**Progress ICAD approved analysis proposals (updated Jan 23)**

Note: Shaded proposals have been completed (published), proposals in italics have been discontinued.

**Summary: 62 proposals approved** (32 published/in press; 3 in submission; 1 in circulation; 13 in progress; 13 discontinued)

| **Proposal No** | **Lead applicant** | **On behalf of partner** | **Title** | **Approval date** | **Date release** | **Expire date protected access** | **Status** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | L Sherar | Steering Committee | International children's accelerometry database (ICAD): Design and methods. | NA (core) | NA | NA | **Published**  *BMC PH 2011* |
| 2 | U Ekelund | SPEEDY | Combined Associations of Moderate-to-Vigorous Physical Activity and Sedentary Time with Cardio-Metabolic Risk Factors in Youth (ICAD) | NA (core) | NA | NA | **Published**  *JAMA 2013* |
| 3 | L Sherar | Steering Committee | The association between parental education, weight status and objectively assessed physical activity and sedentary behaviour in youth: A cross country comparison | NA (core) | NA | NA | **Published**  J Epi Comm Health 2016 |
| 4 | A Cooper | PEACH | A cross country comparison of body mass index, accelerometer assessed physical activity and sedentary behaviour of children and adolescents | NA (core) | NA | NA | **Published**  IJBNPA 2015 |
| 5 | S Kwon | Iowa Bone Dev Study | Tracking of accelerometry-measured physical activity during childhood: ICAD pooled analysis | Mar-11 | Sep-11 | NA | **Published**  *IJBNPA 2012* |
| *~~6~~* | *G Cardon* | *Belgium Pre-school Study* | *Are patterns of sedentary behaviours and physical activity associated with weight status in preschool aged children?* | *Mar-11* | *Sep-11* | *Sep-12* | *Discontinued* |
| 7 | K Wijndaele | PEACH | Breaks in sedentary time and cardiovascular risk in children and youth. | May-11 | Apr-13\* | Jul-17# | **Published**  *IJBNPA 2019* |
| *~~8~~* | *A Timperio* | *CLAN/HEAPS* | *Independent associations between TV viewing and weight status and cardio-metabolic health among children.* | *Feb-12* | *Apr-13\** | *Apr-18#* | *Discontinued* |
| *~~9~~* | *N Ridgers* | *CLAN/HEAPS* | *Physical activity levels according to different cut-point thresholds and associations with health outcomes.* | *Feb-12* | *Apr-13\** | *Apr-18#* | *Discontinued* |
| *~~10~~* | *J Salmon* | *CLAN/HEAPS* | *Is children’s TV viewing and computer use more strongly associated with light-intensity than moderate- to vigorous-intensity physical activity? (Brief report)* | *Feb-12* | *Apr-13\** | *Apr-18#* | *Discontinued* |
| *~~11~~* | *U Ekelund* | *SPEEDY* | *Does physical activity moderate or modify the association between birth weight and cardio-metabolic health outcomes.* | *Feb-12* | *May-13* | *Aug-16#* | *Discontinued – re-applied for ICAD2 data (#35)* |
| 12 | R Pate / J Mitchell | TAAG | Physical Activity and Pediatric Obesity: a Quantile Regression Analysis. | Feb-12 | Apr-13\* | Jan-15# | **Published**  *MSSE 2016* |
| 13 | U Ekelund / M Hildebrand | Open access | Associations between birth weight, waist circumference and sedentary time – a mediation analysis. | Mar-12 | May-13 | May-14 | **Published**  *AJCN 2015* |
| 14 | A Atkin | Open access | TV viewing and computer use in children and adolescents: A descriptive epidemiology using the International Children’s Accelerometry Database | Jan-13 | May-13 | May-14 | **Published**  *AJPM 2014* |
| 15 | R Pate / J Moore | Open access | Associations of Vigorous-intensity Physical Activity with Biomarkers in Youth | Jun-13 | Jul-13 | May-15# | **Published**  *MSSE 2017* |
| 16 | A Cooper / A Goodman | Open access | Seasonal variation in physical activity and day length | Jun-13 | Jul-13 | Jul-14 | **Published**  *IJBNPA 2014* |
| 17 | K Corder | Open access | Characterising age-related differences in the ratios of vigorous physical activity and moderate physical activity | Oct-13 | Oct-13 | Apr-15# | **Published**  *PMR 2016* |
| 18 | B Hansen | Open access | Cross-sectional associations of reallocating time between sedentary and active behaviours on cardiometabolic risk factors in young people: an International Children’s Accelerometry Database (ICAD) analysis | Jan-14 | Jan-14 | May-17# | **Published**  *Sports Med 2018* |
| *~~19~~* | *B Hansen* | *Open access* | *Does age affect the magnitude of associations between sporadic and bouted time spent in moderate-to-vigorous intensity physical activity and adiposity and markers of cardio-metabolic risk factors in children and adolescents?* | *Jan-14* | *Jan-14* | *Mar-16#* | *Discontinued – re-applied for ICAD2 data (#37)* |
| 20 | K Brazendale | Open access | Not all minutes are created equal: Rosetta Stone Part 2 | Mar-14 | Mar-14 | Mar-15 | **Published**  *JSAMS 2015* |
| 21 | F Harrison | Open access | Weather and physical activity; how and why do relationships vary between countries? | Sep-14 | Oct-14 | Mar-16# | **Published**  IJBNPA 2017 |
| *~~22~~* | *E Murtagh* | *Open Access* | *The relationship between inverse BMI, physical activity and cardiometabolic risk in children and young people* | *Mar-15* | *Apr-15* | *Apr-16* | *Discontinued* |
| *~~23~~* | *E Murtagh* | *Open Access* | *The relationship between inverse BMI and physical activity in children and young people* | *Mar-15* | *Apr-15* | *Apr-16* | *Discontinued* |
| 24 | J Tarp / S Brage | Open Access | Physical activity patterns and metabolic health in youth | May-15 | May-15 | Jul-17# | **Published**  *IJO 2018* |
| 25 | J Tarp | Open Access | Assessing mediation by adiposity in the association between physical activity and cardiometabolic risk factors in youth – A cross-sectional mediation analysis | Nov-15 | Feb-16 | Feb-17 | **Published**  *IJO 2017* |
| 26 | N Kuzik | Open Access | The role of physical activity and sedentary behaviour in metabolic health of children across different weight statuses | Feb-16 | Mar-16 | Mar-17 | **Published**  *Obesity 2017* |
| *~~27~~* | *S Kriemler* | *KISS* | *ICAD preschool data for comparison to establish Swiss physical activity guidelines for preschool children (from birth to the fifth year of life)* | *Apr-16* | *May-16* | *May-17* | *Discontinued* |
| 28 | J Steene-Johannessen | Open Access | Variation in objectively measured physical activity and sedentary behaviors across European youth | Apr-16 | Oct-16 | Oct-18# | **Published**  *IJBNPA 2020* |
| 29 | E van Ekris | Open Access | Tracking of total sedentary time and prolonged uninterrupted sedentary time during childhood and adolescence | Jul-16 | Oct-16 | Oct-18# | **Published**  *IJBNPA 2020* |
| **ICAD2 proposals (release from Mar 2017)\*\*** | | | |  |  |  |  |
| 30 | S Kwon | IBDS | A closer look at the relationship among accelerometer-based physical activity metrics | Jan-17 | Jun-18\*\* | Jun-19 | **Published**  *IJBNPA 2019* |
| 31 | A Atkin | SPEEDY | Age related change in physical activity during childhood and adolescence | Jan-17 | Apr-18\*\* | May-23\* | In progress |
| 32 | U Ekelund/ J Tarp | Open access | Independent prospective associations between sedentary time, light, moderate and vigorous intensity physical activity with cardio-metabolic risk factors and adiposity in young people | Jan-17 | Apr-18\*\* | Jun-23\* | In progress (new release Sept 20) |
| ~~33~~ | *J Tarp* | *EYHS Denmark* | *Prospective associations between PA and anthropometrical indices of adiposity – examining sources of heterogeneity in population and study characteristics* | *Jan-17* | *Sep-18* | *Sep-19* | *Discontinued (combined with #32)* |
| 34 | E Aadland | CoSCIS | Uncovering relationships between physical activity and metabolic health in children and adolescents by means of multivariate pattern analyses | Jan-17 | Apr-18\*\* | Apr-19 | **Published**  *Prev Med 2020* |
| 35 | GP Bernhardsen | Open Access | Birth weight and cardio-metabolic risk factors in youth- does physical activity matter? (update of #11) | Jan-17 | May-17 | Oct-19\* | **Published**  *IJO 2020* |
| 36 | E van Sluijs | SPEEDY | Is ubiquitous car ownership driving physical inactivity in young people? | Jan-17 | Apr-18\*\* | Apr-19 | In submission |
| *~~37~~* | *BH Hansen* | *Open access* | *Does age affect the magnitude of associations between sporadic and bouted time spent in moderate-to-vigorous intensity physical activity and adiposity and markers of cardio-metabolic risk factors in children and adolescents? (update of #19)* | *Jan-17* | *Apr-18\*\** | *Apr-19* | *Discontinued* |
| 38 | P Collings | Open access | Sleep dimensions and cardiometabolic risk markers: analysis of mediation by physical activity and sedentary time in the International Children’s Accelerometry Database | Jan-17 | Apr-20 | Apr-21 | **Published**  *Ped Obes 2021* |
| 39 | M Renninger/ U Ekelund | Open access | Is objectively measured sedentary time and physical activity associated with the metabolic syndrome in children and adolescents? | Apr-17 | May-17 | May-18 | **Published**  *Ped Obes 2019* |
| 40 | A Atkin | No data | Harmonising data on the correlates of physical activity and sedentary behaviour in young people: Methods and lessons learnt from the International Children's Accelerometry Database (ICAD) | Nov-16 | NA | NA | **Published**  *IJBNPA 2017* |
| *~~41~~* | *H Hussein* | *Open access* | *Estimating the existence and direction of a causal relationship between activity levels and obesity in children* | *Jul-17* | *Aug-17* | *Aug-18* | *Discontinued* |
| 42 | M Orme | Open access | Reactivity to accelerometer measurement of children and adolescents: The International Children’s Accelerometery Database | Oct-17 | May-18\*\* | Jun-23\* | In progress |
| 43 | S Costa | Open access | The relationship between physical activity, sedentary time, and weight in preschool aged children: Analysis from the International Children’s Accelerometry Database | Oct-17 | May-18\*\* | Jun-23\* | In progress |
| 44 | K Dias | Open access | Levels and determinants of sedentary, light and moderate to vigorous physical activity levels in pre-school aged children | Nov-17 | May-18\*\* | May-19 | **Published**  *IJERPH 2019* |
| 45 | DR Pereira da Silva | Open access | To examine the joint associations of different intensities (light, moderate and vigorous) of physical activity and obesity status with metabolic risk in youth | Jan-18 | May-18\*\* | May-19 | **Published**  *IJO 2020* |
| 46 | PB Júdice | Open access | Can physical activity offset the harmful effects of specific sedentary patterns? A trans-national prospective study from childhood to adulthood (ICAD 2) | Jan-18 | May-18\*\* | May-19 | **Published**  *J Pediatrics 2020* |
| 47 | C Gammon | Open Access | Interpretation of the youth physical activity guidelines: implications for compliance estimates and associations with health indicators | Jun-18 | Jun-18 | Jun-19 | **In press**  *MSSE* |
| 48 | R Love | Open Access | Socio-economic patterning of physical activity intensities: are the current global recommendations of physical activity appropriate? | Aug-18 | Sep-18 | Sep-19 | In submission |
| 49 | M Chinapaw | Open access | Development and validation of an analysis method for sophisticated PA and SB sequence maps using accelerometer data pooled into an international database | Sep-18 | In progress |  | Further harmonisation planned |
| 50 | M McNarry | Open access | Patterns of objectively measured sedentary time and physical activity during and after primary and secondary school | Jan-19 | Feb-19 | Feb-21\* | In progress |
| 51 | M McNarry | Open access | Determining clustered cardiometabolic risk variables in youth using principal component analysis | Jan-19 | Feb-19 | Feb-21\* | In progress |
| 52 | N Pearson | Open access | Investigating the home environmental and behavioural pathways between maternal education and changes in children’s objective physical activity and sedentary time: a structural equation modelling analysis | May-19 | Jul-20 | May-23\* | In progress |
| 53 | K Brazendale | Open access | Children’s Physical Activity During Weekdays versus Weekend Days: Testing the Structured Days Hypothesis (SDH) | May-19 | Jun-19 | Jun-20 | **Published**  *IJBNPA 2021* |
| *~~54~~* | *P Collings* | *Open access* | *Screen type and time associations with cardiometabolic risk markers in a large international sample of children* | *Sep-19* | *Apr-20* | *Apr-21* | *Discontinued* |
| 55 | L Sherar | Open access | Investigating the physical activity, sleep, sedentary behaviour and dietary behavioural pathways between breakfast consumption and BMI: a structural equation modelling analysis | Sep-19 | Jul-20 | Jul-21 | In circulation |
| 56 | E Ikeda | Open access | Assessing the contribution of active travel, organised physical activity and physical education to moderate-to-vigorous physical activity in children and adolescents: A cross-sectional and prospective analysis | Dec-19 | Feb-21 | Feb-22 | **Published**  *IJBNPA 2022* |
| 57 | M Standage | Open access | Cross-sectional and prospective associations between the daily composition of children’s movement behaviours and markers of metabolic risk: A compositional isotemporal substitution analysis | Apr-20 | Sep-20 | Feb-22\* | In progress |
| 58 | Y Al-Ajlouni | Open access | Prospective associations between active school travel and objectively-measured physical activity patters in children and adolescents | Apr-20 | Apr-20 | Apr-22\* | In progress |
| 59 | A Werneck | Open access | Association of active commuting to school with changes in different physical activity intensities and sedentary time: The ICAD Multi-country Study | Apr-20 | Apr-20 | Apr-21 | **Published**  *Prev Med 2021* |
| 60 | H Arnott | Open access | Using Compositional Data Analysis to Investigate Children’s Patterns of Movement Behaviour and Association with Cardio-metabolic Outcomes in the International Children’s Acclerometry Dataset (ICAD) | Aug-20 | Feb-21 | Feb-22 | In progress |
| 61 | M Stavnsbo | Open access | Latent Profile Analysis of Physical Activity and Cardiometabolic Risk Markers in a Large International Sample of Children | Apr-21 | May-21 | Aug-23\* | In progress |
| 62 | J Westra | Open access | Age- and behaviour-specific correlations between sedentary behaviour and physical activity | May-21 | Jun-21 | May-23\* | In progress |
| 63 | E Murtagh | Open access | 24-hour movement behaviours and associations with metabolic health, parental and family support in children. | Mar-22 | Jun-22 | Jun-23 | In progress |
| 64 | L Kretschmer | Open access | Investigating factors related to the variation of objectively measured physical activity in a large international sample of children. | Mar-22 | May-22 | May-23 | In circulation |

\*: Due to reprocessing of accelerometry data, all data releases were renewed in April 2013.

\*\*: Due to updating of the ICAD2, all ICAD2 data releases were re-released Apr/May 2018.

#: Extension approved