

# Life/2021

The future of kidney disease care  
– a joint call for personalized action

Life/2021 virtual congress  
September 15-18, 2021

## Program

[nephrologycampus.com](http://nephrologycampus.com)



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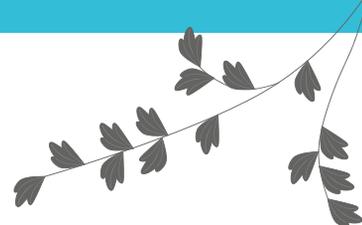
# GET ACCESS & DISCOVER THE INTERACTIVE ONLINE NEPHROLOGY CAMPUS

new ways of virtual education and  
easy assembly of your personal  
congress schedule

## DISCOVER YOUR LIFE/2021 CAMPUS



## Welcome address



Stockholm, September 6, 2021

Dear participants of Life 2021,

All over the world, about 700 million people are living with chronic kidney disease.

I am one of them.

As a Swede, I have had the privilege of receiving excellent care, free of charge. But as you all know, not all patients are that lucky.

Globally, the prevalence of chronic kidney disease is rapidly growing. In developing countries, many patients with chronic kidney disease do not receive dialysis and transplantation. On top of this, the effects of global warming, water shortage and air pollution evidently add to the risk of chronic kidney disease.

As a kidney transplant recipient, I am acutely aware that the need for organs is greater than the supply. Even here in Sweden, with its national donor register, 30 to 50 people die every year while waiting for an organ transplant. We need to increase public awareness about organ shortage, donation and transplantation.

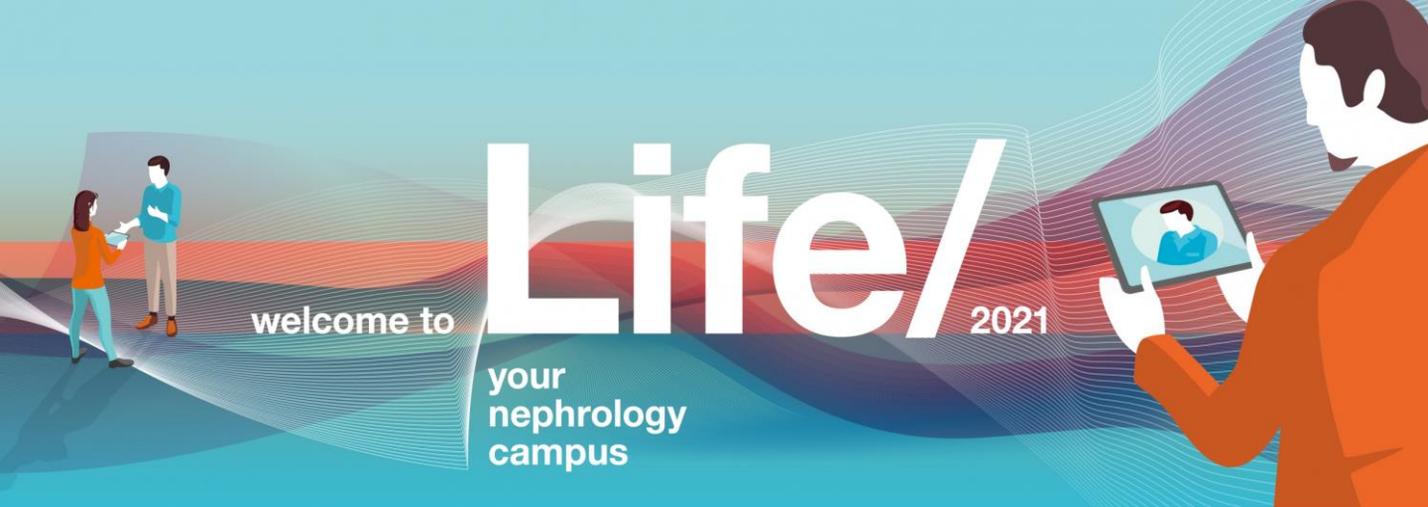
Furthermore, we need to do more to promote a healthy lifestyle, with sustainable food habits and more exercise, to decrease the risk of chronic kidney disease.

Dear nephrologists, when you engage yourselves in these matters, you speak not only for your profession – but for millions of grateful patients, all over the world.

As one of them, I wish you the best of luck with this conference, and with your lifesaving mission.

**His Royal Highness  
Prince Daniel of Sweden**  
Duke of Västergötland





## Dear Life/community,

dialysis therapy is life-saving for approx. 3.4 million people worldwide. However, the complexity of chronic kidney disease (CKD) treatment is enormous with novel approaches emerging. Let's get together to explore these possibilities.

Join Life/2021 and be part of the networking community to plan for better and more sustainable care of CKD patients. Meet nephrologists from all over the world, learn about the future of kidney disease care from the renowned faculty and implement new findings directly in your daily clinical practice.

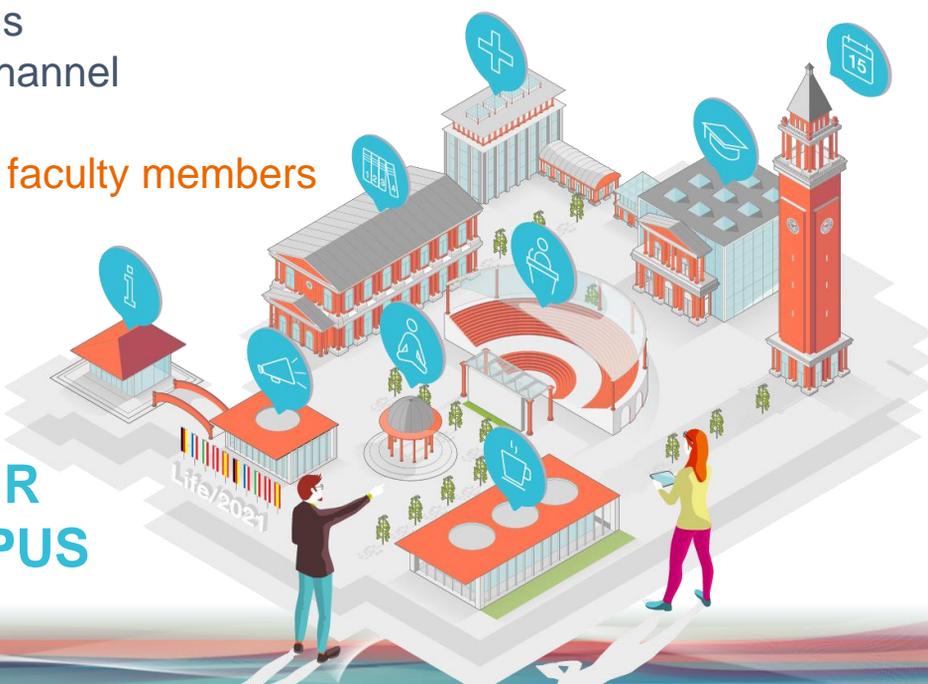
## Life/2021 nephrology congress

from September 15 – 18, 2021



### Your program along 4 learning pathways includes

- > 60 hours of scientific content
  - 19 lectures
  - 24 breakout sessions
  - a dedicated nurse channel
  - a resident program
- presented by over 80 faculty members



## DISCOVER YOUR LIFE/2021 CAMPUS

## Meet the Life/2021 nephrology congress chairmen



**Prof. Dr. C. Wanner**

University Hospital  
Würzburg, Germany

**Christoph Wanner** is Professor of Medicine and chief of the Division of Nephrology and Hypertension at the University Hospital of Würzburg, Germany. His areas of interest are metabolic disorders and cardiovascular outcomes in patients with diabetic kidney disease and other rare diseases. He has served as the principal investigator of the 4D study and as a steering committee member of the EMPA-REG OUTCOME study and is the central European coordinator of the SHARP and EMPA-KIDNEY study. He has published more than 700 scientific articles and served as chair of the European Renal Registry of the ERA-EDTA (2009-2015). In 2007 he received the International Distinguished Medal of the National Kidney Foundation. Prof. Wanner is an honorary member of the Polish Society of Nephrology and received a Doctor Honoris Causa from Charles University, Prague, Czech Republic in 2012. He is currently the president of the ERA-EDTA.

**Peter Stenvinkel** serves as a Full Professor and senior lecturer at the Department of the Renal Medicine Karolinska University Hospital, Karolinska Institute, Stockholm, Sweden.

He is interested in bio-inspired medicine and epigenetics as well as various aspects of inflammation, wasting, vascular calcification and metabolism in chronic kidney disease. He received a prize for the best Swedish thesis in diabetology in 1994 and was a Baxter Extramural Grant awardee in 1996. He was a Karolina prize awardee in 2005 and a Vicenza prize awardee in 2009. He received the Addis Gold medal from the ISRNM for nutritional research in 2010 and was National Kidney Foundation international awardee in 2012. He received the ERA-EDTA prize for outstanding educational contribution in 2017.



**Prof. Dr. P. Stenvinkel**

Karolinska University  
Hospital, Karolinska  
Institutet Stockholm,  
Sweden

# STAY UP TO DATE

GAIN NOVEL INSIGHTS TO IMPROVE PATIENT OUTCOMES



## GET THE MOST RECENT NEWS RIGHT AWAY

discover Life/TV that will guide you through the congress or subscribe to Life/news to stay up to date at the **Life/news center**

## ASK FOR HELP

get support at the **Life/help desk**, e.g., through our live chat



# Life/TV

## YOUR GUIDE THROUGH THE AGENDA HIGHLIGHTS

**Kristina zur Mühlen** is a professional TV journalist and moderator. She has a scientific background in physics and extensive television experience as a host. Kristina zur Mühlen will give you a daily outlook of the highlights of the scientific agenda, special guests and talks. This way you can rest assured to not miss anything and stay on top of your personal agenda overview.



**Life/TV** is your fresh start to the congress day. From September 15 to 18, the daily Life/TV sessions will provide you with an informative 15-minute introduction to each day of the congress. Selected speakers are invited to share their voices on current topics, relevant to the scientific content and the Life/2021 nephrology community.

To emphasize the educational value of the Life/2021 nephrology congress, Life/TV will also provide you with explanation videos on the fascinating, molecular topics addressed in the respective keynote lectures: hypoxia inducible factor 1 and CRISPR-Cas9. A great way to stay on top of your personal agenda and make sure you don't miss anything!

Start your  
day with  
Life/TV!

### Find out about special guests and agenda highlights

**Life/TV – Campus tour** **REC**

Tuesday, 10.00 a.m. CEST

**Life/TV – Day 1** **REC**

Wednesday, 14.00 p.m. - 14.15 p.m. CEST

**Life/TV – Day 2** **REC**

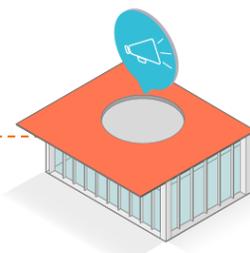
Thursday, 12.00 p.m. - 12.15 p.m. CEST

**Life/TV – Day 3** **REC**

Friday, 12.00 p.m. - 12.15 p.m. CEST

**Life/TV – Day 4** **REC**

Saturday, 09.45 a.m. - 10.00 a.m. CEST



# Explore four learning pathways

There are four learning pathways for you to choose from, each one focusing on an area of interest while covering a wide range of topics within this area. Lectures and breakout sessions within each learning pathway are tailored to the focus topic, with some central lectures and breakout sessions available within each learning pathway.

## Nephro skills



**Advanced analytics**  
personalized therapy    Vascular access    PD  
Joint decision    COVID-19    **Skills lab**    Self-care  
transplantation    vascular calcification  
Interconnected care    **smart dialysis**

## Home dialysis



**HHD**    Interconnected care    pediatric    cardiovascular protection  
**digital solutions**    **Self-care**  
Chronic kidney disease and transition    Skills lab  
**Shared-care**  
**Personalized therapy**    **PD**

## Hemodialysis



**Anemia management**    Self-care  
Impact on health constitution    **HDF**    Advanced analytics    **ESKD**  
**Cardiovascular protection**    **COVID-19**  
Uremic toxins    Digital solutions    **Sodium and potassium**

## Holistic care and health innovations



**New therapy solutions**    Sodium and potassium  
Interdisciplinary approaches    **Sustainability**  
**Global access**    Personalized dialysis    Skills lab  
Advanced analytics    Digital solutions    **Nutrition**  
**Regional challenges**

# About the four learning pathways

## 1 Nephro skills

This learning pathway focuses on the interdisciplinary field of nephrology, comprising various subjects on individual patient care, novel approaches in different renal replacement therapies, and future medical decision-making. Quality nephrology demands skills in many different areas: supporting patients with chronic kidney disease, running a dialysis center, performing vascular access surgery, staying up to date with the latest progress in transplantation medicine. Broaden your skill set in the field of nephrology.

## 2 Home dialysis

This learning pathway provides a detailed look at the wide array of recent approaches to facilitating home dialysis. Home therapies represent a set of treatment modalities for chronic kidney disease patients. Home therapy is increasingly appreciated amongst patients as telemedicine or portable devices become available for patient empowerment. Healthcare professionals have already succeeded in overcoming numerous obstacles in their mission to a patient-centric therapy approach. In addition, patients on home therapies benefit from a reduced COVID-19 infection risk during this pandemic.

## 3 Hemodialysis

This learning pathway will update on the latest advances in improving patient outcomes and quality of life. Hemodialysis remains the main therapy in managing end-stage kidney disease (ESKD). Despite many decades of experience with hemodialysis (HD), research is ongoing and provides promising improvements in patient care. Digitalization and data analysis offer new opportunities in personalizing patient therapies. There are novel insights in areas like sodium and anemia management or patient-centered or shared care.

## 4 Holistic care and health innovations

This learning pathway includes topics on nutritional approaches, gut microbiome research for renal preservation, as well as sustainable and economic consequences of renal replacement therapies. A holistic approach to renal therapy requires the inclusion of various perspectives and areas of expertise. Digital solutions and advanced data analysis in nephrology will also be included. These sessions will inspire to rethink therapeutic approaches and renal care.

# Life/CONGRESS AGENDA

GAIN NOVEL INSIGHTS TO IMPROVE PATIENT OUTCOMES

## YOUR INDIVIDUAL NEPHROLOGY CONGRESS AGENDA

easy assembly of your personal congress  
schedule at the **Life/agenda tower**



# Scientific program at a glance

Nephro skills

Home dialysis

Hemodialysis

Holistic care and health innovation

## WEDNESDAY, SEPTEMBER 15, 2021

02.00 p.m. – 07.05 p.m. CEST

Plenary	02.15 p.m. – 02.40 p.m.	Welcome and opening					
Plenary L02	02.55 p.m. – 03.35 p.m.	Global burden of chronic kidney disease and the need for personalized renal care					
Plenary L03	03.45 p.m. – 04.25 p.m.	Conversation about hypoxia-inducible factor 1-alpha (HIF-1α): Understanding cellular oxygen sensing mechanisms – implications for medicine					
BO01	04.45 p.m. – 05.45 p.m.	BO02	04.45 p.m. – 05.45 p.m.	BO03	04.45 p.m. – 05.45 p.m.	BO04	04.45 p.m. – 05.45 p.m.
How to run quality care in a dialysis center and home program		Pediatric dialysis – modality selection and practical aspects to overcome classic hurdles		Anemia management in the next decade		Sodium and potassium management: Intake, gut microbiome and preservation of kidney function	
BO05	06.00 p.m. – 07.00 p.m.	BO06	06.00 p.m. – 07.00 p.m.	BO07	06.00 p.m. – 07.00 p.m.	BO08	06.00 p.m. – 07.00 p.m.
Challenges in transplantation: Graft rejection and COVID-19		Setting up a home hemodialysis program		Sodium, volume control and cardiovascular outcomes in dialysis patients		Global access to affordable dialysis	
Plenary	07.00 p.m. – 07.05 p.m.	Daily Wrap-up					

## THURSDAY, SEPTEMBER 16, 2021

12.00 p.m. – 06.55 p.m. CEST

Plenary L09	12.15 p.m. – 01.15 p.m.	Convection with conviction to CONVINCE					
BO09*	01.30 p.m. – 02.30 p.m.	BO10*	01.30 p.m. – 02.30 p.m.	BO11*	01.30 p.m. – 02.30 p.m.	BO12*	01.30 p.m. – 02.30 p.m.
Nephrological skills lab		Self-care in dialysis		Advanced analytics in nephrology		Digital solutions	
BO13	02.50 p.m. – 03.50 p.m.	BO14	02.50 p.m. – 03.50 p.m.	BO15	02.50 p.m. – 03.50 p.m.	BO16	02.50 p.m. – 03.50 p.m.
Vascular access management		Infection management in peritoneal dialysis		Uremic toxins and hemodiafiltration		Solving African challenges in dialysis	
L05	04.05 p.m. – 05.35 p.m.	L06	04.05 p.m. – 05.35 p.m.	L07	04.05 p.m. – 05.35 p.m.	L08	04.05 p.m. – 05.35 p.m.
Joint decision making for personalized therapy		Chronic kidney disease and transition management		Cardiovascular protection in end-stage kidney disease		Global awareness, impact and footprint	
Plenary L04	05.45 p.m. – 06.45 p.m.	Chronic kidney disease – a clinical model of premature ageing			N01	05.45 p.m. – 06.45 p.m.	Nursing leadership 2.0 – the future is now
Plenary	06.45 p.m. – 06.55 p.m.	Daily Wrap-up					

## FRIDAY, SEPTEMBER 17, 2021

12.00 p.m. – 06.25 p.m. CEST

L11	12.15 p.m. – 01.45 p.m.	L12	12.15 p.m. – 01.45 p.m.	L13	12.15 p.m. – 01.45 p.m.	L14	12.15 p.m. – 01.45 p.m.
Multiple aspects to improve current and future peritoneal dialysis management		Cardioprotective dialysis at home		Taking leaps to a personalized iron and anemia management		Interdisciplinary approaches to unlock new therapy solutions to kidney disease	
BO17	02.00 p.m. – 03.00 p.m.	BO18	02.00 p.m. – 03.00 p.m.	BO19	02.00 p.m. – 03.00 p.m.	BO20	02.00 p.m. – 03.00 p.m.
Vascular calcification		Defining patient pathways as routes of personalized therapy		Challenges in dialysis delivery: Sodium balance, fluid status and organ damage		Does "one-size-fits-all" still apply to (pre-) dialysis treatment?	
BO21	03.30 p.m. – 04.30 p.m.	BO22	03.30 p.m. – 04.30 p.m.	BO23	03.30 p.m. – 04.30 p.m.	BO24	03.30 p.m. – 04.30 p.m.
Models of kidney care – worldwide perspectives and principles of care		How to start home hemodialysis		Do we need potassium binders to combat hyperkalemia in patients with advanced chronic kidney disease?		Solving Eastern and Southeastern European challenges in dialysis	
Plenary L10	04.45 p.m. – 06.15 p.m.	CRISPR in the renal arena – breaking down hurdles to new medicines and global transplant availability			N02	04.45 p.m. – 06.15 p.m.	Evidence-based practices for improving patient care and advancing the nursing field
Plenary	06.15 p.m. – 06.25 p.m.	Daily Wrap-up					

## SATURDAY, SEPTEMBER 18, 2021

09.45 a.m. – 02.00 p.m. CEST

L15	10.00 a.m. – 11.30 a.m.	L19	10.00 a.m. – 11.30 a.m.	L16	10.00 a.m. – 11.30 a.m.	L17	10.00 a.m. – 11.30 a.m.
Interconnected renal care		Advantages of home dialysis during a pandemic		COVID-19 and nephrology: Unprecedented challenges and lessons learned		Food as medicine	
Plenary L18	12.00 p.m. – 12.45 p.m.	Clinical trials and practice in diabetic kidney disease from one-size-fits-all to one-fit-for-everyone			N03	12.00 pm – 12.45 pm	Home dialysis in pandemic times and beyond
Plenary	01.15 p.m. – 02.00 p.m.	Farewell					

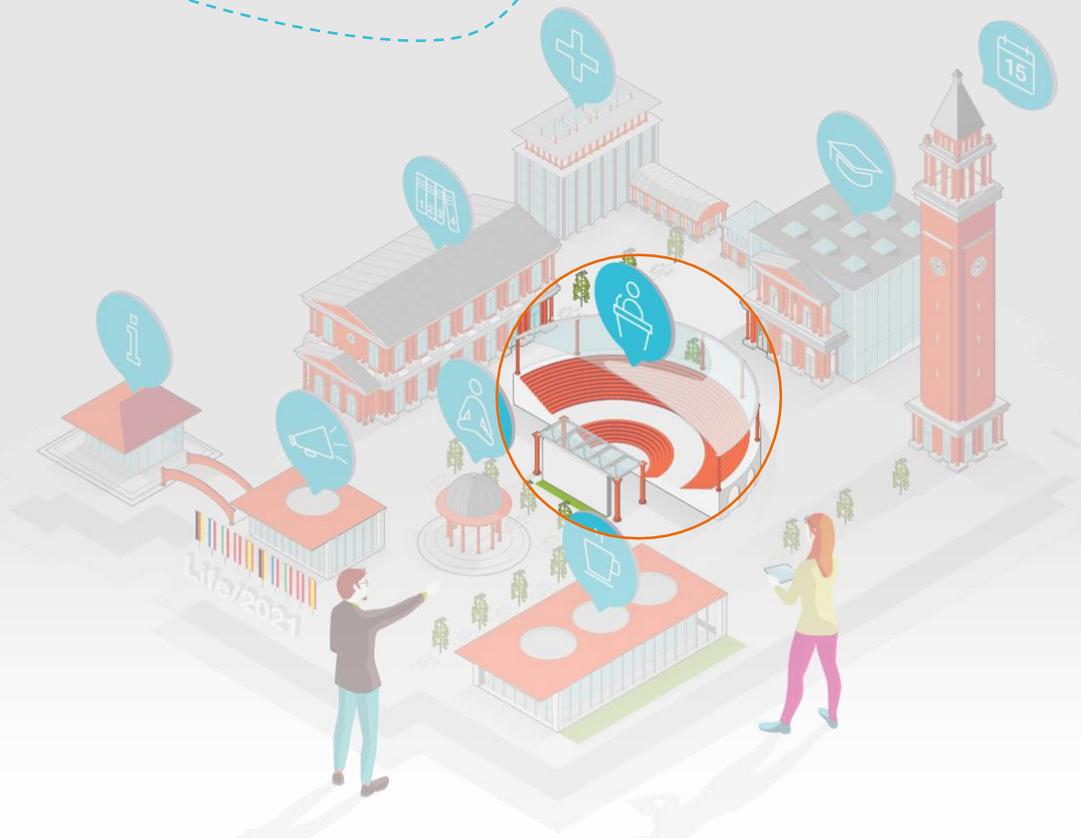
# BE PART OF THE Life/COMMUNITY

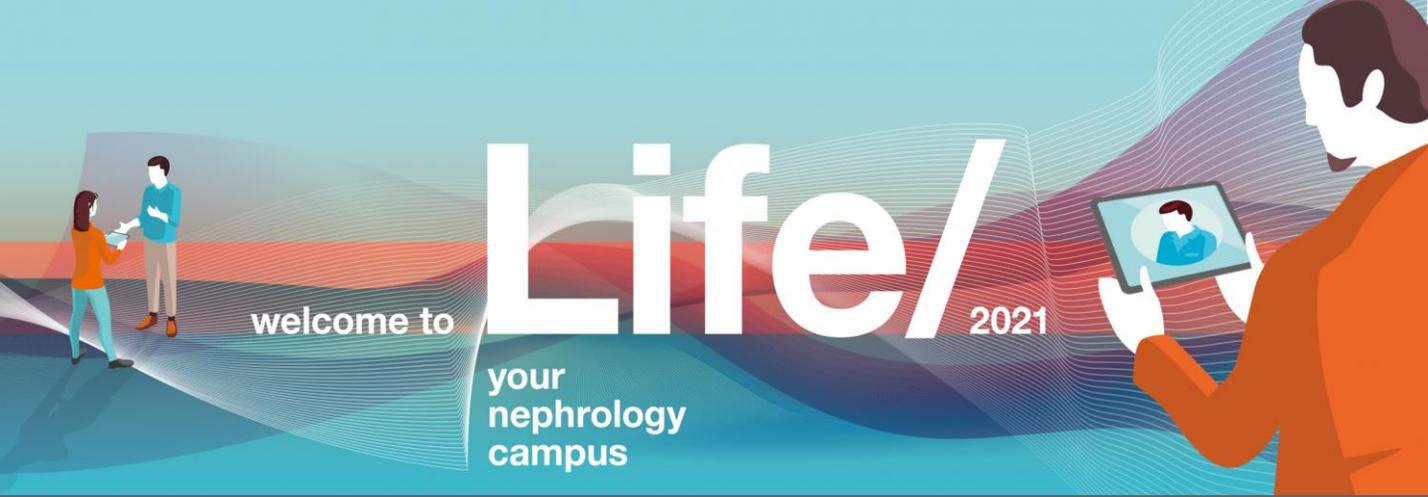
GAIN NOVEL INSIGHTS TO IMPROVE PATIENT OUTCOMES



## DISCOVER LATEST SCIENTIFIC TRENDS

join 19 lectures and 24 breakout  
sessions from leading clinicians and  
researchers at the **Life/auditorium**





# PROGRAM

## WEDNESDAY, SEPTEMBER 15, 2021

02.00 p.m. – 02.15 p.m. CEST

**REC** **Plenary**

**Life/TV: Welcome and highlights of the day**

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**Kristina zur Mühlen**



02.15 p.m. – 02.25 p.m. CEST

**LIVE** **Plenary**

**Opening remarks from the Life/chairmen**

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**Christoph Wanner**  
**Peter Stenvinkel**




02.25 p.m. – 02.35 p.m. CEST

**LIVE** **Plenary**

**Welcome and greetings**

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**Katarzyna Mazur-Hofsäß**  
CEO EMEA, FMC  
**Franklin W Maddux**  
Global Chief Medical Officer, FMC



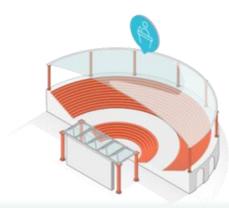

02.35 p.m. – 02.40 p.m. CEST

**REC** **Plenary**

**Welcome address**

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**His Royal Highness Prince Daniel of Sweden,  
Duke of Västergötland**

# WEDNESDAY, SEPTEMBER 15, 2021

02.55 p.m. –  
03.35 p.m. CEST

## Global burden of chronic kidney disease and the need for personalized renal care

L02

Chairs

**Peter Stenvinkel, Christoph Wanner**

Speakers and topics

**Adeera Levin**

Global burden of chronic kidney disease – what we do and don't know...



**Dick de Zeeuw**

... and why we need precision medicine



The global burden of chronic kidney disease (CKD) continues to increase not only because of the higher prevalence due to traditional causes of CKD such as diabetes and hypertension, but also because of the increasing incidence of CKD resulting from infections and unknown causes in the so-called CKD hotspots. The first lecture summarizes what is currently known about the epidemiology of CKD and the gaps therein. The second lecture deals with the major steps that have been made in halting or slowing the morbidity of the disease in the last 20 years. However, despite this big success, the residual risk remains still extremely high, therefore showing the need for personalized precision renal care.

LIVE

Keynote Lecture

03:45 p.m. –  
04:25 p.m. CEST

## Conversation about hypoxia-inducible factor 1-alpha (HIF-1 $\alpha$ ): Understanding cellular oxygen sensing mechanisms – implications for medicine

L03

Chairs

**Peter Stenvinkel, Christoph Wanner**

Speakers and topics

**Peter Ratcliffe**

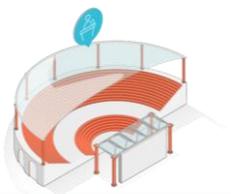
**Kai-Uwe Eckardt**



Have you ever wondered how the molecular understanding of HIF-inhibitors developed? Find out by following the conversation about hypoxia-inducible factor 1-alpha (HIF-1 $\alpha$ ) between Prof. Sir Peter Ratcliffe and Prof. Kai-Uwe Eckardt. Learn from these outstanding experts about the elucidation of the oxygen sensing pathway and its use in medicine!

LIVE

Keynote Session



04.45 p.m. –  
05.45 p.m. CEST

Breakout Session – Nephro skills

LIVE

## How to run quality care in a dialysis center and home program

BO01

Speakers and topics

### Wim van Biesen

Challenges in setting up a renal care facility efficiently and with quality care: Hospital



### Stefano Stuard

Challenges in setting up a renal care facility efficiently and with quality care: Provider network



### Natalie Borman

Challenges in setting up a renal care facility efficiently and with quality care: Home program



Explore and learn to understand the different challenges in setting up a renal care program and how they can be solved. An expert panel from hospital settings, large provider outpatient clinics and home programs will share various quality measures and controls which are required to set up a renal care program efficiently while still providing the highest standard of care.

04.45 p.m. –  
05.45 p.m. CEST

Breakout Session – Home dialysis

LIVE

## Pediatric dialysis – modality selection and practical aspects to overcome classic hurdles

BO02

Speakers and topics

### Peter Bárány

Peritoneal dialysis in children – choices and challenges in different age groups

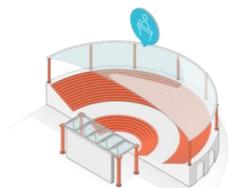


### Rukshana Shroff

Hemodiafiltration in children – is this the way forward?



This workshop will focus on the right modality selection for patients and how the common hurdles can be overcome. Another focus of the discussion will be the advantages of peritoneal dialysis solutions especially for pediatric patients as well as the performance of hemodiafiltration in pediatric therapy.



04.45 p.m. –  
05.45 p.m. CEST

Breakout Session – Hemodialysis

LIVE

## Anemia management in the next decade

BO03

Moderator

**Kai-Uwe Eckardt**

Speakers and topics

**David Wheeler**

Management of anemia in hemodialysis patients – what has PIVOTAL taught us



**Kai-Uwe Eckardt**

The failure of EPO production in diseased kidneys – implications for therapy



How can anemia be treated in the future? To answer this question, the adequacy of current iron supplementation and the large potential of hypoxia-inducible factor (HIF) stabilizers for future renal anemia treatments will be discussed. Find out more about the future of anemia management.

04.45 p.m. –  
05.45 p.m. CEST

Breakout Session – Holistic nephrology

LIVE

## Sodium and potassium management: Intake, gut microbiome and preservation of kidney function

BO04

Moderator

**Bernard Canaud**

Speakers and topics

**Charles Chazot** REC

Sodium burden in chronic kidney disease, transition to dialysis, incremental dialysis and preservation of RRF

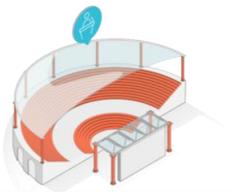


**Carla Avesani**

Healthy diet and potassium restriction in chronic kidney disease: How to conciliate both?



Disorders of sodium and potassium are commonly encountered in chronic kidney disease and can have serious consequences. In this workshop, you will learn more about the impact of high sodium and potassium intake and the growing body of literature supporting links between sodium intake and microbiota, which may play a role in the development and maintenance of high blood pressure.



06.00 p.m. –  
07.00 p.m. CEST

BO05

Breakout Session – Nephro skills

## Challenges in transplantation: Graft rejections and COVID-19

Speakers and topics

### Lionel Rostaing

Apheresis and transplantation



### Miriam Banas

Innovative tools for detection and monitoring of transplant rejection



### Mario Cozzolino

Impact of COVID-19 and transplantation



Post-transplant surveillance for acute rejection is mainly based on regular monitoring of serum creatinine levels and transplant biopsies upon functional renal impairment. This talk gives an overview about alternative approaches to detect and monitor kidney transplant rejection. Additionally, this session will address organ transplantation challenges in times of the COVID-19 pandemic.

Discuss and learn more about:

Novel monitoring and detection tools for transplant rejection, explore antibody-depletion techniques to overcome transplantation challenges for a successful ABO- and/or human leukocyte antigens (HLA)-incompatible transplantation. Find out about the effects of immunoadsorption in combination with membrane filtration and the impact on complement markers. This session will shed light on diagnostic tools to acquire data and interpret these appropriately regarding hemostasis parameters and thrombin generation in the context of double-mediated rejection.

LIVE

06.00 p.m. –  
07.00 p.m. CEST

BO06

Breakout Session – Home dialysis

## Setting up a home hemodialysis program

Speakers and topics

### Eric J Goffin

Achieving good patient outcomes and quality of life – technological advances and solutions to homecare



### James G Heaf

Barriers to home hemodialysis, treatment frequency and hemodialysis prescription



### Maria F Slon Roblero

Breaking down barriers for home hemodialysis: Patient empowerment and improvement in the process of shared decision making



Explore the benefits and hurdles of setting up a home hemodialysis program for patients. Discuss how patients can be motivated and empowered for home therapies; solutions and best practices will be discussed.

LIVE



# WEDNESDAY, SEPTEMBER 15, 2021

06.00 p.m. –  
07.00 p.m. CEST

Breakout Session – Hemodialysis

LIVE

## Sodium, volume control and cardiovascular outcomes in dialysis patients

BO07

Speakers

**Peter J Blankestijn**



**Bernard Canaud**



Explore the cardiovascular impact through effective volume control and fluid management. The workshop will show you how to best diagnose and reduce hypervolemia in your patients, using effective medication or ultrafiltration. Interesting case studies will be discussed and will address water and sodium overload as well as the prevention thereof to improve cardiovascular disease and mortality. Early detection is the key to prevention of pathogenesis and can be supported by using lung ultrasounds and biomarkers.

06.00 p.m. –  
07.00 p.m. CEST

Breakout Session – Holistic nephrology

LIVE

## Global access to affordable dialysis

BO08

Speakers and topics

**Sidy M Seck**

The global shortfall in affordable dialysis



**Peter Kotanko**

Allo-hemodialysis, a potential solution



Currently, more than 2 million people die each year due to the lack of affordable dialysis and if no solution is found this number will increase over the next years. We propose allo-hemodialysis (alloHD) as a simple and low-cost HD alternative. In alloHD, the patient's blood is dialyzed against the blood of a healthy subject (buddy), who receives the excess fluid and uremic solutes and excretes them via his/her healthy kidneys. By eliminating the "classical" dialysate, both technical complexity of hemodialysis and machine costs are significantly reduced, making it an affordable HD alternative.

07.00 p.m. –  
07.05 p.m. CEST

Plenary

REC

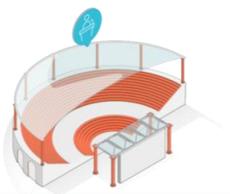
## Daily Wrap-up

**Franklin W Maddux**

Global Chief Medical Officer, FMC



The Daily Wrap-up gives a short summary of the day as well as an outlook for the upcoming sessions and puts the presentations into context.



# STAY HEALTHY

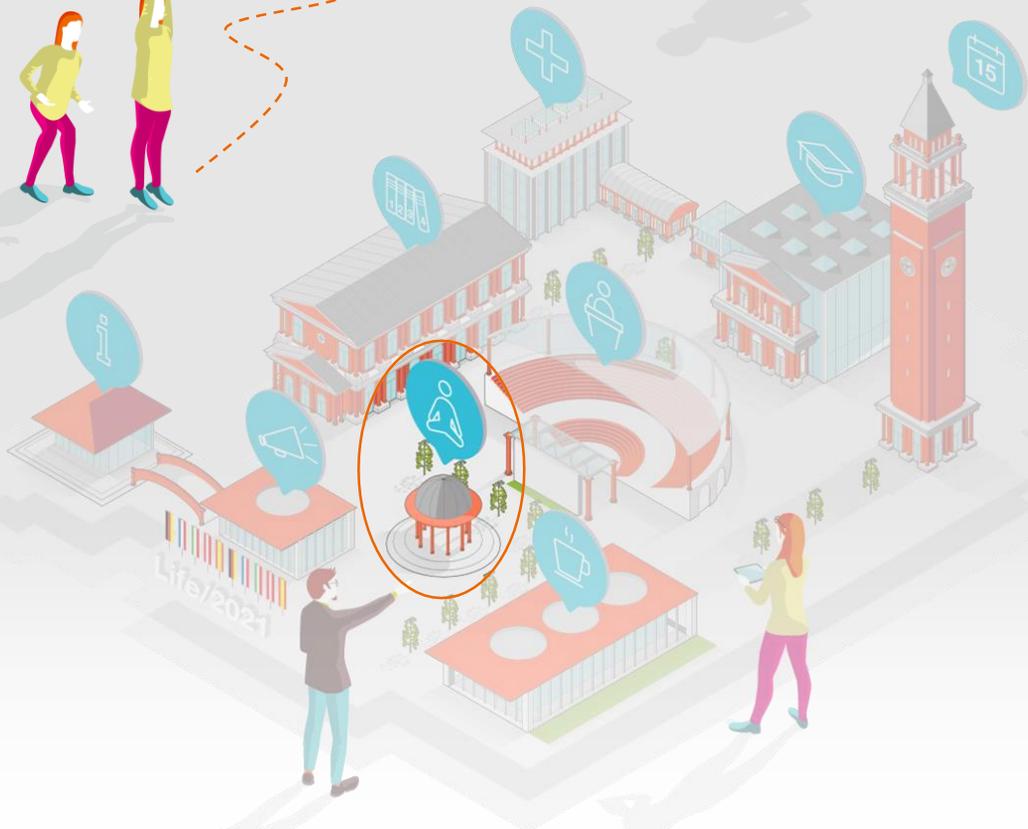
EXPERIENCE HANDS-ON KNOWLEDGE FROM OUR  
LIFE/HEALTH BODY AND MIND EXPERTS

## JOIN AN EDUCATIONAL COOKING SESSION WITH JAMIE OLIVER

cook a recipe specifically designed  
for patients with chronic kidney  
disease at the **Life/health pavilion**

## YOGA FOR CKD PATIENTS

meet the body and mind experts who will  
show yoga exercises suitable for CKD  
patients at the **Life/health pavilion**



# Life/health body and mind program



**Jamie Oliver** is a world-renowned chef who has made it his personal mission to improve the health of everyone by providing access to healthy food and recipes for all, including patients and people who have to follow restrictive diets. He is involved in many social projects, notably in schools, to increase the health of students in the long-term in the UK by teaching good eating habits. In 2019, he co-founded the Bite Back 2030 campaign, a “youth-led movement working to achieve a world where all young people have the opportunity to be healthy, no matter where they live”. In the 23 cookery books he has published, the best-selling author places an important focus on making healthy and delicious cooking easy, quick and within everyone’s reach.

Cook a recipe specifically created for CKD patients!

## Learn about nutrition management for CKD patients

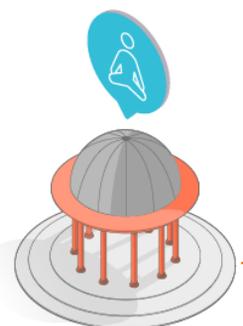
**Jamie Oliver** shares his dedication to a healthy lifestyle during a cooking session at Life/2021 nephrology congress. Nutrition expert **Dr. Carla Avesani**, as well as chairmen **Prof. Dr. Peter Stenvinkel** and **Prof. Dr. Christoph Wanner** will accompany Jamie with expertise about nutritional guidelines for CKD patients.

### Session 1 REC

Thursday, 07.00 p.m. – 08.00 p.m. CEST

### Session 2 REC

Friday, 06.30 p.m. – 07.30 p.m. CEST



# Life/health body and mind program



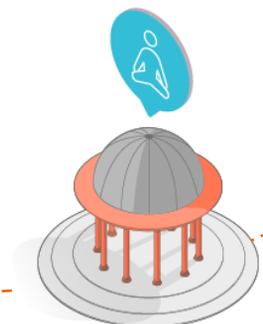
## Cooking methods can counteract malnutrition in patients with impaired kidney function

Impaired kidney function and resulting rising mineral concentrations can lead to a disrupted electrolyte balance, hypertension and ultimately weaker bone structure and cardiac congestion. As a result, a diet that causes no harm for the general population can lead to increased mineral levels if it is not well-planned considering the particularities for patients with impaired kidney function.<sup>(1)</sup>

Patients with chronic kidney disease (CKD) need to comply with a careful dietary plan to avoid nutritional deficits, like malnutrition, sarcopenia and others. As recommended by the updated KDOQI Guideline for Nutrition in CKD, the diet should be tailored according to the patient's preferences, nutritional status, socioeconomic condition and clinical goal instead of focusing on dietary restriction only.<sup>(2)</sup> Based on increasing research literature about food, nutritional patterns and health outcomes, suitable cooking techniques can be derived to optimize nutritional guidelines. Demineralization procedures can be applied to an entire range of foods<sup>(3)</sup> especially to vegetables<sup>(4)</sup> but also in meat, legumes, fruits and cheese<sup>(3,5)</sup>.

The goal is to develop easily applicable procedures that maintain the highest level of taste and food texture.<sup>(3)</sup> This is done by performing aqueous mineral extraction and using different cooking techniques like soaking and pressure cooking.<sup>(3,5)</sup> These methods enable the reduction of potassium content by up to 80 %.<sup>(5)</sup> A dietary selection of demineralized foods can have a positive impact on the nutritional profile of renal patients.<sup>(3)</sup>

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# Life/health body and mind program



**Joëlle Fixson** is a certified yoga teacher specialized in healthy movement and pain management. She draws from her own experience of living with fibromyalgia for over two decades to adapt her classes to best suit her students' capabilities. She believes that yoga is for everyone and can help nearly anyone to feel better, no matter their situation.

**Kim Saha** is a qualified physiotherapist and a certified Pilates instructor. Kim has gathered a wealth of experience in helping people with injuries to release chronic pain thanks to her work in a physiotherapy clinic and by providing emergency medical care for the British Athletics Team. Having researched CKD, she is thrilled to use her great expertise to help patients suffering from this disease.



## Learn about the benefits of yoga exercises for CKD patients

Recognizing that kidney patients are keen to learn about suitable exercises they can do at home, the Life/2021 program includes a series of yoga sessions that will provide participants with information and practical demonstrations.

Our body movement experts have developed special training sessions that can be adapted to the individual health conditions of CKD patients.

### **Session 1** REC

Wednesday, 04.30 p.m. – 04.45 p.m. CEST

### REC **Session 3**

Friday, 03.15 p.m. – 03.30 p.m. CEST

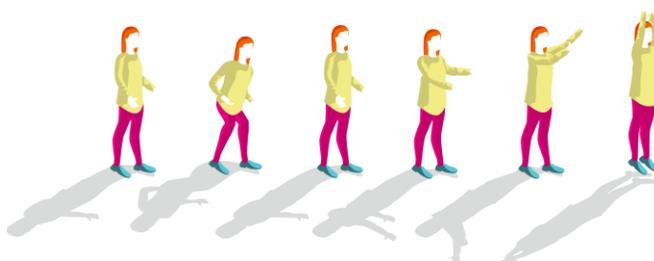
### **Session 2** REC

Thursday, 02.35 p.m. – 02.50 p.m. CEST

### REC **Session 4**

Saturday, 11.45 a.m. - 12.00 p.m. CEST

# Life/health body and mind program

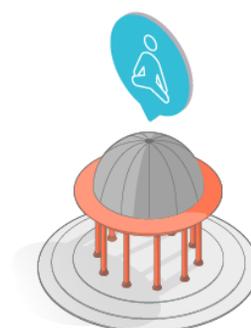


## Yoga and Pilates significantly benefit both body and mind

Various medical approaches exist to improve the well-being of people suffering from chronic diseases such as CKD. In the field of complementary medicine, the use of mind-body interventions (MBI), encompassing therapies like Yoga and Pilates, have been gaining interest.<sup>(1)</sup> These therapies have been shown to protect against the onset of serious illnesses as well as improving the clinical picture of chronic diseases by promoting metabolic, physiological and psychological benefits.<sup>(2,3)</sup>

Yoga and Pilates encompass physical postures, breathing, meditation and relaxation techniques which link the body and mind. These techniques can be adjusted to be feasible even for physically limited patients. It is not surprising that Yoga also improves clinical outcomes in CKD, as shown in over 10 different clinical studies.<sup>(4-14)</sup> Similar studies exist for Pilates demonstrating health benefits also in renal transplant patients.<sup>(10-20)</sup>

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- 3) Booth FW. 2012 Compr Physiol Vol. 2(2), pp. 1143–1211.
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## DISCOVER YOUR LIFE/2021 CAMPUS



12.00 p.m. –  
12.15 p.m. CEST

REC

Plenary

## Life/TV: Welcome and highlights of the day

Kristina zur Mühlen



12.15 p.m. –  
01.15 p.m. CEST

Keynote Lecture

## Convection with conviction to CONVINCe

Chairs

**Bernard Canaud, Christoph Wanner**

Speaker

**Peter J Blankestijn**



Online hemodiafiltration (HDF) is an established renal replacement modality for patients with end stage chronic kidney disease that is now gaining clinical acceptance worldwide. Currently, there is a growing body of evidence indicating that treatment with HDF is associated with better outcomes and reduced cardiovascular mortality for dialysis patients.

In this presentation current evidence on the effects on clinical outcome is summarized and possible mechanisms of beneficial effect are discussed. Currently, treatment with HDF appears to improve the survival of dialysis patients predominantly due to a reduction in their cardiovascular burden, and this reduction is linked to the sessional convection volume exchanged. Information on the effects on patient reported outcome measures is very limited. Presently, large clinical trials are progressing, which hopefully will deliver definite answers in the near future. Information on rationale, design and present status will be shared with the audience.

LIVE

L09



01.30 p.m. –  
02.30 p.m. CEST

Breakout Session – Nephro skills

## Nephrological skills lab

### Speakers and topics

#### Detlef Klein

Fistula care – shunt monitoring, surgery, puncturing strategies, sonography



#### Maximilian J Röder

Peritoneal dialysis catheter implantation preparation, exit site care and ISPD 2019 guidelines



#### Ulrich Moissl

Value of bioimpedance monitoring in daily routine hemodialysis care to determine optimal dry weight



#### Catharina V Schramm

Value of bioimpedance monitoring in daily routine hemodialysis care to determine optimal dry weight



#### Kai Lopau

Renal biopsy – instruments and equipment, complications to be avoided



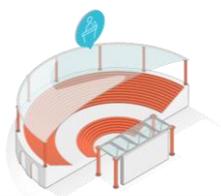
#### Daniel Kraus

Atrial catheter implantation – practical training



- 1. Fistula care:** This session will demonstrate fistula sonography and discuss (a) useful recommendations for shunt monitoring, (b) optimal preparation for shunt surgery and what prior examinations are useful, (c) different fistula puncturing strategies using sonography according to recent ERBP vascular guideline.
- 2. PD catheter care and implantation techniques:** This session will discuss and demonstrate (a) PD catheter implantation preparation of the patient, (b) exit site care and what to do in case of infection, (c) discuss approaches to infection in line with 2019 ISPD guidelines.
- 3. Body Composition Monitoring:** Training and hands-on practice. The value of bio-impedance measurements in daily routine hemodialysis care to determine optimal dry weight.
- 4. Renal Biopsy:** Required instruments and equipment, procedures, short videos on how to find the kidney, complications to avoid.
- 5. Atrial catheter implantation:** Practical training

LIVE



01.30 p.m. –  
02.30 p.m. CEST

Breakout Session – Home dialysis

## Self-care in dialysis

Speakers and topics

**Martin Wilkie**

Shared hemodialysis care – background



**James Fotheringham**

How did we deliver shared hemodialysis care?



**Tania Barnes**

Shared hemodialysis care – key factors for training staff



Care to care? Find out about the importance of patient involvement in therapy and how shared care prepares for successful transition to home hemodialysis. Learn from the experts how to start and facilitate a shared or supported self-care program in your unit.

LIVE

01.30 p.m. –  
02.30 p.m. CEST

Breakout Session – Hemodialysis

## Advanced analytics in nephrology

Speakers and topics

**Markus Ketteler**

Applied advanced analytics in chronic kidney disease - mineral and bone disorder (CKD-MBD)



**Hiddo J Lambers Heerspink**

Applied advanced analytics to predict individual drug response



**Luca Neri**

Applied advanced analytics for prognosis, diagnosis and therapy management in nephrology



What can nephrology expect from the digital revolution? Visit this workshop to take part in lively discussions and catch a glimpse of the future. See how “advanced analytics” can be applied to help improve individual patient care. Learn what impact predictions from electronic medical records can have, how to implement personalized treatment approaches to delay the progression to end-stage kidney disease (ESKD), how to prepare patients for transition to dialysis and many more applications of applied data analytics.

LIVE



01.30 p.m. –  
02.30 p.m. CEST

Breakout Session – Holistic nephrology

LIVE

## Digital solutions

### Speakers and topics

#### Jeroen P Kooman

Wearables: Can they improve outcomes in kidney patients



#### Len Usvyat

Obtaining insights from multiple data sources through applied advanced big data analytics



#### Stefan Mönk

Virtual reality applications to empower patient self- and home-care



Explore the opportunities the translation of recent technological breakthroughs offer to improve patient care. Can virtual reality help improve patient self-care? Will real-time data transmission and analytics make therapy management easier? Find out which benefits can be expected from handheld devices, remote monitoring and pervasive sensing, as well as what developments are imminent and how analytics and artificial intelligence (AI) can improve future personalized care delivery.

02.50 p.m. –  
03.50 p.m. CEST

Breakout Session – Nephro skills

LIVE

## Vascular access management

### Speakers and topics

#### Anabela Rodrigues

Primary prevention: Integrated patient management towards better vascular access protection



#### Anna Caroli

Computational modelling combining imaging with clinical parameters in support of optimal vascular access surgical planning

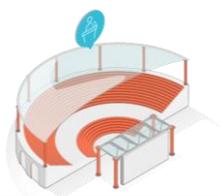


#### Pedro Ponce

Secondary prevention: Surveillance and preemptive intervention



Discover how integrated patient management based on organizational models and technical advances as well as primary and secondary vascular access prevention may improve patient outcomes. Additionally, you will find out more about pre-operative assessment for arteriovenous fistula placement for dialysis and the value of predicting vascular access outcome.



02.50 p.m. –  
03.50 p.m. CEST

Breakout Session – Home dialysis

LIVE

## Infection management in peritoneal dialysis

Speakers and topics

**Jolanta S Malyszko**

Exit site infections in PD



**Olof Heimbürger**

Peritonitis



Peritoneal dialysis (PD)-related peritonitis remains the most frequent treatment-related infection and is the greatest contributor to infection-related morbidity, including hospitalization risk and temporary or permanent transfer to hemodialysis. Many treatment innovations have been shown to be effective in reducing the risk for exit site infection and PD-related peritonitis. This breakout session reviews current knowledge in diagnosing and managing PD-associated infections (exit site and peritonitis).

BO14

02.50 p.m. –  
03.50 p.m. CEST

Breakout Session – Hemodialysis

LIVE

## Uremic toxins and hemodiafiltration

Speakers and topics

**Raymond Vanholder**

Update on uremic toxicity



**Vincenzo Panichi**

Effects of high volume online hemodiafiltration on erythropoiesis-stimulating agent resistance – results from REDERT study



Since the seminal work on classification, concentration, and interindividual variability of uremic toxins, new aspects of 'modern' dialysis treatment have emerged. Uremic toxins (UT) have been identified and related to higher rates of morbidity and mortality in dialysis patients. Find out more about their effects on cardiovascular disease and how to improve the removal of UT during dialysis. Usual doses of erythropoiesis-stimulating agents (ESAs) have limited impact on chronic kidney disease-associated anemia. This session will discuss online high-volume hemodiafiltration and the remediation of ESA resistance in patients suffering from uremic inflammation, in reference to the REDERT study.

BO15



02.50 p.m. –  
03.50 p.m. CEST

Breakout Session – Holistic nephrology

## Solving African challenges in dialysis

Speakers and topics

**Charles R Swanepoel**

Fix the workforce?



**Rasha Hussein**

Developing pediatric nephrology services in low-income countries



**Gloria E Ashuntantang**

How can we solve the problem of availability and accessibility to dialysis in Africa?



Explore how different challenges of renal care can be solved and what best practices have been established recently. Take part in the discussion between expert nephrologists from academia and large provider networks. A special focus will be the pediatric treatment, lack of workforce and overall access to treatment and dialysis in several African countries. Exchange on cases and participate in the development of a plan that will impact care implementation and the quality of future care delivery.

LIVE

04.05. p.m. –  
05.35 p.m. CEST

Split Lecture – Nephro skills

## Joint decision making for personalized therapy

Chairs

**Natalie Borman, Adeera Levin**

Speakers and topics

**Jolanta S Malyszko**

New perspectives in managing chronic kidney disease patient pathway: The way to self-care and home hemodialysis



**Monika Lichodziejewska-Niemierko**

Shared decision making: The factors of a successful peritoneal dialysis therapy



**Natalie Borman**

Breaking the barriers for home hemodialysis



**Anabela Rodrigues**

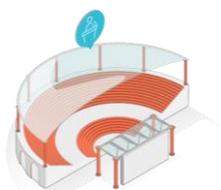
Comparing outcomes of home therapies: Peritoneal dialysis and home hemodialysis



This lecture highlights new perspectives in managing self-care with the establishment of home peritoneal dialysis (PD) and home hemodialysis (HHD). Further, it will teach about the hurdles for home dialysis and how such barriers can be overcome. Finally, some very promising new perspectives in the approach of personalized self-care will be shared.

LIVE

L05



04.05. p.m. –  
05.35 p.m. CEST

## Chronic kidney disease and transition management

Chairs

**Marie Evans, Dick de Zeeuw**

Speakers and topics

**Ziad A Massy**

Medication prescriptions in patients with chronic kidney disease – chronic kidney disease-cohort's inputs



**Dick de Zeeuw**

How to delay the transition in chronic kidney disease



**Marie Evans**

Personalized transition management



**Pedro Ponce**

Timely access management: Preparing the patient for fistula creation



Chronic kidney disease (CKD) is associated with multiple comorbidities and a particularly high level of polymerization. Recent results from CKD cohort studies describe the complexity of prescription in the CKD setting, due in part to the lack of up-to-date guidelines on dose level adjustments in patients with impaired kidney function. However optimal drug management should be an important target for preserving kidney function. Many interventions have been tested to reduce the risk, but we are nowadays still confronted with a high unmet need. Target findings and the search for new interventions must change to include more individual and precise approaches to delay the transition to renal replacement therapy (RRT).

For people with advanced chronic kidney disease and evidence of progression to renal replacement therapy, personalized transition management offers a better option to prepare these patients for dialysis, transplantation, or conservative care. Patient involvement in the decision-making process is important and requires unbiased patient education. Another very important aspect of the proper transition of CKD patients into dialysis is the preparation of timely access management by e.g., fistula creation.

Split Lecture – Home dialysis

LIVE



04.05 p.m. –  
05.35 p.m. CEST

## Cardiovascular protection in end-stage kidney disease

Chairs

**Jürgen Floege, Andrzej Więcek**

Speakers and topics

**Maarten W Taal**

Hemodynamic stress in hemodialysis: Are we able to prevent complications and organ damage?



**Bernard Canaud**

Restoring sodium balance in hemodialysis



**Jürgen Floege**

How to halt vascular calcification



**Andrzej Więcek**

Atrial fibrillation in dialysis patients: Which anticoagulant agent to choose



**Francesca Mallamaci**

Exercise for dialysis patients



End-stage kidney disease (ESKD) is associated with significantly increased morbidity and mortality resulting from cardiovascular disease (CVD), which is an underlying disease affecting the majority of dialysis patients. This is likely due to ventricular hypertrophy as well as other risk factors, such as chronic volume overload, sodium imbalance, vascular calcification and mineral bone disorder, atrial fibrillation and many other aspects related to uremic milieu. Better understanding the impact of these numerous factors on CVD might be an important step for the prevention and treatment of ESKD. The lecture will demonstrate how the adjustment of hemodialysis parameters as well as therapeutic and preventive measures like physical exercise can be beneficial for patients on dialysis.

Split Lecture – Hemodialysis

LIVE



04.05 p.m. –  
05.35 p.m. CEST

## Global awareness, impact and footprint

Chairs

**Gloria E Ashuntantang, Christoph Wanner**

Speakers and topics

**Christoph Wanner**

Impact of SGLT2 inhibition on future dialysis requirement



**Gloria E Ashuntantang**

Increasing access to integrated end-stage kidney disease care as part of universal health coverage



**James Fotheringham**

Treatment strategies to reduce the harm from the three times a week hemodialysis schedule



**Raymond Vanholder**

Costs of kidney care and kidney replacement therapy: What about the future?



**Peter J Blankestijn**

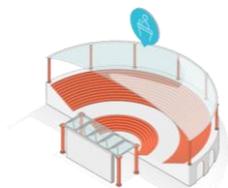
Sustainable healthcare of the future: "Ways to greener dialysis"



Although the number of patients undergoing dialysis is constantly increasing, there is a significant variability due to different resources worldwide. Factors like access to dialysis, treatment strategies, the timing of dialysis initiation, and the classical dialysis schedule will be discussed during this session. How will the increasing costs of renal replacement therapy affect the future treatment options for individual patients and the healthcare burden in individual countries? Among medical therapies, the environmental impact of dialysis seems to be particularly high, suggesting that the nephrology community has an important role to reduce resource usage like reusing reverse osmosis reject water, usage of renewable energy and improving waste management.

Split Lecture – Holistic nephrology

LIVE



## Chronic kidney disease – a clinical model of premature ageing

Chairs

**Adeera Levin, Goce Spasovski**

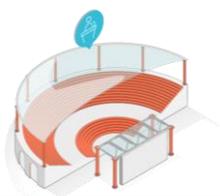
Speaker

**Peter Stenvinkel**



Chronic kidney disease (CKD) shares phenotypic similarities with other chronic burdens of lifestyle diseases that accumulate with age, such as type-2 diabetes, heart failure, vascular and neurodegenerative diseases. These, often co-existing, diseases share a prematurely aged phenotype, involving early vascular disease with calcification, osteoporosis, frailty, cognitive dysfunction, depression, and muscle wasting. Nine hallmarks of aging have been identified that are common across taxa, highlighting their fundamental importance. These include dysregulated mitochondrial metabolism and telomeres biology, epigenetic modifications, cell-matrix interactions, proteostasis, dysregulated nutrient sensing, stem cell exhaustion, “inflammageing” and immuno-senescence. Uremic inflammation, which resembles “inflammageing” in the general population, is part of an intermediate inflammatory phenotype mechanistically related to mechanisms involved in the aging process, such as telomere shortening, tissue hypoxia, oxidative stress, repressed Nrf2-Keap1 expression, mitochondrial dysfunction, and altered nutrient sensing, which can have a direct effect on cellular and tissue function. Deeper mechanistic insight into the phenomena of premature aging might improve the application of novel interventions and provide novel leads to combat premature aging processes in the chronic burden of lifestyle diseases. Novel opportunities to better understand and target premature aging have recently emerged. As an example, comparative patterns among several species endowed with amazing longevity and unique metabolic profiles in the animal kingdom should be exploited to better understand aging and age-related diseases. Moreover, recent data indicate that the uremic milieu promotes somatic mutations that resemble the ones documented in children with Hutchinson-Gilford Progeria syndrome. Finally, as accumulating evidence show that the skewing towards a more carnivorous diet with processed food in the Western world has resulted in a dietary association with the “diseasome of aging” a transformation of food systems should be considered.

LIVE



05.45 p.m. –  
06.45 p.m. CEST

Nurse Channel

## Nursing leadership 2.0 – the future is now

Speakers and topics

### Suzanne Mitrovich

International year of the nurse and midwife: A year of recognition



### Sabina Frumen Pivk

Crisis leadership: The critical role of the nurse



### Raquel Ribeiro

Transitional leadership: Crucial in uncertain times



### João Fazendeiro Matos

Strengthening the nursing profession: An example of recognition



### Marjelka Trkulja

Nursing leadership: The future is now



An unprecedented year highlighted not only the essential care that nurses provide, but also the inherent leadership that every nurse has. When the World Health Organization declared 2020 as the International Year of the Nurse and Midwife, Nurses around the globe were preparing to celebrate our profession. Our year of celebration soon became a year of fear and anxiety. However, our strength and unity were palpable. Fear and anxiety changed into appreciation, inspiration and recognition as we led by example on the front line. Our previously 'normal' way of working was tested, and this affected not only our nursing profession but also the patients who receive our care.

This session will highlight how the experience of the COVID-19 global pandemic uncovered emerging Nurse leadership. This paved the way for the deserved recognition as we rose to the challenge, combining our natural skills with newly gained experience.

REC

06.45 p.m. –  
06.55 p.m. CEST

Plenary

## Daily Wrap-up

### Peter Stenvinkel



The Daily Wrap-up gives a short summary of the day as well as an outlook for the upcoming sessions and puts the presentations into context.

REC

07.00 p.m. –  
08.00 p.m. CEST

Plenary

## Cooking session: Improving health through food

Jamie Oliver  
Carla Avesani  
Christoph Wanner  
Peter Stenvinkel



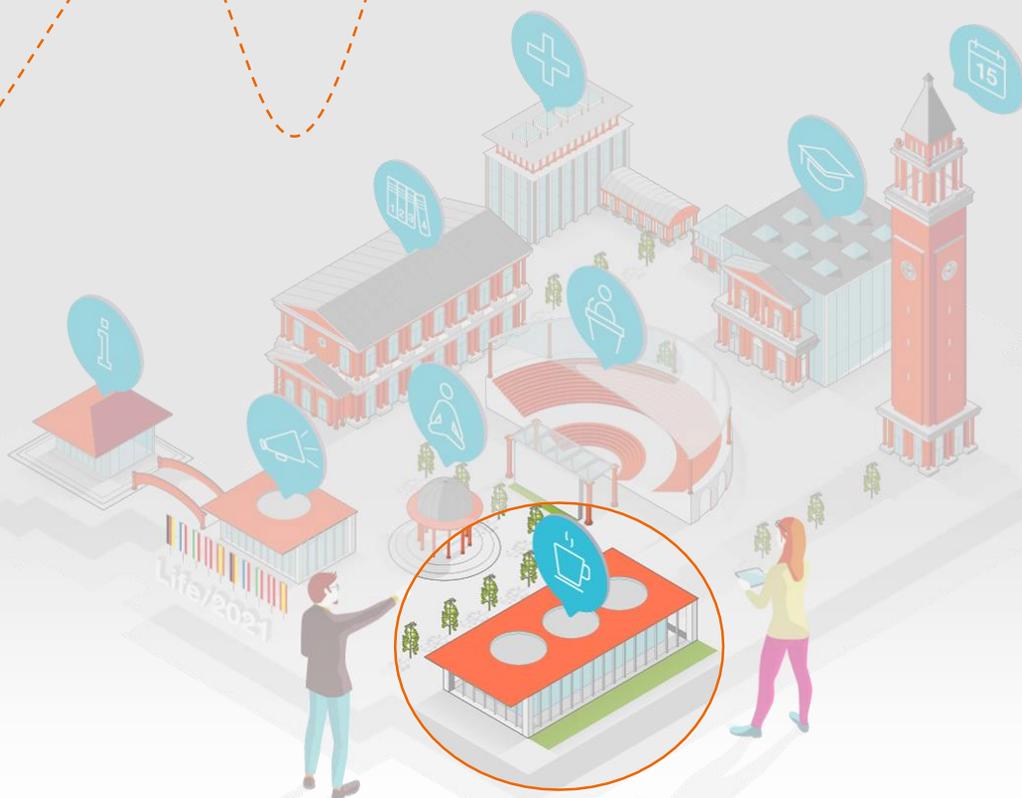
REC

# BE PART OF THE Life/COMMUNITY

GAIN NOVEL INSIGHTS TO IMPROVE PATIENT OUTCOMES

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# Life/nurse channel

## FROM NURSES FOR NURSES



The **Life/nurse channel** is specially designed to reflect how in dialysis, doctors and nurses work together as a very close team – and also how the role of the nurse is evolving! In three dedicated sessions, highly topical renal nursing areas will be explored, such as: operational crisis management, the many new challenges in patient care, critical matters of decision-making and taking a more leading role along with more responsibility ownership. Also, the findings of six nurse research works will be presented that have the potential to change nursing practice to improve patient care as well as advance the field of nursing. Finally, the hot topic of home dialysis in pandemic times and beyond will be discussed from a nurse perspective.

### Benefit from their high-level expertise for clinical practice!



Suzanne  
Mitrovich



Sabina  
Frumen Pivk



Raquel  
Ribeiro



João  
Fazendeiro Matos



Marjelka  
Trkulja



Ricardo  
Peralta



Mário  
Mateus



Corina  
Popescu



Beáta Ferencné  
Gerhák



Rayyan  
Merhi



Nusret  
Mehmedovic



Siobhan  
Gladding



Evelyne  
Vreman



Richard  
Fredin

### Nursing leadership 2.0 – the future is now REC

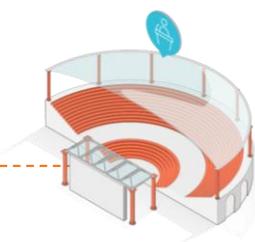
Thursday, 05.45 p.m. - 06.45 p.m. CEST

### Evidence-based practices for improving patient care and advancing the nursing field REC

Friday, 04.45 p.m. - 06.15 p.m. CEST

### Home dialysis in pandemic times and beyond REC

Saturday, 12.00 p.m. - 12.45 p.m. CEST





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## DISCOVER YOUR LIFE/2021 CAMPUS



12.00 p.m. –  
12.15 p.m. CEST

REC

Plenary

## Life/TV: Welcome and highlights of the day

Kristina zur Mühlen



12.15 p.m. –  
01.45 p.m. CEST

## Multiple aspects to improve current and future peritoneal dialysis management

L11

Chairs

Wim van Biesen, Jolanta S Malyszko

Speakers and topics

**Wim van Biesen**

Optimizing fluid status in peritoneal dialysis – insights from the IPOD-PD study



**Simon J Davies**

Sodium management and fluid overload in peritoneal dialysis



**Monika Lichodziejewska-Niemierko**

Managing infections in peritoneal dialysis



**Claus P Schmitt**

Horizon 2020 Consortium “Improve peritoneal dialysis”: Novel strategies to improve outcome in peritoneal dialysis



This lecture will share important insights from recent publications related to peritoneal dialysis (PD) management: from the optimization of the patient's fluid status as understood from the IPOD-PD study to managing sodium and fluid overload to avoid membrane failure and possible infections such as peritonitis. Insights from the consortium of the European research and innovation program Horizon 2020 will be shared. The focus will be set on improving aspects of the fluid status of PD patients to prevent future development of heart disease and other comorbidities leading to technique failure.

12.15 p.m. –  
12.30 p.m. CEST

12.30 p.m. –  
12.45 p.m. CEST

12.45 p.m. –  
01.00 p.m. CEST

01.00 p.m. –  
01.15 p.m. CEST

Split Lecture – Nephro skills

LIVE



12.15 p.m. –  
01.45 p.m. CEST

## Cardioprotective dialysis at home

Chairs  
**Allan J Collins, Eric J Goffin**

### Speakers and topics

**Allan J Collins**  
Cardioprotection: Applying dialytic modalities to preserve cardiovascular health



**James G Heaf**  
Optimizing fluid status in home hemodialysis



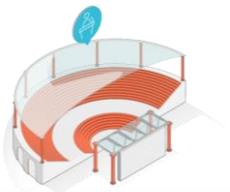
**Maria F Slon Roblero**  
Improving cardiovascular outcomes with home hemodialysis



One of the most concerning risk factors for end-stage kidney disease (ESKD) patients is cardiovascular damage. Home hemodialysis (HHD) is a means of personalizing the approach to renal replacement therapy (RRT) and enabling reduction of the high incidence of cardiovascular disease. This lecture will show how stress on the heart and vascular system will contribute to the kidneys, which fail to efficiently remove excess fluid, causing elevated blood pressure. Consequently, fluid status needs close monitoring and frequent adjustments. Treatment options such as home-based therapies like the HHD modality allows for the detection and control of fluid overload and hypertension, cardiac remodeling, and vascular calcification as essential factors to preserve and improve the cardiovascular health of individual patients.

Split Lecture – Home dialysis

LIVE



12.15 p.m. –  
01.45 p.m. CEST

## Taking leaps to a personalized iron and anemia management

Chairs

**Kai-Uwe Eckardt, David Wheeler**

Speakers and topics

**David Wheeler**

Might SGLT2 inhibitors play a role in anemia management?



**Kai-Uwe Eckardt**

Targeting the oxygen-sensing pathway – a “nobel” approach



**Stefano Stuard**

Personalized anemia management in a large dialysis provider network



12.15 p.m. –  
12.35 p.m. CEST

12.35 p.m. –  
12.55 p.m. CEST

12.55 p.m. –  
01.15 p.m. CEST

Split Lecture – Hemodialysis

Future choices in anemia management of dialysis patients will be presented and discussed in this session. New potential alternatives to current therapies with erythropoietin-stimulating agents (ESAs) such as HIF-PHIs combined with enhanced iron supplementation and suppressed hepcidin may maintain physiological levels of erythropoietin in the future. For diabetes patients suffering from chronic kidney disease, SGLT2 inhibitors might supersede ESAs as a promising alternative by potentially increasing erythropoiesis and also halting chronic kidney disease progression. However, SGLT2 inhibitors and HIF-PHIs are still under investigation for anemia treatment in dialysis patients in particular.

At present, caregivers need to put in considerable effort to maintain hemodialysis (HD) patients' hemoglobin levels within a narrow range and to reduce ESA dosing in order to prevent adverse outcomes. Predictive models that calculate the long-term responses of ESA therapy support the decision-making of caregivers regarding anemia management in HD patients treated in centers.

LIVE



12.15 p.m. –  
01.45 p.m. CEST

## Interdisciplinary approaches to unlock new therapy solutions to kidney disease

L14

Chairs

**Ziad A Massy, Lionel Rostaing**

Speakers and topics

**Ali Gharavi**

Genomic registries and kidney research



**Lionel Rostaing**

Transplantation in high-risk patients (hyperimmunized or incompatible) by combining therapy approaches to hybrid treatments



**Juliana Blum**

Novel approaches in vascular tissue engineering



Genomic medicine including Next Generation Sequencing (NGS) technologies aims to use genetic information of patients to improve the understanding of many human diseases. These new approaches and strategies have great potential to revolutionize nephrology research and to be translated into clinical practice. Recent examples will be presented in this session.

The number of kidney transplant candidates is increasing sharply. Among those patients, many transplant recipients are hyperimmunized or incompatible to the transplant organ. In this lecture, various strategies will be discussed to ensure successful kidney transplantation in such high-risk patients.

Availability of vascular conduits that can provide infection-free and durable access for hemodialysis patients remains a substantial challenge and an unmet clinical need. New devices, biological approaches and techniques are in development for fistula placement and will be discussed in this session.

Split Lecture – Holistic nephrology

LIVE

02.00 p.m. –  
03.00 p.m. CEST

## Vascular calcification

BO17

Speakers and topics

**Pieter Evenepoel**

Inflammation and vascular calcification: Back to the future



**Juan M Rodriguez Portillo**

In uremia calcium likes to travel to the vascular wall



**Marc Vervloet**

Minerals and vascular calcification: New kits for old guys on the block



The early vascular ageing process mediated by medial vascular calcification results in a marked discrepancy between chronological and biological vascular age in chronic kidney disease. Medial vascular calcification is associated with excessive cardiovascular morbidity and mortality. In this workshop you will have the opportunity to learn more about novel preventive options from dedicated leaders in this field.

Breakout Session – Nephro skills

LIVE

02.00 p.m. –  
03.00 p.m. CEST

Breakout Session – Home dialysis

LIVE

## Defining patient pathways as routes of personalized therapy

BO18

Speakers and topics

### Marie Evans

Integrated care of patients with different options from peritoneal dialysis to home, including also self- or supported home care



### Sandip Mitra

New perspectives in advanced chronic kidney disease management – matching patient characteristics to dialysis pathways



### Elke Schöffner

Conservative care versus dialysis initiation in older adults



Recently, many connections of pre-dialysis care to dialysis outcomes and modality choices have been made. Learn how self- and supported care ensure care continuity and soft transitioning, when renal replacement therapy (RRT) should be initiated and how to match therapy and dialysis structure as best fitting for your individual patients.

02.00 p.m. –  
03.00 p.m. CEST

Breakout Session – Hemodialysis

LIVE

## Challenges in dialysis delivery: Sodium balance, fluid status and organ damage

BO19

Speakers and topics

### Vincenzo Cantaluppi

Sodium balance, fluid overload and inflammation in hemodialysis



### Simon J Davies

Sodium management in peritoneal dialysis

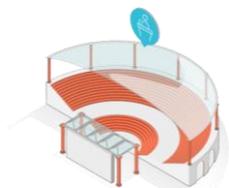


### Maarten W Taal

Hemodynamic stress in hemodialysis



Do we know what are the effects of kidney disease and dialysis treatment on the human body? Follow discussions and case studies on how perfusion of the brain and other organs is affected by uremic toxicity and dialysis treatments, how organ damage can be prevented by adequate and individual treatment calibration. Sodium levels are one important parameter which can have harmful effects such as hemodynamic stress. The session will elaborate on how this parameter can be balanced to ensure hemodynamic stability during hemodialysis.



02.00 p.m. –  
03.00 p.m. CEST

Breakout Session – Holistic nephrology

LIVE

## Does “one-size-fits-all” still apply to (pre-) dialysis treatment?

BO20

Speakers and topics

### Dick de Zeeuw

Pharmacologic intervention targeting albuminuria and renal function



### Christoph Wanner

Challenges of treating and studying patients during transition and on maintenance hemodialysis treatment



This workshop will discuss the impact of recent and current pharmacologic interventions targeting albuminuria and renal function. It will address how we can improve in the future in relation to clinical studies. During the transition phase into maintenance hemodialysis treatment, mortality rates are high and preventive pharmacologic interventions are often abandoned. Patients often become frail, challenges arise of studying patients on dialysis and personalized treatment approaches are often preferred. What questions need to be solved (treatment time, dialysis sodium prescription, anticoagulation) and what pragmatic approaches can be taken?

03.30 p.m. –  
04.30 p.m. CEST

Breakout Session – Nephro skills

LIVE

## Models of kidney care – worldwide perspectives and principles of care

BO21

Speakers and topics

### Kitty Jager

Global prevalence of chronic kidney disease and its consequences

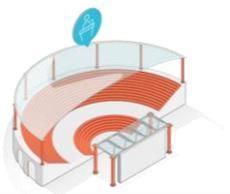


### Adeera Levin

Models of chronic kidney disease care: Global applications



Explore how care delivery is impacted by different models of renal care. Chronic kidney disease (CKD) prevalence steadily increases and global developments such as the coronavirus crisis, differences in healthcare systems and an increasing variety of patient conditions call for individual models of kidney care on a national and personal level. This breakout session will provide up-to-date information on different models of kidney care and encourages you to ask and discuss personal questions or problems regarding the best model of kidney care for your patients.



03.30 p.m. –  
04.30 p.m. CEST

Breakout Session – Home dialysis

## How to start home hemodialysis

Speakers and topics

### Allan J Collins

Delivering quality healthcare in end stage renal disease more cost effectively



### Maxence Ficheux

How to grow a home dialysis program using different technologies



### Ercan Ok

How to initiate and expand a home hemodialysis program under low reimbursement conditions



This workshop will emphasize how to implement and grow home hemodialysis programs. You will learn how to support physicians and nurses effectively and efficiently to sustain and improve quality care and overcome limitations, how to optimize hemodialysis through new technologies and how to deal with patients' fears and possible hurdles such as high costs.

LIVE

03.30 p.m. –  
04.30 p.m. CEST

Breakout Session – Hemodialysis

## Do we need potassium binders to combat hyperkalemia in patients with advanced chronic kidney disease?

Moderator

### Ziad A Massy

Speakers and topics

### Jürgen Floege

Loop diuretics and treatment of acidosis are sufficient, there is no need for potassium binders in the majority of patients



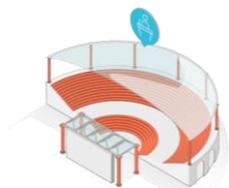
### Andrzej Więcek

Loop diuretics and treatment of acidosis are insufficient, there is a need for potassium binders in advanced chronic kidney disease



Should potassium be managed conservatively in dialysis and pre-dialysis chronic kidney disease (CKD), or should we focus on sufficient renin-angiotensin-aldosterone-system blocking and use potassium binders to maximize cardiovascular protection? Follow an interesting debate on milestones and best practices to fight hyperkalemia in CKD patients and participate with your own arguments.

LIVE



03.30 p.m. –  
04.30 p.m. CEST

Breakout Session – Holistic nephrology

## Solving Eastern and Southeastern European challenges in dialysis

BO24

Speakers and topics

### Goce Spasovski

Nephrology in the Eastern and Central European region:  
Optimizing chronic kidney disease patient care – challenges and opportunities



### Monika Lichodziejewska-Niemierko

Initiatives to improve home therapies uptake in the COVID-19 and non-COVID-19 era – examples from Poland



Renal care varies worldwide because of country specific demographic and socioeconomic characteristics. Leading nephrology experts from academia and a large provider network in Eastern and Southeastern Europe will present best clinical practices to guarantee high-quality renal care and perspectives on how to overcome challenging demographic and socioeconomic conditions in that region for renal care. Discuss your ideas, exchange your cases and take part in the elaboration of a plan on how to impact care implementation and future quality care delivery.

LIVE

04.45 p.m. –  
06.15 p.m. CEST

## CRISPR in the renal arena – breaking down hurdles to new medicines and global transplant availability

L10

Chairs

**Peter Stenvinkel, Christoph Wanner**

Speakers and topics

### Fiona Loud

Transplant shortages and kidney transplantation – where are we now?



### Fyodor Urnov

A CRISPR path to medicines for kidney disease



### Michael Curtis

Transformation of solid organ transplant through genome editing



The 2020 Nobel Prize in Chemistry was given for discovering one of gene technology's sharpest tools: the CRISPR/Cas9 genetic scissors. Researchers can use these tools to alter the DNA of animals, plants and microorganisms with extremely high accuracy. This technology revolutionized the molecular life sciences, brought new opportunities for plant breeding, is contributing to innovative cancer therapies and may help to cure inherited diseases.

The developments and advancements in the clinic and novel approaches to treat human disease using CRISPR-based genome and epigenome editing will be discussed.

LIVE

Keynote Lecture



04.45 p.m. –  
06.15 p.m.  
CEST

Nurse Channel

## Evidence-based practices for improving patient care and advancing the nursing field

Speakers and topics

### Ricardo Peralta

A randomized controlled trial comparing MuST with rope ladder and buttonhole cannulation techniques



### Mário Mateus

Multidisciplinary team strategies for violence events in hemodialysis environment



### Corina Popescu

Enhancing dialysis care quality through interconnected technologies



### Beáta Ferencné Gerhák

Popularization of the nursing profession



### Rayyan Merhi

Comparison between the prognosis of intradialytic hypotension after administering saline versus administering online solution



### Nusret Mehmedovic

Alcohol-based hand disinfection – is there a risk for nurses?



Nurses are constantly developing their scientific skills and looking for ways to change and revolutionize the way we treat patients, work, and offer services. The research works presented in this session are a snapshot of how nurses are developing evidence-based practices that improve patient care and advance the nursing field.

REC

06.15 p.m. –  
06.25 p.m. CEST

Plenary

## Daily Wrap-up

### Christoph Wanner



The Daily Wrap-up gives a short summary of the day as well as an outlook for the upcoming sessions and puts the presentations into context.

REC

06.30 p.m. –  
07.30 p.m. CEST

Plenary

## Cooking session: Improving health through food

### Jamie Oliver



### Carla Avesani



### Christoph Wanner



### Peter Stenvinkel



REC



# THE Life/RESIDENT CENTER

BENEFIT FROM EXCHANGING WITH EXPERTS AND PEERS

## EXCHANGE

new insights with experienced nephrologists and other residents from all over the world at the **Life/resident center**



## NETWORK

and build up mutually beneficial relationships with mentors who can provide professional guidance

## LEARN

about hands-on clinical cases



# Life/resident program

## THE FUTURE OF NEPHROLOGY



**Peter Stenvinkel**  
Karolinska University  
Hospital, Karolinska  
Institutet Stockholm,  
Sweden



**Miriam Banas**  
University Hospital  
Regensburg, Germany



**Christoph Wanner**  
University Hospital  
Würzburg, Germany



**Wim van Biesen**  
University Hospital  
Ghent, Belgium

**Life/2021 resident program** is an offer to support physicians in residency with additional lectures and workshops and the opportunity to exchange with peers and experts; an invitation to actively participate in an informal event to foster your medical-scientific knowledge and grow your network.

### Welcome and Impulse Lecture

Wednesday, 12.00 p.m. - 01.00 p.m. CEST

### Resident Workshops

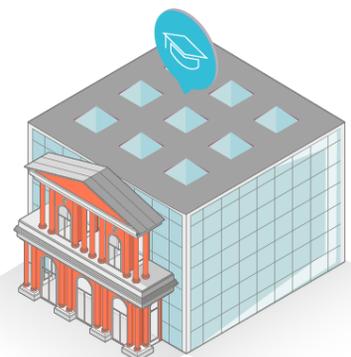
Thursday, 09.00 a.m. - 10.00 a.m. CEST

Friday, 09.00 a.m. - 10.00 a.m. CEST

Saturday, 08.45 a.m. - 09.45 a.m. CEST

### International Get-Together

Friday, 07.30 p.m. CEST – open end



# SATURDAY, SEPTEMBER 18, 2021

09.45 a.m. –  
10.00 a.m. CEST

REC

Plenary

## Life/TV: Welcome and highlights of the day

Kristina zur Mühlen



L15

10.00 a.m. –  
11.30 a.m. CEST

## Interconnected renal care

Chairs

**Hiddo J Lambers Heerspink, Franklin W Maddux**

Speakers and topics

**Jeroen P Kooman**

Wearable sensors: Can they benefit patients with chronic kidney disease?



**Wim van Biesen**

Leveraging big data to improve individualized healthcare decision-making: What can be expected, data – information – knowledge



**Franklin W Maddux**

Transforming individualized healthcare through interconnected intelligence



10.00 a.m. –  
10.20 a.m. CEST

10.20 a.m. –  
10.40 a.m. CEST

10.40 a.m. –  
11.00 a.m. CEST

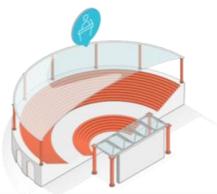
Split Lecture – Nephro skills

LIVE

This session starts with the newest examples and questions whether currently available wearable sensor technology will potentially benefit chronic kidney disease (CKD) patients. The success of such wearable medical devices very much depends on how they will fit into healthcare structures.

Over the last decades, individualized healthcare decision-making became technically feasible. To enhance patient-centered healthcare, tools using big data and artificial intelligence (AI) were developed to support shared decision making and to explain and visualize the effect of different interventions on patients.

The fast-growing global epidemic of chronic kidney disease demands immediate attention and a long-term strategy to cope with the implications of this worldwide challenge. In the last talk, the vision of interconnected intelligence will be introduced to you. This vision will result in a greater capacity for understanding CKD-specific implications, innovation, and progress to individualized treatment and improve healthcare systems.



10.00 a.m. –  
11.30 a.m. CEST

Split Lecture – Home dialysis

## Advantages of home dialysis during a pandemic

Chair  
**Otto Arkossy**

Speakers and topics

**Natalie Borman**

Advantages and challenges of home therapies in a pandemic



**Allan J Collins**

Is remote dialysis care the future?



Patients with advanced CKD constitute a COVID-19 vulnerable population and a challenge in the prevention and control of the disease. Home-based renal replacement therapies offer an opportunity to manage patients remotely and avoid the need to attend and travel to a dialysis facility thus reducing the likelihood of infection due to a reduction in direct interactions. Patients attend a medical facility much less frequently, are not reliant on patient transport thus limiting the close interaction with both other patients and healthcare workers and reducing the likelihood of contracting the disease. Increasing HHD utilization results in improved patient outcomes during a pandemic, can increase engagement, and improve overall quality of life.

LIVE

10.00 a.m. –  
11.30 a.m. CEST

Split Lecture – Holistic nephrology

## COVID-19 and nephrology: Unprecedented challenges and lessons learned

Chairs  
**Stefano Stuard, Christoph Wanner**

Speakers and topics

**Annette Bruchfeld**

Epidemiology, drugs and vaccines: What do we know and how far have we come?



**Tobias Huber**

COVID-19 and the kidney: From molecular mechanisms to clinical application



COVID-19 has been an unprecedented respiratory disease affecting multi organ systems and leading to acute kidney injury. COVID-19 positive patients are twice as likely to develop AKI compared to negative hospitalized patients and show high mortality.

This lecture will introduce the epidemiology of COVID-19 affecting multi organ systems and leading to severe acute injury.

Mechanisms of SARS-COV 2 showing multiorgan tropism will be detailed leading to therapeutic implications.

Both speakers will finalize their part of the lecture by presenting what they see as the most important and impactful lessons learned after 1.5 years of the COVID-19 pandemic.

LIVE



10.00 a.m. –  
11.30 a.m. CEST

## Food as medicine

Chairs

**Denis Fouque, Peter Stenvinkel**

Speakers and topics

**Peter Stenvinkel**

Food as medicine – what can we achieve with bioactive nutrients?



**Denis Fouque**

Optimal protein intake during chronic kidney disease, stage 4 and 5 according to KDOQI guideline 2020



**Charles Chazot** REC

Nutritional management for in-center dialysis patients in the era of precision medicine



**Carla Avesani**

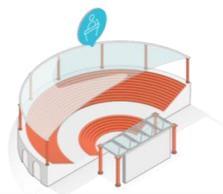
Prescribing food baskets as part of a health care intervention: A new way to promote diet-related outcomes



The role of nutritional therapy as a strategy to slow down chronic kidney disease (CKD) progression and how to maintain the appropriate diet during dialysis will be discussed in this session. Traditional dietary recommendations for patients with CKD focus on the amount of nutrients consumed. These restrictions can result in a low intake of fruits and vegetables and a lack of diversity in the diet. However current evidence suggests that a plant-based diet has few risks but potential benefits for the primary prevention of CKD and progression to end-stage kidney disease. Another approach is the very low-protein diet (LPD) supplemented with essential amino acids plus ketoacid (KA) in order to assure an adequate essential amino acid supply. The current evidence suggests that KAs supplemented LPD diets should be included as part of the clinical recommendations for both the nutritional prevention and metabolic management of CKD. Finally, also serum albumin level as a marker of protein-energy wasting and of mortality in patients on hemodialysis will be discussed in relation to nutritional management of in-center patients.

Split Lecture – Holistic nephrology

LIVE



12.00 p.m. –  
12.45 p.m. CEST

Keynote Lecture

## Clinical trials and practice in diabetic kidney disease: From one-size-fits-all to one-fit-for-everyone

L18

Chairs

**Peter Stenvinkel, Christoph Wanner**

Speaker

**Hiddo J Lambers Heerspink**



In the last two years, several new drug classes have been demonstrated to reduce the risk of kidney failures such as SGLT2-inhibitors, endothelin receptor antagonists, and mineralocorticoid receptor antagonists. Despite the efficacy of these drugs on a population level, not every patient benefits to the same extent. It appears that a large individual variation in the response is present. Understanding the underlying mechanisms for the variation in drug response will pave the way for personalized therapy approaches. The objective of this lecture is:

1. To review variation in drug response in patients with Chronic Kidney Disease.
2. To evaluate patient characteristics and biomarkers of individual drug response.
3. To explore strategies to overcome therapy resistance at an individual patient level.

LIVE

12.00 p.m. –  
12.45 p.m. CEST

Nurse Channel

## Home dialysis in pandemic times and beyond

N03

Speakers and topics

**Siobhan Gladding**

How the pandemic is impacting home therapies



**Evelyne Vreman**

Thinking outside the box to find solutions in times of crisis



**Richard Fredin**

Using key learnings to future proof and develop home therapies



Patients with End Stage Renal Disease (ESRD) are vulnerable and are considered at high risk for severe illness with COVID-19 infection. During the past 2 years, the lives of renal patients across the globe have been challenged. Patients face many different obstacles during their day-to-day life managing their ESRD and the complications this can bring to themselves and their families, especially when they are managing their own dialysis treatment at home. Although the effects of country lockdowns and restrictions on both patients and Renal Health Care Professionals are immense, patients continue to receive care and support in center and at home. Patients on home dialysis may have a lower risk of exposure to infection because they are in their own environment. Maintaining the equilibrium for these patients requires solution-focused thinking, especially in these unprecedented times. This presentation will review some of the added impacts and challenges that have been, and continue to be, faced by the renal community during the COVID-19 pandemic. What are the lessons learned and how does this impact the vision for the future of Home Dialysis?

REC

# SATURDAY, SEPTEMBER 18, 2021

01.15 p.m. –  
01.30 p.m. CEST

REC

Plenary

## Special contribution

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01.30 p.m. –  
02.00 p.m. CEST

LIVE

Plenary

## Farewell

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**Katarzyna Mazur-Hofsäß**

CEO EMEA, FMC

**Franklin W Maddux**

Global Chief Medical Officer, FMC

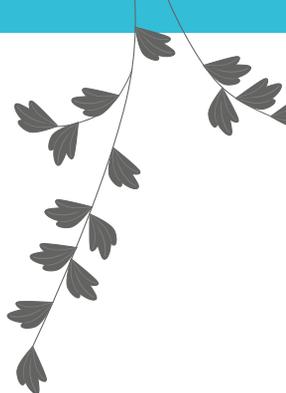
**Peter Stenvinkel**

**Christoph Wanner**



# Life/after the congress

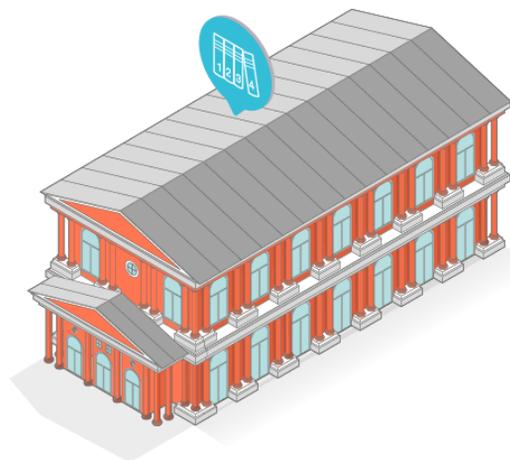
## THE FUTURE OF NEPHROLOGY



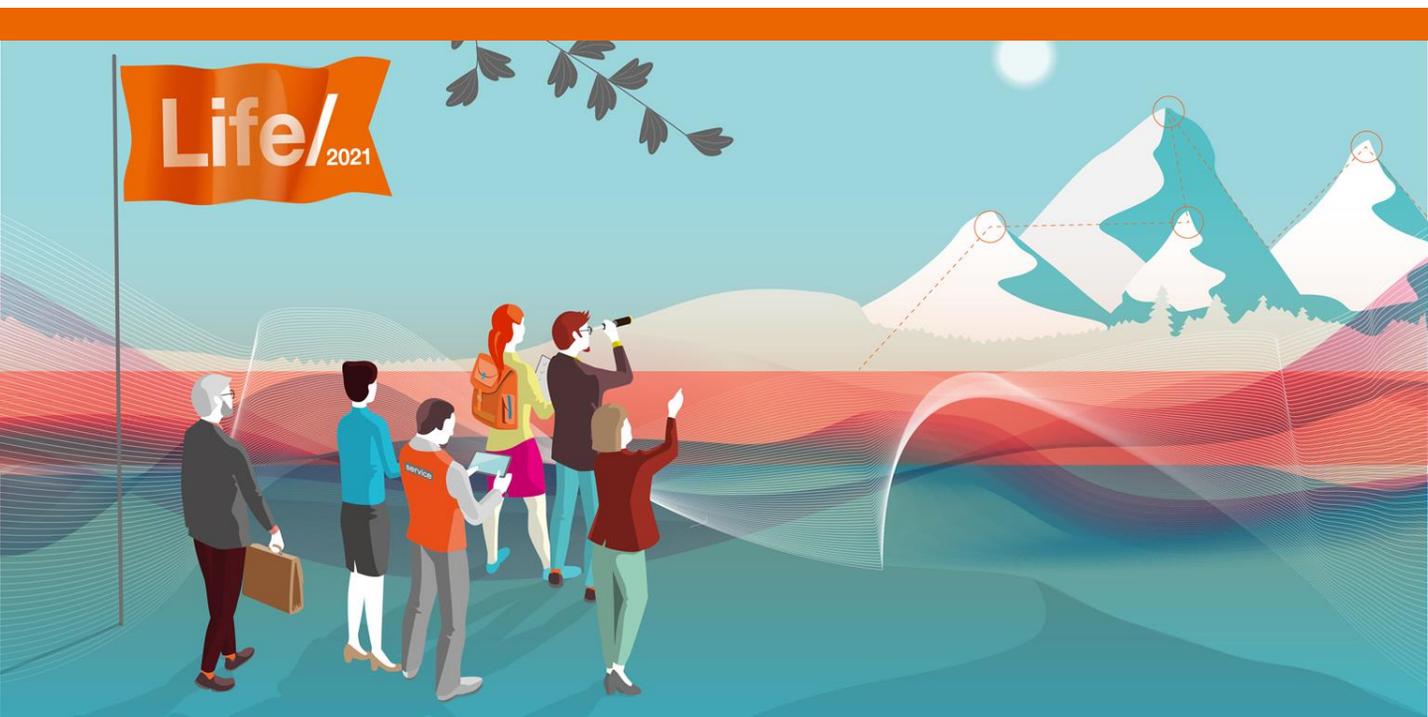
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