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Podium Session: Strength & Conditioning

Chair: Laura-Anne Furlong

THE EFFECT OF SUB-MAXIMAL LOADS ON TRUNK POSTURE DURING THE CLEAN IN COMPETITIVE WEIGHTLIFTERS

Szilvia Kiraly, Staffordshire University, UK

THE PRE-EXHAUSTION METHOD SEEMS INEFFECTIVE TO INCREASE ELECTROMYOGRAPHIC ACTIVITY

Rafael A. Fujita, University of São Paulo, Brazil

RELIABILITY AND COMPARISON OF FORCE CHARACTERISTICS OF THE NORDIC HAMSTRING EXERCISE

Steven Ross, Edgehill University, UK

THE INFLUENCE OF DYNAMIC AND PLYOMETRIC EXERCISES ON KNEE JOINT MOTION FOR COUNTERMOVEMENT JUMP PERFORMANCE

Marco V. Campana Bonilla, Dongguan University of Technology, China

COMPARISON OF THE BILATERAL AND UNILATERAL BARBELL HIP THRUST

Jac Lloyd Palmer, Cardiff Metropolitan University, UK

DOES HIP CONTRACTURE EFFECT ANTERIOR PELVIC TILT CHANGES DURING SQUATTING?

Bryan Christensen, North Dakota State University, USA

PLANTARFLEXOR ELECTROMECHANICAL DELAY: INFLUENCE OF CONTRACTION TYPE AND MUSCLE-TENDON UNIT LENGTH

Evan Crotty, University of Limerick, Ireland

ADAPTATIONS IN TRICEPS SURAE MUSCLE-TENDON UNIT MECHANICAL PROPERTIES IN ELITE JUMPERS

Gaspar Epro, London South Bank University, UK



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Podium Session: Injury & Rehabilitation

Chair: Helen Bayne

CHANGES IN LOWER EXTREMITY BIOMECHANICS DUE TO A BASKETBALL-SPECIFIC FATIGUE PROTOCOL

Peng Lu , Beijing Sport University, China

CASE STUDY OF AN ACCIDENTAL ANKLE TWIST: A KINEMATIC ANALYSIS USING FUNCTIONAL DATA ANALYSIS

Manuela Paulina Trejo Ramírez, Sheffield Hallam University, UK

BIOMECHANICAL ANALYSIS OF SCHWINGEN (SWISS WRESTLING) TO GAIN INSIGHTS INTO HEAD, NECK AND KNEE INJURY RISKS

Silvio Lorenzetti, Swiss Federal Institute of Sport, Switzerland

FALLING AS A STRATEGY TO DECREASE KNEE LOADING DURING LANDINGS

Boyi Dai, University of Wyoming, USA

EFFECT OF FATIGUE ON KNEE KINEMATICS AND KINETICS DURING SIDESTEP CUTTING AND SINGLE LEG LANDING IN FEMALE HANDBALL ATHLETES

Bruno Bedo, University of São Paulo, Brazil

LANDING ASYMMETRY IN BACK TUCKED SALTOS AND THE EFFECT OF TAKEOFF ASYMMETRY

Nicolas Hallgrimson, University of Saskatchewan, Canada

THE EFFECT OF AUTOGRAFT TYPE ON PROGRESSION OF PHASE-SPECIFIC LOADING ASYMMETRIES IN THE COUNTER-MOVEMENT JUMP FROM SIX TO NINE MONTHS POST-ACLR

Jill Costley, Sports Surgery Clinic, Ireland

WHOLE-BODY CHANGE OF DIRECTION TASK EXECUTION ASYMMETRIES AFTER ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION

Katherine Daniels, Sports Surgery Clinic, Ireland



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Podium Session: Hitting & Kicking

Chair: Kevin Ball

ISOKINETIC STRENGTH PROFILE OF FEMALE SOCCER PLAYERS: BETWEEN LIMB COMPARISONS.

Paul A. Jones, University of Salford, UK

TIME-COURSE OF COUNTERMOVEMENT JUMP VARIABLES DURING RECOVERY FROM MATCH FATIGUE: ANALYSIS OF AN INDIVIDUAL ATHLETE

Nicholas Linthorne & Antonia Gregoriou, Brunel University London, UK

CHOICE OF DATA PROCESSING INFLUENCES PRACTICAL INTERPRETATION OF KICK LEG JOINT KINETICS DURING THE IMPACT PHASE OF BALL KICKING

Simon Augustus, University of Chichester, UK

RELATIONSHIPS BETWEEN WHOLE-BODY KINEMATICS AND BADMINTON JUMP SMASH RACKET HEAD SPEED

Romanda Miller, University of East London, and Loughborough University, UK

KINEMATICS OF MEN STRIKING MOTION IN EIGHTH DAN KENDO PLAYERS

Naoki Murase, Chukyo University, Japan

BACKSWING LENGTH AND SWING PATH TENDENCIES FROM AMATEUR GOLFERS

Boris Bacic, Auckland University of Technology, New Zealand

THE EFFECT OF DELIVERY METHOD ON CRICKET BATTING UPPER-BODY KINEMATICS

Stuart A. McErlain-Naylor, University of Suffolk, UK

BIOMECHANICAL INVESTIGATION OF THE KIZAMI TSUKI IN KARATE ATHLETES

Riccardo Annibali & Valentina Camomilla, University of Rome, Italy

BIOMECHANICAL IMPLICATIONS OF THE BATTING BACKLIFT TECHNIQUE IN CRICKET: A COLLATION OF CURRENT EVIDENCE

Habib Noorbhai, University of Johannesburg, South Africa



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Podium Session: Methods & Equipment

Chair: Mark Robinson

[A PRACTICAL OPEN-SOURCE COMPARISON OF DISCRETE AND CONTINUOUS BIOMECHANICAL ANALYSIS TECHNIQUES](#)

Stuart A. McErlain-Naylor, University of Suffolk, UK

[COMPARISON OF CONCENTRIC MOVEMENT VELOCITY WITH PUSH BAND 2.0 AND VICON MOTION CAPTURE DURING RESISTANCE EXERCISES](#)

Edward Pelka, Miami University, USA

[THE USE OF UPPER LIMB PROSTHESIS OPTIMIZES LONG JUMP APPROACH KINEMATICS: A CASE STUDY OF AN ELITE T47 ATHLETE](#)

Apostolos Theodorou, National and Kapodistrian University of Athens, Greece

[THE EFFECT OF STEP WIDTH CONTROL ON LOAD CARRIAGE ECONOMY](#)

Sean Hudson, University of Huddersfield, UK

[THE EFFECT OF MARKER PLACEMENT ERROR ON THE INTERPRETATION OF INTER-LIMB DIFFERENCES IN FRONTAL PLANE KNEE LOADING DURING A CHANGE OF DIRECTION TASK](#)

Ciaran McFadden, University of Roehampton, UK

[USING COMPUTER VISION AND DEEP LEARNING METHODS TO CAPTURE SKELETON PUSH START PERFORMANCE CHARACTERISTICS](#)

Laurie Needham, University of Bath, UK

[AUTOMATED MULTI-FEATURE SEGMENTATION OF TREADMILL RUNNING](#)

Mathew Schwartz, New Jersey Institute of Technology, USA

[COORDINATION VARIABILITY IN OVERGROUND RUNNING AND WALKING AT PREFERRED AND FIXED SPEEDS](#)

Hannah Wyatt (Auckland University of Technology, New Zealand)



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Podium Session: Pedagogy & Skill Acquisition

Chair: ChengTu Hsieh

POSTURAL STABILITY AND ANTICIPATORY POSTURAL ADJUSTMENTS PERFORMANCES AFTER GENERAL MUSCLE FATIGUE IN TRAINED AND UNTRAINED ADULTS

Hui Lyu, Zhejiang University, Zhejiang University, China

VISUALISING THE EFFECT OF SAMPLE SIZE ON DESCRIPTIVE STATISTICS: WITH APPLICATION TO A COUNTERMOVEMENT JUMP TEST

Nick Linthorne, Brunel University London, UK

SPATIAL SPEED-ACCURACY TRADE-OFF IN INTERNATIONAL BADMINTON PLAYERS PERFORMING THE FOREHAND SMASH

Idrees A. Afzal, Loughborough University, UK

MOVEMENT VARIABILITY IN THE SPINAL KINEMATICS OF FAST BOWLERS

Corey Perrett, University of Otago, New Zealand

CHARACTERISTICS OF A WELL-DONE BREAKING PITCH IN BASEBALL

Hirota Nakashima, Chukyo University, Japan

THE CONTRIBUTION OF BODY CENTER OF MASS VELOCITY TO BASKETBALL BALL RELEASE VELOCITY ACROSS SHOT DISTANCES

Casey Wiens, University of Southern California, USA

BIOMECHANICAL STUDY ON DIFFERENT DIRECTIONS FOR RUNNING JUMPS FOCUSED ON THE TAKEOFF PREPARATION

Yuki Suzuki, Chukyo University, Japan

UNDERGRADUATE STUDENT EXPERIENCES OF PUBLISHING BIOMECHANICS RESEARCH

Stuart A. McErlain-Naylor, University of Suffolk, UK

TRANSVERSE PLANE HEAD-TRUNK COORDINATION DURING ANTICIPATED AND UNANTICIPATED SIDESTEPPING TASKS

Sam R. Zeff, University of Massachusetts Amherst, USA



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Podium Session: Athletics & Swimming

Chair: Shinji Sakurai

ANY OLYMPIC JUMP THAT WOMEN CAN DO, MEN CAN DO NEARLY 20% BETTER

Emily McClelland, Southern Methodist University, USA

HYDRODYNAMIC RE-EXAMINATION OF UNDERWATER NON-PROPULSIVE PHASE IN FRONT CRAWL

Daiki Koga, University of Tsukuba, Japan

STRENGTH-VELOCITY RELATIONSHIP OF RESISTED SWIMMING: A REGRESSION ANALYSIS

Francisco Cuenca-Fernández, University of Granada, Spain

CONTRIBUTION OF NEW START INFORMATION SYSTEM PROTOTYPE TO THE FALSE START DETECTION IN ATHLETICS

Matthieu Milloz, University of Limerick, Ireland

INTER-LIMB COORDINATION DURING SPRINT ACCELERATION

Helen Bayne, University of Pretoria, South Africa

THE EFFECT OF POLO DRILL SWIMMING ON FREESTYLE KINEMATICS: A PILOT STUDY

Victoria Brackley, Victoria University, Australia

DIFFERENCES IN REACTION FORCE-TIME CHARACTERISTICS EXPERIENCED BY FEMALES WHEN RUNNING ON A TRACK AT DIFFERENT SPEEDS

Harper E. Stewart, University of Southern California, USA

THE RELATIONSHIP BETWEEN TRUNK KINEMATIC VARIABLES AND UNDERWATER UNDULATORY SWIMMING PERFORMANCE IN COMPETITIVE SWIMMERS

Takahiro Tanaka, Ritsumeikan University, Japan

MULTI-SEGMENT CONTRIBUTIONS TO INDUCED BALL VELOCITY IN COLLEGIATE BASEBALL PITCHERS

Arnel Aguinaldo, Point Loma Nazarene University, USA

DYNAMICS OF HANDSTAND BALANCE

Hannah Wyatt, Auckland University of Technology, New Zealand



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Poster Session: Motor Control & Rehabilitation

Chair: Liz Bradshaw

MOTOR ENTROPY INFLUENCE ON SPORT RESULTS: USAIN BOLT'S RECORD-BREAKING RACE EXAMPLE

Andrey Pomerantsev, Lipetsk State Pedagogical University, Russia

A NOVEL METHOD FOR COMPARING VECTOR CODING PROFILES

Adam Brazil, University of Bath, UK

THE EFFECT OF ANTICIPATION ON PENULTIMATE STEP STANCE PHASE KINEMATICS IN A RUNNING CHANGE OF DIRECTION MANOEUVRE

Katherine Daniels, Sports Surgery Clinic, Ireland

STEP WIDTH, GLUTEUS MEDIUS ACTIVATION AND POSTURAL SWAY RESPONSES TO A NOVEL GAIT TREATMENT: A PILOT STUDY

Maddison Misiak, Northern Michigan University, USA



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Poster Session: Mixed Topics

Chair: Marcus Lee

CLASSIFICATION OF FOUR DELIVERY STYLES OF PITCHING MOTION IN YOUNG BASEBALL PLAYERS

Tomohisa Miyanishi, Sendai University, Japan

STUDENTS' PERCEPTION ON TEACHING STYLE AND LEARNING OUTCOME

ChengTu Hsieh, California State University, USA

THE BALL ORIENTATIONS USED BY PLACE KICKERS AT THE 2019 RUGBY WORLD CUP AND THEIR ASSOCIATIONS WITH KICK SUCCESS

Sam Jones, Swansea University, UK

EFFECTS OF MAXIMAL STRENGTH ON GROUND REACTION FORCE PATTERNS DURING COUNTERMOVEMENT JUMPS

Michael H. Haischer, Marquette University, USA

RELIABILITY OF A NOVEL PRINTED PIEZORESISTIVE PRESSURE SENSOR

Louise Burnie, Swansea University, UK



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Poster Session: Athletics

Chair: Steffi Colyer

HOW HITTING THE HURDLE AFFECTS PERFORMANCE IN THE 110M HURDLES

Ryo Iwasaki, Tokyo Gakugei University, Japan

THE EFFECT OF VISUAL GAZE LOCATION ON BLOCK-START BIOMECHANICS IN ATHLETICS

Mitsuo Otsuka & Marcus Lee, Singapore Sport Institute, Singapore

AN ANALYSIS OF THE THROWING TECHNIQUE OF COLLEGE MALE JAVELIN THROWERS IN A COMPETITION

Mizuki Makino, Nippon Sport Science University, Japan

PROSTHETIC LEG DESIGN, FORCE PRODUCTION, AND CURVE SPRINT PERFORMANCE: A PILOT STUDY

Ryan S. Alcantara, University of Colorado, USA