35 year’s Collaboration on Marine-Earth Sciences of Nanjing University with Canadian Universities

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About Nanjing University (NJU)

- Nanjing University, as one of the 9 top universities in China, it provides advanced education and scientific research.

Gulou Campus (Centre of Nanjing)

Pukou Campus (Northern Bank of R. Changjiang)

Xianlin Campus (Eastern Nanjing New Campus as major)
About Nanjing University (NJU)

- NJU has developed multi-disciplinary programs in human-social sciences, natural sciences, life sciences, modern engineering-technological sciences, and management since 1980s. The University includes:
  - 28 schools
  - 85 undergraduate programs, 7 dual bachelor's degree programs
  - 164 master's programs
  - 150 Ph.D programs
  - 28 post-doctoral stations.

- About 50,000 students, 2,500 faculty members (including 33 Chinese Academicians.)
Earth Science is the Strongest portion of NJU, comparing with other Chinese Universities, it consists of four Schools:

- School of Earth Sciences and Engineering
- School of Geographic & Oceanographic Sciences
- School of Atmospheric Sciences
- School of Environmental Sciences.
The collaboration between Nanjing University and Canadian universities or research institutes reaches 35 years since 1979, through the personal exchange to development a series of cooperative projects.
The Joint Research Project mainly in the area of Geo & Ocean sciences, which including as:

- IDRC project (1988-1992)
- CIDA project (1997-2002 CCHEP 282 /19736)
- CIDA Tier 1 project (2002-2007)

Sino-Canadian college (2005—–)

Strengthen future collaboration
The Sedimentation Processes of Tidal Embayments and their Relationship to Deepwater Harbor Development along the Coast of Hainan Island, China (Dec.1988~Dec.1992)

This project was carried out by:

- Marine Geomorphology and Sedimentology Laboratory (MGSL), Nanjing University
- Atlantic Geoscience Centre, Bedford Institute of Oceanography (BIO)
Outcomes

- Research on tidal inlet embayment coast: Three main types of tidal inlet were identified.
- Harbor site selection, planning and siltation predicated. Sanya, Yangpu and Dongshui inlets were all applied in the harbor construction.
- Volcanic activities along North Coast of Hainan Island was discovered, and dated as Holocene and Late Pleistocene.
Outcomes

- Developed a coastal ocean research laboratory in NJU, consists of 3 parts: Ocean Survey Lab, Experiment Labs, and MGIS Lab
- Published 58 papers, 2 books as:
  - Island Environment and Coast Development, Nanjing University Press, 1992
  - Tidal Inlet embayments Coast of Hainan, Chinese Environment Science Press, 1998
- 22 persons were trained to be 2 Ph.D students, 6 Master students, 6 visiting scholars and 10 technicians through the project for Nanjing University
Hainan Province
Yangpu Harbour
CIDA Project
CCHEP282/19736
(1997-2002)

Environmental Training for Integrated Monitoring and Management of the Coastal Zone of Hainan Province, China

Nanjing University and U. Waterloo
Cooperated with U. Guelph
U. Wilfrid Laurier
Objectives

- To enhance the institutional capacity of Nanjing University
- To deliver instructional programs and development assistance to Hainan Provincial and Local Authorities
- To address the maintenance of environmental quality in the face of rapid development in the Sanya watershed and coastal zone through Integrated Coastal Zone Management (ICZM) strategies
Outcomes

Education/training:

- **A training base** was established in Haikou with sufficient equipment for environmental monitoring training.
- **51 students**, from governmental sectors, local universities and private sectors, were trained in the Environment – Resources science and management by professors from both sides. Students reached to master degree level, and owned certificate from NJU and UW. The training benefited the local society, lots of trainees got promoted afterwards.
- **10 Canadian students and 23 Chinese students** got trained.
- Former students today almost are leader in the different level of the province.
Monitoring:

- Physical environmental monitoring: including coastal water monitoring and land based monitoring
- Social survey
Local capacity building

- Two local institutes were deeply involved in the project, which helped the capacity building at both institutional level and individual level.
CIDA Tier 1 S-61562 Project (2002-2007)

Eco-planning and Environmental Management in Coastal Communities

Organized by University of Waterloo cooperated with University of Dalian Technology, Hainan Province and NJU
Research
- Coastal ocean science
- Coast natural reserve of Tongguling (east coast of Hainan)

Practicing integrated coastal management
- Working with provincial department of environment and resources of Hainan
- Initiatives in Jiangsu: Yangkou Harbor Construction, and Coastal Tourism

Capacity building
- Institutional level----Hainan Research Academy of Environmental Sciences
- Individual level
Sino-Canadian College
(2005—present, on-going program)

Nanjing University
and
Waterloo University
Establishment of SCC

- November 2005, NJU and UW jointly established the Sino-Canadian College (SCC).

- SCC is a platform for promoting international academic cooperation and exchange between NJU and UW.
Objectives:

To promote the ongoing excellent cooperation and exchanges between the two provinces and the two universities

UW and NJU will leverage their advantages in geo and environmental sciences, and other disciplines to provide integrated leadership in research, education and services.

The College is designed to make contributions to the sustainable development of the provinces: Ontario Canada and Jiangsu China.
Growing Dimensions for Cooperation

Includes:

- Academic Research Collaboration
- Dual-Degree Student Exchange programs
- Visiting Scholar Plan (VSP)
- Teacher Exchange & Course Delivery
- Summer Study Tour Programs
- Joint workshops, seminars and conferences
Presently, there are three cohorts of SCC graduates.

95% of the SCC graduates have been offered the opportunity to further their study in several famous universities (Harvard, Stanford, U of British Columbia, U of Hong Kong and Lund University).
NJU-UW partnership was renewed during the NJU Week in Northern America in Waterloo, Canada during April 2012.
Highlights (1)

- In Nov. 2005, Prof. David Johnston, the President of University of Waterloo, visited Nanjing University and signed the agreement which inaugurated the establishment of SCC.

- On 31st October, 2008, Hong Yinxing, Chancellor of Nanjing University, Dalton McGuinty, Premier of Ontario and David Johnston, attended the ceremony to release the College Emblem of SCC.

- On June 10, 2009, Hong Yinxing, Chancellor of NJU was awarded an Honorary Doctoral Degree in Laws of UW.
On September 22, 2009, Dr. Deep Saini, the former Dean of Faculty of Environment of the University of Waterloo, was named Guest Professor at Nanjing University.

On March 24, 2010, during the visit to Nanjing University, David Johnston, on behalf of the University of Waterloo, made a donation for a multimedia UW Classroom at Xianlin Campus of Nanjing University.

On October 21, 2013, Canadian Governor General, Professor David Johnston visited Nanjing University. He delivered a talk on “The Diplomacy of Knowledge” emphasized the important of Scientific and Educational exchanges to serve for peaceful world of international affairs.
Memorable Moment

2001.6 Award Wang Ying Honorary Doctorate Degree

2008.9.17 visit University of Waterloo

2012.4 Nanjing University award David Johnston Honorary Doctorate Degree
2013.10.21, Canadian Governor General, Professor David Johnston visited Nanjing University.
Strengthen the Collaboration

- In April 23rd of 2014, New Collaboration has signed up with U.W. for extend the Joint Research, Joint education and Joint training of postgraduate student in the Scientific area of Quantum Mechanics, Chemical Engineering, Computer and African Studies.

- Water Science, MGIS are continuing to be the major area for collaboration, especially in the South China Sea Studies.
Strengthen the Collaboration

- The joint Research and Educational Program will also be carried out with Dalhousie University, the Marine Science and Law of Sea is major concerned.

- The new trend is characterized both in fundamental sciences and the application aspect.
All above reflects: a healthy and fruitful cooperation has been built up step by step through both sides efforts, which set up a new pattern of cooperative project for the early 21 century!
Thank you!