CURRICULUM VITAE

Christina Marie Laukaitis, M.D., Ph.D., FACP, FACMGG

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CHRONOLOGY OF EDUCATION

08/91-06/95	B.S. Biology, B.S. Chemistry, Honors Program, Butler University, Indianapolis, IN Honors: "Mouse salivary androgen protein mediates mate selection behavior"
07/95-05/01	Ph.D. Department of Cell and Structural Biology, University of Illinois, Urbana, IL "Differential dynamics of $\alpha 5$ integrin, paxillin, and α -actinin during formation and disassembly of adhesions in migrating cells." Advisor: Rick Horwitz
08/99-05/03	M.D. University of Illinois Chicago College of Medicine, Urbana-Champaign Campus, Urbana, IL
06/03-07/03	Visiting researcher, Oxford University, Oxford, UK
07/03-06/04	Intern, Internal Medicine Residency, St. Vincent Hospital, Indianapolis, IN
06/04-06/06	Resident, Internal Medicine Residency Program, St. Vincent Hospital, Indianapolis, IN
06/06-09/06	Locum tenens clinical practice
09/06-08/08	Fellow, Division of Medical Genetics, University of Washington, Seattle, WA

Board Certifications and Licenses

01/05-present	DEA license #BL9698056
06/04-06/07	Physician license # 11011691A, State of Indiana
08/06-08/08	Physician license #MD00046480, State of Washington
07/08-present	Physician license #40539, State of Arizona
11/06	Diplomate, American Board of Internal Medicine (recertification 11/2016)
10/09	Diplomate, American Board of Medical Genetics
03/11-present	Fellow, American College of Physicians
01/15-present	Fellow, American College of Medical Genetics

PRESENT POSITION

Associate Professor of Medicine with Tenure
Medical Genetics Program Director
Division of Geriatrics, General Internal Medicine and Palliative Medicine
Department of Medicine, University of Arizona College of Medicine, Tucson, AZ

Associate Professor (Joint Appointment)
Department of Nutritional Sciences, University of Arizona, Tucson, AZ

Director of Genetic Consultation and Counseling Services Center for Applied Genetics and Genomic Medicine, University of Arizona, Tucson, AZ

Director of Molecular Genetic Pathology Fellowship Program Department of Pathology, University of Arizona, Tucson, AZ

Medical Education Director, Outreach Core, Partnership for Native American Cancer Prevention University of Arizona Cancer Center, University of Arizona, Tucson, AZ

Member, University of Arizona Cancer Center University of Arizona, Tucson, AZ

Member, Southwest Environmental Health Sciences Center College of Pharmacy, University of Arizona, Tucson, AZ

CHRONOLOGY OF EMPLOYMENT

06/92-08/92	Summer Intern, U.S. Department of Agriculture, Maquoketa, IA
08/92-06/93	Resident Assistant, Office of Student Affairs, Butler University, Indianapolis, IN
2003, 2004	Butler Summer Institute Research Student, Butler University, Indianapolis, IN
08/93-06/94	Staff Assistant, Office of Student Affairs, Butler University, Indianapolis, IN
08/94-06/95	Resident Assistant, Office of Student Affairs, Butler University, Indianapolis, IN
07/95-08/97	Graduate Assistant, Dept. of Cell & Structural Biology, University of Illinois, Urbana, IL
08/97-05/98	Teaching Assistant, Intro. to Cell & Molecular Biology, University of Illinois, Urbana, IL
05/98-08/00	Graduate Assistant, Dept. of Cell & Structural Biology, University of Illinois, Urbana, IL
08/00-12/00	Teaching Assistant, Medical Microbiology Laboratory, University of Illinois, Urbana, IL

01/01-05/01	Teaching Assistant, Medical Neuroscience Laboratory, University of Illinois, Urbana, IL
07/06-08/06	Locum tenens physician, Hopi Health Care Center, Polacca, AZ
09/08-present	Physician, University Physicians Health, Tucson, AZ
09/08-08/10	Assistant Professor, Clinical Medicine, Deptartment of Medicine, University of Arizona, Tucson, AZ
09/08-01/14	Associate Investigator, Arizona Cancer Center, Tucson, AZ
03/09-present	Member, Genetics Graduate Interdisciplinary Training Program, University of Arizona, Tucson, AZ
07/09-present	Member, Cancer Biology Interdisciplinary Training Program, University of Arizona, Tucson, AZ
09/10-06/17	Assistant Professor of Medicine, Tenure Eligible, Dept. of Medicine, University of Arizona, Tucson, AZ
03/10-12/12	Medical Director, University Medical Center Home Health, University of Arizona, Tucson, AZ
07/10-06/13	Clinical Director, Coagulation Clinic, Department of Medicine, University of Arizona, Tucson, AZ
10/12-12/13	Associate Program Director, Internal Medicine Residency Program, University of Arizona, Tucson, AZ
01/14-present	Member, University of Arizona Cancer Center, Tucson, AZ
	Member, Southwest Environmental Health Sciences Center, College of Pharmacy, University of Arizona, Tucson, AZ
03/14-08/15	Laboratory Co-Director, Clinical Laboratory of the University of Arizona Genomics Core, Tucson, AZ
01/15-present	Director of Genetic Consultation and Counseling Services, Center for Applied Genetics and Genomic Medicine, University of Arizona, Tucson, AZ
07/16-present	Director, Molecular Genetic Pathology Fellowship Program, Department of Pathology, University of Arizona, Tucson, AZ
07/17-present	Associate Professor of Medicine with Tenure, Dept. of Medicine, University of

HONORS AND AWARDS

08/91-06/95 National Science Scholar

Arizona, Tucson, AZ

Spring 1998	Outstanding Cellular and Molecular Biology Teaching Assistant, University of Illinois, Urbana, IL
Spring 1998	"Teaching Assistants Rated 'Excellent' by their Students" list, University of Illinois, Urbana, IL
Fall 2000	"Teaching Assistants Rated 'Excellent' by their Students" list, University of Illinois, Urbana, IL
06/03	AMWA Janet Glasgow Memorial Award, University of Illinois College of Medicine, Urbana, IL
04/05	Indiana Chapter American College of Physicians Research poster winner, sponsored presentation at ACP Annual Meeting, Indianapolis, IN
06/06	Resident's Research Award, St. Vincent Hospital, Indianapolis, IN
01/11	Association of Specialty Professors/T. Franklin Williams Scholars Program meeting, Washington D.C.
03/11	Yellen Distinguished Young Investigator Award, Arizona Cancer Center; unrestricted use gift, Tucson, AZ
10/11	40 under 40, Arizona Star, recognizes young leaders in Tucson based on professional accomplishments, leadership qualities and community impact
11/13	"Researcher of the Year", Arizona Chapter, American College of Physicians
09/14-06/15	Learning to Lead Faculty Leadership Program, University of Arizona College of Medicine, Tucson, AZ
07/2017	Promotion to Associate Professor, with tenure, University of Arizona, Tucson, AZ
03/2019	Awarded Mendel Medal by Moravian Museum, Brno, Czech Republic

SERVICE/OUTREACH

Local/State outreach

11/08-presentArizona State Genetic Services Advisory Committee

09/10	Judge, American College of Physicians Arizona Chapter Meeting, Phoenix, AZ
10/11	Judge, American College of Physicians Arizona Chapter Meeting, Tucson, AZ
12/11	"Cancer 101" 8-hour workshop of cancer pathology, risk factors, treatment and support; Hopi Tribe Community Health Workers, Hopi Cancer Support Services, Kykotsmovi, AZ

09/14-09/16 Board Member, Friends of Hubbel Trading Post National Historic Site, raise money to provide >\$25,000 in scholarships annually to Native American students 09/15 "Cancer 101" 5-hour workshop of cancer pathology, risk factors, treatment and support, Navajo Tribe Community Health Workers and Kayenta Area Public Health Nurses, Kayenta, AZ National/international outreach 10/10-09/11 Butler Young Alumni Board, Butler University, Indianapolis, IN 09/12-present Southwest Oncology Group (SWOG) 2015-present American ambassador to the Mendelianum, organizing the American celebration of the International Mendel Day on March 8 of each year 2018-present Hypermobile EDS Genetic Research Network 2019-present Chair, hematology subcommittee of the Ehlers Danlos Society International Consortium on EDS and Related Disorders College committees 09/09-present Multidisciplinary Endocrine Tumor Board, University of Arizona College of Medicine, Tucson, AZ 09/11-present Organizer, Genetics & Genomics Grand Rounds, University of Arizona College of Medicine, Tucson, AZ 10/12-12/14 Internal Medicine Residency Competency Evaluation Committee, University of Arizona College of Medicine, Tucson, AZ MD/PhD Program Admissions Committee, University of Arizona College of 08/13-present Medicine, Tucson, AZ Ad Hoc Member, Scientific Review Committee, University of Arizona Cancer 08/15-present Center, Tucson, AZ 09/15-07/17 Member, Cancer Committee, University of Arizona Cancer Center, Tucson, AZ Ad Hoc Member, ACS Institutional Research Grant Review Committee, Tucson, 10/16-12/16 AZUniversity committees 05/13-11/13 Genomic Clinical Services Task Force, University of Arizona, Tucson, AZ 07/13-10/14 Genomic Medical Review Board, University of Arizona, Tucson, AZ AHSC Precision Health Advisory Council, University of Arizona, Tucson, AZ 11/13-04/14 09/15-06/17 Molecular Oncology Tumor Board, University of Arizona, Tucson, AZ

Date of CV 04/2019

Other service

2013	Ad hoc Reviewer, Cancer Epidemiology, Prevention, and Biomarkers
2013	Ad hoc Reviewer, Grant Program of the Czech Science Foundation
2014	Ad hoc Reviewer, Gut
2015-2019	Ad hoc Reviewer, PLoS One
2014 & 2015	Ad hoc Reviewer, BMC Genomics
2015	Ad hoc Advisor for rare disease prescribing, Banner Population Pharmacy
2015	Ad hoc Reviewer, Molecular Carcinogenesis
09/15-present	Adult Genetics Special Interest Group, American College of Medical Genetics
2016	Ad hoc reviewer, Cancer Genetics
06/16	Ambassador and Table co-leader, Cancer Moonshot Summit, Vice President Joe Biden's nationwide conversation about cancer
10/17	Reviewer, Partnership for Native American Cancer Prevention Outreach small grants program

PUBLICATIONS (in order by date)

Contributions to scholarly books and monographs

- 1. Lazarowitz, S.G., Ward, B.M., Sanderfoot, A.A., and **Laukaitis, C.M.** (1997) "Intercellular and intracellular trafficking: What we can learn from Geminivirus movement" in <u>Cellular Integration of Signalling Pathways in Plant Development</u>. NATO ASI Series. Series H: Cell Biology, Vol. 104, Springer-Verlag, Berlin, Germany.
- 2. **Laukaitis, C.M.**, and Karn, R.C. (2012) "Recognition of subspecies status in the evolution of incipient reinforcement on the European house mouse hybrid zone" in <u>Evolution of the House Mouse</u> (Eds. M. Macholán et al.), Cambridge University Press, Cambridge, UK.
- 3. Thompson, P.A., Stopeck, A. and Laukaitis, C.M. (2013) "Breast cancer prevention" in Fundamentals of Cancer Prevention, Ed. 3 (Eds. D. Alberts and L. Hess), Springer-Verlag, Berlin, Germany.
- 4. Dennis L.K., Lynch C.F., Brown H., **Laukaitis C.M.**, Lashway S., Smith E. (2019) "Cancer"in: Maxcy-Rosenau-Last Public Health and Preventive Medicine, Ed. 16 (Ed. Remington P), New York: McGraw-Hill Medical.

Refereed journal articles (student co-authors indicated by asterix and underline)

1. **Laukaitis, C.M.**, Critser, E.S. and Karn, R.C. (1997) Salivary androgen-binding protein (ABP) mediates sexual isolation in Mus Musculus. Evolution.**51**(16): 2000-2005. Date of CV 04/2019

- 2. Knight, B., Laukaitis, C.M., Akhtar, N., Hotchin, N.A., Edlund, M. and Horwitz, A.R. (2000) Visualizing cell migration in situ. Current Biology. 10: 576-585. PMID: 10837222
- 3. **Laukaitis, C.M.**, Donais, K., Webb, D.J., and Horwitz, A.F. (2001) Differential dynamics of α5 integrin, paxillin, and α-actinin during formation and disassembly of adhesions in migrating cells. Journal of Cell Biology. **153**(7):1427-1440. PMID: 11425873
- 4. Talley, H.M., Laukaitis, C.M., Karn, R.C. (2001) Female preference for male saliva: Implications for sexual isolation of Mus musculus subspecies. Evolution. **55**(3): 631-634. PMID: 11327170
- 5. **Laukaitis, C.M.**, Dlouhy, S.R., and Karn, R.C. (2003) The mouse salivary androgen-binding protein (ABP) gene cluster on chromosome 7: Characterization and evolutionary relationships. Mammalian Genome. **14**:679-691. PMID: 14694904
- 6. Karn, R.C. and Laukaitis, C.M. (2003) Characterization of two forms of mouse salivary androgen-binding protein (ABP): Implications for evolutionary relationships and ligand-binding function. Biochemistry. 42(23):7162-7170. PMID: 12795612
- 7. Emes, R.D., Riley, M.C., **Laukaitis, C.M.**, Goodstadt, L., Karn, R.C., and Ponting, C.P. (2004) Rapid duplication and sequence diversification within the rodent androgen-binding protein (ABP) gene cluster. Genome Research. **14**(8):1516-1529. PMID: 15256509
- 8. **Laukaitis, C.M.**, Dlouhy, S.R., Emes, R.D., Ponting, C.P., and Karn, R.C. (2005) Diverse spatial, temporal, and sexual expression of recently duplicated androgen-binding protein genes in *Mus musculus*. BMC Evolutionary Biology. **5**:40. PMID: 16018816
- 9. **Laukaitis**, **C.M.** and Karn, R.C. (2005) Evolution of the secretoglobins: A genomic and proteomic view. Biological Journal of the Linnean Society. **84**:493-501.
- 10. **Laukaitis, C.M.,** Heger, A., Blakley, T.D., Munclinger, P., Ponting, C.P., and Karn, R.C. (2008) Rapid bursts of Abp gene duplication occurred independently in diverse mammals. BMC Evolutionary Biology. **8**:46. PMID: 18269759
- 11. Karn, R.C. and **Laukaitis**, **C.M.** (2009) The mechanism of expansion and the volatility it created in three pheromone gene clusters in the mouse genome. Genome Biology and Evolution. **2009**:494-503. PMID: 20333217
- 12. Karn, R.C., Young, J.M., and **Laukaitis**, C.M. (2010) A candidate *Mus muculus* subspecies discrimination system involving a *V1R* gene with different alleles fixed in *M. m. domesticus* and *M. m. musculus*. PLOS One. **5**(9):e12638. PMID: 20844586
- 13. Vošlajerová Bímová, B., Macholán, M., Baird, S.E.B., Munclinger, P., **Laukaitis, C.M.**, Karn, R.C., Luzynski, K., Tucker, P., Piálek, J. (2011) Reinforcement selection acting on the European house mouse hybrid zone. Molecular Ecology. **20**(11):2403-2424. PMID: 21521395
- 14. Zhou, X., Wei, Y., Xie, F., **Laukaitis, C.M.**, Karn, R.C., Kluetzman, K., Gu, J., Zhang, Q-Y., Roberts, D.W., and Ding, X. (2011) A Novel Defensive Mechanism against Acetaminophen Toxicity in the Mouse Lateral Nasal Gland: Role of CYP2A5-mediated

- regulation of testosterone homeostasis and salivary Androgen-binding protein Expression. Molecular Toxicology. **79**(4):710-723. PMID: 21252290
- 15. Karn, R.C. and **Laukaitis, C.M.** (2011) Positive selection shaped the convergent evolution of independently expanded kallikrein subfamilies expressed in mouse and rat saliva proteomes. PLoS One. **6**(6):e20979. PMID: 21695125
- 16. Karn, R.C., Mauss, C. and **Laukaitis, C.M.** (2012) Congenic strain analysis reveals genes that are rapidly evolving components of a prezygotic isolation mediating incipient reinforcement. PLoS One. 7(4):e35898. PMID: 22558260
- 17. Karn R.C., **Laukaitis C.M.** (2012) The roles of gene duplication, gene conversion and positive selection in rodent *Esp* and *Mup* pheromone gene families with comparison to the *Abp* family. PLoS One. **7**(10):e47697. *PMID*: 23094077
- 18. Nelson-Moseke, A.C*, Jeter, J.M., Cui, A., Roe, D.J., Chambers, S.K., and Laukaitis, C.M. (2013) An Unusual BRCA Mutation Distribution in a High-Risk Cancer Genetics Clinic. Familial Cancer. 12(1):83-87. PMID: 23179792. *Mentored resident is primary author
- 19. <u>Janoušek V</u>.*, Karn R.C., **Laukaitis C.M.** (2013) The role of retrotransposons in gene family expansions: insights from the mouse Abp gene family. BMC Evol Biol. **13**:107. PMID: 23718880. Highly-accessed manuscript; *Mentored graduate student is primary author.
- 20. Karn, R.C., <u>Chung, A.G.</u>*, **Laukaitis, C.M.** (2013) Shared and unique proteins in human, mouse and rat saliva proteomes: Footprints of functional adaptation. Proteomes. **1**(3):275-89. PMID: 249264338. *<u>Mentored undergraduate student is co-author.</u>
- 21. Karn RC, **Laukaitis CM.** (2014) Selection shaped the evolution of mouse androgen-binding protein (ABP) function and promoted the duplication of *Abp* genes. Biochem Soc Trans. 42(4):851-60. PMID: 25109968.
- 22. Karn, R.C., <u>Chung, A.G.</u>*, **Laukaitis, C.M.** (2014) Did androgen-binding protein paralogs undergo neo- and/or sub-functionalization as the Abp gene region expanded in the mouse genome? PLoS One. 9(12):e115454. PMID: 25531410. *<u>Mentored undergraduate student is co-author</u>
- 23. Burton, B.K., Balwani, M., Feillet, F., Barić, I., Burrow, T.A., Camarena Grande, C., Coker, M., Consuelo-Sánchez, A., Gómez, G., Deegan, P., Di Rocco, M., Enns, G.M., Erbe, R., Ezgu, F., Ficicioglu, C., Furuya, K.N., Kane, J., Laukaitis, C., Mengel, E., Neilan, E., Nightingale, A.S., Peters, H., Scarpa, M., Otfried, K., Smolka, S., Valayannopoulos, V., Wood, M., Goodman, Z., Yang, Y., Eckert, S., Rojas-Caro, S., Quinn, A.G. (2015) A Phase 3 Trial of Sebelipase Alfa in Lysosomal Acid Lipase Deficiency. New England Journal of Medicine 373(11):1010-20. PMID: 26352813.
- 24. Karn, R.C., **Laukaitis, C.M.** (2015) Comparative Proteomics of Mouse Tears and Saliva: Evidence from Large Protein Families for Functional Adaptation. Proteomes 3(3):283-297.
- 25. <u>Huynh, J.M.</u>*, **Laukaitis, C.M**. (2015) Panel testing reveals nonsense and missense *CDH1* mutations in families without Hereditary Diffuse Gastric Cancer. Medical Genetics and Genomic Medicine 4(2):232-236. PMID: 27064202. *Mentored graduate student is co-author

- 26. Romagnolo, D.F, Papoutsis, A.J., **Laukaitis, C.M.** Selmin, O.I. (2015) Constitutive expression of AhR and BRCA-1 promoter CpG hypermethylation as biomarkers of ERα-negative breast tumorigenesis. BMC Cancer 15;1026. PMID:267115507.
- 27. <u>Janoušek V.</u>*, Yanchukov, A., Karn R.C., **Laukaitis C.M.** (2016) The role of retrotransposons in gene family expansions in the human and mouse genomes. Genome Biology and Evolution. 8(9):2632-50. PMID: 27503295. *<u>Mentored graduate student is primary author</u>
- 28. <u>Chung, A.G.*</u>, <u>Belone, P.*</u>, Vošlajerová, B.B., Karn, R.C., and **Laukaitis, C.M.** (2017) Studies of an Androgen-Binding Protein Knockout Corroborate a Role for Salivary ABP in Mouse Communication. Genetics. 205(4):1517-1527. PMID: 28159752. *<u>Mentored undergraduate students are co-authors</u>
- 29. Pezer, Z., <u>Chung, A.G.*</u>, Karn, R.C., **Laukaitis, C.M.** (2017) Analysis of copy number variation in the *Abp* gene regions of two house mouse subspecies suggests divergence during the gene family expansions. Genome Biology and Evolution 9(6):1393-1405. PMID: 28575204. *<u>Mentored undergraduate student is co-primary author</u>
- 30. Thybert, D., Roller, M., Navarro, F.C., Fiddes, I., Streeter, I., Feig, C., Martin-Galvez, D., Kolmogorov, G., <u>Janoušek</u>, V., Akanni, W., Aken, B., Aldridge, S., Chakrapani, V., Chow, W., Clarke, L., Cummins, C., Doran, A., Dunn, M., Goodstadt, L., Howe, K., Howell, M., Josselin, A-A., Karn, R.C., **Laukaitis, C.M.,** Jingtao, L., Martin F., Muffato, M., Quail, M.A., Sisu, C., Stanke, M., Stefflova, K., Van Oosterhout, C., Veyrunes, F., Ward, B., Yang, F., <u>Yazdanifar, G</u>.*, Zadissa, A., Adams, D., Brazma, A., Gerstein, M., Paten, B., Pham, S., Keane, T., Odom, D.T., Flicek, P. (2017) Repeat associated mechanisms of genome evolution and function revealed by the *Mus caroli* and *Mus pahari* genomes. Genome Research 28(4):448-459. PMID: 29563166. *Mentored undergraduate student is co-author
- 31. <u>Huynh, J.M.*</u>, Galindo, M., **Laukaitis, C.M.** (2018) Novel and Missense Variants of Uncertain significance in *TMEM67* Present in a Patient with Joubert Syndrome. Clinical Case Reports 6(11):2189-2192. PMID: 30455918. *Mentored MD, PhD student is co-author
- 32. Valori, V., Tus, K., LeBeau, L., **Laukaitis, C.M.**, Harris, D.T., and Maggert, K.A. (2019) Human rDNA Copy Number Is Unstable in Metastatic Breast Cancers. PLoS Genetics (Under Review)

Reviews (Peer-reviewed prior to publication)

- 1. **Laukaitis, C.M.** and Gerner, E.W. (2011) DFMO: Targeted Risk Reduction Therapy. Best Practice and Research: Clinical Gastroenterology 25(4-5):495-506. PMID: 22122766
- 2. **Laukaitis, C.M.** (2012) Genetics for the General Internist. American Journal of Medicine 125(1):7-13. PMID: 22079017
- 3. Laukaitis, C.M., Erdman, S.H. and Gerner, E.W. (2012) Chemoprevention in patients with genetic risk of colorectal cancers. Colorectal Cancer 1(3):241-256. PMID: 25221625

4. Jesudas, R., Chaudhury, A., **Laukaitis, C.M.** (2019) An update on the new classification of Ehlers-Danlos syndrome and review of the causes of bleeding in this population. Haemophilia. (In Press)

WORKS IN PROGRESS

- 1. Jesudas, R., Saboda, K., <u>Martinez, K.L.</u>, <u>Huynh, J., Sanoja, A.</u>, Mauss, C., Byers, P. and **Laukaitis, C.M.** While Symptoms are Similar Between People Who Do and Do Not Meet hEDS Criteria, Bleeding and Bruising Differ (drafting with Spring 2019 submission)
- 2. <u>Martinez, K.L.</u>, <u>Hiadlovska, Z.</u>, Mauss, C., Karn, R.C. and **Laukaitis, C.M.** qPCR Method Highlights Prominent Sexual Dimorphism in Submandibular Gene Expression in Mice (drafting with Summer 2019 submission)
- 3. Karn, R.C., Pezer, Z., <u>Yazdanifar, G.</u>, Janoušek V., and **Laukaitis, C.M**. The *Androgen-binding protein* gene regions in 6 species and subspecies of the genus Mus (drafting with Summer 2019 submission)
- 4. Laukaitis, C.M., Chaudhury, A., Mauss, C., <u>Urquijo, M.</u>, Walsh, T., Daneri Navarro, A., King, M-C., Thompson, P. Frequent BRCA1/2 Mutations Found in Mexican & Mexican-American Women with Breast Cancer. The Breast Journal (data analysis completed, anticipated Summer 2019 submission)
- 5. Dias, R., Wilder, J., Mauss, C., Heimark, R., **Laukaitis, C.M.**, Prediction of Breast Cancer Stage by a Multi-Locus SNP in Mexican and Mexican American Women. (data analysis completed, anticipated Autumn 2019 submission)

SCHOLARLY PRESENTATIONS

Seminars, Symposia and Rounds

- 05/03 Invited Presentation. 4th European Congress of Mammalogy, "Evolution of the secretoglobins: A new family of mammalian proteins" Brno, Czech Republic
- 11/05 Invited Seminar. Department of Zoology, "Diverse spatial, temporal, and sexual expression of recently duplicated androgen-binding protein genes in *Mus musculus*" Charles University, Prague, Czech Republic
- 11/06 Invited Seminar. Institute for Vertebrate Biology, "Rapid bursts of *Abp* gene duplication occurred independently in diverse mammals" Czech Academy of Sciences, Studenec, Czech Republic
- 04/08 Invited Presentation. 1st International Conference of Wild Mouse Genetics, "Rapid bursts of *Abp* gene duplication in rodents and other mammals" Max Planck Institute for Evolutionary Biology, Plön, Germany
- 05/09 Invited Seminar. Department of Zoology, "Rapid bursts of *Abp* gene duplication in rodents and other mammals" Masyryk University, Brno, Czech Republic

- 08/09 Gastrointestinal Division Grand Rounds. "Hereditary Nonpolyposis Colon Cancer Syndrome" University of Arizona, Tucson, AZ
- 10/09 Internal Medicine Resident Academic Half-day. "Genetics for the General Internist" University of Arizona, Tucson, AZ
- 04/10 Medical Staff Education. "Native American Cancer Prevention Goals, Cancer Staging" Hopi Health Care Center, Polacca, AZ,
- 09/10 Workshop Leader. Annual Meeting, Arizona Chapter, American College of Physicians, "Genetic Testing" Phoenix, AZ
- 09/10 Internal Medicine Resident Academic Half-day. "Genetics for the General Internist" University of Arizona, Tucson, AZ
- 12/10 Medical Staff Education. "Colon cancer in high-risk populations" Hopi Health Care Center, Polacca, AZ,
- 12/10 Medical Staff Management Conference. "Care of the patient at high risk of cancer" Southern Arizona Veterans Administration Health Care Center, Tucson, AZ
- 02/11 Pulmonology Division Seminar. "Genetics for Pulmonologists" University of Arizona, Tucson, AZ
- 05/11 Medical Staff Education. "Lynch syndrome and renal cancer: Not so rare in Native Arizona" Chinle Navajo Health Services Hospital, Chinle, AZ
- 08/11 Medical Staff Education. "Evidence for cancer screening and prevention; Identification of the patient at high-risk for breast cancer" Tohono O'Odham Indian Health Service Hospital, San Xavier, AZ
- 12/11 Medical Staff Education. "Identifying and caring for women at high risk of breast cancer" Hopi Health Care Center, Polacca, AZ
- 02/12 Invited Presentation. Indian Health Service Midwinter Conference on Women's and Children's Healthcare, "Hereditary Cancer Syndromes, Maternal and Pediatric Considerations" Telluride, CO
- O3/12 Invited Presentation. Medicine Grand Rounds. "Genetics for the General Internist" Department of Medicine, University of Arizona, Tucson, AZ
- 06/12 Invited Presentation. Navajo Nation Cancer Conference, Pre-meeting for health care professionals "Clinical Trials of Cancer Prevention" Window Rock, AZ
- 07/12 Invited Presentation. Pathfinders Summer Institute, Native Research Network "Cancer Basics", "Cancer Types and Treatments" and "Cancer Prevention" Seattle, WA
- 11/12 Invited Seminar. Czech Academy of Sciences, "The evolutionary history of three mouse pheromone gene families" Brno, Czech Republic

- 04/13 Medicine Grand Rounds. "Genetic Breast Cancer Syndromes: Cancer is Preventable, but Patients are Under-recognized" Department of Medicine, University of Arizona, Tucson, AZ
- 04/13 Invited Presentation. 22nd Annual Southwestern Conference on Medicine, "Genetic Testing for the Primary Care Physician" Tucson, AZ
- 06/13 Invited Presentation. Pathfinders Summer Institute, "Cancer BASICS" Tucson, AZ
- 08/13 Invited Presentation. International Society for Inherited Gastrointestinal Tumors Semiannual Meeting, "Seeking genes that predict desmoid formation in patients with familial adenomatous polyposis" Cairns, Australia
- O5/14 Invited Presentation. 2nd International Conference of Wild Mouse Genetics, "Selection shaped the evolution of mouse androgen-binding protein (ABP) function and promoted the duplication of *Abp* genes" Max Planck Institute for Evolutionary Biology, Plön, Germany
- 05/14 Invited Seminar. Ventana Medical Systems, "Insensitivity to antigrowth signals" Oro Valley, AZ
- 03/15 Invited Presentation. Mendel Forum 2015, "Mendelian Genetics: an historical perspective and a glimpse into the future". Centrum Mendelianum, Brno, Czech Republic
- 05/15 Internal Medicine Resident Academic Half-day. "Who to refer to genetics, and why to refer them" University of Arizona, Tucson, AZ
- 05/15 Invited Seminar. Undergraduate Biology Research Program. "Genes, genomes and mouse spit" University of Arizona, Tucson, AZ
- 06/15 Invited Seminar. MD-PhD Program. "Careers in Cancer Genetics and Research" University of Arizona, Tucson, AZ
- 07/15 Invited Seminar. NACP Research Retreat. "Cancer in Native Americans in Arizona" Northern Arizona University and University of Arizona, Tucson, AZ
- 07/15 Invited Seminar. NACP Research Retreat. "Genetic research in genomic instability and cancer" Northern Arizona University and University of Arizona, Tucson, AZ
- 09/15 Invited Seminar. Pathology Resident/Fellow Conference. "Mendelian Genetics and Testing for Common Disorders" University of Arizona, Tucson, AZ
- 09/15 Invited Seminar, Dermatology Resident Conference. "Genetics for Dermatology" University of Arizona, Tucson, AZ
- 01/16 Invited Seminar. Pathology Resident/Fellow Conference. "Cancer Genetics" University of Arizona, Tucson, AZ
- 04/16 Family Medicine Residency Academic Half-Day. "Cultural Competency Training: Working with Native American Patients" University of Arizona, Tucson, AZ

- 05/16 Internal Medicine Residency Academic Half-Day. "Cultural Competency Training: Working with Native American Patients" University of Arizona, Tucson, AZ
- 10/16 Invited Seminar. Pathology Resident/Fellow Conference. "Cancer Genetics" University of Arizona, Tucson, AZ
- 06/16 Invited Seminar. Scientific Team Meeting. "In Pursuit of the Function of Mammalian Androgen-binding proteins (ABPs)" Research Institute in Semiochemistry and Applied Ethology, Quartier Salignan, France
- O7/16 Short course core lecture. "Cancer genomics" Summer internship for INdigenous peoples in Genomics, Tucson, AZ
- 03/17 Invited Seminar. "Cross Cultural Communication: Challenges for Healthcare Providers and Researchers" Native American Research and Training Center Winter Institute, Tucson AZ
- 11/17 Invited Seminar. Basic Medical Sciences Seminar Series. "Breast Cancer in Mexican and Mexican American Women" The University of Arizona College of Medicine—Phoenix, Phoenix, AZ
- 02/18 Invited Seminar. "Cross Cultural Communication: Challenges for Healthcare Providers and Researchers" Native American Research and Training Center Winter Institute, Tucson AZ
- 05/18 Invited Speaker. Cancer Prevention & Control Seminar Series. "Breast Cancer in Mexican and Mexican American Women" The University of Arizona Cancer Center, Tucson, AZ
- O5/18 Invited Speaker. 3rd Annual Precision Medicine Symposium. "The hEDS GENE study: A major gene-finding effort for hypermobility EDS" The Center for Applied Genetics and Genomic Medicine, The University of Arizona, Tucson, AZ
- 05/18 Invited Speaker. UBRP Ethics Retreat. "Germline Genome Editing" Undergraduate Biology Research Program, The University of Arizona, Tucson, AZ
- 06/18 Invited Presentation. Internal Medicine Grand Rounds. "The hEDS GENE study: A major gene-finding effort for hypermobility EDS" Department of Medicine, The University of Arizona, Tucson, AZ
- 08/18 Key Note Speaker. 2018 Medical Scholars Program Student Retreat. "Persistence and Perspicacity: Lessons from an Academic Life" University of Illinois College of Medicine at Urbana-Champaign, Champaign, IL

Colloquia

- 04/09 Public lecture. "Live smarter: Cancer Genetics and You", Flandrau Science Café, University of Arizona, Tucson, AZ
- 01/10 Public lecture. "Breast cancer risk assessment & chemoprevention", Cancer in the Family Conference, Tucson, AZ

- 02/10 Public lecture. "Assessing your cancer risk based on family history" University of Arizona Cancer Center Public Lecture Series, Green Valley, AZ
- O3/10 Public lecture. "Assessing your cancer risk based on family history", University of Arizona Cancer Center Public Lecture Series, Oro Valley, AZ
- 03/12 Public lecture. "Cancer 101", Tucson Indian Center, Tucson, AZ
- 06/12 Public lecture. "Cancer basics and prevention", Navajo Nation Cancer Conference, Window Rock, AZ
- 09/12 Public lecture and panel member. "Ovarian cancer screening and prevention", National Ovarian Cancer Coalition, Tucson Chapter, Tucson, AZ
- 03/13 Public Lecture. "Colorectal Cancer", Breaking Barriers in Cancer among Native Americans Conference, Partnership for Native American Cancer Prevention, Flagstaff, AZ
- 02/14 Invited Speaker. "Inherited cancer risk in patients from the UA High-risk Cancer Genetics Clinic", Tucson Chapters Phi Beta Psi Founders Day Banquet, Tucson, AZ
- 04/14 Public Lecture. "DNA and Inherited Disease", Pima County Genealogical Society, Tucson, AZ
- 05/14 Invited Speaker. Cancer Health Disparities Institute, Board of Community Advocates Meeting, "Inherited Predisposition to Breast Cancer in Mexican and Mexican American Women" University of Arizona Cancer Center, Tucson, AZ
- 01/15 Invited Speaker. "Updates in Fabry Disease", Fabry Support & Information Group Tucson Fabry Family Get Together, Tucson, AZ
- 03/15 Invited Speaker. "Alpha-1-Antitrypsin Genetics", Old Pueblo Alpha-1 Support Group Meeting, Tucson, AZ
- 10/16 Panel Member. "Pink and Blue: The Colors of Hereditary Cancer", DiepCjourney Foundation, Tucson, AZ
- 01/17 Invited Speaker. "Diagnosis and Inheritance of Ehlers-Danlos Syndrome", Ehlers-Danlos Syndrome Facebook Meetup Group, Tucson, AZ
- 09/17 Invited Speaker. "The hEDS GENE Project: A gene finding effort for hypermobility Ehlers-Danlos Syndrome", Dazzle Vegas 2017 EDS Global Learning Conference Las Vegas, NV
- 03/18 Invited Speaker. "Updates in Fabry Disease Treatment", Fabry Support & Information Group Tucson Fabry Family Get Together, Tucson, AZ
- O5/18 Panel Member. "A Special Community screening of: 'Jay", Institute for LGBT Studies & Arizona Queer Archives, University of Arizona, Tucson, AZ

CONFERENCES

4th European Congress of Mammalogy, Brno, Czech Republic 05/03

American College of Physicians Annual Session, San Francisco, CA 05/05

Summer Institute in Statistical Genetics, Courses in Basic statistics, Genetic data analysis, Molecular phylogenetics, North Carolina State University, Raleigh, NC 06/05-07/05

European Society for Evolutionary Biology 10th Congress, Krakow, Poland 08/05

Northwest Genetics Exchange, Vancouver, BC, Canada 04/07

1st International Conference of Wild Mouse Genetics, Max Planck Institute for Evolutionary Biology, Plön, Germany 04/08

NCI Translational Science Meeting, Vienna, VA 11/09

Annual Meeting, Arizona Chapter, American College of Physicians, Phoenix, AZ 09/10

Beyond the Genome: The human gene count, human evolution and disease genomics. Boston, MA 10/10

International Society for Inherited Gastrointestinal Tumors Semi-annual Meeting, San Antonio, TX 03/11

International Congress of Human Genetics. Montreal, Quebec, Canada 10/11

Indian Health Service Midwinter Conference on Women's and Children's Healthcare, Telluride, CO 02/12

Navajo Nation Cancer Conference, Pre-meeting for health care professionals. Window Rock, AZ 06/12

Native Research Network Semi-Annual Meeting", Seattle, WA 07/12

American College of Medical Genetics, Annual Meeting, Phoenix, AZ 03/13

22nd Annual Southwestern Conference on Osteopathic Medicine, Tucson, AZ 04/13

International Society for Inherited Gastrointestinal Tumors Semi-annual Meeting, Cairns, Australia 08/13

American College of Physicians, Arizona Chapter Meeting, Tucson, AZ 11/13

Behaviour Meets Biochemistry: Animals Making Sense of Molecules Making Scents, London, England 02/14

2nd International Conference of Wild Mouse Genetics, Max Planck Institute for Evolutionary Biology, Plön, Germany, 05/14

American Society of Human Genetics 64th Annual Meeting, San Diego, CA 10/14 Date of CV 04/2019

Mendel Forum 2015, Centrum Mendelianum, Brno, Czech Republic 03/15

American College of Medical Genetics Annual Clinical Genetics Meeting, Salt Lake City, UT 03/15

Sanford Children's Genomic Medicine Consortium Inaugural Meeting, Sioux Falls, SD 04/15

American College of Medical Genetics Annual Clinical Genetics Meeting, Tampa, FL 03/16

Ehlers Danlos Syndrome International Symposium, New York City 05/16

Collaborative Group of the Americas for Inherited Colorectal Cancer, Seattle, WA 10/16

American College of Medical Genetics Annual Clinical Genetics Meeting, Phoenix, AZ 03/17

4th International Conference of Wild Mouse Genetics, Zurich, Switzerland, 06/17

American College of Medical Genetics Annual Clinical Genetics Meeting, Charlotte, NC 04/18 International Symposium on Ehlers Danlos Syndromes, Ghent, Belgium 09/18

Ehlers Danlos Society Classification re-evaluation meeting, New York City, NY 04/19

American College of Medical Genetics Annual Clinical Genetics Meeting, Seattle, WA 04/19

Peer reviewed abstracts (mentored student in italics)

- 1. **Laukaitis, C.M.**, Karn, R.C. Where and when are *Abp*-like gene copies expressed? Abstract selected for poster presentation. American College of Physicians Annual Session, San Francisco, CA, 05/05.
- 2. **Laukaitis, C.M.**, Dlouhy, S.R., Emes, R.D., Ponting, C.P., and Karn, R.C. Diverse spatial, temporal, and sexual expression of recently duplicated androgen-binding protein genes in *Mus musculus*. European Society for Evolutionary Biology 10th Congress, Krakow, Poland, 08/05.
- 3. Bímová, B, Macholán, M., Munclinger, P., **Laukaitis, C.M.**, Karn, R.C., Pialek J. The test of behavioral isolation on the mouse hybrid zone: the comparison of behavioral and molecular cline. European Society for Evolutionary Biology 10th Congress, Krakow, Poland, 08/05.
- 4. Karn R.C., Laukaitis C.M., Munclinger P. The evolutionary history of a gene involved in adaptive evolution. European Society for Evolutionary Biology 10th Congress, Krakow, Poland, 08/05.
- 5. *Bímová*, *B.*, Macholán, M., Munclinger, P., **Laukaitis, C.M.**, Karn, R. C., Tucker, P., Piálek, J., Behavioral isolation in the house mouse hybrid zone. 11th International Conference on Rodent Biology "Rodens et Spatium", Myshkin, Russia, 07/09.

- 6. *Bímová*, *B.*, Macholán, M., Munclinger, P., **Laukaitis**, C.M., Karn, R.C., Baird, S.J.E., Piálek, J. Behavioural isolation in the house mouse hybrid zone. 12th Congress of European Society for Evolutionary Biology, Turin, Italy, 08/09.
- 7. **Laukaitis, C.M.** and Thompson, P. Detecting Copy Number Variation in Candidate Genes for Colorectal Cancer Risk. Invited poster and abstract. NCI Translational Science Meeting, Vienna, VA, 11/09.
- 8. Karn, R.C. and **Laukaitis, C.M.** A candidate subspecies discrimination system involving a vomeronasal receptor gene with different alleles fixed in *M. m. domesticus* and *M. m. musculus*. Beyond the Genome: The human gene count, human evolution and disease genomics. Boston, MA, 10/10.
- 9. **Laukaitis, C.M.**, Thompson, P., Martinez, M-E., and Gerner, E.W. Identifying gene copy number variants associated with colorectal adenoma recurrence. Beyond the Genome: The human gene count, human evolution and disease genomics. Boston, MA, 10/10.
- 10. **Laukaitis C.M.** and Fuentes-Mauss, C. Does germline variation in the number of Glutathione S-transferase gene copies affect the risk of metachronous colorectal neoplasia? International Congress of Human Genetics. Montreal, Canada 10/11
- 11. *Nelson-Moseke, A.C,* Jeter, J.M., Cui, A., Roe, D.J., Chambers, S.K., and **Laukaitis, C.M.** An Unusual BRCA Mutation Distribution in a High Risk Cancer Genetics Clinic. American Society of Human Genetics. San Francisco, CA 11/12
- 12. Mauss, C., Thompson, P., Garcia, F., Lopez, AM, Laukaitis, C.M. Prevalence of Genetic Mutations in Mexican and Mexican-American Women with Breast Cancer. American College of Medical Genetics Annual Meeting, Phoenix, AZ 03/13
- 13. *Chaudhury, A.*, Mauss, C., Jeter, J., **Laukaitis, C.M.** Understanding Genetic Polymorphisms and Susceptibility in High Risk Breast Cancer. American College of Medical Genetics Annual Meeting, Phoenix, AZ 03/13
- 14. *Maher*, *K.*, Walton, S-J, Mauss, C., Clark, S., **Laukaitis, C.M.** Seeking genes that predict desmoid formation in patients with familial adenomatous polyposis American College of Medical Genetics Annual Meeting, Phoenix, AZ 03/13
- 15. *Chung, A.*, Mauss, C., Karn, R.C., **Laukaitis, C.M.** Expression of Androgen-binding protein genes (*Abp*) in lacrimal glands and tear secretions. American College of Medical Genetics Annual Meeting, Phoenix, AZ 03/13
- 16. **Laukaitis, C.M**, *Maher, K., Walton, S-J*, Mauss, C., Clark, S. Seeking genes that predict desmoid formation in patients with familial adenomatous polyposis. International Society for Inherited Gastrointestinal Tumors Semi-annual Meeting, Cairns, Australia 08/13
- 17. Chaudhury, A., Mauss, C., Jeter, J.M., Laukaitis, C.M. Genomic Evaluation of Inherited Predisposition to Breast Cancer in Women from the University of Arizona Cancer Center High Risk Breast Cancer Genetics Clinic. American Association for Cancer Research (AACR) Special Conference on Advances in Breast Cancer Research: Genetics, Biology, & Clinical Applications, San Diego, CA. 10/13

- 18. **C.M. Laukaitis**, *A. Chaudhury*, C. Mauss, T. Walsh, P. Thompson, A-M Lopez, A. Daneri Navarro, M-C King. Genomic evaluation of inherited predisposition to breast cancer among women of Mexican ancestry. American Society of Human Genetics Annual Meeting, Boston, MA 10/13
- 19. *Chaudhury, A.*, Mauss, C., Jeter, J.M., **Laukaitis, C.M**. University of Arizona Cancer Center High Risk Breast Cancer Genetics Clinic Perspective on Utilization of a Custom Next Generation Sequencing Panel. American College of Physicians Arizona Chapter Scientific Meeting; Tucson, AZ 11/13
- 20. *Maher, K., Walton, S-J,* Mauss, C., Clark, S., **Laukaitis, C.M.** QSOX1: A Desmoid Tumor Modifier Gene in FAP? American College of Physicians Arizona Chapter Scientific Meeting; Tucson, AZ 11/13; *Ist Place Poster Award Winner*
- 21. Chaudhury, A., Laukaitis, C.M., Mauss, C., Walsh, T., Casadei, S., Thompson, P., Lopez, AM, Daneri Navarro, A., King, M-C. Frequent BRCA1/2 Mutations Found in Mexican & Mexican American Women with Breast Cancer. American Association for Cancer Research (AACR) San Antonio Breast Cancer Symposium; San Antonio, TX, 12/13
- 22. *Huynh*, *J.*, **Laukaitis**, **C.M.** Panel Testing Reveals Nonsense and Missense *CDH1* Mutations in Families Without Hereditary Diffuse Gastric Cancer. American College of Medical Genetics Annual Meeting, Tampa, FL, 03/15
- 23. *Huynh, J.*, **Laukaitis, C.M.** Panel Testing Reveals Nonsense and Missense *CDH1* Mutations in Families Without Hereditary Diffuse Gastric Cancer. Collaborative Group of the Americas for Inherited Colorectal Cancer 2016 Annual Meeting, Seattle, WA, 10/16
- 24. Gawryletz, C.D., McLaughlin, B.M, **Laukaitis, C.M.** Stewart, A.K., A homozygous missense mutation in the Procollagen-Lysine,2-Oxogluarate 5-Dioxygenase 2 (*PLOD2*) gene compatible with clinical phenotype Bruck syndrome type 2 (BRKS2). Center for Individualized Medicine Conference, Rochester, MN, 10/2016
- 25. Mauss C., Heimark, R., Wilder, J. Laukaitis, C.M. A SNP assay to predict risk of advanced breast cancer in women of Mexican ancestry participating in the *ELLA* Study. American College of Medical Genetics Annual Meeting, Phoenix, AZ, 03/2017
- 26. *Huynh*, *J.*, **Laukaitis**, **C.M**. *TMEM67* Variants of Uncertain Significance present in a Patient with Joubert Syndrome. American College of Medical Genetics Annual Meeting, Phoenix, AZ, 03/2017
- 27. **Laukaitis, C.M.**, Karn, R.C., Analysis of copy number variation in the *Abp* gene regions of two house mouse subspecies suggests divergence during the gene family expansions. 4th International Conference of Wild Mouse Genetics, University of Zurich, Zurich, Switzerland, 06/17
- 28. Karn, R.C, **Laukaitis, C.M.**, What have we learned about the rapid and extensive *Abp* gene family expansion in the genus Mus? 4th International Conference of Wild Mouse Genetics, University of Zurich, Zurich, Switzerland, 06/17

- 29. *Huynh, J.*, Galindo, M., **Laukaitis, C.M.** Synergistic effects observed in a patient with both Rubinstein-Taybi and 22q11.2 deletion syndromes. American College of Medical Genetics Annual Meeting, Charlotte, NC 04/2018
- 30. *Martinez, K.*L., Saboda, K., Mauss, C., Byers, P., **Laukaitis, C.M.** Patients diagnosed with hEDS and G-HSD have their quality of life similarly disrupted by GI symptoms. American College of Medical Genetics Annual Meeting, Seattle, WA 04/2019
- 31. *Huynh*, *J.*, Saboda, K., Mauss, C., Byers, P., **Laukaitis, C.M.** Patient-reported fatigue and sleepiness symptoms are similar between patients with hEDS and G-HSD. American College of Medical Genetics Annual Meeting, Seattle, WA 04/2019
- 32. Jesudas, R., Mauss, C., Saboda, K., *Huynh, J., Sanoja, A., Martinez, K.*, Byers, P., **Laukaitis, C.M.** While symptoms are similar between people who do and do not meet hEDS criteria, bleeding and bruising differ. American College of Medical Genetics Annual Meeting, Seattle, WA 04/2019
- 33. Sanoja, A., Saboda, K., Byers, P., **Laukaitis, C.M.** Patients affected by hEDS and G-HSD both report significant kinesiophobia and chronic pain by Tampa Scale for Kinesiophobia (TSK) assessment. American College of Medical Genetics Annual Meeting, Seattle, WA 04/2019
- 34. Erdemir, O., *Sanoja, A, Martinez, K.*, Mauss, C., Byers, P., **Laukaitis, C.M.** Identifying candidate genes for hEDS: Design and initial results of the hEDS Gene study. American College of Medical Genetics Annual Meeting, Seattle, WA 04/2019

PUBLICATION ACTIVITY (calculated 04/2019)

33 publications

WoS: 915 citations, h-index: 14, average citations/item: 27.73

GRANTS

Current, Federal

U54 CA143924 Solomon, Alberts, Briehl, Martinez 09/14-08/19 NIH/NCI \$901,147 0.6 Calendar

Partnership in Native American Cancer Prevention, Outreach Core.

Role: Co-I, Medical Education Director for Community Outreach Program

The goal of this project is to partner with tribal communities to develop sustainable community education programs and research for cancer prevention that address the unique needs and stages of readiness in three tribal communities (Hopi, Navajo, and Tohono O'odham Nations).

LTAUSA18 Macholan & Laukaitis 01/19-12/22
Ministerstvo SMT of Czech Republic \$10,000 cost share 0 Calendar
Looking through the evolutionary window: What does introgression of a large gene family across the mouse hybrid zone tell us about speciation?

The goal of this Czech/American Scientific Cooperation Grant is to describe the detailed structure of the *Abp* gene complex in wild mice of the *M. m. musculus* and *M. m. domesticus* subspecies and their natural hybrids using a novel technique of long-reads sequencing supplemented with up-to-date computing and bioinformatical approaches.

Current, Industry

EDS-related coagulation research Laukaitis & Jesudas 01/18-01/19
Aniara Diagnostica, LLC \$20,000 0 Calendar

Identifying the genetic basis of bleeding in patients with Ehlers-Danlos Syndrome (EDS)

EDS describes a series of conditions that may be associated with bleeding symptoms. Patients with EDS may have associated platelet function defects, although additional and multiple etiologies are likely. There is an unmet need to better identify patients with EDS with an increased bleeding risk in order to limit surgeries, provide prophylaxis and identify treatments.

Genzyme Rare Disease Registry Laukaitis (Site PI) 07/14-ongoing Genzyme, a Sanofi Company \$60,152 0 Calendar

Rare Disease Registry Program (including Gaucher, Fabry, MPS I, and Pompe diseases). This longitudinal, international, observational program tracks outcomes of routine clinical practice for patients with these rare diseases. Data collected from these physicians represents rare disease practice patterns and disease and treatment understanding across different populations and cultures. The data collected by this international, collaborative registry may provide information to better characterize the natural history and progression of these diseases, as well as the clinical responses of patients whose physicians have prescribed treatment for their disease.

Current, Private Foundation

Research Project Grant Laukaitis & Byers 12/16-12/2019 Wallace Research Foundation \$782,298 2.4 Calendar

Mapping genes for the Ehlers-Danlos Syndrome hypermobility subtype.

Ehlers-Danlos Syndrome (EDS) is a collection of heritable connective tissue disorders. Except for the hypermobile type, most types have a known disease-causing gene. This study seeks to identify major genes associated with hypermobility EDS using exome sequencing of affected patients. It also supports clinical services in order to develop and test treatment protocols.

Research Project Grant Laukaitis & Byers 07/17-12/18
Maltz Family Foundation \$198,500 0 Calendar

Funding to Augment Current Research on Ehlers-Danlos syndrome.

This funding expands analysis potential of the Wallace Foundation Funding to allow whole genome sequencing and auto-antibody analysis of 150 participant samples and to start Nurse Practitioner clinical support in 2017.

Research Project Grant Laukaitis & Byers 12/18-12/19
Maltz Family Foundation \$260,000 0 Calendar

Funding to Expand Current Research on Ehlers-Danlos syndrome.

This funding adds a full-time genetic analyst to assist with whole genome sequence analysis, adds additional metabolomics analysis, supports career development funding for the PI, and funds a series of small EDS community meetings.

Completed Research Support, Federal

P50 CA950060 Gerner 10/12-09/13 bridge funding

NIH/NCI \$599,999 1 Calendar

NIH/NCI Specialized Program of Research Excellence in GI Cancer (GI SPORE)

Developing medical treatments for FAP.

Role: Substudy MPI

The long-term objective of our SPORE in GI Cancers is to decrease mortality due to GI Cancers by developing novel approaches for risk assessment, screening, chemoprevention and therapeutics. This project studies medication regimens to delay surgery and prevent cancer in people with FAP, an inherited cancer syndrome.

U54 CA143924-01 Wiist & Garcia 09/09-08/14 NIH/NCI \$5.4 Million 1 Calendar

Partnership in Native American Cancer Prevention, Outreach Core.

Role: Medical Education Director for Community Outreach Program

The goal of this project is to partner with tribal communities to develop sustainable community education programs and research for cancer prevention that address the unique needs and stages of readiness in three tribal communities (Hopi, Navajo, and Tohono O'odham Nations).

U54 CA143924 Solomon, Alberts, Briehl, Martinez 02/15-01/16 NIH/NCI \$901,147 0.6 Calendar

Functional analysis of ATM gene mutations identified in minority women with breast cancer.

Role: Substudy MPI

This funding supports development of a full pilot project for NACP funding. These funds come with three expectations: (1) submission of a proposal application to NACP, (2) travel of collaborators to each other's institutions and to relevant tribal communities, (3) submission for external funding.

Completed Research Support, Private Foundation

Komen small research grants Ray 06/09-05/13 Susan B. Komen Foundation 0 Calendar

Education and screening regarding BRCA1/2 mutations and associated cancer risks to the underserved urban, rural, and Latina populations at high risk for hereditary breast cancer in Arizona via tele-genetic counseling.

Role: Co-Investigator

The major goal of this project was to measure the feasibility and reaction to providing genetic counseling and testing to underserved populations using modalities such as telemedicine.

IRG-74-0013 Alberts/Cress 07/12-06/14
American Cancer Society \$30,000 0 Calendar

DNA rangin gang mutations in woman of Marican ancastry with breast cancer

DNA repair gene mutations in women of Mexican ancestry with breast cancer.

Role: Substudy PI

The *ELLA* Study has created a unique database of women from an underserved and understudied population who have been affected by breast cancer. We will use these data to develop a baseline of mutation prevalence from which to start studying inherited breast cancer in other Hispanic populations.

Research Grant Laukaitis 08/012-07/14
Phi Beta Psi Charity Trust \$112,885 0 Calendar

Detecting inherited DNA-repair mutations in women with strong family histories of breast cancer.

This proposal supports translational studies looking for inherited genetic variation in breast-cancer risk genes to explain elevated familial breast cancer risk in the absence of *BRCA1* or *BRCA2* gene mutations. This work funds a preliminary study genotyping women from the UA Cancer Genetics Clinic who have not been affected by cancer, but who are at high-risk based on their family history.

74-001-34-IRG A. Kraft 12/15-12/16 American Cancer Society \$21,000 0 Calendar

A Multi-locus SNP Assay to Predict Risk of Advanced Breast Cancer in ELLA Samples.

Role: Substudy PI

We will genotype germline samples collected from the *ELLA* study, which enrolled 1222 Mexican-American women at the time of their diagnosis with breast cancer to test whether the risk-conferring low-affinity, low miR-367 genotypes are preferentially associated with participants with early (Stage 1-2) compared with later (Stage 3-4) breast cancer.

Completed Research Support, Industry

LAL-CL02 Laukaitis (Site PI) 08/13-09/17 Synageva BioPharma \$360,360 0.36 Calendar

A Multicenter, Randomized, Placebo-Controlled Study of SBC-102 in Patients with Lysosomal Acid Lipase Deficiency.

This multicenter, randomized, placebo-controlled study evaluates the safety and efficacy of SBC-102 (sebelipase alfa) in patients with Lysosomal Acid Lipase Deficiency (LALD). The study will consist of a screening period of up to 6 weeks, a 20-week double-blind treatment period and an open-label extension period of up to 130 weeks.

Graduate and Postdoctoral Advisors

Rick Horwitz, PhD Executive Director, Allen Institute for Cell Science Seattle, WA

Barbara Trask, PhD (retired) Senior Vice-President Emeritus Human Biology Division Fred Hutchinson Cancer Research Center Seattle, WA

Peter Byers, MD
Professor of Genetics
Departments of Medical Genetics, Pathology
Director, Collagen Diagnostic Laboratory
University of Washington
Seattle, WA

References

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Robert P. Erickson, MD Professor Emeritus of Pediatrics (Genetics) University of Arizona rpe@email.arizona.edu

This is a true and accurate statement of my activities and accomplishments. I understand that misrepresentation in securing promotion and tenure may lead to dismissal or suspension under ABOR Policy 6-201 J.

Collaborators within the past 5 years:

Peter Byers

Ateefa Chaudhury

Xinxin Ding

Adrian Daneri Navarro

Nathan Ellis Paul Flicek

Maureen Kelly Galindo Carol Goldtooth-Begay

O'neil Guthrie Ronald Heimark Zuzana Hiadlovská

Julie Huynh
Vaclav Janoušek
Rohith Jesudas
Robert Karn
Thomas Keane
Mary-Claire King

Jörg Klug Miloš Macholán Keri Maher Eva Matalová Pavel Munclinger Pavel Němec Zeljka Pezer Zoë Powis Denise Roe

Donato Romagnolo Ornella Selmin Teshia Solomon Patricia Thompson David Thybert Martyn Urquijo

Barbora Vošlajerová Bímová

Tom Walsh Jason Wilder Alexey Yanchukov Golbahar Yazdanifar