

---

## PhD Student in Entomology – Carlos Andrés Rosas Sánchez

---

### Profile

My Bachelor's degree was obtained in 2014 from Facultad de Ciencias, Universidad Nacional Autónoma de México (UNAM), with a major in Biology. My main interests in Entomology are the taxonomy and systematics of Hemiptera: Heteroptera.

I have experience in other fields such as Immunoparasitology (Study of the oral infection by *Trypanosoma cruzi*) and Ecology (Symbiotic relationships among aquatic insects and protozoa).

Some of the skills and abilities that I have are: working well in team situations, having good writing and analytical skills, having a strong interest in scientific outreach, and experience doing field work.

### Education

UNIVERSITY	University of California, Riverside (UCR)
YEAR	Fall 2016 - Present
DEGREE	PhD in Entomology
THESIS TOPIC	“Systematics of the subfamily Mirinae (Heteroptera: Miridae)”.
ADVISOR	Under the direction of Dr. Christiane Weirauch.
RESEARCH	<ol style="list-style-type: none"><li>1. Taxonomic revision of one or several genera, with emphasis on the Neotropical fauna.</li><li>2. Phylogeny of the subfamily Mirinae based on the analysis of combined morphological and molecular datasets.</li><li>3. Study of the evolution of host associations across Mirinae, with emphasis on important genera which are specific plant pests.</li></ol>
FELLOWSHIP	UC Mexus – Consejo Nacional de Ciencia y Tecnología (CONACyT). *  * translated as National Science and Technology Council.

**UNIVERSITY** **Universidad Nacional Autónoma de México (UNAM)**

<b>YEAR</b>	2014
<b>DEGREE</b>	Bachelor in Biology.
<b>THESIS TOPIC</b>	“Revision of the genus <i>Largus</i> (Hahn, 1831) (Hemiptera: Heteroptera: Largidae) for Mexico”.
<b>ADVISOR</b>	Under the direction of Dr. Harry Urad Brailovsky Alperowitz.
<b>ACTIVITIES</b>	<ol style="list-style-type: none"><li>4. Sorting and identifying species.</li><li>5. Elaboration of biogeographic maps.</li><li>6. Writing a taxonomic key for identifying Mexican <i>Largus</i> species, with specimen and genitalia photographs.</li></ol>

## Work Experience

**POSITION** **Research Assistant.**

<b>YEARS</b>	2014 - 2016
<b>PLACE</b>	Universidad Nacional Autónoma de México (UNAM). - Instituto de Biología (IBUNAM). - Colección Nacional de Insectos (CNIN).
<b>ACTIVITIES</b>	<ul style="list-style-type: none"><li>▪ Mounting, sorting and identifying entomological specimens (specifically working with Hemiptera).</li><li>▪ Aid in writing and organizing information for scientific papers.</li><li>▪ Publication of scientific article: “Revision of the genus <i>Largus</i> (Hahn, 1831) (Hemiptera: Heteroptera: Largidae) for Mexico”. - Revista Mexicana de Biodiversidad, IBUNAM.</li></ul>
<b>ADVISOR</b>	Under the direction of Dr. Harry Urad Brailovsky Alperowitz.
<b>SCHOLARSHIP</b>	Obtained from Consejo Nacional de Ciencia y Tecnología (CONACyT). *  * translated as National Science and Technology Council.

<b>POSITION</b>	<b>Social Service Intern.</b>
<b>YEAR</b>	2013
<b>PLACE</b>	Universidad Nacional Autónoma de México (UNAM). - Instituto de Biología (IBUNAM). - Colección Nacional de Insectos (CNIN).
<b>ACTIVITIES</b>	<ul style="list-style-type: none"> <li>▪ Mounting, sorting and identifying entomological specimens.</li> <li>▪ Maintenance of the insect collection.</li> <li>▪ Assistance in ongoing projects.</li> </ul>
<b>ADVISOR</b>	Under the guidance of M. S., Cristina Mayorga Martínez.
<b>SCHOLARSHIP</b>	Obtained from Secretaría de Educación Pública (SEP). *  * translated as Ministry of Education.

<b>POSITION</b>	<b>Intern.</b>
<b>YEAR</b>	2011
<b>PROJECT</b>	“Ciliated protozoa associated with freshwater organisms of four endorreic basins located at the Volcanic Transmexican Belt”.
<b>PLACE</b>	Universidad Nacional Autónoma de México (UNAM). - Facultad de Ciencias. - Protozoology Lab.
<b>ACTIVITIES</b>	<ul style="list-style-type: none"> <li>▪ Field work at several localities in: Puebla, Estado de México, Jalisco, Michoacán and Morelos.</li> <li>▪ Sorting and dissecting entomological specimens.</li> <li>▪ Identification of protozoa and aquatic insects.</li> </ul>
<b>ADVISOR</b>	Under the direction of Dr. Rosaura Mayen Estrada.
<b>SCHOLARSHIP</b>	Obtained from Facultad de Ciencias, UNAM. - Grant by PAPIIT (Programa de Apoyo a Proyectos de Investigación e Innovación Tecnológica). *  *translated as Program to support Research Projects and Technological Innovation.

<b>POSITION</b>	<b>Intern.</b>
<b>YEAR</b>	2010
<b>PROJECT</b>	“Characterization of the presence of <i>Trypanosoma cruzi</i> in digestive system studied in mice model. Study of the cellular and humoral immune response”.
<b>PLACE</b>	Universidad Nacional Autónoma de México (UNAM). - Instituto de Investigaciones Biomédicas (IIB). - Immunology Lab.
<b>ACTIVITIES</b>	<ul style="list-style-type: none"> <li>▪ Experimental model development.</li> <li>▪ Training in vivarium for working with security protocols handling virulent strains.</li> <li>▪ Elaboration of immunological and histological tests to determine infection rates.</li> </ul>
<b>ADVISOR</b>	Under the direction of Dr. Bertha Espinoza Gutiérrez.

## Publications

- ROSAS C. A. & BRAILOVSKY H. 2015. Revision of the genus *Largus* (Hahn, 1831) (Hemiptera: Heteroptera: Largidae) for Mexico. Revista Mexicana de Biodiversidad.

## Scientific Meetings and Outreach

<b>Personalized Attention and Tutoring Program.</b>	
<i>Year</i>	2015
<i>Place</i>	Universidad Autónoma Metropolitana (UAM).
<i>Activities</i>	<ul style="list-style-type: none"> <li>▪ Speaker: “Arthropod Biology: insects, bugs and stuff”.</li> </ul>

<b>Humanities and Sciences Festival.</b>	
<i>Year</i>	2015, 2014 & 2013
<i>Place</i>	Universum Museum, UNAM.
<i>Activities</i>	<ul style="list-style-type: none"> <li>▪ Exhibitor - representing the CNIN, IBUNAM.</li> <li>▪ Explaining insect diversity, ecology, importance, life cycles and overall information to students, families and other attendants.</li> </ul>

<b>85<sup>th</sup> IBUNAM Anniversary.</b>	
<i>Year</i>	2014
<i>Place</i>	Palacio de la Autonomía, UNAM.
<i>Activities</i>	<ul style="list-style-type: none"> <li>▪ Speaker - conference: "Insect Biodiversity".</li> <li>▪ Explaining insect diversity, ecology, importance, life cycles and overall information to students, families and other attendants.</li> </ul>

<b>11<sup>th</sup> Cave Week Symposium.</b>	
<i>Year</i>	2011
<i>Place</i>	Universidad Nacional Autónoma de México (UNAM). - Facultad de Ciencias, Unidad Multidisciplinaria de Docencia e Investigación Juriquilla, Querétaro.
<i>Activities</i>	<ul style="list-style-type: none"> <li>▪ Speaker - conference: "Insect communities compared at two different Mexican caves in Veracruz and Guerrero".</li> <li>▪ Member of the organizing committee.</li> <li>▪ 1<sup>st</sup> place winner in cave photography contest.</li> </ul>

## English tests

- 2003** University of Cambridge. Entry Level Certificate in English (ESOL) - Entry 3. Pass with Merit in the Preliminary English Test. Council of Europe Level B1.
- 2004** University of Cambridge. Level 1 Certificate in English (ESOL) Grade B in the First Certificate in English. Council of Europe Level B2.
- 2005** Anglia Training Centre. Certificate in the Teaching of English as a Foreign Language (CTEFL).
- 2006** ILAC, International Language Academy of Canada. Certificate in recognition of proficiency at the Advanced III Level (3-week course).
- 2014** Educational Testing Service - Toefl iBT - Overall Score 107/120.
- |            |              |             |            |
|------------|--------------|-------------|------------|
| Reading 29 | Listening 28 | Speaking 24 | Writing 26 |
|------------|--------------|-------------|------------|
- 2015** GRE (Graduate Record Examination)
- |                        |                  |            |
|------------------------|------------------|------------|
| Verbal Reasoning       | Scaled Score 155 | % Below 67 |
| Quantitative Reasoning | Scaled Score 144 | % Below 18 |
| Analytical Writing     | Score 3.5        | % Below 38 |

---

## Software

**Office 97 - 2010.** Expertise 90%  
(Word, Excel, Powerpoint, Outlook, OneDrive).

**DIVA Gis.** Expertise 80%  
Software for elaborating biogeographic distribution maps.

**Specimen Databasing.** Expertise 80%  
Software for database – UNIBIO, IBUNAM.

**Leica-LAS Multifocus Photography** Expertise 90%  
Software to capture stack of images at different focus positions.