# KATARZYNA ALEKSANDRA GURZAWSKA-COMIS, RCS (Eng) MOralSurg, PhD, PhD, DDS

Birthdate: 25.08.1982

Dentist and Scientist

Research field: implant dentistry, bone tissue engineering, stem cells, nanotechnology, biomaterials and biomimics

# **CAREER SUMMARY – research and clinical positions**

Associate Professor in Oral Surgery Head of Maxillofacial Surgery and Pathology	Jun 2024 – present	Aarhus University, Denmark
Consultant in Oral Surgery	Jul 2023 - present	Liverpool University Hospitals NHS Foundation Trust
Senior Lecture/Associate Professor in Oral Surgery	May 2022 - present	University of Liverpool, School of Dentistry, Oral Surgery, UK Liverpool University Hospitals NHS Foundation Trust
Specialist and Clinical Lead of Primary Oral		
Surgery Service Specialist in Oral Surgery	Sep 2022-May 2022	Gloucester Health and Care NHS Foundation Trust, Oral Surgery iMOS Service, UK
RCS (Eng) MOralSurg  NIHR Academic Clinical Lecturer in Oral Surgery	Jan 2021-May 2023	Birmingham Community Healthcare NHS Foundation Trust, Birmingham Dental Hospital, Oral Surgery Department, UK
PhD	Mar2015–Dec 2020	University of Birmingham, School of Dentistry, Oral Surgery, UK
Post-doc EU Marie Sklodowska-Curie	Sep 2006 – Apr 2015	Medical University of Lodz, Faculty of Medicine and Dentistry, Poland
Post-doc	Sep 2013 – Aug 2014	Charite University - Universitätsmedizin Berlin, Faculty of Medicine, Institute for Dental, Oral and Maxillary Medicine, Germany
	Sep 2011 - Aug 2013	University of Copenhagen, Faculty of Health and Medical Sciences, Institute of Odontology, Denmark
PhD	Sep 2008 – Aug 2011	University of Copenhagen, Faculty of Health and Medical Sciences, Institute of Odontology, Denmark Glostrup Copenhagen University Hospital, Research Center for Ageing and Osteoporosis, Denmark
Dentist	Sep 2008 – Jan 2012 Sep 2007 – Aug 2008	Dentin Clinic, Copenhagen; ADAMED, Lodz
Post-graduate dental training	Nov2007-Jan2008 Sep2006-Mar2007	Thomas Lowerton, Lakarhuset Aktiebolag, Malmö, Sweden Medical University of Lodz, Faculty of Medicine and Dentistry, Poland
Research Assistant in Biomechanical Engineering	Sep 2006 – Aug 2008	Technical University of Lodz, Faculty of Mechanical Engineering, Poland Technical University of Denmark, Department of Mechanical Engineering, Copenhagen, Denmark

# RESEARCH EXPERIENCE

BONE BIOLOGY  in vitro studies of titanium dental implants and scaffolds using stem cells, primary and cell-line osteoblasts, macrophages, neutrophils, fibroblasts; bacterial infection model	evaluation of chemical and physical surface properties titanium surfaces (AFM, SEM, XPS, confocal and fluorescence microscopy) Mechanical properties: final element analysis, 3D Model, 3D printing	in vivo studies of titanium implant surface on animal rabbit model and of scaffolds on osteoporotic and inflammatory rat model (histomorphometry, X-ray, microCT images Haar wavelet, micro CT)
CLINICAL EXPERIENCE		
ORAL SURGERY (OS) – 6 years speciality Simple and surgical extraction Single dental implant placement GBR (guided bone regeneration) Management of oral pathologies (biopsy) Management of odontogenic cyst Sedation (IV and inhalation) Children and adult GA Oral and Maxillofacial Trauma	OS related to other specialities  Endodontic surgery: root canal treatment and apicectomy Orthodontic surgery (removal and exposure of impacted teeth, autotransplantation) Hypodontia – MDT (multidisciplinary team)	ORAL PATHOLOGY  Management of cancer patients – MDT (special interest MRONJ) Facial pain Temporomandibular disorder Pharmacological treatment
TEACHING EXPERIENCE		
POSTGRADUATE	UNDERGRADUATE	PROFESSIONAL (CPD)
Assessment of clinical and surgical skills via ISCP Management of PhD program in tissue engineering Lead of research projects Critical appraisal of scientific papers, PhD, Master and Bachelor theses	Assessment of clinical skills via LIFTUPP and CAFS "Chairside" teaching oral surgery Fantom teaching minor oral surgery Research methodology and delivery of scientific results	Surgical principle and skills in dental implantology Anatomy assessment based on CBCT 3D planning of implant placement Bone biology and osseointegration - theory
GRANTS and AWARDS		

#### **GRANTS and AWARDS**

May 2023	Osteology Foundation Award – 1 <sup>st</sup> Prize in research competition
Oct 2022	BAOS Award for the best open paper
Mar 2020	IADR Osteology New Investigator Award in Bone Regeneration
Oct 2019	Finalist in NIHR Academic Ground Round at the University of Birmingham
Aug 2018	ATHENA SWAN Award
Sept 2017	IADR GSK Mineralised Tissue Group (MINTIG) Research Award
May 2017	Royal College of Surgeon of England Grant
April 2017	Values in Practice Awards, Birmingham Community Healthcare, NHS Foundation Trust
Sep 2016	GSK ODRT Awards
Apr 2016	SPIRE, Strategic Programme for International Research and Education, Bergen, Norway
Mar 2015	II Prize for New Investigator in Implant Dentistry, IADR 2015, Boston, US
Mar 2014	DENTSPLY IIS Award 2013 for oral presentation: "Plant-derived molecules, pectins as a novel nanocoating for improvement of osseointegration"
Oct 2013	Finalist of Basic Research Competition of 22 <sup>nd</sup> EAO Annual Scientific Meeting 2013, Dublin, Ireland
Aug 2013	European Union Grant by Seventh Framework Program, Grant number # 290246 "Rheumatoid Arthritis and Periodontal Inflammatory Disease (RAPID)", Experienced researcher, Marie-Curie Fellowship

Mar 2013	Finalist of the Arthur R. Frechette Prosthodontic Research Award Competition, IADR 2013, Seattle, United States
Dec 2012	Nomination for a Dale T. Mortensen Junior Fellowship at AIAS
Jul 2012	A National Heat Winner for Denmark in Euspen International Challenge 2012, Eidhoven, Netherlands
Sep 2011	Grant number #2106-07-0025 by the Danish Strategic Research Council, Programme Committee for nano science and technology, biotechnology and information technology "Nanocoating of bone implants in vivo". Position in the project: Research Assistant (in vivo studies on rabbits)
Sep 2008	Grant number # 2106-07-0025 by the Danish Strategic Research Council, Programme Committee for nano science and technology, biotechnology and information technology "Nanocoating of bone implants in vitro". Position in the project: PhD student ( <i>in vitro</i> studies)
Feb 2007	European Union Grant Call FP6-2004-NMP-NI-4, Integrated Project (IP) - 026717-2 "Metrological Needs for Dental Implants" part of the project: NanoCMM (Coordinate measuring machine for micrometric and nanometric applications). Position in the project: Research Assistant (metrological studies)
Sep 2007	CIRIUS grant (agency under the Danish ministry of education with the aim to support the internationalization of education and training in Denmark) "Roughness Analysis of Dental Implants" part of the project: NanoCMM. Position in the project: Research Assistant (metrological studies)
Sep 2006	Project granted by Medical University of Lodz, Faculty of Medicine and Dentistry and Technical University of Lodz, Mechanical Engineering "Numerical analysis of von Misses stresses and strain in human mandible after surgical operations with use of bone substitute materials" Supervised by: Marcin Kozakiewicz, Ryszard Grądzki. Position in the project: PhD student (clinical and numerical studies)
Feb 2004	SOCRATES grant "Analysis of knowledge about Dental Imlantology among Polish and Spanish society"

#### **EDUCATIONAL POSITIONS CURRENT and PAST:**

#### Postgraduate clinical:

Supervision of 3 DCT and 2 StR – Liverpool University Dental Hospital (current)

Supervision of 4 DCT and 1 StR, 1 ACF – Birmingham Dental Hospital (past)

Instructor of Implantology Course by European Association of Osseointegration (EAO) in 2019, 2022 (past)

### Postgraduate academic:

Supervision of 3 PhD students - University of Birmingham, Charite University, Jagielonski University Krakow (past)

Supervision of 5 Master students - King's College London, University of Birmingham, University of Leeds (past)

Supervision 3 Bachelor students – University of Birmingham (past)

Lecturer on Biomaterials – University of Birmingham (current)

# <u>Undergraduate clinical</u>:

Tutor on BDS program in Oral Surgery and Oral Diagnosis – University of Liverpool (current)

Tutor on BDS program in Oral Surgery – University of Birmingham (past)

## <u>Undergraduate academic:</u>

Lecturer on Biomaterials – University of Birmingham (current)

Lecturer on Research Course for 3rd year dental students – University of Liverpool (current)

Examiner: OSCE undergraduate 4<sup>th</sup> and 5<sup>th</sup> years dental students – University of Birmingham (past) and University of Liverpool (present)

### **DENTAL PROFFESIONAL ASSOCIATIONS**

ADI Academic Advisor (Jan 2024 – present)

Board member National Osteology Foundation Group UK (NOG) (Sept 2023 – present)

Main organiser of BSODR ECR conference 23-24 March 2023 Liverpool "Translational Oral Research"

Member of committee WIN (2023- present)

Secretary of ABAOMS (2022 - present)

Secretary of EAO Junior Committee (2014 – 2019)
Representative of Academic Oral Surgery Speciality Trainees in UK (2018 -2022)
Organiser of Implantology Course "My first implant" EAO (2018 – 2020)
Organiser of EAO Summer Camp 2015 and 2019
Scientific Program Organiser IADR Implantology Group (June 2011 – present)

# LANGUAGES:

Polish – native speaker English – professional Danish - Prøve i Dansk 3 Spanish - basic