



Alireza Raissadati

- Postdoctoral Medical Fellow, Cardiology
- Fellow in Pediatrics - Cardiology

Bio

BIO

Alireza Raissadati, MD, PhD is a fellow in pediatric cardiology at Lucile Packard Children's Hospital, Stanford. He obtained his medical degree, PhD in medicine, and PhD in biotechnology from University of Helsinki. His research focused on population-based long-term outcomes of patients following congenital heart surgery and the role of vascular growth factors and gene vectors as management strategies for heart transplant rejection.

Dr. Raissadati completed his pediatric residency training at Boston Children's Hospital/Harvard Medical School and Boston Medical Center in Boston, MA. His clinical interest lies in treating pediatric patients with heart failure and following heart transplantation. His research is focused on understanding the intricacies of heart transplant rejection to find new therapeutic targets for acute rejection and coronary artery vasculopathy of the heart transplant.

CLINICAL FOCUS

- Fellow
- Pediatric Cardiology
- Heart Transplantation
- Heart Failure
- Coronary Artery Vasculopathy
- Heart Transplant Rejection

HONORS AND AWARDS

- Burroughs Wellcome Fund Scholar, Pediatric Scientist Development Program (2021)
- Best National Doctoral Thesis Award, Finnish Society for Surgery (2017)
- Young Investigator Award, Medical Society of Finland (2017)
- Research grant award, Medical Society of Finland (2016, 2018)
- Young Investigator Award, Association for European Paediatric Cardiology (2016)
- Research grant award, Finnish Medical Association (2015, 2016)
- Research grant award, Pediatric Research Foundation (2015)
- Research grant award, Aarne Koskelo Foundation (2014, 2017)
- Research grant award, Emil Aaltonen Foundation (2014, 2016, 2018, 2022)
- Travel grant award, Helsinki University (2013, 2014)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University Of Helsinki (2018)
- Doctor of Philosophy, University Of Helsinki (2016)
- Lisensiaatti, University Of Helsinki (2014)
- Fellowship, Lucile Packard Children's Hospital/Stanford University , Pediatric Cardiology (2024)
- Residency, Boston Childrens Hospital/Harvard Medical School , Pediatrics (2020)
- PhD, University of Helsinki, Faculty of Biological and Environmental Sciences , Biotechnology (2018)
- PhD, University of Helsinki, Faculty of Medicine , Medicine (2016)
- MD, University of Helsinki, Faculty of Medicine , Medicine (2014)

Publications

PUBLICATIONS

- **Prescription medication use after congenital heart surgery.** *Cardiology in the young*
Raissadati, A., Haukka, J., Pätälä, T., Nieminen, H., Jokinen, E.
2022; 1-8
- **Inhibition of Vascular Endothelial Growth Factor Receptors 1 and 2 Attenuates Natural Killer Cell and Innate Immune Responses in an Experimental Model for Obliterative Bronchiolitis.** *The American journal of pathology*
Krebs, R., Tikkanen, J. M., Raissadati, A., Hollmén, M., Dhaygude, K., Lemström, K. B.
2021
- **Long-term Social Outcomes After Congenital Heart Surgery.** *Pediatrics*
Raissadati, A., Knihtilä, H., Pätälä, T., Nieminen, H., Jokinen, E.
2020; 146 (1)
- **Chronic Disease Burden After Congenital Heart Surgery: A 47-Year Population-Based Study With 99% Follow-Up.** *Journal of the American Heart Association*
Raissadati, A., Haukka, J., Pätälä, T., Nieminen, H., Jokinen, E.
2020; 9 (9): e015354
- **The effect of sildenafil on pleural and peritoneal effusions after the TCPC operation.** *Acta anaesthesiologica Scandinavica*
Koski, T. K., Suominen, P. K., Raissadati, A., Knihtilä, H. M., Ojala, T. H., Salminen, J. T.
2019; 63 (10): 1384-1389
- **Development of Human Leukocyte Antigen (HLA) Antibodies Against Vascular Homograft Donor in Pediatric Heart Transplant Recipients.** *Annals of transplantation*
Jahnukainen, T., Lauronen, J., Raissadati, A., Pihkala, J. I., Ylinen, E., Punttila, J. T., Salminen, J. T., Pätälä, T., Mattila, I. P., Jalanko, H. J.
2019; 24: 454-460
- **Hypoxia-inducible factor controls immunoregulatory properties of myeloid cells in mouse cardiac allografts - an experimental study.** *Transplant international : official journal of the European Society for Organ Transplantation*
Keränen, M. A., Raissadati, A., Nykänen, A. I., Dashkevich, A., Tuuminen, R., Krebs, R., Johnson, R. S., Syrjälä, S. O., Lemström, K. B.
2019; 32 (1): 95-106
- **Outcomes after the Mustard, Senning and arterial switch operation for treatment of transposition of the great arteries in Finland: a nationwide 4-decade perspective.** *European journal of cardio-thoracic surgery : official journal of the European Association for Cardio-thoracic Surgery*
Raissadati, A., Nieminen, H., Sairanen, H., Jokinen, E.
2017; 52 (3): 573-580
- **Vascular Endothelial Growth Factor-B Overexpressing Hearts Are Not Protected From Transplant-Associated Ischemia-Reperfusion Injury.** *Experimental and clinical transplantation : official journal of the Middle East Society for Organ Transplantation*
Raissadati, A., Tuuminen, R., Dashkevich, A., Bry, M., Kivelä, R., Anisimov, A., Syrjälä, S., Arnaudova, R., Rouvinen, E., Keränen, M. A., Krebs, R., Nykänen, A. I., Lemström, et al
2017; 15 (2): 203-212

- **Late Causes of Death After Pediatric Cardiac Surgery: A 60-Year Population-Based Study.** *Journal of the American College of Cardiology*
Raissadati, A., Nieminen, H., Haukka, J., Sairanen, H., Jokinen, E.
2016; 68 (5): 487-498
- **Late outcome after paediatric heart transplantation in Finland.** *Interactive cardiovascular and thoracic surgery*
Raissadati, A., Pihkala, J., Jahnukainen, T., Jokinen, E., Jalanko, H., Sairanen, H.
2016; 23 (1): 18-25
- **Simvastatin pretreatment reduces caspase-9 and RIPK1 protein activity in rat cardiac allograft ischemia-reperfusion.** *Transplant immunology*
Tuuminen, R., Holmström, E., Raissadati, A., Saharinen, P., Rouvinen, E., Krebs, R., Lemström, K. B.
2016; 37: 40-45
- **Increased myeloid cell hypoxia-inducible factor-1 delays obliterative airway disease in the mouse.** *The Journal of heart and lung transplantation : the official publication of the International Society for Heart Transplantation*
Ropponen, J. O., Keränen, M. A., Raissadati, A., Nykänen, A. I., Krebs, R., Lemström, K. B., Tikkanen, J. M.
2016; 35 (5): 671-8
- **Ischemia-Reperfusion Injury Enhances Lymphatic Endothelial VEGFR3 and Rejection in Cardiac Allografts.** *American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons*
Dashkevich, A., Raissadati, A., Syrjälä, S. O., Zarkada, G., Keränen, M. A., Tuuminen, R., Krebs, R., Anisimov, A., Jeltsch, M., Leppänen, V. M., Alitalo, K., Nykänen, A. I., Lemström, et al
2016; 16 (4): 1160-72
- **Platelet-derived Growth Factor-B Protects Rat Cardiac Allografts From Ischemia-reperfusion Injury** *TRANSPLANTATION*
Tuuminen, R., Dashkevich, A., Keranen, M. I., Raissadati, A., Krebs, R., Jokinen, J. J., Arnaudova, R., Rouvinen, E., Yla-Herttuala, S., Nykanen, A. I., Lemstrom, K. B.
2016; 100 (2): 303-313
- **Systemic overexpression of matricellular protein CCN1 exacerbates obliterative bronchiolitis in mouse tracheal allografts.** *Transplant international : official journal of the European Society for Organ Transplantation*
Raissadati, A., Nykänen, A. I., Tuuminen, R., Syrjälä, S. O., Krebs, R., Arnaudova, R., Rouvinen, E., Wang, X., Poller, W., Lemström, K. B.
2015; 28 (12): 1416-25
- **Donor Heart Treatment With COMP-Ang1 Limits Ischemia-Reperfusion Injury and Rejection of Cardiac Allografts.** *American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons*
Syrjälä, S. O., Nykänen, A. I., Tuuminen, R., Raissadati, A., Keränen, M. A., Arnaudova, R., Krebs, R., Koh, G. Y., Alitalo, K., Lemström, K. B.
2015; 15 (8): 2075-84
- **Progress in late results among pediatric cardiac surgery patients: a population-based 6-decade study with 98% follow-up.** *Circulation*
Raissadati, A., Nieminen, H., Jokinen, E., Sairanen, H.
2015; 131 (4): 347-53; discussion 353
- **Angiopoietin-2 inhibition prevents transplant ischemia-reperfusion injury and chronic rejection in rat cardiac allografts.** *American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons*
Syrjälä, S. O., Tuuminen, R., Nykänen, A. I., Raissadati, A., Dashkevich, A., Keränen, M. A., Arnaudova, R., Krebs, R., Leow, C. C., Saharinen, P., Alitalo, K., Lemström, K. B.
2014; 14 (5): 1096-108
- **Ex vivo intracoronary gene transfer of adeno-associated virus 2 leads to superior transduction over serotypes 8 and 9 in rat heart transplants.** *Transplant international : official journal of the European Society for Organ Transplantation*
Raissadati, A., Jokinen, J. J., Syrjälä, S. O., Keränen, M. A., Krebs, R., Tuuminen, R., Arnaudova, R., Rouvinen, E., Anisimov, A., Soronen, J., Pajusola, K., Alitalo, K., Nykänen, et al
2013; 26 (11): 1126-37
- **Cardiac VEGF-B expression decreases along with cardiac allograft unload.** *Journal of cardiac failure*
Raissadati, A., Tuuminen, R.
2012; 18 (11): 879-80