

**A. Title of Proposed Project**

Endangered and Migratory bats in Latin America, a Common Strategy for their conservation through capacity-building: The Latin American Network for Bat Conservation, (RELCOM).

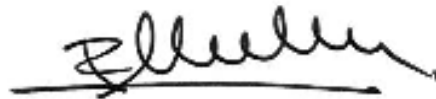
**B. Cover letter signed by the authorized representative of the firm.**

On behalf of the Latin American Network for Bat Conservation or *Red Latinoamericana para la conservación de los Murciélagos* (RELCOM), I thank to the USFWS, and its Western Hemisphere Migratory Species Initiative for the opportunity to submit this proposal.

The Latin American Network for Bat Conservation, is a group generated by our team's initiative, the Program for the Conservation of Mexican Bats or *Programa para la Conservación de los Murciélagos de México* (PCMM), which has gathered the most relevant groups of bat scientists in Latin America, to work and unite efforts for the conservation of bats in the whole region. RELCOM has already joined 11 groups committed to work in Latin America, and many more have expressed their will to join into the network.

The development of a first meeting will allow us to establish the basis for a common strategy for the conservation of ecologically and economically important species of bats in Latin America, including those species that are conservation priorities such as the endangered migratory as well as the endemics. A capacity building program will allow us to share the experience of our 15 years of successful work on bat conservation in Mexico, so each country can adopt the parts of our priorities, strategies, experience and methodologies according to their own needs. By developing this project, we will generate common goals and methodologies to seek the conservation of bats in the long-term and will have a more effective influence in with the local governments so they generate measures for the conservation of migratory bats and their habitat, therefore achieving historical success in conservation.

We hope the proposal is suitable for the program and we thank once again for putting together this initiative, sincerely



Rodrigo A. Medellín

**Contact Information of the Firm:**

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<http://www.bioconciencia.org.mx/relcom.html>

**D. (In case of association) Contact information of Associated Firm(s)**

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**E. Project Summary: An abstract of the proposal (200 words or less) both in English and Spanish.**

The development of a first meeting of the Latin American Network for bat conservation, will take place in La Tirimbina Reserve, Costa Rica. It will consist in a capacity-building program to provide each of the teams with tools and methodologies so that they establish their own Research, Conservation, and Environmental Education Plans, by maximizing the positive impact that we have generated through 15 years of successful work on bat conservation in Mexico by adapting and replicating it in other countries of Latin America. This way, each country can adopt the program according to their own needs. Additionally, we will seek to generate a participative process to establish the basis of the Latin American Strategy for Bat Conservation. Which will aim for the conservation of ecologically and economically important species of bats, including those species that are conservation priorities such as the endangered migratory, and endemic bat species. By developing this project, we will achieve historical success in biological conservation. The efforts for the conservation of bats in the region will no longer be isolated, and we will have a more effective influence in the local governments so they adopt measures for the conservation of bats and their habitat.

El desarrollo de la primer reunión de la Red Latinoamericana para la Conservación de Murciélagos, en la Reserva de La Tirimbina, Costa Rica, consistirá en un programa de formación de capacidades que otorgará a cada uno de los grupos, con herramientas y metodologías para que establezcan sus propios planes de Investigación, Conservación y Educación Ambiental, al maximizar el impacto positivo que hemos generado a través de 15 años de exitoso trabajo en conservación de murciélagos en México, al adaptarlo y replicarlo en otros países de Latinoamérica. De esta forma, cada país puede adoptar el programa de acuerdo a sus propias necesidades. Además, buscaremos generar un proceso participativo para establecer la base de una Estrategia Latinoamericana de Conservación de Murciélagos, que estará dirigida a la conservación de especies de murciélagos ecológica y económicamente importantes. Incluyendo aquellas que son prioridades para la conservación como las migratorias amenazadas, y las especies endémicas. Al desarrollar este proyecto, lograremos un éxito histórico en la conservación biológica. Los esfuerzos para la conservación de murciélagos ya no estarán aislados, y tendremos una influencia más efectiva en los gobiernos locales, al promover la adopción de medidas para la conservación de los murciélagos y su hábitat.

## F. Project description

### 1. Rationale:

Latin America is a region that holds a great diversity of bats, gathering over 30% of the world bat diversity (CITA), including migratory, endangered and endemic species. Bats are a very important group for ecological processes in the region, many of which have direct benefits to humans and the ecosystem functioning in general by performing keystone environmental services like seed dispersal, insect pest control, and pollination of economically important plants in the neotropics (Medellin & Gaona, 1999; Medellín, 2003; Cleveland et al., 2006; Muscarella & Fleming, 2007; Sanchez & Medellín, 2007). However, many populations of this group have suffered great reductions in numbers in Latin America, where natural habitats are being destroyed at a very high rate, as grain production for cattle consumption has been proven as an important cause of deforestation in the region as well as road building and fragmentation. It has been expressed by FAO early this year, that it is most unlikely that Latin America can cope with reforestation practices the extent of constant deforestation that is present in the region (FAO, 2009). The situation for bats, has caused many bat species and populations to become endangered or threatened. This scenario is even more complex when we consider migratory bat species, where the absence of favorable conditions along migratory routes may be critical for the survival of viable populations that provide critical ecological services (McCracken, 1986; Kevan & Phillips, 2001; Eardley et al., 2006).

The effects have been studied for nectar feeding bats of the genus *Leptonycteris* that migrate from Central Mexico, to North America, and *Tadarida brasiliensis* which is migratory both in North America, and Latin America. However, less attention has been given to other migratory species in South and Central America, which distribution ranges cross several political borders, like *Lasiurus cinereus*, *Lasiurus borealis*, *Eptesicus fuscus*, *Nyctinomops macrotis*, *Eumops glaucinus* and *Eumops perotis*. The Program for the Conservation of Mexican Bats, has already been working with migratory species like *Leptonycteris* and *Tadarida brasiliensis* for more that 15 years, and this experience, not only in terms of research, but in Conservation Actions has been also translated into norms or environmental policies, as well as in different programs of Environmental Education. A capacity-building program, delivered by the Program for the Conservation of Mexican Bats will allow us to identify the common needs of the region regarding bat species. Through this, we will seek to provide each of the teams with tools and methodologies so that they establish their own Research, Conservation, and Environmental Education Plans. The objective is to maximize the positive impact of the experience that we have generated through 15 years of successful work on bat conservation in Mexico by adapting and replicating it in other countries of Latin America. This way, each country can adopt the parts of our priorities, strategies, experience, and methodologies according to their own needs.

Many other species are shared among the Latin American countries and have additional potential to represent shared conservation and recovery interests. Similarly, at least seven countries in the region contain a total of over 30 species endemic to a single country (see table). Conservation of endemic species presents similar challenges in different countries, but there is no communication or shared experiences among the different countries as to how endemic species are protected in each country. It is crucial that we identify lessons and strategies that can lead to sustainable conservation of these endemic species. Such task can easily be achieved with this initiative.

<i>COUNTRY</i>	<i># END SPECIES</i>
Mexico	15
Brasil	7
Peru	6
Ecuador	3
Argentina	1
Cuba	1
Venezuela	1
<b>TOTAL ENDEMIC SPECIES TO A COUNTRY IN LATIN AMERICA</b>	<b>34</b>

Endemic and Migratory bat species provide an excellent model to maximize the learning experience and optimize the conservation efforts of all the bat conservation groups in Latin America. Endemic species represent an exclusive part of each country's biological richness, and also represent a national responsibility where each country is held accountable of the fate of these endemic species. While migratory species represent the expels of how cross-country collaboration should work.

By sitting down with several countries and discussing strategies to protect migratory and endemic bat species, common lessons and important processes and actions will be identified. As a result, all the national action plans to protect endemic and migratory species will benefit by pooling the different strategies and extracting lessons. This project is targeting four out of 6 priorities identified by the Western Hemisphere Migratory Species Initiative (WHMSI), which are Monitoring and Evaluation, by delivering the groups with tools and methodologies for monitoring migratory, endemic and endangered bats; Administration, by considering a module on fundraising; Environmental Education and Outreach and Social and Economic Issues, by giving a great emphasis on what is the presence of bats in the current environmental law and how to work on this matter.

The need of creating a group in the region that could work together for the conservation of bats was evident when we observed that there were successful local efforts, still isolated, directed to the conservation of bats in the region, that could significantly benefit from working cooperatively among them, creating coordinate actions for bat conservation, given an opportunity for synergy, exchange, and cross collaboration. RELCOM has a great potential to become one of the strongest groups for bat conservation by promoting, and achieving common objectives for the conservation of bats in the Latin American region.

RELCOM is currently integrated by different groups of bat scientists from the following countries: Costa Rica, Bolivia, Brazil, Cuba, Puerto Rico, Panama, Guatemala, Venezuela, Peru, Argentina and Mexico (team presenting this proposal). Recently a group from Colombia and Uruguay were nominated to join the network, so we might be expanding the cross-collaboration in Northern, Central, South America and the Caribbean in the near future.

The Program for the Conservation of Mexican Bats (PCMM), and Bioconciencia, the local NGO representing the program (Bioconciencia, 2009), has already been working with the endangered migratory species from the genus *Leptonycteris* and *Tadarida brasiliensis* for more than 15 years, and this experience, not only in terms of research, but in Conservation Actions has been also translated into norms or environmental policies, as well as in different programs of Environmental Education.

PCMM has been working to change the fact that bats are the most frequently ignored group of mammals in conservation plans across the region, by enhancing the important role bats play in ecosystem function. Also, bats are the object of very well-established myths and phobias in Latin America, where many people mistakenly believe all bats to be vampires, not knowing the benefits we receive from bats and not knowing the great diversity of bats we have in the region. The PCMM has been ameliorating this with a very strong Environmental Education Program. What we intend to do with this first meeting is to integrate this experience, offer it to all the groups and facilitate the innovation so each country develops their own Program. Additionally, we will promote participation from all the members so we integrate common needs and methodologies for the conservation of migratory endangered and endemic bats, which will be fundamental for the establishment of a functioning Latin American strategy for bat conservation.

The strategy will contain a series of standardized protocols and methodologies for monitoring migratory, endemic and endangered bats in order to share results and monitor their conservation status their habitat. We will also establish a clearinghouse to centralize information about studies and efforts to follow migratory bats across countries and begin conducting the initial steps to trace migratory routes across Latin America, a long-overdue task that has been conducted for birds and other organisms, but never for bats.

The establishment of the strategy will bring strength to the network as a group, and to each of the projects locally, as we will start having an important influence and presence in the policy-making of each of the countries forming the group. We will push forward for the establishment of regulations along migratory corridors of bats and their habitat, as well as special attention to endemic and endangered bats in the region. Finally we need to say that we are all convinced that the efforts towards bat conservation not only have to be directed to research, or policy-making, but to educate the public and people most closely related to bats (namely human communities established close to caves, roosts or habitats that are rich in bat fauna or present endangered species) about the benefits and the importance as well as the keys for bat conservation, therefore, the strategy will also contain goals related to Environmental Education.

## **2. Project Goals and Objectives:**

Goals of the Network:

To integrate the local, isolated efforts for bat conservation into a regional network to maximize the potential positive impact on behalf of the conservation of bats across Latin America, for this we will organize a meeting to be taking place in La Tirimbina Reserve, Costa Rica the following November, 2009.

Objectives of this first year of activities:

- a) Build the capacity of Latin American scientists that integrate RELCOM in the three main areas of work: Research, Conservation actions, and Environmental Education
- b) Establish the basis of the Latin American Strategy for Bat Conservation

Specific objectives

- a) Gather the representatives of all groups in La Tirimbina Reserve, Costa Rica by November, 2009 for a 6-day meeting.
- b) Share the experience of the Program for the Conservation of Mexican Bats, by developing a series of workshops for each of the areas (research, conservation actions and Environmental Education) targeting migratory, endangered and endemic bats.
- c) Guide round tables to analyze and identify of the main causes affecting the conservation status of the migratory endangered bat species populations in each country, and detect the needs that are common in the region.
- d) Design common strategies, priorities, goals and methodologies for research and monitoring bats policy making and environmental education, therefore establishing the basis of a Latin American Strategy for bat conservation.
- e) Identify common future needs of the network and the means to satisfy them, such as communication, fund gathering and upcoming meetings.
- f) Development of a website dedicated to the network to share information on the long term. Such clearinghouse is crucial to understand the large scale patterns of movement of migratory bat species and document the degree of sharing bat populations between neighboring countries and among other countries in the continent.

### 3. Project Activities and Methodologies:

Activities proposed for the accomplishment of each specific objective.

- a) Gather the representatives of all groups in La Tirimbina Reserve, Costa Rica by November, 2009 for a 5-day meeting.

If we obtain the funds from USFWS to perform this project, we would use part of the funds (see budget) to invite the representatives to Costa Rica, and organize the meeting there for a 6-day session.

- b) Share the experience of the Program for the Conservation of Mexican Bats, by developing a series of workshops for each of the areas (research, conservation actions and Environmental Education) targeting migratory, endangered and endemic bats.

The Program for Conservation of Mexican Bats, has 15 years of successful and continuous work in the field and has developed a strong strategy that has been key for its success and has been honored with awards at international level *i.e.* Rolex Award for Enterprise (RolexAwards, 2009), Disney Conservation Hero (2008), Whitley Awards (2004), among others. We consider this experience could be the starting point to help the other groups that integrate the network, to create solidly-based bat conservation projects, by building their capacities at the most. We have done this in the past, and help to the establishment of the bat conservation program of in Costa Rica, Bolivia, and Cuba. However, a full capacity building program that puts into context the general needs for bats in Latin America, is a first of its kind initiative. Therefore, we have designed a capacity-building program that will follow this general program:

- a) Research Activities, taking the experience of 15 years of work at the PCMM
  - Migratory bats in Mexico, the ecology of migratory corridors, methodologies, and research needs.

- Endangered bats in Mexico, emergence factors, methodologies and research needs
  - Endemic bat species in Mexico, when micro becomes hugely important.
  - How to establish a bat monitoring and cave population program with data gathering and analyzing on the long term.
- c) Conservation Efforts workshop; environmental policies in Mexico, and fund gathering.
- Local environmental policies and the importance of bats.
  - The economic value of environmental services as a tool for conservation.
  - The use of other flag-species for the benefit of bat conservation.
  - Fund gathering for bat research, conservation and education.
- d) The generation of an Environmental Education program, its importance for bat conservation.
- The myths and pre-conceptions of bats in the Latin American culture, why do we hate them?
  - Integrating field ecology into an environmental education program: migratory, endangered, endemic bats and cave monitoring. The Environmental education program of the PCMM
  - The importance of the local involvement in bat conservation, the role of emotions and sense of belonging in an Environmental Education Program.
  - When a community takes a conservation project into their hands, the use of Xoxafi Cave as an example of local sustainable development.
- e) Round table: Current status of migratory, endangered and endemic bats in Latin America
- Here we will dedicate a morning session so each country delivers a diagnosis of migratory, endangered and endemic bats in their own country, research methods applied and needs in terms of the three core areas: research, conservation actions, and environmental education. A moderator will be placing the emerging common elements for a following analysis in common.
- f) Establishing a first approach to the Latin American Strategy for bat conservation.
- With the information gathered in letter d) and any other elements recognized within the members, the group will establish a first approach to the Latin American Strategy for Bat Conservation.
- g) Recognizing future needs of RELCOM -Clearinghouse-
- We will dedicate a session to place in paper the common goals we are all willing-able to achieve for a 3 year period to place them in the Latin American Strategy. We will select the following leaders of the group for the next three years, who will be in charge of the clearinghouse and fund gathering. We will determine the goals for the establishment of a clearinghouse through a web portal, in order to share results, as well as

monitoring the migratory patterns of migratory bats, and placing in common our results on bat population monitoring, and their threats among neighboring countries, and the whole region. The clearinghouse will also contain information for environmental educators that take part in this initiative or would like to replicate the experience. The website will also include a forum for discussion open to all members.

h) Post Meeting work

The first approach to the strategy, will give us a tremendous framework to work with, if it approved, we will seek to publish the strategy and papers that resume this effort.

We will hire a web manager who will develop a portal as close as possible to the needs and goals stated above, the full implementation of this portal will be keystone to maintain the Latin American Strategy functioning on the long-term.

**4. Time frame / work plan:**

A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here.

YEAR/MONTH	PHASE OF PROJECT	RESPONSIBLE
2009. 7	Send invitations to team representatives of each country for the meeting in November.	Program for the Conservation of Mexican Bats, Bioconciencia.
8	Preparation of the contents of the capacity building program for the Latin American Network for Bat Conservation (RELCOM).	Costa Rica-PCMM
7-9	Coordination with Costa Rica team for logistics assistance. Create the final program of the meeting.	
9	First meeting takes place in La Tirimbina Reserve, Costa Rica.	PCMM coordinates capacity-building program and the rest of meetings  -Costa Rica Team will manage logistics
10	A first version of the Latin American Strategy is Published	
2010. 2	A final report of the Capacity Building program and the Latin American Strategy will be sent to USFWS	PCMM is responsible
1-3	We generate the website dedicated to the Network.  Teams in other countries begin developing the structure of their own Program, and generating results according to the Latin American Strategy	PCMM will design and place it online  Each team is responsible.
4-6	Fund gathering for upcoming meetings begin	Team selected as host will be responsible. Coordination and support from all teams is required.
7-9	Continued data gathering and follow-up on the Latin American Strategy	Each team is responsible.



List of deliverables:

The final report should include:

1. A general report on how did the meeting go, including the list of attendants, a financial balance on the expenses performed until that moment.
2. The final program of the capacity building program and its results.
3. The document generated at the meeting on the Latin American Strategy.

Outputs to be generated within the year

1. A final publication on the Latin American Strategy for bat conservation.
2. Creation of the Website that will serve as a clearinghouse
3. Follow-up results after the first year of the meeting, and final financial statement.

**5. Team Composition and Task Assignment:** Indicate the structure and composition of your team. List the name of staff, firm, area of expertise, position assigned, and task assigned.

We have considered mentioning the whole composition of people integrating the Network, while some only have the names of representatives, only the first two teams have direct responsibilities at the present time



**Mexico, Program for the Conservation of Mexican Bats,  
Bioconciencia.**



Name of Staff	Area of Expertise	Position Assigned	Task(s)
Rodrigo A. Medellín	- Migratory, Endemic, and Endangered Bats in Latin America. - Economic value of Bats Environmental Services - Environmental Policies	Director and Coordinator for Science and Conservation	Director of RELCOM for the period 2007-2010.  Bat Research Workshop Responsible
Joaquín Arroyo	Vampire, Insect feeding and Endemic Bats	Co-Principal Investigator of PCMM	Logistic Coordinator, Bat Research Workshop Exponent Conservation Workshop Exponent
Laura Navarro	Environmental Education	Environmental Education Coordinator	Environmental Education Workshop Responsible
María Luisa Franco Morales	Environmental Education	Community Liason Officer	Environmental Education Workshop Exponent
María de Jesus Teniente	Environmental Education	Community Liason Officer	
Osiris Gaona Pineda	Seed dispersal, Environmental Policies	Student Coordinator	Logistic Coordinator of the meeting
Cristina Espinosa	Grant Seeking	Grants Administrator	Write reports and Proposals to fund the meeting(s)

**Costa Rica, Asociación para la Conservacion de los Murciélagos de Costa Rica:**

<b>Name of Staff</b>	<b>Area of Expertise</b>	<b>Position Assigned</b>	<b>Task(s)</b>
Bernal Rodriguez Herrera	Bat Communities in tropical forests	Representative of Costa Rica team	Responsible in Costa Rica, Liason with La Tirimbina Reserve
Melquisedec Gamba Ríos.	Roosting habits of tropical bats, telemetry	Associated researcher.	Logistic coordinator in Costa Rica

**Rest of people integrating Costa Rica Team**

- a. Carlos Roberto Chavarría Vargas
- b. Mariamalia Araya Fallas
- c. Karla Barquero Cuevas
- d. Willy Pineda Lizano

**Bolivia:**

- a. Luis Antonio Aguirre
- b. Isabel Galarza

**Cuba:**

- a. Carlos Alberto Mancina González
- b. Abel Hernández
- c. Aylin Alegre
- d. Emanuel Mora
- e. Fernando Balseiro
- f. Humberto Vela
- g. Lainet García

**Guatemala:** José Cajas

**Brasil:**

- a. Ludmila Aguiar
- b. Deborah Faria
- c. Susi Pacheco

**Puerto Rico:** Armando Rodríguez

**Panama:** Dr. Rafael Samudio

**Venezuela:** Jafet Nassar

**Argentina:** Monica Diaz

**Peru:** Jose Luis Mena

**Proposed New members:**

**Colombia:** Sergio Estrada

**Uruguay:** Germán Botto Nuñez

**6. CVs of Proposed Staff:**

Dr. Rodrigo Medellín

Rodrigo A. Medellín has studied and worked on the ecology and conservation of mammals in Mexico for 25 years. After completing his undergraduate studies at the University of Mexico he obtained his Ph.D. from the University of Florida. Working in diverse settings in the field from rainforests to deserts to montane forests, he uses a diverse approach including community ecology, plant-animal interactions, population biology, and more recently, molecular ecology. He has produced more than 70 publications including over 40 scientific papers in international journals and six books and book chapters on bat ecology and conservation, mammal diversity analyses, and conservation of large mammals. Rodrigo was head of the Wildlife Department of the Mexican Federal Government in 1995-96.

He has been President of the Mexican Society of Mammalogists, served as Chair of the Committee for International Relations and currently chairs the Latin American Fellowship Committee of the American Society of Mammalogists, and has been a member of the Board of Directors of the same Society for six years and was reelected in June, 2004 for a third 3-year term. He is a member of the Scientific Advisory Board of Bat Conservation International and of the Lube Bat Conservancy, and founder and director of the 15-year-old Program for the Conservation of Bats of Mexico.

Rodrigo is a member of the Species Survival Commission of IUCN, professor of ecology at the Institute of Ecology, University of Mexico, where he is Head of the Department of Ecology and Biodiversity. Rodrigo has taught conservation biology and community ecology for over 10 years at the graduate and undergraduate levels, and directed over 20 theses of graduate and undergraduate students. He is also adjunct professor at Columbia University in New York and Associate Researcher at the American Museum of Natural History and the Arizona-Sonora Desert Museum. Rodrigo is currently an Associate Editor for the journals Conservation Biology, Journal of Mammalogy, ORYX (the International Journal of Conservation), Acta Chiropterologica, and Mastozoología Neotropical. In 2000 he was appointed representative of Mexico before the CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) Animals Committee. In 2002 he was elected representative of North America and also vice-Chair of the CITES Animals Committee, and in 2004 he was re-elected for the same positions.

In 2002 he was invited to join the Millenium Project (Chaired by Jeffrey Sachs) of the United Nations as a member of Task Force 6: Environmental Sustainability, and continues to be advisor of the Mexican Government for wildlife issues. In 2005 he funded Bioconciencia with other team members, the official NGO that integrates the PCMM, which has coordinated since. In 2007 he directs and manages through Bioconciencia the 37<sup>th</sup> North American Symposium of Bat Research and the 14<sup>th</sup> International Bat Research Conference in Merida, Yucatan, where the first members of RELCOM signed the agreement.

Dr. Medellín has received various recognitions, among the most recent: January 2009, Rolex Award for Enterprise, and March 2009 Volkswagen premio "Por Amor al Planeta". In June 2007 he was awarded the Aldo Leopold Award by the American Society of Mammalogists "For outstanding contributions to the conservation of mammals and mammalian biodiversity". In April of 2004 he received the Whitley Award for International Nature Conservation from the hands of Her Royal Highness, Princess Anne of

England.

Dr. Joaquín Arroyo-Cabrales

Joaquín Arroyo holds both a Museum Science M. A., and a Biology Ph. D. from Texas Tech University, and is currently a Senior Scientist at the Archaeozoology Lab from the National Institute of Anthropology and History, specializing on the study of the fossil small mammals, mainly bat bone remains. His previous positions include Visiting Scientist, National Museum of Natural History at The Smithsonian Institution, Washington, D. C., E.U.A. from 1998 to 1999, Research assistant at the Museum of Texas Tech University in 1985-1989 and 1992-1994, field assistant at the excavations in Lubbock Lake Landmark Historical Park, on the summers of 1987 and 1988. He has been part of the Program for the Conservation of the Bats of México since its start back in 1994, and presently he is the Coordinator of Logistics for the program. He has lectured at 26 national and 7 international events; also, has participated with 105 oral/posters presentations at 29 national and 38 international professional meetings. He has been awarded support for scientific research from 20 national and international agencies. He is member of six national and international professional societies, has been reviewer for 20 national and international journals, as well as associate editor for 4 scientific outlets, and has participated at peer-reviewing grant evaluations for 6 agencies. He counts 174 academic publications, either nacional or international, including 59 peer-reviewed.

M.C. Laura Navarro-Noriega

Laura Navarro, an educator at the Universidad Nacional Autónoma de México, specializes in environmental education and has been director of the educational programs for the Program for the Conservation of the Bats of México from which she is a co-founder. Her previous positions include the Environmental Restoration project at Ajusco National Park from 1993 to 1994 and the development of summer environmental education courses for children, and other projects of musical teaching for children. At the PCMM she developed a series of bilingual stories: Marcelo, the Bat; Valentin a Special Bat; Don Sabino, the City Bat; Flowers for Lucía the Bat; and Seeds for Barbarita the Bat. Ms. Navarro was the coordinator of a series of short radio pieces, "Adventures in Flight", and first place winner of the Second Latin American Radio Biennium of Radio in Mexico. She has attended numerous courses of environmental education and gave lectures on her work at different symposia on education and conservation. In 2001 she received the Educator of the Year award from Bat Conservation International, In 2006 she received the "Conservation Hero 2006 Award" from Disney Wildlife Conservation Fund. Currently she is in a doctoral program, the "Doctorado Interuniversitario de Educación Ambiental" in the Universidad Autónoma de Madrid from which she will graduate from in 2010.

Maria Luisa Franco Morales

Maria Luisa started working on the PCMM from 1995, she has directed the Environmental Education activities that have been performed in Central and Southeast Mexico. She has gathered broad experience in the field working with children and in Environmental Education with the bat subject. Her work was used as the basis for the bat conservation programs of Guatemala and Costa Rica. She has presented her work in National and International conferences.

María de Jesús Teniente Franco

Maria de Jesus started working for the PCMM from 1995, and she has direct the community activities in the West Coast and Northeast Mexico. She has broad experience

working with children, she has directed numerous workshops and courses and participated in conferences presenting her experience with bats. She has coordinated volunteers and takes charge of the public relations of the project.

Osiris Gaona Pineda

Osiris holds a Masters in Restoration Ecology and her undergrad thesis was performed with Fruit-Eating bats and the seed dispersal at the Lacandon Forest. She has coordinated the Lab together with Dr. Medellín since 1990. She has managed several National and International meetings among which the Nectar-Feeding Bats network, the Jaguar simposium and the 14<sup>th</sup> International Bat Research Conference, and 37<sup>th</sup> North American Symposium on Bat Research, organized in Merida Yucatán, Mexico by Bioconciencia

Biol. Cristina Espinosa

Cristina is a young biologist who recently received her bachelor degree in March 2006 from the National Autonomous University of Mexico, she graduated with a thesis on the endemic kangaroo rat of San Jose Island in the Gulf of California for which she has a publication. She started working for Bioconciencia in Dec 2005 as a grants administrator, where her work is to keep track of the proposals, keep in touch with project leaders, write reports, new proposals and explore new organisms to request funds. She was student of Dr. Medellín for a 4 semester course on Wildlife Conservation at UNAM, where she gained experience handling bats, she was as a student at the Organization of Tropical Studies course on Tropical Ecology and Conservation in January, 2007. She was part of the Organizing Committee for the 14<sup>th</sup> International Bat Research Conference, and 37<sup>th</sup> North American Symposium on Bat Research, organized in Merida Yucatán, Mexico by Bioconciencia. She is currently developing her PhD in Environmental Education at Universidad Autónoma de Madrid

Bernal Rodriguez Herrera (Costa Rica)

Bernal recently graduated from his PhD program at Universidad Nacional Autónoma de México, with a thesis about the mating systems of *Ectophylla alba* in Costa Rica, works as a professor of Biology at the University of Costa Rica, and is the scientific director of La Tirimbina Biological Reserve in Costa Rica. He founded and is the president of the Association for the Conservation of Bats of Costa Rica, he has been chief curator of the mammalian collection at the National Museum of Costa Rica, and has worked for the Smithsonian with the project, effects on fragmentation on the Bat Community in the Amazon rainforest. He holds about twenty publications about the ecology of bats in the tropics, as has published two books, including one about the tent-roosting bats of the Neotropics, coauthoring with M. Timm and R. Medellín, and the field guide of the Bats of Costa Rica coauthoring with Richard LaVal.

Melquisedec Gamba Rios. (Costa Rica)

Melqui is a young Biologist from Universidad Latina de Costa Rica, has worked as an assistant of research at La Tirimbina Reserve, and has been the coordinator of international courses held at Monteverde Institute from 2007-2008. He has experience studying fruit-eating bats, radio tracking with telemetry, he has attended several courses, including one specially dedicated to Biological Conservation In Latin America, held at La Tirimbina Rainforest Center. He has studied in particular the ecology of tent-building bats in the tropical rain forests of Costa Rica, for which he has four academic publications.

## 7- 8. Staffing and Work Schedule

Months	Activity	Time Input (working hours)	Responsible
2009. 7	Prepare invitations to team representatives of each country for the meeting in November. Send Invitations	4hrs	Cristina Espinosa
8	Preparation of the contents of the capacity building program for the Latin American Network for Bat Conservation (RELCOM).	1hr	Rodrigo A. Medellin
7-9	Coordination with Costa Rica team for logistics assistance. Create the final program of the meeting.	3 meetings of 6hrs each= 18hrs	Rodrigo A. Medellin, Laura Navarro, Joaquin Arroyo.
		At least 3 hours per week in September, and 5 per week in October	Bernal Rodriguez-Rodrigo A. Medellin and/or Osiris Gaona.
9	First meeting takes place in La Tirimbina Reserve, Costa Rica.	6 days with 9:00-14:00 meetings and 5:00-8:00 meetings (only days), totaling 39 hrs.	PCMM coordinates capacity-building program and the rest of meetings  -Costa Rica Team will manage logistics
10	A first version of the Latin American Strategy is Published	10 hours	Rodrigo A. Medellin
2010. 2	A final report of the Capacity Building program and meeting is sent to USFWS	3 days of 6 work hours=18 hrs	Cristina Espinosa
1-3	We generate the website dedicated to the Network. (Design) System framing for a portal  Teams in other countries begin developing the structure of their own Program, and generating results according to the Latin American Strategy	16 hours -design- 20 hours -system-  -Depends on time availability, organization of each team-	Website designer and manager  Each team is responsible.
4-6	Fund gathering for upcoming meetings begin	5 days of 6 work hours= 30hrs	Selected team Grants officer
7-9	Continued data gathering and follow-up on the Latin American Strategy	Depends on time availability, organization of each team-	Each team is responsible.

## 9. Relevant literature

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#### **G. Summary of Costs**

The network is integrated by 13 different countries considering also Uruguay and Colombia. In order to maximize our efforts and not to give preference to any of the countries, we consider it would be appropriate to have at the time of the meeting, at least 4 members from the PCMM and 2 members of each country having their flights covered, excluding Costa Rica which will be hosting all members, for a total of 26 people with flights covered.

We have calculated the costs flights and rounded to the next \$50 at the time of making the proposal, depending on the countries of origin of each of the members. We consider the amount stated in the budget will be the maximum amount possibly covered for flight costs to each team. Of course if team responsables can cover other members of their team coming to the meeting, they will be invited to do so.

## Project Budget

<b>Items</b>	<b>Amount requested from USFWS</b>	<b>Obtained from other sources (Conacyt and UNAM)</b>	<b>Total (usd)</b>
<i>Salaries and overhead:</i>			
1/3 Salaries UNAM personnel (2)		16,000	16,000
1/8 Salaries for PCMM staff (2)	2,000		2,000
Office Costs; paper, mail delivery, consumables	700	2,000	2,700
Computer and other equipment		2,000	
Vehicles and infrastructure (office space, etc)		15,000	
<i>Flight costs covered for each country:</i>			
Mexico	2,000		2,000
Bolivia	2,000		2,000
Brasil	1,600		1,600
Puerto Rico	700		700
Venezuela	2,000		2,000
Argentina	2,000		2,000
Panama	800		800
Peru	1,600		1,600
Guatemala	750		750
Cuba	900		900
Colombia (1)	600		600
Uruguay (1)	1,200		1,200
<b><i>Subtotal: flight costs</i></b>	<b>16,150</b>		<b>16,450</b>
<i>Lodging and Meals Costs</i>			
Lodging and meals at La Tirimbina Reserve = \$28 x 30 people x 6 days	5,040		<b>5,040</b>
<i>Transportation</i>			
Bus rental, San Jose - La Tirimbina Reserve-San Jose	500		<b>500</b>
<i>Communication Costs:</i>			
Web forum design and management.	<b>1,000</b>	1,000	<b>2,000</b>
<b><i>Publications</i></b>			
Latin American Strategy	<b>1,000</b>	800	<b>1,800</b>
<b>Total</b>	<b>26,390</b>	34,800	<b>61,190</b>