



Jayakumar Rajadas

Assistant Professor (Research) of Medicine (Pulmonary and Critical Medicine)
Medicine - Pulmonary, Allergy & Critical Care Medicine

 NIH Biosketch available Online

Bio

ACADEMIC APPOINTMENTS

- Assistant Professor (Research), Medicine - Pulmonary, Allergy & Critical Care Medicine
- Member, Cardiovascular Institute
- Member, Wu Tsai Human Performance Alliance
- Member, Maternal & Child Health Research Institute (MCHRI)

ADMINISTRATIVE APPOINTMENTS

- Adjunct Full Professor (WOS), Department of Bioengineering and Therapeutic Sciences, School of Pharmacy, UCSF, (2017- present)
- Founding Director, Advanced Drug Delivery and Regenerative Biomaterials Laboratory, (2020- present)
- Founding Director, Biomaterials and Advanced Drug Delivery Center, (2007-2020)

HONORS AND AWARDS

- SPARK award, Stanford (2009, 2011, 2012,2013, 2014,2019)
- Seed grant, CVI , Stanford (2014, 2017)
- Young Scientist Award in Chemistry, Council of Scientific and Industrial Research, India (1996)
- TANSA Award, Government of Tamil Nadu, India (1999)

PROFESSIONAL EDUCATION

- M.S, University of Madras , Chemistry (1983)
- Ph.D, Indian Institute of Technology , Biophysical Chemistry (1990)

LINKS

- ADDReB Lab website: <http://bioadd.stanford.edu/>

Teaching

COURSES

2024-25

- Drug Development: Key Issues in Regulation, Benefit vs. Risk, and Commercialization: MED 227 (Aut)
- Introduction to Drug Development: A Guide to Therapeutic Innovation: MED 225 (Spr)

2023-24

- Drug Development: Key Issues in Regulation, Benefit vs. Risk, and Commercialization: MED 227 (Aut)
- Introduction to Drug Development: A Guide to Therapeutic Innovation: MED 225 (Spr)

2022-23

- Drug Development: From a Concept to the Clinic: MED 225 (Spr)
- Drug Development: Key Issues in Regulation, Benefit vs. Risk, and Commercialization: MED 227 (Aut)

2021-22

- Drug Development: From a Concept to the Clinic: MED 225 (Spr)
- Drug Development: Key Issues in Regulation, Benefit vs. Risk, and Commercialization: MED 227 (Aut)

Professional

PROFESSIONAL INTERESTS

Dr. Rajadas is currently working on the molecular mechanisms of neurodegenerative disorders caused by aggregated tau and Abeta proteins that are synergistically involved in Alzheimer's disease development. He uses various biophysical approaches such as AFM, fluorescence, and NMR to understand the structural details of these two proteins' neurotoxic oligomeric forms.

For the past 10 years, our lab has also been involved in transforming biophysical ideas into biomaterial and drug delivery technologies. These technologies include microencapsulation of drugs, vascular grafts, bio-implants, development of small molecule and protein-based drugs, regeneration of nerve and cardiovascular tissues, and wound healing applications.

WORK EXPERIENCE

- Founding Director - Advanced Drug Delivery and Regenerative Biomaterials Laboratory, Stanford Cardiovascular Institute (2020 - present)
- Assistant Director - Cardiovascular Pharmacology, Stanford school of medicine (2013 - present)
- Founding Director - Biomaterials and Advanced Drug Delivery Lab, Stanford School of Medicine (2009 - 2019)
- Instructor - Neurology and Neurological Sciences, Stanford University School of Medicine (2007 - 2012)
- Consulting Professor - Department of Chemical Engineering, Stanford University (2005 - 2007)
- Visiting Professor - Department of Biological Sciences, Stanford University (2003 - 2005)

Publications

PUBLICATIONS

- **Advances in CRISPR-Cas systems for epigenetics.** *Progress in molecular biology and translational science*
Ilyas, M., Shah, Q., Gul, A., Ibrahim, H., Fatima, R., Babar, M. M., Rajadas, J.
2024; 208: 185-209
- **Current progress in CRISPR-Cas systems for cancer.** *Progress in molecular biology and translational science*
Fatima, H., Raja, H. A., Amir, R., Gul, A., Babar, M. M., Rajadas, J.
2024; 208: 211-229
- **Intranasal delivery of liposome encapsulated flavonoids ameliorates l-DOPA induced dyskinesia in hemiparkinsonian mice.** *Biomaterials*
Ahmed, M. R., Inayathullah, M., Morton, M., Pothineni, V. R., Kim, K., Ahmed, M. S., Babar, M. M., Rajadas, J.
2024; 311: 122680
- **Drug repurposing for bacterial infections.** *Progress in molecular biology and translational science*
Ilyas, M., Latif, M. S., Gul, A., Babar, M. M., Rajadas, J.
2024; 207: 1-21

- **P66 is a bacterial mimic of CD47 that binds the anti-phagocytic receptor SIRP β and facilitates macrophage evasion by *Borrelia burgdorferi*.** *bioRxiv : the preprint server for biology*
Tal, M. C., Hansen, P. S., Ogasawara, H. A., Feng, Q., Volk, R. F., Lee, B., Casebeer, S. E., Blacker, G. S., Shoham, M., Galloway, S. D., Sapiro, A. L., Hayes, B., Torrez Dulgeroff, et al
2024
- **Computational biology approaches for drug repurposing.** *Progress in molecular biology and translational science*
Waseem, T., Rajput, T. A., Mushtaq, M. S., Babar, M. M., Rajadas, J.
2024; 205: 91-109
- **Development of chitosan based β -carotene mucoadhesive formulation for skin cancer treatment.** *International journal of biological macromolecules*
Azhar, F., Naureen, H., Shahnaz, G., Hamdani, S. D., Kiani, M. H., Khattak, S., Manna, M. K., Babar, M. M., Rajadas, J., Rahdar, A., Díez-Pascual, A. M.
2023: 126659
- **Designing of gradient scaffolds and their applications in tissue regeneration.** *Biomaterials*
Pattnaik, A., Sanket, A. S., Pradhan, S., Sahoo, R., Das, S., Pany, S., Douglas, T. E., Dandela, R., Liu, Q., Rajadas, J., Pati, S., De Smedt, S. C., Braeckmans, et al
2023; 296: 122078
- **Oral hymecromone decreases hyaluronan in human study participants.** *The Journal of clinical investigation*
Rosser, J. I., Nagy, N., Goel, R., Kaber, G., Demirdjian, S., Saxena, J., Bollyky, J. B., Frymoyer, A. R., Pacheco-Navarro, A. E., Burgener, E. B., Rajadas, J., Wang, Z., Arbach, et al
2022; 132 (9)
- **Development of mucoadhesive adapalene gel for biotherapeutic delivery to vaginal tissue.** *Frontiers in pharmacology*
Afzaal, H., Shahiq-Uz-Zaman, Saeed, A., Hamdani, S. D., Raza, A., Gul, A., Babar, M. M., Rajadas, J.
2022; 13: 1017549
- **A neurovascular-unit-on-a-chip for the evaluation of the restorative potential of stem cell therapies for ischaemic stroke.** *Nature biomedical engineering*
Lyu, Z., Park, J., Kim, K., Jin, H., Wu, H., Rajadas, J., Kim, D., Steinberg, G. K., Lee, W.
2021
- **Development of Vancomycin Delivery Systems Based on Autologous 3D Platelet-Rich Fibrin Matrices for Bone Tissue Engineering.** *Biomedicines*
Dubnika, A., Egle, K., Skrinda-Melne, M., Skadins, I., Rajadas, J., Salma, I.
2021; 9 (7)
- **Development of Vancomycin Delivery Systems Based on Autologous 3D Platelet-Rich Fibrin Matrices for Bone Tissue Engineering** *BIOMEDICINES*
Dubnika, A., Egle, K., Skrinda-Melne, M., Skadins, I., Rajadas, J., Salma, I.
2021; 9 (7)
- **Adipose-derived stromal cells seeded in pullulan-collagen hydrogels improve healing in murine burns.** *Tissue engineering. Part A*
Barrera, J., Trotsyuk, A., Maan, Z. N., Bonham, C. A., Larson, M. R., Mittermiller, P. A., Henn, D., Chen, K., Mays, C. J., Mittal, S., Mermin-Bunnell, A. M., Sivaraj, D., Jing, et al
2021
- **Disrupting biological sensors of force promotes tissue regeneration in large organisms.** *Nature communications*
Chen, K., Kwon, S. H., Henn, D., Kuehlmann, B. A., Tevlin, R., Bonham, C. A., Griffin, M., Trotsyuk, A. A., Borrelli, M. R., Noishiki, C., Padmanabhan, J., Barrera, J. A., Maan, et al
2021; 12 (1): 5256
- **Electrophysiological Characterization of Glioma using a Biomimetic Spheroid Model**
Kim, K., Tercan, S., Baday, M., Mahaney, K. B., Recht, L. D., Rajadas, J., Patel, C. B., IEEE
IEEE.2021: 86-89
- **Association of serum allopregnanolone with restricted and repetitive behaviors in adult males with autism.** *Psychoneuroendocrinology*
Chew, L., Sun, K. L., Sun, W., Wang, Z., Rajadas, J., Flores, R. E., Arnold, E., Jo, B., Fung, L. K.
2020; 123: 105039
- **Integrated Ca²⁺ flux and AFM force analysis in human iPSC-derived cardiomyocytes.** *Biological chemistry*
Malkovskiy, A. V., Ignatyeva, N., Dai, Y., Hasenfuss, G., Rajadas, J., Ebert, A.
2020

- **The Effect of Ethanol Consumption on Composition and Morphology of Femur Cortical Bone in Wild-Type and ALDH2*2-Homozygous Mice.** *Calcified tissue international*
Malkovskiy, A. V., Van Wassenhove, L. D., Goltsev, Y., Osei-Sarfo, K., Chen, C., Efron, B., Gudas, L. J., Mochly-Rosen, D., Rajadas, J.
2020
- **Repurposing Disulfiram (Tetraethylthiuram Disulfide) as a Potential Drug Candidate against *Borrelia burgdorferi* In Vitro and In Vivo.** *Antibiotics (Basel, Switzerland)*
Potula, H. S., Shahryari, J., Inayathullah, M., Malkovskiy, A. V., Kim, K., Rajadas, J.
2020; 9 (9)
- **Dendritic Cells as Targets for Biomaterial-Based Immunomodulation.** *ACS biomaterials science & engineering*
Eslami-Kaliji, F., Sarafbidad, M., Rajadas, J., Mohammadi, M. R.
2020; 6 (5): 2726-2739
- **Dendritic Cells as Targets for Biomaterial-Based Immunomodulation** *ACS BIOMATERIALS SCIENCE & ENGINEERING*
Eslami-Kaliji, F., Sarafbidad, M., Rajadas, J., Mohammadi, M.
2020; 6 (5): 2726-39
- **Azlocillin can be the potential drug candidate against drug-tolerant *Borrelia burgdorferi sensu stricto* JLB31.** *Scientific reports*
Pothineni, V. R., Potula, H. S., Ambati, A., Mallajosyula, V. V., Sridharan, B., Inayathullah, M., Ahmed, M. S., Rajadas, J.
2020; 10 (1): 3798
- **Amyloid protein aggregates: new clients for mitochondrial energy production in the brain?** *The FEBS journal*
Sivanesan, S., Chang, E., Howell, M. D., Rajadas, J.
2020
- **Upregulation of CD47 Is a Host Checkpoint Response to Pathogen Recognition.** *mBio*
Tal, M. C., Torrez Dulgeroff, L. B., Myers, L. n., Cham, L. B., Mayer-Barber, K. D., Bohrer, A. C., Castro, E. n., Yiu, Y. Y., Lopez Angel, C. n., Pham, E. n., Carmody, A. B., Messer, R. J., Gars, et al
2020; 11 (3)
- **Pharmacological antagonism of histamine H2R ameliorated L-DOPA-induced dyskinesia via normalization of GRK3 and by suppressing FosB and ERK in PD.** *Neurobiology of aging*
Ahmed, M. R., Jayakumar, M., Ahmed, M. S., Zamaleeva, A. I., Tao, J., Li, E. H., Job, J. K., Pittenger, C., Ohtsu, H., Rajadas, J.
2019; 81: 177-89
- **4-Methylumbelliferyl glucuronide contributes to hyaluronan synthesis inhibition** *JOURNAL OF BIOLOGICAL CHEMISTRY*
Nagy, N., Gurevich, I., Kuipers, H. F., Ruppert, S. M., Marshall, P. L., Xie, B. J., Sun, W., Malkovskiy, A. V., Rajadas, J., Grandoch, M., Fischer, J. W., Frymoyer, A. R., Kaber, et al
2019; 294 (19): 7864-77
- **Adenosine and hyaluronan promote lung fibrosis and pulmonary hypertension in combined pulmonary fibrosis and emphysema** *DISEASE MODELS & MECHANISMS*
Collum, S. D., Molina, J. G., Hanmandlu, A., Bi, W., Pedroza, M., Mertens, T. J., Wareing, N., Wei, W., Wilson, C., Sun, W., Rajadas, J., Bollyky, P. L., Philip, et al
2019; 12 (5)
- **TOPICAL FOCAL ADHESION KINASE INHIBITOR PROMOTES SKIN REGENERATION AND SCAR PREVENTION IN A PRECLINICAL PORCINE MODEL**
Kwon, S., Kuehlmann, B., Dohi, T., Trotsyuk, A. A., Hu, M. S., Inayathullah, M., Rajadas, J., Longaker, M. T., Gurtner, G. C.
WILEY.2019: A11-A12
- **BIOMIMETIC ADIPOSE STEM CELL DRESSING FOR SKIN REGENERATION**
Trotsyuk, A., Bonham, C. A., Rodrigues, M., Mittermiller, P., Rajadas, J., Inayathullah, M., Gurtner, G.
WILEY.2019: A4
- **4-Methylumbelliferyl glucuronide contributes to hyaluronan synthesis inhibition.** *The Journal of biological chemistry*
Nagy, N., Gurevich, I., Kuipers, H. F., Ruppert, S. M., Marshall, P. L., Xie, B. J., Sun, W., Malkovskiy, A. V., Rajadas, J., Grandoch, M., Fischer, J. W., Frymoyer, A. R., Kaber, et al
2019

- **Fidgetin-Like 2 siRNA Enhances the Wound Healing Capability of a Surfactant Polymer Dressing.** *Advances in wound care*
O'Rourke, B. P., Kramer, A. H., Cao, L. L., Inayathullah, M., Guzik, H., Rajadas, J., Nosanchuk, J. D., Sharp, D. J.
2019; 8 (3): 91-100
- **Anti-hyperlipidaemic effects of synthetic analogues of nordihydroguaiaretic acid in dyslipidaemic rats** *BRITISH JOURNAL OF PHARMACOLOGY*
Singh, M., Bittner, S., Li, Y., Bittner, A., Han, L., Cortez, Y., Inayathullah, M., Arif, Z., Parthasarathi, R., Rajadas, J., Shen, W., Nicolls, M. R., Kraemer, et al
2019; 176 (3): 369–85
- **Conformational Preferences of A#25-35 and A#35-25 in Membrane Mimicking Environments.** *Protein and peptide letters*
Sambasivam, D. n., Sivanesan, S. n., Sultana, S. n., Rajadas, J. n.
2019; 26 (5): 386–90
- **An introduction to nanoengineered biomaterials** *NANOENGINEERED BIOMATERIALS FOR REGENERATIVE MEDICINE*
Mozafari, M., Rajadas, J., Kaplan, D. L., Mozafari, M., Rajadas, J., Kaplan, D.
2019: 1–11
- **Adenosine and hyaluronan modulate lung fibrosis and pulmonary hypertension in combined pulmonary fibrosis and emphysema (CPFE).** *Disease models & mechanisms*
Collum, S. D., Molina, J. G., Hanmandlu, A. n., Bi, W. n., Pedroza, M. n., Mertens, T. C., Wareing, N. n., Wei, W. n., Wilson, C. n., Sun, W. n., Rajadas, J. n., Bollyky, P. L., Philip, et al
2019
- **Salivary thiocyanate as a biomarker of Cystic Fibrosis Transmembrane Regulator function.** *Analytical chemistry*
Malkovskiy, A. V., Yacob, A. A., Dunn, C. E., Zirbes, J. M., Ryan, S. P., Bollyky, P. L., Rajadas, J. n., Milla, C. E.
2019
- **Optimization of transdermal deferoxamine leads to enhanced efficacy in healing skin wounds.** *Journal of controlled release : official journal of the Controlled Release Society*
Duscher, D. n., Trotsyuk, A. A., Maan, Z. N., Kwon, S. H., Rodrigues, M. n., Engel, K. n., Stern-Buchbinder, Z. A., Bonham, C. A., Whittam, A. J., Barrera, J. n., Hu, M. S., Inayathullah, M. n., Rajadas, et al
2019
- **Characterization of Brain Dysfunction Induced by Bacterial Lipopeptides That Alter Neuronal Activity and Network in Rodent Brains** *JOURNAL OF NEUROSCIENCE*
Kim, K., Zamaleeva, A. I., Lee, Y., Ahmed, M., Kim, E., Lee, H., Pothineni, V., Tao, J., Rhee, S., Jayakumar, M., Inayathullah, M., Sivanesan, S., Red-Horse, et al
2018; 38 (50): 10672–91
- **Characterization of brain dysfunction induced by bacterial lipopeptides that alter neuronal activity and network in rodent brains.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*
Kim, K., Zamaleeva, A. I., Woo Lee, Y., Ahmed, M. R., Kim, E., Lee, H., Raveendra Pothineni, V., Tao, J., Rhee, S., Jayakumar, M., Inayathullah, M., Sivanesan, S., Red-Horse, et al
2018
- **Anti-Hyperlipidemic Effects of Synthetic Analogs of Nordihydroguaiaretic acid (NDGA) in Dyslipidemic Rats.** *British journal of pharmacology*
Singh, M., Bittner, S., Li, Y., Bittner, A., Han, L., Cortez, Y., Inayathullah, M., Arif, Z., Parthasarathi, R., Rajadas, J., Shen, W., Nicolls, M. R., Kraemer, et al
2018
- **Fidgetin-Like 2 siRNA Enhances the Wound Healing Capability of a Surfactant Polymer Dressing** *ADVANCES IN WOUND CARE*
O'Rourke, B. P., Kramer, A. H., Cao, L. L., Inayathullah, M., Guzik, H., Rajadas, J., Nosanchuk, J. D., Sharp, D. J.
2018
- **In vitro and in vivo evaluation of cephalosporins for the treatment of Lyme disease.** *Drug design, development and therapy*
Pothineni, V. R., Parekh, M. B., Babar, M. M., Ambati, A., Maguire, P., Inayathullah, M., Kim, K. M., Tayebi, L., Potula, H. S., Rajadas, J.
2018; 12: 2915-2921
- **Deferoxamine Can Prevent Pressure Ulcers and Accelerate Healing in Aged Mice.** *Wound repair and regeneration : official publication of the Wound Healing Society [and] the European Tissue Repair Society*
Bonham, C. A., Rodrigues, M., Galvez, M., Trotsyuk, A., Stern-Buchbinder, Z., Inayathullah, M., Rajadas, J., Gurtner, G. C.
2018
- **Cytokines as therapeutic agents and targets in heart disease.** *Cytokine & growth factor reviews*

Dubnika, A., Manoukian, M. A., Mohammadi, M. R., Parekh, M. B., Gurjarpadhye, A. A., Inayathullah, M., Dubniks, V., Lakey, J. R., Rajadas, J.
2018

● **TOPICAL DELIVERY OF A FOCAL ADHESION KINASE INHIBITOR RESULTS IN ACCELERATED WOUND HEALING WITH REDUCED SCARRING IN A PORCINE WOUND MODEL**

Kwon, S., Ma, K., Duscher, D., Padmanabhan, J., Dong, Y., Inayathullah, M., Rajadas, J., Gurtner, G. C.
WILEY.2018: A13

● **Strategies for directing cells into building functional hearts and parts** *BIOMATERIALS SCIENCE*

Jafarkhani, M., Salehi, Z., Kowsari-Esfahan, R., Shokrgozar, M., Mohammadi, M., Rajadas, J., Mozafari, M.
2018; 6 (7): 1664–90

● **Prolonged survival of transplanted stem cells after ischaemic injury via the slow release of pro-survival peptides from a collagen matrix.** *Nature biomedical engineering*

Lee, A. S., Inayathullah, M., Lijkwan, M. A., Zhao, X., Sun, W., Park, S., Hong, W. X., Parekh, M. B., Malkovskiy, A. V., Lau, E., Qin, X., Pothineni, V. R., Sanchez-Freire, et al
2018; 2 (2): 104–113

● **In vitro and in vivo metabolite identification of a novel benzimidazole compound ZLN005 by LC-MS/MS.** *Rapid communications in mass spectrometry : RCM*

Sun, W. n., Nguyen, K. D., Fitch, W. L., Banister, S. D., Tang, H. n., Zhang, X. n., Yu, L. n., Engleman, E. G., Rajadas, J. n.
2018

● **Possible Clues for Brain Energy Translation via Endolysosomal Trafficking of APP-CTFs in Alzheimer's Disease** *OXIDATIVE MEDICINE AND CELLULAR LONGEVITY*

Sivanesan, S., Mundugaru, R., Rajadas, J.
2018: 2764831

● **In vitro and in vivo evaluation of cephalosporins for the treatment of Lyme disease** *DRUG DESIGN DEVELOPMENT AND THERAPY*

Pothineni, V., Parekh, M. B., Babar, M., Ambati, A., Maguire, P., Inayathullah, M., Kim, K., Tayebi, L., Potula, H. K., Rajadas, J.
2018; 12: 2915–21

● **Topical Delivery of a Focal Adhesion Kinase Inhibitor Results in Accelerated Wound Healing with Reduced Scarring in a Porcine Wound Model**

Kwon, S., Ma, K., Duscher, D., Padmanabhan, J., Dong, Y., Inayathullah, M., Rajadas, J., Gurtner, G. C.
WILEY.2018: A33

● **Transdermal Deferoxamine Enhances Wound Healing in Aged Mice**

Bonham, C. A., Rodrigues, M., Trotsyuk, A., Stern-Buchbinder, Z., Inayathullah, M., Rajadas, J., Gurtner, G. C.
WILEY.2018: A10

● **Transdermal Deferoxamine Significantly Enhances Healing of Sickle Cell Ulcers**

Rodrigues, M., Bonham, C. A., Inayathullah, M., Rajadas, J., Yang, G. P., Caterina, M. P., Gupta, K., Longaker, M. T., Gurtner, G. C.
WILEY.2018: A11

● **Controlled Delivery of a Focal Adhesion Kinase Inhibitor Results in Accelerated Wound Closure with Decreased Scar Formation.** *The Journal of investigative dermatology*

Ma, K. n., Kwon, S. H., Padmanabhan, J. n., Duscher, D. n., Trotsyuk, A. A., Dong, Y. n., Inayathullah, M. n., Rajadas, J. n., Gurtner, G. C.
2018

● **Nordihydroguaiaretic acid, a lignan from Larrea tridentata (Creosote bush) protects against ALIOS diet-induced metabolic dysfunction in mice.** *The Journal of pharmacology and experimental therapeutics*

Chan, J. K., Bittner, S. n., Bittner, A. n., Atwal, S. n., Shen, W. J., Inayathullah, M. n., Rajada, J. n., Nicolls, M. R., Kraemer, F. B., Azhar, S. n.
2018

● **Microhemorrhage-associated tissue iron enhances the risk for Aspergillus fumigatus invasion in a mouse model of airway transplantation.** *Science translational medicine*

Hsu, J. L., Manoukhova, O. V., Clemons, K. V., Inayathullah, M. n., Tu, A. B., Sobel, R. A., Tian, A. n., Nazik, H. n., Pothineni, V. R., Pasupneti, S. n., Jiang, X. n., Dhillon, G. S., Bedi, et al
2018; 10 (429)

● **PEG/Dextran Double Layer Influences Fe Ion Release and Colloidal Stability of Iron Oxide Nanoparticles.** *Scientific reports*

- Mohammadi, M. R., Malkovskiy, A. V., Jothimuthu, P. n., Kim, K. M., Parekh, M. n., Inayathullah, M. n., Zhuge, Y. n., Rajadas, J. n.
2018; 8 (1): 4286
- **Inhibition of Hyaluronan Synthesis Attenuates Pulmonary Hypertension Associated with Lung Fibrosis.** *British journal of pharmacology*
Collum, S. D., Chen, N. Y., Hernandez, A. M., Hanmandlu, A., Sweeney, H., Mertens, T. C., Weng, T., Luo, F., Molina, J. G., Davies, J., Horan, I. P., Morrell, N. W., Amione-Guerra, et al
2017
 - **Nanomaterials engineering for drug delivery: a hybridization approach.** *Journal of materials chemistry. B*
Mohammadi, M. R., Nojoomi, A., Mozafari, M., Dubnika, A., Inayathullah, M., Rajadas, J.
2017; 5 (22): 3995-4018
 - **From solvent-free microspheres to bioactive gradient scaffolds** *NANOMEDICINE-NANOTECHNOLOGY BIOLOGY AND MEDICINE*
Rasoulianboroujeni, M., Yazdimamaghani, M., Khoshkenar, P., Pothineni, V. R., Kim, K. M., Murray, T. A., Rajadas, J., Mills, D. K., Vashae, D., Moharamzadeh, K., Tayebi, L.
2017; 13 (3): 1157-1169
 - **Screening of NCI-DTP library to identify new drug candidates for *Borrelia burgdorferi*.** *journal of antibiotics*
Pothineni, V. R., Wagh, D., Babar, M. M., Inayathullah, M., Watts, R. E., Kim, K., Parekh, M. B., Gurjarpadhye, A. A., Solow-Cordero, D., Tayebi, L., Rajadas, J.
2017; 70 (3): 308-312
 - **Dynamic CT imaging of volumetric changes in pulmonary nodules correlates with physical measurements of stiffness.** *Radiotherapy and oncology*
Lartey, F. M., Rafat, M., Negahdar, M., Malkovskiy, A. V., Dong, X., Sun, X., Li, M., Doyle, T., Rajadas, J., Graves, E. E., Loo, B. W., Maxim, P. G.
2017; 122 (2): 313-318
 - **Sutureless microvascular anastomosis with the aid of heparin loaded poloxamer 407.** *Journal of plastic, reconstructive & aesthetic surgery : JPRAS*
Özer, F., Ni#anc#, M., Ta#, Ç., Rajadas, J., Alhan, D., Bozkurt, Y., Günal, A., Demirta#, S., I##k, S.
2017; 70 (2): 267-273
 - **Pharmaceuticals and Stem Cells in Autism Spectrum Disorders: Wishful Thinking?** *WORLD NEUROSURGERY*
Sivanesan, S., Tan, A., Jeyaraj, R., Lam, J., Gole, M., Hardan, A., Ashkan, K., Rajadas, J.
2017; 98: 659-672
 - **Pharmacological rescue of diabetic skeletal stem cell niches.** *Science translational medicine*
Tevlin, R., Seo, E. Y., Marecic, O., McArdle, A., Tong, X., Zimdahl, B., Malkovskiy, A., Sinha, R., Gulati, G., Li, X., Wearda, T., Morganti, R., Lopez, et al
2017; 9 (372)
 - **Discovery of novel brain permeable and G protein-biased beta-1 adrenergic receptor partial agonists for the treatment of neurocognitive disorders.** *PloS one*
Yi, B. n., Jahangir, A. n., Evans, A. K., Briggs, D. n., Ravina, K. n., Ernest, J. n., Farimani, A. B., Sun, W. n., Rajadas, J. n., Green, M. n., Feinberg, E. N., Pande, V. S., Shamloo, et al
2017; 12 (7): e0180319
 - **Nanomaterials engineering for drug delivery: a hybridization approach** *Journal of Materials Chemistry B*
Mohammadi, M., Nojoomi, A., Mozafari, M., Dubnika, A., Inayathullah, M., Rajadas, J.
2017; 5 (22): 3995-4018
 - **Therapeutic Nanoparticles for Targeted Delivery of Anticancer Drugs** *MULTIFUNCTIONAL SYSTEMS FOR COMBINED DELIVERY, BIOSENSING AND DIAGNOSTICS*
Alasvand, N., Urbanska, A. M., Rahmati, M., Saeidifar, M., Gungor-Ozkerim, P., Sefat, F., Rajadas, J., Mozafari, M., Grumezescu, A. M.
2017: 245–59
 - **Nanoparticles hybridization to engineer biomaterials for drug delivery** *Nanobiomaterials Science, Development and Evaluation*
Mohammadi, M., Sun, W., Inayathullah, M., Rajadas, J.
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