

Hosted by CoNaRe: ALICE2 celebrated its first official meeting in Costa Rica



Marketing and services A new management in CLARA

Ida Holz received the LACNIC Outstanding Achievement Award 2009





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«The European Union is made up of 25 Member States who have decided to gradually link together their know-how, resources and destinies. Together, during a period of enlargement of 50 years, they have built a zone of stability, democracy and sustainable development whilst maintaining cultural diversity, tolerance and individual freedoms. The European Union is committed to sharing its achievements and its values with countries and peoples beyond its borders».

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Editorial



Martha Giraldo, Executive Director RENATA President of the CLARA Board

ear Friends of CLARA,

With satisfaction I received the appointment at the last CLARA Assembly and Directing Board meeting held in Costa Rica in August, where I was elected to take up the post of President of the Directing Board of this important Corporation.

Beyond the individual recognition for my participation as member of CLARA representing Colombia and the RENATA Corporation, I receive the appointment as recognition to the work and important development that the Advanced Academic Network has had in our country. Not only have we improved in relation to network infrastructure, but, most significantly, in terms of the dissemination and incorporation of the network by part of the academic and scientific community. The support from the regional networks, the academic institutions and especially from

the government has been fundamental to move forward the way we have done so far. The result is that today we have extended the capacity of the communication channels due to their increasing use and we have 85 institutions connected to the network making use of the services and increasingly participating in national and international projects.

CLARA is going through a period of intense activity, thanks to the resources provided by the European Community through the ALICE2 Project. The members of CLARA worked very hard last year on the consolidation of an Action Plan for the development of this project that would give us the necessary thrust so that after the fourth year, when the resources put into the project are finished, we have made advances which are equally important or more important than those obtained in the previous ALICE project, which resulted in the conformation of the great Latin American network connecting 13 countries across the region.

We have received the first financial contribution from the European Community and we have already started to envision significant results. The tendering process for the strengthening of RedCLARA has been initiated, introducing changes that improve the topology of the current network, imply a greater capacity of the links and a significant use of dark fibre, which will enable us to move forward in a more favourable scheme towards sustainability, as long as communication rates are more competitive and favourable for our region.

We expect that through the ALICE2 project CLARA will have new services over the network which favour and strengthen the integration and collaboration for the development of projects of common interest for the countries in the region. This is why one of the purposes of ALICE2 is to support communities which contribute towards the Millennium Development Goals.

In the meantime, our institutions have a long road ahead to acknowledge that by entering the global circuits of research and collaboration through advanced networks what has happened is that institutional frontiers have been widened, and that access limit to resources is the world itself and what really counts from now onwards is our capacity to develop alliances.

Alliance then becomes a key word. Building work groups, networks, inter-institutional links for the development of collaborative projects. All of this is what e-Science means and in Latin America we have shown that united we are succeeding. We are moving forward little by little in providing the suitable context to support projects by the scientific community which address the region's problems.

The invitation then is to keep on contributing with our best efforts so that together we make the purposes of CLARA and its ALICE2 project move forward, thus reasserting that advanced academic networks are key instruments in education, science, technology and innovation and therefore in the formulation of public policies for development, in the contribution towards the attainment of the Millennium Development Goals, for the management of our valuable natural resources and as instruments to enhance the region's competitiveness. Hosted by CoNaRe:

ALICE2 celebrated its first official meeting in Costa Rica

From August 10 to 14, the dependencies of the National Centre of High Technology, CENAT, were the scenario for the CLARA-TEC Meeting and the ALICE2 Project Meeting. Both activities are carried out twice per year and were supposed to be held in Honduras from June 29th to July 3rd, of course due to the conflicts that the country was facing at the time, it was decided to change the country and date of these events, and the recently connected to RedCLARA country, Costa Rica, was a great option.

María José López Pourailly



The days spent in San José of Costa Rica will be remembered as a very fruitful experience for most of all the different meetings participants. Plus the ALICE2 Project and CLARA-TEC Meeting, during that particular week some other meetings were also held: A Technical Training in Security, the CLARA General Assembly, a meeting between the EELA-2 Project Coordinator, Bernard Maréchal, and the CLARA members; a training in Mamagement capacities in the context of the "Strengthen of the Regional Academic Advanced Networks through CLARA as a Regional Public Good" Project (which is financed by the Inter-American Development Bank, in the scope of the Regional Public Goods), and also an informative meeting devoted to the report of the advances of the e-CienciAL Project, which is financed by OAS-FEMCIDI (Special Multilateral Fund of the Organization of American States' Inter-American Council for Integral Development).



ALICE2 Meeting

The opening ceremony was carried on at 18:00 PM in Wednesday 12. Headed by Dr. Rodrigo Arias, President of CONARE, Dr. Alvaro de la Ossa, Director of CENAT, Carlos Casasasús, President of the CLARA Board and Florencio Utreras, Executive Director of CLARA, the event counted with the participation of authorities of the Costa Rican universities, the Council for Research and Innovation, representatives of the Telecommunications Company (ICE) and all the participants of the technical and managerial meetings of ALICE2.

The Project Meeting started on Thursday, 13 at 8:00 AM, and -following the agenda- the first reports were of the Work Packages 1, 2 and 7: Management, Procurement and Sustainability, respectively.

Regarding Management and Procurement, Florencio Utreras reported on most relevant activities, the Guarantee requested by the European Commission, the launching event of the @LIS2 Programme carried out in the ECLAC Offices in Santiago – Chile with the participation of the European Commission Representation in Santiago, ECLAC, Regulatel and ALICE2; the two procurements processes, the budget and the new staff that was hired in CLARA to carry on the ALICE2 Project activities:

 Gustavo García (Colombia) as Technical Manager

 Rafael Puleo (Venezuela) as Marketing Manager

Claudia Córdova (Peruú) as Training Manager
 Vacina (Calambia) as Software

- Hugo Vecino (Colombia) as Software Engineer

- Fernando Cabrera as Accounting Officer

- Tania Altamirano as Sub-editor in the Public Relations (PR) Group

 Verónica Uribe del Águila as Journalist of the PR Group

- Ixchel Pérez Santamaría as Journalist of the PR Group
- Renata Victal as Journalist of the PR Group

During the WP4 - Networking Technologies slot in the agenda, Michael Stanton (RNP), Director of the CLARA Technical Commission, reported on the activities carried out by CLARA-TEC and the participation in international projects in which the RedCLARA network is the underlying infrastructure. lara Machado (RNP) reported in the advancements of the CLARA-TEC Technical Working Groups (you can check out all the information related to this issue in the report entitled as "10th CLARA Technical Meeting" published in this edition of DeCLARA). Gustavo García, CLARA Technical Manager, reported about the changes that the network is facing, the future network, and also about the activities that have been carried out by Alex Soarez (RNP - Network Engineering Group), Claudia Inostroza (REUNA - Network Operations Centre), and Hugo Vecino, CLARA software Engineer.

Inclusion (WP8)

Regarding regional inclusion, Rafael Ibarra (RAICES) reported on the ARRANCA initiative that Central American Countries are preparing for the IADB Regional Public Goods Granting Programme.

Martha Giraldo (RENATA) reported about the presentation that she gave by Videoconference for the Council of Rectors (Presidents) of the Bolivian universities on March 25th, which followed the presentation given by Florencio Utreras (also by Videoconference) to some representatives of the Bolivian Universities invited by ADSIB, as well as the AECI representation in La Paz; and even though no feedback has been received since then, it was acknowledge that there have been strong efforts in order to reach Bolivia, but the constant change in the Bolivian representation has been an obstacle to make progress in that line.

Giraldo also referred to the contacts established with Cuba through the Academy of Sciences and to a meeting held in La Habana in the framework of the Meeting of Open Repositories; she explained that Cuba has very interesting developments and that it could take advantage of RedCLARA very quickly. CLARA's Director said that though the answers from Cuba are rather slow, they seem to be very interested in hosting an ALICE2 Meeting.

Paraguay has been another country to which CLARA has been directing its efforts, with the cooperation of RNP; in fact Nelson Simões (RNP) attended a meeting with some Paraguayan universities, government officials and Itaipú's research centres at the Bi-national

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facility (Brazil-Paraguay) called "Parque Tecnológico Itaipú" located in the border of Brazil and Paraguay. After Simões meeting, Florencio Utreras had a second round of meetings with Itaipú authorities who offered their facilities for the next ALICE2 Meeting.

WP5: Marketing and Services

Rafael Puleo, CLARA's Marketing Manager, presented the advances made in his area, focusing in the so called Life Cycle Portfolio Management (LCPM) and in the Portfolio of Services.

The LCPM is a methodology aimed at integrating new services (innovation) to the portfolio of services offered by CLARA to its partners, its purpose is to describe procedures in order to minimize the risks of mismatch between customer needs, technology trends and CLARA strategies; skills that allow the creation and documentation of processes (Technology and user interaction) useful for the creation of new concepts of services or products. The perspective of Puleo is that the problem for the NRENs in the Project is how to convert new skills into new concepts, and for CLARA, the challenge is to define new concepts with added value for the users and for the institution itself. ensuring its sustainability in the long term as well as the customer satisfaction. The Marketing Manager said that an LCPM document has been delivered detailing the whole process, this will be fully implemented in time and probably future adaptations will be requiered.

Regarding the Portfolio of Services, Puleo informed that through the implementation of a Strategic Marketing methodology, that aimed to elaborate the possible service offering, special needs and requirements were detected within CLARA and the different member NRENs. This allowed subdivide the NRENs in four groups according to their level of development, as: Leaders, Consolidated, Growing Networks and Networks in Formation.

Other main characteristic that the methodology chosen helped to clarify was the heterogeneity character of these NRENs, in terms of the institutions and organizations that they nationally connect (56% - universities, 15% - research institutions), which is clearly pointing at the importance of implementing services to effectively support collaborative research initiatives.

Puleo presented a Service Offering structure, that is based in three main categories:

1) Basic Service Offering: Main service offering oriented to all the targets and composed by services aimed to hold up the connectivity, to support the communication and collaboration through RedCLARA.

2) Reseach Supporting Services: Services



oriented to the research community and aimed to strength the research, education and innovation between NRENs and the rest of the world. 3) NRENs Supporting Services: Services mainly oriented to the less developed networks and aimed to support the NRENs in their growing process.

The definition of the services for this structure is the task that WP5 is currently taking care of.

WP3: Visibility

María José López, CLARA Public Relations (PR) Manager, referred to the most relevant Visibility actions that have been already carried out and also about those that were under development within the framework of the ALICE2 Project. Most of all her presentation was devoted to report about the development of those activities that were defined in the Visibility Plan that was delivered in June 2009; the Plan's objectives and main action lines were also explained. Regarding the dissemination actions that were carried out before



the Meeting was held, special importance was given to the ALICE2 branding and corporate style, website, dissemination material, and also to the DeCLARA bulletin, the DeCLARA Express newsletter and to the ALICE2 websites statistics (that started to be saved at the end of May 2009).

Regarding the dissemination actions in process, it was reported that WP3 is working on the initial stages of development of the Case studies, the Compendium and the LA - PR Network.

The report ended with a slot devoted to Public & International Relations actions, which included an invitation to be part of ArchaeoGrid, for LA universities and museums; the aim of the ASTRA project to reach LA and the invitation to the LA-NRENs to contact their coordinators in order to start the actions that will conduct to the sounds reconstruction of ancient musical instruments (it was stated that there's a big but disaggregated arts community within LA, which should be tackled by the ALICE2 project in order to coordinate one single big arts community in the region and in close contact with Europe); and the report of the collaborative actions that have been taken in order to help DANTE's PR for the GN3 launch event.

WP6: Community Building and Application Development

During the Metting, Rocío Cos, CLARA's Project Manager, presented an overall view of the content of this Work Package and the interrelationships between the different activities and modules within it. Work has been done in determining the major application areas to be targeted for development/support. The Organization of American States (OAS), the Interamerican Development Bank (IDB), the National Science and Technology Organizations, the Advanced Research and Technology Collaborative for the Americas (ARTCA), and the Iberoamerican Program for Science and Technology (CyTED), were to identify as possible partners and alliances to be reached.

Luis Furlán (RAGIE) presented on the results of a search of Latin American researchers, networks and groups that are working on projects related to the satisfaction of the United Nations Millennium Development Goals (MDG's) and the core of the EU Seventh Framework Programme (FP-7).

A search was also made of the projects being supported by the IDB and it was found that there are many that fall within the areas targeted at the MDG's and FP-7. In this same chord, the results of the OAS-CLARA/FEMCIDI project, which determined five areas of interest in

A new Board was define for CLARA

During the CLARA Assembly it was chosen the new CLARA Board. The Executive Director of RENATA, Colombian national research and education network, Martha Giraldo was elected as the new President of the CLARA Board.

Giraldo will work along with Luis Furlán, Vice President (Guatemala - RAGIE), Rafael Ibarra, Treasurer (El Salvador - RAICES), Ida Holz, Secretary (Uruguay - RAU), and Nelson Simões, Vocals (Brazil - RNP).

It is important to mention that every Board constitute has a two-year term of work, and the President position is renewed annually.

Fiscal Commission is now constituted by the following executives: Anibal Gattone (Argentina - InnovaRed), Juvenal Castromonte (Peru - RAAP), and Carlos Casasus (Mexico, CUDI).

With respect to the Technical Committee, during the new period it will be composed of technical representatives of the following networks: CoNaRe (Costa Rica), REUNA (Chile), RNP (Brazil), CUDI (Mexico), InnovaRed (Argentina), RAGIE (Guatemala) and RENATA (Colombia).



Latin America for the development of e-Science, Cos informed that two of them, health and education, perfectly match the related MDG's.

Another procedure followed by this WP, was to look up information on published peer reviewed articles in mainstream scientific journals. The result: all CLARA member countries are active in publications, and many in the areas related to MDG's and the FP-7.

For WP6 the next step will be to identify, select and start developing and/or support user communities working on projects related to the MDG's and the FP-7. An "Applications Committee" was proposed to coordinate this task.

In coordination and strong support of the Public Relations team, activities have been started related to the identification of projects/applications which represent the priorities for the region, which will engage in the creation of case studies. These Case Studies will help raise awareness of the benefits of the ALICE2 project and the RedCLARA2 network infrastructure. At least two Case Studies will be delivered on a yearly basis.

WP9: Human Capacity Building

Claudia Cordova, Training Manager of CLARA reports on the first Central America Technical Workshop called «Seminario de Redes Avanzadas» a full day seminar held in CONARE (Consejo Nacional de Rectores) Costa Rica on May 27th. This activity was carried on jointly with WP8 with a program developed by Luis Furlán, Rafael Ibarra and Alejandro Cruz with Alvaro de la Ossa (CoNaRe). The technical program -with the gris as the main topic- was developed by the Training Manager who was also in charge of inviting the speakers and taking care of the logistics. The speakers were Herbert Hoeger (CeCalcula and EELA-2), Luis Furlán and José Luis Gordillo (DGSCA - UNAM). The seminar took advantage of the ARTCA event celebrated at the same time in a facility located very close to CENAT, in Costa Rica, and the activity was scored between "good and excellent" by the participants.

Cordova also reported on the Training Workshop that was being developed in parallel at the CENAT premises; she acknowledges the great contribution of the RNP's Security Team. The Workshop lasted for three days and had over 30 participants (further details are given in the report entitled as "10th CLARA Technical Meeting" published in this edition of DeCLARA).

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10th CLARA Technical Meeting

O n August 10th-14th the 10th CLARA Technical Meeting was held in San José de Costa Rica. Michael Stanton, president of CLARA's Technical Commission, and Iara Machado, director of Advanced Internet at RNP, led the activity. During the opening presentation, Michael Stanton made a historical summary of the previous meetings and extolled the benefits already attained. Topics like the new eleven Work Groups (WG), new methodologies and Telepresence were also addressed.

From now on, the groups will have a coordinator, a subcoordinator (secretary) and their members. Each WG will have a lifespan of two years and will have a discussion list on the network, a 300 MB wiki, financial support for participating in CLARA-TEC's meetings, scholarships for some tasks and funding for purchasing equipment (hardware).

The coordinators from each group will have specific responsibilities, namely: to coordinate work meetings, supervise the good functioning of the wiki, keep contact with the Communications department in CLARA so that news can be published on its website, promote the discussion list via emails, take advantage of the events by the Advanced Networks to disseminate the work done by their groups, find collaboration opportunities with work groups from Terena, RedIRIS and Internet2. Coordinators will also have the responsibility of sending a half-yearly report to CLARA indicating the advances and activities carried out.

Sub-coordinators will have to support their superiors and be responsible for the following functions: to elaborate the minutes for the WG-CLARA meetings, to support the coordinator for the publication of news on the wiki and on CLARA's website, to encourage the active participation of WG members, to promote WG-CLARA's activities in their Advanced Network, and to elaborate ways to value the participation of technicians in the groups.

In the evaluation done by lara Machado, the support from RedCLARA will be fundamental for the good functioning in this new phase. "Now, in ALICE2, Work Groups will have more resources, we will be able to offer scholarships for courses and will have resources to purchase equipment, like hardware, which will support the groups. Mi vision is that a new cycle is beginning. In 2005, it was a very incipient collaboration work and now we have evolved quite a lot. The support from CLARA is also being fundamental", explained lara.

Liliana Velásquez, Network Security manager at RNP, made a presentation on security. In her evaluation, the CLARA-TEC meeting was a positive one, especially because of the exchange of experiences between the NRENs.

"The event was very interesting, since we had the chance to learn about the new work groups in the ALICE2 programme and about the action plan of each of them for the next two years – if on the one hand the WGs represent an excellent CLARA initiative to bring new advanced technologies and applications into the NRENs, they also constitute a valuable opportunity for NRENs to exchange experience and information on common interest issues. Equally, the event made it possible to learn about the advances of some of the projects in which CLARA is involved" highlighted Liliana Velásquez, who added that "NRENs had a space to present the work the have developed; particularly I appreciated a lot this moment, of learning in detail about the various initiatives and activities that have been being conducted in favour of the teaching and research community".

During CLARA-TEC the course called "A practical vision on network security and defense" was conducted. The training was promoted by the CLARA Security Work Group (WG-Seg) and was delivered by Carlos Santos and Federico Costa, security analysts from the Service Centre for Security Incidents at the Brazilian National Education and Research Network (CAIS/RNP). They taught how to set up and maintain a secure system, even in the case of wireless connections. During two days they conducted group exercises and practices on network security.

"I think the purposes set out by the CLARA Security Work Group – that is, to promote the security culture among IT professionals from the NRENs, to raise awareness among technicians from the NRENs on the crucial role they have in this process and to train them to turn their systems and networks into more secure environments – were fulfilled. The feedback from students was quite positive. The course was very well received by the participants", added Liliana Velásquez.

Alex Moura, responsible for the RedCLARA NEG (Network Engineering Group), made a presentation on the future of RedCLARA2 and also on the IPE network, built throughout RNP's national backbone, with 26 Brazilian states plus the Federal District integrated and connected at speeds ranging from 2.5 to 10 Gbps. Through the IPE network, almost 700 Brazilian universities and research centres are connected.



Michael Stanton and Liliana Velásquez

To have more details on this presentation and others, visit the website:

http://indico.rnp.br/conferenceOtherViews.py?view=clara& amp;confld=63

New Work Groups presented at the CLARA-TEC meeting and their members:

- IPTV WG
 - Coordinator: Jaime Martínez RENATA
- Sub-coordinator: Máximo Escobar REDCYT
- Collaboration: RAAP, RAU, CUDI
- Videoconference WG
 - Coordinator: Daniel Díaz RAAP
 - Sub-coordinator: Walter Munguía Martínez
 - RAAP
 - Collaboration: open to everybody
- Eduroam WG
 - Coordinator : Johnny Laura RAAP
 - Sub-coordinator: José Luis Quiroz Arroyo -RAAP
 - Collaboration : RENATA, CUDI
- Security WG
 - Coordinator: Liliana Solha RNP
 - Sub-coordinator: Claudia Inostroza CLARA
 - Collaboration CUDI, RAAP, RAGIE,
 - REUNA
- Measurements WG
 - Coordinator: Daniela Brauner RNP
 - Sub-coordinator: Albert Astudillo REUNA
 Collaboration: REUNA, Innova-Red, RAGIE,
 - Collaboration: REUNA, Innova-Red, RAGIE, RAU, CUDI
- Serv-IPv6 WG
 - Coordinator: Azael Fernández Alcántara CUDI
 - Sub-coordinator:
 - Collaboration: CUDI, Renata, RENIA, REUNA
- VoIP WG
 - Coordinator: Paulo Aguiar RNP/UFRJ.
 - Sub-coordinator: lara Machado RNP.
 - Collaboration: REUNA, RAAP
- Training WG
 - Coordinator: Claudia Cordova CLARA.
 - Sub-coordinator: lara Machado RNP.
 - Collaboration: open to everybody

Luis Furlan, RAGIE president:

«We get more out of the network on education than in research»

Advanced networks can become an important infrastructure for research in Guatemala and Central America. But today the region is utilizing them with higher intensity in educational events.

Ixchel Pérez

n late 2007, in Guatemala, for every thousand members of the Economically Active Population (Población Económicamente Activa- PEA), there was not a single investigator. This reality was revealed by the data provided by the Network of Science and Technology Indicators (Red de Indicadores de Ciencia y Tecnología, RICYT): the rate was 0.15 researchers per thousand in the PEA.

That year, the staff dedicated to science and technology amounted 1,700, and only 634 of them were researchers. From the total of professionals dedicated to research, according to the entity, 55.8% were employed in institutions of higher education, while the rest worked in government. There was no one record in business.

The situation for investment in science and technology was not better. The total expenditure in this area, as activity, was about \$ 22.8 million, while investment in research and development reached \$ 19.8 million.

In this context, Luis Furlan, president of the Guatemalan Advanced Network for Research and Education (Red Avanzada Guatemalteca para la Investigación y Educación - RAGIE) refers to the importance of educational institutions to take seriously the investigation, and that this would bring benefits for Central American countries. In addition he explains the importance of advanced networks in research development.

How is the situation in the region, exist a research culture?

I would divide Central America in two parts: the first would consist of Guatemala, El Salvador, Nicaragua

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and Honduras; and the second would be Costa Rica and Panama.

In the first four countries, research conditions are quite poor, there is no culture, most universities do not have a research component and are mostly teacher-type universities. For example, here in Guatemala there are eleven universities, and only three do research works.

On the other hand, Government support for research, at least in the case of Guatemala, is very low. By law, should be provided Q20 million Quetzales for the National Council for Science and Technology (Consejo Nacional de Ciencia y Tecnología, CONCYT). That really is a very small budget, if you change the money to dollars we are talking about \$ 2.5 billion, and it should cover salaries, rent and all expenses, what is left is for research. In the case of the Universidad del Valle, where I work, the research budget is superior than what is available to the whole CONACYT. There is an incipient research work. It is evident in the indices that can be found on the Internet in terms of scientific papers, there are a few, but not as in bigger countries, even in the other two countries in the region, Costa Rica and Panama, where the situation is very different.

Is there a bigger budget and more interest in research in these two countries?

Yes and the education part is also higher. In our countries, if you see the enrollment of students in universities, over 50%, and I would say even more, are in the areas of law, business administration, economics, enrollment in the hard sciences or the engineering is quite low.



In the case of El Salvador, a project was established and although there was a draft budget to hire two investigators, only one was involved. Is there a kind of fear to commit with research works in the region?

I think so. Research is not considered as a career you can keep fully. I'm not sure how it is in other countries but, at least in Guatemala, 90% of teachers are what we call "taxitype teachers», it means they only arrive, do their class and leave. His main work is in commercial enterprises and other things, that is, there are no teachers full time hired at universities, so they could do research work..

Is it because they do not believe the investigation is «profitable»?

That is another reason. It is lack of culture, lack of education. Maybe they consider too difficult to find projects and financing, which is also part of the investigation labor.

Besides lack of resources, what other challenges has Guatemala to promote research?

Another serious problem in Guatemala is that still between 50% and 60% of the population is indigenous, then, in rural areas is impossible to find research initiatives, if most of the people have not even finish primary school.

The purpose that 100% of children attend school is a goal that has not been reach yet. Research work, with few exceptions, is developed exclusively in the capital.

Does it affect the political situation and the economic crisis?

Of course. In fact, I think it depends on every Government how to promote science and technology. In the case of the current government, its target are the social themes, to assist in poverty and hunger, but do not realize that using science and technology could improve those things, and then it is no supporting research.

What may stimulate research?

Higher educational institutions should recognize that research is an integral part of what a university is. Many of them believe that they obligations are to teach and give titles to the student and that is it, but do not have a central theme of research in their curricula.

What benefits could bring research promoting?

Each country could begin to develop its science and technology to progress. This science and technology should be adequate to our needs, because even some universities think it is not necessary, that the solutions is in importing the results that advanced countries applied -and our case in particular, we are so close to the United States and sometimes academics says «why should we investigate if we can go to the US and in two hours bring the ideas they use there.» But the problem is that what is develops and what is invented there is not necessarily what is required in our countries.

In this context, how has it influenced the use of advanced networks in the promotion of local research?

Precisely, we have the National Research and Educational Networks, we have RAICEs in El Salvador and RAGIE in Guatemala, Honduras does not have one, and in Nicaragua had been uninstall, but the most serious problem is that we have the network established, there is adequate capacity in it, but no projects that can be run on that infrastructure. In my participation in CLARA, I have insisted that we get more out the network on research than in education.

In the case of education, it is taking advantage with applications?

Yes in the case of our university, we are receiving courses from other institutions in the world, we have made a very interesting exercise, for example, we have a teacher who is getting his PhD in London and from there, is giving classes using videoconferencing. In that sense we have take advantage of the network by participating in activities, like CUDI Virtual Days, which is transmitted from Mexico and that we re-transmit to the interior of our university and other universities, and we are getting a profit on this.

And that's where I think it may be a better use of advanced networks. If we can carry into the country, as in El Salvador where universities of different countries are connected - here in Guatemala are only in the capital-, if we could connect university campuses and public schools that are in the interior, we could improve the quality of education that is being delivered.

What efforts are being made to encourage the use of advanced research networks?

We realized conferences about what the networkis, how it is being used in other countries, and how it could

be used here; we have developed meetings and press conferences. We also want to organize a workshop in Guatemala in late September to see what projects are being carried out and also to internalize on other initiatives that are not traditionally develop over advanced networks and that fits our situation, because normally we receive talks on astrophysics, and stuff that do not applied to our country. We are asking for a CLARA workshop on topics such as distance education, health and climate change are important topics for our countries.

In these areas could have major benefits in Guatemala and the region, the use of networks?

Exactly, if we can attract projects in telemedicine, for example, or the study of climate change, the whole phenomenon of the 'Girl' and the 'Child' or, for example, in our countries that are highly affected by earthquakes and erupting volcanoes, if they develop projects systems development or early-warning emergency or natural disaster response, such as hurricanes, would be very interesting. These are the issues that affect us and this is where we should have research projects and, of course, in education, always using our networks.

"The legislation for scientific promotion in different countries must promote the relations between researchers"

Since the 1st September CLARA has a new Management area and a new member in its staff, Benjamín Marticorena Castillo, whose mission will consist in managing the Academic Relations tasks. During the rest of the year, this PhD in Physics (University of Grenoble, France, 1972) with an extensive career in the scientific world, will perform his duties of community promotion and coordination, articulation with national bodies for science and technology (ONCYTs) and others in this field, and project development promotion. Until the end of 2009 this will be done in a part-time basis, which will be extended to full-time in January 2010. The Project Management, headed by Rocío Cos, will work, together with Academic Relations, in the formulation of new initiatives, and will deal with the management and coordination of the projects in which CLARA participates.

Nearly twenty scientific publications, an interesting background in academia, vast knowledge of the scientific world – from his own experience in research to highly relevant positions- and a series of consultancies, representations and awards, are the credentials with which the Knight of the France's Legion of Honour (2006) and Honorary PhD at the National University of Engineering (Peru, 2006), Benjamín Marticorena joins CLARA in order to materialise the appropriation of RedCLARA by scientific and academic communities, and carry the voice of CLARA to the government bodies in order to build a sustainable future for our network and researchers.

The new challenge faced by CLARA and his particular view on the scientific world were the main topics of this conversation that we held with the Academic Relations Manager through the network.

With your ample experience in Science, and based on your own experience as a scientist and researcher, why do you think that the disagreement between scientists, scientific and academic



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María José López Pourailly

communities, and the use of the network for research purposes still exists? ¿What must happen for them to effectively incorporate the network for the development of their research and projects? Among the members of the science community there is a certain lack of communication, guite against the common sense of scientific activities, which is that of the free flow of knowledge, findings and intuitions. Researchers not only are grouped in communities that know little about each other, but also in regions within their countries, and in institutions. Thus, a specialist usually ignores what another specialist is producing in his/her same thematic area in a nearby university. This is why we believe that there must be, in the first place, a change of attitude in researchers themselves towards their peers and a deliberate facilitation of the communication work between them by the institutions in which they work. The legislation for scientific promotion in different countries must, likewise, promote the relations between researchers. We also have to contribute to instilling in researchers the sense of belonging in a community and the commitment towards the social role they perform.

The Network is an effective instrument to reach these goals. It is essential that it continues with the virtual courses on its services and applications for researchers, increasingly involving them in the network, especially the younger ones, typically more prone to innovations. Likewise, the participation of some experimented researchers acknowledged by the scientific community gives confidence to the community that gets connected virtually.

There is a job that must be done in the training of the researcher so that his/her attitude is favourable to sharing information, ideas and objectives. And, on the other hand, an effort to strengthen, from the technical and promotion opportunities of the Network, the dissemination of its services and the conditioning of these to the needs of researchers.

From the same perspective, and from a personal point of view, how do you value RedCLARA?

The construction of RedCLARA was, since its beginning in 2003, a fantastic challenge, only possible due to the coincidence of several circumstances. On the one hand, due to the previous existence of the national networks of Argentina, Brazil, Chile, Costa Rica, México, Panama and Uruguay, as a Latin American capital in the field. Then, we had the disposition of the European Community to contribute to the development of research in Latin America, interconnecting scientist in both regions. Another timely circumstance was the existence modern and underused infrastructure and, therefore of low cost use. And finally and most significantly, we had a human group (essentially from the existing national networks) that was able to represent Latin America in the negotiations with the EC, the IBD, the OAS and other cooperating bodies.

In the few years of CLARA's life, capacities for design, interconnection, technological and financial transfer and institutional relations have been concentrated in it. Now there must be a greater emphasis on the dissemination of CLARA's services and on its permanent upgrading in the face of the requirements of the research communities in Latin America. Greater communication, incorporation of new institutions and more countries, stimulus for the creation of thematic research communities and for the consolidation of the already existing ones, are the most necessary actions for CLARA. The communities for natural sciences, medicine and engineering which are still not using the services of RedCLARA but which have a history of achievements and plans must be attracted into the Network. In the same way, communities such as Social and Human Sciences, must be seen with special attention.

It seems to me that, at present, CLARA's main challenge is to consolidate itself in the awareness of the scientific community, as an instrument for the extension and intensification of the research activity, and of the international relations between Latin American science and that of other regions of the world.

The promotion and coordination of communities is part of your missions in the post you have just taken up in CLARA. Which do you identify here as the main challenges that you and CLARA will have to face?

The promotion and coordination of communities are two of my main responsibilities, the same ones that, as everything in CLARA, are shared with the other members of the same work group (GT6) and are supported by the activities of the other groups in the Network (dissemination, technology, training...). The greatest challenges at present are to attain the greatest possible identification of Latin American researchers with RedCLARA; the extension of the use of CLARA services by them and as a consequence the increase in scientific production of the member countries and institutions. A set of thematic scientific communities is mature enough to incorporate CLARA's technologies into their instruments for work and relationshipbuilding.

In general terms, the bodies for science and technology (ONCYT) across the region have a positive perception of the existence of the network. However, either because of socioeconomic, political or cultural reasons, it is true that only in a few countries the bet of these bodies to undertake a road of development linked to the network has consistent and effective support from their governments. What should be your relation with these institutions and which are your perspectives in relation to the work you will have to develop with them?

It is fundamental to develop relations with the National Research and Education Networks (NREN) and of CLARA, with the National Bodies for Science and Technology (ONCYT), since the biddable funds possessed by researchers in different Latin American countries are usually managed by these bodies. Apart from directly supporting research, ONCYTs can contribute towards the inclusion of new research and education institutions into the NRENs. Since they are the bodies in charge of defining national policies for science and technology, they can facilitate the extension of RedCLARA and of the scientific production in Latin America.

A physical network without data running over it is purposeless. The existence of data, the transference of these, has to do with the execution of collaborative research projects. What will be your task in the area of articulation and promotion of new scientific-academic collaboration initiatives? RedCLARA's great challenge is to have greater and increasingly relevant information running over it everyday. Such objective requires the application of a multiple strategy, consisting in the communication through various media: Congresses, Teleconferences, Information on the web, training for users, information biddable funds available for researchers. on repositories of texts and other materials that are useful for their work, etc. The challenge is a diverse one, and must be faced by means of a variety of activities like the ones already mentioned, which take into account the particularities of each of the research communities that get involved in the Network.

What is your main motivation to be part of CLARA?

CLARA's potential for Latin American integration and for the relation between this region's research community and others worldwide is a big one. This single objective is enough to feel motivated towards CLARA. No country in Latin America has enough researchers as required to know in depth its biologic, geologic and cultural heritage, and to develop knowledge on energy, production and services technologies, as well as on environmental risks, natural disasters and the crucial relations between culture and nature. It is necessary to get engaged in the task of knowing the space we live in and the society we are part of.

A new management in CLARA

The new marketing and services area in CLARA has an important mission: to make the organization services an even more efficient tool for the development of the National Education and Development Networks of the region. In order to accomplish this objective, the manager, Rafael Puleo, has design an strategic plan that involves different areas of CLARA and the participation of the NEDN. During the six-monthly meeting of CLARA, that took place at San Jose de Costa Rica during August, Rafael took some time to speak with us and tell us about this new area and its goals.

Verónica Uribe Del Águila

ow does CLARA's marketing and services area was born?

Every organization has a strategic plan, a vision. According to this strategy the way that the organization is going to work is established. The department of marketing is in charge of the market study, the needs of the clients, which in CLARA's case are the national networks.

What is the main objective of this area?

The development and innovation of services to support NEDN. The area looks after the generation of extra value services so that the network is more attractive for the NEDN, besides supporting its developing in different countries.

How to upgrade a service, do it more attractive?

Every service has a life cycle that shows a curve. Once created, this goes trough a first stage of growing until it gets to a point of maturity. From this point on, the user's interests decreases until finally the services must get off the air. During that life cycle, the organization can develop different actions to extend the existence of the service, these may be marketing actions or from a technical point of view.

Can you give us an example of some of these actions? When a service enters into a maturity stage and the users decrease, the organization must ask itself why this is happening, then, according to the answer take some actions in the life cycle of the product to guarantee that the service is operating, working originally as thought and giving the information on its status.

Can the services like the ones CLARA offers, last for ever?

They can last many years. In fact, you can have a service that change of version or can be adapted to another service. No service I completely necessary because everyone has its starting and it's ending point. But services can last very long, like telephone service, for example.

You made a market study, tell me about the conclusions.

It makes us understand there are different networks with different needs, because some of them are more advanced than others, then we have to adapt our services to be attractive for all kind of networks. We have a service offer that is basic, and suitable for all networks, and a specialized one, witch is dedicated for smaller networks or with special needs.

What are the main challenges for a marketing strategy for CLARA's services?

A strategy needs the support of many people inside the

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DATA

Name: Rafael Enrique Puleo Born city: Caracas Job: Marketing manager from CLARA Profession: Licensed in computing, Master in marketing and services management forom the Business School of Lyon.



network in order to understand their needs and what do they expect from the advanced network, in other words, what do users and clients of RedCLARA expect.

In which phase is the project right now? What do you expect in short and in long term?

We have already define the logical frame of the life cycles from CLARA's services and we are now at he process of identifying the services for the next portfolio, deciding witch services are we going to include, according to the segments that we are going to access.

Scientists create spermicide from spider venom

An erectogenic more potent than Viagra and without adverse effects. This is the first result obtained by the team led by Dr. Fernando Romero of La Frontera University (Chile), in his commitment to study the principles of the venom of the wheat spider. The sequel is the creation of a spermicide that this month will begin the clinical trials phase conducted simultaneously between Chile and Brazil through the remote instrumentation platform of the National University Network, (REUNA). The epilogue: a contribution to scientific knowledge to correct the classification of the protagonist determining that is native from Chile.

Tania Altamirano L.



Dr. Fernando Romero



t started on his return from Brazil in 1995. Dr. Fernando Romero was doing a postgraduate degree at the Federal University of Sao Paulo, where he repaired on the increased of male population sexual problems.

«During a world congress of urology, I found out that all the sex problems that men had before at the age of 65 and older, had advanced to 35 years due to problems of stress and that this was inhibiting the ability of response to the libido with the couple. It was indeed a global problem, «he says.

In his return, the researcher from Temuco, recalled a famous saying in southern Chile: "spider bitted". Used to refer to flirtatious men, the expression is based on the prolonged erection that produces the wheat spider bite, which Dr. Romero decided to track for an investigation that would isolate the specific component of the venom that caused priapism to produce a drug for erectile dysfunction.

The initiative «Therapeutic Products for erectile dysfunction and heart failure from the purified venom of Latrodectus mactans from Chile» received U\$266 thousand U.S. dollars from the Fund to Promote Scientific and Technological Development, -Fondo de Fomento al Desarrollo Científico y Tecnológico Fondef-CONICYT-, to develop a three-year investigation that



The wheat spider

culminated with the patent of a drug. The laboratory of biosynthesis of the Federal University of Sao Paulo (Brazil) and Pfizer was the counterpart of the research that suggests a real sexual revolution, as the active ingredients of the poison would be more powerful and efficient than sildenafil citrate, pharmacologically known as Viagra.

«We achieved to demonstrate that the purified toxin is better than Viagra in the sense that it is totally harmless,» said Romero, who adds that unlike Viagra, the Chilean drug acts on adipose tissue, without causing side effects.

Innovative contraceptive

With over seven years of research, Dr. Romero and his team implemented all relevant preclinical testing and were able to isolate, sequence and synthesize the active ingredient of this poison; that encouraged the idea of making it an industrial product.

The project, -headed by the doctor of molecular biology and professor of neurobiology, Fernando Romero, and his alternate director, the surgeon, cardiologist and professor of pharmacology, Dr. Raul Salvatici, both teachers and researchers of the Department of Preclinical Sciences, Faculty of Medicine of La Frontera University «- aimed to extract purified and sequenced molecular fractions from the toxin of the wheat spider that had a potential use in biological systems with high value-therapeutic drug, useful for erectile dysfunction.

In the investigation process, the specialist noticed the reaction that produces the venom of the spider in the sperm, inhibiting their ability to fertilize, and started a second project: «Biopharmaceutical Principle, human spermicide, obtained from Latrodectus mactans".

«The venom is a cocktail of toxins that generates a set of systemic actions. The wheat spider bite produces a generalized systemic effect which is characterized by intense sweating, severe muscle contractility, cardiovascular and respiratory problems, among others. We isolate the specific molecular fractions of the poison to get an alternative product for the treatment of erectile dysfunction, and other product inhibitor of the ability to fertilize, which opens a pioneer possibility in the field of male contraception, «says Dr. Romero.

Connected with Brazil

This month, Dr. Romero team would begin to experiment with molecular structures along with researchers at the Federal University of Sao Paulo, and they will make use of the UCRAV platform (see box).

«It is extremely important because in the final stages is when you have more analysis and, from that point of view, one key aspect that exists today in the development of research is the ability to have connectivity with high efficiency laboratories, something that goes beyond the Internet system; for this reason REUNA offered us the possibility of using this system that allows me to have connection on my computer and see the experiments that are being done in Temuco or Brazil. Today there is no way to do that unless through this implementation, «says the researcher.

Collaborative Use of High-Value Resources (Uso Colaborativo de Recursos de Alto Valor, UCRAV) (http://www.ucrav.cl/ucrav2/) is a platform for remote instrumentation services developed by the National University Network, (Red Universitaria Nacional, REUNA) from Chile (http://www.reuna.cl), and built with a set of open source tools designed to Internet, that through the connection provided by RedCLARA (http://

Weaving ties

Dr. Romero team will start performing tests with the molecular structures, along with investigators from the Federal University of Sao Paolo and for this purpose it will be use the facilities offered by the UCRAV platform.

According to Alberto Montecinos, REUNA Software Development Engineer, this is the first time the platform is connected internationally. «It was recently connected in July. Before he could send data from Temuco, but Brazil could not send to Temuco; since we traveled to Brazil to complete the installation and enable the connection, they can work remotely because UCRAV gives them a client-server structure that supports without problems their needs.»

«The biggest benefits of this tool to researchers are the possibility of collaboration between different institutions, the connectivity aspect, and that there is no need to move physically. That is, a benefit in time and resources», complements Montecinos.

What>s next for UCRAV? «Nationally, our next connection is the Chile University Medicine School, which is planned to be perform in this semester,» advances the specialist.



Dr. Raul Salvatici and Dr. Fernando Romero are scientists that are developing the investigation.

<u>www.redclara.net</u>) makes possible the exchange at distance and simultaneously of information.

«Is a platform that permits the connection of instruments (different types of microscopes) to a web system that allows you to see analysis perform remotely. We captured in video signal, things that the analytic instrumental shows in the monitor, it is passed to the UCRAV server and so remotely, we can see the same screen for analysis, and at the same time have a videoconference, and share files and say <move this, do that>, it means an analysis can be studied while the researcher interacts with the person who analyzes the sample, «says Alberto Montecinos, REUNA Software Development Engineer who has supported the implementation of the development that has required Dr. Romero work..

According to the engineer, UCRAV is focused on high value instruments: «There are specialized microscopes that cost a million dollars and not any university has them. With this platform a company or university send the sample to the laboratory, get connected to a website and participates in the analysis as if it was present at the process.»

In this regard, Dr. Romero says the platform facilitates the solution of problems and represents a major contribution to the research community. «You are there, present, without traveling to another country, you can directly visualize the analysis and discuss the results obtained. With Dr. Eduardo Bustos in Santiago, and people in Brazil, we may be witnessing at the same time, a real and remote experiment. Thus, we optimize the time and the money».

Furthermore, Dr. Romero emphasis the importance of connectivity for the development of this research that as already has been said, it could generate a revolution in biological-sexual terms: «At this point, we are working experimentally with the molecular structures and the laboratory relationship is vital. We have the functional proofs that we take out of this, but this is the result of a molecular screening performed to an enormous number of molecules, and once we get those we seek, we will initiate discussions with researchers from other universities to tell them about the molecular structure that we found and the results it gave us. After that we begin to do further testing, and look for new properties. This can only be done thanks to the connectivity and the discussions that enables. He adds: « Today, a researcher is not a person who is enclosed in his laboratory, for any reason, the more connected to the scientific world you are, the faster your move, because the world is speedier".

In both projects, the team of researchers has found innovative results that have been patented worldwide. «The patent of the erectogenic cost U\$120 thousand dollars, we had to cover our work in 19 countries in the world, countries with better technology, and now the pre-clinical phase is ending. In the case of the spermicide, the patent should be registered at the end of the year, «concludes Dr. Romero.

UCRAV

UCRAV is a pioneer project of a Chilean grid collaboration and creation of specialized scientific instruments in the analysis of organic and inorganic samples, connected from north to south, through the Academic Network, REUNA.

UCRAV scientific instrument grid, lets to view online and in real time, safe and trustful, in a private way and with an exclusive use of the resources, the analysis of samples that researchers and companies send to laboratories where the instrumental is connected.

UCRAV scientific instrument grid, open new possibilities for the laboratories and users by expanding the range and scope of sample analysis services- by eliminating the restriction imposed by the geographical barriers and distances-, this benefits science and industry, not only in terms of technological development and researchers associated with these labs expertise, but in what respects to more equitable access to scientific equipment required for the development of research with scientific and / or industrial purposes.

More information: : www.ucrav.cl

Originally from Chile

As a parallel result of the investigation, scientists discovered that the wheat spider is native from Chile, so in early 2009 its classification was changed. «We made a contribution to scientific knowledge. The *Latrodectus mactans* spider was zoologically misclassified as *mactans*, is native from Chile and is a variant of *mirabilis*. So we have a *Latrodectus mirabilis*, this is something new, a recent classification, «says Dr. Romero excited.

According to the Laboratory of Arachnology, from the Concepcion University (<u>http://www2.udec.cl/~aracnologia/comun/comun.html</u>), this spider is also known as 'colored tush' spider, rage spider or black widow, -because of the habit of devouring the male after copulation-, and lives in grasslands and wheat fields from Biobío and La Araucanía regions in south-central Chile.

The female body, which is larger than the male, measures about three inches and its eight legs spread may reach six to seven centimeters. His body is black and has a swollen abdomen with red spots.

A contest according to the importance of the advanced networks

The Ecuador's Advanced Network Project Contest, comes back this year with new strength. The main goal: promote in the country the elaboration of the projects that take advantage of this networks

Verónica Uribe Del Águila

Theutilities of the advanced networks for teleconferences are well known, but reducing its use to this only task is wasting the great amount of possibilities that this tool offers in the areas of research and regional development. That is why, ones the connection is established in the country, is necessary to promote the design and development of projects and investigations that can benefit with this network and also benefit the needs of the region.

New airs in CEPRA

Promoting the use and investigation with advanced networks was the challenge assumed by the Ecuador's Consortium for the Development of Advanced Internet by

the time it organized the first Ecuador's Advanced Network Project Contest. Two years after that, this initiative comes back to celebrate its 2009 edition.

The specific objectives of this contest are to support the development of advanced applications that required the internet capacity and characteristics that RedCEDIA offers, contributing to

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the scientific and technological community in the country, allowing establishing bonds between investigators and institutions members of the CEDIA Foundation.

About that, Dr. Villie Morocho Zurita, Executive Manager of CEDIA and main supporter of this year's contest, says that: "The main goal of CEPRA is to generate proposals of projects that can use the installed structure. Ecuador needs to gain more experience in the areas of advanced computing, virtual labs and grid technology. In that way, the relationship with CLARA is a great help showing how this tools can be used and encouraging the investigators of the country to use them. This year inside CEPRA, many changes have been made in order to generate more proposals, researches and projects for the use of the infrastructure, for example, the bases and other documents were corrected. Besides, an extra effort has been made in publicizing more the contest with the interested institutions".

Among the requirements for the projects they should count with three institutions members of the CEDIA located in different cities; with this there was mend to relation more the universities members of the Ecuador's NREN and to promote the inter universities research.



In competition

There are six projects that besides accomplishing the requirements have satisfied the aspects of originality and functionality according to the jury of the contest were chosen as finalists. One of them is the research leaded by the

Superior Polytechnic School of Chimborazo, in charge of engineer Daniel Layedra Larrea. The projects name is "The Guardian of the Heart and its working area is the Telehealht. This will use the design software patterns and will allow medical institutions to have a centralized mechanism to keep electro cardiogram images. Nowadays these institutions don't have a way to gather this information that, in most of the cases, is vital for their patients. The Guardian of the Heart will be able to get, visualize and register the cardiac data and images of the patients and also will have a projection of the patient's cardiac behavior. All these will be storage in a centralized data base. With applications developed for desktop and web, electrocardiogram lecture will be able without been in the same place as the patient", says the investigator.

There is a lot of expectative for this project; they hope to be able to implement it in the health centers all over the country in order to have a unique cardiac history of all patients. The engineer Daniel Layedra Larrea comments that "at the moment this is not part of a larger project, but goes together with another project presented by the institution: the Metropolitan Area Network for Telehealth. The idea is that from its initial phase The Guardian of the Heart operates inside the area of that network".

The initiative of the Metropolitan Area Network is in charge of the engineer Ciro Radicelli, who tells us that "the project proposes to design, develop, implement and integrate a system of tele consult and tele diagnosis, to increase the coverage, upgrade the quality and support the public health system; besides of training, gathering and retaining health personal in the hard access areas of the province of Chimborazo. In order to accomplish that, a telematic network of the metropolitan area (infrastructure of telecommunication and equipment) common to the health center attention implementation will be supported; also de developing of associated technology to software that allows the tele consult, tele diagnosis and the automatic medical procedures (medical histories, support services in management and control of cardiac diseases)".

Another project in the contest is the one presented by the University of Cuenca, called "Infrastructure of Special Data for the RedCEDIA (IDE CEDIA)". "The first phase consisted in crating a relation between the University of Cuenca and

For more information, please visit:

- CEDIA: <u>http://www.cedia.org.ec/</u>
- Universidad de Cuenca: http://www.ucuenca.edu.ec/
- Escuela Superior Politécnica del Litoral (ESPOL): <u>http://www.espol.edu.ec/</u>
- Escuela Superior Politécnica de Chimborazo (SPOCH): http://www.espoch.edu.ec/

the actors, among them, Spain, a country that already has a national IDE. This year we are going to create a support with other institutions and the project IRIS", says Johanna Serpa, researcher of this initiative.

Acording to Serpa " IDE CEDIA is a platform which proportionate three basics services: a maps visor, a maps catalog and a maps editor. The catalog works as a searcher that also can be useful for communication. The editor let the user so make geographic information. The user can use the maps of the catalog as a base for a more specific map, such a tourism map or to determinate the area affected for a pandemic, etc. Finally, the visor has a list of several browser institutions.

Besides, inside the same project we want to create sectorial iris, for example, for tourism. This and other three projects of institutions like the Cuenca University and the Escuela Superior Politécnica del Litoral (ESPOL) are in competition to receive until a 70% of financing. CEDIA had designate US\$ 100.000,00 to the financing of the selected initiatives. The value of a project co financing will be a most of US\$30.000, 00, although CEDIA could approve projects that need more than this amount. Besides, the proposal not approve will serve like a project bank for the process that is been taken in CLARA.

The contestants' projects are the following:

Project: Heart's guardian Investigation area: health Institution: ESPOCH

Project: Metropolitan area network for video health Investigation area: health Institution: ESPOCH Project: Collaborative system of advance network Investigation area: Systems and telecommunication Institution: Cuenca University

Project: Space data infrastructure for redCEDIA (IDECEDIA) Investigation area: Geographic information system Institution: Cuenca University Project: Design of a solution of the network infrastructure for the presentation of multimedia services on IP Investigation area: Telecommunication Institution: ESPOL

Project: CEDIANEWS Investigation area: Streaming video, transmission of video, RSS, news channels, IPV6 Institution: Cuenca University

Ida Holz received the LACNIC Outstanding Achievement Award 2009

Director of the Uruguayan Academic Network (Red Académica Uriguaya, RAU) and Secretary of the CLARA Directory, Ida Holz was chosen for her permanent contribution during the past 20 years to the development of ICTs in Latin America and for her commendable work, not only for the concrete results she has achieved but also for the example it sets for the entire community.



The Latin American and Caribean Internet Adresses Registry, LACNIC announced the first edition of the Outstanding Achievement Award (2009) presented to Mrs. Ida Holz, Head of the Central Computer Service of the University of the Republic, Uruguay, Director of the Uruguayan Academic Network (Red Académica Uriguaya, RAU) and Secretary of the CLARA Board. The Outstanding Achievement Award is a LACNIC initiative that aims at honoring and rewarding those individuals who have made significant contributions to the development of the Internet and the Information Society in the region of Latin America and the Caribbean.

Her outstanding achievements

In the early 1970s, Ida Holz was part of the first generation to graduate with a university degree in Computer Engineering from the University of the Republic - an institution where she continues to work to this day. This would signal what she has been during her entire life: a pioneer.

In 1987 she took charge of the position she holds to this day. From that position she began developing the Uruguayan Academic Network and later, in the early 90s, its connection to the Internet. Ida has played a key role in the development and evolution of ICTs in Uruguay. Since 2005, she is a member of the Board of Directors of AGESIC (the Uruguayan Agency for the Information Society), from where she has actively contributed to the success of the «Plan Ceibal», the Uruguayan version of the «One laptop per child» program.

Although Ida>s role in Uruguay has been extremely relevant, her most significant contributions have been at regional level. During the early 1990s, she was part of the group of regional Internet pioneers whose collaborative efforts in search for critical mass and cooperation made possible the development of the first national networks that served as a basis for the development of what has become the Internet in Latin America. Ida has been untiring in her efforts to maintain communication between Internet promoters, builders and operators in Latin America and the Caribbean so that they can come together and work in cooperation, contributing technical knowledge and spirit of collaboration, and prioritizing community service.

Thus, together with other colleagues whose contribution has also been extremely valuable, Ida has been a part of the region>s major organizational ventures. She played a leading role in the construction of the Latin American Network Forum, the Latin American and Caribbean Internet Address Registry (LACNIC), the organization of Latin American and Caribbean ccTLDs (LACTLD), and the Latin American Cooperation of Advanced Networks (CLARA). Her activity has always been marked by her great dedication, devotion and commitment.

Ida Holz has been a relevant individual who during the past 20 years has permanently contributed to the development of ICTs in Latin America. The relevance of her work is commendable, not only for the concrete results she has achieved but also for the example it sets for the entire community. She has left a legacy to our region in each one of her contributions to the investigation of new information and communication technologies, digital inclusion and the use of emerging technologies in digital inclusion, with dozens of research projects devoted to the analysis of regionally relevant proposals published by LIRNE and COMUNICA; her support of the creation and development of networks such as DIRSI; and her struggle for regulators and regulations to use metrics that are more adjusted to the reality of our countries and a poor man>s perspective, published in her works for RegulateOnline, which undoubtedly represent a significant advance for Latin America and the Caribbean.

On May 5, 2009, Amy Mahan died in Montevideo at the age of 47, at the peak of her professional career, after a brief battle against cancer. She is survived by her partner Bruce Girard and her daughter Danielle.

Honorary Mention

Amy Mahanln addition, the Judging Panel, made up by Raimundo Beca from Chile, Sylvia Cadena from Colombia, Jesús Martínez from Cuba, Alejandro Pisanty from Mexico and José Soriano from Peru, has decided to award a posthumous honorary mention to researcher Mrs. Amy Mahan in recognition of her contribution to the development of the Internet, just a few months after her passing.

Amy was a noted scientific researcher, technical editor, writer, consultant and coordinator of different initiatives relating to communication technologies for development. Originally from San Francisco, USA, her career was marked by her participation in global and regional initiatives, by her support of different projects and initiatives around the world, by her commitment to the right to information and communication as the basis for social and human development, and by her collaborative work at international level. For more information about LACNIC Outstanding Achievement Award 2009, visit: http://lacnic.net/sp/anuncios/2009 ConvocatoriaTrayectoria.html

Institutional presentation

ALICE2 celebrates in Uruguay

The past 22th of July, Montevideo became the venue of the launching of the ALICE2 project in Uruguay, event that gathered CLARA members, Academic Uruguayan Network (RAU) and other important guests and specialists in advancing networks.

Verónica Uribe Del Águila

There is nothing like a celebration to gather the members and helpers from a community. And no better reason to do it but to celebrate the born of a dream like ALICE2. The Oriental republic of Uruguay becomes one of the venues of the launching of this ambitious project from ALICE (Project carried on between June of 2003 and March of 2008) as its predecessor.

The ALICE project (Latin America with Europe) had as a goal the development of RedCLARA, the first research and education network in Latin America and connects 13 countries in the continent trough their research networks. Besides, RedCLARA offers these networks connectivity with Europe and other regions of the world. Controlled by DANTE and 80% founded by the European Comission, ALICE had four European partners and 19 Latin-American ones, among them, the Latin American Cooperation of Advanced Networks (CLARA).

Onitspart, ALICE2 (Latin America Connected to Europe), project confounded by the European Commission during the program @LIC2, began its work in December of 2008. With a duration of 45 moths (until December of 2012), ALICE2 has the objective of promoting and supporting the cooperative research inside Latin America and with Europe. All this with the estrangement of CLARA, its network infrastructure, RedCLARA, and the promotion of research communities that work development subjects (UN – Millennium Development Goals – MDG) and subjects promoted by the FP7 (7th Framework Programme – European Commission).

This project counts with a total budget of 20 million Euros, 12 of them financed by the European Commission trough the program EuroAid and 6 million financed by the National Research and Education Networks. The project will concentrate its efforts on the implementation of a long lasting infrastructure that is sustainable far from the project and that promotes the inclusion in countries of Latin America and the Caribbean. Besides, ALICE2 will encourage the development of applications orientated to the Millennium Development Goals project to be accomplished by 2015.

Together in Montevideo

Carried out in the offices of Lacnic (Latin American and Caribbean Internet Addresses Registry) in Montevideo, Uruguay, the event gathered representatives from different organizations related to ALICE2. For Rocío Coz, member of CLARA, "this was a very crowded event where many important people related to CLARA attended, and that developed a very nice atmosphere of good conversation".

Among the people gathered for this launching where: Florencio Utreras, Executive Director of CLARA, Rocío Cos, Adriana Maddalena, Fernando Cabrera y Mark Urban. In representation of the European Commission assist Richard Empson (Information and Press of the Delegation) and Manuel Fernández Quilez (Cooperation Area Adviser). Also assist representatives from the RAU: Ida la Hoz (RAU Director) and Sergio Ramirez (RAU Technician), Enrique Blanco (Manager of the General Secretary Office from the OEA in Uruguay), and the representatives of the Santander Bank from Uruguay and the LACNIC team.

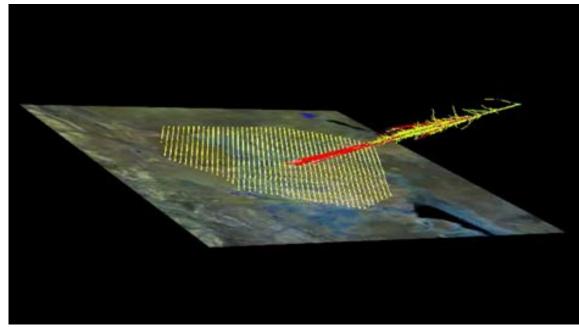
Behind the origin of the Universe

In January 2010, the largest cosmic ray detector of the world will complete six years of work. Due to RedCLARA, through the connection provided to the project by the Argentinean academic network, Innova|Red, scientists have made substantial advances in the study of the cosmos. The first indicates that galaxies with active nuclei may be the source of cosmic rays with higher energies coming to Earth. This is the first sentence of what may become the story of creation.

Tania Altamirano L.

C onstantly come to our planet, without us noticing, particles, atoms or electrons, from all directions. Some of them are more energetic than any other particle observed in nature, travel at nearly speed of light and have hundreds of millions of times more energy than particles produced by any accelerator in the world. This is what is known as ultra-energetic cosmic rays.

With 3000 square kilometers of area covered, the Pierre Auger Observatory in Argentina is the largest cosmic ray detector of the world. Its facilities are located in Malargue, Mendoza Province, consisting of a network of 1600 sensors complemented by a set of highly sensitive telescopes that



Simulation of the work done by the observatory>s detectors to register cosmic rays.

examine the sky to observe the thin ultraviolet light produced by cosmic ray showers as they strike the atmosphere.

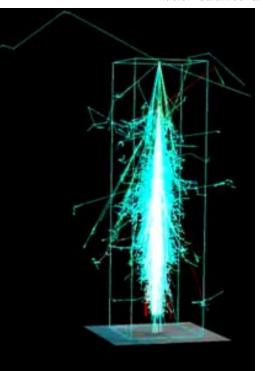
The Auger project brings together 400 scientists from over 70 institutions in 17 countries around the world, and its main objective is to solve the mystery of the origin of these rays by means of the measurements of particle cascades that occur whenever a cosmic ray collides with molecules in the upper atmosphere. This determines the energy, arrival direction and nature of the rays that have the highest energies observed. According to scientists, identify its origin would allow understanding what are the most energetic astrophysical sources of the universe and comprehend the mechanisms of acceleration of these particles that even might contain information on the evolution and possibly on the origin of the universe.

However, very few cosmic rays of ultra high energy reach the earth and the Auger Observatory, even with its large size, can detect only about 30 events per year, therefore a second observatory in Colorado, United States, is being developed to increase substantially the number of events registered.

What to do with measurements?

All data collected by detectors and telescopes are transfer to a central station via cellular services to be sent, through the connection procured by RedCLARA to Innova | Red, towards the Constituent Atomic Center, in Buenos Aires, where are stored and available for international collaboration.

Thanks to the connectivity provided by RedCLARA for the transfer and storage of data, in 2007 research conducted at the observatory determine that the active nuclei Galaxies are the most probable sources of



Simulation of cosmic shower.

cosmic rays of higher energies that reach the Earth, a fact listed by the prestigious magazine Science as one of the great achievements of that year.

«We>ve taken a big step forward in solving the mystery of the origin of higher energy cosmic rays» said in the official announcement the Nobel Prize winner James Cronin, from Chicago University (USA), who conceived the Pierre Auger together with Alan Watson of the Leeds University (Great Britain).

«Applying statistical methods we conclude that the arrival directions of the 27 highest-energy cosmic rays are not randomly distributed. Most of these events come from

directions close to the positions of nearby active nuclei galaxies, such as Centaurus A «, explained in the note Diego Harari, researcher at the Bariloche Atomic Center and National Council of Scientific and Technique Research -Consejo Nacional de Investigaciones Científicas y Tecnicas, CONICET-, Argentina.

The biographical fact

Pierre Victor Auger (1899 - 1993) was a French physicist who performed outstanding work on atomic physics, nuclear physics and cosmic rays, and had a great interest in popularizing science.

His work focused on atomic physics (photoelectric effect), nuclear physics (slow neutrons), and cosmic ray physics. Among his most recognized contributions is the discovery of the «Auger effect» or «Auger Electron (1925) and his comprehensive study of Air shower (1938), also known as Auger shower.

During the International Cosmic Ray Conference, held on July from 7th to 15th 2009 in Poland (http:// icrc2009.uni.lodz.pl/), Paul Sommers of Pennsylvania State University, in a lecture entitled « Pierre Auger Observatory New results», presented recent data that suggest the possibility that some of the particles that reach Earth are indeed iron cores.» At this point, data have generated more questions than answers. All we can do is keep collecting more information and see if it develops in a more consistent image, «said Hank Glass, a member of Fermi Lab.

Finally, as a contribution to education, the observatory offers to students and general public guide tours around its facilities and publish 1% of the information collected by the surface detector through Event Viewer in the observatory>s website.

The Observatory In Numbers

The project brings together: 400 scientists from 70 institutions in 17 countries around the world And it has: 1600 detectors spread over 3000 square kilometers of area covered If you want to know more about the Pierre Auger Observatory, visit: <u>http://visitantes.auger.org.ar/</u>

"Our economic and social well-being demands we build a smarter Caribbean"

The friendship and collaboration liaisons that CLARA has with the Caribbean Knowledge and Learning Network (CKLN) has its years. But during the ALICE2 project and aiming to ensure regional inclusion, that camaraderie must be transformed in a close cooperation effort. We spoke with Mr. Mr. Ken Sylvester is the Chief Executive Officer of CKLN about the development of the advanced network in the Caribbean region (C@ribNET) and, of course, about this cooperation fostered by ALICE2, an endeavor that it is clearly part of his plans, as can concluded by his own commitment: "We guarantee you this will not be a one-way flow".

María José López Pourailly

CKLN was launched by the Caribbean Community (CARICOM) and the Organization of Eastern Caribbean States (OECS) in 2004. With the support of the Organization of American States (OAS), the World Bank, the European Union and the Canadian International Development Agency (CIDA), this multilateral project - as it is stated in it's Website - is "designed to enhance the competitiveness of Caribbean countries, using information and communication technologies to connect the Caribbean to the global pool of knowledge, developing human resources and facilitating greater regional integration".

Funded by regional and international donor agencies including the World Bank, the European Union, the Canadian International Development Agency (CIDA), the Organisation of American States (OAS), the Inter-American Development Bank (IDB) and the Caribbean Development Bank (CDB) and supported by contributions from CARICOM member governments, CKLN aims to offer to the Caribbean tertiary level institutions, universities, training and vocational colleges, the opportunity to connect to each other and to international partners at greatly reduced costs, to develop online learning to be shared regionally and beyond.

The interview

At the 4th EU-LAC Ministerial Forum held in Lisbon on April 2006, the Ministers and heads of delegations that were representing the Caribbean countries, strongly claimed in order to stop what they acknowledged as the exclusion of the Caribbean from the world's educational and research network. The European Commission and the Latin American Ministers were confronted to the reality of the existence of a huge digital gap in the Caribbean Basin, a crack that for most of the attendees that were aware about the needs and demands of the Information Society was recognized as the difference between growth and development and decrease and fall. A year later, at the Twenty-Eighth meeting of the Conference of Heads of Government of the Caribbean Community (CARICOM), held in Barbados on July, CKLN presented a proposal for developing a regional broadband fibre optic network (namely C@ribNET) to Heads.

From July of 2007 to August 2009, has the Caribbean experienced any kind of growth in terms of both bridging the digital divide and achieving the construction of C@ribNET?



While it is true that growth has occurred in the mobile communications market everywhere in the region and with spectacular increases in access to mobile telephony platforms, there has only been very modest growth in Internet access due to still relatively high cost of access. So the digital divide persists everywhere.

From your personal point of view, which have been the most important achievements of CKLN in terms of developing this network?

That would have to be actually getting our hands on the funds earmarked for developing and implementing the network! The processes employed by multilateral funding agencies are intended to be more auditable than efficient but this is understandable, in context. So whilst we celebrate the commitment of the Heads of government of CARICOM to CKLN and C@ribNET, which is manifested by the financial contributions made by each CARICOM country to the development of the project, and the continued financial support for the management and administration of the project; without the funds from the European Union we would have been unable to move forward and build the network

Though the CKLN project is integrated by 18 countries (CARICOM members and three associated countries), C@ribNET will benefit 20 countries, including Turks & Caicos and the Dominican Republic. Which is the reason for this difference?

Actually, when the C@ribNET project was originally contemplated, it was intended to connect and orchestrate collaborations across all land masses and language groups in the Caribbean. That was the 'blue sky' idea. But there are certain realities that you have to account when implementing the idea. We had to recognize the political entities and institutions that would be required to move the project idea along, the sources of funding and so on. We now say the beneficiaries are CARIFORUM member states and associated entities. CARIFORUM includes states that are members of the CARICOM bloc PLUS the Dominican Republic. It also helps that the principal funder for C@ ribNET development is the European Union and our sense is they are keen on a CARIFORUM initiative.

CKLN intends to reduce the brain drain in the Caribbean by fostering the development and use of e-Learning platforms and technologies, what about research and community building?

Our vision is that C@ribNET will be a catalyst that shall enable response and address all of those you mentioned and then some. We hold strongly to the idea that once you give Caribbean peoples a platform that allows each of us to connect to all of us in a seamless and affordable way, communities of practice will develop to advance all kinds of knowledge initiatives. These include research that are formally in the academy and institution-bound as well as enable others not now institutionally-connected. For example, we believe that there is significant knowledge bound in so-called "folk wisdom" that is simply itching to be released and codified. We think the collaboration that is fostered by an entity such as C@ribNET will allow these kinds of initiatives to flourish in due course.

In your own words, why it is important for the Caribbean to count with C@ribNET?

Our economic and social well-being demands we build a smarter Caribbean. None of us have everything we need to succeed. But there is a good chance that all of us contributing could muster the resources that will give us success. In our view the approach that promises the best results is to work inside to outside and across all the walls that separate us. This is the essence of purposeful collaborative action we advocate.

Which do you identify as possible lessons that CKLN and C@ribNET could learn from CLARA and RedCLARA?

Quite simply, you have gone down this road before us. We are in a hurry to be in production. And we do not see a premium attached to reinventing wheels. So we are anxious to ingest all the experiences and knowledge that CLARA gained from your own development and which is on offer. We guarantee you this will not be a one-way flow. For in time, we believe that the peoples of the Caribbean by way of C@ribNET will have loads to offer the stakeholders of CLARA.

How could CLARA help CKLN and C@ribNET, which do you envision are the contributions that Latin America could do to the Caribbean in order to face the process in which you are involved?

Quite simply by sharing the lessons learnt in the RedCLARA implementation and the critical issues and considerations that must be addressed to ensure sustainability of the network

In a region with such a high level of poverty, how can a Government justify the investment in technology? In other words, why should all the Caribbean Governments support the growth of C@ ribNET and CKLN?

Because the governments of the Caribbean are in full agreementthattheeconomicprosperityoftheCaribbean Region depends on our ability to significantly improve the global competitiveness of countries in the region; and to achieve this, we must upgrade and diversify the skills and knowledge of our human resource through greater collaboration and connectivity. CKLN and C@ ribNET, give full expression and directly support this strategic objective of the leadership of the Caribbean Region.

CKLN time-line

November 2002: The prime ministers of seven Eastern Caribbean States and Barbados meet with the president of the World Bank, Mr. James Wolfenson (currently former president) in St. Kitts. They acknowledge that in the 21st century the well being of the Caribbean society is directly linked to their economies becoming more globally competitive, meaning: emphasizing economic diversification and labour mobility of its citizens. For them, the economic diversification of the region must be reached by: 1) the promotion and use of new technologies, 2) institutional innovation and 3) regional cooperation, embodied in the concept of a Centre of Excellence.

November 2003: With seed funding from the World Bank, the CKLN Project is developed with a strategic goal: to enhance the global competitiveness of the Caribbean region by upgrading and diversifying the skills and knowledge of its human resources through greater regional collaboration and connectivity.

May 2004: The CKLN Project is presented to CARICOM Heads at the 15th Intercessional Meeting in St. Kitts & Nevis. The Project is fully endorsed; the Heads take oversight responsibility and sponsor the CKLN development. The CARICOM Secretariat is mandated to assist in securing the funding for the implementation of the Project.

July 2004: The Caribbean Knowledge and Learning Network (CKLN) is established by CARICOM governments with the support of the World Bank, the European Union, the Organization of American States (OAS), United Nations Development Program (UNDP) and the Canadian International Development Agency (CIDA), Caribbean Development Bank and the Inter-American Development Bank (IDB).

February 2008: The Inter-American Development Bank announced the approval of a US\$650,000 grant from its Regional Public Goods Program to support the Caribbean Advanced High Speed Network (C@ribNET) to enhance the region's connectivity and competitiveness. "C@ribNET complements in the Caribbean what RedCLARA has recently achieved in Latin America with an advanced high-speed network that made remarkable advances in the interconnection of the national research and education networks in 16 countries," explained IDB program coordinator Laura Bocalandro.

Virtual Days from Mexico:

Education and research a <click> away

With twenty editions in two years, this initiative offers the opportunity to attend, ask questions and comment on high level conferences about technology, health, education and grid. If you missed any of these days, do not worry, submissions and presentations are available at the website of Mexican research and education network, CUDI.

Tania Altamirano L.

The second Wednesday of every month, students, academics and researchers come together through the network to participate in the CUDI Virtual Days, an event of continues training offered by Technology Direction for Education Support (Dirección de Tecnología de Apoyo a la Educación, DITAE) from the Tamaulipas Autonomous University (UAT) of Mexico, where are presented topics that includes ecology, health, education and technology.

Under the title Current technological topics for ongoing training, the objective of this initiative is to promote, among the different participating academies, technological instruction through the presentation and / or demonstration of the latest technologies on informatics and telecommunications.

Virtual Days contains seven presentations per edition and during the first activity of the year, the coordinator of the CUDI-UAT area, Dr. Hector Gabino Aguirre, referred to the experience of the previous 13 reunions developed in 2008: «It was very helpful because we have the presence of recognized professionals of different areas of interest.»

Actually, the initiative has one year broadcasting, has made 20 editions and has involve institutions such as the Cisco Academy Training Center Mexico, Monterrey Technological Institute, Autonomous National University from Mexico (Universidad Nacional Autónoma de México,UNAM), University of Guadalajara and the University Corporation for Development of Internet (Corporación Universitaria para el Desarrollo de Internet, CUDI).



After each transmition, you can access the papers and presentations from every speaker, through recordings and PDF documents available on the DITAE Vodcast site, in the Virtual Day section (see: <u>http://www.</u>vodcast.uat.edu.mx/index.php/dia-virtual/).

CUDI Participation

In the development of Virtual Days, CUDI has been actively involved with the presentation of diverse topics. In the nineteenth edition, (<u>http://www.vodcast.uat.edu.mx/index.php/2009/07/decimo-noveno-dia-virtual/</u>) Project Manager, Rocío Cos, presented the work realized by CLARA and CUDI.

«CLARA is working hard to develop projects where the beneficiaries are the partner networks and has obtained financing from the Inter-American Development Bank (IDB), the Organization of American States (OAS) and the Seventh Framework Program of the European Commission (FP7)» affirmed the executive.

During her presentation, Cos referred to projects executed by CLARA some of them in foreclosure or bid for funding; they are:

- Strengthening regional advanced academic networks through CLARA as a Regional Public Good,
- Latin American Network of University Repositories of Scientific Documentation (pending approval)
- Program to Promote the Use of Advanced Networks in Latin America for the development of Science, Technology and Innovation,
- Project of Telehealth Public Policies in Latin America
- EELA-2 Infrastructure shared between Europe and Latin America
- GLOBAL, and
- EVALSO, Enabling Virtual Access to the South American Observatories.

«These are the projects in which CLARA and its partner networks are active members. CLARA keep working to achieve collaboration with other projects, either among partners countries or representing them, to find links and provide support to its networks members, so that, at the same time, its members can connect with other groups, other world regions, and implement collaborative projects essentials to the development of countries, «stated the Project Manager at the end of her speech.

In the twenty-Day Virtual (<u>http://www.vodcast.uat.</u> <u>edu.mx/index.php/2009/08/vigesimo-dia-virtual/</u>), CUDI Coordinator, Salma Jalife, presented the procedures to create a virtual community in the Corporation and talk about the current status of the work done with CLARA.

In her speech, «Building CUDI Communities and CLARA progress,» Jalife declared that so far there are ten communities including education, health, grids, ecology, astronomy, laboratory science land, mathematics, digital libraries and student TV and said that the goal is to bring together academics from similar or complementary disciplines to share experiences, develop collaborative projects, conduct outreach events and solve common problems.



Dirección de Tecnología © 2008

CUDI Coordinator, Salma Jalife, during her talk at Virtual Day No. 20.

In addition, in her presentation, the Coordinator CUDI explained the procedures to create a community of interest using the Mexican corporation network, and the efforts being carried out to identify communities of interest in Latin America from different regional projects that the institution is developing with the IDB, OAS and in the context of the ALICE2 project (funded by the European Commission through its @ LIS 2 Program).

«For example, -explained Jalife-, the education community has been directed to studying the new technologies of information and communication applied in education and is dedicated to the development of learning objects. For this year a post grade has been proposed for the development of learning objects and, through the relationship between CUDI and RENATA (Colombian NREN), found a space for collaboration and researchers and academics from both countries are interacting to improve education through this course. This is a clear example of a community that found an element of collaboration and has developed a common project".

7 35

Upcoming Virtual Days

October 22th November 19th December 10th

For more information, visit the CUDI site: <u>www.cudi.edu.mx</u>

Make your contribution

Virtual Days assistants, have the possibility to interact with the speakers in different ways. For an active participation, videoconference and Webex, a tool available at the Cisco Learning webpage (<u>www.</u> <u>ciscolearning.webex.com</u>) permit connecting to the scheduled meeting, send text messages or make comments. For those who prefer to attend only as listeners can do so by accessing the online transmission performed on CUDI and DITAE sites during each event.

«Sometimes people do not participate because they consider their question as superficial, but no question is an excess. Great inventions have emerged from small doubts, «said the videoconferencing manager of the UAT Excellence Center, Adam Urbina Aguillón, speaking at the panel "Virtual Days 2008 -2009", who also remarked the possibility of interacting through website and telephone. "We look forward to incorporate soon, the technology of cell messages" ended Urbina.

EELA-2 project moves forward New Possibilities for research in Uruguay

From the 20th to the 24th of July, researchers and specialists from Uruguay and other countries, debate and shared their knowledge during the three activities from the EELA-2 project (E-Science grid facility for Europe and Latin America) in Montevideo: a Tutorial for Grid users, a workshop and the first EELA-2 User Forum.

Verónica Uribe

S ince 2008 the EELA-2 project offers a high capacity grid that allows global access to computing resources required for different kinds of applications been develop in Latin America (LA) and between it and Europe (EU). This way research and communication between countries are fomented, for the development of America Latina.

The main objectives of EELA-2 project are to consolidate ant to expand the e-infrastructure generated by the former project (EELA, 2006), build over the research networks GÉANT (Pan-European network) and RedCLARA (<u>www.redclara.net</u>), and to determinate the conditions of durability of the e-infrastructure, beyond the time established for the execution of the project. All this with the support of ELLA-2 members in different



parts of Latin America, witch, trough their investigations and initiatives, help to maintain and to spread this einfrastructure. A few months ago, a new member joins the cause: The University of Montevideo.

A good start

With the goal of supporting the creation of spaces and spreading grid computing, the project EELA-2 organized from the 20th to the 24th of July, in the Faculty of Engineering of the University of the Republic in Montevideo (Uruguay), the first user forum, workshop and tutorial for EELA-2 users. During these five days international and Uruguay's specialists discuss about the importance of the integration to the project. This reunion gathered Héctor Cancela, Universidad de La Republica's Computing Institute Director and Roberto Barbera, EELA-2 member and Catania's University (Italy) professor, who presented the goals obtained by the project and planted the challenges for this year.

More info

- Proyecto EELA-2: <u>http://www.eu-eela.eu/</u>
- GEANT: <u>http://www.geant.net/</u>
- Universidad de la República: <u>http://www.universidad.edu.uy/index.php</u>
- Instituto de Computación de la Facultad de Ingeniería de la Universidad de La
- República: http://www.fing.edu.uy/inco/pm/field.php?n=Main.HomePage
- CIEMAT: <u>http://www.ciemat.es/</u>
- RAU: <u>http://www.rau.edu.uy/</u>

Herbert Hoeger, training leader, closed the week with the conclusions of the event.

About this important meeting and what it means to the development of technology in Uruguay, Luis Castillo, member of the RAU (Uruguay's Education and Investigation National Network) says that "EELA-2 has come in an interesting moment because a super computing center project was been develop but it failed. EELA-2 is an alternative for the development of the clusters in different faculties of Uruguay that have the line of work trough grid technology. In that sense, the RAU searches to support the activities of EELA-2 in the country, that's the case of the event in Montevideo, witch has a lot of success among the researchers. We hope this goes always forward and finally establishes in the country.

Definitively the integration of the University of the Republic of Uruguay, and with it the whole country, to the EELA-2 project, opens new doors for development and application of grid technology in Latin America.

New projects

During the 24th of July workshop, many of these applications were presented. Here two of the most interesting, explained by their researchers.

Applied Chemistry

Pablo D. Dans, researcher of the Pasteur institute of Montevideo, specialized organization specialized in the area of biomedicine, present a possible application of the e-infrastructure of EELA-2 to the lines of investigation of the Bimolecular Simulating group and the Bioinformatics Unit of their institution. "Our goal is to continue with the lines of research that are been worked, besides the upgrading of our calculate park trough the application of the local cluster and the possible implementation of a grid with informatics resources from the institute", says the specialist.

On the other hand, the Institute of Mecanical of Fluids and Environment Engineering from the Engeering faculty of the University of the Republic from Uruguay presented among other others the Historical-Weather Heritage Recovery project. Gabriel Usera, investigator from this institution tells us that "the project wants to digitalize in a semiautomatic way the graphic registers of weather variables. Once scanned, this registers are processed with computing algorisms that allowed the extraction of information contained on them and with the minimum operator's intervention possible. It specifically processes historical series of 30 years from Montevideo and Durazno city. This way we can recover and make accessible this information treasure, gathered in the historical registers that actually are in paper, witch difficult access and conservation".

More Info

http://indico.eu-eela.eu/conferenceOtherViews. py?view=standard&confld=195. Para más información sobre EELA-2 ingresa a: http://www. eu-eela.eu/.

Scientists concerned with the end of EELA-2 Project

Launched on 1 April 2008, with founds from the European Commission Seventh Framework Program, FP7, E-infrastructure shared between Europe and Latin America, EELA-2 Project, actually represents a major channel for data exchange among the members of 78 institutions dedicates to research and education. Therefore, the proximity of the end of the project, in agenda for March 31st 2010, has concern the scientific community

Renata Victal

According to Bernard Maréchal, EELA-2 Project Coordinator (E-infrastructure shared between Europe and Latin America) and professor at the Federal University of Rio de Janeiro (UFRJ), Brazil, there are two possible funding solutions to give continuity to investigations that are operating on the EELA-2 grid: look for other partners in Europe, Asia and Africa; or even try to obtain support within the Latin American Corporation of Advanced Networks (Corporación Latino Americana de Redes Avanzadas, CLARA).

«We are trying to get funds with European partners, through the proposal for a new project, which would be not only between Europe and Latin America but worldwide. We include countries in Africa, Asia and even in United States. This is an option. The other one is giving CLARA the possibility of using the current infrastructure «said Maréchal, during his participation in one of the CLARA and ALICE2 Project semestral reunions held in Costa Rica, on August 10 to 14, with the purpose of presenting the proposal to the directors of CLARA.

In this opportunity, the professor recalled that the previous project, EELA that operated from January 2006 to January 2008 showed that the development of a grid infrastructure between Europe and Latin America was feasible and satisfied a real need of a big part of the scientific community.

Since then, several projects on the grid have made good progress and have presented interesting results. The real possibility of not having funding and, therefore, to see these investigations abandoned halfway, concerned. Maréchal indicated that every day higher education institutions seek information on how to join the EELA-2 Project, but the approaching of the project ending, become unfeasible the income of any university or institution.

Among other things, Maréchal highlighted the diversity of research being carried out by European and Latin American institutions on the grid. All motivated by regional peculiarities, each in their way, of fundamental importance for the development of solutions that can facilitate the lives of many people.

«In 2006, EELA gathered 20 institutions in Europe and Latin America. Today, with EELA-2, the number becomes 78. It is a very large

research volume. The major projects in Europe are those related to high energy physics because the calculations require an enormous amount of computational resources. In Latin America the most significant studies are in the area of bioinformatics, tropical diseases studies, Earth science problems and meteorology. These are important areas for the Latin American people and are not as important in Europe," asserted the project coordinator.

More Information • EELA-2: <u>http://www.eu-eela.eu/</u>



Brazil-Japan connection

FILE Through the optic fiber, the movies cross continents

A distant dream turned reality the night of the 30th of July and put Brazil in the movie's world history. During the 10th Electronic Language International Festival (FILE) the biggest art and technology event in Latin America, though a optic fiber connection, 4k resolution film (8 million pixel by frame) was transmitted from the Sesi popular theater, in Sau Paulo, to the California and San Diego Universities in the United States and to Keio University in Japan.

Renata Victal





his was the first transmission of this sort in the world and to accomplish this aim, it was necessary a 10 gigabits per second connection and the use of the KyaTera platform from the Support to Research of the State of Sao Paolo Foundation. The RNP (National Network of education and Research of Brasil) coordinated the network support trough the creation of lightpaths dedicated for the transmissions. The data traffic was made trough the research networks Kyatera and Advanced Network of Sao Paolo, in Brasil; the new international connection of 10 Gbps of ANSP; Florida Light Rail and Cisco Wave (C-wave) in the USA; and the Japanese JGN2plus and Wide. Also participated GLIF Open Lightpath Exchanges, Southern Light (Sao Paolo), Ampath (Miami), Starlight (Chicago) and T-Lex (Tokyo).

More than 60 researchers participate in this initiative. The 4K technology (4096 x 2160 pixels) presents a resolution four times higher than the High Definition (HD) TV.

More Information:

• RNP: http://www.rnp.br/

• FILE: <u>http://www.filefestival.org/site_2007/pagina_conteudo_livre.</u> <u>asp?a1=308&a2=308&id=2</u>

• Fapesp: http://www.fapesp.br/

ANSP: <u>http://www.ansp.br/projeto/historico</u>

Universidad Presbiteriana Mackenzie: http://www.mackenzie.br/

• El trailer de la película puede ser visto en:. <u>http://www.enquantoanoitenaochega.</u> com.br "The objective was to demonstrate that we have the infrastructure for this", says Eunézio de Souza, know as Professor Thoroh and coordinator of the Fotonic's Lab of the Presbyterian University Mackenzie, and responsible of the transmission.

The studies for the transmission of the movie began a year ago. The tape "Enquanto a Noite Não Chega", directed by Beto Souza and Renato Falcão, discuss a subject that worries every human being since the start of its existence – the end of life, this strating from a book from Josué Guimarães: "if the end is to close and everything is ending, the only thong to do is to make the travel with some elements that still exist. All this, with a great among of dignity".

One day after the transmission a videoconference was held with the culture minister Juca Ferreira, and the North American, Japanese and Mackenzie University's professors, witch connected to the RPN organized the transmission.

During the FILE 2009 was also launched the Brazilian Digital Culture Forum, as a part of the pilot project from the Culture Minister and RNP, in a meeting from minister Juca Ferreira and some bloggers. In this occasion, the directors assistant of Advanced Network of the RNP, made a presentation about the NREN during the FILE symposium.

File gathered more than 300 artists from 30 different countries with works in different digital culture areas: interactive art, games, performances, surround art, virtual reality and discussions about digital movies.

According to Paula Perissinotto, who organized FILE 2009, is necessary to think more about the union of art and technology. "There are some people who are producing but there are no people thinking about art and technology together. In Brazil there is a lack of academic formation, this is our biggest lack".



APAN delegates witness solar eclipse of the century thanks to TEIN3

TEÎN3

On 22 July parts of Asia saw the Earth's longest total solar eclipse of the 21st century. It was visible from a narrow corridor traversing India, Nepal, Bangladesh, Bhutan and China. After leaving mainland Asia, the path crossed Japan's Ryukyu Islands and ultimately curved southeast through the Pacific Ocean.

Most of the best viewing opportunities were in China and Japan where millions of people were flocking across the eclipse path to witness this special event. Thousands of miles away, in an air-conditioned conference room at the Berjaya Times Square Hotel in Kuala Lumpur, delegates attending the 28th Asia-Pacific Advanced Networking (APAN) meeting were equally able to be part of this spectacle in real time: thanks to live broadcast streaming from China and Japan over the respective national research and education networks and the regional TEIN3 backbone, attendees witnessed the gradual blotting out of the sun directly on their laptop and main presentation screen, living one of those special moments in a lifetime. They also had in-depth presentations and discussion of the technologies used to capture and broadcast this major event.

Kamal Hisham Kamaruddin, Network Operation Manager of the Malaysian research and education network MYREN, which hosted the APAN meeting commented: "MYREN is very proud to have contributed to allowing the delegates to be part of this extraordinary event. It just shows that high-speed networking makes it possible to study and become part of history remotely".

Special credit goes to Dr. Jilong Wang, the director of TEIN3 NOC and CNGI-CERNET2 NOC, for leading the design, implementation and demonstration of the live streaming of the solar eclipse from CNGI-6IX to the APAN meeting in KL over the TEIN3 backbone.

Helga Spitaler, Regional Marketing Officer - DANTE

Details of the routing are as follows:

IPv4 Streaming from Japan Route : OGPOP(Kyushu Univ.) -> SINET -> TEIN3 -> **MYREN** Credited organisations: QGPOP (Kyushu Gigapop Project) Kyushu University National Astronomical Observatory of Japan Keio University Ultra-Realistic **Communications Forum** National Institute of Information and Communications Technology

IPv6 Streaming from China Route : CNGI-6IX ->TEIN3 -> MYREN Credited organizations:

http://eclipse.astronomy2009.org.cn/english/ organization/1139.html.



Courtsey of Zhonghui Li, TEIN3 NOC



Courtsey of APAN KL Organising Committee

Día Internacional de la Seguridad en TI se celebrará en Brasil

Celebrate in the whole world y promote by the Computer Security Day (CSD) since 1988, The Security in Informatics International Day (DISI 2009) will be held in El Salvador de Bahia in December the second.

The objective of this event is to educate and inform the users about the security in Internet and other informatics environments. The National Research and

More Information:

• CAIS – RNP: <u>http://www.rnp.br/cais/</u>

Education Network of Brazil, connected to RedCLARA since 2004 participate in this event since 2005 promoting conferences and other activities directed to educate and inform the user in network and informatics equipment's security aspects.

This year topic of the DISI is the social Networks, web application for a very popular relation that has many security and privacy applications.

Find more information about this event and how to contact the organization thought this mail address disi@cais.rnp.br.



OCTOBER

- 28 Sep 10| 2nd EELA-2 Grid School E2GRIS2 http://indico.eu-eela.eu/conferenceDisplay.py?confld=200 Querétaro, México
- 12-14 | 3rd International Symposium on Intelligent Distributed Computing - IDC 2009 http://www.idc2009.cs.ucy.ac.cy/ Ayia Napa, Cyprus
- 12-14 Cracow Grid Workshop 2009 http://www.cyfronet.krakow.pl/cgw09/ Krakow, Poland
- 12-16 | Summit 2009: OGF/IEEE/CANARIE http://www.summit09.ca/ Banff, Canada
- 13-15 | IEEE/ACM GRID http://www.grid2009.org/ Banff, Alberta, Canada
- 14-16 | Fourth International Congress of Educational Innovation http://www.ciie.cfie.ipn.mx/ Tamaulipas, Mexico

- 20-23 | FIRST Technical Colloquium http://www.first.org/events/colloquia/oct2009/ Santiago, Chile
- 21-22 | NGS Innovation Forum http://www.ngs.ac.uk/innovationforum09 London, UK
- 21-23 | QA & TEST: 8th International Conference on Software QA and Testing on Embedded Systems http://www.gatest.org/en/registration/registration.php Bilbao, Spain
- 21-23 | e-Challenges Conference http://www.echallenges.org/e2009/default.asp?page=home Istanbul, Turkey

22 | Permanent Seminar 2009 Pedro José Amaya Policy and Management in Science, Technology Innovation

- (Colciencias Tecnos) http://tecnos.powweb.com/sempolcti/programacion.html RENATA, Colombia
- 22-23 | TERENA General Assembly http://www.terena.org/events/details.php?event_id=1327 Bucarest, Romania

Agenda

NOVEMBER

- 2-6 | Tutorial EELA-2 http://indico.eu-eela.eu/conferenceDisplay.py?confld=211 Buenos Aires, Argentina
- 8-13 | 76 IETF Meeting http://www.ietf76.jp/ Hiroshima, Japan
- 9-13 | eResearch Australia http://www.eresearch.edu.au/ Sydney, Australia
- 10-13 | 3rd International Conference on Theory and Practice of Electronic Governance (ICEGOV 2009) http://www.icegov.org./ Bogota, Colombia
- 14-20 | SC09: International Conference on High Performance Computing (HPC) http://sc09.supercomputing.org/ Portland, OR, U.S.

- 17-18 | EuroCAMP Advanced http://www.terena.org/events/details.php?event_id=1506 Budapest, Hungary
- 17-20 | Seventh International Congress on Computation and Optimization Software (CICOS 2009) http://www.uaem.mx/cicos/cicos2009/call.html State of Morelos, Mexico
- 25 | Permanent Seminar 2009 Pedro José Amaya Policy and Management in Science, Technology Innovation (Colciencias - Tecnos) http://tecnos.powweb.com/sempolcti/programacion.html RENATA, Colombia
- 25-27 | Second EELA-2 Conference http://www.eu-eela.eu/ Altamira, Venezuela
- 26 | TERENA Technical Committee http://www.terena.org/events/details.php?event_id=1495 Amsterdam, Netherlands

DECEMBER

- 1-4 | the 1st International Conference on Cloud computing (CloudCom 2009) http://www.cloudcom.org/ Beijing, China
- 2-3 | IGT2009 The World Summit of Cloud Computing http://www.grid.org.il/?CategoryID=384&ArticleID=124 Israel
- 9-10 | User Forum SEE-GRID-SCI http://www.see-grid-sci.eu/ Istanbul, Turkey
- 10 | Permanent Seminar 2009 Pedro José Amaya Policy and Management in Science, Technology Innovation (Colciencias - Tecnos) http://tecnos.powweb.com/sempolcti/programacion.html
- RENATA, Colombia
- 9-11 | IEEE 5th International Conference on e-Science (e-Science 2009) http://www.escience2009.org/ Oxford, UK
- 9-11 | The Fifteenth International Conference on Parallel and Distributed Systems (ICPADS>09) http://www.comp.polyu.edu.hk/conference/icpads09/ Shenzhen, China
- 17 | Executive Committee TERENA http://www.terena.org/events/details.php?event_id=1508 Amsterdam, Netherlands

ALICE2 will support two scholarships for LANOMS 2009

ALICE2 - CLARA will fund the participation of two persons in the LANOMS 2009 event. Download the postulation rules to apply to these two grants (only in Spanish, PDF), from: http://www.redclara.net/doc/ALICE2/concursos/ ConcursoALICE2_CLARA_becas_evento_LANOMS2009.pdf. Receipt of nominations until October 7th at 24:00 GMT.



IEEE/IFIP 6th Latin American Network Operations and Management Symposium

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