

SUMMER SCHOOL ON HEALTHY AND ACTIVE LIFESTYLE “HALS – HEALTHY AND ACTIVE LIFESTYLE 2018”

Piran, Slovenia, 3rd–9th September 2018

The successful Summer School HALS2018, held between 3 and 9 September 2018, was organized by the Science and Research Centre Koper and the Euro-Mediterranean University (EMUNI). The summer school saw the participation of numerous renowned lecturers from Slovenia, Italy, Austria and Germany.

The first day opened with the presentation of Boštjan Šimunič, Ph.D., focusing on positive aspects and limitations of the technology for measuring quantity and intensity of movement / sports activity. The participants received ActiGraph accelerometers and wore them until the last day of the Summer School when they analysed and showed the data in the final report.

The second day was focused around theories and lectures delivered by Rado Pišot, Ph.D., Marco Narici, Ph.D., Pietro di Prampero, Ph.D., and Tadej Debevec, Ph.D. The topics presented included kinesiology as a science in the field of a healthy and active lifestyle, transfer of knowledge from space research to earth research, research models in aging and motor inactivity, as well as cardiovascular adaptations in extreme living environments such as hypoxia and long-term horizontal bed rest / physical inactivity. In the afternoon, the participants visited the Mediterranean Health Centre where the content of sports diagnostics and rehabilitation was introduced. The participants were able to check their motor skills and receive an interpretation of their results. The afternoon activities included the visit to Bonifika Sports Park and the PANGeA Active Park for the elderly and the new construction of sandy volleyball courts along the Grand Canal. This allowed the students to learn about the spatial possibilities of urban environment for active population in the Municipality of Koper.

The third day of the Summer School was marked by our host lecturers Carlo Reggiani, Ph.D., Marco Narici, Ph.D., and Nandu Goswami, Ph.D. They presented the latest findings of their research in the areas of muscular adaptations from the point of view of muscle fibres and neuromuscular connections and mechanisms of cardiovascular decline in old age. Boštjan Šimunič, Ph.D. showed muscular contractile properties in practice and presented the latest guidelines for muscular potentiation, peripheral and central fatigue, and the muscular adaptations that occur in the process of normal and pathological aging. In the afternoon, the participants were invited to rowing in a multi-seat canoe.

Gianni Biolo, Ph.D., started the fourth day with his lecture on the meaning of a healthy diet during all periods of life. The lecture was followed by Milena Bučar, Ph.D., and Bojan Butinar, Ph.D. who highlighted the importance of Mediterranean diet and micronutrients for a healthy and active lifestyle. This was followed by a workshop on preparation of a healthy Mediterranean meal and some other sports activities. The afternoon activity included a cycling trip to Sečovelje salt pans, combining sports and nutrition in practice.



The fifth day of the Summer School focused on neuroscience. Anita Hokelmann, Ph.D., and Kathrine Rehfeld, Ph.D., lectured on neuro-plasticity of the brain in cyclic and acyclic movements. Later on, Uroš Marušič, Ph.D. presented the findings of his research in the field of motion-cognitive interventions aiming to improve functional and cognitive abilities of older population. In the afternoon, Anita Hokelmann, Ph.D., and Kathrine Rehfeld, Ph.D. presented the practical content of motion learning and new guidelines for dance to promote neuro-plasticity of the brain. The day wrapped up with Nordic walking workshop. Through the activity, the participants were discovering Fiesa and the slopes of Pacug with stunning views of the Strunjan bay.

The sixth day of the Summer School included theoretical presentations on the treatment of patients after a stroke. Pietro Paolo Battaglini, Ph.D., presented the latest applications of neuro-feedback methods for BCI: brain-computer interfaces. The lecture was followed by Enrico Tongiorgi Ph.D. who introduced the Memori-net project where new guidelines for the treatment of patients after stroke are being formulated. The theoretical part was concluded by Paolo Manganotti, Ph.D. with an outline of treatments for patient after a stroke. Afternoon workshops were carried out by Uroš Marušič, Ph.D. and Boštjan Šimunič, Ph.D. The former presented the importance of measuring brain activity while simultaneously measuring equilibrium and walking for the needs of rehabilitation, while the latter focused on handling functional abilities with the help of simple and advanced measuring equipment. The last evening brought the participants to a final gathering, collecting impressions and establishing new friendships in the pleasant ambient of summertime Piran.

On the last day of the HALS2018 Summer School, participants presented the results of the whole-day measurement of motion / sports activity and passed a written and oral exam.

Given the encouraging feedback from the participants and the very successful organization of the first HALS2018 Summer School, the organizers suggested the date for the second HALS2019 Summer School, which is to be organized between 15th and 21st July, 2019.

We look forward to your participation.

Uroš Marušič and Saša Pišot

POLETNA ŠOLA O ZDRAVEM IN AKTIVNEM ŽIVLJENJSKEM SLOGU »HALS – HEALTHY AND ACTIVE LIFESTYLE 2018«

Piran, Slovenija, 3.–9. september 2018

Poletna šola HALS2018 je potekala v tednu od 3. do 9. septembra 2018 in bila zelo uspešno organizirana s strani Znanstveno-raziskovalnega središča Koper in Evro-sredo-zemske univerze EMUNI. Na poletni šoli so sodelovali številni priznani predavatelji iz Slovenije, Italije, Avstrije in Nemčije.

Prvi dan je dr. Boštjan Šimunič predstavil pozitivne aspekte in hkrati omejitve tehnologije merjenja količine in intenzivnosti gibalne/športne aktivnosti. Udeleženci poletne šole so prejeli ActiGraph pospeškometre in jih nosili vse do zadnjega dne poletne šole, ko so podatke analizirali in prikazali v končnem poročilu.

V drugem dnevu poletne šole HALS2018 so se v teoretičnem delu zvrstili predavatelji dr. Rado Pišot, dr. Marco Narici, dr. Pietro di Prampero in dr. Tadej Debevec. Predstavili so tematike umestitve kineziologije kot vede v področje zdravega in aktivnega življenjskega sloga, prenosa znanj iz vesoljskih raziskav na raziskave na Zemlji, raziskovalnih modelov pohitrenega staranja in gibalne neaktivnosti ter srčno-žilnih adaptacij v ekstremnih življenjskih okoljih, kot so hipoksija in dolgotrajno horizontalno ležanje/gibalna neaktivnost. V popoldanskem času so udeleženci obiskali Mediteranski center zdravja, kjer jim je bila predstavljena vsebina športne diagnostike in rehabilitacije. Na najnovejših napravah so udeleženci lahko preverili svoje gibalne sposobnosti in prejeli ustrezna poročila ter interpretacijo rezultatov. V sklopu popoldanskih aktivnosti pa so si ogledali še Športni park Bonifika z Aktivni gibalnim parkom PANGeA za starejše ter novogradnjo peščenih igrišč za odbojko ob kanalu Grande ter ob tem spoznavali prostorske možnosti urbanega okolja za aktivno prebivalstvo v Mestni občini Koper.

Poletna šola je v tretjem dnevu gostila dr. Carla Reggianija, dr. Marca Naricija in dr. Nanduja Goswamija. Predavatelji so podali najnovejše ugotovitve svojega raziskovalnega področja in s tem udeležencem predstavili področja mišičnih adaptacij z vidika mišičnih vlaken in živčno-mišičnih povezav ter mehanizme srčno-žilnega upada v starosti. S praktičnega vidika je dr. Boštjan Šimunič prikazal meritve mišičnih kontraktilnih lastnosti in podal zadnje smernice mišične potenciacije, perifernega in centralnega utrujanja ter nasploh mišičnih adaptacij, ki se zgodijo v procesu normalnega in patološkega staranja. Popoldansko aktivnost pa so popestrili z veslanjem v večsedežnem kanuju.

Dr. Gianni Biolo je pričel s predavanjem četrtega dneva, v katerem je podal pomen zdrave prehrane v vseh obdobjih življenja. Sledili sta predavanji dr. Milene Bučar in dr. Bojana Butinarja, ki sta izpostavila pomen mediteranske prehrane in mikronutrientov za zdrav in aktivni življenjski slog. Sledila je delavnica priprave zdravega mediteranskega obroka in gibalne/športne aktivnosti. Popoldansko aktivnost pa smo začinili še s kolesarskim izletom v Sečoveljske soline in tako združili gibalno aktivnost in prehrano.

Peti dan poletne šole je bil osredotočen na nevroznanstvene vsebine. Dr. Anita Hokelmann in Dr. Kathrine Rehfeld sta predavali o nevro-plastičnosti možganov pri cikličnih in acikličnih gibanjih. Nadaljeval je dr. Uroš Marušič, ki je predstavil ugotovitve raziskav na področju gibalno-kognitivnih intervencij za izboljšanje funkcionalnih in kognitivnih sposobnosti starejše populacije. V popoldanskem času sta Dr. Anita Hokelmann in Dr. Kathrine Rehfeld predstavili praktične vsebine gibalnega učenja in nove smernice učenja plesa za spodbujanje nevro-plastičnosti možganov. Aktiven dan se je zaključil z delavnico nordijske hoje, kjer smo poleg tehnike nordijske hoje spoznavali še Fieso in klifnata pobočja Pacuga s čudovitimi pogledi na Strunjanski zaliv.

Šesti dan poletne šole je bil namenjen teoretičnim predstavitvam obravnave pacientov po možganski kapi. Dr. Pietro Paolo Battaglini je prikazal najnovejše aplikacije nevro-feedback metod za potrebe komunikacij med človekom in robotom (»BCI: brain-computer interfaces«). Nadaljeval je dr. Enrico Tongiorgi, ki je predstavil projekt Memori-Net, kjer se oblikujejo nove smernice obravnave pacientov po možganski kapi. Teoretični del je zaključil dr. Paolo Manganotti z orisom problematike obravnave pacienta po možganski kapi. Popoldanske delavnice sta vodila dr. Uroš Marušič in dr. Boštjan Šimunič. Dr. Marušič je prikazal pomen merjenja možganske aktivnosti med sočasnim merjenjem ravnotežja in hoje za potrebe rehabilitacije, dr. Šimunič pa je predstavil obravnavo funkcionalnih sposobnosti s pomočjo enostavne in napredne merilne opreme. Zadnji večer pred zaključkom so se udeleženci srečali na zaključnem druženju, ker so ob zakuski in prijetnem glasbenem ambientu poletnega Pirana zbirali vtise in spletali nova prijateljstva.

Zadnji (sedmi) dan poletne šole HALS2018 so udeleženci predstavili rezultate celotenskega merjenja gibalne/športne aktivnosti ter opravili pisni in ustni izpit.

Zaradi spodbudnih povratnih informacij udeležencev in nasploh zelo uspešno organizirane prve poletne šole HALS2018, so organizatorji predstavili datum druge poletne šole HALS2019, ki bo organizirana v tednu od 15. do 21. julija 2019. Vljudno vabljeni.

Uroš Marušič in Saša Pišot