Stanford

Gaspard Pardon

Postdoctoral Research Fellow, Microbiology and Immunology

Bio

HONORS AND AWARDS

- Best Postdoc Poster award, Stanford - China Cardiovascular Research Symposium - Stanford Cardiovascular Institute (CVI) (2017)
- Stanford University Postdoc Hardship Fund award, Stanford University (2017)
- Early Postdoc.Mobility fellowship, Swiss National Science Foundation (2016)
- Finalist for Oustanding Student Paper award, IEEE MEMS 2014 conference, San Francisco (2014)
- Finalist for Outstanding Student Paper award (12 selected out of 909 submissions), IEEE 27th International Conference Micro Electro Mechanical Systems (MEMS) (2014)
- Seed-funding grant (18k$) for patenting and market study., KTH Innovation Holding (2014)
- Travel award in the memory of Nils and Hans Backmark., KTH Royal Institute of Technology, Sweden (2014)
- Travel award in the memory of Nils and Hans Backmark., KTH Royal Institute of Technology, Sweden (2012)
- 1st rank at the Swiss University National Championship in Slalom and Giant Slalom alpine skiing, Swiss Academic Ski Club, Swiss-Ski (2008)
- 18th rank at the Swiss National Championship in Slalom alpine skiing, Swiss-Ski (2003)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Head of competition, Swiss Academic Ski Club (SAS) (2005 - 2007)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Royal Institute of Technology (2014)
- Master of Science, Ecole Polytechnique Federale Lausanne (2008)
- Bachelor of Science, Ecole Polytechnique Federale Lausanne (2006)

STANFORD ADVISORS

- Helen Blau, Postdoctoral Faculty Sponsor
- Helen Blau, Postdoctoral Research Mentor

PATENTS

- Gaspard Pardon, Tommy Haraldsson, Wouter Van Der Wijngaart. "United States Patent US20150203687A1 Modification of polymer surface properties", Gaspard Pardon, Tommy Haraldsson, Wouter Van Der Wijngaart

LINKS

- My Lab Site: http://blaulab.stanford.edu/
- My Previous Lab Site: https://microsystems.stanford.edu/

- My Personal Website: http://gpardon.weebly.com

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

To advance our understanding of genetic cardiomyopathies, we need new tools to study how contractile & cellular function are affected by specific gene mutations.

Using cardiomyocytes derived from human induced pluripotent stem cell (hiPSC-CM) as in vitro model, my research focuses on understanding how the microenvironment affect genetic heart disease progression.

For this, I develop novel analytical platforms using microengineering and biomaterial technologies.

LAB AFFILIATIONS

- Helen Blau, Blau lab (9/1/2018)
- Beth Pruitt, Microsystems and Mechanobiology lab (9/1/2016 - - 8/31/2018)

Publications

PUBLICATIONS

- **Engineering hiPSC cardiomyocyte in vitro model systems for functional and structural assessment** *PROGRESS IN BIOPHYSICS & MOLECULAR BIOLOGY*
  Schroer, A., Pardon, G., Castillo, E., Blair, C., Pruitt, B.
  2019; 144: 3–15
- **Reaction injection molding of hydrophilic-in-hydrophobic femtolitre-well arrays.** *Microsystems & nanoengineering*
  Zandi Shafagh, R., Decrop, D., Ven, K., Vanderbeke, A., Hanusa, R., Breukers, J., Pardon, G., Haraldsson, T., Lammertyn, J., van der Wijngaart, W.
  2019; 5: 25
- **Engineering hiPSC cardiomyocyte invitro model systems for functional and structural assessment.** *Progress in biophysics and molecular biology*
  Schroer, A., Pardon, G., Castillo, E., Blair, C., Pruitt, B.
  2018
- **Big bottlenecks in cardiovascular tissue engineering** *COMMUNICATIONS BIOLOGY*
  Huang, N. F., Serpooshan, V., Morris, V. B., Sayed, N., Pardon, G., Abilez, O. J., Nakayama, K. H., Pruitt, B. L., Wu, S. M., Yoon, Y., Zhang, J., Wu, J. C.
  2018; 1
- **Big bottlenecks in cardiovascular tissue engineering.** *Communications biology*
  Huang, N. F., Serpooshan, V., Morris, V. B., Sayed, N., Pardon, G., Abilez, O. J., Nakayama, K. H., Pruitt, B. L., Wu, S. M., Yoon, Y., Zhang, J., Wu, J. C.
  2018; 1: 199
- **Sampling and detection of airborne influenza virus towards point-of-care applications.** *PloS one*
  Ladhani, L., Pardon, G., Meeuws, H., van Wesenbeeck, L., Schmidt, K., Stuyver, L., van der Wijngaart, W.
  2017; 12 (3): e0174314
- **Single-Step Imprinting of Femtoliter Microwell Arrays Allows Digital Bioassays with Attomolar Limit of Detection.** *ACS applied materials & interfaces*
  Decrop, D., Pardon, G., Brancato, L., Kil, D., Zandi Shafagh, R., Kokalj, T., Haraldsson, T., Puers, R., van der Wijngaart, W., Lammertyn, J.
  2017; 9 (12): 10418–26
- **Off-stoichiometry improves the photostructuring of thiol-enes through diffusion-induced monomer depletion.** *Microsystems & nanoengineering*
  Hillmering, M., Pardon, G., Vastesson, A., Supekar, O., Carlborg, C. F., Brandner, B. D., van der Wijngaart, W., Haraldsson, T.
  2016; 2: 15043
- **Pt-Al2O3 dual layer atomic layer deposition coating in high aspect ratio nanopores.** *Nanotechnology*
  Pardon, G., Gatty, H. K., Stemme, G., van der Wijngaart, W., Roxhed, N.
  2013; 24 (1): 015602