

“INTERVENTION & PREVENTION IN HEALTH: RESEARCH TO PRACTICE”

STUVAC SEMINARS

Where: Falkland Islands, South Georgia, Antarctica (ship based travel)

When: 22 February, 2010 – 12 March, 2010

Faculty: Professor David Sonnabend, Rani Lueder MSIE CPE, Dr Jenny Pynt

Day 1-22 February

Embarkation.

9:00-9:30 pm: **Welcome and overview of conference**

(Dr Jenny Pynt)

Day 2-23 February

7:00-8:00 am: **The Shoulder** *(Prof David Sonnabend)*

- Basic anatomy
- Common pathology and relevant physical examination
- Instability
- Cuff Disease
- Arthritis
- Ordering tests:
- What and When
- Cost and reliability
- Ultrasound unreliability
- The future

6.00-7.00 pm: **Lifespan ergonomics** *(Rani Lueder, CPE)*

- Revisiting ergonomics - how it is evolving.
- How incorporating lifespan ergonomics into design can shape our lives and communities.
- Historical roots; international trends.

9:00-10:00 pm: **Questions and case-based discussion**

Day 3-24 February

7:00-8:00 am: **Tendon pathology and treatment: A disease of our age**
(*Prof. David Sonnabend*)

- Pathology: Prevalence of cuff tears, basic histology and molecular biology
- Treatment: Just because its broke why fix it?
- Non-operative (exercises, medication, activity modification etc)
- Cuff repair (open/arthroscopic)
- Orthobiologics” – the world of allograft, xenograft and synthetic scaffolds
- Stem cells the future? (including our project!)
- When all else fails: “Reverse Arthroplasty”

4:30-5:30 pm: **Delegate Presentations**

9:00-10.00 pm: **Questions and case-based discussion**

Day 4- 25 February

7:00-8:00 am: **Total Joint Replacement: New parts for old**
(*Prof. David Sonnabend*)

- The history of joint replacement, with particular reference to the shoulder.
- Design (including CAD/CAM)
- Fixation
- Bearing surfaces and materials
- Computer-assisted “Navigation” surgery
- Clinical Results
- Problems of “Revision Surgery”
- “Our” design and research)

6:00-7.00 pm: **Revisiting ergonomics for children and adolescents**
(*Rani Lueder, CPE*)

- Are children more than “little adults”?
- Infants, toddler, children, adolescents and maturity
- Child physical development and posture
- Children and risk – how these risks change as they evolve
- Rethinking the child-technology fit
- International efforts and trends related to children and design and in their communities

Day 5-26 February

7:00-8:00 am: **The Sporting Shoulder: Throwers and swimmers are not the same** (*Prof. David Sonnabend*)

- Instability (subluxation and dislocation)
- Rehab
- Surgery (open/arthroscopic)
- The shoulder in paraplegic sport

11:00-12:00 am: **Questions and case based discussion**

4.00-5.00 pm: **Product design usability in a changing world** (*Rani Lueder, CPE*)

- What is good design?
- First principles in product design
- First principles in usability
- Implications of *lifespan ergonomics* on product design usability.
- Design tools and approaches.
- International efforts.

Day 6-27 February

7:00-8:00 am: **Obesity, smoking and joints** (*Prof. David Sonnabend*)

- Overview of the “obesity epidemic” (physical/ psychosocial)
- Obesity and the growing skeleton
- Body failure and obesity
- Technical problems/worse results of joint replacement in the obese
- +/- effects of smoking on wound-healing
- Increased operative risks in smokers

11:00-12:00 am: **Sitting, seating and real world considerations (who made up all those rules?)** (*Rani Lueder, CPE*)

- What do we know about...
What is sitting? What is comfort? What is posture?
- How our thinking about seating, posture and support has evolved...
And what do we know that “just ain’t so” (Mark Twain)
- New research findings.
- Implications of changes in work organization and technologies.
- International perspectives.
- Beyond adjustability to adaptability.

4:00-5:00 pm: **Questions and case based discussion**

Day 7-28 February

7:00-8:00am: **Delegate presentations**

6:00-7.00 pm: **Delegate presentations**

Day 8-1 March

7:00-8:00 am: **Fracture Healing: Modern trends in treatment**
(Prof. David Sonnabend)

- How healing occurs
- What we can do to 'help'
- Modern trends in treatment: surgical, medical, 'physical'

6:00-7.00 pm: **Designing places that work for all of us**
(Rani Lueder, CPE)

- International perspectives – how we sometimes lose our way.
- How our notion of “accident” frames the debate.
- Rethinking design for all of us.
- Worldwide efforts for products, places and neighbourhoods.

9.00-10.00 pm: **Questions and case based discussion**

Day 9-2 March

7:00-8:00am: **Ancient Greek seating: A cause of modern day back pain**
(Dr Jenny Pynt)

- Why the ancient Greeks may be responsible for your back pain
- The effect of kyphosed sitting and seating on spinal structures
- The cycle of sublimation of posturally healthy seating to aesthetics

6:00-7:00pm: **Evolution of the Shoulder: A fairy tale based in fact**
(Prof. David Sonnabend)

The evolution of both skeleton and “soft tissues” of the shoulder from the fin of the fish, through reptiles, amphibians, marsupials and quadrupedal mammals to man and his “near cousins”.

9:00-10:00 pm: **Questions**

Day 10-3 March

7:00-8:00am: **The Greying of Australia: Baby boomer health in the 21st Century** (*Prof. David Sonnabend*)

- Baby boomer health in the 21st century
- Trends, costs and remedies

6.00-7.00 pm: **Rethinking ability, disability and universal design**
(*Rani Lueder, CPE*)

- What is good design?
- Evolving assumptions about ability and disability.
- Universal design means good design for all of us.
- Examples of Universal design in our lives.
- International efforts and trends.
- Trends, costs and remedies

9.00-10.00 pm: **Questions and case based discussion**

Day 11-4 March

7:00-8:00am: **Delegate presentations**

11.00-12.00 am: **Delegate presentations**

6.00-7.00 pm: **Questions and case based discussion**

Day 12-5 March

7:00-8:00am: **Organ-donation and bone-banking in Australia: Ethics and practicalities** (*Prof. David Sonnabend*)

- With particular reference to “bone banking”

6.00-7.00 pm: **Questions and discussion**

Day 13-6 March

7:00-8:00am: **Setting up a Surgical Practice: Pearls and Pitfalls**

- Part 1 Pearls (*Pam Sonnabend MBA*)

6.00-7.00 pm: **Becoming old while young; learning from elder simulation projects** *(Rani Lueder, CPE)*

- Why simulate aging?
- Elder simulation projects to evaluate products and places. Performed with my student teams at Art Center College of Design (Pasadena, California) from 2004 – present.
- Findings... what we learned from each other.

Day 14-7 March

7:00-8:00am: **Setting up a Surgical Practice: Pearls and Pitfalls**

- Part 2: Pitfalls

(Pam Sonnabend MBA)

6.00-7.00 pm: **What I have learned as an expert witness in cases relating to child and adult injury and disability**

(Rani Lueder, CPE)

9.00-10 .00 pm: **Questions**

Day 15-8 March

7:00-8:00am: **Delegate presentations**

6.00-7.00 pm: **Writing and editing books: Challenges and pitfalls**

(Rani Lueder, CPE)

9.00-10 .00 pm: **Questions**

Day 16-9 March

7:00-8:00am: **Delegate presentations**

6.00-7.00 pm: **General question time**

Day 17-10 March

7:00-8:00am: **Delegate presentations**

6.00-7.00 pm: **General question time**

Day 18-11 March

6.00-7.00 pm: **Concluding remarks** *(Speakers and delegates)*

Day 19-12 March

Disembarkation

N.B In order to fit in with Peregrine's excellent onboard program, the conference may be subject to alterations necessitated by the weather and wildlife.

* If you would like to present a 15 to 30 minute paper please submit an abstract by email to: jennypynt@optusnet.com.au with abstract Antarctica in the subject line. No attachments please. A maximum of 15 papers will be accepted

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