

**BIOGRAPHICAL SKETCH**

NAME: Constantinos Marios Mikelis

eRA COMMONS USER NAME (credential, e.g., agency login): MIKELIS79430

POSITION TITLE: Associate Professor

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Patras, Greece	B.S.	09/2002	Biology
University of Patras, Greece	M.S.	12/2004	Molecular Pharmacology
University of Patras, Greece	Ph.D.	05/2009	Molecular Pharmacology
German Cancer Research Center (dkfz), Germany	Sabbatical training	09/2009	Vascular Oncology and Metastasis
NIDCR, National Institutes of Health	Postdoctoral	09/2014	Vascular Biology, Cancer Biology and Metastasis

**A. Personal Statement**

I am an Assistant Professor in the Pharmaceutical Sciences Department at the School of Pharmacy of Texas Tech University Health Sciences Center. Prior to joining TTUHSC, I was a post-doctoral fellow in the Oral and Pharyngeal Cancer Branch of the National Institute of Dental and Craniofacial Research (NIDRC) at the National Institutes of Health (NIH). I have received excessive training in the fields of vascular and cancer biology, focusing on the G protein-coupled receptor (GPCR) signaling pathways and I am uniquely qualified to address gaps in our current knowledge of the role of small GTPases on vascular biology and on cancer cell-endothelial cell interaction. During my graduate studies, I worked on growth factor-induced angiogenesis, which led me receive a broad background on vascular biology. Upon completion of my PhD studies I moved to German Cancer Research Center (dkfz) in Heidelberg, Germany, where I received training in animal models and specifically in *in vivo* models of angiogenesis and tumor angiogenesis. My interest to explore novel, potent pathways that can be treated by drugs led me to the Oral and Pharyngeal Cancer Branch, NIDCR, NIH. For five years, I was part of the vascular biology team, working on vascular and cancer-related projects. At NIH, I expanded my interests, knowledge and was able to incorporate novel techniques and animal models to address important questions. During my postdoctoral training, I investigated the role of small GTPases, and mostly RhoA, on endothelial biology, focusing mostly on endothelial permeability, and on the role of small GTPases and GPCR pathways on tumor angiogenesis and cancer metastasis. As a former member of the Oral and Pharyngeal Cancer Branch, at NIH, I was involved in many cancer-related projects, and worked with a wide repertoire of tumor models.

My current primary research focus in TTUHSC, revolves on investigating the role of the small GTPase RhoA on developmental and tumor-induced angiogenesis, on the role of endothelial RhoA on cancer cell trans-endothelial migration and the signaling circuits involved in this process and on identifying and studying genetic

alterations taking place in the endothelium upon incorporation of cancer-derived exosomes, as part of the pre-metastatic niche. My lab is utilizing a repertoire of *in vitro* and *in vivo* models and innovative approaches to explore the functional role of RhoA in the endothelial cell physiology, as well as the molecular circuits governing cancer cell-endothelial cell communication, elucidating their functional significance in human physiology.

## B. Positions and Honors

### Positions and Employment

2009-2014	Fellow, Oral and Pharyngeal Cancer Branch, National Institute of Dental and Craniofacial Research, NIH, Bethesda, MD
2014-2021	Assistant Professor, Department of Biomedical Sciences, School of Pharmacy, Texas Tech University Health Sciences Center, Amarillo, TX
2015-present	Faculty Member, Graduate School of Biomedical Sciences, School of Pharmacy, Texas Tech University Health Sciences Center, Amarillo, TX
2019-present	Associate Member of US National Academy of Inventors
2021	Associate Professor (with tenure), Department of Pharmaceutical Sciences, School of Pharmacy, Texas Tech University Health Sciences Center, Amarillo, TX
2021-present	Associate Professor (with tenure), Department of Pharmacy, University of Patras, Greece & Adjunct Associate Professor, Department of Pharmaceutical Sciences, School of Pharmacy, Texas Tech University Health Sciences Center, Amarillo, TX

### Editorial Affiliations

2011-2016	Associated Faculty Member, <i>Faculty of 1000 – Cell Biology</i> <a href="http://f1000.com/prime/thefaculty/member/1458674642528216">http://f1000.com/prime/thefaculty/member/1458674642528216</a>
2015-present	Editorial Board Member: “ <i>EC Dental Science</i> ” Journal
2016-present	Editorial Board Member: “ <i>Annals of Pharmacology and Pharmaceutics</i> ” Journal
2018-present	Editorial Board Member: “ <i>Gastrointestinal and Digestive Diseases</i> ” Journal
2018-present	Editorial Board Member: “ <i>Integrative Immunobiology and Vaccines</i> ” Journal
2019-present	Editorial Board Member: “ <i>Experimental and Therapeutic Medicine</i> ” Journal
2020-present	Editorial Board Member: “ <i>Journal of Human Physiology</i> ” Journal
2020-present	Editorial Board Member: “ <i>Frontiers in Cell and Developmental Biology</i> ” Journal
2021-present	Editorial Board Member: “ <i>Oncology Reports</i> ” Journal

### Professional experience and service

Ad-hoc Reviewer for:

- Oral Diseases Journal 2014.1-present
- British Journal of Pharmacology 2014.12-present
- EC Dental Science 2015.1-present
- Thrombosis and Haemostasis 2015.1-present
- Biomedical Chromatography 2015.2-present
- Molecular Biology of the Cell 2016.1-present
- Oncotarget 2016.4-present
- Heliyon 2016.8-present
- BMC Pharmacology and Toxicology 2017.1-present
- European Journal of Pharmacology 2017.3-present
- Vascular Cell 2017.8-present
- PLOS One 2017.10-present
- Toxicology Reports 2017.11-present
- European Journal of Medicinal Chemistry 2018.1-present
- International Journal of Oncology 2018.3-present
- Journal of Cellular and Molecular Medicine 2018.4-present

- Food & Function 2018.7-present
- International Journal of Molecular Medicine 2018.9-present
- Allergologia et Immunopathologia 2018.10-present
- Experimental and Therapeutic Medicine 2018.11-present
- Journal of Innate Immunity 2018.11-present
- Molecular Medicine Reports 2018.12-present
- Experimental and Therapeutic Medicine 2018.12-present
- Carcinogenesis 2018.12-present
- Oncology Letters 2019.1-present
- BMC Cancer 2019.2-present
- Aging 2019.4-present
- Experimental and Molecular Pathology 2019.6-present
- RSC Advances 2019.7-present
- Cancers 2019.8-present
- Pharmacology 2019.9-present
- Stem Cells and Development 2019.10-present
- Cell Communication and Signaling 2019.11-present
- Molecular Medicine 2019.11-present
- Cells 2019.11-present
- International Journal of Clinical and Experimental Ophthalmology 2020.1-present
- Journal of Bone and Joint Infection 2020.2-present
- Microcirculation 2020.2-present
- Journal of Vascular Research 2020.2-present
- Molecular Pharmaceutics 2020.2-present
- Nanomaterials 2020.2-present
- Artificial Cells, Nanomedicine and Biotechnology 2020.3-present
- Journal of Human Physiology 2020.3-present
- Biomedical Research International 2020.5-present
- Cell Biology and Toxicology 2020.5-present
- Antioxidants 2020.5-present
- FASEB Journal 2020.6-present
- Archives of Biochemistry and Biophysics 2020.6-present
- Oncology Letters 2020.7-present
- Technology in Cancer Research and Treatment 2020.8-present
- Genes 2020.8-present
- Microvascular Research 2020.8-present
- Angiogenesis 2020.9-present
- PLOS Computational Biology 2020.9-present
- Blood 2020.10-present
- Expert Opinion on Investigational Drugs 2020.10-present
- Drug Development Research 2020.10-present
- Frontiers in Cellular and Developmental Biology 2020.11-present
- Frontiers in Physiology 2020.11-present
- Journal of Biological Research 2020.11-present
- Blood Advances 2020.11-present
- Biomedicines 2020.12-present
- Life Sciences 2020.12-present
- Prostaglandins and Other Lipid Mediators 2021.1-present
- Translational Lung Cancer Research 2021.1-present
- Frontiers in Bioengineering and Biotechnology 2021.2-present
- Acta Biomaterialia 2021.2-present
- Traffic 2021.3-present
- Frontiers in Pharmacology 2021.3-present

- Canadian Journal in Physiology and Pharmacology 2021.3-present
- Cancer Research and Clinical Oncology 2021.3-present
- Polymers 2021.3-present
- Drug Discovery Today 2021.4-present
- Acta Astronautica 2021.4-present
- Scientific Reports 2021.4-present
- Gene Reports 2021.5-present
- Oncogene 2021.8-present
- Biomedicine & Pharmacotherapy 2021.9-present
- Scientific Reports 2021.9-present
- Communications Biology 2021.10-present
- Cellular Signaling 2021.10-present
- Clinical and Translational Medicine 2021.10-present
- Neoplasia 2021.11-present

### **Memberships**

- 2011-2016 Associate Member, Faculty of 1000  
2012-present Member, American Society of Biochemistry and Molecular Biology (ASBMB)  
2015-present Member, North American Vascular Biology Association (NAVBO)  
2015-present Member, American Association of Pharmaceutical Scientists (AAPS)  
2016-present Member, International Society for Extracellular Vesicles (ISEV)  
2016-present Member, American Association of Cancer Research (AACR)

### **Honors and Awards**

- 2003 Travel Award for CellTarget Conference, Budapest, Hungary.
- 2003-2004 Award and scholarship reward from *The Hellenic National Scholarships' Foundation* for student excellence (highest grades from University of Patras).
- 2004 Award and scholarship reward from *The Hellenic Pharmaceutical Industry Association* (highest grades nationwide).
- 2005-2008 Scholarship from Research Committee of the University of Patras.
- 2008 Travel Award from the European School of Haematology for the 8<sup>th</sup> Euroconference on Angiogenesis, Paris, France
- 2008 Travel Award from Hellenic Society for Biochemistry and Molecular Biology for the 33<sup>rd</sup> FEBS Congress and 11<sup>th</sup> IUBMB Conference, Athens, Greece.
- 2013 Travel Award from ASBMB (American Society for Biochemistry and Molecular Biology) for the 2013 ASBMB Annual Meeting, Boston, MA.
- 2013 Invited Speaker: University of Dresden, Germany
- 2013-2014 Fellows Award for Research Excellence (FARE), sponsored by the NIH Scientific Directors, Office of Intramural Training and Education and FeCom.
- 2014 Invited Speaker: Texas Tech University Health Sciences Center, Amarillo, TX.
- 2014 Invited Speaker: University of Nottingham, UK.
- 2014 Invited Speaker: Wilmer Eye Institute, Johns Hopkins University, Baltimore, MD.
- 2015 Invited Speaker: University of Patras, Greece.

- 2015 Invited Speaker: Immunotherapeutics and Biotechnology Department, School of Pharmacy, Texas Tech University Health Sciences Center, Abilene, TX.
- 2016 Invited Speaker: Department of Biomedical Sciences, Bouve College of Health Sciences, Northeastern University, Boston, MA.
- 2016 Invited Speaker: Amarillo Research Days, Amarillo, TX.
- 2017 TTUHSC School of Pharmacy Graduate Mentor of the Year Award.
- 2017 TTUHSC Graduate School of Biomedical Sciences Outstanding Teacher of the Year Award, sponsored by the Student Senate.
- 2018 TTUHSC School of Pharmacy Graduate Mentor of the Year Award.
- 2018 TTUHSC Graduate School of Biomedical Sciences Outstanding Teacher of the Year Award, sponsored by the Student Senate.
- 2019 TTUHSC Graduate School of Biomedical Sciences Outstanding Teacher of the Year Award, sponsored by the Student Senate.
- 2019 TTUHSC School of Pharmacy Graduate Mentor of the Year Award.
- 2019 TTUHSC School of Pharmacy Graduate Teacher of the Year Award.
- 2020 TTUHSC Graduate School of Biomedical Sciences Outstanding Faculty Award, sponsored by the Student Senate.
- 2020 TTUHSC Graduate School of Biomedical Sciences Outstanding Teacher of the Year Award, sponsored by the Student Senate.
- 2020 TTUHSC School of Pharmacy Graduate Mentor of the Year Award.
- 2020 TTUHSC School of Pharmacy Graduate Teacher of the Year Award.
- 2021 2021 Faculty Appreciation Award for the TTUHSC Graduate School of Biomedical Sciences, sponsored by the Student Senate.
- 2021 TTUHSC Graduate School of Biomedical Sciences Outstanding Teacher of the Year Award, sponsored by the Student Senate.
- 2021 TTUHSC School of Pharmacy Graduate Teacher of the Year Award.

### **Honors and Awards of Mikelis' lab members**

- Sanallah Sajib:
  - 2017 AAPS BIOTEC Section Travel Award for the AAPS National Biotechnology Conference, May 1-3 2017, San Diego, California.
  - Best Podium Presentation Award during the 16<sup>th</sup> Annual Amarillo Research Days, June 15-16 2017, Amarillo, Texas.
  - 2017 Vasculata Scholarship Award for the 2017 Vasculata, July 24-27, Chicago, Illinois.
  - 2017 Mary Lou Clements-Mann Scholarship.
  - Best Oral Presentation in 2017 Graduate Student Seminars, Graduate Program in Pharmaceutical Sciences, September 1, 2017.
  - 2018 Phonathon Scholarship

- Selection for Podium Presentation by TTUHSC Graduate School of Biomedical Sciences at 2018 Student Research Week (SRW), March 20-25, Lubbock, Texas.
  - 2018 Vasculata Scholarship Award for the 2018 Vasculata, July 23-26, Washington University in St. Louis, MO.
  - Young Investigator Fellowship Award, Symposia on Cancer Research 2018, October 4-5, MD Anderson Cancer Center, Houston, TX.
  - Graduate Student Travel Support Award, 58th Annual Meeting of the Society of Toxicology, March 10-14 2019, Baltimore, MD.
  - American Society for Biochemistry and Molecular Biology (ASBMB) Graduate Student Travel Award, 2019 Experimental Biology Meeting, April 6-9, Orlando, Florida.
  - Selection for the NCI Graduate Student Recruiting Program, May 7-8 2019, Bethesda, MD.
  - Third poster award in 31st Annual TTUHSC Student Research week, March 20-22 2019, Lubbock, TX.
  - K Wyatt McMahon Outstanding Graduate Student, GSBS Graduation Ceremony, May 7. 2021.
- Fatema Tuz Zahra:
    - 2017 Vasculata Scholarship Award for the 2017 Vasculata, July 24-27, Chicago, Illinois.
    - 2017 Mary Lou Clements-Mann Scholarship.
    - 2018 Vasculata Scholarship Award for the 2018 Vasculata, July 23-26, Washington University in St. Louis, MO.
    - 2018 Mary Lou Clements-Mann Scholarship.
    - Best Oral Presentation in 2018 Graduate Student Seminars, Graduate Program in Pharmaceutical Sciences, September 4th, 2018.
    - American Society for Biochemistry and Molecular Biology (ASBMB) Graduate Student Travel Award, 2019 Experimental Biology Meeting, April 6-9, Orlando, FL.
    - Cayman Chemical Travel Award for attendance of the 2019 Experimental Biology Meeting, April 6-9, Orlando, FL.
    - Vasculata Scholarship, for attendance of 2019 Vasculata, July 15-18, Medical College of Wisconsin, Milwaukee, WI.
    - 2019 Mary Lou Clements-Mann Scholarship.
    - Poster Award in 2019 Gordon Research Seminar on Angiogenesis, August 3-4, Newport, Rhode Island, CT.
    - Graduate Student Travel Support Award for the Society of Toxicology 59<sup>th</sup> Annual Meeting in Anaheim, California, March 15-19, 2020.
    - Selection by the American Society for Investigative Pathology (ASIP) for Oral Presentation at the Experimental Biology meeting in San Diego, California, April 4-7, 2020.
    - Selection for Podium Presentation in 32nd Annual TTUHSC Student Research week, March 10-13 2019, Lubbock, TX.
    - 2020 Dean's Scholarship Award, and for the duration of her studies at TTUHSC.
    - 2020 AAPS Best Abstract Award, American Association of Pharmaceutical Scientists, AAPS PharmSci 360, October 26-November 5, New Orleans, LA.
    - PISA 2020 GALL Trainee Scholar Award for Excellence in Cardiovascular Research, PISA 2020 Meeting, November 9-13 2020 Virtual Conference.
    - 2021 Phonathon Scholarship

- Selection for the NCI Graduate Student Recruiting Program, May 4-5 2021, Bethesda, MD.
- ASIP 2021 Experimental Pathologist-in-Graduate-Training (EPIGT) Award.

- Racheal Akwij:

- 2018-2019 American Association of University Women (AAUW) International Fellowship.
- Best Oral Presentation in 2019 Graduate Student Seminars, Graduate Program in Pharmaceutical Sciences, September 4th 2019.
- 2020 Dean's Recognition Award
- 2021 Dean's Scholarship Award, and for the duration of her studies at TTUHSC.

- Behnaz Lahooti:

- 2021 Mai Anh Do & David Nguyen Foundation Scholarship.
- 2021 Mary Lou Clements-Mann Scholarship.
- 2021 Scholarship of American Association of Iranian Pharmaceutical Scientists

## C. Peer-reviewed Publications (Manuscripts, Invited Editorials, Book Chapters, Patents, Abstracts)

### Manuscripts

1. Papadimitriou, E., Polykratis, A., Hatziapostolou, M., Parthymou, A., Polytarchou, C., **Mikelis, C.** Heparin affin regulatory peptide: a new target for tumour therapy? *Curr Cancer Drug Targets*. 2004 4(6):471-82.
2. Kokolakis, G., **Mikelis, C.**, Papadimitriou, E., Courty, J., Karetsou, E. and Katsoris, P. Effect of Heparin Affin Regulatory Peptide on the Expression of Vascular Endothelial Growth Factor Receptors in Endothelial Cells. *In Vivo* 2006 20(5):629-635.
3. **Mikelis, C.**, Koutsoumpa, M. and Papadimitriou, E. Pleiotrophin as a possible new target for angiogenesis-related diseases and cancer. *Recent Patents on Anti-Cancer Drug Discovery*. 2007 2: 175-186.
4. Parthymou, A., Lampropoulou, E., **Mikelis, C.**, Drosou, G. and Papadimitriou, E. Heparin affin regulatory peptide/pleiotrophin negatively affects diverse biological activities in C6 glioma cells. *Eur J Cell Biol*. 2008 87(1):17-29.
5. **Mikelis, C.** and Papadimitriou, E. Heparin-binding protein pleiotrophin: An important player in the angiogenic process. *Connect Tissue Res*. 2008 49(3):149-152.
6. Polytarchou, C., Hatziapostolou, M., Poimenidi, E., **Mikelis, C.**, Papadopoulou, A., Parthymou, A. and Papadimitriou, E. Nitric oxide stimulates migration of human endothelial and prostate cancer cells through up-regulation of pleiotrophin expression and its receptor protein tyrosine phosphatase beta/zeta. *Int J Cancer* 2009 124(8):1785-1793.
7. Koutsoumpa, M., Hatziapostolou, M., **Mikelis, C.**, Koolwijk, P. and Papadimitriou, E. Aprotinin stimulates angiogenesis and human endothelial cell migration through the growth factor pleiotrophin and its receptor protein tyrosine phosphatase beta/zeta. *Eur J Pharmacol* 2009 602(2-3):245-249.

8. **Mikelis, C.**, Sfaelou, E., Koutsoumpa, M., Kieffer, N. and Papadimitriou, E. Integrin  $\alpha_v\beta_3$  is a pleiotrophin receptor required for pleiotrophin-induced endothelial cell migration through receptor protein tyrosine phosphatase  $\beta/\zeta$ . *FASEB J* 2009 23(5):1459-1469.
9. Papadimitriou, E., **Mikelis, C.**, Lampropoulou, E., Koutsoumpa, M., Theochari, K., Tsirmoula, S., Theodoropoulou, C., Lamprou, M., Sfaelou, E., Vourtsis, D. and Mpountouris, P. The role of pleiotrophin in cancer. *Eur Cytokine Netw* 2009 20(4):180-190.
10. Kutschera, S., Weber, H., Weick, A., De Smet, F., Genove, G., Takemoto, M., Prahst, C., Riedel, M., **Mikelis, C.**, Baulande, S., Champseix, C., Kummerer, P., Coseiller, E., Multon, M.C., Heroult, M., Bicknell, R., Carmeliet, P., Betsholtz, C. and Augustin, H.G. Differential endothelial transcriptomics identifies semaphoring 3G as a vascular class 3 semaphorin. *Arterioscler Thromb Vasc Biol.* 2011 31(1):151-9.
11. **Mikelis, C.**, Lamprou, M., Koutsoumpa M., Koutsoumpas A.G., Spyranti, Z., Zompra, A.A., Spiliopoulos, N., Vradis A.A., Katsoris, P., Spyroulias, G.A., Cordopatis P., Courty, J. and Papadimitriou E. A peptide corresponding to the C-terminal region of pleiotrophin inhibits PTN-induced angiogenesis in vivo and in vitro. *J Cell Biochem.* 2011 112(6):1532-43.
12. Patel, V., Marsh, C.A., Dorsam, R.T., **Mikelis, C.M.**, Masedunskas, A., Amornphimoltham, P., Nathan, C.A., Singh, B., Weigert, R., Molinolo, A.A. and Gutkind, J.S. Decreased lymphangiogenesis and lymph node metastasis by mTOR inhibition in head and neck cancer. *Cancer Res.* 2011 71(22):7103-12.
13. Koutsoumpa, M., Drosou, G., **Mikelis, C.**, Theochari, K., Vourtsis, D., Katsoris, P., Giannopoulou, E., Courty, J., Petrou, C., Magafa, V., Cordopatis, P. and Papadimitriou, E. Pleiotrophin expression and role in physiological angiogenesis in vivo: potential involvement of nucleolin. *Vasc Cell.* 2012 16;4:4.
14. Pan, W., Pham, V.N., Stratman, A.N., Castranova, D., Kamei, M., Kidd, K.R., Lo, B.D., Shaw, K.M., Torres-Vazquez, J., **Mikelis, C.M.**, Gutkind, J.S., Davis, G.E. and Weinstein, B.M. CDP-diacylglycerol synthetase-controlled phosphoinositide availability limits VEGFA signaling and vascular morphogenesis. *Blood.* 2012 120(2):489-98.
15. Koutsoumpa, M., Polytarchou, C., Courty, J., Zhang, Y., Kieffer, N., **Mikelis, C.**, Skandalis, S.S., Hellman, U., Iliopoulos, D. and Papadimitriou, E. Interplay between  $\alpha_v\beta_3$  integrin and nucleolin regulates human endothelial and glioma cell migration. *J Biol Chem.* 2013 288(1):343-54.
16. Kaspiris, A., **Mikelis, C.**, Heroult, M., Khaldi, L., Grivas, T.B., Kouvaras, I., Dangas, S., Vasiliadis, E., Lioté, F., Courty, J. and Papadimitriou, E. Expression of the growth factor pleiotrophin and its receptor protein tyrosine phosphatase beta/zeta in the serum, cartilage and subchondral bone of patients with osteoarthritis. *Joint Bone Spine.* 2013 80(4):407-13.
17. Chen, J.J., **Mikelis, C.**, Zhang, Y., Gutkind, J.S. and Zhang, B. TRAIL induces apoptosis in oral squamous carcinoma cells – an association with Ras regulated cell surface expression of death receptor 5. *Oncotarget.* 2013 4(2):206-17.
18. **Mikelis, C.M.**, Palmby, T. R., Simaan, M., Li, W., Szabo, R., Lyons, R., Martin, D., Yagi, H., Fukuhara, S., Chikumi, H., Galisteo, R., Mukoyama, Y., Bugge, T. H. and Gutkind, J.S. PDZ-RhoGEF and LARG are essential for embryo development, and provide a link between thrombin and LPA receptors and Rho activation. *J. Biol. Chem.* 2013 288(17):12232-43.
19. Lionakis, M., Swamydas, M., Fischer, B., Plantinga, T., Johnson, M., Jaeger, M., Green, N., Masedunskas, A., Weigert, R., **Mikelis, C.**, Wan, W., Lee, C-C.R., Lim, J., Rivollier, A., Yang, J., Laird, G., Wheeler, R., Alexander, B., Perfect, J., Gao, J., Kullberg, B-J., Netea, M., and Murphy, P. CX3CR1-dependent renal macrophage survival promotes candida control and host survival. *J.Clin. Invest.* 2013 123(12):5035-51.
20. Gan, C.P., Patel, V., **Mikelis, C.M.**, Zain, R.B., Molinolo, A.A., Abraham, M.T., Teo, S.H., Abdul Rahman, Z.A., Gutkind, J.S. and Cheong, S.C. Heterotrimeric G-protein alpha-12 (G $\alpha$ 12) subunit promotes oral cancer metastasis. *Oncotarget* 2014 5(20):9626-40.
21. Dillenburg-Pilla, P., Patel, V., **Mikelis, C.M.**, Zarate-Blades, C.R., Amornphimoltham, P., Wang, Z., Martin, D., Leelahavanichkul, K., Doci, C.L., Dorsam, R., Masedunskas, A., Weigert, R., Molinolo, A.A. and Gutkind, J.S. SDF-1/CXCL12 induces directional cell migration and spontaneous metastasis via a CXCR4/G $\alpha$ i/mTORC1 axis. *FASEB J.* 2015 29(3):1056-68.



22. **Mikelis, C.M.**, Simaan, M., Ando, K., Fukuhara, S., Sakurai, A., Amornphimoltham, P., Masedunskas, A., Weigert, R., Chavakis, T., Adams, R.H., Offermanns, S., Mochizuki, N., Zheng, Y. and Gutkind, J.S. RhoA and ROCK mediate histamine-induced vascular leakage and anaphylactic shock. *Nat. Commun.* 2015 10(6):6725. doi:10.1038/ncomms7725.
23. Doçi, C.L., **Mikelis, C.M.**, Molinolo, A.A., Amornphimoltham, P., Lionakis, M.S., and Gutkind, J.S. Genetic Identification of Sema3F as an Anti-Lymphangiogenic Metastasis Suppressor Gene in Head and Neck Squamous Carcinoma. *Cancer Res.* 2015 Jul 15;75(14):2937-48. doi: 10.1158/0008-5472.CAN-14-3121. Epub 2015 May 7.
24. Punganuru, S.R., Madala, H.R., Venugopal, S.N., Samala, R., **Mikelis, C.** and Srivenugopal, K.S. Design and synthesis of a C7-aryl piperlongumine derivative with potent antimicrotubule and mutant p53-reactivating properties. *Eur. J. Med. Chem.* 2016 107:233-44.
25. O'Hayre, M., Inoue, A., Kufareva, I., Wang, Z., **Mikelis, C.M.**, Drummond, R.A., Avino, S., Finkel, K., Kalim, K.W., DiPasquale, G., Guo, F., Aoki, J., Zheng, Y., Lionakis, M.S., Molinolo, A.A. and Gutkind, J.S. Inactivating mutations in GNA13 and RHOA in Burkitt's lymphoma and diffuse large B-cell lymphoma: a tumor suppressor function for the G $\alpha_{13}$ /RhoA axis in B cells. *Oncogene* 2015 Nov 30. Doi: 10.1038/onc.2015.442.
26. Drummond, R.A., Collar, A.L., Swamydas, M., Rodriguez, C.A., Lim, J.K., Mendez, L.M., Fink, D.L., Hsu, A.P., Zhai, B., Karauzum, H., **Mikelis, C.M.**, Rose, S.R., Ferre, E.M., Yockey, L., Lemberg, K., Kuehn, H.S., Rosenzweig, S.D., Lin, X., Chittiboina, P., Datta, S.K., Belhorn, T.H., Weimer, E.T., Hernandez, M.L., Hohl, T.M., Kuhns, D.B. and Lionakis, M.S. CARD9-Dependent Neutrophil Recruitment Protects against Fungal Invasion of the Central Nervous System. *PLoS Pathog.* 2015 Dec 17;11(12):e1005293. doi: 10.1371/journal.ppat.1005293.
27. Rieber, N., Gazendam, R.P., Freeman, A.F., Hsu, A.P., Collar, A.L., Sugui, J.A., Drummond, R.A., Rongkavilit, C., Hoffman, K., Henderson, C., Clark, L., Mezger, M., Swamydas, M., Engeholm, M., Schüle, R., Neumayer, B., Ebel, F., **Mikelis, C.M.**, Pittaluga, S., Prasad, V.K., Singh, A., Milner, J.D., Williams, K.W., Lim, J.K., Kwon-Chung, K.J., Holland, S.M., Hartl, D., Kuijpers, T.W., Lionakis, M.S. Extrapulmonary Aspergillus Infection in Patients 1 with CARD9 Deficiency. *J Clin Invest Insight* 2016 Oct 20; 1(17):e89890.
28. \*Doçi, C.L., \* **Mikelis, C.M.**, Callejas-Valera, J.L., Hansen, K.K., Molinolo, A.A., Gutkind, J.S. Epidermal loss of G $\alpha_q$  confers a migratory and differentiation defect in keratinocytes. *PLOS One* 2017 Mar 16;12(3):e0173692. \* Co-first author.
29. Ranjan, A., German, N., **Mikelis, C.**, Srivenugopal, K., Srivastava, S.K. Penfluridol induces endoplasmic reticulum stress leading to autophagy in pancreatic cancer. *Tumour Biol.* 2017 Jun;39(6):1010428317705517.
30. Sajib, M.S., Zahra, F.T., Lionakis, M.S., German, N., **Mikelis C.M.** Mechanisms of angiogenesis in microbe-regulated inflammatory and neoplastic conditions. *Angiogenesis* 2018 Feb;21(1):1-14.
31. Collar, A.L., Swamydas, M., O'Hayre, M., Sajib, M.S., Hoffman, K.W., Singh, S.P., Mourad, A., Johnson, M.D., Ferre, E.M.N., Farber, J.M., Lim, J.K., **Mikelis, C.M.**, Gutkind, J.S., Lionakis M.S. The homozygous CX3CR1-M280 mutation impairs human monocyte survival. *JCI Insight* 2018 Feb 8;3(3). pii: 95417. doi: 10.1172/jci.insight.95417.
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37. Sajib, M.S., Park, J.H., Apu, M.N.H., Wagner, R., Tewari, H., Srivastava, S.K., Tullar, P., Bickel, U., **Mikelis, C.M.** Endothelial RhoA signaling pathway: Role in cancer metastasis. 2016 Amarillo Research Week, School of Medicine, Texas Tech University Health Sciences Center, Amarillo, Texas, USA, March 21, 2016.
38. Apu, M.N.H., Sajib, M.S., Wagner, R., Tewari, H., Saifuddin, S., Srivastava, S.K., Tullar, P., **Mikelis, C.M.** Role of RhoA signaling pathway in bFGF- and cancer-induced angiogenesis. 2016 Amarillo Research Week, School of Medicine, Texas Tech Health Sciences Center Amarillo, Texas, USA, March 21, 2016.
39. Punganuru, S.R., Madala, H.R., **Mikelis, C.M.**, Srivenugopal, K.S. Design of a Rofecoxib-Combretastatin hybrid drug that exerts highly potent antimicrotubule, anti-angiogenesis properties and Cox-2 inhibition both in cell culture and xenograft models. AACR Annual Meeting, New Orleans, LA, USA, April 16-20, 2016.
40. Sajib, M.S., Park, J.H., Apu, M.N.H., Wagner, R., Tewari, H., Tullar, P., Srivastava, S.K., Bickel, U., **Mikelis, C.M.** Endothelial RhoA signaling pathway: Role in cancer metastasis. 2016 Amarillo Research Days, School of Pharmacy, Texas Tech University Health Sciences Center, Amarillo, Texas, USA, June 1-2, 2016.
41. Apu, M.N.H., Sajib, M.S., Wagner, R., Tewari, H., Saifuddin, S., Srivastava, S.K., Tullar, P., **Mikelis, C.M.** Role of RhoA signaling pathway in bFGF-induced angiogenesis. 2016 Amarillo Research Days, School of Pharmacy, Texas Tech Health Sciences Center Amarillo, Texas, USA, June 1-2, 2016.
42. Sajib, M.S., Ashraf-Uz-Zaman, M., **Mikelis, C.M.**, German, N. Evaluation of the Fungal Metabolite Gliotoxin as an Anti-Cancer Agent. 2016 Amarillo Research Days, School of Pharmacy, Texas Tech Health Sciences Center Amarillo, Texas, USA, June 1-2, 2016.
43. Sajib, M.S., Park, J.H., Zahra, F.T., Tullar, P., Bickel, U., **Mikelis, C.M.** Role of endothelial RhoA in cancer cell trans-endothelial migration and metastasis. NAVBO Vasculata Conference, Philadelphia USA and Uppsala, Sweden, August 15-17, 2016.
44. Sajib, M.S., Park, J.H., Zahra, F.T., Tullar, P., Srivastava, S.K., Gutkind, J.S., Bickel, U., **Mikelis, C.M.** Role of endothelial RhoA signaling pathway in cancer metastasis. 19<sup>th</sup> International Vascular Biology Meeting, Boston, MA, USA, October 30- November 3, 2016.
45. Sajib, M.S., Park, J.H., Zahra, F.T., Tullar, P., Srivastava, S.K., Bickel, U., **Mikelis, C.M.** Involvement of endothelial small GTPases in trans-endothelial cancer cell migration. 2017 Gordon Conference on Vascular Cell Biology: Emerging Mechanisms of Vascular Biology, Disease and Treatment, Ventura, CA, USA, January 15-20, 2017.
46. Zahra, F.T., Sajib, M.S., Apu, M.N.H., Tullar, P., Lionakis, M.S., **Mikelis, C.M.** Participation of endothelial RhoA in basic Fibroblast Growth Factor (bFGF)-induced angiogenesis. 29<sup>th</sup> TTUHSC Student Research Week, Lubbock, TX, USA, March 7-10, 2017.
47. Sajib, M.S., Zahra, F.T., Park, J.H., Tullar, P., Srivastava, S.K., Bickel, U., **Mikelis, C.M.** Endothelial cytoskeletal reorganization through RhoA/ROCK pathway is required for cancer cell migration. 29<sup>th</sup> TTUHSC Student Research Week, Lubbock, TX, USA, March 7-10, 2017.

48. Zahra, F.T., Sajib, M.S., Apu, M.N.H., Tullar, P., Lionakis, M.S., **Mikelis, C.M.** Participation of endothelial RhoA in basic Fibroblast Growth Factor (bFGF)-induced angiogenesis. Vasculata 2017, University of Illinois at Chicago, IL, USA, July 23-27, 2017.
49. Sajib, M.S., Zahra, F.T., Park, J.H., Tullar, P., Srivastava, S.K., Bickel, U., **Mikelis, C.M.** Endothelial cytoskeletal reorganization through RhoA/ROCK pathway is required for cancer cell migration. Vasculata 2017, University of Illinois at Chicago, IL, USA, July 23-27, 2017.
50. Hossain, A., Sajib, M.S., Patel, R., Al-Ahmad, A., **Mikelis, C.**, German N. Effect of the disulfide bridge on the biological activity of the gliotoxin. American Chemical Society, 73<sup>rd</sup> Annual Southwest Regional Meeting. Lubbock, TX, USA, October 29- November 1, 2017.
51. Sajib, M.S., Zahra, F.T., Park, J.H., Tullar, P., Srivastava, S.K., Bickel, U., **Mikelis, C.M.** Tumor cells activate small GTPase RhoA in endothelial cells to facilitate transendothelial migration during cancer metastasis. TTUHSC Student Research Week (SRW), Lubbock, TX, March 20-25, 2018.
52. Zahra, F.T., Sajib, M.S., Ichiyama, Y., Tullar, P., Kubota, Y., **Mikelis, C.M.** Role of endothelial small GTPase RhoA in embryo development and retinal angiogenesis. TTUHSC Student Research Week (SRW), Lubbock, TX, March 20-25, 2018.
53. Sajib, M.S., Zahra, F.T., Akwii, R., Park, J.H., Tullar, P., Srivastava, S.K., Bickel, U., **Mikelis, C.M.** Endothelial RhoA-mediated vascular permeability in metastasis. 17th Amarillo Research Days, Amarillo, TX, June 13-14, 2018.
54. Zahra, F.T., Sajib, M.S., Ichiyama, Y., Tullar, P., Kubota, Y., **Mikelis, C.M.** Differential role of endothelial small GTPase RhoA in physiological versus pathological angiogenesis. 17th Amarillo Research Days, Amarillo, TX, June 13-14, 2018.
55. Zahra, F.T., Sajib, M.S., Apu, M.N., Akwii, R., Tullar, P., Lionakis, M.S., **Mikelis, C.M.** Involvement of small GTPases in basic fibroblast growth factor (bFGF)-induced angiogenesis. Vasculata 2018, Washington University at St. Louis, MO, USA, July 23-26, 2018.
56. Sajib, M.S., Zahra, F.T., Akwii, R., Park, J.H., Tullar, P., Srivastava, S.K., Bickel, U., **Mikelis, C.M.** Endothelial RhoA activation: An important step in the metastatic process. Vasculata 2017, University of Illinois at Chicago, IL, USA, July 23-26, 2018.
57. Hossian, A.K.M.N., Sajib, M.S., Tullar, P.E., **Mikelis, C.M.**, Mattheolabakis, G. miR-143 and miR-506 halt cell cycle progression in lung cancer cells and inhibit angiogenesis in vitro. AAPS PharmSci 360, Advancing Pharmaceutical Sciences, Careers and Community, Washington DC, November 4-7, 2018.
58. Hossian, A.K.M.N., Sajib, M.S., Tullar, P.E., **Mikelis, C.M.**, Mattheolabakis, G. miR-143 and miR-506 combinatorial treatment: inhibitors of cell cycle progression and angiogenesis in Lung cancer cells in vitro. 17th Louisiana Biomedical Research Network Annual Meeting, November 22, 2018.
59. Sajib, M.S., Zahra, F.T., Park, J., Tullar, P.E., Srivastava, S.K., Bickel, U., **Mikelis, C.M.** Inhibition of Endothelial RhoA-ROCK Pathway Blocks Cancer Metastasis. 58th Annual Meeting of Society of Toxicology, Baltimore, MD, March 10-14, 2019.
60. Zahra F.T., Sajib M.S., Ichiyama Y., Tullar P., Kubota Y., **Mikelis C.M.** Participation of endothelial small GTPase RhoA in embryo development and retinal angiogenesis. 58th Annual Meeting of Society of Toxicology, Baltimore, MD, March 10-14, 2019.
61. Akwii, R.G., Zahra, F.T., Sajib, M.S., Gibson, K., Tullar P., **Mikelis C.M.** Small GTPase RhoA participates in Angiopoietin2-induced lymphatic endothelial cell migration. 31st Annual TTUHSC Student Research Week, Lubbock, TX, March 19-22, 2019.
62. Chowdhury, E.A., Alqahtani, F., Noorani, B., Sajib, M.S., **Mikelis, C.M.**, Mehvar, R., Bickel, U. Blood-brain barrier permeability of [13C] sucrose in young adult and aged mice. 31st Annual TTUHSC Student Research Week, Lubbock, TX, March 19-22, 2019.
63. Sajib, M.S., Zahra, F.T., Park, J.H., Akwii, R., Tullar, P.E., Srivastava, S.K., Bickel, U., **Mikelis, C.M.** Inhibition of Endothelial RhoA-ROCK pathway blocks cancer Metastasis. 31st Annual TTUHSC Student Research Week, Lubbock, TX, March 19-22, 2019.



64. Zahra F.T., Sajib M.S., Ichiyama Y., Akwii R., Tullar P., Kubota Y., **Mikelis C.M.** The endothelial small GTPase RhoA regulates angiogenesis in certain pathological conditions. 31st Annual TTUHSC Student Research Week, Lubbock, TX, March 19-22, 2019.
65. Sajib, M.S., Zahra, F.T., Park, J.H., Tullar, P., Srivastava, S.K., Bickel, U., **Mikelis, C.M.** Metastatic cancer cells activate endothelial RhoA-ROCK pathway for trans-endothelial migration. 2019 AACR Annual Meeting, Atlanta, GA, March 29 – April 3, 2019.
66. Zahra F.T., Sajib M.S., Ichiyama Y., Akwii R., Tullar P., Kubota Y., **Mikelis C.M.** Involvement of Endothelial Small GTPase RhoA in Angiogenesis *In Vitro* and *In Vivo*. Experimental Biology 2019, Orlando, FL, April 6-9, 2019.
67. Sajib, M.S., Zahra, F.T., Park, J.H., Tullar, P., Srivastava, S.K., Bickel, U., **Mikelis, C.M.** Endothelial RhoA Regulates Breast Cancer Metastasis. 2019 ASBMB Annual Meeting, Orlando, FL, April 6-9, 2019.
68. Sajib, M.S., Zahra, F.T., Park, J.H., Tullar, P., Srivastava, S.K., Bickel, U., **Mikelis, C.M.** Role of Endothelial RhoA in Melanoma and Lung Cancer Trans-endothelial Migration and Metastasis. 2019 ASIP Annual Meeting, Orlando, FL, April 6-9, 2019.
69. Tsirmoula, S., Skondra, L., Enake, M., Koutsoumpa, M., Kastana, P., **Mikelis, C.M.**, Skandalis, S., Hellman, U., Sugahara, K., Papadimitriou, E. Interaction of moesin with  $\alpha\beta 3$  integrin regulates endothelial cell migration. 3rd Joint Meeting of the European Society for Microcirculation (ESM) and the European Vascular Biology Organization (EVBO), Maastricht, The Netherlands, April 15-18, 2019. Citation: J. Vacs Res 2019; 56(suppl 1): 89.
70. Akwii, R.G., Zahra, F.T., Sajib, M.S., Gibson, K., Tullar P., **Mikelis C.M.** Angiopoietin 2 (Ang2)-induced lymphatic endothelial cell migration is dependent on RhoA activation. Lymphatic Forum 2019, Austin, TX, May 30 -June 1, 2019.
71. Chowdhury, E.A., Alqahtani, F., Noorani, B., Sajib, M.S., **Mikelis, C.**, Mehvar, R., Bickel, U. The brain uptake kinetics of markers with low passive permeability: Novel insights from studies with sucrose. 13th International Conference on Cerebral Vascular Biology (CVB 2019), Miami, FL, June 25-28, 2019.
72. Lamprou, M., Kastana, P., Choleva, E., Kofina, F., Tzoupis, H., Pantazaka, E., Sajib, M.S., Tselios, T., **Mikelis, C.M.**, Papadimitriou, E. Binding of pleiotrophin to vascular endothelial growth factor receptor 2 regulates endothelial cell migration. 44th FEBS Congress, Krakow, Poland, July 6-11, 2019. Citation: FEBS Open Bio, 9: P-06-031. doi:10.1002/2211-5463.12675.
73. Zahra F.T., Sajib M.S., Akwii, R., Ichiyama Y., Tullar P., Kubota Y., **Mikelis, C.M.** Involvement of Endothelial Small GTPase RhoA in basic endothelial cell functions, embryo development and retinal angiogenesis. Vasculata 2019, Wauwatosa, WI, July 15-18, 2019.
74. Zahra, F.T., Sajib, M.S., Oikonomou, V., Apu, M.N., Akwii, R., Tullar, P., Lionakis, M.S., **Mikelis, C.M.** Role of small GTPase RhoA in basic fibroblast growth factor (bFGF)-induced angiogenesis. 2019 Gordon Research Conference on Angiogenesis, August 3-4, Newport, Rhode Island, CT.
75. Zahra F.T., Sajib M.S., Akwii, R., Ichiyama Y., Tullar P., Kubota Y., **Mikelis, C.M.** Endothelial RhoA GTPase is essential for in vitro endothelial functions but dispensable for physiological in vivo angiogenesis. 2019 Gordon Research Conference on Angiogenesis, August 3-4, Newport, Rhode Island, CT.
76. Ashraf-Uz-Zaman, M., Ji, G., Alvina, K., Sajib, M.S., **Mikelis C.M.**, Avila, M., Neugebauer, V., German, N.A. Discovery, structure-activity relationship study, and *in vivo* evaluation of novel series of mono-amine transporter inhibitors. 59<sup>th</sup> Society of Toxicology Annual Meeting and ToxExpo 2020, March 15-19, Anaheim, CA.
77. Doçi, C.L., Calleja-Valera, J.L., **Mikelis, C.M.**, Molinolo, A.A., Gutkind, J.S. Sema3F suppresses tumor initiation through alteration of the immunological tumor microenvironment in chemical carcinogenesis models. Experimental Biology 2020, April 4-7, San Diego, CA.
78. Zahra, F.T., Sajib, M.S., Oikonomou, V., Akwii, R., Tullar, P., Lionakis, M.S., **Mikelis, C.M.** Endothelial small GTPase RhoA: A potential target for anti-angiogenic therapy. Experimental Biology 2020, April 4-7, San Diego, CA.

79. Zahra, F.T., Sajib, M.S., Akwii, R., Oikonomou, V., Tullar, P., Wood, L., Lionakis, M.S., **Mikelis, C.M.** The regulatory activity of GIPC1 on RhoA-mediated bFGF angiogenic functions. Experimental Biology 2021, Virtual Meeting.
80. Akwii, R.G., Sajib, M.S., Zahra, F.T., Tullar, P., **Mikelis, C.M.** Angiopoietin-2-induced lymphatic endothelial cell migration drives lymphangiogenesis via the  $\beta$ 1 integrin-RhoA-formin axis. Lymphatic Forum 2021, May 31-June 5, Virtual Meeting.
81. Elwaie, T.A., Sajib, M.S., Abbas, S.E., George, R.F., Aly, E.I., Elmageed, Z.Y.A., **Mikelis, C.M.**, Ali H.I. Novel Pyrrolotriazine based VEGFR-2 kinase Inhibitors as Promising Candidates Targeting Triple Negative Breast Cancer: Design, Synthesis, Biological Evaluation and Molecular Modeling Study. San Antonio Breast Cancer Symposium 2021, Sep 7-11.
82. Pervaiz, I., Zahra, F.T., **Mikelis, C.M.**, Al-Ahmad, A. Modeling Glut1 Deficiency Syndrome at the Human Blood-Brain Barrier *In Vitro* Using CRISPR-Cas9 Edited Induced Pluripotent Stem Cells. 2021 Society of Neuroscience Conference, Nov 13-16.

#### D. Relevant Platform Presentations

1. Invited Speaker: University of Dresden, Germany. Seminar title: Vascular permeability in Histamine-induced inflammatory diseases: the role of endothelial RhoA. August 8<sup>th</sup> 2013.
2. Invited Speaker: School of Pharmacy, Texas Tech University, Texas, USA. Seminar title: The Rho-le of vascular permeability in histamine-induced inflammatory diseases. February 11<sup>th</sup> 2014.
3. Invited Speaker: University of Nottingham, UK. Seminar title: Endothelial permeability in inflammatory conditions: the role of RhoA. May 16<sup>th</sup> 2014.
4. Invited Speaker: Wilmer Eye Institute, Johns Hopkins University, USA. Seminar title: The role of vascular permeability in histamine-induced inflammatory conditions. July 9<sup>th</sup> 2014.
5. Invited Speaker: 12th Annual International Innate Immunity Conference, Chania, Crete, Greece. Seminar title: RhoA and ROCK mediate histamine-induced vascular leakage and anaphylactic shock. June 22<sup>nd</sup> 2015.
6. Invited Speaker: School of Pharmacy, University of Patras, Greece. Seminar title: Endothelial RhoA mediates histamine-induced inflammatory conditions, by controlling vascular leakiness. June 30<sup>th</sup> 2015.
7. Invited Speaker: Immunotherapeutics and Biotechnology Department, School of Pharmacy, Texas Tech Health Sciences Center, Abilene, Texas, USA. Seminar title: The Rho-le of vascular permeability in histamine-induced inflammatory diseases. October 16<sup>th</sup> 2015.
8. Invited Speaker: Department of Pharmaceutical Sciences, Bouve College of Health Sciences, Northeastern University, Boston, Massachusetts, USA. Seminar title: The role of vascular permeability in cancer and non-cancer-related inflammatory diseases. March 24<sup>th</sup> 2016.
9. Invited Speaker: Amarillo Research Days organized by the School of Pharmacy, TTUHSC, Amarillo, USA. Seminar title: Role of vascular permeability in inflammatory diseases: The role of small GTPase RhoA. June 2<sup>nd</sup> 2016.
10. Invited Speaker: 14<sup>th</sup> Annual International Innate Immunity Conference, Crete, Greece. Seminar title: Endothelial RhoA mediates trans-endothelial cancer cell migration and metastasis. June 22<sup>nd</sup> 2017.
11. Invited Speaker: Amarillo Research Days organized by the School of Pharmacy, TTUHSC, Amarillo, USA. Seminar title: Role of vascular permeability in inflammatory diseases: The role of small GTPase RhoA. June 13<sup>th</sup> 2018.

12. Invited Speaker: Biomedical Research Foundation Academy of Athens (BRFAA), Athens, Greece.  
Seminar title: The Rho-le of a small GTPase in vascular physiology. September 30<sup>th</sup> 2019.
13. Invited Speaker: Oklahoma Medical Research Foundation (OMRF), Oklahoma City, Oklahoma, OK, USA.  
Seminar title: The Rho-le of small GTPases in vascular physiology. November 19<sup>th</sup> 2019.
14. Invited Speaker: 2<sup>nd</sup> International Conference on Cell and Experimental Biology, Houston, TX, USA. Talk title: The impact of endothelial RhoA on tumor cell transmigration and metastasis. July 13<sup>th</sup> 2021.

## E. Research Support

### Ongoing Research Support

**R15, NCI, NIH R15CA231339** (Mikelis, Co-PI) 07/01/2018 – 06/30/2021  
Title: Novel class of chemotherapeutic agents for treatment of metastatic Triple-negative breast cancer.  
Total cost: \$458,847  
Role: Co-PI (with Dr. German)

**Push-to-NIH TTUHSC Seed Grant 2018** (Mikelis, PI) 12/1/2018 – 11/30/2020  
Title: Role of endothelial RhoA on angiogenesis.  
Total cost: \$75,000  
Role: PI

**Department of Pharmaceutical Sciences Research Enhancement Program 2020** (Mikelis, PI) 04/01/2020 – 03/31/2021  
Title: Compensatory mechanisms upon endothelial RhoA inhibition: the role of RhoB  
Total cost: \$10,000  
Role: PI

**CANCER PREVENTION AND RESEARCH INSTITUTE OF TEXAS (CPRIT) CORE FACILITY SUPPORT AWARD RP200572** (Mikelis Co-I) 08/31/2020 – 08/30/2025  
Title: From Whole-Animal Imaging to Superresolution Microscopy: An Imaging Core for the TTUHSC Campus at Amarillo  
Total cost: \$2,831,213  
Role: Co-I (PI: Dr. Ulrich Bickel)

**Hellenic Foundation for Research & Innovation (HFRI) Grant #376** (Mikelis, PI) 2021-2024  
Title: Role of endothelial RhoA in cancer metastasis  
Total cost: €180.000,00  
Role: PI

**MEDIKOS Award #81755** (Mikelis, PI) 2021-2023  
Total cost: €4.500,00  
Role: PI

### Completed Research Support

**Basic Research Seed Grant 2016** (Mikelis, PI) 08/01/16 – 07/31/17  
Office of Sciences, School of Pharmacy, Texas Tech University Health Sciences Center  
Title: Blocking cancer cell trans-endothelial migration to prevent metastasis: role of known mediators and identification of new ones.  
Goal: This seed grant provided funding to gather pilot data for the role of small GTPase RhoA on cancer cell trans-endothelial migration.  
Role: PI

**The Laura W. Bush institute for Women's Health Seed Grant** (Mikelis, Co-PI) 04/15/17 – 04/14/18

Title: The role of the exosome pathway in facilitating lung metastases in a mouse model of LAM

Goal: Screening for identification of exosome-induced targets in the lung in a newly-developed in vivo LAM model.

Amount: \$25,000

Role: Co-PI (with Dr. Karbowiczek)

**TTUHSC Start-up funds**

(Mikelis, PI)

11/01/14 – 10/31/17

School of Pharmacy, Texas Tech University Health Sciences Center

Goal: There were funds provided by TTUHSC SOP to support establishment of the Mikelis Laboratory and generation of experimental data for grant proposals.

Role: PI

## F. School Service

### Faculty Committees

- Graduate Program Committee (Member) (2015-2017)
- Continuous Education Committee (Member) (2015-2016)
- Faculty Search Committee for a Tenure-Track faculty position in the Department of Biomedical Sciences (Member) (2015-2016)
- Principles of Disease Curricular Renewal Ad-hoc Committee (Chair) (2016-2017)
- Research Advisory Committee (Member) (2016-2017)
- Student Admissions Committee (Member) (2017-2021)
- Faculty Search Committee for a Tenure-Track faculty position in the Department of Biomedical Sciences (Member) (2017)
- Faculty Search Committee for a non-Tenure-Track Teaching position in the Department of Biomedical Sciences (Member) (2018)
- Student Admissions Committee (Chair) (2021)

### Teaching Activity

#### **Texas Tech University Health Sciences Center**

##### PharmD Program:

- Facilitator in Case Studies of 2<sup>nd</sup> year PharmD students (PHAR 3361) (2015-2018).
- Clinical Research and Literature Evaluation (PHAR 2210), 2<sup>nd</sup> year PharmD students (2015-present).
- Principles of Disease (Teaching Team Leader) (PHAR 1233), 1<sup>st</sup> year PharmD students (2016-present).
- Clinical Correlations 2 (PHAR 1251), 1<sup>st</sup> year PharmD students (2019-present).

##### Graduate Program:

- Cancer Biology and Therapeutics Course (GPSC 5326), Graduate School of Biomedical Sciences (2014 - present).
- Experimental Design and Biostatistics (Teaching Team Leader) (GPSC 5230), Graduate School of Biomedical Sciences (2016-present).
- Advanced Principles of Disease Graduate Course (GPSC 5356), Graduate School of Biomedical Sciences (2017-present).
- Advanced Course in Vascular Biology (Teaching Team Leader), Graduate School of Biomedical Sciences (2018-present).
- Pharmacogenomics and Nanomedicine Graduate Program of Aristotle University of Thessaloniki, Greece (2020).

## **University of Patras**

### PharmD Program:

- Physiology I (PHA-A25-NEW)
- Physiology II (PHA-B14-NEW)

### Graduate Program “Drug Discovery and Development”

- Preclinical and Clinical Drug Assessment (DPHA\_4)
- Molecular Targets of Drug Activity (DPHA\_C01)
- Applied Biotechnology and Bioinformatics (DPHA\_C02)
- Therapeutic Precision Approaches (DPHA\_C03)

## **Student Advisory Committees**

### Supervisor of PhD Candidates

- Mr. Sanaullah Sajib (2015-2020) Successfully defended his PhD on 6/8/2020.
- Ms. Fatema Tuz-Zahra (2016-2021) Successfully defended her PhD on 5/6/2021.
- Ms. Racheal Grace Akwii (2019-present)
- Ms. Behnaz Lahooti (2020-present)
- Mr. Hanumantha Rao Madala (2016, graduate student rotation)
- Mr. Andrew Baez (2017, graduate student rotation)

### Supervisor of MSc Candidates

- Ms. Racheal Akwii (2018-2019)

### Supervisor of ABRI Interns

1. Mr. Christopher Cobos, West Texas A&M University (2015)
2. Mr. Suyash Srivastava, UT Austin (2017)

### Supervisor of PharmD students

1. Mr. Christian Tulio (2017)
2. Ms. Myla Bhakta (2017)
3. Ms. Katelyn Gibson (2018-2019)

### Chair of Oral Qualifying Committees

1. Mr. Faleh Alqahtani (Supervisor: Dr. Ulrich Bickel; 2016)
2. Mrs. Srinidhi Jayaraman (Supervisor: Dr. Vardan Karamyan; 2016)
3. Mr. Ahmed Alobaida (Supervisor: Dr. Fakhru Ahsan; 2017)
4. Mr. Ali Sifat (Supervisor: Dr. Thomas Abbruscato; 2017)

### Member in Graduate Committees of PhD Candidates

1. Mr. Ismail Walbi (Supervisor: Dr. Xinli Liu), transferred to University of Houston
2. Mr. Alali Amer (Supervisor: Dr. Xinli Liu), transferred to University of Houston
3. Mr. Sushanta Sarkar (Supervisor: Dr. Ruiwen Zhang), quitted from GSBS
4. Mr. Ronak Patel (Supervisor: Dr. Abraham Al-Ahmad), graduated 10.2018
5. Mr. Hanumantha Rao Madala (Supervisor: Dr. Kalkunte Srivenugopal), graduated 3.2018
6. Mr. Mostofa A.M.G. (Supervisor: Dr. Kalkunte Srivenugopal), graduated 8.2017
7. Ms. Laxmi Iyer (Supervisor: Dr. Thomas Thekkumkara), graduated 10.2018
8. Ms. Nehal Gupta (Supervisor: Dr. Sanjay Srivastava), graduated 3.2019
9. Ms. Efrosyni Holeva (University of Patras, Greece; Supervisor: Dr. Evangelia Papadimitriou)
10. Ms. Despoina Denekou (University of Patras, Greece; Supervisor: Dr. Evangelia Papadimitriou)
11. Ms. Jee Hyun Park (Supervisor: Dr. Ulrich Bickel), graduated 3.2017
12. Mr. Sreedhar Reddy Suthe (Supervisor: Dr. Ming-Hai Wang), graduated 10.2019
13. Mr. Anwar Hossain (Supervisor: Dr. Nadezhda German), graduated 10.2019
14. Mr. Sharavan Ramachandran (Supervisor: Dr. Sanjay Srivastava), graduated 10.2020
15. Mr. Ahmed Morsy (Supervisor: Dr. Paul Trippier)
16. Mrs. Snehal Raut (Supervisor: Dr. Abraham Al-Ahmad), graduated 9.2020

17. Ms. Daniela Rolph (Supervisor: Dr. Hiranmoy Das), graduated 9.2021
18. Mr. Carl (Joey) Greene (Supervisor: Dr. Hiranmoy Das)
19. Mr. Behnam Noorani (Supervisor: Dr. Ulrich Bickel), graduated 5.2021
20. Ms. Iti Kaushik (Supervisor: Dr. Sanjay Srivastava), graduated 9.2021
21. Mr. Ali Keshavarz (Supervisor: Dr. Fakhru Ahsan), graduated 3.2020
22. Mr. Hossam Abdelrahman (Supervisor: Dr. Fakhru Ahsan), graduated 4.2021
23. Ms. Farzane Sivandzade (Supervisor: Dr. Luca Cucullo)
24. Mr. Aditya Bhalerao (Supervisor: Dr. Luca Cucullo)
25. Mr. Sounak Bagchi (Supervisor: Dr. Rahul Jayant)
26. Ms. Rachel Hudson (Supervisor: Dr. Ming-Hai Wang), graduated 10.2021
27. Ms. Shiva Hadi Esfahani (Supervisor: Dr. Vardan Karamyan)
28. Ms. Magda Christopoulou (University of Patras, Greece; Supervisor: Dr. Evangelia Papadimitriou)
29. Ms. Tanya Chhibber (Supervisor: Dr. Rahul Jayant)
30. Ms. Beth Daugherty (Supervisor: Dr. Magdalena Karbowniczek)
31. Ms. Sadisna Shahi (Supervisor: Dr. Nadezhda German)
32. Mr. Trevor Anderson (Supervisor: Dr. Devin Lowe)
33. Mr. Sreyas Gaikwad (Supervisor: Dr. Sanjay Srivastava)
34. Ms. Marina Anastasiou (Supervisors: Dr. George Bertias, University of Crete and Dr. Pilar Alcaide, Tufts University), graduated 6.2021
35. Mr. MD Sariful Islam Howlander (Supervisor: Dr. Das)

#### Member in Graduate Committees of MSc Candidates

1. Ms. Despoina Ntenekou (U. Patras, Greece; Supervisor: Dr. Evangelia Papadimitriou), graduated 6.2017
2. Ms. Pinelopi Kastana (U. Patras, Greece; Supervisor: Dr. Evangelia Papadimitriou), graduated 9.2017
3. Ms. Kinzie Sherrill (Supervisor: Dr. Abraham Al-Ahmad), graduated 3.2019
4. Ms. Nausheen Syera (Supervisor: Dr. Vardan Karamyan), graduated 6.2019
5. Ms. Spyridoula Mparmpousi (U. Patras, Greece; Supervisor: Dr. Evangelia Papadimitriou), graduated 9.2020
6. Ms. Pooja Sree Varahachalam (Supervisor: Dr. Rahul Jayant)
7. Mr. Chanakya Patel (Supervisor: Dr. Ulrich Bickel), graduated 5.2021

#### **Graduate Students currently being mentored in Dr. Mikelis' lab**

- **Md Sanaullah Sajib** (2015 - 2020); supported by TTUHSC, Graduate School of Biomedical Sciences
- **Fatema Tuz Zahra** (2016 - present); supported by TTUHSC, Graduate School of Biomedical Sciences
- **Racheal G. Akwii** (2019 - present); supported by TTUHSC, Graduate School of Biomedical Sciences
- **Behnaz Lahooti** (2020 - present); supported by TTUHSC, Graduate School of Biomedical Sciences

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