

## Dr. Patrick Levi Journey

### Contact

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<i>Years</i>	<i>Degree / Certificate</i>	<i>Institution</i>
August 2016- August 2019	Postdoctoral Fellow	Oregon Health & Science University
August 2011- August 2015	PhD. Mechanical Engineering	The University of Texas at Austin
August 2009 - August 2011	Master of Science in Engineering	The University of Texas at Austin
August 2005- May 2009	Bachelor of Science in Mechanical Engineering	The University of Portland

<i>Years</i>	<i>Position</i>	<i>Institution</i>
August 2019- Present	Assistant Professor of Biomedical Engineering	San José State University Cardiovascular Disease Department of Biomedical Engineering,

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## Advising Experience (See also: individuals in Research Experience section)

1. Research advisor for eleven undergraduate and graduate students. – Fall 2019
  - a. Competitive Research Awards:
    - i. Undergraduate Research Grant (2X) – Fall 2019
    - ii. Davidson Research Scholar (2X) – Fall 2019
    - iii. Professional Development Grant – Fall 2019
2. Undergraduate Student Mentor, American Heart Association Undergraduate Fellow, Oregon Health & Science University, Summer 2018, 2019
  - a. *Carlos Marquez*, undergraduate summer research assistant in bioengineering
    - i. *Poster at BMES:* 'Determination of Smooth Muscle Cell Growth on Reactive Ion Plasma Treated Polyvinyl Alcohol Biomaterials'
3. Undergraduate Student Mentor, MJ Murdock Charitable Trust, Oregon Health & Science University, Summer 2017
  - a. *Rachel Hills*, mechanical engineering undergraduate student interested in graduate studies in Biomedical Engineering Murdock Scholars (<http://www.ohsu.edu/xd/outreach/find-highered.cfm>)
4. Undergraduate Student Mentor, BUILD EXITO, Oregon Health & Science University, 2017
  - a. *Amy Kuper*, undergraduate student interested in becoming an MDExito, (<https://www.pdx.edu/exito>)
5. Biotech Advisor (BME 550-Biomedical Engineering & Society Capstone), University of Portland, Spring 2017  
Served as the primary advisor to MSBME candidates on their capstone project. My primary duties were weekly meetings and progress reports on data gathering, experimental design, and manufacturing of an access port device.

## Service

- x Manuscript Reviewer (Journal of Controlled Release (2019-present))
- x Manuscript Reviewer (ACS Biomaterials Science & Engineering (2019-present))
- x Abstract Reviewer: BMES (2017-present)
- x Manuscript Reviewer (Open Life Science (2018))
- x Lead mechanical engineer and Spanish translator for Engineers Without Borders, University of Portland chapter.
  - o Agua Negra, Guatemala (2009)
  - o Guadalupe Carney, Honduras (2009)
- x Graduates Linked with Undergraduates in Engineering (sophomore Chemical Engineering student (2010-2011))
- x Colombian Food Bank Foundation, Vice President of International Relations (2015-present)
- x Fundación Barquitos de Papel, Asesor in Tolú, Colombia (2015)
- x Biomedical Engineering Society abstract reviewer for 2017 and 2018 annual meetings
- x Invited talk: The Nanoworld and Youth (Albuquerque Academy, Albuquerque, NM (2017))

- x Biomedical Engineering Advisory Board Member at The University of Portland (2017-2018)
- x Adjunct Faculty Member, The University of Portland (2017-2018)
- x NIH T-32 Postdoctoral Fellow (2016-2018)
- x David Bruton, Jr. Graduate School Fellowship (2013-2014)
- x NSF Graduate Research Fellowship Honorable Mention (2010)
- x Graduate Presidential Scholar (2010)
- x The Outstanding Mechanical Engineering Student (Donald P. Shiley School of Engineering, 2009)
- x Karel and Marta Tietze Endowed Scholar (2005-2009)
- x University of Portland Men's Soccer Cumulative GPA Award (2006-2008)
- x NCAA All-West Region Academic All American (2007 and 2008)
- x University of Portland Dean's List (5X)
- x West Coast Conference Commissioner's Honor Roll (4X)
- x Presidential Scholarship (2005-2009)
- x AP Scholar with Distinction (2005)

- x English (Native Speaker)
- x Spanish (Fluent)

1. Journey, P., Glynn, J., Dykan, I., Hagen, M., Kaul, Wampler, R., Hiss, M., Giraud, G., Characterization of a Second Generation Isolated Rotary Total Artificial Heart Circulation: Heart Failure (submitted)
2. Journey, P.\*; Parthiban, S. P.\*; Athirasala, A., Franco, Tahayeri, A., Menezes, P., Bertassoni, L., (2019) '3D Bioprinting of Blood Vessels and Vascular Networks: Progress and Challenges Toward Biofabrication of Functional Vascularized Tissues and Organoids Emerging Technologies for Biofabrication and Biomanufacturing World Scientific Publishing. (2019)
3. Journey, P., Anderson, D., Pohan, G., Yim, E., Hirata, M., Reactive ion plasma modification of poly(vinyl-alcohol) increases primary endothelial cell affinity and reduces thrombogenicity Macromolecular Bioscience 18(9) (2018)
4. Journey, P., Agarwal, R., Singh, V., Roy, K., Srinivasan, S.V., Shi, L., Unique Size and Shape-Dependent Uptake Behaviors of Non-Spherical Nanoparticles by Endothelial Cells due to a Shearing Flow Journal of Controlled Release 245, 170–176 (2017).
5. Journey, P., Agarwal, R., Roy, K., Srinivasan, S.V., Shi, L., Size-Dependent Nanoparticle Uptake by Endothelial Cells in Capillary Flow System

6.

9. Journey P, Agarwal R., Singh V., Roy K, Sreenivasan S.V., Shi L., "The Effect of Nanoparticle Size on Margination and Adhesion Propensity in Artificial Micro-Capillaries" ASME Micro/Nanoscale Heat and Mass Transfer International Conference 2012, Atlanta, GA. Podium.
10. Journey P, Caldorera-Moore M., Singh V., Agarwal R., Marshall S., Sreenivasan S.V., Roy K., LaBrake D., Shi L., "High Throughput Nanoimprint Manufacturing of Shape-Specific, Stimuli-Responsive Polymeric Nanocarriers for Drug Imaging Agent Delivery" NSF CMMI Research and Innovation Conference 4-7 January, 2011, Atlanta, GA. Poster
11. Journey P, Singh V., Agarwal R., Marshall S., Caldorera-Moore M., Sreenivasan S.V., Roy K., Shi L., "Nanoimprint Manufacturing of Shape-Specific Stimuli-Responsive Polymeric Nanocarriers for Drug Delivery in Cancer Therapy" The University of Texas at Austin Graduate recruitment Poster session March, 2011 Austin, TX. Poster (Best poster award)
12. Anderson D., Journey P, Cutiongco M., Pohan G., Chevallerier Mantovani D., Yim E., Hinds M., Reactive ion surface modification of vascular materials enhances endothelialization without promoting thrombosis. American Heart Association Basic Cardiovascular Scientific Sessions, Portland, OR. May 2017. Poster
13. Agarwal R., Singh V., Marshall S., Journey P, Shi L., Sreenivasan S.V., Roy K. "Shape Matters: Effect of Polymeric Nanocarriers Shape on Hepatic and Endothelial Cell Lines" Society of Controlled Release July 20-24 2011 Annual Meeting, Honolulu, HI. Poster.
14. Agarwal R., Singh V., Journey P, Shi L., Sreenivasan S.V., Roy K. "Geometry Matters: Cellular Uptake of Nanoscale Drug Carriers is Highly Dependent on Particle Size and Shape" Society for Biomaterials Apr 10-13 2011 Annual Meeting, Boston, MA. Podium
15. Agarwal R., Singh V., Marshall S., Journey P, Shi L., Sreenivasan S.V., Roy K. "Shape Matters: A Comparison of Nano-Discoids and Nano-Cylinders for Intracellular Drug Delivery" Biomedical Engineering Society Oct 24-27 2011 Annual Meeting, Atlanta, GA. Poster.
16. Agarwal R., Singh V., Marshall S., Journey P, Shi L., Sreenivasan S.V., Roy K. "In Vitro Characterization of Shape-Specific Nano-Hydrogels" Society For Biomaterials Fall Symposium Oct 4-6 2012 Annual Meeting, New Orleans, LA, Poster.
17. Agarwal R., Moore M.C., Singh V., Marshall S., Journey P, Shi L., Sreenivasan S.V., Roy K. "Nanoimprint Lithography to Study Effect of Shape of Nanocarriers for Drug Delivery." Biomedical Engineering Society 2011 Annual Meeting, Hartford, CT. Podium.
18. Caldorera-Moore M.E., Kang S., Singh V., Moore Z., Agarwal R., Journey P, Huang R., Sreenivasan S., Shi L., Roy K. "Characterization of nanoimprinted shape-specific, disease-responsive drug carriers." Biomedical Engineering Society 2010 Annual Meeting, Austin, TX. Poster.

References Available Upon Request
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