Tamargo J, Atar D, Agewall S, Niessner A. Oral anticoagulation in patients with non-valvular atrial fibrillation and a CHA2DS2-VASc score of 1: a current opinion of the European Society of Cardiology Working Group on Cardiovascular Pharmacotherapy and European Society of Cardiology Council on Stroke.
  Eur Heart J Cardiovasc Pharmacother 2019;5:171-180. PMID: 31119266
- Vonbank A, Drexel H, Agewall S, Lewis BS, Dopheide JF, Kjeldsen K, Ceconi C, Savarese G, Rosano G, Wassmann S, Niessner A, Schmidt TA, Saely CH, Baumgartner I, Tamargo J.
   Reasons for disparity in statin adherence rates between clinical trials and real-world observations: a review.
   Eur Heart J Cardiovasc Pharmacother 2018;4:230-236. PMID: 30099530
- 12. Rosano GMC, Tamargo J, Kjeldsen KP, Lainscak M, Agewall S, Anker SD, Ceconi C, Coats AJS, Drexel H, Filippatos G, Kaski JC, Lund L, Niessner A, Savarese G, Schmidt TA, Seferovic P, Wassmann S, Walther T, Lewis BS. Expert consensus document on the management of hyperkalaemia in patients with cardiovascular disease treated with RAAS-inhibitors Coordinated by the Working Group on Cardiovascular Pharmacotherapy of the European Society of Cardiology.
  Eur Heart J Cardiovasc Pharmacother 2018;4:180-188. PMID: 29726985
- 13. Niessner A, Tamargo J, Koller L, Saely CH, Schmidt TA, Savarese G, Wassmann S, Rosano G, Ceconi C, Torp-Pedersen C, Kaski JC, Kjeldsen KP, Agewall S, Walther T, Drexel H, Lewis BS.
  Non-insulin antidiabetic pharmacotherapy in patients with established cardiovascular disease: a position paper of the European Society of Cardiology Working Group on Cardiovascular Pharmacotherapy.
  Eur Heart J 2018;39:2274-2281. PMID: 29126266
- 14. Tamargo J, Rosano G, Thomas W, Duarte J, Niessner A, Kaski JC, Cecconi C, Drexel H, Kjeldsen K, **Savarese G**, Torp-Pedersen C, Atar D, Lewis BS, Agewall S.

### Gender differences in the effects of cardiovascular drugs.

Eur Heart J Cardiovasc Pharmacother 2017;3:163-182. PMID: 28329228

## • Global Cardiovascular Clinical Trialists (CVCT) forum

CVCT forum selects and brings together a carefully selected faculty of key opinion leaders, clinical trialists, investigators, regulators, statisticians, industry r&d experts, decision makers and practitioners. The Applicant has been selected among hundreds worldwide researchers for an advanced fellowship on clinical trials supported by CVCT forum. Thus, the Applicant is now involved in designing randomized controlled trials (EMPARIAL trials) and working on research questions to be tested in the EMPAREG-Outcome trial population.

Butler J USA
Zannad F France
EMPAREG-Outcome trial steering committee members Global
EMPERIAL trials steering committee members Global

1. **Savarese G**, Uijl A, Lund LH, Anker SD, Asselbergs F, Fitchett D, Inzucchi SE, Koudstaal S, Ofstad AP, Schrage B, Vedin O, Wanner C, Zannad F, Zwiener I, Butler J.

Empagliflozin in Heart Failure With Predicted Preserved Versus Reduced Ejection Fraction: Data From the EMPA-REG OUTCOME Trial J Card Fail. 2021;27:888-895. PMID: 34364665

2. Abraham WT, Lindenfeld J, Ponikowski P, Agostoni P, Butler J, Desai AS, Filippatos G, Gniot J, Fu M, Gullestad L, Howlett JG, Nicholls SJ, Redon J, Schenkenberger I, Silva-Cardoso J, Störk S, Krzysztof Wranicz J, **Savarese G**, Brueckmann M, Jamal W, Nordaby M, Peil B, Ritter I, Ustyugova A, Zeller C, Salsali A, Anker SD.

Effect of empagliflozin on exercise ability and symptoms in heart failure patients with reduced and preserved ejection fraction, with and without type 2 diabetes

Eur Heart J. 2021;42:700-710. PMID: 33351892

3. Savarese G, Sattar N, Januzzi J, Verma S, Lund LH, Fitchett D, Zeller C, George JT, Brueckmann M, Ofstad AP, Inzucchi SE, Wanner C, Zinman B, Butler J. Empagliflozin Is Associated With a Lower Risk of Postacute Heart Failure Rehospitalization and Mortality. Insights From the EMPA-REG OUTCOME Trial

Circulation 2019;139:1458-1460. PMID: 30855996

#### • EU: BD@H (Big Data for Better Hearts)

http://www.ehnheart.org/projects/imi-bigdataheart.html http://www.bigdata-heart.eu/

Funded with 200M SEK by EU Horizon 2020 Innovative Medicines Institute (IMI).

Major European collaboration on big data registry based and -omics analyses.

Folkert Asselbergs Utrecht
Stefan Koudstaal Utrecht
Rick Grobbee Utrecht
Harry Hemingway London
Stefan Anker Berlin

And others

1. Lim YMF, Molnar M, Vaartjes I, **Savarese G**, Eijkemans MJC, Uijl A, Vradi E, Suzart-Woischnik K, Brugts JJ, Brunner-La Rocca HP, Blanc-Guillemaud V, Couvelard F, Baudier C, Dyszynski T, Waechter S, Lund LH, Hoes AW, Tyl B, Asselbergs FW, Gerlinger C, Grobbee DE, Cronin M, Koudstaal S **Generalisability of Randomised Controlled Trials in Heart Failure with** 

Reduced Ejection Fraction.

Eur Heart J Qual Care Clin Outcomes . 2021 Oct 1;qcab070. doi: 10.1093/ehjqcco/qcab070. Online ahead of print. PMID: 34596659

2. Uijl A, **Savarese G**, Vaartjes I, Dahlström U, Brugts JJ, Linssen GCM, van Empel V, Brunner-La Rocca HP, Asselbergs FW, Lund LH, Hoes AW, Koudstaal S.

Identification of distinct phenotypic clusters in heart failure with preserved ejection fraction

Eur J Heart Fail. 2021;23:973-982. PMID: 33779119

3. Uijl A, Lund LH, Vaartjes I, Brugts JJ, Linssen GC, Asselbergs FW, Hoes AW, Dahlström U, Koudstaal S, **Savarese G.** 

A registry-based algorithm to predict ejection fraction in patients with heart failure.

ESC Heart Fail 2020;7:2388-97. PMID: 32548911

4. Uijl A, Lund LH, Asselbergs FW, Savarese G.

Methodological issues in meta-analyses of real-world clinical data to infer causality.

Int J Cardiol. 2021;345:107-108. PMID: 34688720

5. Hemingway H, Asselbergs FW, Danesh J, Dobson R, Maniadakis N, Maggioni A, van Thiel GJ, Cronin M, Brobert G, Vardas P, Anker SD, Grobbee DE, Denaxas S; **BigData@Heart Consortium**.

Big data from electronic health records for early and late translational cardiovascular research: challenges and potential.

Eur Heart J 2018;39:1481-1495. PMID: 29370377

#### • Center for Molecular Cardiology, Zurich, Switzerland

The Applicant worked at the Center for Molecular Cardiology between 2013 and 2015 but still has a great scientific collaboration ongoing with this institution.

Martin F Reiner

Switzerland

Giovanni G Camici Switzerland Thomas F Luscher Switzerland

1. Akhmedov A, Bonetti NR, Reiner MF, Spescha RD, Amstalden H, Merlini M, Gaul DS, Diaz-Cañestro C, Spescha RS, Semerano A, Giacalone G, **Savarese G**, Montecucco F, Kulic L, Nitsch RM, Matter CM, Kullak-Ublick GA, Sessa M, Lüscher TF, Beer JH, Liberale L, Camici GG.

Deleterious role of endothelial lectin-like oxidized low-density lipoprotein receptor-1 in ischaemia/reperfusion cerebral injury.

J Cereb Blood Flow Metab 2019;39:2233-2245. doi: PMID: 30073881

2. Reiner MF, Breitenstein A, Holy EW, Glanzmann M, Amstalden H, Stämpfli SF, Bonetti NR, Falk V, Keller S, **Savarese G**, Benussi S, Maisano F, Lüscher TF, Beer JH, Steffel J, Camici GG.

Ticagrelor, but not clopidogrel active metabolite, displays antithrombotic properties in the left atrial endocardium.

Eur Heart J 2017;38:916-919. PMID: 28065908

3. Reiner MF, Akhmedov A, Stivala S, Keller S, Gaul DS, Bonetti NR, **Savarese** G, Glanzmann M, Zhu C, Ruf W, Yang Z, Matter CM, Lüscher TF, Camici GG, Beer JH.

Ticagrelor, but not clopidogrel, reduces arterial thrombosis via endothelial tissue factor suppression.

Cardiovasc Res 2017;113:61-69. PMID: 28028070

4. Merlini M, Shi Y, Keller S, **Savarese G**, Akhmedov A, Derungs R, Spescha RD, Kulic L, Nitsch R, Lüscher T, Camici G.

Reduced nitric oxide bioavailability mediates cerebroarterial dysfunction independent of cerebral amyloid angiopathy in a mouse model of Alzheimer's disease.

Am J Physiol Heart Circ Physiol 2017;312:H232-H238. PMID: 27836896

5. Spescha RD, Klohs J, Semerano A, Giacalone G, Derungs RS, Reiner MF, Rodriguez Gutierrez D, Mendez-Carmona N, Glanzmann M, **Savarese G**, Kränkel N, Akhmedov A, Keller S, Mocharla P, Kaufmann MR, Wenger RH, Vogel J, Kulic L, Nitsch RM, Beer JH, Peruzzotti-Jametti L, Sessa M, Lüscher TF, Camici GG.

Post-ischaemic silencing of p66Shc reduces ischaemia/reperfusion brain injury and its expression correlates to clinical outcome in stroke. Eur Heart J 2015;36:1590-1600. PMID: 25904764

6. Reiner MF, Martinod K, Stivala S, **Savarese G**, Camici GG, Lüscher TF, Wagner DD, Beer JH.

Dietary omega-3 alpha-linolenic acid does not prevent venous thrombosis in mice.

Thromb Haemost 2015;113:177-84. PMID: 25231375

7. Camici GG, Savarese G, Akhmedov A, Lüscher TF.

Molecular mechanism of endothelial and vascular aging: implications for cardiovascular disease.

Eur Heart J 2015;36:3392-403. PMID: 26543043

#### • Uppsala Clinical Research Center, Uppsala, Sweden

The Applicant has a great ongoing collaboration with the Uppsala Clinical Research Center in terms of trial clinical events adjudicator for the randomized controlled trials DAPA-MI, DAPA-CKD, DAPA-MI and REVASC-MI.

# • <u>KI: MEB</u>

Ongoing collaboration on the role of dyskalemias and kidney disease on the prognosis and use of treatments in heart failure. The joint work on SwedeHF+SCREAM registries has led to several important studies in the field, and many others are ongoing.

Carrero JJ Sweden

1. Trevisan M, Fu EL, Xu Y, **Savarese G**, Dekker FW, Lund LH, Clase CM, Sjölander A, Carrero JJ.

Stopping mineralocorticoid receptor antagonists after hyperkalaemia: trial emulation in data from routine care

Eur J Heart Fail. 2021;23:1698-1707. PMID: 34196082

- Fu EL, Uijl A, Dekker FW, Lund LH, Savarese G, Carrero JJ.
   Association Between β-Blocker Use and Mortality/Morbidity in Patients With Heart Failure With Reduced, Midrange, and Preserved Ejection Fraction and Advanced Chronic Kidney Disease
   Circ Heart Fail. 2020:13:e007180. PMID: 33070637
- 3. **Savarese G**, Xu H, Trevisan M, Dahlstrom U, Rossignol P, Pitt B, Lund LH, Carrero JJ.

Incidence, Predictors, and Outcome Associations of Dyskalemia in Heart Failure With Preserved, Mid-Range, and Reduced Ejection Fraction. JACC Heart Fail 2019;7:65-76. PMID: 30553905

4. Savarese G, Lund LH, Carrero JJ.

Reply: Clinical Context of Dyskalemias Across the Heart Failure Spectrum and Their Associated Adverse Outcomes.

JACC Heart Fail 2019;7:533-534. PMID: 31146879

5. Cooper LB, Savarese G, Carrero JJ, Szabo B, Jernberg T, Jonsson A, Dahlbom C, Dahlstrom U, Larson A, Lund LH.

Clinical and research implications of serum versus plasma potassium measurements.

Eur J Heart Fail 2019;21:536-537. PMID: 30485595

### • **BIOSTAT Study**

Collaboration on prognostic role of biomarkers in heart failure

Adrian Voors The Netherlands

Marco Metra Italy
Carolyn Lam Singapore

1. **Savarese G**, Uijl A, Ouwerkerk W, Tromp J, Anker SD, Dickstein K, Hage C, Lam CSP, Lang CC, Metra M, Ng LL, Orsini N, Samani NJ, van Veldhuisen DJ, Cleland JGF, Voors AA, Lund LH.

Biomarker changes as surrogate endpoints in early-phase trials in heart failure with reduced ejection fraction.

ESC Heart Fail. 2022. Apr 6. doi: 10.1002/ehf2.13917. Online ahead of print.

PMID: 35388650

# • Heart Failure Publication Committee

A consortium of worldwide heart failure experts aiming to identify unmet needs in the field and provide scientific evidence

Kirkwood F Adams **USA USA** Tariq Ahmad Larry A Allen **USA** Michael Böhm Germany Nihar R Desai **USA** Stephen S Gottlieb **USA** Carolyn Lam Singapore Belgium Patrizio Lancellotti JoAnn Lindenfeld **USA** Eileen O'Meara Canada Mitchell A Psotka **USA** Giuseppe MC Rosano UK John R Teerlink **USA** 

 Rosano GMC, Allen LA, Abdin A, Lindenfeld J, O'Meara E, Lam CSP, Lancellotti P, Savarese G, Gottlieb SS, Teerlink J, Wintrich J, Böhm M. Drug Layering in Heart Failure: Phenotype-Guided Initiation. JACC Heart Fail. 2021;9:775-783. PMID: 34627725

#### ,

#### 6 SUPERVISION OF GRADUATE STUDENTS

6.1 PhD candidates supervised up to the defence of the candidate's doctoral thesis, with the applicant serving as main supervisor

Davide Stolfo and Benedikt Schrage are going to have their PhD defence on June 3<sup>rd</sup> and June 10<sup>th</sup> 2022, respectively. Their theses include only studies published on topranked journals in the Cardiology field.

Felix Lindberg had his half time review on May 16<sup>th</sup> 2022, and has already published 1 study + 1 is submitted. Peter Moritz Becher had his half time review on May 30<sup>th</sup> and has already published 2 studies on the top ranked journal in the heart failure field (European Journal of Heart Failure).

# 6.2 PhD candidates supervised up to the defence of the candidate's doctoral thesis, with the applicant serving as *co-supervisor*

Ulrika Faxén Ljung (2018-11-23)

Department of Medicine, Cardiology, KI

Main supervisor: Lars H Lund

Title - Heart failure: Role of metabolic biomarkers, ejection fraction, and sex

# 6.3 Students supervised up to their licentiate degree, with the applicant serving as main supervisor

None

# 6.4 Students supervised up to their licentiate degree, with the applicant serving as co-supervisor

None

# 6.5 Ongoing supervision of a PhD candidate, with the applicant serving as *main supervisor*

Department of Medicine, Cardiology, KI

- 1. Davide Stolfo (Defence on June 3<sup>rd</sup> 2022) Co-supervisors: Nicola Orsini, Lars H Lund, Camilla Hage (KI)
- 2. Benedikt Schrage (Defence on June 10<sup>th</sup> 2022) Co-supervisors: Frieder Braunshweig, Lars H Lund, Nicola Orsini (KI)
- 3. Felix Lindberg (Half time review on May 16<sup>th</sup> 2022, Defence in Spring 2024) Co-supervisors: Cecilia Linde, Lars H Lund, Nicola Orsini (KI)
- 4. Peter Moritz Becher (Half time review on May 30<sup>th</sup> 2022, Defence in Spring 2024) Co-supervisors: Francesco Cosentino, Lars H Lund (KI), Stefan Blankenberg (Germany)
- 5. Francesca Musella (Registered in Spring 2022, Half time review in Fall 2023, Defence in Fall 2024)
- 6. Daniela Tomasoni (Registration ongoing)
- 7. Federica Guidetti (Registration ongoing)

Certification for supervision attached to the application.

# 6.6 Ongoing supervision of a PhD candidate, with the applicant serving as *co-supervisor*

Department of Medicine, Cardiology, KI

- 1. Angiza Shahim (Half time in Fall 2021; Defence in Spring 2023) Main supervisor: Camilla Hage
- 2. Ingibjörg Kristjansdottir (Half time in Fall 2023; Defence in Spring 2024) Main supervisor: Lars H Lund
- 3. Barna Szabó (Half time in Spring 2023; Defence in Spring 2025) Main supervisor: Lars H Lund
- 4. Camilla Settergren (Half time in Fall 2023; Defence in Fall 2025) Main supervisor: Lars H Lund
- 5. Mikael Erhardsson (Half time in Spring 2023, Defence in Spring 2025) Main supervisor: Camilla Hage
- 6. Laura Landucci (Half time in Spring 2023; Defence in Spring 2025) Main supervisor: Ulrika Ljung Faxén

Certification attached to the application.

### **6.7 Postdoc supervision**

Department of Medicine, Cardiology, KI Domenico D'Amario (2019-2022)

### 6.8 Supervision of other researchers who have defended a thesis

Alicia Uijl Visiting PhD student from Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht University, Utrecht, The Netherlands

#### 6.9 Ongoing careers of holders of earlier PhDs and of postdocs

None

#### 7 THESIS EVALUATION

#### 7.1 Serving as thesis opponent

Alicia Uijl Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht University, Utrecht, The Netherlands. June 2020. Thesis: Opportunities and challenges of real-world data in heart failure.

#### 7.2 Serving as a member of a thesis examination committee

- Planned member of the examination committee for the half time review of Per Eldhagen (PhD student; Department of Medicine) – planned in October 2022
- Planned member of the examination committee for the half time review of Konrad Nilsson (PhD student; Uppsala University) – May 2022

#### 7.3 External thesis reviewer

None

#### 8 EVALUATION OF OTHERS' WORK

#### 8.1 Serving as reviewer of candidates proposed for academic positions

None

### 8.2. Serving as reviewer for international evaluations

- Reviewer for case reports submitted to the Heart Failure and the World Congress on Acute Heart Failure (Heart Failure Association – European Society of Cardiology) 2016
- Reviewer for case reports submitted to the Heart Failure and the World Congress on Acute Heart Failure (Heart Failure Association European Society of Cardiology) 2017
- Member of the European Society of Cardiology (ESC) Abstract Reviewing Committee - 2018
- Member of the European Society of Cardiology (ESC) Abstract Reviewing Committee - 2019
- Reviewers for abstracts submitted to the Heart Failure and the World Congress on Acute Heart Failure (Heart Failure Association European Society of Cardiology) 2019
- Reviewers for abstracts submitted to the Heart Failure and the World Congress on Acute Heart Failure (Heart Failure Association European Society of Cardiology) 2020
- Member of the European Society of Cardiology (ESC) Abstract Reviewing Committee - 2020
- Reviewers for abstracts submitted to the Congress of the American College of Cardiology (ACC) - 2022
- Reviewers for abstracts submitted to the Heart Failure and the World Congress on Acute Heart Failure (Heart Failure Association – European Society of Cardiology) - 2022
- Member of the European Society of Cardiology (ESC) Abstract Reviewing Committee - 2022

# 8.3 Evaluator of research applications in international competition

 Member of the Heart Failure Association (HFA – European Society of Cardiology) committee for Research and Training grants application evaluation.

### 8.4 Evaluator of major research applications in national competition

- Reviewer for the Deutsche Forschungsgemeinschaft (DFG) in 2021
- Reviewer for the British Heart Foundation in 2021

- Reviewer for the British Heart Foundation in 2019-2020
- Reviewer for the Deutsche Forschungsgemeinschaft (DFG) in 2020
- Reviewer for Italian Board of education, university and research-funded projects in 2019-2020
- Netherlands Organisation for Scientific Research Innovational research grants (VIDI) in 2019
- Reviewer for research grants in the United Arabic Emirates in 2018

#### 8.5 Evaluator of major research grant applications in local competition

None

#### 8.6 Editor of scientific journals

- Section Editor for Heart Failure European Heart Journal Open (2021 ongoing)
- Deputy Editor of European Heart Journal Case Reports (2020 ongoing; previously Associate Editor since 2017)
- Associate Editor of Frontiers in Cardiovascular Medicine (2021 ongoing)
- Associate Editor of Plos One (2018 ongoing)

#### 8.7 Member of an editorial board

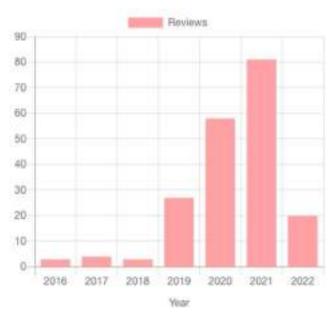
- Frontiers in Cardiovascular Medicine (2021 ongoing)
- Plos One (2018 ongoing)
- European Heart Journal Case Reports (2017 ongoing)
- Cardiology and Therapy (2017 ongoing)
- European Cardiology Review (2019 ongoing)
- European Heart Journal Open (2021 ongoing)

#### 8.8 Referee for scientific journals

Around 100 Reviews per year for the following top-ranked journals:

- Journal of American College of Cardiology
- European Heart Journal
- Circulation
- European Journal of Heart Failure
- Circulation: Heart failure
- Annals of Internal Medicine
- International Journal of Cardiology
- Cardiovascular Research
- Journal of Cardiovascular Medicine
- Journal of Cardiac Failure
- European Heart Journal Cardiovascular Pharmacotherapy
- American Journal of Cardiology
- European Heart Journal Case Reports

- European Cardiology Review
- Nutrition, Metabolism and Cardiovascular diseases
- European Journal of Cardiovascular Nursing
- Cardiology and Therapy
- ESC Heart Failure
- Scandinavian Cardiovascular Journal
- Cardiac Failure Review
- Journal of Hypertension



Certified reviews on Publons

#### 8.9 Reviewer or advisor for other scientific bodies

- EMA (European Medicines Agency) AIFA (Italian Drug Agency) (2012-ongoing)
- Clinical Event Adjudication (CEA) for randomized trials Uppsala Clinical Research Center, Uppsala, Sweden (2016 ongoing)
- Several participations to AstraZeneca advisory boards over the last years
- Advisory board Servier (2022 ongoing)

# 8.10 Other relevant evaluation assignments

None

#### 9 INTERNATIONAL VISITING RESEARCH FELLOWSHIPS

The Applicant has been very active in the research field of heart failure and cardiovascular disease before starting his PhD studies at KI in 2015, as shown in the list of publications. Between July 2013 and December 2015 the Applicant has been guest research assistant at the Center for Molecular Cardiology of the University of Zurich as winner of a Research Grant from the European Society of Cardiology (25.000 Euros). There, the Applicant has actively worked on the molecular

mechanisms of heart failure and other cardiovascular diseases, publishing on high impact journals and establishing a still ongoing scientific collaboration.

#### 10 SCIENTIFIC DISTINCTIONS

- Member of the European Society of Cardiology Heart Failure Association committee for the Atlas of Heart failure (2019 – ongoing)
- Secretary of the European Society of Cardiology Working Group on Cardiovascular Pharmacotherapy (2018 ongoing)
- Advanced Fellowship in Cardiovascular Trials Global Cardiovascular clinical trialists (CVCT) forum-Boehringer Ingelheim (2018 ongoing)
- Scholar of the Italian Society of Cardiology (2018 ongoing)
- Young Investigator Award from the Heart Failure Association (HFA) of the European Society of Cardiology (ESC)(finalist) (HFA Congress 2018, Vienna, Austria)
- Young Investigator Award on Population Science from European Society of Cardiology (finalist) (ESC Congress 2017, Barcelona, Spain)
- Nucleus member of the European Society of Cardiology Working Group on Cardiovascular Pharmacotherapy (2016 ongoing)
- Chairman of the European Society of Cardiology Cardiovascular Pharmacotherapists and Trialists of Tomorrow (2016 ongoing)
- Member of the committee on Surveys, Registry and Epidemiology Committee of the Heart Failure Association – European Society of Cardiology (2016 – ongoing)
- Fellow of the Heart Failure Association (FHFA)(2015 ongoing)
- Fellow of the European Society of Cardiology (FESC)(2014 ongoing)
- Young investigator award from the Italian Society of Cardiology (2013)
- Best Poster Award European Society of Cardiology Congress (ESC Congress 2012, Munich Germany).
- Member of the Italian Society of Cardiology (2010 ongoing)

#### 11 OTHER SCIENTIFIC MERITS

# KAROLINSKA INSTITUTET TEACHING PORTFOLIO

# 1 SUBJECT AREA COMPETENCE AND CURRENT TEACHING ACTIVITY

- Clinical cardiology and heart failure
- Registry research methodology
- Optimization of use of heart failure treatments
- Trial design
- Meta-analyses
- Pathophysiology, phenotyping and treatments in heart failure
- Cardiorenal syndrome, hyperkalaemia, mechanisms and sue of reninangiotensin-aldosterone system antagonist drugs
- Statistical methods for observational, trial and meta-analysis studies design
- Evidence based medicine, epidemiology and biostatistics

In the following sections, the area of competence is further highlighted by the title of the courses where the Applicants conducts teaching activities.

The European Society of Cardiology and the Heart Failure Association report online the programmes of the courses in which the Applicant conducts teaching activities and also some recordings are available.

 $https://www.escardio.org/Education/Courses/Resources/all-about-clinical-trials \\ \underline{https://www.escardio.org/Education/Courses/Organised/hfa-clinical-trials-in-heart-failure-course-2021$ 

#### 2 TEACHING IN THE STUDY PROGRAMME

The applicant is currently member of the steering committee of the doctoral programme in CardioVascular Research (CVR programme) at the Karolinska Institutet.

#### 2.1 Scope/time of teaching

Throughout career, teaching has been done during clinical or research time (no specific time set aside for teaching). Proportion of time teaching has generally been approximately 20-40%.

Regularly recurring teaching:

### PhD students

- in own research group: research methodology, study design, good clinical practice, statistics, clinical heart failure
- KI PhD courses: pathophysiology, phenotyping and treatments in heart failure

- KI PhD courses organized by the Applicant:
- 1) clinical trials in cardiovascular research (course 3173) where the Applicant is course coordinator/director. This is one of the CVR programme courses with the highest numbers of participants;
  2) clinical trials in heart failure research course (5307) where the Applicant is course coordinator/director. This course was the best rated PhD course within the CVR programme in 2021.
- The Applicant is faculty member at the PhD programme "Health Science, technology and Management" at the University "Scuola Superiore Istituto Sant'Anna" in Pisa (Italy) where he leads the course on "Introduction to study Design" 10 hours/year. Selected PhD students from this PhD programme visit KI for 3-6 months research projects <a href="https://www.santannapisa.it/en/education/phd-health-science-technology-and-management">https://www.santannapisa.it/en/education/phd-health-science-technology-and-management</a>

#### • Medical students

- Coordinator for the KI medical students Degree Project (2022-ongoing; 10 students in 2022)
- Supervision for the KI medical students Degree Project (1 student in VT 2019, 2 students in HT2019 and 2 students in VT2020, 1 in VT2021, 1 in HT2021, 1 in VT2022; 1 in HT2022)
  - KI Courses
  - o SVK Hjärtsvikt Semester 6
  - SVK Hjärtsvikt seminarier Semester 5

#### Mixed classes and other

- Junior cardiology fellows Bed-side teaching
- All about clinical trials courses, delivered by the Working group on cardiovascular pharmacotherapy of the European Society of Cardiology <a href="https://www.escardio.org/Education/Courses/Resources/all-about-clinical-trials">https://www.escardio.org/Education/Courses/Resources/all-about-clinical-trials</a>.

The Applicant is member of the executive committee that plans all the educational activities of the Working group on cardiovascular pharmacotherapy of the European Society of Cardiology

• HFA clinical trial course in heart failure organized by the Applicant as board member of the Heart Failure Association of the European Society of Cardiology. This is also PhD course at KI (5307) <a href="https://www.escardio.org/Education/Courses/Organised/hfa-clinical-trials-in-heart-failure-course-2021">https://www.escardio.org/Education/Courses/Organised/hfa-clinical-trials-in-heart-failure-course-2021</a>

The Applicant is member of the executive committee that plans all the educational activities of the Heart Failure Association of the European Society of Cardiology

• MSc in Heart Failure at St. George University, London, UK (2021 - ongoing) <a href="https://www.sgul.ac.uk/study/courses/heart-failure">https://www.sgul.ac.uk/study/courses/heart-failure</a>

#### Teaching and tutoring of PhD students at KI:

- 1. Davide Stolfo (Defence on June 3<sup>rd</sup> 2022)
- 2. Benedikt Schrage (Defence on June 10<sup>th</sup> 2022)
- 3. Felix Lindberg (Half time review on May 16<sup>th</sup> 2022, Defence in Spring 2024)
- 4. Peter Moritz Becher (Half time review on May 30<sup>th</sup> 2022, Defence in Spring 2024)
- 5. Francesca Musella (Half time review in Fall 2023, Defence in Fall 2024)
- 6. Angiza Shahim (Half time in Fall 2021; Defence in Spring 2023
- 7. Ingibjörg Kristjansdottir (Half time in Fall 2023; Defence in Spring 2024)
- 8. Barna Szabó (Half time in Spring 2023; Defence in Spring 2025)
- 9. Camilla Settergren (Half time in Fall 2023; Defence in Fall 2025)
- 10. Mikael Erhardsson (Half time in Spring 2023, Defence in Spring 2025)
- 11. Laura Landucci (Half time in Spring 2023; Defence in Spring 2025)
- 12. Ulrika Löfström (PhD studies ongoing)

Topics: Heart failure, study design, registries

#### Teaching of PhD students in Universities other than KI

- All about clinical trials courses, delivered by the Working group on cardiovascular pharmacotherapy of the European Society of Cardiology <a href="https://www.escardio.org/Education/Courses/Resources/all-about-clinical-trials">https://www.escardio.org/Education/Courses/Resources/all-about-clinical-trials</a> (2015 - ongoing)
- HFA clinical trial course in heart failure organized by the Applicant as board member of the Heart Failure Association of the European Society of Cardiology. This is also PhD course at KI (5307)(2021-ongoing) <a href="https://www.escardio.org/Education/Courses/Organised/hfa-clinical-trials-in-heart-failure-course-2021">https://www.escardio.org/Education/Courses/Organised/hfa-clinical-trials-in-heart-failure-course-2021</a>
- University of Pisa, Istituto Superiore Sant'Anna (2019) course on metaanalysis
- PhD programme "Health Science, technology and Management" at the
  University "Scuola Superiore Istituto Sant'Anna" in Pisa (Italy) where he
  leads the course on "Introduction to study Design" 10 hours/year. Selected
  PhD students from this PhD programme visit KI for 3-6 months research
  projects

https://www.santannapisa.it/en/education/phd-health-science-technology-and-management

# Topic – Study design

#### Tutoring medical student for their degree project (Examensarbete Termin 8)

#### KI:

- Christian Vestman (VT2019 cosupervisor)
- Gabriela Jumaa (HT2019 main supervisor)
- Nora Norén (HT2019 main supervisor) graded as best supervisor for the project performed with this student
- Leon Mansour (VT2020 main supervisor)
- Felix Lindberg (VT2020 main supervisor)
- Astrid Karlson (VT2021 main supervisor)
- Ali Jamshidi (HT2021 main supervisor)
- Rurik Antbacke (HT2022 main supervisor)
- Natanael Øigaard (VT2022 main supervisor)

# <u>Tutoring medical student and cardiology fellows for their degree project (visiting students)</u>

- Daniele Rodolico (2020-2021 visiting student from University of Rome, who performed his MD thesis under the Applicant's supervision)
- Chiara Cappelletti (2021-2022 visiting Cardiology fellow from University of Trieste, who performed her specialization thesis under the Applicant's supervision)

# <u>Summary of certified teaching hours. More details in the Undervisningtabell (xls). Certificates attached.</u>

KI Medical Students	
SVK Hjärtsvikt	18 Hours
Supervision Degree projects/other	315 Hours
thesis: 11 students	
Seminarieledare i hjärtsvikt för T5	4 Hours
	Total: 337 Hours
KI PhD Students	
KI PhD courses	13.4 Hours
Non-KI PhD courses	20 Hours
Teaching to PhD students within the	
group not counted	
	Total: 33.4 Hours
Other teaching to MDs/PhDs and PhD students/Nurses	
All about clinical trials: educational	35.6 Hours
activity of the European Society of	

Cardiology	
Nationell Kurs om hjärtsvikt	1 Hour
Course: Systematic Reviews and	7.5 Hours
Meta-Analyses - from theory to	
Practice (Sant'Anna University)	
Preceptorship course	1 Hour
MSc in Heart Failure – London	4.5 Hours
	Total: 49.6 Hours
Bed-side teaching	
Echocardiography instructor	Total: 260 Hours
	<b>Total number of teaching hours: 680</b>

#### 2.2 Form of instruction

Lectures/Seminars/Workshops/Case-based/Bed-side education/Clinical procedures demonstration and supervision (e.g. echo)/ Supervision of PhD and MD and master students/Tutoring

The Applicant is currently organizing a Master Programme in Heart Failure at KI with the endorsement of the Heart Failure Association of the European Society of Cardiology

#### 2.3 Teaching assignments

• KI PhD course "Clinical trials in cardiovascular research" (3173)

Role: <u>Course organizer</u>, <u>course coordinator</u>, course planning, teacher and examiner

Form of teaching: lectures, seminars, workshops. The Applicant lectures on registry-based research and meta-analyses and leads hands-on on how to perform meta-analyses

1-week full time course. Around 30 students attend every year. The course has been run in 2019, 2020, 2021 and is now enrolling students for December 2022.

Aims of the course are to:

- Improve knowledge and skills related to clinical trial planning and design as well as successful running of different types of clinical trials (observational studies, registries, randomized trials);
- Provide an overview of all the most recent trials in the cardiovascular arena;
  - Provide Good Clinical Practice (GCP) training

Faculty of the course consists of experts in trials and registries from Sweden and several European countries thanks to the collaboration with the European Society of Cardiology and the Swedish Cardiac Society.

The exam consists into the presentation of a trial design which the participants plan during the course.

• KI PhD course "Clinical trials in heart failure research" (5307)/HFA clinical trial course in heart failure.

Role: <u>Course organizer</u>, <u>course coordinator</u>, course planning, teacher and examiner

Form of teaching: lectures, seminars, workshops. The Applicant lectures on registry-based research and meta-analyses and leads hands-on on how to perform meta-analyses

1-week full time course. 17 students attended in 2021 (including some from Denmark). It was rated the best course within the CVR programme at KI. The course is now enrolling students for 2022.

Aims of the course is to provide guidance on how to:

- choose the adequate trial design to conduct an interventional study
- apply important ethical principles while designing a clinical trial
- design a clinical trial which satisfies the requirements of the regulatory agencies
- choose and use key statistical methods for running randomized controlled trials and meta-analyses of randomized controlled trials
- critically interpret data from randomized controlled trials and meta-analyses of randomized controlled trials

Faculty of the course consists of European experts in trials and registries thanks to the collaboration with the Heart Failure Association of the European Society of Cardiology, which also covers registration fees + hotel in Sorrento (Italy) where the lectures/workshops are hold.

The exam is home-based (multiple choice and open questions)

• KI PhD course: Clinical Aspects of Cardiovascular Research (3195), Cardiovascular Physiology and Pathophysiology (3071) and Diabetes and Cardiovascular Disease (5310)

Role: teacher

Form of teaching: lectures

The applicant has been responsible for the topics: 1) heart failure pathophysiology; 2) heart failure phenotyping 3) heart failure treatments, also in relation to important comorbidities, such as diabetes

# • <u>KI course for medical students on heart failure (SVK Hjärtsvikt – Termin/semester 6)</u>

Role: teacher

Form of teaching: lectures

The applicant has been responsible for the topics: 1) heart failure epidemiology; 2) heart failure treatments 3) implementation of medical therapy in heart failure.

#### • KI heart failure seminars for medical students (Termin/semester 5)

Role: teacher

Form of teaching: Case-based teaching

By clinical cases, the Applicants focuses on teaching important elements related to the diagnostic/therapeutic course in patients with heart failure

• <u>All About Clinical Trial Course by Working Group on Cardiovascular</u> Pharmacotherapy of European Society of Cardiology.

Since 2015 the Applicant is faculty at the "All about clinical trial course" by the Working Group on Cardiovascular Pharmacotherapy of the European Society of Cardiology. Education is one of the main objectives of the European Society of Cardiology and as included in the mission of this Scientific Society.

 $\underline{https://www.escardio.org/The-ESC/About/Website-mission-statement-and-intended-}$ 

audience#:~:text=The%20European%20Society%20of%20Cardiology,survey
s%20and%20the%20publishing%20of

https://www.escardio.org/Working-groups/Working-Group-on-Cardiovascular-Pharmacotherapy/Education/all-about-clinical-trials-course-and-workshop

This is a 2-day intensive course run 4 times/year in different European cities (Rome, Tel Aviv, Brussels, London, Berlin, Barcelona, and others), aiming to improve competence and confidence to deliver better clinical trials which in turn will have a positive impact on services and patient outcomes.

Participants are postgraduate students, medical doctors, PhD students, academic and industry researchers (mainly MDs and PhD students). The course offers lectures and interactive workshops on regulatory issues, statistics, trial data interpretation and manuscript writing.

Form of teaching: lectures, seminars, workshops.

The Applicant's role in this course is to contribute to define the program, teaching basic and advanced principles of trial design by frontal lectures and workshops where published literature is discussed with the participants.

MSc in Heart Failure at St. George University, London, UK

Role: teacher

Form of teaching: Lectures

Topics: study designs and clinical heart failure

• PhD course "Introduction to study design" belonging to the PhD programme "Health Science, technology and Management" at the University "Scuola Superiore Istituto Sant'Anna" in Pisa (Italy)

Role: <u>Course organizer, course coordinator</u>, course planning, teacher and examiner

Form of teaching: Lectures and workshops. The Applicant lectures on observational, registry-based, trial and meta-analysis research and leads hands-on on how to perform meta-analyses

Topics: study design.

Aims of the course is to provide guidance on how to:

- design a simple observational study, randomized trial, meta-analysis or systematic review.
- perform data analysis and interpretation
- critically review literature
- predict important statistical issues

The exam is home-based (multiple choice and open questions)

#### 2.4 Examination and assessment

The Applicant is currently course organizer, teacher and examiner for the KI PhD course "Clinical trials in cardiovascular research" (3173). The Applicant has planned the course examination as follows: after 2 days of frontal teaching/workshops, the students receive a home assignment which consists of planning a clinical trial based on the content of the lectures/workshops. The students have 2 days to work on the home assignment. As oral examination, the students are asked to present their study. During the examination, the Applicant moderates the discussion regarding the presented studies, provides comments and feedbacks and challenges students with questions regarding the design of each clinical trial. In order to facilitate the students with the preparation of the presentation, the Applicant provides guidelines highlighting the most important elements which should be considered. The Applicant is also course organizer, teacher, and examiner for the KI PhD course "Clinical trials in heart failure research" (5307) and "Introduction to study design" at the University "Scuola Superiore Istituto Sant'Anna" in Pisa (Italy). For these courses, the Applicant prepares a home-based exam consisting in multiple choice and open questions. The grade for passing the exam is 18/30.

### 2.5 Production of study materials and instructional materials

For review articles and book chapters, please see publications above

### Other materials:

Slides etc. from presentations at ESC, ESC Heart Failure (HFA congress), AHA, ACC, All about clinical trials course and regional meetings such as Swedish and Italian Cardiovascular meetings, as well as many grand rounds and other lectures and courses are generally made available online.

#### For example:

ESC and HFA publishes such materials at <a href="http://congress365.escardio.org">http://congress365.escardio.org</a>
ACC published such materials at <a href="https://accscientificsession.acc.org">https://accscientificsession.acc.org</a>
All about clinical trials course materials at: <a href="https://www.escardio.org/Working-groups/Working-Group-on-Cardiovascular-Pharmacotherapy/Education/all-about-clinical-trials-course-and-workshop">https://www.escardio.org/Working-groups/Working-Group-on-Cardiovascular-Pharmacotherapy/Education/all-about-clinical-trials-course-and-workshop</a>

#### 2.6 Course evaluation, and evaluation of instruction and study programme

From the teaching hours listed in table above, the Applicant has received extensive positive formal and informal feedback, with several request to return for recurrent teaching (e.g. KI PhD courses and SVK courses).

86% of the students attending the KI PhD course "Clinical trials in cardiovascular research" (3173) in 2019 organized by the Applicant were satisfied of the course's quality to a large/very large extent, 90% in 2020, 90% in 2021.

100% of participants were satisfied to a very large extent of the KI PhD Course "Clinical trials in heart failure research" (5307) in 2021 – rated best course of the CVR programme.

#### 2.7 Internationalisation

Tutoring and supervising many international researchers working on projects based on the Swedish Heart Failure Registry data.

Organizing educational activities which attract potential students to KI.

# 3 TEACHING IN NURSING AND MEDICINE AND FOR HEALTHCARE PRACTITIONERS

#### 3.1 Teaching in nursing and medicine

- Clinical teaching of medical students/junior cardiologists at the Cardiology Unit, Federico II University Hospital, Naples, Italy
  - echo lab: 4 hours/week x 1 year (2015-2016)
- Nationell Kurs om hjärtsvikt (November 2019) dedicated to introducing nurses to heart failure
- Teaching in several courses involving the participation of MDs (as reported in the table above)
- Teaching at the MSc in Heart failure at ST George's University of London
- Preceptorship course at Karolinska University Hospital

#### 3.2 Teaching for healthcare practitioners

As above

#### 4 DEVELOPMENT OF TEACHING SKILLS

### 4.1 Formal studies in university-level teaching

- KI Course: Introduction to teaching at KI Fall 2018
- KI Course: Teaching and learning in higher education Spring 2019 equivalent to five weeks of academic studies
- KI Course: Teaching in the glocal university (ongoing, ends in June 2022) 2 weeks full time study
- Registered for the KI course "Two2Tango, tandems for teaching in the glocal classroom" which will start in December 2022 2 weeks full time study
- I will register for the KI course "Designing doctoral courses" 2 weeks full time study the registrations have not opened yet.

### 4.2 Other teaching activities

None

#### 5 DEVELOPMENT WORK IN TEACHING/MEDICAL PEDAGOGY

# 5.1 Pedagogical development work and projects

None

# 5.2 Communication and presentations of pedagogical development work

None

# **6 TEACHING DISTINCTIONS**

Awarded for excellent supervision on the course "Degree project in medicine fall 2019" – KI.

# 7 OTHER TEACHING MERITS

None

# KAROLINSKA INSTITUTET CLINICAL PORTFOLIO

#### 1 CLINICAL SPECIALIST EXPERTISE AND CURRENT ACTIVITY

Cardiovascular specialist with special focus on heart failure employed at Department of Cardiology; Heart and Vascular and Neuro Theme, Karolinska University Hospital, Stockholm, Sweden.

# 2 CLINICAL EXPERTISE AND FORMAL TRAINING (INCLUDING PUBLIC HEALTH WORK)

#### 2.1 Completed clinical training

 Cardiology specialist training - Department of Advanced Biomedical Sciences, Federico II University Hospital, Naples, Italy - July 2011 – June 2016

#### 2.2 Specialist expertise

- Cardiology specialist Federico II University, Naples, Italy July 2011 June 2016
- Heart Failure specialist Postgraduate Course-Certification in Heart Failure, University of Zurich, Switzerland 2016 2017

#### 3.3 Clinical positions

- Cardiology intern Department of Advanced Biomedical Sciences, Federico II University - July 2011 – June 2016
- Cardiology specialist. Heart and Vascular Theme, Karolinska University Hospital, Stockholm, Sweden; April 2020 ongoing.

# 2.4 Clinical supervisory positions

### 2.5 On-call activity

- Cardiology and Internal Medicine Unit Department of Advanced Biomedical Sciences, Federico II University Hospital - July 2011 – June 2013
- Coronary Care Unit Department of Advanced Biomedical Sciences, Federico II University Hospital January 2015 June 2016

#### 2.6 Clinical profile area

Heart Failure specialist

### 3 CLINICAL DEVELOPMENT WORK (INCLUDING PUBLIC HEALTH)

# 3.1 Efforts resulting in significantly improved clinical care provision

The applicant actively works on "implementation science" in heart failure. A part of his research focuses on investigating underuse of guidelines-recommended treatments in Sweden, the underlying reasons, and to assess whether specific subgroups of patients are undertreated, in order to develop implementation strategies. His research on this topic has been published on the highest-impacted journals in the field (European Heart Journal, Heart, JACC Heart Failure, European Journal of Heart Failure). The Applicant is currently leading a position document with the support of the Heart Failure Association of the European Society of Cardiology to suggest strategies to fight against clinical inertia and lack of treatment implementation in heart failure patients. The Applicant is also responsible for the programme on improvement in quality of care at the Cardiology Department of the Karolinska University Hospital, where he screens the Swedish heart failure registry to identify and then refer to the outpatient clinic those patients who are not receiving optimized heart failure treatment.

#### 3.2 Area of expert knowledge

Heart failure evidence-based care Heart failure with preserved, mid-range and reduced ejection fraction Cardiomyopathies

#### 3.3 Responsibility for a diagnostic group

None

### 3.4 New treatment forms and diagnostics

None

#### 3.5 Clinical trials

- GCP certified most recently in 2021
- Steering committee member: EMPERIAL trials (2 phase 3 randomized, double-blind trials testing Empagliflozin in patients with heart failure with preserved and reduced ejection fraction) and SYMPHONY trial (investigating whether a screening strategy of point-of-care NT-proBNP and AI-echocardiography in primary practice/ general community settings increases the number of patients diagnosed with heart failure at 6 months, when compared to usual care)
- Investigator: ENGAGE AF-TIMI 48; EMPHASIS-HF, APOLLO.

#### 3.6 Care programme and clinical guidelines

The Applicant's research has had direct impact on clinical guidelines, with several publications cited in the current guidelines in the cardiovascular field. As an example, 12 publications have been cited in the current 2021 ESC guidelines on heart failure (original publication 24, 36, 37, 50, 51, 52, 56, 60, 62, 70; other publications 56 and 61)

The Applicant collaborates with the Heart Failure Association and the Working Group on Cardiovascular Pharmacotherapy of the European Society of Cardiology for the production of consensus and position documents aiming to provide practical guidelines for clinicians (see collaboration list)

#### 3.7 Clinical supervision

The Applicant has actively supervised young cardiology fellows in the heart failure outpatient clinical and the echo lab of the Cardiology Department of the Federico II University Hospital, Naples, Italy (2015-2016).

#### 3.8 Pharmaceuticals

Reviewer for EMA (European Medicines Agency) – AIFA (Italian Drug Agency)

#### 3.9 Clinical use of results achieved in a specific medical field

The Applicant's research has directly impacted European and American Guidelines in the cardiovascular field, leading to specific recommendations. More specifically, he is author in 12 publications cited by the 2021 European Guidelines on Heart failure (original publication 24, 36, 37, 50, 51, 52, 56, 60, 62, 70; other publications 56 and 61).

#### 3.10 Clinical fellowship

- Cardiology fellowship at the "Federico II" University of Naples (2011-2016)
- Heart failure fellowship at the University of Zurich (2016-2017)

#### 3.11 Preventive work

The participant has actively participated to the Angina Awareness Initiative with the European Society of Cardiology

#### 4 CLINICAL DISTINCTIONS

None

#### 5 OTHER CLINICAL MERITS

None

#### 6 DEVELOPMENT PLANS IN HEALTHCARE AND PUBLIC HEALTH

The Applicant is clinically active at the Karolinska University Hospital, Heart Failure division, where his research on "implementation science in heart failure" is daily directly applied to clinical practice and has led to an implementation programme at the Karolinska University Hospital (briefly described above). By collaborating with the European Society of Cardiology, the Applicant aims to develop research/clinical programmes aiming to reduce the global public health of heart failure.

# KAROLINSKA INSTITUTET LEADERSHIP, DEVELOPMENT AND COLLABORATION PORTFOLIO

# 1 CURRENT ACTIVITIES INVOLVING MANAGERIAL RESPONSIBILITY

Board member of the Heart Failure Association of the European Society of Cardiology

https://www.escardio.org/Sub-specialty-communities/Heart-Failure-Association-of-the-ESC-(HFA)/About/Board

Responsible on behalf of the HFA board of the young community of the HFA, i.e. the Heart Failure Specialists of Tomorrow (HoT) <a href="https://www.escardio.org/The-ESC/ESC-Young-Community/Heart-failure-specialists-Of-Tomorrow">https://www.escardio.org/The-ESC/ESC-Young-Community/Heart-failure-specialists-Of-Tomorrow</a>

Board member, Working group on Cardiovascular Pharmacotherapy of the European Society of Cardiology

https://www.escardio.org/Working-groups/Working-Group-on-Cardiovascular-Pharmacotherapy/nucleus-and-structure

Chair and founder of the young community of the WG on Cardiovascular Pharmacotherapy of the European Society of Cardiology, i.e. Cardiovascular Pharmacotherapists and Trialists of Tomorrow (CPTT) <a href="https://www.escardio.org/The-ESC/ESC-Young-Community/cardiovascular-pharmacotherapists-and-trialists-of-tomorrow-cptt">https://www.escardio.org/The-ESC/ESC-Young-Community/cardiovascular-pharmacotherapists-and-trialists-of-tomorrow-cptt</a>

Steering committee member of the Swedish Heart Failure Registry, with specific tasks on the research activities performed on the registry <a href="https://www.ucr.uu.se/rikssvikt-en/quality-registry/about-swedehf#:~:text=The%20Swedish%20Heart%20Failure%20Registry,chronic%2">https://www.ucr.uu.se/rikssvikt-en/quality-registry/about-swedehf#:~:text=The%20Swedish%20Heart%20Failure%20Registry,chronic%20Heart%20Failure%20In%20Sweden.</a>

# 2 TRAINING IN LEADERSHIP, DEVELOPMENT AND COLLABORATION

#### 2.1 Formal education and degrees

None

#### 2.2 Completed courses/study programmes

None

#### 3 MANAGERIAL POSITIONS

#### 6.1 Chairmanship

- CPTTs Cardiovascular pharmacotherapists and trialists of tomorrow (the young community of the Working Group on Cardiovascular Pharmacotherapy of the European Society of Cardiology)
- President Rotaract Club International Castellammare-Sorrento (District 2100 Italy)(Rotary International) 2010-2011

#### 6.2 Positions as member or delegate

See Committee Work.

# 3.3 Responsibility for a section, course coordinator, director of studies, responsibility for a study programme

- Course coordinator/director KI PhD course: Clinical trials in cardiovascular research (3173)
- Course coordinator/director KI PhD course: Clinical trials in heart failure research (5307)
- Coordinator for the KI Degree Project course for medical students (theses)
- Course coordinator/director for the PhD course "Introduction to study design" belonging to the PhD programme "Health Science, technology and Management" at the University "Scuola Superiore Istituto Sant'Anna" in Pisa (Italy)
- Course coordinator/director for the HFA clinical trial course in heart failure from the Heart Failure Association of the European Society of Cardiology
- Course coordinator/director for the All About Clinical Trials course from the Working Group on Cardiovascular Pharmacotherapy of the European Society of Cardiology

#### 3.4 Research team leadership

The Applicant leads a team of 5 PhD students (2 more are currently applying), 1 statistician, and several external collaborators and visiting researchers, focusing on registry-based research in heart failure.

#### 4 COMMITTEE WORK, ETC.

#### 4.1 Commissions of trust in academic organisations

• Board member of the Heart Failure Association of the European Society of Cardiology (2020-ongoing)

- Member of the committee on Surveys, <u>Registry</u> and Epidemiology Committee of the Heart Failure Association – European Society of Cardiology (2016 – ongoing)
- Board Member, Committee on <u>Education</u> and Digital Health, Heart Failure Association, European Society of Cardiology (2020 ongoing)
- Board Member, Committee on Diabetes and Hypertension, Heart Failure Association, European Society of Cardiology (2020 ongoing)
- Member of the European Society of Cardiology Heart Failure Association committee for the Atlas of Heart failure (2019 ongoing)
- Board member of the European Society of Cardiology Working Group on Cardiovascular Pharmacotherapy (2016 ongoing)
- Board member of the <u>Education</u> committee of the European Society of Cardiology - Working Group on Cardiovascular Pharmacotherapy (2020 – ongoing)
- Steering committee member for the EMPERIAL trials (2018 ongoing)
- Secretary of the European Society of Cardiology Working Group on Cardiovascular Pharmacotherapy (2018 2020)
- Steering committee member of the Swedish Heart Failure Registry, with specific tasks on the research activities performed on the registry (2022-ongoing)

### 4.2 Student union activity

None

#### 4.3 Trade union activity

None

#### 4.4 Other committee work

None

# 5 DEVELOPMENT WORK AT EDUCATIONAL INSTITUTIONS OR HOSPITALS

None

# 6 ETHICS, EQUAL TREATMENT, AND ENVIRONMENTAL CONSIDERATION

None

#### 7 MANAGEMENT AND COLLABORATION

None

#### 7.1 Supervisory responsibility

Supervising PhD students, MD students, post-docs, personnel and collaborators in research group

#### 7.2 Responsibility of management/area of responsibility

Responsible for the implementation of quality of care at the Department of Cardiology, Karolinska University Hospital

#### 7.3 Administrative assignments within the institution/healthcare sector

The Applicant takes care of the administration tasks linked with his team members (PhD students, statistician, external collaborators and visiting researchers)

### 7.4 Completed quality assurance work

- Extensive research activity in the Swedish Heart Failure Registry, which is the fundament of the Applicant's research and provides data aiming to improve quality of care in Sweden.
- Committee member of the ESC HF III registry, which aims to investigate on and improve quality of care in Europe.
- Responsible for the programme on implementation of quality of care at the Department of Cardiology, Karolinska University Hospital.

#### 7.5 Establishment and cooperation

#### 7.6. Management and cooperation

#### 8 CONGRESS ORGANISATION

Sessions dedicated research methodology - Heart Failure & World Congress on Acute Heart Failure 2022. Madrid, 21-24 May 2022

Congress organization steering committee - EuroCVP 2020 (annual meeting of Working Group on Cardiovascular Pharmacotherapy of the European Society of Cardiology (ESC)), Vienna 28-29 May 2020.

Sessions dedicated to young cardiologists - EuroCVP 2018 Congress (annual meeting of Working Group on Cardiovascular Pharmacotherapy of the European Society of Cardiology (ESC)), Tel Aviv 13-14 May 2018.

Sessions dedicated to young cardiologists - EuroCVP 2017 Congress (annual meeting of Working Group on Cardiovascular Pharmacotherapy of the European Society of Cardiology (ESC)), Rome 26-28 May 2017.

#### 9 COLLABORATION WITH THE SURROUNDING COMMUNITY

#### 9.1 School

None

#### 9.2 Government agencies

None

#### 9.3 Media

2017: CardioSource WorldNews: NOACs in Patients with AF and HF

2018: Radcliff cardiology: RASi in elderly patients with HFrEF

2019: Physician's academy for cardiovascular education: Betablocker use associated with reduced mortality in HFrEF patients >80 years

2020: Medtronic academy: Global grand rounds – Are devices still relevant in contemporary clinical setting?

#### 9.4 The larger community

As member of the Rotary and Rotaract clubs, the Applicant planned and attended several activities aiming to promote Polio vaccination (PolioPlus) in developing countries and awareness on several diseases prevention (cardiovascular, cancer, etc) The Applicant is involved in the Angina Awareness initiative of the European Society of Cardiology.

#### 9.5 Communications

#### 9.6 Private sector

#### Consulting/advisory Board:

- AstraZeneca
- Servier
- GENESIS
- Societá Prodotti Antibiotici
- Cytokinetics
- Translation Medicine Academy

#### Grants:

- AstraZeneca
- Vifor
- Novartis
- Boston Scientific
- Pharmacosmos

- Boehringer Ingelheim
- Bayer
- Merck Sharp & Dohme

#### 10 INNOVATION EXPERIENCE

10.1 Patents

None

10.2 Other intellectual property rights

None

**10.3 Product development** 

None

10.4 Innovation work in the private sector

None

10.5 Other innovation experience

None

#### 11 ENTREPRENEURSHIP

11.1 Enterprise start-up

None

11.2 Board assignments

None

### 11.3 Other entrepreneurial competence

Founder of the Savarese Cardioconsultancy Ab

12 MENTORSHIP

None

# 13 DISTINCTIONS IN LEADERSHIP, DEVELOPMENT AND COLLABORATION

None

# 14 OTHER MERITS IN LEADERSHIP, DEVELOPMENT AND COLLABORATION

None

#### 15 REFERENCES

Prof. Lars Lund

Cardiology Unit, Department of Medicine, Karolinska Institutet, Stockholm, Sweden

Prof. Francesco Cosentino

Cardiology Unit, Department of Medicine, Karolinska Institutet, Stockholm, Sweden

Prof. Giuseppe Rosano Cardiovascular and Cell Sciences Research Institute, St. George's University, London, UK