

# 20th Congress of the International Federation of Associations of Anatomists

## 5–7 August 2022, Istanbul, Türkiye

### Program Schedule

#### August 5, 2022, Friday

##### Plenary Hall

- 10.00–10.30 **Opening Session**  
Erdoğan Şendemir  
*President of the XX Federative International Congress of Anatomy*
- Piraye Kervancıoğlu  
*President of the Turkish Society of Anatomy and Clinical Anatomy*
- Beverley Kramer  
*President of the International Federation of Associations of Anatomists*

##### Plenary Hall

- 10.30–11.15 **Opening Lecture**  
**Chair:** Erdoğan Şendemir  
Epithelial Barrier Hypothesis for the development of 2 billion allergic, autoimmune, metabolic and neuropsychiatric diseases  
*A. Cezmi Akdiş / Swiss Institute of Allergy and Asthma Research (SIAR), Davos, Switzerland*

- 11.15–11.30 **Break, Visit The Exhibition & Posters**

##### Plenary Hall

- 11.30–13.00 **Chinese Society of Anatomical Sciences Symposium**  
Clinical anatomy new insight in muscular skeleton system  
**Chairs:** Jun Ouyang & Nan Zheng
- The obscure joint – New insights into form-function relationships of the sacroiliac joint  
Niels Hammer
- Anatomical measurement and characteristic of anterior talofibular ligament with its adjacent ligaments in neutral position and plantar flexion  
Jingxing Dai
- The universal existence of myodural bridge complex in vertebrate: an indication of a necessary function  
Nan Zheng
- A multi-stage ensemble network system to diagnose adolescent idiopathic scoliosis  
Xiaohe Li
- Dual efficacy of Fasudil at improving survival and reinnervation of flap through Rho-ROCK-PI3K-AKT pathway  
Zhuang Yuehong
- A 3D visualization layered anatomy for acromial arterial rete and flap design  
Maochao Ding

## Hall 2

- 11.30–13.00 **Symposium**  
Body sourcing for anatomical education and research: experiences from the African Continent  
**Chairs:** Goran Štrkalj & Brendon Billings  
No challenge is insurmountable: dealing with the difficulties of sourcing human bodies on the African continent  
Beverley Kramer
- 
- Cultural practices of South African ethnic groups on the body and their influence on body donation  
Brenda De Gama
- 
- Where is our missing body?  
Amenu Tolera Wirtu
- 
- Sourcing body for anatomy education and research: the Nigerian experience  
Samuel Asala
- 
- Cadavers for education and research: overcoming challenges in Rwanda  
Julien K. Gashegu
- 
- The sources of cadavers between Africa and Eastern Europe  
Brendon Billings

## Hall 3

- 11.30–13.00 **FIPAE Symposium**  
Anatomy visualised  
**Chairs:** Claudia Krebs, Nalini Pather & Paul Rea  
Anatomy through visual-rich social media – Experiences, lessons, and opportunities  
Joyce El-Haddad
- 
- Putting the ‘fun’ back in anatomy fundamentals with tabletop serious games  
Mikaela Stiver
- 
- Deep anatomy observation with touch and drawing: the haptico-visual observation and drawing method  
Leonard Shapiro
- 
- So, you want to create XR – Now, what?  
Claudia Krebs
- 
- Are they learning with immersive VR? A novel assessment tool for cognitive load  
Nalini Pather
- 
- A MSc in medical visualisation and human anatomy  
Paul M. Rea

## Hall 4

- 11.30–13.00 **Chinese Society of Anatomical Sciences Symposium**  
Development, stem cells and cancer  
**Chair:** Zhengquan Yu  
Centriole components' multi-site localization and involvement in spindle assembling and asymmetric positioning in mouse oocyte meiosis  
Wei Ma
- 
- The AMPK–HOXB9–KRAS axis regulates lung adenocarcinoma growth in response to cellular energy alteration  
Jun Zhan
- 
- Lepr<sup>+</sup> mesenchymal cells sense diet to modulate intestinal stem/progenitor cells via leptin-Igf1 axis  
Zhengquan Yu

<b>Hall 5</b>	
11.30–13.00	<p><b>Platform Presentation Session</b>  <b>Chairs:</b> Ayberk Kurt &amp; Erich Brenner                      Thalamus morphology in healthy and disease patients: MRI retrospective study                      Ramada Khasawneh</p> <hr/> <p>Morphology of the temporomandibular joint in skeletal class II and III malocclusion                      Felipe Figueroa</p> <hr/> <p>Frequency of ponticulus posticus in cone beam computed tomography                      Gustavo Matus</p> <hr/> <p>Radiographic evaluation of the morphometric and morphological characteristics of the external occipital protuberance                      Hande Salim</p> <hr/> <p>Physiological intracranial calcifications in children: a computed tomography-based single-center study                      Faiza Al Hajri</p> <hr/> <p>Coexistence of bifid median nerve and persistent median artery: three case reports                      Ekrem Solmaz</p>
13.00–14.00	<b>Break, Visit the Exhibition &amp; Posters</b>
<b>Plenary Hall</b>	
14.00–15.30	<p><b>FICEM Symposium</b>                      Anatomical disciplines as incubators for ethics and professionalism in healthcare education  <b>Chair:</b> Thomas H. Champney                      The dissection room as a transformational education space                      Jon Cornwall</p> <hr/> <p>Reflecting on relational anatomy                      Sabine Hildebrandt</p> <hr/> <p>Histology &amp; neuroanatomy as transducers for ethics and professionalism                      Thomas H. Champney</p>
<b>Hall 2</b>	
14.00–15.30	<p><b>President's Emergent Anatomists Programme Symposium</b>                      Establishing a professional profile and networking as an early career anatomist  <b>Chair:</b> Carol Hartmann                      Becoming involved in academic citizenship: getting involved in societies and networking                      Nalini Pather</p> <hr/> <p>Linking in and getting out of the research gate: developing your online profile                      Jason M. Organ</p> <hr/> <p>Developing your curriculum vitae                      Carol Hartmann</p>
<b>Hall 3</b>	
14.00–15.30	<p><b>Chinese Society of Anatomical Sciences Symposium</b>                      Stem cell in adult tissue development: from reproduction to regeneration  <b>Chairs:</b> Yue Wang &amp; Xuejiang Guo                      Phf2 coordinates ribosome biogenesis and DNA damage response for mouse and human neural stem cell activation                      Jia Feng</p> <hr/> <p>Dynamic mRNA degradome analyses indicate a role of histone H3K4 trimethylation in association with meiosis-coupled mRNA decay in mouse and human oocyte aging                      Qian-Qian Sha</p>

Cell response to microenvironmental mechanical force during development  
Yue Wang

Differential diagnosis and treatment of azoospermia in men  
Xuejiang Guo

#### Hall 4

14.00–15.30 **Korean Association of Anatomists Symposium**

3D printing and digital anatomy

**Chairs:** Beom Sun Chung & Joe Iwanaga

3D and digital technology in clinical anatomy

Joe Iwanaga

The sectioned images and three-dimensional models for digital anatomy

Chung Yoh Kim

The digital transformation and education equality in anatomy learning with female and male 3D anatomy models

Grace Kim

#### Hall 5

14.00–15.30 **Platform Presentation Session**

**Chairs:** Mehmet Üzel & Mehmet Selman Demirci

Intramuscular nerve distribution of the splenius capitis muscle with the modified Sihler's staining technique

Melisa Gülcan

Facial canal morphometry: a technical report

Shavana Govender

Tympanic annulus: clinical implications for endoscopic ear surgery

Selçuk Mülazımoğlu

Anatomical connections among the depressor supercillii, levator labii superioris alaeque nasi, and inferior fibers of orbicularis oculi: implications for variation in human facial expressions

Mi-Sun Hur

Crossing fibers of the depressor septi nasi and orbicularis oris attaching to the medial crura of major alar cartilage: medial crura depressor

Mi-Sun Hur

Ophthalmic artery arising from the middle meningeal artery in South African patients

Bukola Rukayat Omotoso

15.30–15.45 **Break, Visit the Exhibition & Posters**

#### Plenary Hall

15.45–17.15 **Anatomical Society Symposium**

Part to part, part to whole: fitting the pelvis into the evolutionary puzzle of the human body

**Chairs:** Nicole Torres-Tamayo & Shahed Nalla

Understanding the evolution of the human birth canal through geometric morphometrics: insights from a Brazilian contemporary sample

Maria Rita Guedes Carvalho

Application of geometric morphometrics in predicting hominin pelvic morphology

Mayowa T. Adegboyega

A new reconstruction of the pelvis of KNM-WT 15000 reveals new insights into the body shape of Early African Homo erectus

Nicole Torres-Tamayo

**Hall 2**

15.45–17.15

**Panel**

The anatomy of medical terminology

**Chair:** Stephen Russell

Teaching anatomical terminology: a systematic approach

Kyle McLeister

Bridging the gap: anatomical and clinical medical terminology

Amanda Hardman

Notes from a philologist: when the English equivalents of TA terms are inconsistent with the original Latin terms

Stephen Russell

Arteries don't got noses! (and the TA doesn't have "non-concordant adjectives")

Lewis Stiles

Giving the province of Quebec a taste of its own medicine: diversity of dialect in the medical field

Mélanie Houle

Meet the terminologia carcinomatosa: a proposed addition to the TA family

Anjali Sachdeva

**Hall 3**

15.45–17.15

**FICSP Symposium**

Ethical considerations in the publication of anatomy manuscripts

**Chair:** Gülgün Şengül

The ethicality of publishing anatomical research: perspectives from an author, reviewer, and editor

Shane R. Tubbs

Data integrity and ethical publishing behavior in the anatomical sciences

Heather F. Smith

Ethics in experimental animal research

Gülgün Şengül

**Hall 4**

15.45–17.15

**TEPARG Symposium**

Hybridising anatomy education

**Chair:** Joanna Matthan

Learner gain: evaluating learner gain and student satisfaction of teaching anatomy online using 3D digital models as compared to 2D illustrations

Rohan Bhate

Educator perspective: educational sources for distance teaching in anatomy during the Covid-19 pandemic

Erich Brenner

Innovation in imaging: an innovative online resource for learning radiology and anatomy

Safia Khan &amp; Imogen Cowdell

Flexible Assessments: Adopting a flexible approach to professional anatomy spotter exams during Covid

Luisa Wakeling

Dissection post-Covid: the role of cadaveric dissection and hybrid medical education in the post-Covid-19 pandemic era

Hannah Bridgwater

Clinical anatomy solutions: online solutions to the delivery and assessment of a clinical anatomy and medical imaging unit

Ian Johnson

Hall 5	
15.45–17.15	<p><b>Satellite Symposium</b> End-to-end digital technologies as a key efficiency factor in anatomy teaching and learning Yuri Vasiliev</p>
15.45–17.15	<p><b>Platform Presentation Session</b> <b>Chair:</b> Barış Özgür Dönmez A marine collagen-based biomimetic hydrogel recapitulates cancer stem cell niche and enhances progression and chemoresistance in human ovarian cancer Sik Yoon</p> <hr/> <p>In vivo preclinical evaluation of bioprinted human cartilage construct Vladimir Mironov</p> <hr/> <p>Regenerative potential of chondrospheres fabricated from human perichondrium Vladimir Mironov</p>
Plenary Hall	
17.15–18.00	<p><b>Plenary Lecture</b> <b>Chair:</b> Çağatay Barut Pineal region surgery Türker Kılıç / <i>Department of Neurosurgery, Bahçeşehir University, Faculty of Medicine, Istanbul, Turkey</i></p>
Hall 2	
17.15–18.00	<p><b>Plenary Lecture</b> <b>Chair:</b> Ceri Davies Shackled by the great chain: how embryological anatomy had been enrolled for systemic racism and sexism Scott Gilbert / <i>Howard A. Schneiderman Professor Emeritus of Biology, Swarthmore College, Swarthmore, PA, USA</i></p>
18.00–19.00	<p><b>Federative International Committee for the Support of Anatomy Professionals (FICSAP) Annual Meeting</b></p>

## August 6, 2022, Saturday

Plenary Hall	
08.30–10.00	<p><b>Invited Panel</b> <b>Chair:</b> Meltem Bahçelioğlu Anatomy of the clitoris, science meets art Helen O'Connell / <i>Urological Surgeon, Melbourne, Australia</i></p> <hr/> <p>Visualizing the clitoris: a twenty-year journey Levent Efe / <i>Medical illustration Studios, Melbourne, Australia</i></p>
Hall 2	
08.30–10.00	<p><b>Chinese Society of Anatomical Sciences Symposium</b> Multi-model analysis of the brain and neurodegenerative disorders <b>Chairs:</b> Yuchun Tang &amp; Lingzhong Fan Probabilistic atlas of human brainstem pathways and its application Yuchun Tang</p> <hr/> <p>Genetic and phenomic architecture of the human brain torque Lu Zhao</p> <hr/> <p>Uncovering the genetic profiles underlying the intrinsic organization of the the human cerebellum Lingzhong Fan</p> <hr/> <p>Spatial-temporal brain structure change during the progression of sporadic Alzheimer's disease Junjie Zhuo</p>

**Hall 3**

- 08.30–10.00 **Platform Presentation Session**  
**Chairs:** Sergey Dydykin & Ayhan Cömert  
 Anatomy of the suspensory ligament of the penis: does size matters?  
 Leonardo Miguel Vieira Silva
- 
- Abductor pollicis brevis in fetuses: classification, measurements, and surgical implications  
 Saliha Seda Adanır
- 
- Anatomical characteristics of the hip flexion abduction external rotation (FABER) position using magnetic resonance imaging  
 Masahiro Tsutsumi
- 
- A novel approach for quantitative imaging of the seated anatomy of the buttocks using ultrasound  
 Nkhensani Mogale
- 
- Evaluation of the anatomical structures with physical examination and magnetic resonance imaging in ischiofemoral impingement syndrome  
 Ayşe Gamze Özcan
- 
- Morphological and morphometric study of the latissimus dorsi tendon for its transfers in rotator cuff tears  
 Mi-Sun Hur

**Hall 4**

- 08.30–10.00 **Chinese Society of Anatomical Sciences Symposium**  
 Synaptic and circuit plasticity and behavior  
**Chairs:** Yun-Qing Li & Tao Chen  
 Mechanisms underlying descending modulation on pain and negative emotion through the pathway between prefrontal cortex and midbrain  
 Yun-Qing Li
- 
- Glutamatergic synapses from the insular cortex to the basolateral amygdala encode empathic pain  
 Tao Chen
- 
- Roles and neural circuits of the striatum on sleep-wake regulation  
 Xiang-Shan Yuan
- 
- Rostromedial tegmental nucleus nociceptin/orphanin FQ (N/OFQ) signaling regulates anxiety- and depression-like behaviors in alcohol withdrawn rats  
 Rao Fu
- 
- Mechanically evoked defensive attack is controlled by GABAergic neurons in the anterior hypothalamic nucleus  
 Peng Cao

**Hall 5**

- 08.30–10.00 **Platform Presentation Session**  
**Chairs:** Burak Bilecenoğlu & Mert Ocak  
 Evaluation of trachea and bronchi with 3-dimensional reconstruction method in Covid-19 patients  
 Ayşe Erkaya
- 
- Sex-dependent morphometric analysis of sternum on computed tomography images  
 Hande Salim
- 
- Comparison of the cystocolodocal angle in patients with choledocholithiasis and only cholelithiasis  
 Zekiye Karaca Bozdağ
- 
- Differences in the anatomical structure of the uterus between fertile and infertile individuals  
 Betül Sevindik
- 
- Evaluation of coronary artery variations and anomalies with coronary computerized tomographic angiography  
 Nevin Aydın
- 
- Prenatal diagnosis of giant cardiac tumor with fetal echocardiography: two cases  
 Yasemin Özdemir Şahan

## Hall 6

- 08.30–10.00 **Platform Presentation Session**  
**Chairs:** Elisabeth Eppler & Vladimir Mironov  
Protein homeostasis of lung tissue under the influence of *Vipera berus berus* and *Vipera berus nikolskii* poison  
Liudmyla Sokurenko
- 
- STUB1-mediated proteasomal degradation of m6A methyltransferase METTL3 regulates cancer metastasis  
Bin Li
- 
- Stomach secretes estrogen in response to the blood triglyceride levels  
Yuta Yamamoto
- 
- 99m Tc-labeled keratin gold-nanoparticles in a nephron-like microfluidic chip for photo-thermal therapy applications. An ultramicroscopical point of view  
Selenia Miglietta
- 
- Di-(2-ethylhexyl) phthalate triggers proliferation, migration, stemness, and epithelial-mesenchymal transition in human endometrial and endometriotic epithelial cells via the transforming growth factor- $\beta$ /smad signaling pathway  
Yeseon Lim

## Plenary Hall

- 10.00–10.45 **Plenary Lecture**  
**Chair:** Selçuk Tunalı  
Squirt Eis: A sculptural intervention with popsicles in shapes of the female prostate  
Julia Frankenberg / *Sculptural Intervention, Squirt Eis, Berlin, Germany*

### 10.45–11.00 **Break, Visit the Exhibition & Posters**

- 11.00–12.30 **Anatomical Society Symposium**  
Augmented and virtual reality in anatomy  
**Chair:** Matthieu Poyade  
Scaleable, accessible and affordable utilization of extended reality (virtual reality, augmented reality and the metaverse) in surgical education and global health and its scientific rationale  
Jagtar Dhanda
- 
- Medical visualization: from medical art to XR visualization  
Matthieu Poyade
- 
- Using cognitive load theory and visual elements of art to design anatomy learning resources  
Thanasorn Asaswesna

## Hall 2

- 11.00–12.30 **FIPAE Symposium**  
Anatomy and sexism  
**Chairs:** Gabrielle Finn & Nalini Pather  
Welcome and Introduction to the Symposium  
Nalini Pather
- 
- Feminist theory within education  
Megan Brown
- 
- Sex and sexism in anatomy  
Gabrielle Finn
- 
- Female genital cosmetic surgery: the role of anatomical knowledge in decision making  
Jisoo Yoon
- 
- Inspiring and supporting women in Anatomy – Beyond stereotypes  
Yolanda Salinas Álvarez
- 
- Challenging gendered norms: how might we drive change in and through anatomy education  
Nalini Pather



**Hall 3**

11.00–12.30

**ISCAA Symposium**

Recent advances in clinical and applied anatomy: from the bench to clinical practice

**Chair:** Ayhan Cömert

Surprising anatomical facts as a troubleshooter for saphenous nerve block

Georg Feigl

Surgical anatomy for suboccipital retrosigmoid approach

Eyüp Bayatlı

The anatomy and sonoanatomy for ultrasound-guided nerve blocks in the head and neck

Ayhan Cömert

Interdisciplinary clinical anatomy education

Marcela Bezdickova

Erector spinae plane blocks; same block with sonoanatomical differences

Selin Güven Köse

Surgical anatomy for intracranial and intracanalicular course of optic nerve: anatomical comparison of different surgical approaches

Tuğba Moralı Güler

Microsurgical anatomy of the Sylvian fissure

Y. Efe Güner

Ultrasound-guided cervical sympathetic ganglion block: anatomical considerations

Burcu Candan

**Hall 4**

11.00–12.30

**Chinese Society of Anatomical Sciences Symposium**

Brain development and regeneration

**Chairs:** Feng Mei & Sonia R. Mayoral

Long-term intravital single cell tracking under 2-photon microscopy

Ya-Jie Liang

A neural circuit from thalamic paraventricular nucleus to central amygdala for the facilitation of neuropathic pain

Yu-lin Dong

Understanding normal and diseased human basal ganglia using combinatory indexing single nuclei RNA sequencing

Linya You

Crosstalk between astrocytes and oligodendrocytes in early life stress

Jianqin Niu

Poly-L-ornithine reverses the inhibitory effect of fibronectin on oligodendrocyte differentiation and promotes myelin repair

Hui Fu

Neuronal requirements for the initiation of myelination in the CNS

Sonia R. Mayoral

**Hall 5**

11.00–12.30

**Satellite Symposium**

Complete anatomy's female model, a new perspective in anatomy education

Ashton Luxgrant (Medical Writer 3D4Medical) &amp; Mohamed Shahin

11.00–12.30

**Platform Presentation Session****Chair:** Seher Yılmaz

The effect of growth hormone on 6-OHDA induced HEK-YFP-DAT cell line

Özlem Kirazlı

Preventive effects of bone marrow-derived mesenchymal stem cell transplantation in a D-galactose-induced brain aging in rats

Gehan Farouk El Akabawy

Cannabidiol ameliorates lithium chloride pilocarpine-induced seizure, consequent hippocampal damage in acute, latent and chronic phases of epilepsy in animal model  
Olatunji Sunday Yinka

Evaluation of two point discrimination sensation in the hand  
Cevdet Yardımcı

## Hall 6

11.00–12.30

### Platform Presentation Session

**Chairs:** Servet Çelik & Eren Ögüt

Anatomical formation of the sural nerve: descriptive study on a sample of South African cadavers  
Jayshree Harangee

Anatomical investigation of the connection between the accessory nerve and the posterior root of the first cervical nerve using cadaveric dissections  
Jayshree Harangee

Origin and cervicothoracic connections of the cardiac nerves in human fetuses  
Mailén Lucía González

Evaluation of the alteration of morphometry in foramina ovale and spinosum: the contribution of the foramen vesalius  
Michael Kostares

Anatomical variations of foramen of the diaphragma sellae and neighbouring structures: a cadaveric study  
Uğur Berk Akdağ

Dr. Marjorie Ann England: innovative fetal imaging, human morphology educator, researcher & humanitarian pioneering gender shift in medical anatomy  
Brion Benninger

## Plenary Hall

12.30–13.15

### Plenary Lecture

**Chair:** Gülğün Şengül

The human brain anatomy revisited in the light of intraoperative functional mapping in awake patients with gliomas: towards a meta-networking organization of the cerebral connectome  
Hugues Duffau / *Department of Neurosurgery, Gui de Chauliac Hospital, Montpellier University Medical Center, Montpellier, France*

13.15–14.30

**Break, Visit the Exhibition & Posters**

## Break Out / Chat Room (Hall B1)

13.15–14.30

### Open Mic Session: Ethics in Anatomy supported by Federative International Committee for Ethics and Medical Humanities (FICEM)

**Moderators:** Jon Cornwall & Andreas Winkelmann

**Other experts:** Thomas Champney & Sabine Hildebrandt & Goran Straklj

## Plenary Hall

14.30–16.00

### Korean Association of Anatomists Symposium

Anatomy in forensic sciences

**Chair:** Sang-Seob Lee

The applicability of two forensic dental age estimation for Japanese children and the comparison with the Korean population  
Akiko Kumagai

Forensic Anthropology from a practitioner's view  
Reza Gerretsen

The use of alternating light sources for discrimination of bone material in common soil  
Frank van de Goot

Defense POW/MIA Accounting Agency Korean War Identification Project (DPAA KWIP)  
Esther Choo

Thermal alteration and trauma in human bones  
Giovanna Vidoli

**Hall 2**

14.30–16.00

**Symposium**

Animal modelling in the anatomy of human disease

**Chairs:** Busisiwe Maseko & Carmen Falcone

Does preeclampsia lead to autism? An investigation using Sprague Dawley rats

Busisiwe Maseko

Animal models of FASD: important considerations when developing FASD model using animals

Oladiran Olateju

The Zucker diabetic Sprague Dawley (ZDSD) rat and a translational rodent model of type 2 diabetes

Robert Ndou

A Sprague Dawley rat model used to investigate the effects of binge gestational alcohol exposure in skeletal health: is it translational?

Diana Pillay

**Hall 3**

14.30–16.00

**Symposium**

Bone-deep anatomy: from the bench to clinical practice

**Chairs:** Diogo Pais & Diogo Casal

Bone composition in Wistar rats and its composition after infrasound exposure and glucose intolerance

Luísa Zagalo

Assessment of intraosseous arterial vascularization of the L1 vertebral body – Differences between human and Wistar rat

Diogo Moura

Arterial blood supply to the Wistar rat iliac bone

Gonçalo Coluna

Gross and microscopical anatomy of the human medial femoral condyle: new grounds to improve old flaps in this region

Alexandre Almeida

Digital anthropometric analysis of the phylogenetic evolution of the female pelvis: contributions to the understanding of labor

Raquel Lopes

Digital evaluation of the congruency of the shoulder joint surfaces in patients with brachial plexus lesions

Luís Gonçalves

Comparison of the 3-dimensional shape of the joint surfaces of the proximal interphalangeal joints of the fingers and the surfaces of the hamate and the base of the fifth metacarpal bone

Manuel Vilela

Anatomical basis of elongating bone transfers useful for pediatric bone reconstruction

Diogo Casal

**Hall 4**

14.30–16.00

**Korean Association of Anatomists Symposium**

A new era of clinical anatomy: from the classical dissection to the advanced medical imaging corresponding to clinical needs

**Chair:** Hee-Jin Kim

Challenge to unlanded territory: ultrasonographic anatomy of the face for the minimally-invasive procedures

Hee-Jin Kim

Progressive methodologies for the anatomical structures: microdissection, microcomputed tomography, and numerical simulation

Mi-Sun Hur

Dynamic coordination of the smooth and skeletal muscles in the pelvic floor: meso-anatomical examination

Keiichi Akita

Hall 5	
14.30–16.00	<p><b>Platform Presentation Session</b>  <b>Chair:</b> Yolanda Salinas-Alvarez                      Integrating virtual-reality enriched active learning into pre-clinical gross anatomy education                      Jian Yang</p> <hr/> <p>3D-Printing: a viable substitute for commercially purchased anatomical models                      David Resuehr</p> <hr/> <p>Creating a global community during Covid-19 pandemic: bringing anatomical sciences educators together                      Inaya Hajj Hussein</p> <hr/> <p>As a learning tool social media in anatomy education from the students' perspective                      Abdullah Ortadeveci</p> <hr/> <p>Let students tell us what resources they used in their online anatomy education!                      Zekiye Karaca Bozdağ</p>
Hall 6	
14.30–16.00	<p><b>Platform Presentation Session</b>  <b>Chair:</b> Guo-fang Tseng                      Three-dimensional visualization and quantification of the whole enteric nervous system in mouse and human using tissue clearing                      Young Hyun Yun</p> <hr/> <p>Evaluation of dendrite morphology in wistar and genetic absence epileptic (GAERS) rats                      Özlem Kirazlı</p> <hr/> <p>Ameliorative effect of 'Zingiber officinale and Allium sativum' on the hippocampus of streptozotocin induced diabetes mellitus in adult male wistar rat models                      Dorcas Olubunmi Taiwo Ola</p> <hr/> <p>Dorsal and ventral hippocampus changes in a novel TDP-43 overexpression rat model by viral-mediated gene transfer method                      Elif Polat Çorumlu</p> <hr/> <p>The role of platelet-rich plasma (PRP) on motoric functions after peripheral nerve injury                      Rizni Fitriana</p> <hr/> <p>The dose dependent effects of linalool on the cerebellar morphology of diabetic rats                      Merve Nur Ermez</p>
16.00–18.30	<p><b>IFAA General Assembly Delegate Registration</b>  <b>IFAA GENERAL ASSEMBLY - IFAA Members Only</b></p>
24.00–01.00	<p><b>Federative International Committee for Ethics and Medical Humanities (FICEM) Annual Meeting</b></p>

## August 7, 2022, Sunday

### Plenary Hall

08.30–10.00	<p><b>FICSAP Symposium</b>                      Growing anatomists: anatomists perceptions of needs and provision of support  <b>Chairs:</b> Stephanie Woodley &amp; Helen Nicholson                      What support do anatomists need to develop their careers: data from the FICSAP/FIPAE survey                      Stephanie Woodley, Helen Nicholson</p>
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### Hall 2

08.30–10.00	<p><b>Chinese Society of Anatomical Sciences Symposium</b>                      Preparation for the colorful life  <b>Chairs:</b> Guang Wang &amp; Kai Yuan                      Misregulation in protein O-GlcNAcylation contributes to neurodevelopmental defects                      Kai Yuan</p>
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Loss of Atoh8 attenuates skeletal myogenesis  
Beate Brand-Saberi

Atg7 is involved in the neural development of the early embryo  
Guang Wang

The function of connexin in OL development and myelin repair  
Tao Li

The role of Eph-ephrin signaling in axon guidance of serotonin raphe neurons during development  
Teng Teng

### Hall 3

08.30–10.00

#### FIPAE Workshop

Active learning in anatomical sciences education: emerging from the pandemic

**Chairs:** Anneliese Hulme, Joyce El-Haddad & Nalini Pather

Diogo Pais, Gülğün Şengül, Jason Organ, Joy Balta, Quentin Fogg and Natasha Flack

The workshop is designed to maximise audience participation and dialogue. The discussion is scaffolded by the prompt questions with initial responses from a panel of experts from different geographical regions, and sub-disciplines of the anatomical sciences. Audience responses, views and experiences are welcomed and encouraged in this dialogue.

The outcome of this session is to:

- appreciate the diverse experiences of teaching and learning in the anatomical sciences during the pandemic, and identify common areas that we might collaboratively share and develop practice to advance anatomical sciences education globally.

### Hall 4

08.30–10.00

#### Chinese Society of Anatomical Sciences Symposium

Tissue engineering and regenerative medicine: To restore tissue functions

**Chairs:** Wen Zeng & Jing Zhou

Applications of multifunctional hydrogels in tissue engineering  
Malcolm Xing

Dimensionality-dependent mechanical stretch regulation of cell behavior  
Yong Yang

Mechanical regulation of metabolic reprogramming of vascular smooth muscle cells in vein grafts  
Jing Zhou

Endothelium-mimicking coating engineered cardiovascular stents for regulating vascular tissue regenerative repair  
Zhilu Yang

Stem cells and the regeneration of tissue engineered blood vessels  
Wen Zeng

### Hall 5

08.30–10.00

#### Platform Presentation Session

**Chairs:** Behice Durgun & Ceren Günenc Beşer

Developing maternal socio-demographic and anthropometric protocol: determining birth size and delivery outcomes at the Alex Ekwueme Federal University Teaching Hospital, Abakaliki, Nigeria  
Chinedu Godwin Uzomba

A comparison of results using three mathematical models for multifactorial adult age-at-death estimation in a South African population  
Nicolene Jooste

Proportional evaluation of measurements related to height and body parts: assessment of the presence of golden ratio  
Songül Çuğlan

Assessing growth changes in the human palate across different stages of dental eruption  
Erin Frances Hutchinson

Quantitative differentiation of thoracolumbar transitional vertebrae: possible associations with other anomalies in the vertebral column  
Anneli Poolman

Hall 6	
08.30–10.00	<p><b>Platform Presentation Session</b> <b>Chair:</b> Zeliha Kurtoğlu Olgunus Revisiting the muscles and nerves of anterior compartment of the arm: preliminary results of a cadaver study Büşra Anacur</p> <hr/> <p>Width of the orbicularis oculi fibers extending to the upper lip with the lateral and inferior lengths of the orbicularis oculi at the level of the lateral canthus: application to botulinum neurotoxin type A injection for crow's feet Mi-Sun Hur</p> <hr/> <p>Localization of the mandibular lingula using panoramic radiographs Juan Pablo Aravena</p> <hr/> <p>Topographic anatomy of the tibial nerve and posterior tibial artery in the tarsal tunnel Ayşe İmge Uslu</p> <hr/> <p>Case cadaveric series on the sural nerve formation variants and the aberrant sensory innervation of the lateral surface of the foot Maria Piagkou</p>
10.00–11.00	<b>Break, Visit the Exhibition &amp; Posters</b>
Plenary Hall	
11.00–12.30	<p><b>Korean Association of Anatomists Symposium</b> Craniofacial development and regeneration <b>Chairs:</b> Hyuk-Jae Edward Kwon &amp; Richard Schneider Hierarchical levels of gene regulation in the development and evolution of jaw length Richard Schneider</p> <hr/> <p>Distinct BMP-Smads signaling outputs confer diverse functions in the dental mesenchyme Liwen Li</p> <hr/> <p>Epigenetic regulation of palate formation Hyuk-Jae Edward Kwon</p> <hr/> <p>Lower jaw bone length is altered by pharmacological inhibition of embryonic osteoclast activity Erin Ealba Bumann</p> <hr/> <p>Injury induced transient dedifferentiation of taste receptor cells in mice Han-Sung Jung</p>
Hall 2	
11.00–12.30	<p><b>Platform Presentation Session</b> <b>Chairs:</b> Lena Hirtler &amp; Gökşin Nilüfer Demirci Topographical anatomy of the superficial temporal artery Tuğba Moralı Güler</p> <hr/> <p>Contralateral transorbital endoscopic approach to petrous apex: a feasibility cadaver study Hazan Başak</p> <hr/> <p>Beyond the tip of the iceberg: a meta-analysis on the anatomy of the clitoris Rebecca Beni</p> <hr/> <p>A microsurgical study of the anatomy and anatomical variations of the median nerve: a cadaveric study Manuel Encarnacion</p>
Hall 3	
11.00–12.30	<p><b>Platform Presentation Session</b> <b>Chairs:</b> İsmail Nadir Gülekon &amp; Cenk Murat Özer Clinically relevant morphometric analysis of pterygopalatine fossa and its volumetric relationship with adjacent paranasal sinuses: a CT-based study Betül Dıgilli</p> <hr/> <p>Chronic neck pain and its association with the angle of the cervical curve Thuduwage Chamalika Sujewanie Weerakoon</p>

Evaluation of the piriformis muscle anatomy by magnetic resonance imaging  
Ekrem Solmaz

Evaluation of the alignment of the intersesamoidal ridge's axis through 3D-printing models and digital method  
İsmail Türkten

Morphometric evaluation and classification of the superior orbital fissure on 3D MDCT images  
Büşra Piriç

Investigation of the presence of discoid meniscus and its effect on anatomic structures in the knee joint by magnetic resonance images: a retrospective study  
Hilal Irmak Sapmaz

#### Hall 4

11.00–12.30

##### Chinese Society of Anatomical Sciences Symposium

Adaptive learning and teaching in the post-Covid-19 era

**Chairs:** Xuesong Yang & Wei Wei

Unpacking the relationships between teacher-led and learner-led mobile learning activities and their impacts on teacher evaluation in a blended medical program

Wei Wei

Surgical boot camp improves clinical competencies in senior medical students

Jifeng Zhang

The anatomists' perceptions of blended learning changed by COVID-19 pandemic: a national survey in mainland China

Xin Cheng

The Chinese anatomists' perceptions towards blended learning approach in anatomy education: a national survey in the post-Covid-19 era

Xuesong Yang

Blended learning approach improves active learning and academic performance in a human embryology course

Shangming Liu

Modulations of the autonomic nervous system and hormone-physiological changes in response to Covid-19-related adaptations of different learning environments

Morris Gellisch

#### Hall 5

11.00–12.30

##### Platform Presentation Session

**Chairs:** Joanna Matthan & Goran Strkalj

The development of a core musculoskeletal anatomy syllabus for physical therapy education

Stephanie J. Woodley

Neuroanatomy in the medical curriculum: a South African perspective

Gerda Venter

A postgraduate perspective of radiology into the anatomy curriculum

Courtney Barnes

A Southern African perspective on the ethical use of digital images in anatomical teaching

Tamara Lottering

#### Hall 6

11.00–12.30

##### Platform Presentation Session

**Chairs:** Dusica Lazar Maric & Neslihan Yüzbaşıoğlu

Factors that influence decomposition timeline estimation in Anambra state, Nigeria

Darlington Nnamdi Onyejike

An evaluation of the reliability of current stature estimation equations for contemporary White South Africans

Natasha Rosanne Loubser

Morphological evaluation and clinical significance of the supracondylar process and supratrochlear foramen: an anatomic and radiological study

Ayşe Erkaya

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Aplasia cutis congenita associated with coarctation of aorta in a newborn: is this a coincidence or variant of Adams-Oliver syndrome?

Başak Soran Türkcan

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An anatomical variation: absence coeliac trunk

Hürriyet Ercan Çetinok

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### Plenary Hall

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12.30–13.15

#### Plenary Lecture

**Chair:** Hyuk-Jae Edward Kwon

The first woman anatomist in Korea "Prof. Bok Young Rha"  
(Mother and daughter woman anatomists)

Kyung Ah Park / *Professor Emeritus, Yonsei University College of Medicine, Seoul, South Korea*

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13.15–13.45

#### ICSMS Executive Committee Meeting

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13.15–14.30

#### Break, Visit the Exhibition & Posters

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### Break Out / Chat Room (Hall B1)

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13.15–14.30

#### Developing future anatomists: Share your views

**Moderator:** Carol Hartmann

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### Plenary Hall

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14.30–16.00

#### FICEM Symposium

Historical anatomical collections: treasure, legacy, and challenges

**Chairs:** Andreas Winkelmann & Brendon Billings

Provenance of collection items from the early 19th century in an anatomical collection

Andreas Winkelmann

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Restitution of indigenous bodies: the ethics of what remains

Marina L. Sardi

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Collections of the unborn

Jason Mussell

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Congdon's Anatomical Museum: from educational collections to Thailand's first anatomical museum

Adisorn Ratanayotha

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African life and death masks in the Raymond A. Dart Collection

Brendon Billings

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### Hall 2

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14.30–16.00

#### Symposium

Forensic clinical anatomy: an update 5 years later its proposal

**Chair:** Raffaele De Caro

Forensic clinical anatomy: introduction

Raffaele De Caro

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Forensic clinical anatomy: Definition and perspectives

Andrea Porzionato

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Imaging in forensic clinical anatomy

Veronica Macchi

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Forensic clinical anatomy and surgery

Carla Stecco

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Forensic clinical anatomy and clinical anatomy

Shane R. Tubbs

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**Hall 3**

- 14.30–16.00 **FICEDA Symposium**  
 Equality and diversity in anatomy  
**Chair:** Odile Plaisant  
 Colonisation, cadavers and colour: is there a case for decolonising the anatomy curricula?  
 Gabrielle Finn, Adam Danquah, and Joanna Matthan
- 
- Policies for equality and diversity in anatomy across different anatomical societies within the IFAA  
 Diogo Pais and Bernard Moxham
- 
- The development of guidelines for equality and diversity by the IFAA  
 Bernard Moxham and Beverley Kramer
- 
- Teaching female anatomy in the medical curriculum  
 Jennifer Hayes

**Hall 4**

- 14.30–16.00 **Chinese Society of Anatomical Sciences Symposium**  
 Morphology and function of myodural bridge  
**Chairs:** Hong-Jin Sui & Gary D. Hack  
 The biomechanics, and physiological function of MDBC in dog  
 Hong-jin Sui
- 
- The myodural bridge in humans: discovery and potential implications  
 Gary D. Hack
- 
- Study on the developmental of myodural bridge of human and SD rats  
 Jianfei Zhang
- 
- The myodural bridge of the American alligator (*Alligator mississippiensis*) alters CSF flow  
 Bruce A. Young
- 
- Effect of myodural bridge management on postoperative results and complications during decompression of subcerebellar tonsillar hernia  
 Bin Dong

**Hall 5**

- 14.30–16.00 **Platform Presentation Session**  
**Chairs:** Kerem Atalar & Dila Şener Akçora  
 Immune-mediated arthritis: is there any way for experimental modelling of its premorbid conditions and detection of compensatory mechanisms in the joint during the preclinical phase?  
 Andrii Viktorovych Fedotchenko
- 
- A different exosome secretion modality occurs in patient-derived colorectal cancer spheroids and in their mouse xenograft  
 Michela Relucenti
- 
- Evaluation of muscle spindle density and distribution of certain mimic muscles: preliminary results of a cadaveric study  
 Ekin Karacan
- 
- Microanatomic alterations in the uterus of a polycystic ovary syndrome (PCOS) mouse model and the potential role of carnitines  
 Maria Grazia Palmerini
- 
- Prenatal choline, uridine monophosphate, and fish oil supplements affect synaptogenesis in 5XFAD animals  
 Elif Nedret Keskinöz
- 
- Effect of exosomes derived from Sertoli cells on reconstruction of seminiferous tubule  
 Chunyang Li

## Hall 6

- 14.30–16.00 **Platform Presentation Session**  
**Chair:** Isabel Stabile  
Education of anatomy of arm and leg using 60 hand gestures  
Mi-Sun Hur
- 
- Consolidation carnival: a modified speed-dating approach to reviewing musculoskeletal anatomy in an undergraduate medical curriculum  
Rosemary B. Bassey
- 
- Virtual journal club in anatomy: perspectives of postgraduate students  
Kerri Keet
- 
- Short and long-term retention of anatomical variation recognition using extended reality visualization  
Güneş Aytaç
- 
- Exploring the most effective combination of drawing approaches for observation and understanding three-dimensional anatomy  
Leonard Shapiro

16.00–16.15 **Break, Visit the Exhibition & Posters**

## Plenary Hall

- 16.15–17.45 **Platform Presentation Session**  
**Chair:** Maria Piagkou  
A biomechanical study on the effect of long head of biceps tenotomy on supraspinatus load and humeral head position during shoulder abduction  
Shavana Govender
- 
- Branching patterns and variations of the facial artery and clinical importance: a cadaveric study  
Zeynep Askin
- 
- A novel anatomical description of the terminal peroneal artery and the terminal peroneal window with its important clinical and radiological implications  
James Richard Archer

## Hall 2

- 16.15–17.45 **Symposium**  
Methodologies in applied anatomy: clinical, forensic, and evolutionary anatomy  
**Chairs:** Shahed Nalla & Nicole Torres-Tamayo  
A biological perspective on involving mathematical methodologies  
Sundika Ishwarkumar, Nicolene Jooste
- 
- Assessing age-related bony pelvis variation from CT scans  
Caroline VanSickle
- 
- A brief review of virtual methodologies and their importance for evolutionary anatomy and biological anthropology  
Nicole Torres-Tamayo

## Hall 3

- 16.15–17.45 **Symposium**  
Integration of anatomy and innovation into healthcare  
**Chair:** Brion Benninger  
Integration of ankle anatomy and innovation into healthcare  
Lena Hirtler
- 
- Integration of hand anatomy and innovation into healthcare  
Quentin A. Fogg
- 
- Integrating anatomy with innovation: advancing the blueprint and knowledge of the lower limb, especially neurovascular structures from the pelvis to the foot improving healthcare  
Brion Benninger

**Hall 4**

16.15–17.45

**The Anatomical Record Symposium**

Evolution of a discipline: the changing face of anatomy

**Chairs:** Jason Organ & Heather F. Smith

The evolving ethics of anatomy: dissecting an unethical past in order to prepare for a future of ethical anatomical practice

Amber Comer

Books, bones and bodies: the relevance of the history of anatomy in Nazi Germany for medical education today

Sabine Hildebrandt

Ethical dilemmas in skeletal collection utilization: implications of the Black Lives Matter movement on the anatomical and anthropological sciences

Shanna E. Williams

Queer anatomy: how anatomy has played a role in the sociopolitical treatment of the LGBTQIA+ community

Theodore C. Smith

Shifting language for shifting anatomy: using inclusive anatomical language to support transgender and nonbinary identities

Jessica Byram &amp; Lauren Easterling

Decolonization of anatomy curricula

Gabrielle Finn

**Hall 5**

16.15–17.45

**Platform Presentation Session****Chairs:** Figen Gövsa & Tuncay Peker

Effect virtual interactive 3-Dimensional models on anatomy education: a randomized controlled study

Pradip Rameshbhai Chauhan

The effectiveness and satisfaction of virtual anatomy laboratory education on medical students: a randomized trial compared to cadaver dissection

Young Hyun Yun

Customized 3D printing model in preventing vertebral artery injury for cervical pedicle screw insertion

Aslı Beril Karakaş

Creation of 3- dimensional anatomical models using mobile phone applications

Suresh Selvaraj

Individualized 3d printing-assisted C1 and C2 cervical posterior screw fixation using full-scale models

Aslı Beril Karakaş

**Hall 6**

16.15–17.45

**Platform Presentation Session****Chairs:** Eduardo Andres Olivera Pertusso & Rodrigo Enrique Elizondo-Omaña

Biomechanical properties of the tendinous and capsular layers of the rotator cuff complex in a fresh tissue sample

Jessica Yvonne Cronje

A guide to facilitate the creation of a femoral tunnel for arthroscopic ligamentum teres reconstruction: a three-dimensional computed tomography study

Abdul Veli İsmailoğlu

Endonasal endoscopic route to superior orbital fissure: a feasibility anatomic study

Hazan Başak

Morphometric analysis of select cranial ventricular access points in patients with scaphocephaly

Vensuya Bisetty

Evaluation of preop and postop 6 months findings of surgery and transcatheter ventricular septal defect closure with Doppler echocardiography

Zeynep Bilge Yılmaz

Investigating the accuracy of ultrasound-guided blocks of peripheral branches of trigeminal nerve using methylene blue: an anatomical study

Selin Güven Köse

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**Plenary Hall**

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17.45–18.30 **Closing Lecture**  
**Chair:** Emel Uluþınar  
Understanding ALS one neuron at a time: the power of cellular anatomy  
Hande Özdinler / *Department of Neurology, Northwestern University, Feinberg School of Medicine, Chicago, IL, USA*

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18.30–18.45 **Closing Ceremony**

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