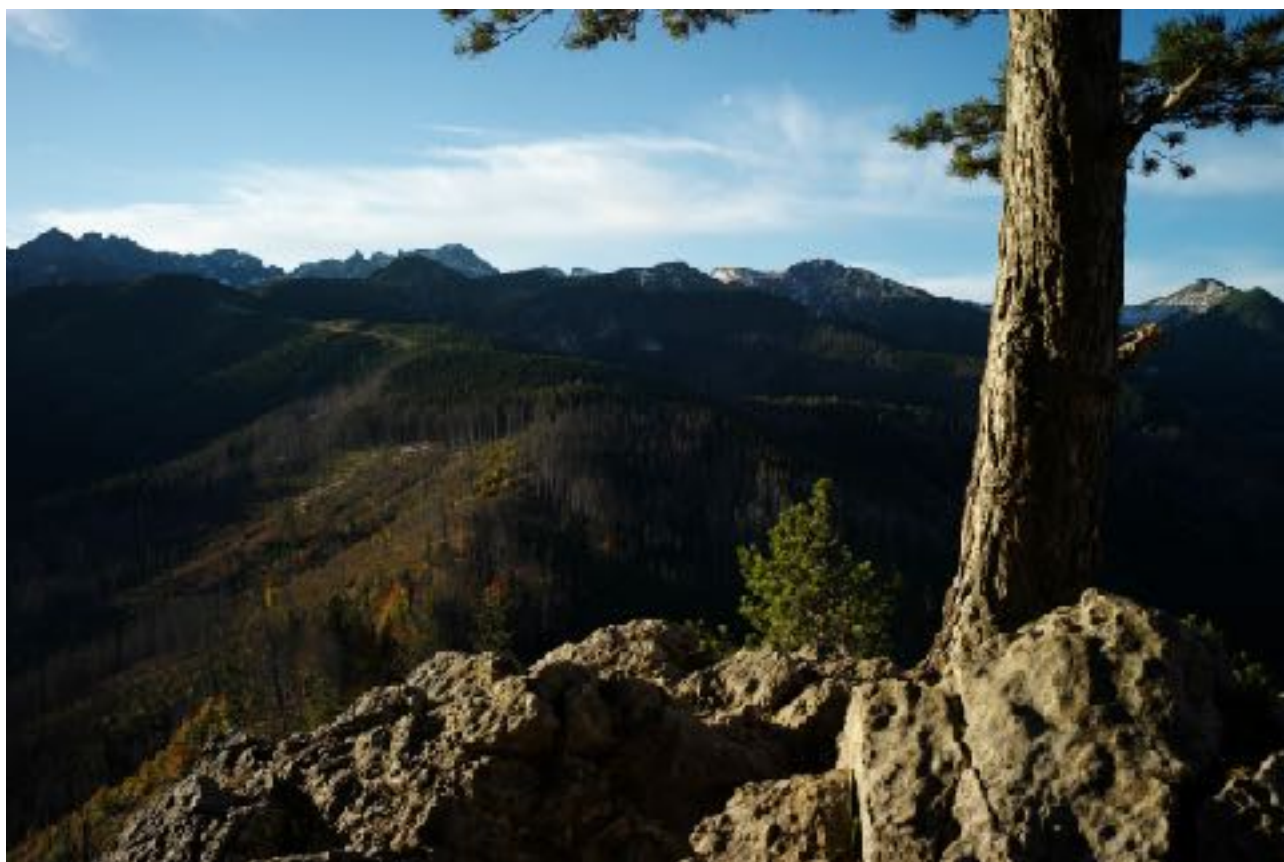


International Commission for Alpine Rescue



## **ICAR MEDCOM Zakopane, Poland** 8-13th October 2019



# ICAR Medcom Hypothermia Day (08:30 - 16.30 , 8th Oct)

Venue: Pope John Paul 2nd/ Cracow University Hospital

Thanks to Tomasz Darocha, Sylwester Kosiński, Peter Paal and TOPR

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## Administration

Register: see Appendix 1 (25 persons)

Apologies:

Sponsors: TOPR

Conflict of Interest declarations: None

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## Agenda

HOPE and re HOPE analysis - the role of potassium. Mathieu Pasquier (CH)

Lowest survivable core temperature? Prof. Janusz Skalski (P)

Chances of defibrillation <30 ° C. 'Silver' Kosinski (P)

Unwitnessed hypothermic cardiac arrest. Pawel Podsiadlo (P)

~~Prehospital core temperature measurement. Tomek Darocha (P)~~

Lessons learned from the Austrian Alpine accidents registry. Peter Paal (A)

Practical sessions in the climate chamber – we looked at various insulation material at -25°C with wind; loss to the ground and through gaps appeared significant. We did a scenario at -30°C with rain and wind; it was harsh. We looked at the temperature of hot infusion when it arrived at the cannula. It was very significant and would impose a further cold stress to the patient.



# ICAR Practical Day (9th Oct)

Venue: Zakopane

Thanks to all the presenters, Gebhard Barbisch and TOPR

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## Administration

ICAR Medcom grant of €600 for manikin/instructor to Laerdal Medical, Poland

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## Medical Stations

"Team resource management in mountain rescue"	Volker Lischke, German Red Cross
"Stop the bleeding/maintain intravascular volume"	Matthias Jacob, Germany
Caving topic	Inigo Soteras and Roger Mortimer, Spain & USA

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## Feedback

The medical stations were well received. The high-fidelity mannequin was appreciated by the participants. Engagement levels were high. CRM with scripted role play caught the participant's imagination. Presenters found the groups large (20-30) and the repetition tiring but felt rewarded.



# ICAR Medcom Conference (10-11th Oct)

Venue: Zakopane

**THURSDAY**

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## Administration

Register: see Appendix 2 (68 persons, 22 countries) We used the Congress registration Medcom list rather than circulating a list. Attendees that had registered for 'all commissions' were therefore excluded.

Apologies: Monika Brodmann Maeder (CH), Haris Sinifakoulis (GR), Didier Moens (B), Andrea Orlandini (I), Beat Walpoth (CH), Maria Antonia Nerin (ES) in Nepal, Dave Watson (Canada) - 'imposter' - an email was sent to Dave thanking him for his contribution to Medcom and DiMM.

Sponsors: None

Conflict of Interest declarations: None

Minute taker: Ken Zafren - Thank you

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## Agenda

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### Welcome and President's report

'Sli.do' platform - please upload this as we will be experimenting with it later this morning.

Minutes from Chamonix & Bolzano and notes from June 2019 video meeting are on the forum. All open items are on the agenda. Can we approve these?

President's Annual Report including Commission finances (max €3000/yr). This is on the forum.

President's 2019 Congress brochure article. This is on the forum.

Budgets:

2019: *Proposed open access €1000; JE Bolzano expenses (€900) and Instructors gift (€58); Forum and website (€100) Practical Day dummy (€600)*

2020: *Open access € 1000; JE expenses to Interlaken €500 and Christchurch €1000; website €200; hypothermia video €200*

Patron for the International Hypothermia Registry. ICAR have approved this, Medcom to lead; Beat Walpoth reports: 'we are in the progress of transferring the whole Registry on the new standard for clinical studies platform 'REDCAP' and this is hosted and monitored by the Division of Quality Care of the University Hospital in Geneva. Unfortunately, it is not yet operational but we look forward to being ready by the end of this year and I will keep you informed.' (Sept 2019)

Dr Gerald Dubowitz & Kilimanjaro SAR. GD had resigned as MO citing ethical and safety concerns, not recommending as an 'elective'. Subsequently KSAR had applied to ICAR for C membership. This has been approved by the board. They were aware of the concerns of GD at the time of the decision but felt that it was better to encourage them by exchange than to refuse the approach. Medcom Members are encouraged to report their concerns to ICAR.

UIAA Medcom Bolzano 7-8 November 2019. Hermann/Giacomo will represent ICAR.

Programme additions on Friday afternoon:

Live Kummen (Norwegian Peoples Aid) Standardising our approach to preventing and treating hypothermia (15 minutes) and Maciej Mikiewicz, TOPR. "Practice of advanced airway management in mountainous terrain - invitation to discussion". (15 minutes)

South African membership change issue ongoing. Both South African organisations feel unable to agree with the Board's proposal to change their status away from a free membership category. Rik de Decker is trying to find a solution; Rik remains in ICAR Medcom as an expert.

Publications noted:

Extrication Times During Avalanche Companion Rescue: A Randomized Single-Blinded Manikin Study HAMB 2019 DOI: 10.1089/ham.2019.0021;

Intranasal sufentanil versus intravenous morphine for acute severe trauma pain: A double-blind randomized non-inferiority study;

Frostbite Injuries in the Austrian Alps: A Retrospective 11-Year National Registry Study. Ströhle M, Rauch S, Lastei P, Brodmann Maeder M, Brugger H, Paal P. High Alt Med Biol. 2018 Dec;19(4):316-320. doi: 10.1089/ham.2018.0060.

Lightning accidents in the Austrian alps - a 10-year retrospective nationwide analysis. Ströhle M, Wallner B, Lanthaler M, Rauch S, Brugger H, Paal P. Scand J Trauma Resusc Emerg Med. 2018 Sep 10;26(1):74. doi: 10.1186/s13049-018-0543-9.

Accidental hypothermia.

Paal P, Brugger H, Strapazzon G. Handb Clin Neurol. 2018;157:547-563. doi: 10.1016/B978-0-444-64074-1.00033-1.

Suspension syndrome: a potentially fatal vagally mediated circulatory collapse-an experimental randomized crossover trial. Rauch S, Schenk K, Strapazzon G, Dal Cappello T, Gatterer H, Palma M, Erckert M, Oberhuber L, Bliemsrieder B, Brugger H, Paal P. Eur J Appl Physiol. 2019 Jun;119(6):1353-1365. doi: 10.1007/s00421-019-04126-5. Epub 2019 Mar 20. Erratum in: Eur J Appl Physiol. 2019 Apr 19;:.

Hypothermia outcome prediction after extracorporeal life support for hypothermic cardiac arrest patients: An external validation of the HOPE score. Pasquier M, Rousson V, Darocha T, Bouzat P, Kosiński S, Sawamoto K, Champigneulle B, Wiberg S, Wanscher MCJ, Brodmann Maeder M, Paal P, Hugli O. Resuscitation. 2019 Jun;139:321-328. doi: 10.1016/j.resuscitation.2019.03.017.

Cut-off values of serum potassium and core temperature at hospital admission for extracorporeal rewarming of avalanche victims in cardiac arrest: A retrospective multi-centre study. Brugger H, Bouzat P, Pasquier M, Mair P, Fieler J, Darocha T, Blancher M, de Riedmatten M, Falk M, Paal P, Strapazzon G, Zafren K, Brodmann Maeder M. Resuscitation. 2019 Jun;139:222-229. doi: 10.1016/j.resuscitation.2019.04.025

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## Internal Regulations (approval) & elect Vice President

The internal regulations have been reviewed by the ICAR Board with the only change being the clarification that the Assembly of Delegates does not have to approve the appointment of Vice Presidents (VPs). VPs are now elected in the same way as the President by the commission delegates rather than put forward by the President. Other commissions are adopting our regulations to harmonise the rules of commissions. The final draft has been on the forum since April 2019 and definitive version was posted last week. No further comments have been made. These were accepted by ICAR Medcom and will be sent to ICAR.

We now need to elect one or more VPs. This is a requirement of ICAR. Historically, we have used VPs for a purpose; encouraging North American involvement and as a stepping stone to succession. My vision last year set out a different structure with a 'research', 'education', 'DiMM' and 'recommendation' leaders. I still think this is most suitable for our current stage of development with the proviso that as we reach my last term of office that a successor should be acknowledged. That said one or more VPs helping to manage the political arena and special tasks would be helpful. I have had expressions of interest and discussions with 2 persons, may I ask if there are any further ICAR Medcom delegates that would like to stand? As there are no other candidates, I would be pleased to suggest Alison Sheets (MRA) and Natalie Hölzl (BExMed and Bergwacht Bayern) should become our VPs. This was unanimous agreed. Congratulations to both.

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## Website, Forum and Archive (Natalie Hölzl, Gege Agazzi)

Natalie walked everyone through the website: [icarmedcom.boards.net](http://icarmedcom.boards.net). She recommended changing notifications to receive instant e-mails for new threads and new posts. She also explained how to communicate using the forum. Natalie also showed the new ICAR MedCom web site: [icar-med.com](http://icar-med.com). The web-mistress is [docnat@gmx.net](mailto:docnat@gmx.net).

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## Discussion: What do we want from the ICAR website? & Growing Commission (John Ellerton)

ICAR website: There is tension on how good the website is at meeting your needs. It could be better and ICAR are proposing to set some capital aside. The first stage is a survey ([www.surveymonkey.com/r/23KX7GD](http://www.surveymonkey.com/r/23KX7GD)) which has just been released. Please take a look and respond.

The data on attendance at October and Spring meetings were presented. See Appendix 3. More members = more delegates and more attendees. As an exercise, I would like you to complete the MCQ on the 'Sli.do' platform. The event code is #7329. I want to know what you - the audience - is looking forward to most? This will help us plan the balance between Medcom and Joint presentations, discussion on Medcom projects and administration. There were no suggestions as to how we could manage the growth of ICAR. Is it time to be more restrictive? If not should we change the venues of our conference and congress to guarantee quality?

Though it is early days for our forum there is evidence for an exponential increase in viewings of meeting posts, yet a marked lack of engagement with only 2 persons with  $\geq 6$  posts and in Sept 65% of members had not posted a single item

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## Proposed ICAR Recommendation: Determination of Death. Corinna Schön, Switzerland

Corinna presented an overview of the paper. The authors will modify the draft recommendation that unwitnessed cardiac arrest (CA) after trauma and other reversible causes including hypothermia is necessarily fatal.

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## Proposed ICAR Recommendation: Suspension Trauma. Giacomo Strapazon, Italy

We discussed and finalised this recommendation. One modification was discussed and would be made. These would then become ICAR Medcom recommendations and be presented to the Assembly of Delegates in 2020 for ICAR approval. As an exception, the recommendation did not need to go to the review panel.

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## ICAR Medcom Review of Recommendations. Matthias Jacob, Germany

Matthias explained the process for developing recommendations. There was discussion regarding treatment of the condensed version. We reviewed the current recommendations that need to be updated. Updated recommendations should be labeled with the recommendation number and the year in which they were updated.

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## Progress report: Psychosocial health of ski patrollers and mountain rescuers (Nordgren et al.)

Alison Sheets gave a presentation titled Emotional Rescue, outlining the content of a proposed paper setting out current thoughts on managing emotional wellbeing and recognising mental illness in rescuers. Psychological first aid to persons involved in rescues could also be part of the paper. A pilot use of the questionnaire to organisations had not been particularly helpful. Primary research involving rescuers looking at incidence of psychological problems was considered a mid-term goal of the working group and could be explored further. The issues around multi-national consent were a major hurdle that needed clarifying.

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## Diploma in Mountain Medicine update. Jason Williams, DiMM Administrative Group

The Basic Diploma in Mountain Medicine has been renamed and is now the Foundational Course in Mountain Medicine. The other modules are: Wilderness and Expedition Medicine, Terrestrial Mountain Rescue Specialty Course and Alpine Helicopter Rescue Specialty Course. It was planned that a development course would be run around the ISMM World Congress 2020.

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## Forging a Better Avalanche Chain of Survival. (TER) Heiko Stopsack, Senior Paramedic & Director, Mt. Hood Backcountry Ski & Avalanche Institute & King County Medic One - Air Rescue Unit, U.S.A.

Heiko proposed strengthening the chain of survival in avalanche accidents by emphasising the importance of cardiopulmonary resuscitation by companions and hence making it integral to their avalanche training.

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## Should Airbags be Mandatory Avalanche Safety Equipment? (TER) Dr Christopher Van Tilburg, Crag Rats MR Hood River, Oregon & MRA, USA

There was a lively discussion following Chris's presentation regarding whether avalanche airbags should be mandatory equipment or highly recommended for recreationists and organised rescuers. Unpublished data suggested the majority of rescuers' deaths were on the way to the avalanche rather than on-site so concerns about digging with an airbag on may not be relevant. Is there evidence that transceiver could be ditched? Follow up the rescuer issue was requested.

## **FRIDAY**

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### **Discussion: Multiple trauma management in alpine environments. Dr Peter Paal, Austria**

Peter Paal presented the latest version of the paper. Fidel Elsensohn suggested a section regarding limitations in mountain rescue. The paper was getting into a final form.

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### **twICEme Medical ID. Christian Connolly, CEO & discussion on application. Dr Peter Paal, Austria (TER)**

After a brief introduction, the audience participated in discussing several prepared questions.

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### **Rescuer first aid competence document. Dr Kazue Oshiro, AMMR, Japan (with Mike Greene, MRE&W, UK)**

Mike Green and Kazue Oshiro presented a proposal for the paper that includes a Delphi process to determine the most important core competencies. A call for experts was made. The scope of the project was discussed. For continued development.

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### **Heat illness - review & lessons from the Grand Canyon. Dr. Drew Harrell & Dr. Risa Garcia, UNM-IMMC, USA**

This was the first time that heat illness and exertional hyponatraemia had been discussed. The experience of the presenters was exceptional and their management including rapid correction of sodium levels monitored by point of care sodium measurements sets a standard for what everyone acknowledged was increasing recognised problem.

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### **Tactical Alpine Medicine. Markus Isser, ÖBRD (TER)**

We were amused by the multiple uses of a foil blanket including emergency sunglasses, splint for clavicular fractures, carrying aid etc. The underlying principle of keeping it simple and quick in 'hot' zones has been accepted and discussed previously.

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### **Ski patrol medical program, Outdoor Emergency Care, 6th revision (20 min) (MED) Dr David Johe; National Ski Patrol, USA**

David Johe presented an overview of medical care provided by the US National Ski Patrol and the development of their training.

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### **Feedback: Krakow hypothermia day (10 min) & Vital signs in hypothermia. Dr Mathieu Pasquier, CHUV, CH**

John gave feedback on the hypothermia day. His 3 take-home messages were: HOPE validation (better than K alone); Unwitnessed HT cardiac arrest has a good survival ~40% (though lower than witnessed ~ 80%); External ECG may not be reliable! ICD patient - ETCO<sub>2</sub> or POCUS to conclude if cardiac arrest has occurred?

Mathieu Pasquier gave a brief description of his recent study of vital signs in hypothermia. Vital signs can be useful for estimating the core temperature. If the core temperature is known, vital signs that are different than expected can provide clues to other concurrent pathology, such as trauma or hypoglycaemia. The members of the commission had a chance to "vote" on the expected vital signs in a patient with a core temperature of 24.6°C. We weren't perfect!



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## Standardising our approach to preventing and treating hypothermia, Dr Live Kummen, Norwegian Peoples Aid

Live showed how Norway has standardised the field treatment of hypothermia.

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## Practice of advanced airway management in mountainous terrain, Maciej Mikiewicz, TOPR.

Maciej described 2 cases and the issue around airway management. He favours armoured ET tubes and is comfortable in winch-operations. He emphasised that intervention had to be used appropriately and only having had considered less hazardous options.

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## Review of other projects:

### **Avalanche QI, Alexandre Kottman**

Alex has not managed to progress this yet.

### **Hypothermia preparedness video, John Ellerton & Viktor Lugnet**

The text is developing on the Forum. Further work is necessary. The video is meant to be a 3 minute reminder for receiving physicians who do not usually care for patients with hypothermia.

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## Future Projects: ICAR recommendation on POCUS?

Didier Moens (B), Andrea Orlandini (I) are unable to attend but willing to take this forward. The WEMJ article on POCUS in austere environment covered similar ground but not specific to mountain rescue. (Clinician's Corner: Ultrasound in Austere Environments. Carlo Andre Canepa and N. Stuart Harris High Altitude Medicine & Biology, 2019) Kyle McLaughlin would like to join the group in a focussed review of POCUS in mountain rescue. The project should develop with a draft being available before Oct 2020 for discussion in Greece.

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## ICAR Medcom Recommendation MCI (Marc Blancher) - approval

Natalie Hölzl presented the "revision" of this paper with the required condensed form. One of the recommendations was revised to be clearer. Official ICAR approval will be in Oct 2020.

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## DiMM Administrative group - replacement for Dave Watson

Inigo Soteras has volunteered to replace Dave in the DiMM Administrative group. The MedCom thanks Dave for his service and wishes him well. Canadian delegates will provide Dave with a bottle of wine, paid for by ICAR MedCom.

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## ICAR project on blood products? Sven Christjar Skaiaa

Sven presented the rationale for prehospital use of blood products. Oxygen delivery is the critical parameter for trauma patients. In mountain rescue, transport time can be long, often over 1 hour. Intravenous fluid boluses provide only temporary improvement in blood pressure. Early transfusion is beneficial for combat casualties. Prehospital plasma also has a survival benefit. Freeze-dried plasma and packed red blood cells (PRBCs) are used in Norway with strict indications:, including obvious or suspected major bleeding and systolic blood pressure <90 mm Hg. Sven also presented case reports from Norway. A review paper focussed on mountain rescue would be started. Progress report in Christchurch. A questionnaire was delayed awaiting the review.

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## Japanese DiMM report, Noriyoshi Ohashi (Japan)

A short report was given; it was delayed from the DiMM section

<b>ICAR CONGRESSES</b>	2020, 14-18th Oct; Thessaloniki Greece
	2021, 26-31th October Reichenau an der Rax (near Vienna) Austria.
	2022, ARS, CH
	2023, South Tyrol
<b>ICAR MEDCOM SPRING</b>	2020, 16-19 April; Christchurch, NZ. Dick Price Wed 15 April arrive Christchurch Thurs 16 ICAR Medcom meeting at the Commodore Hotel plus visit Antarctic NZ HQ Friday 17 Mountain Medicine Conference at the Commodore. See <a href="http://www.mountainmedicine.nz">www.mountainmedicine.nz</a> Social hour at end of conference. Participants are advised to book the Commodore early as it is school holidays in NZ at the time. Rooms have been set aside for us at a reduced rate (\$240/night in a twin) and include breakfast. <a href="https://www.commodorehotel.co.nz/">https://www.commodorehotel.co.nz/</a> More information on code to book coming. Sat 18; morning - Drive to Mt Cook (approx 4.5 hours) Lunch at NZAC Unwin Hut. We stay at this hut. It is booked for 40 people. <b>Sleeping bags are required.</b> Afternoon visit to the Department of Conservation SAR HQ. Evening meal at Unwin Hut Sun 19; Gather at Unwin Hut then visit Glacial Lake SAR on Tasman Glacier. Lunch provided. CIMS (Coordinated Incident Management System), Hypothermia, Immediate versus long term care. Debrief in afternoon Return to Unwin Hut and disperse. Own arrangements for evening meal. Possible overnight at Unwin/Mt Cook. Return to Christchurch Sunday evening or Monday. Transport provided but if going on it would be worth driving yourself from Christchurch. Dick may be going walking in the Fjordland area after the meeting. Contact him for the plan.
	2021, Scotland, hosted by Scottish Mountain Rescue at Glenmore Lodge, Cairngorms. Alastair Glennie/Naomi Dodds, Scottish Mountain Rescue 'Glenmore Lodge haven't put their programme together yet for 2020/2021 so I can't confirm dates but it would provisionally be 8-10th April. We get an SMR discount so for accommodation, breakfast and 3 course dinner per person per night it would be approximately £40 (twin room) and £55 (single room). There is a day delegate rate of £20 per person per day (which includes facility use, tea, coffee, lunch and cake) which we would look to cover by funding from SMR or sponsorship.'
	2022, North or South America. Suggestion: Alison Sheets - Boulder, Colorado?
	2023, ?
<b>ISM WORLD CONGRES</b>	2020, 2-5 June; Interlaken, CH. Monika Brodmann. When is the DiMM course? The provisional programme shows a MEM track.
	2022 ?

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## Medical aspects of SAR template and plan for 'Spring' meeting'. Dick Price, NZ

Dick asked if any organisations had templates to take information when SAR agencies enquired about survival chances. A number of organisations were able to share information.

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## Mountain Emergency Medicine book, Hermann Brugger.

New publication date in March 2020. He also showed a video of the first altitude studies in the terraXcube in Bolzano, Italy.

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## Future Events:

### **CAX Chalten, Patagonia. Mountain Medicine course, Feb 28th- March 4th 2020**

Martin Musi outlined an expedition sub specialty course in Latin America. It was sponsored by CAX (Mountain Rescue) Chalten. He is recruiting a group of 3-5 instructors, how would optimal communicate in Spanish and teach medicine and rescue techniques, and are willing to be flexible travelling to the Chalten from Calafate (the nearest airport).

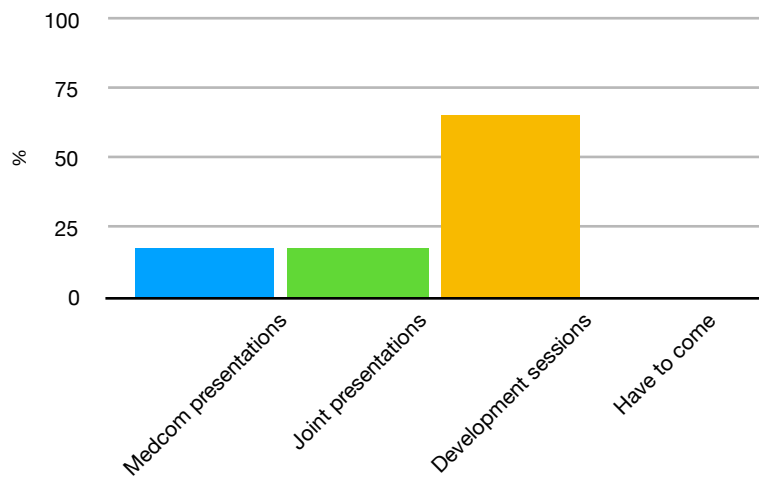
## Appendix 1 – Register Hypothermia Day

AGAZZI Gege  
BLANCHER Marc  
BRINK Bruce  
BRUGGER Hermann  
CHAHAL Anthony  
ELLERTON John  
ELSENHOHN Fidel  
FIELER Julia  
~~GORDON Les~~  
GREENE Mike  
Hölzl Markus  
HOLZL Natalie  
JOHANSSON Linda  
KUMMEN Live  
LIGNET Victor  
LISCHKE Volker  
McLAUGHLIN Kyle  
NORDGREN Marie  
OHASHI Noriyoshi  
OLSEN Vegard  
PAAL Peter  
PASQUIER Matthieu  
PRICE Dick  
SKAIAA Sven Christian  
VOLLENDORF Helga  
WHITE Jonathan

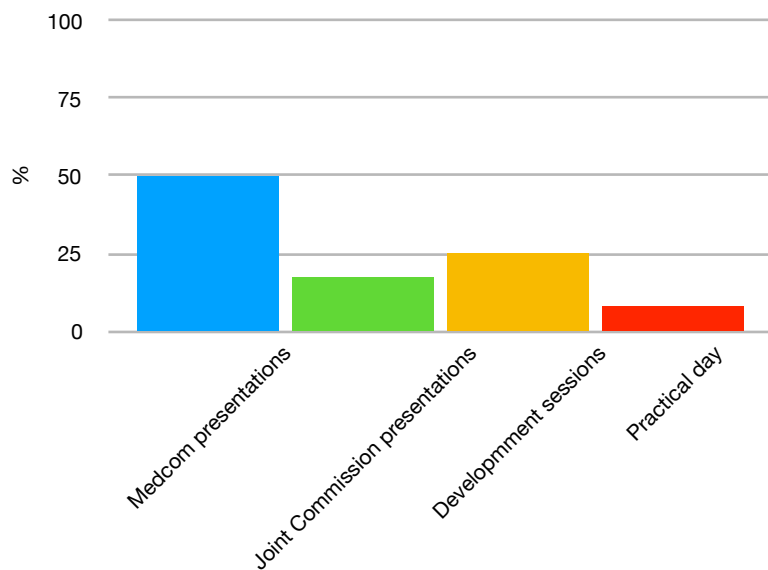
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## Sli.do Poll results:

What are you most looking forward to? (23 responses)



What did you most enjoy? (12 responses)



## Appendix 2 – Register ICAR Medcom

Křiváček	Aleš	Horska Sluzba Ceske Republiky
Juan José	Barrio Lopez	Bombers d'Andorra
Marc	BLANCHER	Groupe de Secours en Montagne
Bruce	Brink	Canadian Society of Mountain Medicine
Herman	Brugger	Icar Honorary Member
Radoslav	Burian	Air Transport Europe, spol. s r.o.
John	Burnham	Scottish Mountain Rescue
Anthony	Chahal	Canadian Ski Guide Institute
Krassen	Demirev	Bulgarian Red Cross / Mountain Rescue Service
Alexander	Egger	Österreichischer Bergrettungsdienst
John	Ellerton	ICAR EXECUTIVE BOARD
Fidel	Elsensohn	ICAR HONORARY MEMBER
Julia	Fielier	Norges Røde Kors
Risa	Garcia	University of New Mexiko / International Mountain Medicine Center
AGAZZI	GIANCELSONO	ITALIAN ALPINE CLUB MED. COM.
Alastair	Glennie	Scottish Mountain Rescue
michael	greene	Mountain Rescue England and Wales
Drew	Harrell	University of New Mexiko / International Mountain Medicine Center
Shiori	Hashimoto	Japan Mountain Guides Association
Anna	Hernandez Bacardit	Bombers d'Andorra
Natalie	Hölzl	Deutsche Gesellschaft für Berg- und Expeditionsmedizin e.V.
Tobias	Huber	Österreichischer Bergrettungsdienst
Staffan	Isberg	Swedish Police Mountain Rescue
Matthias	Jacob	Bergwacht Bayern
Linda	Johannson	Canadian Ski Guide Institute
Sylweryusz	Kosiński	Tatrzańskie Ochotnicze Pogotowie Ratunkowe
Ladislav	Kotrusz	Horská záchranná služba
Alexandre	Kottmann	Alpine Rettung Schweiz
Iveta	Krizalkovicova	Air Transport Europe, spol. s r.o.
Live	Kummen	Norsk Folkehjelp
Vaclav	Kurej	Air Transport Europe, spol. s r.o.
Volker	Lischke, Prof. Dr.	ICAR EXECUTIVE BOARD
Viktor	Lugnet	Svenska Bergsguideorganisationen
Terry	Makos	PEAK Emergency Response Training
Kyle	McLaughlin	Parks Canada
Nicolas	Mena	GREMM - Grupo de Rescate Médico en Montaña
Maciej	Mikiewicz	Tatrzańskie Ochotnicze Pogotowie Ratunkowe
mario	milani	Corpo Nazionale Soccorso Alpino e Speleologico
ENRICO	MOLINERIS	Corpo Nazionale Soccorso Alpino e Speleologico
Roger	Mortimer	National Cave Rescue Commission
Tomikazu	Murakami	Association for Mountain Medical Rescue

Martin	Musi	Mountain Rescue Association
Emanuela	Nittoli	Corpo Nazionale Soccorso Alpino e Speleologico
Marie	Nordgren	Svenska Fjällräddarnas Riks Organisation
Noriyoshi	Ohashi	Japan Mountain Guides Association
Kazue	Oshiro	Association for Mountain Medical Rescue
Peter	Paal	BRD-AVS - Bergrettungsdienst im Alpenverein Südtirol
Mathieu	Pasquier	Centre Hospitalier Universitaire Vaudois, Emergency Service
Anastasia	Patsiou	Hellenic Rescue Team
Richard	Price	Land SAR New Zealand
Oliver	Reisten	Kantonale Walliser Rettungsorganisation
Corinna	Schön	Schweizerische Gesellschaft für Gebirgsmedizin
Alison	Sheets	Mountain Rescue Association
Sven Christjar	Skaiaa	Norsk Fjellmedisinsk Selskap
Will	Smith	Teton County Search and Rescue
Iñigo	Soteras	Hospital de Cerdanya
Dawid	Stec	Górskie Ochotnicze Pogotowie Ratunkowe
giacomo	strapazzon	Corpo Nazionale Soccorso Alpino e Speleologico
Guenther	Sumann	Österreichische Gesellschaft für Alpin- und Höhenmedizin
Iztok	Tomazin	Gorska reševalna zveza Slovenije
Pablo	Villabrille Sampedro	Guardia Civil / Grupo de Rescate e Intervención en Montaña
Helga	Vollendorf	Deutsche Gesellschaft für Berg- und Expeditionsmedizin e.V.
Matus	Vrbicky	Air Transport Europe, spol. s r.o.
Karen	Wanger	Canadian Society of Mountain Medicine
Jonathan	White	Mountain Rescue England and Wales
Jason	Williams	University of New Mexiko / International Mountain Medicine Center
Ken	Zafren	Icar Honorary Member
Grégoire	Zen-Ruffinen	Kantonale Walliser Rettungsorganisation
Bojan	Zivancevic	Red Cross of Serbia

### Appendix 3 – Attendance at Medcom

