



## Curriculum Vitae

### Prof. Dr. Theodora Benedek, MD, PhD, Habil

**Name:** Theodora Benedek

**Previous name:** Hintea

**Date of birth:** \_\_\_\_\_

#### **Places of work**

##### ***-University of Medicine and Pharmacy of Tirgu Mures***

- Professor of Cardiology and Internal Medicine - since 2014
- Director of the Department of Internal Medicine - since 2012
- President of the Committee for Scientific Research of the University Senate – 2016
- PhD coordinator - since 2014

##### ***-County Clinical Emergency Hospital Tirgu Mures***

- senior physiscian in cardiology and internal medicine - since 2004
- head of the Clinic of Cardiology – since 2015

##### ***-European Commission***

- Expert, monitor and rapporteur - since 2007
- Vice Chair of the Life Sciences panel, Marie Curie programme, Horizon 2020, since 2015.

##### ***-Cardio Med Medical Center***

- Coordinator of the Center for Advanced Research in Multimodality Cardiac Imaging

#### **Studies:**

##### **1. License studies:**

- 1991- 1997 - University of Medicine and Pharmacy of Tirgu Mures
- degree awarded - MD, 1997

- 2002 - 2007 - University Petru Maior Tirgu Mures, Faculty of Economic Sciences
- degree awarded - economist MD, 2007

##### **2. Masteral studies**

- 2005 - 2006 - University Petru Maior Tirgu Mures, Faculty of Economic Sciences
- degree awarded - Master in Sanitary Management - 2006

### **3. PhD Studies**

-1998- 2002 - University of Medicine and Pharmacy of Tirgu Mures  
- degree awarded - PhD, 2002

### **4. Habilitation**

2013 - University of Medicine and Pharmacy of Tirgu Mures  
- degree awarded - Habilitated, 2014

### **Editorial work:**

#### ***Editor-in-Chief:***

Journal of Interdisciplinary Medicine

#### ***Managing editor:***

The Journal of Critical Care Medicine (www.jccm.ro) – 2014-2016

Acta Medica Marisiensis (www.actamedicamarisiensis.ro) – 2013-2016

Journal of Cardiovascular Emergencies (www.jce.ro) – 2015- present

#### ***Member in editorial board:***

-Biochemical genetics (Impact factor 1,5)

-Austin Journal of Cardio and Cardiovascular Case Reports

### **Trainings:**

#### **1) National Institute of Cardiology Gotsegen Gyorgy, Budapesta**

Period – 25 october 1999 – 28 january 2000

Training coordinator: Prof. Dr. Keltai Matyas, Prof. Dr. Lengyel Maria

#### **2) University of Vienna, AKH Hospital, Clinic of Cardiology, Laboratory of Interventional Cardiology**

Period: March - May 2003

Training coordinator: Prof. Dr. Glogar Dietmar

#### **3) Institutul de Cardiologie Debrecen – 2005**

Period 18-30 april 2005

Training coordinator: Prof. Dr. Edes Istvan

#### **4) Herz Zentrum Leipzig,**

Period 27-28. 11. 2002

Training coordinator: Prof. Dr. Giancarlo Biamino

### **Accreditations:**

-European Accreditation in echocardiography, awarded by the European Society of Cardiology following an examination in Barcelona, 2005

-European Accreditation in transesophageal echocardiography, awarded by the European Society of Cardiology following an examination in Florence, 2006

-Expert Evaluator of the European Society of Cardiology for awarding the accreditations in echocardiography, transesophageal echocardiography and echocardiography in congenital heart diseases since 2007.

-National accreditation (competence) in interventional cardiology - since 2012

## **Expertise in research:**

### **1) Expert international boards**

1. European Commission - Horizon 2020 - expert for more than 15 calls in 2014 and 2015

2. European Commission - Horizon 2020 - Vice Chair for Life panel, Marie Curie programme – since 2015

3. Aix Marseille University – external expert – selection committee for Doc2AMU doctoral programme, financed by the European Commission - June 2017

4. Chairman New Horizon session, European Congress of Radiology, Vienna, March 2015

5. European Commission - Research Executive Agency, REA.A1 - FP7 Support - expert evaluator for FP7-People-IEF, IIF, IOF (contract nr. CT-EX2002B077414-112)

6. European Commission - Information Society and Media ICT for Health - expert evaluator for ICT-VPH (contract nr. AL00097892)

7. European Commission - Communications Network, Content and Technology, expert evaluator for Information Communication Technology (contract nr. 00120092)

8. European Commission - Research Directorate G - Industrial Technologies - expert evaluator for Large (contract nr. CT-EX2002B077414-106)

9. European Commission - Directorate General for Research and Innovation, Directorate F - Health - expert evaluator for Innovation (contract nr. CT-EX2002B077414-109)

10. European Commission – RTD/T/2 - expert evaluator for IRG, ITN, PEOPLE (contract nr. CT-EX2002B077414-101)

11. Eureka – technical expert (2018-present)

12. French National Research Agency - expert for programme "Programme blanc and young researchers"

13. European Society of Cardiology, European Association of Cardiovascular Imaging and European Board for Accreditations in Cardiology - expert evaluator for accreditations.

## **Most representative publications**

1. **Benedek Teodora**, Gyöngyösi Mariann, Benedek Imre. *Multislice computed tomographic coronary angiography for quantitative assessment of culprit lesions in acute coronary syndromes*. **Canadian Journal of Cardiology**, 2013, 29(3): 364-371, ISSN 0828-282X. **IF 3,94**

2. Benedek Imre, Gyöngyösi Mariann, **Benedek Theodora\***. *A prospective regional registry of ST-elevation myocardial infarction in Central Romania: Impact of the Stent for Life Initiative recommendations on patient outcomes*. **American Heart Journal** 2013, 166

(3):457-465, ISSN 0002-8703, **IF 4,55**. \*- *corresponding author* (**this article received an editorial**)

3. Vlasa A, Biris C, **Benedek T**, Eremie L. *Letter to the Editor, "Association of Endodontic Lesions with Coronary Artery Disease"*. **J Dent Res**. 2017 Feb;96(2):233. **IF 4,6**

4. Muntean I, Toganel R, **Benedek T**. Genetics of Congenital Heart Disease: Past and Present. **Biochem Genet**. 2017 Apr;55(2):105-123. **IF 1,5**

5. Muntean I, **Benedek T**, Melinte M, Suteu C, Toganel R. *Deformation pattern and predictive value of right ventricular longitudinal strain in children with pulmonary arterial hypertension*. **Cardiovasc Ultrasound**. 2016 Jul 29;14(1):27. **IF 1,46**

6. Suteu CC, Muntean I, **Benedek T**, Toganel R. *Giant dissecting ventricular septal haematoma associated with critical congenital heart disease*. **Interact Cardiovasc Thorac Surg**. 2016 Nov;23(5):837-838. **IF 1,39**

7. Suteu CC, Toganel R, **Benedek T**. *Three Rare Anomalies of the Large Vessels in an Infant with Tetralogy of Fallot*. **J Card Surg**. 2016 Jul;31(7):461-3. **IF 0,78**

8. Gyöngyösi M, Wojakowski W, Lemarchand P, Lunde K, Tendera M, Bartunek J, Marban E, Assmus B, Henry TD, Traverse JH, Moyé LA, Sürder D, Corti R, Huikuri H, Miettinen J, Wöhrle J, Obradovic S, Roncalli J, Malliaras K, Pokushalov E, Romanov A, Kastrup J, Bergmann MW, Atsma DE, Diederichsen A, Edes I, Benedek I, **Benedek T**, Pejkov H, Nyolczas N, Pavo N, Bergler-Klein J, Pavo IJ, Sylven C, Berti S, Navarese EP, Maurer G; ACCRUE Investigators\*. - *Meta-Analysis of Cell-based Cardiac stUdiEs (ACCRUE) in Patients With Acute Myocardial Infarction Based on Individual Patient Data*. **Circulation Research**. 2015 Apr 10;116(8):1346-60. **IF 11,089**.

9. Pavo N, Charwat S, Nyolczas N, Jakab A, Murlasits Z, Bergler-Klein J, Nikfardjam M, Benedek I, **Benedek T**, Pavo IJ, Gersh BJ, Huber K, Maurer G, Gyöngyösi M. - *Cell therapy for human ischemic heart diseases: critical review and summary of the clinical experiences*. **J Mol Cell Cardiol**. 2014 Oct;75:12-24. **IF 5,133**.

10. Suci Z, **Benedek T**, Benedek I. - Response to the paper by Jiang et al. entitled 'Prognostic value of cardiac computed tomography angiography in patients with suspected coronary artery disease: a meta-analysis'. **Cardiology**. 2015;130(1):15-6. **IF 2,044**.

11. **Benedek Theodora**, Jako Beata, Benedek Imre. *Plaque Quantification by Coronary CT and Intravascular Ultrasound Identifies a Low CT Density Core as a Marker of Plaque Instability in Acute Coronary Syndromes*. **International Heart Journal**, 2014, 55(1): 22-29, ISSN 1349-2365. **IF 1,073**

12. **Benedek Theodora**, Matei M., Benedek Imre. *Giant aneurysm of the Valsalva sinus associated with multiple coronary artery aneurysms and patent ductus arteriosus*. **European Heart Journal**, 2014;35(11):69, ISSN 0195-668X. **IF 15,203**.

13. Benedek Imre, Bucur Oana, **Benedek Theodora**\*. *Intracoronary infusion of mononuclear bone marrow derived stem cells is associated with lower plaque burden after 4 years*. **Journal of Atherosclerosis and Thrombosis**, 2014, 15(8):88, ISSN 1340-3478. **IF 2,733**. \*- *corresponding author*

14. Rodica Toganel, **Theodora Benedek**\*, Carmen Suteu, Imre Benedek - *Aneurysmal aorto-left ventricular tunnel causing right ventricular outflow tract obstruction, associated with bicuspid aortic valve - a case report*. **Heart & Vessels**, 2015; 30:140-142. ISSN 0910-8327. **IF 2,065** \* *corresponding author*

15. **Benedek Theodora**, Chitu Monica, Benedek Imre - *Response to Relationship of Race/Ethnicity with Door-to-Balloon Time and Mortality in Patients Undergoing Primary Percutaneous Coronary Intervention for ST-Elevation Myocardial Infarction – Findings From Get With the Guidelines – Coronary Artery Disease*. **Clinical Cardiology**, 2014; 37:322-323, ISSN 0160-9289, **IF 2,586**

16. Rodica Toganel, **Theodora Benedek\***, Imre Benedek – *Giant mycotic pulmonary artery aneurysm in a newborn*. **European Heart Journal Cardiovascular Imaging**, 15(8):885, ISSN 2047-2404. **IF 4,105**. \*corresponding author.

17. Gyöngyösi M, Lang I, Dettke M, Beran G, Graf S, Sochor H, Nyolczas N, Charwat S, Hemetsberger R, Christ G, Edes I, Balogh L, Krause KT, Jaquet K, Kuck KH, Benedek I, **Hintea Teodora**, Kiss R, Préda I, Kotevski V, Pejkov H, Zamini S, Khorsand A, Sodeck G, Kaider A, Maurer G, Glogar D., *Combined delivery approach of bone marrow mononuclear stem cells early and late after myocardial infarction: the MYSTAR prospective, randomized study*. **Nature Clinical Practice Cardiovascular Medicine** 2009, 6(1):70-81. ISSN 1743-4297 (Print), ISSN: 1743-4297(web), **IF 5,902**.

18. Mariann Gyongyosi, Rayyan Hemetsberger, Susanne Wolbank, Valentin Pichler, Cristoph Kaun, Aniko Posa, Zsolt Petrasi, Ors Petnehazy, Renate Hofer-Warbinek, Rainer de Martin, Florian Gruber, Imre Benedek, **Theodora Benedek**, Istvan Kovacs, Istvan Benedek jr., Christian A.Plass, Silvia Charwat, Gerald Maurer – *Delayed Recovery of Myocardial Blood Flow After Intracoronary Stem Cell Administration*. **Stem Cell Review and Reports**, 2011;7:616-623, ISSN 1550-8943, **IF 3,766**.

19. Nyolczas N, Gyöngyösi M, Beran G, Dettke M, Graf S, Sochor H, Christ G, Edes I, Balogh L, Krause KT, Jaquet K, Kuck KH, Benedek I, **Hintea Teodora**, Kiss R, Préda I, Kotevski V, Pejkov H, Dudek D, Heba G, Sylven C, Charwat S, Jacob R, Maurer G, Lang I, Glogar D. *Design and rationale for the Myocardial Stem Cell Administration After Acute Myocardial Infarction (MYSTAR) Study: a multicenter, prospective, randomized, single-blind trial comparing early and late intracoronary or combined (percutaneous intramyocardial and intracoronary) administration of nonselected autologous bone marrow cells to patients after acute myocardial infarction*. **American Heart Journal** 2007;153(2):212.e1-7, ISSN 0002-8703, **IF 3,649**.

20. **Benedek Theodora**, Oana Bucur, Ionela Pascanu, Imre Benedek – *Analysis of coronary plaque morphology by 64-multislice computed tomography coronary angiography and calcium scoring in patients with type 2 diabetes mellitus*. **Acta endocrinologica**, 2011; 7,1:59-68, ISSN 1841-0987, **IF 0,183**.

21. **Benedek Theodora**, Jako Beata, Suciú Zsuzsa, Benedek Imre - *Correlations between severity of coronary atherosclerosis and persistentelevation of circulating High Sensitivity C-Reactive Protein levels at 30 daysafter an Acute Myocardial Infarction*. **Romanian review of laboratory medicine**, 2014, 22:49-61. ISSN:1841-6624 **IF 0,239**.

22. I. Pascanu, C.Banescu, **T.Benedek**, C.Duicu, K.Csep, A.Dema - *Thyroid dysfunction in children with Down`s syndrome* - **Acta Endocrinologica**, 2009, 5 (1): 85-92, ISSN 1841-0987, **IF 0,052**.

23. Balazs Bajka, **Theodora Benedek**, Călin Molnar - *Association Between Preinfarction Angina and Angiographic Findings in NON-ST Segment Elevation Myocardial Infarction*. **Clinical Cardiology**, 2016, **IF 2,586**.

24. Balazs Bajka, **Theodora Benedek**, Călin Molnar – *Response to “Coronary Tomographic Computed Angiography for the assessment of the Syntax score in the heavily calcified coronary arteries”*. **Kardiologija Polska**, 2016, **IF 0,539**

25. Rodica Toganel, **Theodora Benedek**, Monica Chitu - *Response to “Statin Use and Aneurysm Risk in Patients With Bicuspid Aortic Valve Disease”*. **Clinical Cardiology**, 2016. **IF 2,586**.

26. Group authors: TIMACS investigators. *Early versus Delayed Invasive Intervention in Acute Coronary Syndromes*. **New England Journal of Medicine**, 2009;300:2165-2175. **IF 47,05**

27. Group authors: PEGASUS-TIMI 54 Steering Com. *Long-term use of Ticagrelor in Patients with prior myocardial infarction.* **New England Journal of Medicine**, 2015;372:1791-1800. **IF 55,873**

## **Research grants:**

### **1.1. International research grants - coordinator**

#### **1) Diagnostic Imaging Strategies for Patients with Stable Chest Pain and Intermediate Risk of Coronary Artery Disease: Comparative Effectiveness Research of Existing Technologies**

Acronym: **DISCHARGE**

Grant agreement no. HEALTH-F2-2013-603266, program FP7-Health-2013-Innovation-1

Financing body - **European Commission, program FP7**

**Role: Member in the Steering Committee, coordinator of all clinical centers in Eastern Europe**

Project value (partner): 150,000 EUR

Period: 2014-2016

#### **2). Electronic Health Records for the Next Generation Medical Decision Support in Romanian and Bulgarian National Healthcare Systems**

Bilateral cooperation România – Bulgaria,

Acronym: **NextGenElectroMedSupport**

Contract no. 461CB/23.10.2010

Coordinator: University Petru Maior Tg.Mures

Role in the project – coordinator partner UMF Tg.Mures

Period: 2010-2012

### **1.1. International research grants - member**

#### **1) Hybrid Medical Complex Systems**

Bilateral cooperation România – Slovacia,

Acronym: **ComplexMediSys**

Contract no. 476/07.03.2011

Coordinator: University Petru Maior Tg.Mures

Role in the project – coordinator partner UMF Tg.Mures

Period: 2010-2012

### **1.3. National research grants - director**

#### **1). Three-dimensional technologies of computerized ultrasonography and intracardiac mapping in diagnostic and interventional nano-technology based treatment of cardiac arrhythmias**

Acronym - **STAR**

Contract number 42-131

Financing body – National center for programme management, Ministry of Education and Research Romania

Programme - PNCD II

Contracting university – UMF Tg.Mures

Role in the project – **Project Director**

Value – total 2,000,000 RON, for UMF Tg.Mureş 1,640,000 RON  
Period 2008-2011

#### **1.4. National research grants - member**

- 1) “High performance multimodal MRI/CT imaging platform, for applications in computational medicine, nanoparticles and hybrid imaging for the research of atherothrombotic disorders – **CARDIO IMAGE**  
Acronym – **CARDIOIMAGE**  
**Financing body: National Authority for Scientific Research and Inovation**  
Value: 2.000.000 EURO  
Role: scientific coordinator  
Period – 2016-2017
  
- 2) Increasing the research capacity in the field of vulnerable plaque imaging, based on advanced nanoparticles, fusion imaging and computational simulation - **PlaqueImage’**  
Acronym – **PLAQUEIMAGE**  
**Financing body: National Authority for Scientific Research and Inovation**  
Value: 2.000.000 EURO  
Role: scientific coordinator  
Period – 2016-2020
  
- 3) **Translation of Genomic Research intracardiac three-dimensional reconstruction in the diagnosis and treatment of congenital or acquired heart disease in adulthood**  
Acronym – **TRIDICO**  
Contract number 72/2006  
Financing body – Romanian Academy of Medical sciences, Ministry of Education and Research (CEEX programme 2006)  
Contracting university – UMF Tg.Mureş  
Role in the project – Scientific ccordinator  
Value - total 1,500,000 RON, for UMF Tg.Mures 1.235.500 RON  
Period 2006-2008  
Web: <http://www.upm.ro/medicina/tridico>
  
- 2) **Translation of genomic research in developing innovative therapies based on stem cell transplantation in atherothrombotic diseases - study integrated into an European research experience of excellence**  
Acronym – **TRANSCARDIOSTEM**  
Contract number 172/2006  
Financing body – Romanian Academy of Medical sciences, Ministry of Education and Research (CEEX programme 2006)  
Contracting university – UMF Tg.Mureş  
Role in the project – Scientific ccordinator  
Value - total 1,500,000 RON, for UMF 1.220.488 RON  
Period 2006-2008  
Adresa de web <http://www.upm.ro/medicina/transcardiosestem>



**3) Implementation of logistical support during the translational genomic resequencing of the acute coronary syndromes to a target population of 1 million inhabitants**

Acronym – **LOGECA**

Contract number 171/2006

Financing body – Romanian Academy of Medical sciences, Ministry of Education and Research (CEEX programme 2006)

Contracting university – UMF Tg.Mureş

Role in the project – Scientific coordinator

Value - total 1,500,000 RON, for UMF 995.000 RON

Period 2006-2008

Adresa de web <http://www.upm.ro/medicina/logeca>

**4) Developing international partnership on stem cell transplantation in acute coronary syndromes in a European Research Networks of Excellence**

Acronym – **COREX**

Contract number 212/2006

Financing body – Romanian Academy of Medical sciences, Ministry of Education and Research (CEEX programme 2006)

Contracting university – UMF Tg.Mureş

Role in the project – Scientific coordinator

Value - total 200,000 RON, for UMF 99.250 RON

Period 2006-2008

Adresa de web <http://corex.8k.ro/>

**5) Translation of hemoreobiologic research on laser-plasma interaction in innovative therapies of coronary atherosclerotic plaque addressed, and biomaterials implanted vascular intima.**

Acronym – **LASCOR**

Contract number 41-069/2007

Financing body – National center for programme management, Ministry of Education and Research Romania

Contracting university – UMF Tg.Mureş

Role in the project – Scientific coordinator

Value - total 2,000,000 RON, for UMF TG.Mures 1.273.774 RON

Period 2007-2010

Adresa de web <http://www.upm.ro/medicina/lascor>

**6) Translation of genomic research related to ethiology of Congenital Heart Diseases into innovative methods for screening, prenatal prevention and 3D imaging**

Acronym – **MAMI**

Contract number 41-042/2007

Financing body – National center for programme management, Ministry of Education and Research Romania

Contracting university – UMF Tg.Mureş

Role in the project – Scientific coordinator

Value - total 2,000,000 RON, for UMF Tg.Mures 1.707.500 RON

Period 2007-2010

Adresa de web <http://www.upm.ro/medicina/mami>



**7) 3D computerized assesment of myocardial viability, translated into innovative methods of medical or interventional treatment or stem cell transplantation in ischemic dilated cardiomyopathy**

Contract number [438/2007](#)

Financing body – National center for programme management, Ministry of Education and Research Romania

Contracting university – UMF Tg.Mureş

Role in the project – Scientific ccordinator

Value - total 1,000,000 RON, for UMF Tg.Mures 1.000.000 RON

Period 2007-2009

Adresa de web <http://idei.8k.ro/>

**8) Laboratory of Excellence in Electrophysiology and Cardiac Imaging as a regional reference of european standards- LEXIC**

Contract number 350/2007

Contracting university – UMF Tg.Mureş

Role in the project – Scientific ccordinator

Value - total 100,000 RON, for UMF 100.000 RON

Perioada de derulare 2007

**9) Center for early diagnostic, treatment and training in treatment of heart diseases in children - DIACORD**

Contract number 349/2007

Financing body – National center for programme management, Ministry of Education and Research Romania, IMPACT programme

Contracting university – UMF Tg.Mureş

Role in the project – Scientific ccordinator

Value - total100,000 RON, for UMF Tg.Mures 100.000 RON

Period - 2007

Over **30 in ternational clinical studies as study coordinator** (EUCLID, FENOPRA, Pioneer, COMMANDER, FINESSE, TIMACS, OASSISS, SNAPIST, PEGASUS, CANTOS, ALECARDIO, STABLITY, ARISTOTEL, etc)

*Prof. Dr. Habil. Theodora Benedek*

*Tîrgu Mureş, 11 July 2017*