

Resource Summary Report

Generated by [kravitz2](#) on Jul 31, 2026

National Natural Toxins Research Center

RRID:SCR_002824

Type: Tool

Proper Citation

National Natural Toxins Research Center (RRID:SCR_002824)

Resource Information

URL: <https://www.tamuk.edu/agriculture/institutes-and-other-units/nntrc/Products-Services.html>

Proper Citation: National Natural Toxins Research Center (RRID:SCR_002824)

Description: Center to provide global research, training, and resources that will lead to the discovery of medically important toxins found in venoms. The Viper Resource Center (VRC) is located in the Natural Toxins Research Center at Texas A&M University-Kingsville.

Abbreviations: VRC, NNTRC

Synonyms: Viper Resource Center

Resource Type: core facility, service resource, access service resource

Keywords: venom, venomous snake, snake, LD50, ED50, toxin, toxins, electrophoretic titration, enzyme, fibrinolytic, function, assay, cancer, cell, chromatography, compound, disintegrin, venom gland, hemorrhagic, integrin, metalloproteinases, polypeptide, protein, proteolytic, species, vendor, research training

Funding: NIH Office of the Director P40 OD010960

Availability: Free, Freely available

Resource Name: National Natural Toxins Research Center

Resource ID: SCR_002824

Alternate IDs: nif-0000-24966

Alternate URLs: <https://orip.nih.gov/comparative-medicine/programs/genetic-biological-and-information-resources>

Old URLs: <http://ntrc.tamuk.edu/>,
<https://www.tamuk.edu/artsci/departments/ntrc/index.html>

Record Creation Time: 20220129T080215+0000

Record Last Update: 20260731T042642+0000

Ratings and Alerts

No rating or validation information has been found for National Natural Toxins Research Center.

No alerts have been found for National Natural Toxins Research Center.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 35 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#) .

Willard NK, et al. (2021) Proteomic Identification and Quantification of Snake Venom Biomarkers in Venom and Plasma Extracellular Vesicles. *Toxins*, 13(9).

Suntravat M, et al. (2021) Evaluation of Signaling Pathways Profiling in Human Dermal Endothelial Cells Treated by Snake Venom Cysteine-Rich Secretory Proteins (svCRiSPs) from North American Snakes Using Reverse Phase Protein Array (RPPA). *Toxins*, 13(9).

Lertwanakarn T, et al. (2021) Negative inotropic mechanisms of β -cardiotoxin in cardiomyocytes by depression of myofilament ATPase activity without activation of the classical β -adrenergic pathway. *Scientific reports*, 11(1), 21154.

Ponce-López R, et al. (2021) Neutralization of crotamine by polyclonal antibodies generated against two whole rattlesnake venoms and a novel recombinant fusion protein. *Toxicon : official journal of the International Society on Toxinology*, 197, 70.

Salazar E, et al. (2020) Biological activities of a new crotamine-like peptide from *Crotalus oreganus helleri* on C2C12 and CHO cell lines, and ultrastructural changes on motor endplate and striated muscle. *Toxicon : official journal of the International Society on Toxinology*, 188, 95.

Lertwanakarn T, et al. (2020) Suppression of cardiomyocyte functions by β -CTX isolated from the Thai king cobra (*Ophiophagus hannah*) venom via an alternative method. *The journal of venomous animals and toxins including tropical diseases*, 26, e20200005.

Zanotty Y, et al. (2019) Mutacytin-1, a New C-Type Lectin-Like Protein from the Venezuelan Cuaima (*Lachesis muta muta* Linnaeus, 1766) (Serpentes: Viperidae) Snake

Venom Inducing Cardiotoxicity in Developing Zebrafish (*Danio rerio*) Embryos. *Zebrafish*, 16(4), 379.

Salazar E, et al. (2019) Contribution of endothelial cell and macrophage activation in the alterations induced by the venom of *Micrurus tener tener* in C57BL/6 mice. *Molecular immunology*, 116, 45.

Suntravat M, et al. (2019) The isolation and characterization of a new snake venom cysteine-rich secretory protein (svCRiSP) from the venom of the Southern Pacific rattlesnake and its effect on vascular permeability. *Toxicon : official journal of the International Society on Toxinology*, 165, 22.

Sánchez EE, et al. (2019) The neutralization efficacy of expired polyvalent antivenoms: An alternative option. *Toxicon : official journal of the International Society on Toxinology*, 168, 32.

Dowell NL, et al. (2018) Extremely Divergent Haplotypes in Two Toxin Gene Complexes Encode Alternative Venom Types within Rattlesnake Species. *Current biology : CB*, 28(7), 1016.

Dobson J, et al. (2018) Rattling the border wall: Pathophysiological implications of functional and proteomic venom variation between Mexican and US subspecies of the desert rattlesnake *Crotalus scutulatus*. *Comparative biochemistry and physiology. Toxicology & pharmacology : CBP*, 205, 62.

Sánchez EE, et al. (2018) Crotamine-like from Southern Pacific rattlesnake (*Crotalus oreganus helleri*) Venom acts on human leukemia (K-562) cell lines and produces ultrastructural changes on mice adrenal gland. *Ultrastructural pathology*, 42(2), 116.

Suntravat M, et al. (2018) CatroxMP-II: a heme-modulated fibrinogenolytic metalloproteinase isolated from *Crotalus atrox* venom. *Biometals : an international journal on the role of metal ions in biology, biochemistry, and medicine*, 31(4), 585.

Girón ME, et al. (2018) Intraspecies geographical variability in the South American tigrá mariposa (*Bothrops venezuelensis* Sandner 1952) snake venom activities. *Toxicon : official journal of the International Society on Toxinology*, 144, 23.

Nielsen VG, et al. (2018) Characterization of the Rabbit as an In Vitro and In Vivo Model to Assess the Effects of Fibrinogenolytic Activity of Snake Venom on Coagulation. *Basic & clinical pharmacology & toxicology*, 122(1), 157.

Zhang C, et al. (2017) Lys49 myotoxin from the Brazilian lancehead pit viper elicits pain through regulated ATP release. *Proceedings of the National Academy of Sciences of the United States of America*, 114(12), E2524.

Komives CF, et al. (2017) Opossum peptide that can neutralize rattlesnake venom is expressed in *Escherichia coli*. *Biotechnology progress*, 33(1), 81.

Cantú E, et al. (2017) The binding effectiveness of anti- α -disintegrin polyclonal antibodies against disintegrins and PII and PIII metalloproteases: An immunological survey of type A, B and A+B venoms from Mohave rattlesnakes. *Comparative biochemistry and physiology. Toxicology & pharmacology : CBP*, 191, 168.

Dowell NL, et al. (2016) The Deep Origin and Recent Loss of Venom Toxin Genes in Rattlesnakes. *Current biology* : CB, 26(18), 2434.