Stanford

Shobha Regmi

Postdoctoral Scholar, Radiology

Bio

BIO

Research interest: Mesenchymal stem cell transplantation, Stem cell biology, Islet transplantation, Biomaterials, Drug delivery

HONORS AND AWARDS

- Young Scientist Investigator Award, The Transplantation Society (TTS) and Cell Transplant and Regenerative Medicine Society (CTRMS) (2019)
- Yeungnam University-Foreign Student Scholarship, Yeungnam University (2015)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, The Transplantation Society (2019 - present)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Yeungnam University (2020)
- Bachelor of Science, Tribhuban University (2014)

STANFORD ADVISORS

- Avnesh Thakor, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Enhanced viability and function of mesenchymal stromal cell spheroids is mediated via autophagy induction.** *Autophagy*
  Regmi, S., Raut, P. K., Pathak, S., Shrestha, P., Park, P., Jeong, J.
  2020
- **Intraportally delivered stem cell spheroids localize in the liver and protect hepatocytes against GalN/LPS-induced fulminant hepatic toxicity.** *Stem cell research & therapy*
  Regmi, S., Pathak, S., Thanh, T. P., Nguyen, T. T., Sung, J., Yook, S., Kim, J. O., Yong, C. S., Choi, I., Doh, K., Park, P., Park, J., Seo, et al
  2019; 10 (1): 230
- **Mesenchymal Stem Cell Capping on ECM-Anchored Caspase Inhibitor-Loaded PLGA Microspheres for Intraperitoneal Injection in DSS-Induced Murine Colitis** *SMALL*
  Pathak, S., Regmi, S., Shrestha, P., Choi, I., Doh, K., Jeong, J.
  2019; 15 (23): e1901269
- **Inflammation-triggered local drug release ameliorates colitis by inhibiting dendritic cell migration and Th1/Th17 differentiation.** *Journal of controlled release : official journal of the Controlled Release Society*
  Regmi, S. n., Pathak, S. n., Nepal, M. R., Shrestha, P. n., Park, J. n., Kim, J. O., Yong, C. S., Choi, D. Y., Chang, J. H., Jeong, T. C., Orive, G. n., Yook, S. n., Jeong, et al

2019

- **Engineered islet cell clusters transplanted into subcutaneous space are superior to pancreatic islets in diabetes** *FASEB JOURNAL*
  Pathak, S., Regmi, S., Gupta, B., Tung Thanh Pham, Yong, C., Kim, J., Yook, S., Kim, J., Park, M., Bae, Y., Jeong, J.
  2017; 31 (11): 5111–21

- **Particulate-Based Single-Dose Local Immunosuppressive Regimen for Inducing Tolerogenic Dendritic Cells in Xenogeneic Islet Transplantation.** *Advanced healthcare materials*
  Pathak, S., Acharya, S., Regmi, S., Shrestha, P., You, Z., Bae, Y. K., Park, M. H., Yook, S., Kim, J., Park, S. Y., Jeong, D., Yong, C. S., Kim, et al
  2020: e2001157

- **Single-dose intraperitoneal delivery of FK506-encapsulated polymeric microspheres for the alleviation of murine colitis** *JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY*
  Pathak, S., Regmi, S., Nepal, M., Shrestha, P., Choi, J., Yook, S., Jeong, J.
  2020; 91: 121–28

- **Local release of NECA (5'-(N-ethylcarboxamido)adenosine) from implantable polymeric sheets for enhanced islet revascularization in extrahepatic transplantation site.** *Journal of controlled release : official journal of the Controlled Release Society*
  Nguyen, T. T., Emami, F., Yook, S., Nguyen, H. T., Pham, T. T., Pathak, S., Regmi, S., Kim, J. O., Yong, C. S., Kim, J., Jeong, J.
  2020

- **Targeted delivery of doxorubicin for the treatment of bone metastasis from breast cancer using alendronate-functionalized graphene oxide nanosheets** *JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY*
  Tung Thanh Pham, Hanh Thuy Nguyen, Cao Dai Phung, Pathak, S., Regmi, S., Ha, D., Kim, J., Yong, C., Kim, S., Choi, J., Yook, S., Park, J., Jeong, J.
  2019; 76: 310–17

- **Mesenchymal stem cell therapy for the treatment of inflammatory diseases: Challenges, opportunities, and future perspectives.** *European journal of cell biology*
  Regmi, S. n., Pathak, S. n., Kim, J. O., Yong, C. S., Jeong, J. H.
  2019

- **Hyaluronic acid-capped compact silica-supported mesoporous titania nanoparticles for ligand-directed delivery of doxorubicin** *ACTA BIOMATERIALIA*
  Gupta, B., Poudel, B., Ruttala, H., Regmi, S., Pathak, S., Gautam, M., Jin, S., Jeong, J., Choi, H., Ku, S., Yong, C., Kim, J.
  2018; 80: 364–77

- **Polyamino Acid Layer-by-Layer (LbL) Constructed Silica-Supported Mesoporous Titania Nanocarriers for Stimuli-Responsive Delivery of microRNA 708 and Paclitaxel for Combined Chemotherapy** *ACS APPLIED MATERIALS & INTERFACES*
  Gupta, B., Ruttala, H., Poudel, B., Pathak, S., Regmi, S., Gautam, M., Poudel, K., Sung, M., Ou, W., Jin, S., Jeong, J., Ku, S., Choi, et al
  2018; 10 (29): 24392–405

- **Polymeric microsphere-facilitated site-specific delivery of quercetin prevents senescence of pancreatic islets in vivo and improves transplantation outcomes in mouse model of diabetes** *ACTA BIOMATERIALIA*
  Pathak, S., Regmi, S., Nguyen, T., Gupta, B., Gautam, M., Yong, C., Kim, J., Son, Y., Kim, J., Park, M., Bae, Y., Park, S., Jeong, et al
  2018; 75: 287–99

- **Paclitaxel and Erlotinib-co-loaded Solid Lipid Core Nanocapsules: Assessment of Physicochemical Characteristics and Cytotoxicity in Non-small Cell Lung Cancer** *PHARMACEUTICAL RESEARCH*
  Gupta, B., Poudel, B., Regmi, S., Pathak, S., Ruttala, H., Gautam, M., An, G., Jeong, J., Choi, H., Yong, C., Kim, J.
  2018; 35 (5): 96

- **Tissue adhesive FK506-loaded polymeric nanoparticles for multi-layered nano-shielding of pancreatic islets to enhance xenograft survival in a diabetic mouse model** *BIOMATERIALS*
  Tung Thanh Pham, Tiep Tien Nguyen, Pathak, S., Regmi, S., Hanh Thuy Nguyen, Tuan Hiep Tran, Yong, C., Kim, J., Park, P., Park, M., Bae, Y., Choi, J., Byun, Y., Ahn, C., Yook, et al
  2018; 154: 182–96

- **Single synchronous delivery of FK506-loaded polymeric microspheres with pancreatic islets for the successful treatment of streptozocin-induced diabetes in mice** *DRUG DELIVERY*
  Pathak, S., Regmi, S., Gupta, B., Poudel, B. K., Tung Thanh Pham, Yong, C., Kim, J., Kim, J., Park, M., Bae, Y., Yook, S., Ahn, C., Jeong, J.
  2017; 24 (1): 1350–59

- **Folate receptor-targeted hybrid lipid-core nanocapsules for sequential delivery of doxorubicin and tanespimycin** *COLLOIDS AND SURFACES B-BIOINTERFACES*
  Gupta, B., Pathak, S., Poudel, B., Regmi, S., Ruttala, H., Gautam, M., Lee, J., Jeong, J., Choi, H., Yong, C., Kim, J.
  2017; 155: 83–92

- **A three-dimensional assemblage of gingiva-derived mesenchymal stem cells and NO-releasing microspheres for improved differentiation** *INTERNATIONAL JOURNAL OF PHARMACEUTICS*
  Regmi, S., Cao, J., Pathak, S., Gupta, B., Poudel, B., Pham Thanh Tung, Yook, S., Park, J., Yong, C., Kim, J., Yoo, J., Jeong, J.
  2017; 520 (1-2): 163–72

- **Development of Bioactive PEGylated Nanostructured Platforms for Sequential Delivery of Doxorubicin and Imatinib to Overcome Drug Resistance in Metastatic Tumors** *ACS APPLIED MATERIALS & INTERFACES*
  Gupta, B., Ramasamy, T., Poudel, B., Pathak, S., Regmi, S., Choi, J., Son, Y., Thapa, R., Jeong, J., Kim, J., Choi, H., Yong, C., Kim, et al
  2017; 9 (11): 9280–90

- **Superiority of three-dimensional stem cell clusters over monolayer culture: An archetype to biological application** *MACROMOLECULAR RESEARCH*
  Regmi, S., Jeong, J.
  2016; 24 (12): 1037–46

- **Hybrid Congregation of Islet Single Cells and Curcumin-Loaded Polymeric Microspheres as an Interventional Strategy to Overcome Apoptosis Associated with Pancreatic Islets Transplantation** *ACS APPLIED MATERIALS & INTERFACES*
  Pathak, S., Regmi, S., Gupta, B., Poudel, B. K., Tung Thanh Pham, Kim, J., Park, P., Yong, C., Kim, J., Bae, Y., Kim, S., Jeong, J.
  2016; 8 (39): 25702–13

- **Preparation of High-Payload, Prolonged-Release Biodegradable Poly(lactic-co-glycolic acid)-Based Tacrolimus Microspheres Using the Single-Jet Electrospray Method** *CHEMICAL & PHARMACEUTICAL BULLETIN*
  Pathak, S., Gupta, B., Poudel, B., Tuan Hiep Tran, Regmi, S., Tung Thanh Pham, Thapa, R., Kim, M., Yong, C., Kim, J., Jeong, J.
  2016; 64 (2): 171–78