



## **NORMA HILDA VAZQUEZ DIAZ**

### **Datos Generales**

**Nombre:** NORMA HILDA VAZQUEZ DIAZ

**Máximo nivel de estudios:** PASANTE

**Antigüedad académica en la UNAM:** 40 años

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### **Nombramientos**

**Vigente:** TECNICO ACADEMICO TITULAR B TC Definitivo  
Instituto de Investigaciones Biomédicas  
Desde 16-11-2016

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### **Estímulos, programas, premios y reconocimientos**

SNI I 2012 - 2023  
PRIDE C 2021 - 2024  
PRIDE D - 2021

## NORMA HILDA VAZQUEZ DIAZ

### DOCUMENTOS EN REVISTAS

#### Histórico de Documentos



#	Título	Autores	Revista	Año
1	Expression and characterization of scFv-6009FV in <i>Pichia pastoris</i> with improved ability to neutralize the neurotoxin Cn2 from <i>Centruroides noxius</i>	NORMA HILDA VAZQUEZ DIAZ GERARDO ALFONSO CORZO BURGUETE Mariel Adame et al.	INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES	2024
2	Multiple molecular mechanisms are involved in the activation of the kidney sodium-chloride cotransporter by hypokalemia	NORMA HILDA VAZQUEZ DIAZ TERESA DE JESUS ZARIÑAN GARCIA ALEJANDRO LOPEZ SAAVEDRA et al.	KIDNEY INTERNATIONAL	2022
3	Role of KLHL3 and dietary K <sup>+</sup> in regulating KS-WNK1 expression	MARIA DE JESUS CHAVEZ CANALES NORMA ARACELI BOBADILLA SANDOVAL NORMA HILDA VAZQUEZ DIAZ et al.	AM J PHYSIOL-RENAL	2021
4	KS-WNK1 Translates the Potassium Ingestion State to NCC Activity and Expression	MARIA DE JESUS CHAVEZ CANALES NORMA HILDA VAZQUEZ DIAZ GERARDO GAMBA AYALA et al.	JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY	2021
5	WNK3 and WNK4 exhibit opposite sensitivity with respect to cell volume and intracellular chloride concentration	NORMA HILDA VAZQUEZ DIAZ GERARDO GAMBA AYALA Pacheco-Alvarez D. et al.	AMERICAN JOURNAL OF PHYSIOLOGY-CELL PHYSIOLOGY	2020

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6	Structure-function relationships in the renal NaCl cotransporter (NCC)	PAOLA ANA DE LOS HEROS RIOS MARIA DEL CONSUELO PLATA RAMOS NORMA HILDA VAZQUEZ DIAZ et al.	Current Topics in Membranes	2019
7	Geraniin is a diuretic by inhibiting the Na <sup>+</sup> -K <sup>+</sup> -2Cl <sup>-</sup> cotransporter NKCC2	NORMA HILDA VAZQUEZ DIAZ ARACELI BOBADILLA SANDOVAL GERARDO GAMBA AYALA et al.	AM J PHYSIOL-RENAL	2018
8	The Calcium-Sensing Receptor Increases Activity of the Renal NCC through the WNK4-SPAK Pathway	JONATAN BARRERA CHIMAL HILDA VAZQUEZ DIAZ CONSUELO PLATA RAMOS et al.	JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY	2018
9	C-terminally truncated, kidney-specific variants of the WNK4 kinase lack several sites that regulate its activity	NORMA HILDA VAZQUEZ DIAZ ALBERTO DE LA ROSA VELAZQUEZ GERARDO GAMBA AYALA et al.	JOURNAL OF BIOLOGICAL CHEMISTRY	2018
10	Kidney-specific WNK1 isoform (KS-WNK1) is a potent activator of WNK4 and NCC	MARIA DE JESUS CHAVEZ CANALES NORMA HILDA VAZQUEZ DIAZ XOCHIQUETZAL GONZALEZ RODRIGUEZ et al.	AMERICAN JOURNAL OF PHYSIOLOGY-RE NAL PHYSIOLOGY	2018
11	Insulin and SGK1 reduce the function of Na <sup>+</sup> /monocarboxylate transporter 1 (SMCT1/SLC5A8)	NORMA HILDA VAZQUEZ DIAZ GERARDO GAMBA AYALA Lopez-Barradas, Adriana et al.	AMERICAN JOURNAL OF PHYSIOLOGY-CE LL PHYSIOLOGY	2016
12	The European Eel NCC Gene Encodes a Thiazide-resistant Na-Cl Cotransporter	MARIA DEL CONSUELO PLATA RAMOS NORMA HILDA VAZQUEZ DIAZ LEON DAVID ISLAS SUAREZ et al.	JOURNAL OF BIOLOGICAL CHEMISTRY	2016
13	With no lysine L-WNK1 isoforms are negative regulators of the K <sup>+</sup> -Cl <sup>-</sup> cotransporters	PAOLA ANA DE LOS HEROS RIOS NORMA HILDA VAZQUEZ DIAZ GERARDO GAMBA AYALA et al.	AMERICAN JOURNAL OF PHYSIOLOGY-CE LL PHYSIOLOGY	2016
14	Exonic Mutations in the SLC12A3 Gene Cause Exon Skipping and Premature Termination in Gitelman Syndrome	NORMA HILDA VAZQUEZ DIAZ GERARDO GAMBA AYALA Takeuchi, Yoichi et al.	JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY	2015
15	The effect of WNK4 on the Na <sup>+</sup> -Cl <sup>-</sup> cotransporter is modulated by intracellular chloride	VALERIA BAZUA VALENTI ChavezCanales Lorena RojasVega et al.	JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY	2015
16	The Effect of WNK4 on the Na <sup>+</sup> :Cl <sup>-</sup> Cotransporter is modulated by Intracellular Chloride	VALERIA BAZUA VALENTI RojasVega XOCHIQUETZAL GONZALEZ RODRIGUEZ et al.	FASEB JOURNAL	2015
17	Modulation of NCC activity by low and high K <sup>+</sup> intake: Insights into the signaling pathways involved	Maria Castaneda Bueno Lorena Rojas Vega Isidora Arroyo Garza et al.	AM J PHYSIOL-RENAL	2014

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18	WNK3 abrogates the NEDD4-2-mediated inhibition of the renal Na <sup>+</sup> -Cl <sup>-</sup> cotransporter	JUAN PABLO ARROYO ORTIZ Maria Chavez Canales NORMA HILDA VAZQUEZ DIAZ et al.	AM J PHYSIOL-RENAL	2014
19	WNK-SPAK-NCC cascade revisited: WNK1 stimulates the activity of the Na-Cl cotransporter via SPAK, an effect antagonized by WNK4	Maria Chavez Canales Maria Castaneda Bueno NORMA HILDA VAZQUEZ DIAZ et al.	Hypertension	2014
20	IgY pharmacokinetics in rabbits: Implications for IgY use as antivenoms	NORMA HILDA VAZQUEZ DIAZ ALEJANDRO ALAGON CANO Diaz, Patricia et al.	Toxicon	2014
21	The kinase WNK1 is a powerful inhibitor of the K <sup>+</sup> :Cl <sup>-</sup> cotransporters	Zesergio Melo Adrian Murillo Maria Chavez Canales et al.	FASEB JOURNAL	2014
22	Aspirin and salicylate are solutes of both sodium monocarboxylate transporters (SMCT1/Slc5a8 and SMCT2/Slc5a12)	MARIA DEL CONSUELO PLATA RAMOS Marisol Gavi Maza NORMA HILDA VAZQUEZ DIAZ et al.	FASEB JOURNAL	2014
23	Insulin increases the functional activity of the renal NaCl cotransporter	Maria Chavez Canales Juan Pablo Arroyo NORMA HILDA VAZQUEZ DIAZ et al.	JOURNAL OF HYPERTENSION	2013
24	Molecular evidence for a role for K <sup>+</sup> -Cl <sup>-</sup> cotransporters in the kidney	Zesergio Melo Silvia Cruz Rangel MARIA DEL ROCIO BAUTISTA PEREZ et al.	AM J PHYSIOL-RENAL	2013
25	Production of anti-horse antibodies induced by IgG, F(ab') <sub>2</sub> and Fab applied repeatedly to rabbits. Effect on antivenom pharmacokinetics	NORMA HILDA VAZQUEZ DIAZ FELIPE OLVERA RODRIGUEZ ALEJANDRO ALAGON CANO et al.	Toxicon	2013
26	N-terminal serine dephosphorylation is required for KCC3 cotransporter full activation by cell swelling	Zesergio Melo Silvia Cruz Rangel NORMA HILDA VAZQUEZ DIAZ et al.	JOURNAL OF BIOLOGICAL CHEMISTRY	2013
27	High resolution fluorescence microscopy evidence on the transport of immunoglobulins. Differences between mammalian IgG, F(ab <sub>hermitian conjugative matrix</sub> ) <sub>2</sub> and avian IgY	NORMA HILDA VAZQUEZ DIAZ Sevcik C. Salazar V. et al.	Toxicon	2013
28	Horse IgG- and ostrich IgY-F(ab') <sub>2</sub> groups have different affinities for mice erythrocytes and lymphocytes. Implications for avian immunoglobulin therapeutic usefulness	NORMA HILDA VAZQUEZ DIAZ Sevcik C. D'Suze G. et al.	Toxicon	2012
29	WNK3-SPAK Interaction is Required for the Modulation of NCC and other Members of the SLC12 Family	NORMA HILDA VAZQUEZ DIAZ Maria Castaneda Bueno PAOLA ANA DE LOS HEROS RIOS et al.	CELLULAR PHYSIOLOGY AND BIOCHEMISTRY	2012

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30	Activation of the renal Na <sup>+</sup> :Cl <sup>-</sup> cotransporter by angiotensin II is a WNK4-dependent process	Maria Castaneda Bueno NORMA HILDA VAZQUEZ DIAZ NORMA OFELIA URIBE URIBE et al.	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	2012
31	WNK3 Prevents the Nedd4-2 Inhibition of the Renal Na-Cl Cotransporter (NCC)	JUAN PABLO ARROYO ORTIZ Lorena Rojas Vega Maria Castaneda Bueno et al.	FASEB JOURNAL	2012
32	Physiological aspects of renal K <sup>+</sup> :Cl <sup>-</sup> cotransporters (KCCs) regulation	NORMA HILDA VAZQUEZ DIAZ GERARDO GAMBA AYALA Carlo Melo, Zesergio et al.	FASEB JOURNAL	2012
33	Rare mutations in SLC12A1 and SLC12A3 protect against hypertension by reducing the activity of renal salt cotransporters	Rocio Acuna Lilia Martinez-de-la-Maza Jose Ponce Coria et al.	JOURNAL OF HYPERTENSION	2011
34	WNK2 Kinase Is a Novel Regulator of Essential Neuronal Cation-Chloride Cotransporters	NORMA HILDA VAZQUEZ DIAZ NORMA ARACELI BOBADILLA SANDOVAL GERARDO GAMBA AYALA et al.	JOURNAL OF BIOLOGICAL CHEMISTRY	2011
35	Similar effects of all WNK3 variants on SLC12 cotransporters	Silvia Cruz Rangel Zesergio Melo NORMA HILDA VAZQUEZ DIAZ et al.	AMERICAN JOURNAL OF PHYSIOLOGY-CELL PHYSIOLOGY	2011
36	Nedd4-2 Modulates Renal Na <sup>+</sup> -Cl <sup>-</sup> Cotransporter via the Aldosterone-SGK1-Nedd4-2 Pathway	Juan Pablo Arroyo NORMA HILDA VAZQUEZ DIAZ GERARDO GAMBA AYALA et al.	JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY	2011
37	Insulin increases the activity of NCC through a PI3K dependent mechanism	JUAN PABLO ARROYO ORTIZ NORMA HILDA VAZQUEZ DIAZ GERARDO GAMBA AYALA	FASEB JOURNAL	2010
38	Role of SPAK binding sites in SLC12 cotransporters basal activity and regulation by WNK3	Diana Pacheco Alvarez Paola De-los-Heros Jose Ponce Coria et al.	FASEB JOURNAL	2010
39	Serine 575 accounts for difference in thiazide affinity between mammalian and flounder NCC	Maria Castaneda Bueno NORMA HILDA VAZQUEZ DIAZ DAMIAN HERNANDEZ HERRAN et al.	FASEB JOURNAL	2010
40	A single residue in transmembrane domain 11 defines the different affinity for thiazides between the mammalian and flounder NaCl transporters	Maria Castaneda Bueno NORMA HILDA VAZQUEZ DIAZ ISMAEL BUSTOS JAIMES et al.	AMERICAN JOURNAL OF PHYSIOLOGY-RENAL PHYSIOLOGY	2010

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41	SGK1 and insulin reduce the activity of mammalian electrogenic Na <sup>+</sup> /Monocarboxylate Transporters (SMCTe/Slc5a8)	NORMA HILDA VAZQUEZ DIAZ GERARDO GAMBA AYALA MARIA DEL CONSUELO PLATA RAMOS et al.	FASEB JOURNAL	2009
42	Serum levels and urine detection of Centruroides sculpturatus venom in significantly envenomated patients	NORMA HILDA VAZQUEZ DIAZ ALEJANDRO ALAGON CANO Chase, Peter et al.	CLINICAL TOXICOLOGY	2009
43	Angiotensin II signaling increases activity of the renal Na-Cl cotransporter through a WNK4-SPAK-dependent pathway	Pedro San Cristobal Diana Pacheco Alvarez NORMA HILDA VAZQUEZ DIAZ et al.	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	2009
44	Regulation of NKCC2 by a chloride-sensing mechanism involving the WNK3 and SPAK kinases	Jose Ponce Coria Pedro San Cristobal NORMA HILDA VAZQUEZ DIAZ et al.	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	2008
45	WNK3 and WNK4 Amino Terminal Domain Defines the Effect Upon the Renal Na plus :Cl- Cotransporter	Pedro San Cristobal Jose Ponce Coria NORMA HILDA VAZQUEZ DIAZ et al.	FASEB JOURNAL	2008
46	Regulation of NKCC2 by WNK3 and SPAK	Jose Ponce Coria Pedro San Cristobal NORMA HILDA VAZQUEZ DIAZ et al.	FASEB JOURNAL	2008
47	Regulation of K-Cl cotransporters by signaling complex involving WNK3, WNK4, SPAK, and protein phosphatases	PAOLA ANA DE LOS HEROS RIOS Jetzabeth Rivera Jose Ponce Coria et al.	FASEB JOURNAL	2008
48	Opposite effects of WNK3 and WNK4 upon the Slc26a9 anion transporter/channel.	MARIA DEL CONSUELO PLATA RAMOS NORMA HILDA VAZQUEZ DIAZ GERARDO GAMBA AYALA et al.	FASEB JOURNAL	2008
49	Valproate and Nonsteroidal Anti-Inflammatory Drugs Reduces the activity of electroneutral (SMTn/Slc5a12) and electrogenic (SMCTe/Slc5a8) Na <sup>+</sup> /Monocarboxylate Transporters (SMCT).	MARIA DEL CONSUELO PLATA RAMOS Maria Eugenia Juarez NORMA HILDA VAZQUEZ DIAZ et al.	FASEB JOURNAL	2008



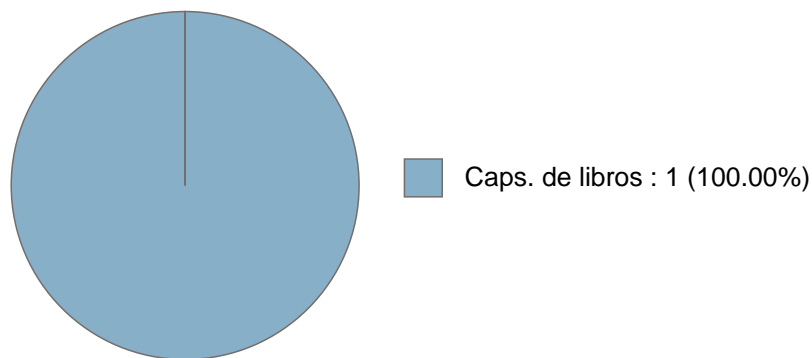
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50	Pathophysiology of functional mutations of the thiazide-sensitive Na-Cl cotransporter in Gitelman disease	PAOLA ANA DE LOS HEROS RIOS NORMA ARACELI BOBADILLA SANDOVAL NORMA HILDA VAZQUEZ DIAZ et al.	AM J PHYSIOL-RENAL	2004
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**NORMA HILDA VAZQUEZ DIAZ**

**LIBROS Y CAPITULOS CON ISBN**

**Obras con registro ISBN**



#	Título	Autores	Alcance	Año	ISBN
1	Aspectos generales de la hipertensión arterial en el adulto mayor	NORMA HILDA VAZQUEZ DIAZ	Capítulo de un Libro	2011	9786074821765





**Sistema Integral de Información Académica**  
**Coordinación de Planeación, Evaluación y**  
**Simplificación de la Gestión Institucional**  
**Reporte individual**



**NORMA HILDA VAZQUEZ DIAZ**

**PARTICIPACIÓN EN PROYECTOS**

**No se encuentran registros en la base de datos de SISEPRO asociados a:**

**NORMA HILDA VAZQUEZ DIAZ**



**Sistema Integral de Información Académica**  
**Coordinación de Planeación, Evaluación y**  
**Simplificación de la Gestión Institucional**  
**Reporte individual**



**NORMA HILDA VAZQUEZ DIAZ**

**PARTICIPACIÓN EN TESIS**

**No se encuentran registros en la base de datos de TESIUNAM asociados a:**

**NORMA HILDA VAZQUEZ DIAZ**



**Sistema Integral de Información Académica**  
**Coordinación de Planeación, Evaluación y**  
**Simplificación de la Gestión Institucional**  
**Reporte individual**



**NORMA HILDA VAZQUEZ DIAZ**

**DOCENCIA IMPARTIDA**

**No se encuentran registros en la base de datos de DGAE asociados a:**

**NORMA HILDA VAZQUEZ DIAZ**



**Sistema Integral de Información Académica**  
**Coordinación de Planeación, Evaluación y**  
**Simplificación de la Gestión Institucional**  
**Reporte individual**



**NORMA HILDA VAZQUEZ DIAZ**

**PATENTES**

**No se encuentran registros en la base de datos de patentes asociados a:**

**NORMA HILDA VAZQUEZ DIAZ**

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**FUENTES DE INFORMACIÓN**

**Internos**

#	Información	Fuente	Sistema	Periodo
1	Grupos ordinarios y resumen de historias académicas	DGAE	SIAE	2008-2025
2	Nombramientos, datos generales, estímulos, premios y reconocimientos	DGAPA	RUPA	2008-2025
3	Producción Académica	CH	Humanindex	2008-2021
4	Producción Académica	CIC	SCIC	2000-2017
5	Proyectos	DGPO	SISEPRO	2018-2022
6	Tesis	DGB	TESIUNAM	2008-2024
7	Tutorías en Posgrado	CGEP	SIIPosgrado	2008-2021

**Externos**

#	Información	Fuente	Sistema	Periodo
8	Documentos Indexados	Elsevier	Scopus	2008-2025
9	Documentos Indexados	Thomson Reuters	WoS	2008-2025
10	Obras con registro ISBN	INDAUTOR	Agencia ISBN	2008-2025
11	Patentes	IMPI	SIGA	2008-2024