Message from the President

Andrew Nelson

2004 is turning out to be a busy year for all of us. Things have been reasonably quiet on the CAPA scene, although there are a couple of things that I would like to draw to your attention.

On the granting front, I would like to draw CAPA members’ attention to the transformation that is in the planning stages for SSHRC. This is the effort to “renew the social sciences and humanities in Canada”, by transforming SSHRC to a “knowledge council”. For details see: http://www.sshrc.ca/web/WhatsNew/initiatives/transformation/index_e.asp.

This spring, they have been seeking consultation on the transformation. For your interest, UWO’s response is posted at http://www.uwo.ca/research/general/sshrc-transformation.html. We were able to get our administration to include a paragraph about the “gap areas”, including anthropology. SSHRC will present a draft report on the transformation to the Congress of the Social Sciences and Humanities in Winnipeg on June 2nd. I would be interested to know if any of our membership was involved in this process, and if so, what their experience was.

With regard to the “gap areas”, at the 2003 business meeting we established a committee to examine the concerns we have about how grant and fellowship applications are handled by NSERC and SSHRC. This process is moving slowly, but I can report that we have managed to get some initial information from NSERC on their decision process for dealing with student fellowships. One of our (UWO) doctoral students was bounced from NSERC to SSHRC this year, and I am pleased to report that this student not only survived the transition, but was awarded a SSHRC CGS! Perhaps there is hope that the process actually works.

There are two important things to note with regard to upcoming conferences. First, Rob Hoppa and I will be hosting a workshop entitled “3D imaging in anthropological research: acquisition, analysis and dissemination”. The workshop will be held here in London in conjunction with this year’s CAPA conference. Please see page 10 for details. Second, on behalf of the 2004 CAPA meeting organizing committee, I would like to invite everyone to this year’s conference that will be held here in London, ON. The meeting will be held October 27-30th at the same venue as the 1997 meeting. The web page is http://www.ssc.uwo.ca/anthropology/capa_2004/.

The web page has relevant dates for symposium and abstract submissions, although at the time of writing, the web forms for these are not yet active. Please keep an eye on the web site for further developments. We do hope to see you all here!

Best wishes to all for a relaxing and productive summer.

Message from the CAPA Student Representative

Joe Parish

Greetings everyone!

This has certainly been a busy year in my own life and I imagine yours as well. Thanks once again to Jodi Blumenfeld for sitting in at the Edmonton meetings in 2003. The most important student issue to come out of these meetings is the addition of a new category for the student prize competition, the Open Media multi-authored prize, valued at $200. This is a pilot category where the student-presenter is the lead author. The prize goes to the student-presenter, as the quality of presentation and ability to answer questions are part of the criteria. Hopefully, this will be voted upon after the 2004 meetings in London, possibly at the business meeting when judges have a better idea of how difficult or easy this was to adjudicate.

As for student news, I really haven’t heard much from people. I guess, for me, the most important thing is to hear what other students are up to, what they would like to add to the business meeting and how I can better serve in my role as the student representative. Being so far away from everyone sometimes makes me feel disconnected so I’d like everyone that can spare a few minutes to send me their updates on research projects and where they’re at in their programmes, what their future research goals might be and anything that you’d like the community to know about your situation. I suppose the benefit of being in an organisation that values its students so much is that there aren’t many issues to bring to the attention of the membership. However, feel free to talk to me at the London meetings (or preferably before) about something that you’d like me to table at the business meeting. I’m always available at jmp429@mizzou.edu. Slainte!
McMaster Launches New PhD Program in ‘Anthropology of Health’

At McMaster University, the new Anthropology of Health program draws together core anthropology faculty and students interested in human biology, medical and physical anthropology. The stream takes advantage of the many links to other health research areas at McMaster and beyond, and encourages inquiry-based learning and research that is multidisciplinary, participatory and collaborative in nature.

Medical anthropology embraces a diverse array of studies: from how human biology and biomedical approaches assist in investigating illness and disease, to the analysis of the cultural and environmental factors that influence the perception of illness in individuals and populations. Understanding the cultural context of health, illness and healing is a central concern of medical anthropology. The meaning of individual illnesses and illness experiences, the values embedded in health policies, the perception of health systems and healing processes, and the beliefs and behaviours of populations that create the conditions for disease and disease transmission are culturally constructed and, therefore, open to critical analysis. The analysis and representation of individual experience, social processes, community history and economic and political environments are all relevant to the understanding of specific health issues.

The Anthropology of Health aims to bridge the boundaries between theory and practice and to equip students with an understanding of the range of theories and methodologies that can be brought to bear in the analysis of health-related phenomena. Faculty at McMaster have a diverse range of interests and theoretical perspectives, but we share a common concern for an engaged and critical and critical anthropology that ultimately informs our understanding of how social and cultural determinants of health intersect and influence the health and well-being of individuals and communities.

Faculty and students in the Department of Anthropology conduct research in international and Canadian contexts, in urban and rural environments, and in clinical, laboratory and community settings. Medical Anthropology faculty and students have carried out research and fieldwork in many parts of the world, including Australia, Canada, Chile, France, India, Italy, Kenya, Malawi, Nepal, Thailand, Uganda, the United States, and Zimbabwe. Our interests are wide ranging in scale – from the study of ancient DNA and molecular processes, through studies of illness experiences and health care settings, to the analysis of contemporary health policies in Canada and internationally. Faculty at McMaster share a common goal in the development of training programs that are critically engaged in the understanding of the meaning of health and illness cross culturally, and in improving the well-being of individuals and communities.

The main thematic areas of the program are:

- Community and international health: behaviour, social change and health interventions; health impacts and policy; culture and the environment.
- Health and gender; health through the life course
- Historical perspectives: health, disease and the body.

For further information, visit the website at: http://www.socsci.mcmaster.ca/anthro/grad/gradhealth.cfm

Meetings of Interest

- 2nd International Conference on Economics and Human Biology, Munich, Germany, 10-13 Jun 2004
- Society of Ancient Medicine, 16-19 June 2004, Birmingham
- 5th International Association for the Study of Human Paleontology Congress, Barcelona, Spain, 19-26 Jun 2004
- 10th Congress of the International Association for Human Auxology, ‘Human Growth in Sickness and in Health’, Florence, Italy, 4-7 Jul 2004
- 7th International ancient DNA and associated biomolecules conference, Brisbane, Australia 12-17 Jul 2004
- XX Congress of the International Primatology Society, Turin, Italy, 23-28 Aug 2004
- World Congress on Mummy Studies, Turin, Italy, 2-5 Sep 2004
- 7th International Congress of Physiological Anthropology, Columbus, Ohio, 1-5 Sep 2004
SSHRC launches Aboriginal research program

Excerpted from SSHRC website: URL http://www.sshrc.ca/web/apply/program_descriptions/aboriginal_e.asp

**Context**

This pilot program was developed as a result of SSHRC’s *Dialogue on Research and Aboriginal Peoples*. The program will run for three years, but may be extended subject to a positive evaluation.

Aboriginal research, in the context of the dialogue, derives its dynamic from traditions of thought and experience developed among, and in partnership with, First Nation, Inuit and Métis peoples in Canada as well as Indigenous peoples in other parts of the world. Aboriginal research encompasses all academic fields as well as domains of knowledge specific to Aboriginal cultural traditions. Those who conduct Aboriginal research, while coming from diverse cultural traditions, are committed to both increased research leadership among Aboriginal scholars and respectful research partnerships involving both Aboriginal and non-Aboriginal interests and perspectives.

**Objectives**

This program has two overall objectives. The first is to facilitate research on a range of policy-related issues that are of concern to Canada’s Aboriginal peoples: urban issues, economic development, the environment, education, research ethics, intellectual and cultural property, and languages and cultures.

The program’s second broad objective is to build up the capacity of the humanities and social science community to operate within, and to benefit from, the approach to Aboriginal research outlined above.

The program is designed to complement, not replace, existing support for Aboriginal research offered through SSHRC’s other programs.

The specific objectives of the Aboriginal Research Pilot Program are to support and promote:

- research that will help develop policy in areas of concern to Aboriginal communities and other stakeholders;
- Aboriginal leadership and participation in research, and advancement of Aboriginal scholars’ research careers;
- significant research training opportunities for Aboriginal students;
- new, effective research partnerships between Aboriginal and non-Aboriginal scholars;
- better understanding of how research by and with Aboriginal scholars and Aboriginal communities can and should be organized;
- better understanding of the relationships between Aboriginal and non-Aboriginal peoples and between their respective intellectual and cultural traditions; and,
- increased awareness and appreciation of the needs, values, knowledge, experiences and contributions of Aboriginal peoples both in Canada and abroad.

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31st Annual Meetings a Great Success

Andrew Nelson, President

The meeting was a great success! There were approximately 140 registrants from as far as Nevada, Illinois, and Newfoundland as well as 50 dentists and 24 dental hygienists who joined us for Saturday’s Dental Anthropology Symposium. Many, many thanks are due to Denise Enis who was the one who really pulled it all together. Nancy Lovell and Owen Beattie got the ball rolling and provided the essential direction.

Vitally important to the proceedings were (in primarily alpha order): Pamela Mayne Correia, Geoffrey Sperber (Dentistry), Sandra Garvie-Lok, Caroline Haverkort, Yvonne Kjorlien, Julija Kelicic, Gail Mathew, Jan McCowan, Joanne McKinnon, Diana Rossi, and Pam WIloughby. Kurt Blakie, Diana Rossi and Darren Shaw designed the website. Pascale Scotte, Michelle Daveluy, and Ghislain Cormier provided translation assistance. There was also a troop of undergrad volunteers behind the registration desk, working the AV equipment and helping with preparation work. Great job everyone!!

Thanks are also due to the conference sponsors. They are: The University of Alberta Conference Fund, the University of Alberta Bookstore, Pearson Education Canada, McGraw-Hill Ryerson, Ltd., The University of Alberta Department of Dentistry and the Division of Continuing Dental Education.

**Highlights**

There were many highlights of the conference that could be sung out, but I would like to emphasize two.

The first is the joint CAPA-University of Alberta, Faculty of Dentistry dental anthropology symposium that brought our membership together with a group of interested dentists and dental hygienists. This was a dynamic and engaging session that included a challenge from Mark Skinner to the dental experts to get involved in the large scale forensic/human rights mass grave excavations. It was a great job by Geoffrey Sperber and Pam Willoughby to bring this session together!

The second is the banquet address given by Aaron Elkins. His talk was rich in insights, anecdotes and light humor.

In addition to our own interest in the conference, the media provided good coverage of the event - on the UofA campus, in both Edmonton newspapers and on CBC TV and radio (including national broadcasts).

**Business Items**

This business meeting saw a historic first - that was the participation of the first student representative to the CAPA executive. Joe Parish, the elected representative was unable to attend, but the student voice was ably represented by Jodi Blumenfeld. The main student concern was the issue of multi-authored papers and eligibility for student prizes.

This issue has been festering for some years. After consideration of a couple of suggestions from the student representative and some lively discussion from the floor we came to the resolution that next year (2004) we will do a pilot project wherein a new category of open media, multi-authored student paper prize in the amount of $200 will be presented.

In this new category, the lead author and presenter must be a student, but co-authorship with other students and/or faculty is permitted. At next year’s conference, the judges will report to the business meeting and a formal decision will be made whether to continue with the new category. Issues to be considered will be the numbers of papers that will require judging and the impact on single authored entries.

In light of the new composition of the executive and several other changes that have taken place within our organization, a number of modifications to CAPA’s constitution must be made.

(Continued on page 7)
prehistory through developments in Physical Anthropology and Archaeology. On February 27, eight students from the College's Anthropology society (ARF: Anth/Arky Resource Forum) and 14 members of the Archaeological Society of Alberta jointly visited the B.G. People exhibit at the Glenbow Museum. This travelling exhibition, which continues until May, has several examples of "leathery" human remains plus an excellent collection of archaeological materials from numerous European sites. For the introductory Anthropology course (Anth 2201) this winter, Dr. Chris Giarland and Julie Cormack took about 150 students to the Calgary Zoo.

Julie continues her work on the Davidson Black biography, which will be completed this summer. She gave a special presentation on this archival work to a College history course that focuses on biographical research.

Her article entitled "Davidson Black and his Role in Chinese Palaeoanthropology" was recently published in Current Research in Chinese Pleistocene Archaeology, edited by Chen Shen and Susan G. Keates.

Although Julie will not be joining the Madaba Plains Project in Jordan this summer, 11 individuals from Calgary will be participating in this archaeological project. These individuals come from the city, the University of Calgary, and Mount Royal College. Julie's contribution will be analysis and published description of the stone implements from the 2002 and 2004 field seasons.

University of Manitoba

As summer approaches, a number of graduate students are busy finishing up thesis research and writing. Deb Merrett has submitted her thesis and was awarded a SSHRC postdoctoral fellowship. Linda Larcombe and Chris Green are also both completing their doctoral thesis research. Linda was awarded a Wener-Gren doctoral field work grant for ancient DNA research. Heather Gill-Rowland returned in March after seven months in Schleswig, Germany. Heather was awarded a DAAD scholarship in the fall to undertake her thesis research. She has now submitted her thesis for defense. Dedrie White and Barb Hewitt are completing their thesis write-ups with plans to submit this summer. Barb Hewitt was awarded a SSHRC doctoral Canada Graduate Scholarship and will be heading to the University of Western Ontario to undertake a PhD with Christine White.

In the fall, the department welcomed Travis Allard and Laurie Shead into the MA program. Both are completing their course requirements and beginning to get started on developing their thesis proposals.

Dr. Tamara Varney joined the department in the fall as a sessional Asst Professor. After a busy year of teaching, Tamara is heading back to Antigua for another field season this May.

The Department of Anthropology welcomes Dr. Stacie Burke as a new tenure-stream member of the faculty, in biological anthropology.

Rob Hoppa was on research leave during the fall term and is continuing to work on his historical demography research with Ann Herring. Lisa Sattenspiel and Richard Preston, as well as developing digital imaging research with students out of the Bioanthropology Digital Image Analysis Laboratory (BDIAL). Rob is currently organizing a SSHRC-funded technology and imaging workshop with Andrew Nelson and colleagues at the University of Western Ontario, for 3D imaging in anthropology. This two-day workshop will precede CAPA in London this fall. For further details, see the announcement on page 10 of this issue.

Julie Cormack

University of Central Florida

Dr. Tosha Dupras was awarded the University Excellence in Undergraduate Teaching Award at the 16th annual Founder's Day Honors Convocation Ceremony held on April 7th. Dr. Dupras was also presented with an award for Excellence in Undergraduate Teaching for the College of Arts & Sciences.

Newsletter Editor

University of Toronto

The U of T remains large and complicated. These brief notes will not offer a very thorough coverage of the activities underway, but they may be of some use as an overview. As CAPA readers probably know, at the graduate level we offer five fields of doctoral study: Social/Cultural, Linguistic, Archaeology, Biological and Medical. There are three campuses comprising U of T, and every one of them does anthropology teaching and research. We have new rules of governance that support increasing autonomy of each campus. In many ways, they operate as separate, but co-operating, institutions at the undergraduate level, but they all contribute to a single graduate program.

At St. George, David Begun, Shawn Lehman and Susan Pfeiffer are anxiously awaiting the arrival of Daniel Sellen on July 1, 2004. Professor Sellen joins us from Emory University. He will hold a CIHR Tier 1 CRC. We are confident that he will contribute terrific things to both biological anthropology and medical anthropology. At UTSC (Scarborough), Michael Schillaci and Larry Sawchuk are both full time; Frances Burton has completed her last undergraduate teaching prior to her retirement. At UTM (Erindale, or Mississauga), Esteban Parra has his genetics lab in
operation and Tracy Rogers covers forensic anthropology. Becky Signum rounds out that group. They have just been given permission to advertise for a second forensic anthropologist, growing that group to four.

Susan Pfeiffer

After spending a busy and rewarding year teaching new courses and keeping up with research, Sabrina Agarwal is said to be leaving the St. George Campus at the University of Toronto. However, she is thrilled (with supportive new husband by her side!) to be moving to a new faculty position in the Department of Anthropology, at the University of California, Berkeley. The Department promises many new exciting teaching and research opportunities, and many warm and inspiring colleagues. She will greatly miss all her friends in Canada, and finds herself filled with sentimental thoughts of snow and happy-colourful-funny-money. However, she looks forward to continuing to be CAPA member, visiting and continuing to work with her Canadian colleagues at home.

Sabrina Agarwal

Trent University

Anne Keenleyside will be traveling to Tunisia this summer to excavate a Roman cemetery (2nd to 4th centuries AD) at the site of Leptiminus. The focus of the project, which is under the direction of Dr. Lea Stirling, Canada Research Chair in Roman Archaeology at the University of Manitoba, is the study of food offerings, social relationships, and health through the analysis of skeletal and archaeological evidence from the site. In August, Anne will be returning to Bulgaria to finish her research on the Greek colonial site of Apollonia. She is currently finishing up a paper with Dr. Henry Schwarzs on the stable isotope analysis of diet among the colonists, and is working on two other papers on the health of this population.

Anne is currently supervising three graduate students. Tom Dornon is looking at joint disease in skeletal and clinical samples, Karen Blackbourn is doing a dietary reconstruction of a 19th century pioneer cemetery population from Port Hope, Ontario, using stable isotope analysis and dental pathology, and Christianne Hawken is examining the health status of this population through an analysis of skeletal pathology.

Anne Keenleyside

University of Calgary

The Department of Anthropology at the University of Calgary is happy to announce that Dr. Steig Johnson will join our faculty for a 9-month position (2004-2005) in primatology, as of September 1st. Dr. Johnson graduated from University of Texas at Austin in 2002. Since 2002, he has been a postdoctoral research associate with the Institute for the Conservation of Tropical Environments (ICTE) of Stony Brook University, working in Madagascar. His research interests include primate behavioral ecology, speciation and hybrid zones in the brown lemur species complex, biogeography and conservation biology, and locomotor behavior and functional morphology.

University of Guam

Ex-pat CAPA member Gary Heathcote is involved in a collaborative study which will shed light on tragic events that most likely occurred in the days that led up to, or immediately after, the American recapturing of Guam in 1944. The study is based on seven incomplete burials recovered from Matapang Park and nearby San Vitoros Road, Tumon Bay, Guam. Dave Defant, Lynn Leon-Guerrero and crew (PHRI, Inc., Guam) excavated these remains in the course of monitoring and mitigation, in areas previously disturbed by earthen moving activities. Four of these individuals were buried face down in a pit not far from a small Japanese pill box. At least two of the individuals wore Japanese-style tabbies (sandals), and a few metal buttons, embossed with the chrysanthemum and anchor motif of the Japanese Imperial Navy, were recovered from the best preserved individual.

These hastily and disrespectfully buried individuals (for two, there is evidence of summary execution) are not necessarily Japanese soldiers, however, and one important objective of the study is to establish ancestry. The leading possibilities for their identities are Japanese (soldiers), Korean (laborers or officers), or Chamorro (civilians from Guam or Japanese-employed translators/police from Saipan or Rota). Trauma wounds thus far recognized are from shrapnel, bullets and a saber, machete or bayonette. One recovered projectile, which shattered a femur of one individual, has been identified as a 6.5mm Japanese rifle bullet.

Preliminary laboratory analyses and in situ field descriptions have identified a number of dental and skeletal lesions, including enamel hypoplasia, a possible vertebral compression fracture, degenerative joint changes and inflammatory changes at muscle attachment sites. Also, there are small pockets of trabecular destruction within the vertebral bodies of one individual which may represent early stage tuberculosis of the spine. Joanne Eakin (Department of Family and Community Medicine, University of New Mexico) and Heathcote are conducting separate osteobiographical (including paleopathological) studies of two sample subsets. Pending approval for bone and tooth tissue sampling from the Guam Historic Preservation Officer, Koji Lum and Della Stumbaugh (Anthropology Department, Binghamton University) will conduct ancient DNA analysis into the ancestry of these individuals, as well as test to identify the disease-causing organism involved in the possible tuberculosis case. Likewise, pending tissue sampling approval, T. Douglas Price (Laboratory for Archaeological Chemistry, University of Wisconsin-Madison) will undertake stable isotope analysis of skeletal and dental tissues towards resolving the residence and migration profiles of these individuals.

Gary Heathcote

Keep us informed!

Submit news, announcements, reviews, field notes etc for inclusion in the CAPA newsletter. Send items to the editor by email at:
CAPA@UManitoba.ca
1. Andrew Nelson calls for approval of agenda; Ann Herring moves, Richard Lazenby seconds.

2. Andrew Nelson calls for approval of minutes from October 2002 meeting, Charles Fitzgerald moves, Ann Herring seconds.

3. Business Arising: Most points from business arising will be treated in the various reports in point 4.

4. Standing Reports:

   President's report:
   Several points in the constitution need to be changed. The members cannot make amendments at the present meeting, because the constitution requires a period of at least 2 months for the changes to be approved. Andrew Nelson highlights the various sections that need to be addressed. The proposed amendments will be posted on the web site, and will also be included in the newsletter Spring 2004, and they will be brought formally at the October 2004 meeting. According to the constitution, we need a minimum of 4 people to bring the changes to the membership - Andrew Nelson, Richard Lazenby, Ann Herring and Rob Hoppa formally propose the changes.

   SSHRC/NSERC: A. Nelson summarizes his discussions with NSERC director concerning the “gap” in which some researchers in biological anthropology fall, not being fully “SSHRC” or “NSERC”. Open the floor to discussion. Annie Katzenberg comments that some of us have adapted to the current system. She points to the fact that the real remaining problem seems to be in Human Biology. She argues that the NSERC organization is supposed to be receptive to new ideas, but it does seem that this is not always the case, and this, despite the fact that there is an inter-disciplinary committee. Some decisions regarding whether one proposal is or not “NSERCable” seems to be committee dependent. Mary Pavelka suggests that we focus discussion on what needs to be targeted to make effective change. Annie Katzenberg suggests that it is better to educate program officers and committee members as to what a given field encompasses. Warren Wilson suggests that we should look at the Physical Anthro committee at NSF to see how they categorize the various subfields. Andrew Nelson proposes to put together a committee that would investigate the question, and come up with a report for the next meeting. Warren Wilson moves to create the committee, Ann Herring seconds. Committee is approved. Members of the committee are Warren Wilson, Richard Lazenby, Christine White, Julie Cormack and Carol MacLeod. Andrew Nelson will chair the committee.

   Secretary-treasurer report; report is presented for 2003 until Oct. Once the fiscal year is finished, the report will be completed and put in the Spring newsletter. So far, the increase in membership fee has allowed an increase in revenue despite a decrease in membership. Richard Lazenby moves to adopt the report, Charles Fitzgerald seconds. Report is approved. Discussion follows on best strategies to increase membership; send reminders to members and people who did not renew last year + personal reminders from colleague to colleague within an institution.

   Student representative report: The elected representative, Joe Parish, could not attend, but Jodi Blumenfeld sat with the executive in his place. This is the first meeting where there is a student representative on the executive committee. An informal consultation took place by email to evaluate the need to consider multiple author papers in the student competitions. An informal consultation took place by email to evaluate the need to consider multiple author papers in the student competitions. The student representative presents the pros and cons. Discussion follows regarding whether or not the “others” should be only students, or could include supervisors, or other collaborators. R. Lazenby points out that including multiple authors in the competition will likely increase the work load of the judges. Andrew Nelson formally proposes a new category, which will be for:

   **Open Media multi-authored paper**, where the student presenter is the lead author. The prize goes to the student-presenter, as the quality of presentation and ability to answer questions are part of the criteria.

   Prize $200

   The motion is to make this new category a pilot category for next year (2004 meeting); judges are to report to business meeting next year to advise membership on whether the category should be made permanent or not.

   Student rep (Jodi Blumenfeld) moves the motion, Mary Pavelka seconds. Motion is accepted by a majority vote.

   Newsletter report: Rob Hoppa reports his activities. Julie Cormack moves to accept Rob’s report, R. Lazenby seconds.
New business

a) Andrew Nelson asks the membership under which conditions the CAPA name can be used for official representation. The specific issue at hand is whether the CAPA name can be used as a sponsor for an educational outreach program. Andrew asked if such cases needed to be taken to the membership at large. Ann Herring proposes that these demands should be handled by the executive, Warren Wilson seconds.

b) Future meetings:

2004: UWO
2005: U Manitoba
2006: Trent
- Tosha Dupras has expressed an interest in holding a future meeting in Orlando.

6) Other business

Annie Katzenberg mentions that the History section on the CAPA web site is incomplete. Members suggest that information should be sent to Andrew Nelson who will send it to Leslie Chan (webmaster).

Richard Lazenby moves to thank the Edmonton organizers, seconded unanimously.

Leslie Chan will send P. Sicotte an invoice for the work he has done on the website.

Richard Lazenby moves to adjourn.

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2003 CAPA STUDENT PRIZES

(Continued from page 3)

Past-president Richard Lazenby started some of these changes last year, and I have continued to make modifications.

A modified version of the constitution will be posted to the web site, and members will then have the opportunity to consider the changes for formal ratification at next year’s business meeting.

The final item worth mentioning here is the ongoing concern about the position of our discipline within the federal funding tricouncils. An ad hoc committee was formed to look further into this matter. The committee consists of Julie Cormack, Richard Lazenby, Carol MacLeod, Warren Wilson and I will chair. Our first order of business will be to gather specific examples of grant or fellowship applications that have not been well served by either NSERC or SSHRC. We would be very grateful for any concrete examples that the membership can provide.

Future Meetings

As mentioned in the fall newsletter, next year’s CAPA meeting will be held in London, hosted by the Department of Anthropology at the University of Western Ontario. Dates will be October 28th, 29th and 30th. Please look to the CAPA web site for links to further information.

Future meetings will be at the University of Manitoba in 2005 and at Trent University in 2006.

Once again — great meeting — and many thanks to Denise Ens!

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Student prizes

This year we had 20 different entries for student prizes! This provided a real challenge for the judges, but after much deliberation the winners were:

The poster prize went to Deborah Merrett - University of Manitoba for her poster entitled "From the Mouths of Babes: Age Estimation in Perinates"

The podium prize went to Sarah Turner - University of Calgary for her paper entitled “Maternal and Infant Congenital Limb Malformation in a Free-ranging Group of Japanese Macaques on Awaji Island, Japan”

Honorable mention for podium papers went to Jocelyn Williams and David Cooper of the University of Calgary. Congratulations to the winners, and job well done to all the student participants!

Several students asked if the judges could provide feedback on their papers. Unfortunately, this is simply not practical, given the large number of student papers. Students are encouraged to seek detailed feedback from their faculty advisors and colleagues who attend the conference. In addition, students are directed to the CAPA web site (http://citd.scar.utoronto.ca/CAPA/publications/paper_guide.html) where there is an excellent guide to paper presentation prepared by Ian Colquhoun, Loren Vanderlinden, Jennifer Thompson and Paul Vasey.

This year’s judges will work on a list of criteria used to judge the papers, which will be posted to the web site soon.
Secretary Treasurer’s report
CAPA 2003

1- 2002 Ottawa Meeting:

Total Revenue: $ 13,622

Expenses:
Meeting expenses: ($ 11,208.05)
Conference Student Travel: ($ 700)
Conference Student Awards: ($ 400)

Total Expenses: ($ 12,308.05)

Surplus from Ottawa meeting: $ 1313.95

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2- Statement of Income and Expenses for 2003

Revenue:

Memberships and bank interest: $ 3,655.96
Revenue for Edmonton conference: $ 9,2161

Total revenue for 2003: $ 12,871.96

Expenses

Edmonton conference: ($ 7,768.83)
Honorarium to Jackie (UWaterloo): ($ 100)
Bank fees: ($ 45.40)
Student travel Edmonton Conference ($ 300)
Student awards Edmonton Conference ($ 400)
Newsletter ($ 19.50)

Total expenses for 2003: ($ 8,633.73)
Total remaining from 2003 operations: $4,238.23

Note: The Edmonton conference generated a surplus of $1,447. If we deduct student travel and awards from the revenue from the conference, the surplus comes down to $747.

Current Assets 2003

Bank of Montreal: $7,441.13
Investments $14,315

Total Assets $21,756.13
Minus Investments $14,315
Available funds: $7,441.13

3- Comparative figures for revenue from membership

2001: $2,145 (approximate because membership from Oct to Oct)
2002: $2,243.73
2003: $3,629.72

4- Membership 2003

<table>
<thead>
<tr>
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<th>Renewal</th>
</tr>
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<tbody>
<tr>
<td>Full</td>
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<tr>
<td>Student</td>
<td>9</td>
</tr>
<tr>
<td>Institutional</td>
<td></td>
</tr>
</tbody>
</table>

3 members did not indicate their status.

Total membership for 2003: 96

For comparison:

Total membership for 2002: 110
Total membership for 2001: 149
Total membership for 2000: 133
Total membership for 1999: 117
Total membership for 1998: 62
Total membership for 1997: 58
Total membership for 1996: 78

NOTES

1 The revenue of the Edmonton conference come from registrations ($5,865.95), the U of A conference fund ($3,000) and support from publishers ($350).

2 $ remaining from 2003 and previous years operations

3 Investments issued Dec 4, 2002 in the amount of $14,000, Mature Dec 5, 2005. Interests earned and paid so far = $315, interest earned but not paid yet: 70.58.
3D Imaging in Anthropological Research
26 & 27 October 2004
Preceding the Annual Meetings of the Canadian Association for Physical Anthropology
London, Ontario

Digital imaging is more and more becoming an integral part of data acquisition and analysis in physical anthropological research. Traditional applications of imaging have been in quantification, recording, enhancement and interpretation. Quantification of skeletal data, in particular measurement from both macroscopic images (e.g. lesions, cutmarks etc) and microscopic images (e.g. dental microstructures, osteon remodelling) as well as medical imaging (e.g. radiographs, CT, MRI) are widely used in biological anthropology. Anthropologists have also taken advantage of more advanced techniques, such as fragment identification and reconstructing fossil specimens that have been deformed through geological processes. Digital imaging and particularly 3D imaging is emerging as an important anthropological tool. The question is: how can we make use of these emerging technologies to aid or enhance research in physical anthropology.

Virtual Environment Technologies Centre (VETC)
at the National Research Council of Canada’s (NRC)
Integrated Manufacturing and Technologies Institute (IMTI)

This two day workshop preceding the annual meetings of the Canadian Association for Physical Anthropology in London, Ontario will bring together international experts in the field of 3D imaging as it can be applied to a variety of research areas in physical anthropology. The bulk of the two days will be devoted to plenary speakers and workshops/tutorials. However, an open call for short research talks by faculty and students in physical anthropology who are currently using 3D imaging technology is also being made. A limited amount of support for travel will be provided to students to either participate in (ie present a 15 minute paper) or attend the workshop is available.

Contact information:
Dr. Andrew Nelson, University of Western Ontario (anelson@uwo.ca)
Dr. Rob Hoppa, University of Manitoba (hoppard@ms.umanitoba.ca)
Federal Budget Good News for Tri-Councils


SSHRC

The $12 million increase to SSHRC’s budget announced in the federal budget has enabled Council to raise the success rate for Standard Research Grants from 41 to 43 per cent. This marks a first step in solving the problem of the “4a” list (projects recommended but not funded). The new funding has also enabled SSHRC to increase the annual value of doctoral fellowships from $19,000 to $20,000 and to increase the success rate for postdoctoral fellowships from 23 to 27 per cent.

CIHR

As a result of the $39M increase to CIHR’s annual base budget announced in the recent 2004 federal budget, CIHR’s Governing Council met by teleconference on April 13th, and approved the following allocations of the additional funding:

- the 5% claw back on grants and awards that was planned for April 1, in the event of no budget increase, is cancelled ($20M);
- the across-the-board cuts to operating grants awarded in the September 2003 open competition are reduced from an average of 15% to 10% ($2.3M). This revision will be implemented by the end of June 2004;
- the budget for the March 1 open competition for operating grants will be increased by $1.5M;
- recognizing the importance of young researchers to the Canadian health research enterprise, effective April 1, 2004, the stipends for individual training awards (studentships and fellowships) are increased by 5% ($2.5M), and the overall budget for the Strategic Training Initiative in Health Research is increased by $1.0M to allow for a corresponding increase in the financial support for trainees available through training program grants. The stipend increase will be implemented by the end of June 2004;
- to stimulate research that capitalizes on key scientific opportunities and addresses important and emerging health issues of concern to Canadians, the budget for large strategic initiatives is increased by $5.2M;
- to support health innovations that contribute to social and economic value for Canadians, the budget for commercialization initiatives is increased by $4.0M; and
- to improve CIHR’s program delivery to researchers and other operational functions, $2.5M will be invested in initiatives designed to use technology to improve the efficiency and effectiveness of processes such as peer review, and e-applications for funding.

Governing Council’s approval of specific investments in large strategic and commercialization initiatives is subject to the outcome of further discussion scheduled for their June 17, 2004 meeting.

These decisions are in-line with CIHR’s strategic directions as outlined in Blueprint 2007, and reflect Governing Council’s continued commitment to excellence and the need to strengthen Canada’s health research community. Further, the Governing Council is committed to building a strategic and responsive organization and in this regard, these decisions recognize the importance of setting the right balance between investigator-driven research, and strategic initiatives led by our Institutes.

Further information on the implementation of this announcement will be communicated to university research administrators next week.

New From the Press


Job Opportunities

University of Toronto

Department of Anthropology at the St. George campus, invites applications for a two year contractually limited Assistant Professorship in Biological Anthropology. We are seeking someone to teach primarily but not exclusively at the undergraduate level, including introductory human biology and evolution and upper level human biology, human osteology and related subjects. An orientation toward human growth and development is especially welcome. Contract is for 12 months annually, beginning July 1, 2004. Applicants should have a PhD in hand, demonstrated teaching ability, and an enthusiasm for working in a large, multi-field Anthropology department.

All qualified candidates are encouraged to apply; however, Canadian and permanent residents will be given priority. The University of Toronto is strongly committed to diversity within its community. The University especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to the further diversification of ideas.

The deadline for applications has been extended to May 31, 2004 Please send application, including CV and teaching dossier to the following address. Please arrange for three letters of reference to be sent to the same address by the closing date.

Chair’s Office
Anthropology Department
100 St. George St.
University of Toronto
Toronto, Ontario
M5S 3G3

University of Auckland

The Department is seeking a lecturer in biological anthropology. The successful applicant will be responsible for teaching at undergraduate and postgraduate levels. Applicants must have a commitment to scholarly research and will also be expected to assist in developing the profile of the Department.

The Department of Anthropology offers graduate and postgraduate qualifications and consists of the sub-disciplines of archaeology, biological anthropology, ethnomusicology and social/cultural anthropology. There is considerable co-teaching and research cooperation between the sub-disciplines. The Department has close links with the School of Biological Sciences and the Faculty of Medical and Health Sciences and with other social science disciplines in the Faculty of Arts. Anthropology contributes to "Social Science for Public Health" and other inter disciplinary programmes. The student body in Anthropology is diverse with approximately 30 percent of its students being of Maori and Pacific Island heritage, a percentage comparable to that of the population of the Auckland region.

For further information and to apply online please visit www.vacancies.auckland.ac.nz or alternatively call 64-9-373 7599 ext 83000.

Applications close 30 June 2004

Temple University

The Department of Anthropology at Temple University (http://www.temple.edu/anthro) is seeking an outstanding candidate for a one-year beginning August 30, 2004) Instructorship or Visiting Assistant Professorship in Biological Anthropology. Candidates should have a Ph.D. in anthropology with a concentration in biological anthropology, and demonstrated excellence in teaching and scholarship. The successful candidate will be expected to teach courses in human genetics and human biology. Salary will be based on Temple University pay scales. Candidates should send a cover letter of interest, describing research and teaching interests, curriculum vita and the names/addresses of three referees to Dr. Charles A. Weitz, chair, Department of Anthropology, 209 Gladfelter Hall, Temple University, Philadelphia, PA 19122. Deadline for applications is June 15, 2004; but review of applications will begin immediately and continue until the position is filled.

2004 CALL FOR PAPERS—CAPA LONDON

Preparations are underway for this year’s Annual Meeting, to be hosted by the Department of Anthropology at UWO in London, Ontario from October 27-30, 2004. Symposium proposals are due by June 18, and abstracts by August 6. These can be submitted to Andrew Nelson or Janet Gardner. The meeting venue will be the Delta London Armouries in downtown London. Conference rate for rooms in the conference hotel is $105.00 CDN per room per night. The deadline for reservations is September 27, but please book early as that is a busy weekend in London.

Call (519) 679-6111 or (800) 668-9999 for hotel booking.

Travel information is available through London Tourism’s site (www.londontourism.ca), or you can contact one of the gang at UWO (see below for contacts) for local travel agent recommendations and any other information.

Preliminary information and contact links are now available on our website - http://www.ssc.uwo.ca/anthropology/capa_2004/index.html.

Keep checking the site for further updates.

For further information and to apply online please visit www.vacancies.auckland.ac.nz or alternatively call 64-9-373 7599 ext 83000.

Applications close 30 June 2004
Membership Form

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

New Member [ ]
or Renewal [ ]

Full Membership $50.00 [ ] ($35.00 if remitting in US currency)
or Student $25.00 [ ] ($17.00 if remitting in US currency)
Institution $60.00 [ ] ($40.00 if remitting in US currency)
Name: _________________________________________

Mailing Address:
________________________________________________________________________
________________________________________________________________________

Postal Code: ______________________

Affiliation and department: (if different from mailing address)

email: ________________
publish email with membership list [ ]
do not publish with membership list [ ]
phone: ________________
publish with membership list [ ]
do not publish with membership list [ ]
fax: _________________
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)
1. 
2. 

If you are an instructor / professor, what is your rank?
If a student:
Undergraduate [ ] year (e.g., 3rd) [ ] or MA [ ] year [ ] or MSc [ ] year [ ] or PhD [ ] year [ ]
If a Postdoctoral Fellow, funded by:
If none of the above:

Please make cheque or money order payable to:
Can Assoc for Phys Anthro and forward to:
Dr. Pascale Sicotte
CAPA treasurer
Dept of Anthropology
University of Calgary
2500 University Dr NW
Calgary AB T2N 1N4
e-mail: sicotte@ucalgary.ca;
A Possible Case of Rhinocerebral Mycosis from the Prehistoric American Southwest

MA Schillaci, University of Toronto (Scarborough) and KC Nystrom, University of New Mexico

An adult Native American recovered during the archaeological excavation of a Valdez Phase (A.D. 1050-1220) habitation pit structure in the Taos Valley of northern New Mexico exhibits lytic destruction of a large portion of right maxilla in addition to several well-demarcated lytic lesions perforating the palate as well as the frontal and sphenoid sinuses. Though limited by a lack of postcranial remains, the differential diagnosis suggest that the treponemal and mycobacterial infections, as well as cancers such as metastatic carcinoma, multiple myeloma and nasopharyngeal carcinoma, are unlikely sources for the observed condition. The destruction of right maxilla, in conjunction with extensive involvement of the sinuses is consistent with rhinocerebral mycoses of fungal rhinosinusites such as rhinocerebral aspergillosis or rhinocerebral mucormycosis. Although Aspergillus and Mucorales organisms are present in the environment, rhinocerebral mycoses are rare conditions that afflict immuno-compromised individuals typically suffering from untreated diabetes mellitus or AIDS. A review of the anthropological literature failed to locate any case reports of rhinocerebral mycoses in prehistoric Native Americans.

From the Mouths of Babes: Age Estimation in Perinates

DC Merrett, University of Manitoba

The estimation of age-at-death from skeletal remains is fraught with uncertainty. Contributing to problems of precision and accuracy in age estimation are inter-individual variation in growth and development, genetic and environmental factors, and differential preservation in the archaeological record.

This paper assesses skeletal age-at-death estimation of perinates and its implication for bioarchaeological research through examination of remains of 10 infants from the site of Ganj Dareh in western Iran, dated ca. 7000 BC. This early Neolithic village, located in the high Zagros Mountains at an elevation of 1400 m, was occupied year-round by people who practised primarily a pastoralist subsistence strategy.

The perinates were examined macroscopically for age indicators. Age estimation for cranial and infracranial bone size for all 10 infants are consistently in the late fetal range when compared to modern size-for-age standards. The dental ages estimated for 4 infants are between birth and 2 months. Whether they were stillborn, or lived for a few days, weeks or months has important implications for estimation of population health status and mortuary practices as well as for age estimation for the 6 infants whose dentitions were not preserved.

An endogenous standard of infant age estimation for this population was developed using dental enamel microstructure. Assumption for the standard application and inferences concerning health and mortuary practices of the Ganj Dareh inhabitants are discussed.

Physical Activity Patterns among School Children in Hamilton, Ontario

A Bain and T Moffat, McMaster University

Childhood obesity is on the rise in Canada and has been implicated in long-term health problems. An understanding of the complex role of physical activity, nutrition and television watching among our nation's youth is urgently needed. Also, the role of poverty on physical activity patterns and possible barriers to activity has yet to be addressed in Canada.

The research presented in this paper investigates the relationship between Body Mass Index (BMI) and physical activity (PA) patterns among school-aged children in Hamilton, Ontario. N inety student in grades 2-4 drawn from three schools (2 low SES schools and 1 high SES school) were interviewed. Two physical activity assessments were administered: a 24-hour and a 7-day recall. The recalls were tailored to collect data regarding the intensity and duration of PA, television and movie watching patterns, computer/video game play patterns, familial involvement in PA, community resource utilisation, and in-school PA.

Preliminary results of the 24-hour recall indicate that 70% of the children interviewed fell short of the 90 minutes of moderate-vigorous PA per day recommended by Health Canada. Of these children, almost 20% reported no moderate-vigorous PA. Both the 24-hour and 7-day recalls indicate significant differences in PA patterns among three schools, suggesting the kinds of activities, the number of activities, and the reliance on school-based programs vary by school. The percentage of the child's day activity, TV/movie and computer/video game habits, and the amount of parental involvement in PA are investigated with respect to their relationship with BMI.

Sociocultural Perspectives of Pediatric Overweight in Cree Communities in James Bay, Quebec

J Makokis and N Willows, University of Alberta

Although there have been no national surveys, evidence suggests that children of First Nation descent have a high prevalence of obesity. In northern Quebec, overweight and obesity are prevalent in the majority of preschool children. The poor success rate of adult obesity treatment programs points to the need for the development of obesity-prevention programs targeted towards children. To be most effective, intervention must be developed with full participation and collaboration of First Nation...
communities and must be preceded by a community need assessment. Because differences between local cultural knowledge concerning health and standard biomedical models have been a source of failure in intervention efforts, it behooves program planners interested in developing obesity prevention programs in Aboriginal communities to better understand the determinants of obesity before developing interventions. Effective programs for overweight prevention must have respect for, and sensitivity to, linguistic and cultural issues, and to ensure that a program is congruent with prevailing community culture and values, it is imperative to identify the local belief systems and terminology by which people label and interpret health problems. Documentation of local perspectives of health and obesity will permit selection of appropriate language for discussing obesity and its associated health risks and will contribute towards a realistic formulation of health promotion programs.

This poster will summarise preliminary analysis of data collected as a part of ethnographic research relating to sociocultural perspectives of pediatric overweight in Cree communities. Data were collected in three communities during the summer of 2003 in the James Bay region in northern Quebec.

**Anthropology Uncovered: Bones and Beyond - An Anthropological Outreach Program**

J Johnson, University of Toronto; and L Paulharju and A Nelson, University of Western Ontario

The teaching of anthropology in elementary and secondary schools is important because it gives students a unique perspective for living in a multicultural world. In Canadian classrooms, anthropology is generally taught as a part of other disciplines including general science, social science and history. There are few specific courses in the secondary curriculum that focus on anthropological material from an anthropological perspective with the exception of some examples in Alberta and Ontario.

Over the past years opportunities have arisen to run anthropological outreach sessions in schools in Toronto area. During these presentations some of the hurdles that teachers face when teaching anthropology have been uncovered. These include the lack of awareness of the network of anthropologists that exists in Canada, a lack of formal anthropological education and a lack of access to material with which to teach anthropological concepts. This poster will outline the outreach project that we are currently developing to assist in ameliorating the situation faced by teachers of anthropology.

The goals of the project are:

- to stimulate interest in, and knowledge of, science using anthropological concepts
- to encourage scientific enquiry through practical applications (hands-on activities)
- to assist those teaching anthropology in the K-12 environment to improve their knowledge and aptitude in the subject of anthropology by providing resources, preparation material, curriculum matched units, and a conference to update teachers on current developments
- to create a network of anthropologists, teachers, museum staff and other professionals that can work together to promote anthropology and its subject matter.

**Do Capuchins Eat a High Fat Diet When It Rains?**

G McCabe, University of Calgary

The study of primate diet can illuminate important aspects of their behaviour and ecology. Socioecological models predict that female social relationships are determined by distribution of food. If it is found that food types vary in their nutritional composition, it could be argued that female relationships within a group are more fundamentally influenced by nutrient rather than food distribution. This study examines the diet of white-faced capuchins (Cebus capucinus) at Santa Rosa National Park in Costa Rica to determine a catalogue of foods consumed and collect samples for nutritional analysis. In September 2003, I will conduct lab analyses to determine the level of protein, fibre, fat, carbohydrate, moisture and energy in each major food species consumed by the monkeys.

My subjects are adult and sub-adult individuals in the study groups, and I record data on foraging and feeding behaviour for each individual through focal animal sampling. Samples of ingested food items are dried for later analysis. The diets of males and females, pregnant and lactating females, dominant and subordinate individuals, and groups inhabiting different habitat types will be compared. These comparisons will reveal whether physiological, sociological, and/or ecological factors are influencing individual dietary patterns.

Preliminary trends indicate that during the wet season groups in different habitats consume the same species of plant foods, and orders of insects and appear to be foraging for a similar percent of their observed time. The most frequently consumed foods are Jobo Lagarto fruit (Sciadodendron excelsum) and Lepidopterans, specifically caterpillars.

**Foraging of Cebus capucinus on Ant-Defended Trees in Costa Rica**

H Young, University of Calgary

The obligate mutualism of swollen-thorn acacias and ants in Costa Rica has long been a topic of study for ecologists. The trees’ thorns provide the ants a place to live and feed, and the ants guard the acacias from predation by herbivores. Cebus capucinus are known to feed on the ant larvae in the acacia’s thorns by reaching over from adjacent trees to break off the thorns. My goal is to investigate how the capuchins in Santa Rosa National Park breach the defence of both partners in mutualism. Three ant species that vary in aggressiveness occur on the acacias at the site. My research focuses on whether frequency of capuchin attacks vary according to ant species and colony vigour. I am also compiling a list of the insect species on which the capuchins forage. By examining how they succeed in overcoming the defences of their prey, this study provides insight into the cognitive decisions underlying capuchin foraging behaviour. The monkeys’ foraging-related behaviour is recorded during focal animal follows, with emphasis on the species of insects eaten and the methods they use. Acacia foraging is recorded according to a detailed ethnogram. One hundred acacia trees with the monkeys’ home ranges have been assessed according to ant species present and colony activity level. The features of the trees on which the capuchins forage will be compared to this control group. Samples of the insects eaten by capuchins are also being identified. Little acacia foraging was observed in the wet season, and it is anticipated that more of this type of foraging will be seen in the dry season. Preliminary results indicate that capuchins do not choose acacia trees according to the ant species present or to colony activity level. The insects eaten by the capuchins varied during the wet season: ants were consumed more frequently in May, whereas caterpillars compromised the bulk of their insect diet in June and July.
Possible Transfer of Old Skeletal Stores of Pb and Sr from Mother to Offspring: Implication for Isotope Studies of Mobility and Migration

C Haverkort and L Luppens, University of Alberta

An increasing amount of experimental data and case study observations strongly suggests that Pb and Sr can be remobilised from ‘old’ maternal skeletal stores as a result of the physiological changes in Ca-metabolism during pregnancy and lactation. Upon being released back into maternal blood circulation, these elements can be transferred to the developing offspring via placenta or mammary gland. Some case studies have shown that maternal and fetal blood can contain Pb reflecting maternal environmental exposure several years or even decades prior to the current pregnancy.

In studies of prehistoric residence and mobility based on the isotope ratios of Pb and Sr, the isotope signature of the first permanent molar (M1) is often interpreted as reflecting place of birth and/or childhood residence of the individual. This is based on the fact that the M1 crown is formed during the first ~3 years of life. However, if old skeletal stores of Pb and Sr are indeed transferred from mother to offspring, there is a possibility for such material to be incorporated into the developing crown as well.

Using nutritional, medical, and anthropological reports, we have explored the idea that, in addition to reflecting place of birth or childhood residence, the M1 isotope ratio may also contain information about maternal residential history prior to pregnancy. The potential implications for studies of prehistoric mobility and migration are discussed.

Correlated Evolution in Hominid Midfacial Morphology: Neandertals in a Comparative Context

JA Blumenfeld, GE Blomquist, MM Kowalewski, University of Illinois, Urbana-Champaign

Much attention has been focussed on understanding the significance of Neandertal craniofacial morphology in terms of both function and phylogeny. Comparative studies examining the functional significance of the Neandertal midface have revolved around climatic, phylogenetic or biomechanical explanations. Alternatively, these features may be related to species’ differences in size. In this study, characteristic Neandertal facial features that are generally thought to be adaptations to either a cold climate or intense anterior tooth use are examined in relation to a diverse comparative sample of both fossil and recent humans in order to determine whether they are significantly correlated with species differences in size. These features are: pronounced midfacial prognathism (measured by the zygo-maxillary angle and naso-frontal angle) and broad nasal apertures (measured by nasal width). Size was estimated for the purpose of this analysis as the geometric mean of five facial measurements. Incorporation of size-adjustment in this analysis strongly affected the results. The two midfacial angles show correlated evolution, the strength of which increases on size-adjustment. However, nasal width and the zygo-maxillary angle covary only in unadjusted data. This analysis shows a strong structural integration between the two midfacial angles. However, this does not discriminate between climatic, phylogenetic or biomechanical explanations for Neandertal midfacial prognathism.

Age Estimation from Skeletal Remains Using the First Rib: A Test of the Method

H Kurki, University of Toronto

The technique of age estimation from skeletal remains using the first rib developed by Kunos et al. (1999) is tested on a sample of known age skeletons from J.C.B. Grant Collection (n = 30; mean age = 54.5 years). The accuracy and bias are found to be high (all ages inaccuracy = 12.4 years, bias = 1.6 years; average of two observations) but comparable to other age estimation techniques currently used by anthropologists. However, low r² values (obs. 1 r² = .307, obs. 2 r² = .405) demonstrate a weak relationship between estimated and known ages for individual specimens, suggesting poor age estimation results for a given specimen. The precision, as measured by intraobserver error, is relatively high (mean age difference between observation = 3.27 years), though lower than the reported by Kunos et al. (1999). Improvements to this technique could render it a useful contribution to the age identification and relatively high incidence of preservation of the first rib in comparison to elements such as pubic symphysis and fourth sternal rib end.

Assessing 3D Change in the Canal Network of Human Cortical Bone by µCT: A New Approach for Age at Death Estimation

DML Cooper, University of Calgary

Quantitative microscopic analysis, or histomorphometry, of cortical bone is an established method for estimating the age at death of human skeletal remains. The primary limitations of this approach include imprecise estimates and an upper age limit (asymptote) beyond which age can no longer be estimated. It is clear that the changes produced by cortical remodelling observed in cross-section are reflections of more extensive change occurring in three dimensions (3D). Indeed, the few studies that have examined the 3D microstructure of cortical bone have revealed a level of complexity that is not evident from individual 2D sections. This suggests that 3D histomorphometric analysis will provide new insights into the remodelling process and may ultimately improve upon the limitations of current 2D age estimation techniques. That said, relatively little is known about the 3D microstructure of cortical bone, and bone biology in general has been
limited to the 2D realm. The primary hurdle facing 3D analysis has been the lack of efficient methods to visualise and quantify bone microstructure in 3D. Thanks to recent improvements in scan resolution, micro-computed tomography ($\mu$CT) is capable of 3D visualisation of the porous canals that permeate cortical bone. The cortical canal network is an integral component of cortical microstructure and, as such, is continually reworked by the process of remodelling. Primary (non-Haversian) canals are incorporated into bone as it forms and remodelling creates new secondary (Haversian) canals that are superimposed onto the existing network. Thus, analysis of 3D changes in the canal network provides a novel means of examining cortical bone dynamics. Quantitative parameters such as mean canal diameter, mean canal spacing, and 3D interconnectivity (branching points) are readily measured from $\mu$CT reconstructions. Additionally, the non-destructive nature of $\mu$CT allows the possibility of the combination of 3D and 2D techniques on the same sample which may ultimately produce the best age estimates. While 3D $\mu$CT analysis is effectively limited to the cortical canal network it provides an important stepping stone towards the further development of more powerful 3D histomorphometric techniques.

An Assessment of the Effectiveness of the Maxillary Suture Obliteration Methods for Estimating Age at Death

J Ginter, University of Toronto

The purpose of this research is to test the accuracy of the original and revised methods developed by Mann et al. (1987, 1991) for predicting age at death from degree of maxillary suture obliteration. The original and revised (Mann et al. 1987, 1991) methods were tested on a sample of 158 documented skeletons, representing diverse genetic and socio-economic backgrounds, from Cape Town, South Africa. Age ranges were estimated by assessing each of the four maxillary sutures. A second test was performed on a sub-sample of 42 individuals to examine intra-observer error. While the original method performed poorly, with age correctly predicted for only the minority of individuals, the revised method produced much improved results. Because the revised method is simplified, intra-observer error decreased. The result of this research indicates that the revised method, in conjunction with other age estimating methods, is effective in predicting age at death using age categories.

Logistic Regression Models for Determination of Sex from Measurements of Thoracic Radiographs

C Torwalt, RD Hoppa, University of Manitoba

The majority of forensic examinations which require anthropological examination are on partially decomposed remains. As such, radiographic analysis may be a possible alternative when rapid estimation of age and determination of sex is needed. The present paper explores five measurements, described by McCormick et al. (1985), to determine sex from chest plate radiographs. A sample of 130 radiographs was obtained from a known age and sex from the Office of the Chief Medical Examiner of Manitoba. These include measurements of manubrium, sternum and fourth rib. Although the chest plate is not completely flat, the areas measured are those closest to the film, and as a result less than 1% magnification occurs. All measurements were taken directly from the radiograph using Mitutoyo calipers. The cut-off points and ranges originally published by McCormick et al. (1985) were tested and new logistic regression models were developed and evaluated for prediction of sex from these measures. An accuracy of 94% for both males and females was observed, using only three very simple and rapidly achievable measurements.

Forensic Anthropology Lessons Learned in a Mass Disaster Situation

S Stratton and O Beattie, University of Alberta

On February 8th, 1986, there was a collision between a Via Rail passenger train and a Canadian National freight train near Hinton, Alberta in which 23 people perished. Each mass disaster situation is unique and this occurrence was an opportunity for forensic anthropologists to learn lessons about the identification process that can be passed onto others. The presentation will describe the type of forensic anthropological techniques that were constructive in this situation and others that were not as valuable. In other words, how to avoid pitfalls in case you are ever involved in this situation.

Deciphering a Pattern in the Scattering of Remains due to Scavenger Activity

Y Kjerulien, University of Alberta

Remains dispersal is studied to either increase the recovery rate of bones or to estimate time since death. Research usually involves small samples, anecdotal evidence and cross-sectional studies providing non-conclusive evidence of patterning. The objective of this study was the use of a larger sample in a naturalistic, longitudinal context to elucidate a possible pattern for scattered remains due to scavenger activity. At the University of Alberta Agricultural Farm, Edmonton, a sample of twelve pigs was deposited on the surface in both wooded and non-wooded locations and in clothed and non-clothed situations. Observations were done from the time of deposition in May 2002 through collection in August 2002. Data collected provide evidence for a pattern of dispersal away from concentrated and continual human activity. Methodological approach may have been key in the elucidation of this evidence.

Chinese Immigrants from Carlin, Nevada: 3D Geometric Morphometric Analysis of Craniofacial Traits

S D Decker, JL Thompson, A Gallegos and B Arriaza, University of Nevada, Las Vegas

The determination of ancestry is often a critical component in the forensic identification of human skeletal remains. Ancestral traits commonly used in these analyses include such non-metric traits as the degree of prognathism, shape of orbit, and angle of zygomatic. While traditional methods of ancestral analysis have proven their usefulness in human identification, often the ability to evaluate which population is most likely represented is based solely on the observer’s experience. These non-metric traits are biologically variable, however, that variability is not normally the focus of scientific research. New technologies are providing the opportunity to reevaluate current methods and create new techniques for analysis, like geometric morphometrics; the study of biological size and shape variation, which is based on the analysis of 3D coordinate data of anatomical landmarks.

The purpose of this paper is to investigate the potential 3D geometric morphometric landmark data to assess variability in the craniofacial region. A sample of 12 male Chinese immigrants from Carlin, Nevada were used to represent people of Asian ancestry. Data were collected using a Microscribe G2X 3D digitizer and analysed using the statistical and analytical program, Morphologika. The results demonstrate interesting patterns of variation within this sample but also reveal that these craniofacial traits are biologically interdependent and so should also be examined as a single entity. This study serves to increase scientific knowledge of new technolo-
Utilising Ultrasound Technology to Measure Facial Thickness in Canadian Aboriginal Populations

TR Peckmann, Saint Mary’s University

To date, North American indigenous populations are underrepresented in the forensic data. Presently, no data exist for facial tissue thickness in Canadian Aboriginal populations. This project utilises ultrasound technology to measure facial soft tissue depths in living Canadian Aboriginal populations. Accurate measurements for facial tissue depth are important and a vital tool inside and outside of the medico-legal arena. In forensic contexts, this new data will aid in positive identification for unknown skulls from people of indigenous ancestry. For the police, who are searching for a missing child, employing new data may help a family to reunite with their lost child. For traditional peoples, this new knowledge may help to corroborate the authenticity of skulls reported to belong to historically significant individuals.

Estimating Age at Death in Later Stone Age Juveniles through Basiocciput Osteometrics

L Harrington, University of Toronto

The applicability of basiocciput osteometrics for estimating age at death was examined in a sample of 24 Later Stone Age (Holocene) infants and children from South Africa. Age estimates derived from the basiocciput were compared to estimations based on dental eruption or femoral diaphyseal length. The basiocciput method yielded complete agreement with conventional methods in 79% of the sample, and partial agreement in 16% of the remaining cases. These results provide additional support for the use of the basiocciput in estimating age at death, and demonstrate the validity of the method when applied to a population of small adult stature.

The development of the basiocciput is patterned such that the relative proportion of its width and height change in a predictable manner over the course of the bone’s growth, which ceases around six years of age. The existing methodology depends on the correlation of age at death with three categories of shape. This study explores the possibility of quantifying the shape changes that occur through growth, and of refining correlations with chronological age.

Skeletal Evidence of Sub-adult and Adult Scurvy from Two Coastal Maya Populations

J Maxwell, University of Western Ontario

Scurvy is the clinical manifestation of vitamin C deficiency. As vitamin C is essential for collagen synthesis, scurvy is associated with the loss of both vascular and skeletal integrity. Skeletal lesions pathognomonic of scurvy in sub-adults are being more frequently reported in the paleopathological literature. Little attention, however, has been paid to the potential for identifying the spectrum of scurvy expression in adult skeletal remains. Previous accounts have been limited to interpreting non-specific indicators of potential scurvy in adults such as alveolar degeneration and ossified sub-periosteal haemorrhage. The purpose of this study is to investigate the patterns of cranial and postcranial changes possibly associated with both sub-adult and adult scurvy in two coastal Maya populations from Belize. Cranial lesions likely attributable to scurvy were identified in at least 8 of 13 sub-adults from these samples. Inspection of the adult crania revealed less dramatic, but morphologically consistent lesions in the same anatomical areas of several individuals. The nature of these cranial lesions and their relationship to the other possible indicators of adult scurvy is discussed, with particular emphasis on anatomical context.

An Unreduced Dislocated Mandible in an Alaskan Eskimo: A Case of Altruism or Adaptation

A Keenleyside, Trent University

Mandibular dislocations are rare in archaeological samples. This paper describes an unreduced dislocated mandible in an adult male skeleton from Point Hope, Alaska. The left mandibular condyle has been displaced anteriorly and two new articulations for the left coronoid process and remnant of the left condyle have formed. The left mandibular body and rami exhibits severe atrophy, and all of the mandibular teeth have been lost antemortem. A review of historical accounts from the early contact period reveals that the Alaskan Eskimos suffered from a variety of disabilities of the musculoskeletal system. Despite these disabilities, many of these individuals were able to function with little or no assistance from other members of their group. The fact that this individual survived to an advanced age in the harsh arctic environment is a testament to the body’s remarkable ability to compensate for and survive with physical disabilities.

The Scattered Human Remains of the Keffer Site (AKGv-14)

D Rainey, McMaster University

The presence of fragmentary human remains recovered from the middens of precontact Huron village sites have traditionally been attributed to the torture and cannibalism of war captives, as described in the Jesuit Relations. The Keffer site is a Huron village site located north of Toronto, Ontario, and was occupied for some time between AD 1475 and 1525. The large-scale excavations that occurred at the site produced over 1200 human bone fragments from the middens and longhouses, providing the opportunity to assess the validity of the ethnohistoric information in a precontact context. In addition to interpersonal violence, a second category of cultural processes that may have contributed to the formation of this assemblage is mortuary practices. The methods used to evaluate the cultural processes responsible for the deposition of these remains include analyses of demography, trauma, postmortem modification, heat exposure, and spatial associations.

Diet and Peak Bone Density in Medieval Britain

J McEwan, University of Alberta

Dual X-ray absorptiometry (DXA) studies of skeletal remains of adults from Wharram Percy, a deserted medieval village in Yorkshire, indicate bone loss in both males and females after age 50. In a previous study it was assumed that inadequate diet was a contributory factor to childhood growth delay (Mays, 1999). The achievement of peak bone density (PBD) gives some protection against later bone loss and subsequent fracture. Various dietary factors including calcium intake and absorption influence the attainment of optimum PBD. Diets with a high grain content, such as that consumed by the Wharram Percy population may lead to inhibition of calcium absorption. However, despite demonstrated bone loss, hip and forearm fractures have not been observed in this population. For this study the radius of 144 individuals aged from 4 years to 60+ was examined using DXA to assess bone density. Documentary and archaeological evi-
Socioeconomic Determinants of the Prevalence of Childhood Overweight and Obesity at the Neighbourhood Level

T Moffat, T Galloway and J Latham, McMaster University

While anthropologists and human biologists have investigated childhood malnutrition in developing countries extensively, very little attention has been paid to poverty and malnutrition in industrialised nations. Although malnutrition in the form of under nutrition found in developing countries is less common, malnutrition in the form of over nutrition and micronutrient deficiencies is becoming increasingly prevalent among children in urban, industrialised settings.

This study compares affluent and less affluent children in the same city to determine whether malnutrition is a function of poverty or more broadly a product of living in a Canadian, urban context. The study sample consists of students aged 7 to 10 attending three elementary schools in a medium-sized, Canadian city (Hamilton, Ontario). One of the schools is located in an affluent area of the city, the other two in inner-city neighbourhoods with a high percentage of the population living below the low-income cutoff. Assessments of child nutrition presented in this paper include measurements of height and weight and 24 hour dietary recalls. Results of the study show that the children attending schools in low-income neighbourhoods have higher prevalence of overweight (>85th percentile of BMI) and obesity (>95th percentile of BMI) compared to those in the higher-income neighbourhood. This finding corresponds to overall higher average energy and fat consumption among children in the less affluent schools compared to the sample of children from the more affluent school. We conclude that more attention must be paid to children’s local socioeconomic and cultural environments as important determinants of the obesity epidemic in North America.

Virtual Representation of an Egyptian Mummy: Problems and Promises

A Nelson, University of Western Ontario; S Kruijthof; G Garvin, St. Joseph’s Health Care; N R Murray; J G Vacotto; I W Ithers; T Neave; D Benson; and C Nelson, City of London

1 Virtual Environment Technologies Center, IMTI, NRC
2 Chatham-Kent Cultural Center

The analysis and public presentation of Egyptian mummies has pushed the interaction between non-destructive imaging and physical anthropology over since Roentgen first x-rayed a mummy in the late 1800s. Recently, mummy scanning has kept pace with development in computed tomography. In this paper, we present the results of a recent project that combined a high resolution (0.6mm slice) CT scan with a laser scan of the external surface of an Egyptian mummy housed in Chatham, Ontario. The objective is to combine data from these two imaging modalities – a process that requires the manipulation of prodigious amounts of digital data – to aid in our analysis and push the frontiers of virtual imagery in anthropology.

Can a Single Set of Growth Reference Values be used Worldwide? A Case Study

N Willows and M Johnson, University of Alberta

It is not clear if all populations have the same growth potential. The designation of a child as having growth that is abnormal implies some means of comparison with a “reference” child of the same age and sex. In practical terms, growth measurements need to be compared across individuals or populations in relation to an acceptable set of reference values. This need has made the choice of a growth reference population an important issue. In the 1980s population-specific growth reference curves were developed for Cree children in northern Quebec and these curves are still used in the region to determine if the growth of a Cree child is healthy or unhealthy. To assess if Cree children have growth that is unique, we compared anthropometric measurements of 2000 Cree children against reference standards from China, Iceland, Norway, Canada and the United States. Compared to all other populations, Cree infants at birth have high weight, length and head circumference. As toddlers and preschool children, Cree are longer and taller, heavier, have greater weight-for-length and weight-for-height, and larger head circumference than the reference population of children in the United States. Beginning at 2 years of age, the weight of Cree children in relation to their height (BMI) is high compared to the children in the United States. Children with high BMI are considered predisposed to adverse health. It is not clear if BMI is appropriate for use with Cree children considering their unique growth. This study suggests that it may not be possible to appraise the growth of all populations worldwide using a single set of growth reference values.

Something Wicked This Way Comes: Dealing With SARS in Toronto through the Implementation of Biomedicine

K Slonim, McMaster University

The biological reality of infectious disease is transformed by cultural contingencies. In this presentation I will adopt a critical medical anthropological analysis to deconstruct how the approach to SARS was driven by a biomedical focus on the virus at the molecular level (with a view to create a vaccine) rather than on a more community based prevention plan. This presentation is structured using the three bodies established in the 1990s work by Margaret Lock and Nancy Scheper-Hughes, which include the individual body, the social body and the body politic. It is not the aim of my presentation to criticise the contribution of the biomedical community to SARS, but to demonstrate that a more holistic approach is required if an understanding of the disease and its prevention is to be achieved.

Was St. Paul’s Bay Disease Endemic Syphilis?

P Jebreen and A Herring, McMaster University, and D Y Yang, Simon Fraser University

Discussion of an important outbreak of syphilis in 18th century rural Quebec (“St. Paul’s Bay Disease”) has been based primarily on a few secondary sources. Most authors consider the disease to have been venereal syphilis. Re-evaluation of primary archival sources, the geographical and age-sex prevalence of the epidemic, and considerations of its epidemiological features support the contention that endemic, not venereal, syphilis was present in the St. Lawrence River Valley between Montreal and Quebec City.
Research into the mortality of historic populations within Canada based upon parish records is lacking. In particular, mortality studies on Canadian Aboriginal communities, both present and past, are extremely scarce. In general, this may be attributed to difficulties encountered in accessing church data of sufficient quality for such research, and the absence of interdenominational standards for record-taking. Recently, attempts have been made to rectify the paucity of information that exists with respect to the mortality profile of Canadian Aboriginal populations by examining historical demographic trends in these communities. These studies are enabling us to gain a more complete picture of historic patterns of Aboriginal health and mortality in Canada.

To further assist in bridging the gap in this area of study, this paper will examine the mortality patterns of the James Bay Lowland Cree community of Fort Albany from 1851 to 1964. Patterns of mortality have been explored for the sister fur-trading post community Moose Factory. These studies are particularly relevant to the present research, as they serve as a model for understanding mortality patterns observed at Fort Albany.

This research provides invaluable insights for comparing past health patterns to contemporary health patterns in Aboriginal communities, and may also assist in the prediction of future epidemiological trends.

**Morbidity and Mortality Decline: Models from the Gibraltar Garrison, 1818-1899**

Janet Padiak, University of Toronto

The decline of mortality, characterised by low morality rates, increased longevity and higher global population, is a relatively recent phenomenon. This process has its beginning in western Europe in the late 18th century, and it has been the subject of debate for the past century. In the latter part of the 19th century, when the existence of national level mortality rates allowed the first analysis, it was believed that improvements in community sanitation, living conditions and medical care were responsible for the decline of mortality. In the last fifty years, the economic view has come to dominate, and it has been hypothesised that the increase in available food gave European populations nutritional and immunological advantages not enjoyed by previous populations. Little is understood about the role of morbidity, or illness episodes, in the mortality decline. This study looks at the relationship of the morbidity in the mortality decline of the 19th century, using British military data compiled on the troops of the garrison at Gibraltar from 1818 to 1899. Because the illness and deaths were collected by cause, it is possible to model relationships within and between morbidity and mortality. This study shows that morbidity did decline as mortality declined, but at a different rate, and it was subject to changes in different categories of disease.

**DNA from Fossils: The Future for Anthropological Genetics**

H Poinar, McMaster University

Most animals that have lived have gone extinct. A few of these can be found in museum collections world wide. As modern biology is limited to the use of extant taxa, retrieving DNA from extinct or subfossil organisms can add significant insight into past population history and resolve phylogenies that are tentative by morphology alone. DNA is a relatively weak molecule, comparatively speaking, yet under certain conditions it persists in the fossil record, despite what in vitro chemistry predicts. While most fossil remains do not contain DNA, museum specimens can be screened for the presence of conditions that would be conducive for nucleic acid preservation. Results from these types of analyses suggest that the preservation of DNA is linked to the temperature and its constancy at a site rather than its age. Chemical analyses of coprolites from extinct herbivores, as well as Archaic Native Americans, show the presence of compounds from the Mallard reaction. Upon the cleaning of these products, the defecator can be identified and his diet analysed. I will discuss our results on sex and dietary determination from palaecofecal samples, as well as the future of Molecular Caving.

**Isotopic Analysis of Nail from Peruvian Mummies: Reconstructing Individual Diet in the Months Prior to Death**

JS W Illiams, University of Calgary

Puruchuco-Huaquerones is an Inca period cemetery located near Lima, Peru in the Rimac River Valley. This cemetery was excavated from 1999-2001 with the recovery of 1286 burials representing 2200-2400 individuals (osteological analyses are ongoing). Various preserved tissues (skin, muscle, tendon, nail, hair, bone, tooth) from 74 individuals have been sampled. This paper will present preliminary results of the stable carbon and nitrogen isotopic analysis of nail for 17 individuals. Proximal and distal nails were sampled to assess diet at the time of death (proximal) and approximately four months before death (distal) in 12/17 (70%) cases, δ15N composition of proximal nail was greater than that for the distal nail. Similarly, in 11/17 (65%) of the cases, the δ13C composition of the proximal nail was greater than that for the distal nail. In the majority of cases, these differences are in the order of 1% but some differences were as great as 2 to 3%. Since the instrumental precision for the δ13C and δ15N is 0.1 and 0.2‰ respectively, these differences likely indicate a dietary shift over four month period. Conversely, the elevated nitrogen isotopic composition at death (proximal nail) could reflect disease processes since there is evidence that δ15N values can be affected by pathology (Katzenberg and Lovell 2001, W hite and Armelagos 1999). Of the 17 individuals sampled for this analysis, four exhibited lesions indicative of pathology with no marked difference in the isotopic composition of their nail relative to the rest of sample.

**Tracing Live Histories using Stable Isotopes of Bone and Teeth in a Colonial Population of the Caribbean**

TL Varney, University of Manitoba

Tracing live histories using stable isotopes can be accomplished through the analysis of skeletal elements that form at different life stages. The analysis of tooth enamel provides information about the childhood diet, since once formed in childhood, enamel does not turnover. In contrast, bone remodels slowly throughout life and reflects diet over the last few decades of life. As such, a comparison of the stable carbon ratios (δ13C) of bone and tooth enamel carbonate will permit the tracing of dietary change or consistency through life. δ13C values of bone and tooth enamel carbonates from 30 adult individuals from the Sainte-Marquerite site, Gaudeloupe, West Indies, were used to examine the possibility of tracing changes in diet from childhood to adulthood. Forty percent (12/30) of the individuals were found to have substantial differences (mean = 4%) in the δ13C values of their bone and tooth enamel carbonate. Placed in the context of the site which has been interpreted as being a probable Afro-Caribbean slave burial ground dating AD 1750-1800, it is likely that the dietary shift seen in these individuals was related to their enforced relocation from their place of birth in Africa to the Caribbean.
Toys ‘r Us - The Elemental Analysis of Human Hair from Archaeological Contexts in Peru

S J Nafel; A J Nelson; R R Martin; C W White; R Fleming; I Kempson and W Skinner, University of South Australia; J Francis, Surface Science W estern; and S Guillen, Centro Mallqui

Many scholars have noted the difficulties encountered in the interpretation of results of trace elemental analysis of human hair from archaeological contexts in light of problems of diagenesis. Last year we reported on our efforts to discriminate diagenetic and biogenic signals from samples from different contexts that had been exposed to water. This year we report on samples from two different depositional environments in Peru – the arid North Coast and the humid Northern Highlands. For this work we added a new analytical tool (toy) to our arsenal of equipment – a synchrotron, which uses x-ray fluorescence to map the distribution of metals in hair.

Our particular research question has been to characterise the distribution of elements within and between strands of hair from an individual from the Lambayeque occupation (ca. 950 – 1100 AD) of the coastal site of Pacatnamu.

This individual is blonde – a phenotype which is quite unexpected for a pre-Columbian South American site. We have noted some indication of oxidation and a unique distribution of elements in the blonde hairs, but we have yet to be able to attribute the blond colour to cultural, pathological or diagenetic processes. Work on this front is continuing.

Bone Chemistry and the Baikal Archaeological Project

MA Katzenberg, University of Calgary and CM Haverkort, University of Alberta

The Baikal Archaeological Project is a Major Collaborative Research Initiative (MCRI) funded by SSHRC. The objectives of the project are to explore hunter-gatherer mobility and lifeways between 9000 and 3000 BP in the region west of Lake Baikal, Russia. The project includes a Human Osteology Module which covers skeletal analysis at the gross level (descriptive, demographic and pathological features) as well as chemical analysis of bone and tooth samples for the purpose of reconstructing diet and mobility. Human remains from five major cemetery sites are included in the present study.

The bone chemistry research includes analysis of stable isotopes of carbon, nitrogen and oxygen as well as strontium isotope analysis. In this paper we present results for carbon and nitrogen analysis from bone collagen, and carbon isotope analysis from bone carbonate. Preliminary results for oxygen and carbon isotopes from tooth carbonate and strontium isotope ratios from femur samples are also discussed.

The results suggest that variation in stable carbon isotopes is largely due to varying reliance on aquatic resources (analysis from both human and faunal sample). Variation in strontium and oxygen isotopes should reveal patterns about residence and mobility. These data may then be compared to information derived from the Ethnographic Context Module of the project.

Did Kennewick Man Really Eat Fish or Was His Diet More Gamy?

J Cybulski, Canadian Museum of Civilization

Stable carbon isotope ratios for Kennewick Man average ~13.5‰, comparable to those of Northwest Coast consumers of marine protein. The favored conclusion is that the Ancient One subsisted largely on anadromous salmon from the Columbia River. Additional information suggests otherwise. Kennewick’s high delta 13C values are unique among tested people from the Plateau and further removed from the lower ratios found in other ancients. His body size and proportions were better attuned to big-game hunting than coastal fishing. Kennewick was taller than the tallest of Plateau hunters who generally exceeded the heights of coastal fishers. The period in which he lived, dry and warm, was optimal for the growth of C4 grasses. The large herbivores that might have eaten those grasses were common at the time, and tools for hunting them are known from other ancient Plateau sites. Kennewick Man more likely obtained his protein from terrestrial rather than marine sources.

Fossils, DNA and Fossil DNA: A New Debate over Human Evolution in China

DY Yang, Simon Fraser University

Recent DNA studies of modern Chinese and other Asian populations suggest that the modern Chinese are not direct descendants of Peking Man and other early hominids found in China but those of much later immigrants from Africa. This hypothesis is consistent with “Out of Africa” model but contradictory to the study of human fossils by Chinese palaeoanthropologists. This paper reviewed the arguments from both fossil and DNA sides and identified the pros and cons with the fossil and DNA evidence. This paper also addressed the theoretical significance of and the practical challenges with studying Chinese fossil DNA.

The Modern/Nonmodern Boundary in Palaeoanthropology

KG Gilliland, University of Alberta

Palaeoanthropology, the study of human evolution, is a multidisciplinary field which includes archaeology, palaeontology and even genetics. There are several special areas of interest in palaeoanthropology, one of which is the origin and spread of modern humans throughout the world. Researchers frequently correlate the first appearance of recognisably modern behaviour with the evolution of Homo sapiens. All fossil humans that are not considered anatomically or behaviourally modern are labelled nonmodern.

However clear this distinction may seem, the definition of modernity is subjective and based on assumptions of evolutionary and technological progress. In addition, archaeological, palaeoontological and genetic data do not conclusively support the modern/nonmodern boundary. The preoccupation with modernity affects how researchers study human evolution and generate hypotheses. Alternative approaches are required so that the hypotheses may be advanced that include as much of the available data as possible, not just that which reinforces existing models.
Understanding the Origin of Modern Humans in East Africa

PR Willoughby, University of Alberta

Since the publication of the first mitochondrial DNA paper in 1987, paleoanthropologists have debated the role Africa played in the emergence of Homo sapiens. It is generally concluded that our species originated in Africa by 200,000 years ago, but only dispersed into other continents after 50,000 years ago. (The only exceptions are Skhul and Qafzeh in Israel, which were occupied over 100,000 years when the Levant was environmentally an extension of Africa). The appearance of these anatomically modern humans occurred within the Middle Palaeolithic or Middle Stone Age (MSA), the technological equivalent of what neandertals were doing in Europe at the same time. This disjunction has led some researchers to suggest that the dispersal of modern humans out of Africa could not take place until some fundamental behavioural reorganisation occurred. This paper addresses the issue of the origins of behavioural versus biological modernity, illustrating this debate with fossil and archaeological data from East Africa, including the author's study area in southwestern Tanzania.

Some Implications of Great Ape Endocast Surface Shape

C MacLeod, Langara College; D Falk, Florida State University; H Mohlberg and K Zilles, Forschungszentrum, Juelich, Germany

Comparative volumetric studies of brain regions point to a very conservative pattern of allometric constraint as the brain increases in absolute size within the primate order. Although the neocortex in anthropoids and the cerebellum in hominoids have both undergone differential expansion, most brain structure volumes can be predicted from brain size alone in mammals, implying no role for natural selection in specific brain structures and functions. When more complex models of surface shape are examined, however, brain expansion appears much more mosaic and functionally specific.

Virtual endocasts of chimpanzees, orangutans, gorillas, and bonobos were deformed to the shape of a modern human reference endocast and to each other using a voxel-based elastic deformation procedure in order to detect the regions of the surface of the brain that differ most markedly. All endocast volumes were normalised, and regions that had to contract or expand in order to meet the reference shape were colour-coded according to degree of voxel deformation.

Endocasts surface shape is very close to brain surface shape, and reveals unique patterns for all great apes, as well as right and left hemispheric differences. Expansion or compression of neocortical and cerebellar regions relative to the modern human endocast suggests that each great ape has undergone its own particular brain evolution, presumably in response to specific ecological conditions.

Characterising the Social Organisation of the Urine Colobus (Colobus vellerosus) using Affiliative Behaviours

SC Marteinsen and P Sicotte, University of Calgary

Affiliation between adults is useful in determining the bonds at the basis of group cohesion. Black and white colobuses are considered Resident-Egalitarian, but female transfer occurs occasionally. Data on affiliation in Colobus vellerosus is presented, and we investigate the influence of the presence of an infant on female affiliation. Two groups of C. vellerosus were studied at the Boabeng-Fiema Monkey Sanctuary in Ghana from June to November 2002 (618 10 minute focuses). B2 (N = 10 individuals) had three males and three females, and W W (N = 37) had six males and sixteen females. W we compare the types of dyads (F-F, M-M, M-F) in their rate of affiliative events and grooming. In W W, female-female rates are higher than male-male and male-female for grooming (Friedman test; F=13.13, P=0.001). Female-female affiliation rates involving focal females infants (0.75) tend to be higher than affiliation rates involving females without infants (0.15), but the mean daily rates do not show a difference (Wilcoxon test; z=-1.599, N=14, P=0.110). Females with infants are not necessarily mothers, as infants are transferred between females at a mean rate of 0.95 times per hour. The high female-female affiliation in WW lends some support to the categorisation as RE, although the lack of difference between dyads in B2 means that we cannot yet discount the possibility that they are DE. The effect of the presence of an infant on female affiliation warrants more investigation.

Intrinsic Population Regulation in the Barbary Macaques of Gibraltar

A Carroll, University of Toronto

Intrinsic population regulation in primates is defined as an individual response to environmental cues that impact population demographics through any of the processes that affect population size: reproduction, mortality, or emigration. This paper is an overview of my doctoral research on Barbary macaque of Gibraltar, where I am examining the role of reproduction in intrinsic population regulation. Records of birth, deaths, and other information have been kept on the population of Barbary macaque of Gibraltar from approximately 1940 to the present. As well, in this population there has been a period of low population size maintained through culling, and a period of large population size without any controls of growth, with records maintained through both periods. My research has involved compiling the available records, and analysing the reproductive data. If there is an intrinsic population regulation mechanism, I would expect to see differences in reproductive variables between the two periods. Reproductive variables examined include age at first birth, reproductive lifespan, interbirth interval, sex ratio at birth, and infant mortality. The initial analysis of the reproductive data from Gibraltar indicates a trend towards a decrease in the reproduction of individual females in the second period. The reproductive variables that appear to be the most flexible are the age at first birth, and the number of births per reproductive year for an individual female. My next step in my research is to statistically test this hypothesis using the data from Gibraltar, and in the future, to examine this question in other populations.

An Observed Case of Infanticide Committed by a Resident Male Central American Black Howler Monkey (Alouatta pigra)

K Knopff, University of Calgary

Although infanticide has been witnessed in other species of howler monkeys and has been inferred for A. pigra, an observed case of infanticide has not previously been recorded for this species. Here we present contextual data on an observed infanticide committed by a resident adult male. The adult male, who was resident in the group since our study began in January 2003, was observed killing a two week old male infant on May 7, 2003. The incident occurred while the infant male was the subject of a focal animal sample taken as part of a study on the day range of A. pigra. Focal data collected by researchers during two full days follows after the birth of the infant but prior to infanticide do not indicate any abnormal behaviours by any group members. Expressly, the infanticidal male showed no violent intent towards either the infant or its’ mother and, on more than one occasion, rested peacefully within one metre of the pair. The infanticide occurred suddenly and without any discernable provocation. After the infanticide, group members separated
The Role of Alarm Calls in White-faced Capuchins

SM Digweed, University of Calgary

Studies in animal communication are often aimed at identifying the meaning and function of vocal signals. Recent research has demonstrated that vocalisation encode not only individual information on size, quality and motivational state but also contain information about external events. Alarm calls are often described as referential signals, as several studies on vervet monkeys, ring-tailed lemurs, domestic chickens, marmots, and ground squirrels have described acoustically distinct calls that vary with external stimuli. Like vervet monkeys, the white-faced capuchins, Cebus capucinus, has three types of predators (large cats, raptors and snakes), and it has been previously observed that white-faced capuchins produce different sounding alarm calls, possibly in response to the different types of predators. Therefore, do capuchins produce acoustically distinct alarm calls for different predator types?

Individuals from two study groups of white-faced capuchins were observed from June to July 2002 and January to June 2003 in Santa Rosa National Park, Costa Rica. Sequence sampling was used; the sequence began when alarm calls were first heard or when a potential predator was observed. Recording then continued until all alarm calls, from all individuals ceased for 10 minutes. During this time both vocalisations and a series of behaviours were recorded continuously. Acoustic analysis of alarm calls was carried out to determine if distinct vocalisations are directed at different types of predators. Preliminary results indicate that there were acoustically distinct calls for two predator classes, aerial and terrestrial threats. However, although the calls are different in structure they do not meet the strict criteria for strict referential signals, as the calls do not represent a specific predator, instead they represent the location of the predator. The acoustic structure of these alarm calls suggest that the call is initially an emotional response to the predator with additional information about location.

Spatial Usage in a Naturalistic Environment by a Captive Group of Western Lowland Gorillas (Gorilla gorilla gorilla)

L Robbins, University of Calgary

In recent years zoos have been moving towards more “naturalistic” animal habitats, yet our understanding of how animals interact with naturalistic enclosure is very limited. A design that is appealing to a human primate may or may not be of high utility to the animal. Due to the high costs incurred in building new enclosures, it is imperative that research be conducted towards understanding how animals utilise their space within their captive environments. Such studies can be applied to the design of future exhibits. This study seeks to understand how a captive gorilla group at the Calgary Zoo utilises its new indoor enclosure by identifying age-sex category preferences for certain spaces, structures and frequency of behaviours within different areas. The location and behaviour of all group members were recorded using instantaneous group scan samples at two minute intervals over a two month period. We found a preferential use of space by all gorillas, with gorillas appearing to prefer areas closer to the holding facility. We also found a preference for structure type with a cave being the most preferred type of structure. In terms of behaviour, frequency of rest and food acquisition varied within different areas but rates of locomotion and play remained relatively constant within different areas. Our findings suggest that in order to encourage a more even use of an
enclosure it is essential that each area of the enclosure be of high utility to the animal.

The Effect of Hurricane Iris on the Social Behaviour of a Population of Central American Black Howlers (Alouatta pigra)

LA MacKenzie, University of Calgary

Hurricane Iris hit southern Belize on October 8, 2001 carrying winds of 145 miles per hour. It is estimated that over 775,000 ha, were severely affected by the hurricane including a substantial amount of damage to an existing study site of Central American black howlers (Alouatta pigra). To date there is little published information that compares pre- and post-hurricane data on animal population dynamics. Following Hurricane Iris, this site provides a unique opportunity to directly compare social behaviour in pre- and post-hurricane periods. Pre-hurricane data on four social groups was collected from May to August 1999, January to May 2000 and January to May 2001. A total of 450 hours of pre-hurricane data were collected in 162 collection days. From January to August 2002, field research was conducted using 10-minute continuous focal animal samples representa-

A Preliminary Assessment of Body Mass and Growth Among Free-ranging Long-tailed Macaques (Macaca fascicularis) of Singapore

MA Schillaci, University of Toronto (Scarborough); L Jones-Engel, University of W ashington; B Lee, Nature Reserves, Singapore; and JW Froehlich, University of New Mexico

Variability in growth and development has been shown to be an important component to the development of sexual dimorphism and to individual reproductive success among nonhuman primates. Socioecological factors such as social structure, feeding and mate competition, and maternal rank, can influence significantly inter- and intra-specific variability in growth. Here, we report on the preliminary findings from an ongoing investigation of growth and development among free-ranging long-tailed macaques in Singapore. Morphometric data for this study were collected from free-ranging long-tailed macaques (n = 38) inhabiting several nature reserves and adjunct areas. These data included measurements of the body weight, body length, tail length and foot length, as well as dental eruption pattern. Data on Macaca fascicularis fascicularis from Thailand (n = 26) were col-

The Genetics of Odontogenesis: Implications in Forensic Dentistry and Palaeo-Odontology

G Sperber, BDS, MS, PhD, FICD, DMD (hc), Professor Emeritus, Faculty of Medicine and Dentistry, University of Alberta

Palaeoanthropology and forensic odontology rely significantly upon detailed dental morphology that is ultimately the phenotypic expression of the underlying genotype and developmental phenomena. Odontogenesis is the consequence of a complex series of molecular interactions controlled by epigenetic signals acting on embryonic epithelial-mesenchymal tissues of ectodermal, neural crest and mesodermal origin. Of the approximately 25,000 genes of the human genome, an estimated 400 or more genes have been identified as being directly or indirectly involved in tooth development.

The loci of these genes on the 22 pairs of autosomes and the pair of sex chromosomes are being identified by their mutations giving rise to phenotypic dental abnormalities. The sequential cascades of stages from initiation through the bud, cap, bell, mineralisation, root formation and eruption of teeth are all under genetic control but subject to environmental influences. Identification of specific genes with clinical phenotypes provides invaluable clues to familial, racial and evolutionary affinities, all of jurisprudential and ancestral significance to odontologists.

Genes for the enamel protein amelogenin are found on both the X and Y chromosomes, producing slightly different enamel proteins, that allow for sex determination from tooth fragments, a crucial forensic identification factor. Deletion of this gene causes X-linked amelogenesis imperfecta. Additional X chromosomes (XXX) cause increased enamel thickness. Odontogenesis is initiated by P63 signals from the stratified squamous oral epithelium to the neural crest derived mesenchyme to create presumptive dental epithelium - the dental lamina. Pitx2, a transcription factor, localises in the epithelial thickenings, creating tooth buds. Activin BA, a member of the TGFβ family of growth factors, is localised in the presumptive tooth mesenchyme, and provides an early mesenchymal epithelial signal. The
early stages of all tooth shapes (incisors, canines, and molars) are identical. The later cap and bell stages of differential shapes of teeth as incisors ventrally (anterior) is dependent on localised BMP and Islet 1 (ISL) expression, while localised FGF8 dorsal (posterior) expression in the jaws determines molariform tooth shapes. Canine and premolar teeth result from interactions between ventral and dorsal signalling. Tooth shape is determined early at the interface between epithelium (enamel) and mesenchyme (dentin). The sites of enamel knots and subsequent foldings of the amelodental membrane in embryonic tooth germs creates genetically determined cusps and grooves that become fossilised by mineralisation. Environmental impacts become permanently imprint upon developing teeth. Combining the genetics of odontogenesis with forensic evidence and fossil data provides an unparalleled source of information on heredity, environmental and evolutionary events through teeth, the most durable of all biological structures. Teeth truly tell tales of the living and the dead.

Forensic DNA Analysis of Bones, Teeth and Saliva

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An important tool in the modern forensic laboratory's analytical arsenal is PCR-based DNA profiling. Using the robust, precise and reliable molecular biological methods that have been applied to forensic evidence over the past decade, it is now possible to obtain results from very minute traces of biological samples. Many cold cases have been solved using DNA methods because it is possible to examine stored samples and apply modern analytical methods to them. And the courts have accepted this evidence based on its well established scientific rigour.

Anthropologists have used mtDNA sequencing for many years to study populations of ancient people, their migration patterns and racial origins. Odontologists, on the other hand, have only recently started to embrace DNA technology. Forensic odontologists now understand the importance of treating dental exhibits as both physical and biological evidence, and they have recognised that these approaches can be used to support and independently verify the expert's conclusions.

This paper will review the application of nuclear DNA profiling methods to various types of dental evidence using case examples to illustrate how the conclusions from hard and soft tissue samples can establish significant associations and linkages between persons in the context of a forensic investigation. Evidence recognition, preservation and analysis will be presented along with the interpretation of DNA profiles and discussion of various problems and limitations.

Dentofacial Morphology

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Because of the social and legal structure of our present day society, the necessity for positive identification of unknown individuals has assumed far more importance than ever before. In the absence of other identification means, the oral structures can provide enough distinctive characteristics for an identification with reasonable dental certainty.

The goal of this presentation is to demonstrate and familiarise the audience with the dentofacial morphology that the practising forensic odontologist uses for identification of unknown human remains.

In very basic terms, dental identification is the comparison of antemortem records to postmortem remains. Conclusive identification is possible because humans have five surfaces on as many as 32 teeth that may be present in the mouth. When other visible factors such as rotations, jaw size, tori, supernumerary teeth and prosthetic appliances are considered, the number of identifying factors increases significantly. If radiographs are also considered, the number of identifying features (e.g., impacted teeth, retained roots, endodontic procedures, trabeculation patterns and pathology, etc.) increases astronomically. Ageing and racial grouping may also be gleaned from dental and facial skeletal structures. Indeed, the uniqueness of the dentofacial morphology is a valuable forensic tool.

In the Absence of Dental Records, Do We Need Forensic Odontologists at Mass Grave Sites?

M. Skinner, PhD, Forensic Anthropologist, Simon Fraser University, and D. Alempijevic, Forensic Anthropologist, University of Belgrade

With the exception of exhumations of mass graves in Latin America, forensic dentists and odontologists are rarely involved in the postmortem examination of remains from mass graves. The cited reason is that there are no dental records so what is the point? In this presentation, it is argued that:

- there may not be adequate searches conducted for antemortem dental records
- local dentists should be approached to participate in the examination of remains
- international forensic odontologists have an ethical obligation to become more involved
- there is significant information about the individual to be obtained by an oral biologist even in the absence of dental records
- some families have useful anamnestic information about the oral status of their loved ones
- dental charting by anthropologists and pathologists may be grossly incorrect.

The Use of Dental Morphology for Population Characterisation: Are “New” Techniques Leading us Astray?

J. T. Mayhall, DDS, PhD, Dr Odont (HC), Professor Emeritus, University of Toronto, Faculty of Dentistry

In the last 10 years there have been several papers and theses appearing that purport to use banks of dental morphological traits to characterise populations (and, by extension, aid in the identification of an individual's population affiliations). These morphological traits are almost always based on presence/absence analysis of the traits gleaned from the use of the three-dimensional plaques produced by Dahlgberg and Turner. The presence or absence of the traits are analysed using statistical techniques that do not allow for analysis of anything other than dichotomous features. Using published studies it will be shown that a simple alteration in the definition of the presence of a trait can drastically alter the results of population comparisons. Examples from Africa, Japan, Easter Island and Europe as well as North America demonstrate that caution should be used in accepting the analyses when only presence or absence of a trait is provided. Stephen J. Gould (1997) has written that, “dichotomized leads to misleading or even dangerous oversimplification.”
Dental Reduction in Late Pleistocene and Early Holocene Homo sapiens

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A reduction in tooth size has been a consistent trend in the evolutionary history of the genus Homo, and many believe that it has been particularly evident in both Neanderthals and so-called anatomically modern Homo sapiens in the period from about 120,000 BP to 5000 BP. The way in which this reduction comes about is a key issue in the evolution of modern humans. To gain a better understanding of the problem, a large and robust dataset consisting of measurements and other observations for 6631 teeth from 728 individuals has been collected from institutions with significant holdings of Neanderthals and early moderns from Europe, the Middle East and North Africa over the last three years. Preliminary analysis of the data from this study has allowed us to confirm that this reduction over this period has indeed occurred, although it is not marked in all teeth and the range of variation overlaps between different groups.

However, rather than examine these results in detail, this paper instead focusses on an overview of the project and its methodology. Because teeth in these groups are subject to heavy tooth wear, and even slight proximal wear affects the conventional tooth measurement of length (MD) and moderate occlusal wear affects the conventional measurement of breadth (BL), until now it has been difficult to validate the nature and pattern of dental reduction. To overcome these problems a new definition of measurements (cervical crown diameters) was developed, which also required the design of specialised dental calipers. Cervical measurements, which are taken at the base of the crown, allow even heavily worn dentitions to be measured. This makes it possible to include a larger number of specimens and thus consider the questions of variability in crown size and, in addition, to test the major hypotheses that have been suggested to explain the phenomenon.

Explaining Sex Differences in Dental Caries: The Role of Saliva, Hormones, and Female Life History

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When dental caries rates are reported by sex, females are typically found to exhibit higher prevalence rates than males. This finding is generally true for diverse cultures with different subsistence systems and for a wide range of chronological periods, exceptions exist but are not common. In this paper we present new data for sex differences in dental caries rates among the Guanches (Tenerife, Canary Islands). Based on corrected tooth count the caries rates for females (8.8%; 158/1790) exhibit approximately twice the frequency of dental caries than males (4.5%; 68/1498). Higher caries prevalence among females is often explained by one of three factors:

- earlier eruption of teeth in girls, hence longer exposure of girl’s teeth to the cariogenic oral environment
- easier access to food supplies by women and frequent snacking during food preparation
- pregnancy

Anthropologists tend to favour explanations involving behaviour, including sexual division of labour and women’s domestic role in food production. By contrast, the causal pathways through which pregnancy contributes to poorer oral health and higher caries rates are de-emphasised.

This paper presents recent research on physiological changes associated with fluctuating hormone levels during individual life history and the impact these changes have on the oral health of women. The biochemical composition of saliva and overall saliva flow rate are modified in several important ways by hormonal fluctuations during events such as puberty, menstruation, and pregnancy, making the oral environment significantly more cariogenic for women than for men. These results suggest that hormonal fluctuations can have a dramatic effect on the oral health of women and constitute an important, yet often neglected, causal factor in explaining sex differences in caries rates.

Skeletal Evidence for Temporo-mandibular Disorders in Ancient Egyptians

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Much clinical attention has been focussed on disorders of the TMJ and estimates of the percentage of the North American public affected by some form of TMJ dysfunction typically exceed 50%. Similarly, degenerative remodelling at the TMJ is observed in several ancient Egyptian skeletal samples dating to the Predynastic and early Dynastic Periods (ca. 3000 BC), with prevalences in the 30% to 40% range. Trauma, maladaptive anatomy or occlusion, systemic conditions such as neurological and infectious disorders, congenital abnormalities, and the cumulative effects of aging have all been implicated in the etiology of TMDs. Bruxism often is identified clinically as a contributing factor. In contrast, the high frequencies of TMJ degeneration in the ancient Egyptians may be at least partially due to considerable occlusal surface abrasion caused by coarse diets and/or the contamination of food by desert sand or by grit introduced through the stone grinding of cereal grains. Other variables that may have a role in the etiology of TMDs in the ancient Egyptians are left/right chewing asymmetry, antemortem tooth loss, and age. Sex and social status are not significantly correlated with TMDs, although social status may be implicated through higher frequencies of antemortem tooth loss, perhaps resulting from caries caused by the consumption of honey and dried fruits.
Student Placement in Stralsund, reviews by real people. Yelp is a fun and easy way to find, recommend and talk about what's great and not so great in Stralsund and beyond. This business has not yet been claimed by the owner or a representative. Claim this business to view business statistics, receive messages from prospective customers, and respond to reviews. 1 review. Rating Details. Student Home Education Programs CAPA Membership Student Societies Facebook. PA Students. CAPA - ACAM > PA Students. As PA students, becoming a member of CAPA allows you to network with fellow physician assistant students and currently practicing PAs, and provides access to the resources for students CAPA has to offer. Benefits of Membership. Network with fellow physician assistant students and practicing physician assistants at CAPA's Annual Conference. Keep up with advocacy initiatives. Receive the latest CAPA news and official news releases. Join CAPA. With CAPA Student Representative, Irene Doucette. PA School Student Associations have formed groups on facebook. Like the CAPA Facebook Page! PA Students. Mission and Vision.