

## Melissa C Leeolou

- MD Student with Scholarly Concentration in Bioengineering, expected graduation Spring 2025
- Masters Student in Epidemiology and Clinical Research, admitted Autumn 2023

### Publications

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#### PUBLICATIONS

- **Filling the Prescription Gap: The Value of Community Support in Psoriasis Management.** *The British journal of dermatology*  
Leeolou, M. C., Sarin, K. Y., Fiorentino, D. F.  
2024
- **Livedoid vasculopathy.** *Dermatology online journal*  
Leeolou, M. C., Rieger, K. E., Yeh, J. E.  
2023; 29 (5)
- **Allometrically scaling tissue forces drive pathological foreign-body responses to implants via Rac2-activated myeloid cells.** *Nature biomedical engineering*  
Padmanabhan, J., Chen, K., Sivaraj, D., Henn, D., Kuehlmann, B. A., Kussie, H. C., Zhao, E. T., Kahn, A., Bonham, C. A., Dohi, T., Beck, T. C., Trotsyuk, A. A., Stern-Buchbinder, et al  
2023
- **Nitric oxide-releasing gel accelerates healing in a diabetic murine splinted excisional wound model.** *Frontiers in medicine*  
Sivaraj, D., Noishiki, C., Kosaric, N., Kiwanuka, H., Kussie, H. C., Henn, D., Fischer, K. S., Trotsyuk, A. A., Greco, A. H., Kuehlmann, B. A., Quintero, F., Leeolou, M. C., Granoski, et al  
2023; 10: 1060758
- **Bullous impetigo on a young man's abdomen.** *Dermatology online journal*  
Young, P. A., Leeolou, M. C., Narala, S., Saleem, A., Bae, G. H.  
2023; 29 (1)
- **Livedoid vasculopathy** *Dermatology Online Journal*  
Leeolou, M. C., Rieger, K. E., Yeh, J. E.  
2023; 29 (5)
- **Primary cutaneous CD4+ small/medium-sized pleomorphic T-cell lymphoproliferative disorder in a young woman.** *Dermatology online journal*  
Leeolou, M. C., Young, P. A., Saleem, A., Narala, S., Bae, G. H.  
2022; 28 (6)
- **Wireless, closed-loop, smart bandage with integrated sensors and stimulators for advanced wound care and accelerated healing.** *Nature biotechnology*  
Jiang, Y., Trotsyuk, A. A., Niu, S., Henn, D., Chen, K., Shih, C. C., Larson, M. R., Mermin-Bunnell, A. M., Mittal, S., Lai, J. C., Saberi, A., Beard, E., Jing, et al  
2022
- **Evanescant, episodic salmon-colored macules in a young woman.** *JAAD case reports*  
Leeolou, M. C., Young, P. A., Dear, A. L., Narala, S., Saleem, A., Rieger, K. E., Bae, G. H.  
2022; 29: 30-32
- **Characterization of Mechanoresponsive Inflammatory Cells during Wound Healing**  
Chen, K., Griffin, M., Henn, D., Bonham, C. A., Fischer, K., Padmanabhan, J., Trotsyuk, A. A., Sivaraj, D., Leeolou, M., Kussie, H. C., Huskins, S., Steele, S., Perrault, et al  
WILEY.2022: A22
- **Disrupting mechanotransduction decreases fibrosis and contracture in split-thickness skin grafting.** *Science translational medicine*

- Chen, K., Henn, D., Januszyk, M., Barrera, J. A., Noishiki, C., Bonham, C. A., Griffin, M., Tevlin, R., Carlomagno, T., Shannon, T., Fehlmann, T., Trotsyuk, A. A., Padmanabhan, et al  
2022; 14 (645): eabj9152
- **Pullulan-Collagen Hydrogel Wound Dressing Promotes Dermal Remodeling and Wound Healing Compared to Commercially Available Collagen Dressings.** *Wound repair and regeneration : official publication of the Wound Healing Society [and] the European Tissue Repair Society*  
Chen, K., Sivaraj, D., Davitt, M., Leeolou, M. C., Henn, D., Steele, S. R., Huskins, S. L., Trotsyuk, A. A., Kussie, H. C., Greco, A., Padmanabhan, J., Perrault, D. P., Zamaleeva, et al  
2022
  - **Characterization of Mechanoresponsive Inflammatory Cells during Wound Healing**  
Chen, K., Griffin, M., Henn, D., Bonham, C. A., Fischer, K., Padmanabhan, J., Trotsyuk, A. A., Sivaraj, D., Leeolou, M. C., Kussie, H. C., Huskins, S. L., Steele, S., Perrault, et al  
WILEY.2022: A5
  - **Mechanical Signaling Mediated by IQGAP1 Promotes Pathologic Foreign Body Response**  
Sivaraj, D., Padmanabhan, J., Chen, K., Henn, D., Kussie, H. C., Leeolou, M. C., Trotsyuk, A. A., Fischer, K., Perrault, D., Gurtner, G. C.  
WILEY.2022: A21
  - **Application of No Releasing Gel Increases Fibronectin, TGF-beta 1, and Accelerates Wound Healing in Diabetic Mice**  
Noishiki, C., Sivaraj, D., Kosaric, N., Leeolou, M. C., Kussie, H. C., Kiwanuka, H., Henn, D., Fischer, K., Trotsyuk, A. A., Padmanabhan, J., Perrault, D., Murad, F., Chen, et al  
WILEY.2022: A8
  - **Determining How Early Disruption Of Mechanotransduction Affects Acute Wound Healing**  
Kussie, H. C., Sivaraj, D., Leeolou, M. C., Huskins, S. L., Steele, S., Henn, D., Trotsyuk, A. A., Gurtner, G. C., Chen, K.  
WILEY.2022: A22
  - **Interactions Of Fibroblasts Versus Macrophages In An In Vitro Model Of Scar Formation And Wound Healing**  
Huskins, S. L., Griffin, M., Steele, S., Thomas, B., Kussie, H. C., Sivaraj, D., Leeolou, M. C., Trotsyuk, A. A., Padmanabhan, J., Longaker, M. T., Gurtner, G. C., Chen, K.  
WILEY.2022: A53-A54
  - **Pullulan-Collagen Hydrogel Wound Dressing Promotes Dermal Remodeling and Healing in an Excisional Wound Model**  
Leeolou, M. C., Sivaraj, D., Davitt, M., Henn, D., Steele, S., Huskins, S. L., Trotsyuk, A. A., Kussie, H. C., Greco, A., Perrault, D., Padmanabhan, J., Longaker, M. T., Chen, et al  
WILEY.2022: A24
  - **Characterization of Mechanoresponsive Inflammatory Cells during Wound Healing**  
Chen, K., Griffin, M., Henn, D., Bonham, C. A., Fischer, K., Padmanabhan, J., Trotsyuk, A. A., Sivaraj, D., Leeolou, M. C., Kussie, H. C., Huskins, S. L., Steele, S., Perrault, et al  
WILEY.2022: A31-A32
  - **Galvanotactic Smart Bandage for Chronic Wound Management and Tissue Regeneration**  
Trotsyuk, A. A., Jiang, Y., Niu, S., Henn, D., Chen, K., Larson, M., Beard, E., Saberi, A., Sivaraj, D., Mermin-Bunnell, A., Mittal, S., Jing, S., Kwon, et al  
WILEY.2022: A36
  - **Reinforced Biologic Mesh Reduces Postoperative Complications Compared to Biologic Mesh after Ventral Hernia Repair.** *Plastic and reconstructive surgery. Global open*  
Sivaraj, D., Henn, D., Fischer, K. S., Kim, T. S., Black, C. K., Lin, J. Q., Barrera, J. A., Leeolou, M. C., Makarewicz, N. S., Chen, K., Perrault, D. P., Gurtner, G. C., Lee, et al  
2022; 10 (2): e4083
  - **Recurrent bilateral cutaneous squamous cell carcinoma arising within pretibial hypertrophic lichen planus with metastasis while on cemiplimab** *Journal of the American Academy of Dermatology Case Reports*  
Leeolou, M., Burgren, N., Lee, C., Momeni, A., Pinto, H., Johannet, P., Nord, K., Chang, A. S.  
2022
  - **IQGAP1-mediated mechanical signaling promotes the foreign body response to biomedical implants.** *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*  
Sivaraj, D., Padmanabhan, J., Chen, K., Henn, D., Noishiki, C., Trotsyuk, A. A., Kussie, H. C., Leeolou, M. C., Magbual, N. J., Andrikopoulos, S., Perrault, D. P., Barrera, J. A., Januszyk, et al

2022; 36 (2): e22007

- **Inhibiting Fibroblast Mechanotransduction Modulates Severity of Idiopathic Pulmonary Fibrosis.** *Advances in wound care*  
Trotsyuk, A. A., Chen, K., Kwon, S. H., Ma, K. C., Henn, D., Mermin-Bunnell, A. M., Mittal, S., Padmanabhan, J., Larson, M. R., Steele, S. R., Sivaraj, D., Bonham, C. A., Noishiki, et al  
2021
- **First reported case of Wohlfahrtiimonas chitiniclastica infection in California JAAD Case Reports** *Journal of the American Academy of Dermatology Case Reports*  
Leeolou, M. C., Perrault, D. P., Siravaj, D., Chang, A. S., Chen, K., Trotsyuk, A., Padmanabhan, J., Gurtner, G. C.  
2021