

## CANADIAN ASSOCIATION FOR PHYSICAL ANTHROPOLOGY L'ASSOCIATION CANADIENNE D'ANTHROPOLOGIE PHYSIQUE

# Newsletter

Editor Megan J. Highet

Volume 2009 Issue I

Spring 2009

### Message from the President

Rob Hoppa

It's that time of year again - the end of classes and exams and maybe programs for some students. Ahead many of us prepare to enter the field, spend some time writing and analysing and hopefully take a little time to relax and recharge the batteries. It has been a relatively quiet term for CAPA but I am pleased to see the continued growth of our membership (as noted at the last business meeting in Hamilton). And related to this, I am very excited to see the commitment to hosting upcoming meetings by our members. As you already know, this year's meetings are being hosted by SFU in Vancouver and the local arrangements committee (Mark Collard, Mark Skinner and Dongya Yang) is busy preparing for that, which will happen at the Vancouver downtown campus from Oct 29 to Oct 31. Next year, we are already booked for the 27-30 Oct 20010 at the Radisson Hotel Saskatoon and lead contacts Sylvia Abonyi and David Cooper have already been working hard securing the venue. And for 2011, our colleagues Michelle Drapeau and Isabelle Ribot have offered to host CAPA in Montreal. I hope to see many of you, as well as more new faces at future meetings. Until then, I wish you all the best for a great summer.

# Message from the Student Representative

Sarah Carnegie

Welcome to Spring everyone!!

The flowers are out, the cherry trees are blossoming and the snow tires are finally coming off here in Toronto... although I know that some of my colleagues in Calgary are still battling some snowing days!! I hope that spring will reach you soon!

I would like to introduce a new segment into the student representative column. We would like to start acknowledging the successful thesis and dissertation defenses of our student members! Please professors and students alike, send me word of all the successful students from your departments and we will include their names here. Please provide their name, date defended, university and department, advisor name and the title of their project.

I am also coming up on the end of my term this fall as student representative, which means we will be looking for someone else to fill my role. Please start thinking if you would like to take over the position... there will be more details to come.

Have a great summer everyone!

### WE WOULD LIKE TO HEAR FROM YOU!

Please send submissions to: <a href="mailto:meganhighet@yahoo.ca">meganhighet@yahoo.ca</a>

(Deadline for the Spring issue is: October 23, 2009)

# CALL FOR NOMINATIONS FOR THE 2009-2011 CAPA STUDENT REPRESENTATIVE

Names of nominations and a brief (300 word max) biography should be submitted by email to <a href="mailto-capa@umanitoba.ca">capa@umanitoba.ca</a> by 30 Jun 2009.

Nominations must be student members in good standing.

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CAPA 2009 Vancouver, BC

Host:

Simon Fraser University

29-31 Oct

#### Volume 2009 Issue I



Pamela Mayne Correia writes:

In September 2008, the Department of Anthropology was pleased to announce the opening of their new permanent exhibit, In the Anthropologists' Footsteps. Replacing an 18 year old exhibit, In the Anthropologists' Footsteps presents the discipline of anthropology in a thematic manner. 32 exhibits explore the four fields of anthropology through four themes: A Sense of Place, Connecting with One Another, We are What We Eat, and Changing to Meet the Needs.

As visitors to Henry Tory Marshall Building wander the hallways, they will participate in a journey and will be transported around the globe on a voyage through time with our faculty.

Within A Sense of Place, we will travel from Russia to Bolivia, and engage in the relationship of people to the land. The spiritual and physical interactions between the people and the landscape are explored through biological and cultural evidence from past and existing populations.

In the next stop of our journey we will hear people *Connect with One Another* through speech and story. The way we understand and work with those around us can be explored through the variety and choice of language use. Whether providing an explanation for the other as told in Flores, or by defining our place within a group in Colombia or India, we use language and story to set boundaries.

A central focus of our lives is our relationship with food. In the third theme, We are What we Eat, we will travel to markets in Greece and Serbia, and to the waters of Greenland and the United States to explore how communities use food to come together, and to maintain health. Evidence of the movement of people from one community to another, and changes in resource exploitation are interpreted from the nutritional record of individuals.

In the final theme, Changing to Meet the Needs, we will look at how modernization and globalization have impacted human biology, technology, and social relationships in Tanzania, Singapore, and Canada. In redefining our relationships with the land, and through technological innovations, we create new opportunities to exploit resources, and broaden our interactions with each other. Spiritual realities are changing, and people are learning new ways to interact with each other.

This exhibition is open to the public on a daily basis. We invite you to stop by when you are on campus and take in these stories.

#### **UNIVERSITY OF MANITOBA**

Linda Larcombe writes:

Linda Larcombe (Ph.D. University of Manitoba, 2005) has recently been appointed to the position of Assistant Professor in the Department of Internal Medicine, Section of Infectious Diseases, University of Manitoba. I am thrilled to have the opportunity to be part of this dynamic team and I look forward to contributing to First Nations health research using my broad anthropological training.

#### Recent publication:

Larcombe, L., Nickerson, P., Dembinski, I., Lodge, A., Larcombe, E., Milligan, L., Martin, B. and Orr, P. 2008 Functional gene polymorphisms in Canadian Aboriginal populations with high rates of tuberculosis *Journal of Infectious Diseases* Vol. 198: 1175-79

**Abstract:** The present study determined whether a pattern of functional singlenucleotide polymorphisms (SNPs) was present that could predispose a Dené cohort to a suboptimal response to Mycobacterium tuberculosis. Compared with a Caucasian cohort, the Dené and Cree were found to maintain a significantly higher frequency of SNPs associated with low expression of vitamin D receptor (VDR), interferon (IFN) g-(+874), and tumor necrosis factor-a (-308) and high production of monocyte chemoattractant protein (MCP)-1(-2518) and interleukin (IL)-6 (-174). Given the roles played by IFN- and VDR in facilitating macrophage containment of M. tuberculosis and the opposing role of MCP-I and IL-6, the observed allelic variation by ethnicity may in part contribute to the high rates of tuberculosis among the Dené.

## **Upcoming Meetings of Interest:**

- CASCA/AES, Vancouver; 13-16 May, 2009.
- <u>Canadian Archaeological Association</u> Thunder Bay; 13-17 May 2009.
- Congress of the Humanities and Social Sciences, Ottawa; 23-31 May 2009.
- 14th International Congress on Circumpolar Health, Yellowknife; 11-16 July 2009.
- American Society of Primatologists, San Diego; 18-21 September 2009.
- Society of Vertebrate Paleontology, Bristol; 23-26 September 2009.
- XVIII Congress of Italian Anthropological Association, Florence; I-4 October 2009
- Paleopathology Association in South America, Argentina; 14-16 October 2009.
- The Stine Rossel Memorial Conference, Copenhagen; 21-23 October 2009.
- Canadian Association for Physical Anthropology, Vancouver; 29-31October 2009
- The Association for Canadian Studies in the United States, San Diego; 18-22 November 2009.
- 17th Congress of the European Anthropological Association, Pozan; 29 Aug 2 Sept 2010.

## **Upcoming Workshop:**

 Muscloskeletal Stress Markers (MSM): Limitations and Achievements in Reconstruction of Past Activity Patterns, Coimbra, Portugal; 2-3 July 2009.

See website for further details: <a href="http://www.uc.pt/en/cia/people/WinMSM">http://www.uc.pt/en/cia/people/WinMSM</a>



## CAPA / ACAP



## Graduate Student Research Profile: Meaghan Huculak, M.Sc. Candidate

Department of Anthropology, St. Mary's University Halifax, Nova Scotia.

In vivo facial tissue depth measurements of African Nova Scotians for 3-D forensic facial reconstruction.

Forensic art is a multidisciplinary field that utilizes knowledge gathered from forensic science, art, anthropology, and human anatomy. It consists of any type of art form that helps identify, capture, or convict criminal offenders, or that aids in finding missing persons or identifying unknown deceased individuals. This thesis concentrates on the three-dimensional method of forensic facial reconstruction, which utilizes clay and sculpting techniques to rebuild a face onto a skull. The reconstruction is guided by facial tissue depth markers, which are measurements of the distance between the surface of the underlying bone and the surface of the skin. Since facial tissue thickness is affected by various factors, tissue depth markers are selected according to age, sex, and ancestry of the skeletal remains that are recovered.

Population specific facial tissue depth data helps increase the accuracy of three dimensional forensic facial reconstructions as well as the chance for establishing a positive identification of the unknown individual. Therefore, the purpose of this research is to expand the facial tissue depth data available in Canada to include African Canadians. Specifically, this study involves collaborating with the African Nova Scotian community to create the <a href="first">first</a> African Canadian tissue depth database to help identify missing children and adults of African Nova Scotian descent. Specific objectives include reporting standard summary statistics, investigating relationships between tissue thickness, age, and sex, comparing the results to African American data, and promoting a positive self image by providing sonographic training to African Nova Scotian youth.

Various techniques for collecting tissue depth data have been employed, however, this study will utilize ultrasound technology to collect the facial tissue depth measurements. Ultrasonic probing is the most accurate method of measuring tissue depth; it is non-invasive, safe, and portable. Tissue depth measurements will be collected from 50 living volunteers of African Nova Scotian descent. Participants include males and females between the ages of 3 years and 99 years old. Volunteers will sign a consent form and complete a biographical datasheet. Height and weight will be measured and recorded. Photographs of the front and right side of each participant will provide comparisons for the reconstruction of cartilaginous structures such as the nose and ears.

The data collection procedure involves measuring the tissue depth of 19 points on the face. The participant is seated in the upright position, facing forward, with facial muscles and jaw relaxed. The transducer is coated with a non-allergenic gel and lightly applied to the skin at a  $90^\circ$  angle to the underlying bony landmark. To prevent depression of the soft tissues, the gel will be the only substance in contact with the skin.



Picture: Meaghan Huculak holding the transducer on the volunteer's face while the soft tissue depth is being recorded on the ultrasound machine in the background.

The participant remains still while the measurement is taken to ensure an accurate reading. Once the coated transducer is in the correct position, the image is frozen on the monitor using the computer keypad, and the participant can relax for a few moments prior to the next measurement. An ultrasound output is generated and the depth of the soft tissue can be measured using calipers built into the computer system. This process is then repeated for all 19 anatomical points. Averages of each point are taken for males and females of specific age groups and a reference table is generated. Statistical analyses will be used to analyze the data.

The generation of a facial tissue depth reference table for contemporary African Nova Scotians will help forensic artists accurately create facial reconstructions of missing persons. Consequently, a more accurate facial reconstruction will increase the likelihood of recognition and positive identification. As a result, this research will help alleviate the psychological, emotional, and physical suffering endured by relatives and friends of missing persons. Furthermore, this data can help authenticate historical skulls that have been identified as African Nova Scotian.

African Nova Scotian facial tissue depth measurements will be compared with African American data to assess the degree of diversity among similar ancestral populations living in different geographical locations. Finally, providing students with the opportunity to learn how to use ultrasound technology and interpret sonographic imaging will help create self-worth in African Nova Scotian youth, thus opening doors to new experiences.



# **Membership Form**

# Canadian Association for Physical Anthropology L'Association Canadienne D'Anthropologie Physique

New Member [ ] or Renewal [ ]  Full Membership \$50.00 [ ] (\$42.00 if remitting in US currency)	
or Student \$25.00 [ ] (\$21.00 if remitting in US currency)	
Institution \$60.00 [ ] (\$50.00 if remitting in US currency)	
Life Time \$750.00 [ ] (\$623.00 if remitting in US currency)  Name:	
Name	
Mailing Address:	
Postal Code:	
Affiliation and department: (if different from mailing address)	Please make cheque or money order payable to:
email:	Can Assoc for Phys Anthro and forward to:
	Dr. Ian Colquhoun
publish email with membership list [ ]	CAPA Secretary/Treasurer
/do not publish with membership list [ ]	Dept of Anthropology
phone:	The University of Western Ontario
publish with membership list [ ]	London, Ontario, Canada
/ do not publish with membership list [ ]	N6A 5C2
fax:	email: colquhou@uwo.ca
publish with membership list [ ]	
/ do not publish with membership list [ ]	
Demographic information: (will not be published in membership list	; for tracking trends only)
Research Fields: (please indicate primary and secondary)	
I.	
2.	
If you are an instructor / professor, what is your rank?	
If a student:	
Undergraduate [ ] year (e.g., 3rd) [ ] or MA [ ] year [ ] or M Sc	[ ] year [ ] or PhD [ ] year [ ]
If a Postdoctoral Fellow, funded by:	
If none of the above:	



# **Future CAPA Meetings**

Oct 29-31, 2009
Vancouver, British Columbia
Hosted By:
Simon Fraser University

2010: Saskatoon, Saskatchewan The University of Saskatchewan

2011: Montréal, Québec The University of Montréal