

**PRELIMINARY  
PROGRAM**

**2<sup>ND</sup> EDITION**

# MLCTO

**SHARING KNOWLEDGE**

## MULTI-LEVEL CTO COURSE

**JUNE 29<sup>TH</sup> - 30<sup>TH</sup>  
JULY 1<sup>ST</sup> 2017**

Nice, French Riviera

**DIRECTORS**

Alexandre AVRAN, MD  
Stéphane RINFRET, MD

**SCIENTIFIC COORDINATOR**

Max AMOR, MD

**International speakers & operators**

**Live demonstrations  
from Tzanck Institute**

**Paramedics session**

Simultaneous  
translation



In collaboration with

incathlab 

[www.mlcto.com](http://www.mlcto.com)

2<sup>ND</sup> EDITION

MLCTO

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## WELCOME LETTER

Dear friends,

The recanalization of coronary chronic total occlusion (CTO) has become an important procedure to treat symptomatic patients with ischemia or heart failure. It is a growing and constantly evolving discipline, allowing us to improve our daily practice in percutaneous coronary interventions (PCI). Learning or reviewing the basics, tips & tricks, and mastering CTO techniques is essential to manage complex coronary patients. More and more interventional cardiologists are eager to learn and develop CTO PCI programs in their CathLabs. We conceived this event to support their initiatives, and following the success of our 2016 first Edition, we are glad to invite you to the ML CTO 2017.

The main goal of this event is to bring together all passionate operators in one place, from beginners to experts in a climate of openness and congeniality. Occasional and regular operators will find this conference to be an opportunity to strengthen their skills and continue their progress in learning new strategies tailored to their level.

The Multi-Level CTO Course will include didactic and practical lectures with simultaneous live cases, related to the topics covered during each session.

**The first day** will be dedicated to CTO PCI basics in antegrade and retrograde approaches, and live cases of more simple CTOs will be broadcasted. In parallel, a special paramedics session will be held.

**The second day** will focus on advanced antegrade techniques and basics of antegrade dissection re-entry.

**Finally, on the third day** the most challenging cases of the course will be performed. We will also address retrograde and antegrade dissection re-entry advanced strategies, discussing about the management of complications and sharing tips & tricks.

**A special session for fellows** has been created to allow young operators to present clinical cases. **A dedicated session for Paramedics** will also be offered this year.

In order to allow as many operators as possible to attend this event, the full conference will be streamed live on [www.incathlab.com](http://www.incathlab.com).

We truly hope this ML CTO Edition will meet all of your expectations. The goal of this Multi-Level CTO course is to provide a complete curriculum adapted to the expertise of a cardiology audience.

Alexandre Avran, MD & Stéphane Rinfret, MD



### Board & Scientific Committee

#### COURSE DIRECTOR

Alexandre Avran, MD  
Saint-Laurent-du-Var, France

#### COURSE DIRECTOR

Stéphane Rinfret, MD, SM  
Montreal, Canada

#### SCIENTIFIC COORDINATOR

Max Amor, MD  
Nancy, France

#### LIVE CASES COORDINATOR

Laurent Drogoul, MD  
Saint-Laurent-du-Var, France

#### PARAMEDICS COORDINATOR

Hervé Faltot  
Colmar, France

### Local organization

#### TZANCK INSTITUTE DIRECTOR

Michel Salvadori, MD



#### LIVE CASES COORDINATORS

Alexandre Avran, MD  
Laurent Drogoul, MD

#### HEAD OF CATHETERIZATION LABORATORIES

Pierre Meyer, MD

#### CATH LAB MEMBERS DEPARTMENT

Philippe Durand, MD  
Claude Mariottin, MD

## LEARNING POINTS

This meeting, translated in English and French, is divided by level of expertise and held over 3 days.

### Thursday, June 29<sup>th</sup>

#### FIRST STEPS IN CTO PCI

- Starting a CTO program
- Analysis of CTO angiographies
- Guidewire selection
- Prevention of complications
- Choice of microcatheters
- Basic antegrade CTO techniques: basics manoeuvres, wire escalation, parallel wire
- Starting a retrograde approach
- Septal collateral channels selection and crossing
- Basic retrograde CTO techniques: reverse cart, knuckle wire, externalization and snaring

### Friday, June 30<sup>th</sup>

#### IMPROVE YOUR SKILLS IN CTO PCI

- Complex antegrade situations: ambiguous proximal cap, difficult proximal cap crossing with a microcatheter
- Management of CTO complications
- Starting an antegrade dissection re-entry (ADR)
- Basics for ADR devices
- Mini Star Technique
- Hybrid algorithm

### Saturday, July 1<sup>st</sup>

#### MASTERING CTO PCI

- Solving difficult retrograde connection
- IVUS in CTOs
- Challenging septal connection
- Ostial CTOs
- Retrograde through epicardial collateral channels
- Ping Pong technique
- Post CABG CTOs
- Complex complications of complex CTOs
- Follow up on ML CTO 2016 cases



CONFERENCE VETTING SYSTEM SUBMISSION: COMPLIANT

## INVITED GUESTS FACULTY

- **Khaldoon Alaswad, MD** - Detroit, USA
- **Max Amor, MD** - Nancy, France
- **Alexandre Avran, MD** - Saint-Laurent-du-Var, France
- **Nicolas Boudou, MD** - Toulouse, France
- **Marouane Boukhris, MD** - Catania, Italy
- **Nenad Bozinovic, MD** - Nis, Serbia
- **Erwan Bressollette, MD** - Nantes, France
- **Emmanouil Brilakis, MD** - Minneapolis, USA
- **Leszek Bryniarski, MD** - Krahov, Poland
- **Alexander Bufe, MD** - Krefeld, Germany
- **Christopher Buller, MD** - Toronto, Canada
- **Heinz Joachim Büttner, MD** - Bad Krozingen, Germany
- **Stéphane Carlier, MD** - Mons, Belgium
- **Mauro Carlino, MD** - Milano, Italy
- **Jo Dens, MD** - Hasselt, Belgium
- **Laurent Drogoul, MD** - Saint-Laurent-du-Var, France
- **Philippe Durand, MD** - Paris, France
- **Javier Escaned, MD** - Madrid, Spain
- **Benjamin Faurie, MD** - Grenoble, France
- **Andrea Gagnor, MD** - Turin, Italy
- **Alfredo Galassi, MD** - Catania, Italy
- **Roberto Garbo, MD** - Turin, Italy
- **Omer Goktekin, MD** - Istanbul, Turkey
- **Colm Hanratty, MD** - Belfast, United Kingdom
- **Jonathan Hill, MD** - London, United Kingdom
- **Thomas Hovasse, MD** - Paris, France
- **Yangsoo Jang, MD** - Yonsei, Korea
- **Risto Jussila, MD** - Vaasa, Finland
- **Sanjog Kalra, MD** - Philadelphia, USA
- **Artis Khalnins, MD** - Riga, Latvia
- **Paul Knaapen, MD** - Amsterdam, The Netherlands
- **Thierry Lefèvre, MD** - Paris, France
- **Nicolas Lhoest, MD** - Strasbourg, France
- **Kambis Mashayekhi, MD** - Bad Krozingen, Germany
- **Pierre Meyer, MD** - Saint-Laurent-du-Var, France
- **Markus Meyer Gessner, MD** - Düsseldorf, Germany
- **William Nicholson, MD** - York, USA
- **Sudhir Rathore, MD** - Llandudno, United Kingdom
- **Stéphane Rinfret, MD** - Montreal, Canada
- **Antonio Serra, MD** - Barcelona, Spain
- **Georges Sianos, MD** - Thessaloniki, Greece
- **Elliot Smith, MD** - London, United Kingdom
- **James Spratt, MD** - Edinburgh, United Kingdom
- **Satoru Sumitsuji, MD** - Suita, Japan
- **Khalid Tammam, MD** - Jeddah, Saudi Arabia
- **Daniel Weilenmann, MD** - St. Gallen, Switzerland
- **Gerald S. Werner, MD** - Darmstadt, Germany
- **Jaroslawn Wójcik, MD** - Lublin, Poland
- **Mike Wyman, MD** - Portland, USA
- **Masahisa Yamane, MD** - Sayama, Japan

## PARAMEDICS GUESTS FACULTY

- **Sabrina Benmesbah** - Paris, France
- **Hervé Faltot** - Colmar, France
- **Aurélie Fresselinat** - Bordeaux, France
- **Rafik Lamari** - Amiens, France
- **Nathalie Lattarico** - Grenoble, France
- **Fanny Villanova** - Marne-la-Vallée, France
- **Gilles Wilhelm** - Colmar, France

## Thursday, June 29<sup>th</sup>

### SESSION 1 – CTO PCI BASICS

- 08:00 Why should we treat CTOs: impact of incomplete revascularisation
- 08:10 Coronary angiography for CTO PCI
- 08:20 CTO angiographic analysis: scoring systems and algorithm
- 08:30 Requirement for CTO PCI program: tools and set up
- 08:45 LIVE CASE #1** SPONSORED BY INDUSTRY
- 09:45 How to prevent common complications?
- 09:55 Vascular access and guide selection for CTO PCI
- 10:05 Essential basic manoeuvres for CTO PCI
- 10:15 Radioprotection and contrast

### 10:30 Coffee break

### SESSION 2 – ANTEGRADE BASICS

- 10:50 Antegrade strategy with sequential wire escalation
- 11:00 Parallel wire technique: indications & how to do it
- 11:10 Microcatheter overview: how to choose and use
- 11:20 Double lumen catheter
- 11:30 How to improve guide support

### 11:40 LIVE CASE #2

SPONSORED BY INDUSTRY

### 12:45 Lunch break

### SESSION 3 – RETROGRADE BASICS

- 14:15 LIVE CASE #3** SPONSORED BY INDUSTRY
- 15:30 Retrograde approach: step-by-step instruction
- 15:40 Debate - Tip injection to cross septal collaterals: Pro & Cons
- 16:00 Reverse CART technique
- 16:10 Knuckle wire dissection technique: use and indication

### 16:20 Coffee break

- 16:45 Externalization and snaring
- 16:55 Lesson from the past to the future

### 17:10 "How would you treat?"

### 17:40 INDUSTRY SESSION

### 18:00 Closing remarks



The Multi-Level CTO Course is designated for a maximum of 18 hours of European external CME credits. Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity. The EACCME credit system is based on 1 ECMEC per hour with a maximum of 3 ECMECs for half a day and 6 ECMECs for a full-day event.

## Friday, June 30<sup>th</sup>

### SESSION 1 – ADVANCED ANTEGRADE TECHNIQUES

08:30	Ambiguous proximal cap without a retrograde option
08:45	When you cannot cross the proximal cap with a microcatheter
<b>09:00</b>	<b>LIVE CASE #1</b> <small>SPONSORED BY INDUSTRY</small>
10:15	Management of CTO PCI complications
<b>10:25</b>	<b>“How would you treat?”</b>
<b>11:00</b>	<b>Coffee break</b>
<b>11:30</b>	<b>LIVE CASE #2</b> <small>SPONSORED BY INDUSTRY</small>
<b>12:45</b>	<b>INDUSTRY SESSION</b>
<b>13:00</b>	<b>Lunch break</b>

### SESSION 2 – BASICS OF ANTEGRADE DISSECTION RE-ENTRY

14:15	Equipment and use
<b>14:30</b>	<b>LIVE CASE #3</b> <small>SPONSORED BY INDUSTRY</small>
15:45	Device-based ADR: step-by-step instructions
16:00	Wire-based ADR: bailout indication and Mini Star technique
16:10	Contrast modulation techniques
<b>16:20</b>	<b>“How would you treat?”</b>
<b>16:45</b>	<b>Coffee break</b>

### SESSION 3 – DEDICATED TO FELLOWS

17:15	Case presentations
17:30	Padawan asking the Jedi: questions & answers session
17:50	The hybrid algorithm: efficiency and safety
18:15	Closing remarks
<b>20:30</b>	<b>ML CTO Dinner</b>

## Saturday, July 1<sup>st</sup>

### SESSION 1 – RETROGRADE ADVANCED STRATEGIES

08:30	Solution for difficult retrograde connection
<b>08:45</b>	<b>LIVE CASE #1</b> <small>SPONSORED BY INDUSTRY</small>
10:00	How to deal with RCA ostial CTOs
10:10	Wire crossed septal connection but microcath doesn't follow: how to deal?
10:20	Retrograde approach through epicardial collateral channels
<b>10:30</b>	<b>Coffee break</b>
11:00	Ping pong technique
11:15	Specific issues with post CABG CTOs
<b>11:30</b>	<b>LIVE CASE #2</b> <small>SPONSORED BY INDUSTRY</small>
<b>13:00</b>	<b>Lunch break</b>

### SESSION 2 – ANTEGRADE DISSECTION RE-ENTRY ADVANCED STRATEGIES

14:10	IVUS for CTO
14:20	ADR difficult situations: how to handle?
<b>14:30</b>	<b>LIVE CASE #3</b> <small>SPONSORED BY INDUSTRY</small>
<b>15:50</b>	<b>“How would you treat?”</b>
<b>16:15</b>	<b>INDUSTRY SESSION</b>
<b>16:30</b>	<b>Coffee break</b>
17:00	Costs in CTO PCI: cath lab perspective
17:10	RECHARGE registry update
17:20	What have they become? Angiographic follow up on last year cases
<b>17:45</b>	<b>Take home messages and conclusion</b>

## PARAMEDICS SESSION

*This session will be in French, without English translation.*

## Thursday, June 29<sup>th</sup>

08:15	Ouverture de la journée
08:20	Pourquoi et comment démarrer un programme CTO ?
<b>08:45</b>	<b>LIVE CASE N° 1</b> <small>SPONSORED BY INDUSTRY</small>
<b>SESSION 1 – CTO : ENJEUX ET OUTILS</b>	
10:00	Recanalisation des occlusions coronaires chroniques : pourquoi ? pour qui ?
10:15	Les outils incontournables
<b>10:30</b>	<b>Pause café</b>
11:00	Techniques antérogrades
<b>11:30</b>	<b>LIVE CASE N° 2</b> <small>SPONSORED BY INDUSTRY</small>
<b>12:45</b>	<b>Déjeuner</b>
<b>13:45</b>	<b>LIVE CASE N° 3</b> <small>SPONSORED BY INDUSTRY</small> (dont 30 minutes de préparation paramédicale)

### SESSION 2 – MANAGEMENT ET SÉCURITÉ DU PATIENT

15:15	Préparation en amont de la procédure
15:35	Surveillance per-procédure
15:55	Gestion post-CTO
<b>16:15</b>	<b>Pause café</b>
16:45	Techniques rétrogrades
<b>17:15</b>	<b>Take home messages</b>

## PARTNERS



## REGISTRATION FEES (VAT included)

### INDIVIDUAL REGISTRATION

	3 DAYS		2 DAYS		1 DAY		SOCIAL DINNER**
	UP TO APRIL 30 <sup>TH</sup>	FROM MAY 1 <sup>ST</sup>	UP TO APRIL 30 <sup>TH</sup>	FROM MAY 1 <sup>ST</sup>	UP TO APRIL 30 <sup>TH</sup>	FROM MAY 1 <sup>ST</sup>	
PARAMEDICS*	–	–	–	–	200€	300€	70€
STANDARD DELEGATES	800€	900€	650€	750€	–	–	
FELLOWS OR STUDENTS	450€	500€	350€	400€	–	–	

\* Only 1<sup>st</sup> day (Thursday, June 29<sup>th</sup> 2017) is available for paramedics.

### GROUP REGISTRATION

	3 DAYS		2 DAYS		SOCIAL DINNER**
	UP TO APRIL 30 <sup>TH</sup>	FROM MAY 1 <sup>ST</sup>	UP TO APRIL 30 <sup>TH</sup>	FROM MAY 1 <sup>ST</sup>	
5 TO 9 DELEGATES	770€	850€	620€	700€	70€
10 TO 14 DELEGATES	720€	800€	570€	650€	65€
15 DELEGATES & MORE	680€	750€	500€	600€	60€

\*\*Social dinner: Thursday, June 29<sup>th</sup> 2017.

## LOGISTICS PACKAGE (VAT included, available until May 1<sup>st</sup>)

Rates indicated below only for Europe and North Africa attendees. For other countries, please contact the organization.

PACKAGE 1-NIGHT STAY 1100€	PACKAGE 2-NIGHTS STAY 1350€	PACKAGE 3-NIGHTS STAY 1650€	PACKAGE 4-NIGHTS STAY 1900€
<b>This package includes:</b> - Transportation to/from the event - Accommodation for 1 night - Transfer from/to Nice airport or station	<b>This package includes:</b> - Transportation to/from the event - Accommodation for 2 nights - Transfer from/to Nice airport or station	<b>This package includes:</b> - Transportation to/from the event - Accommodation for 3 nights - Transfer from/to Nice airport or station	<b>This package includes:</b> - Transportation to/from the event - Accommodation for 4 nights - Transfer from/to Nice airport or station

The organisation will contact you for your logistics details.

## REGISTRATION FORM

Pr  MD/Dr  Mr  Mrs

Last name ..... First name .....

Speciality..... Institution / Company .....

Address .....

Zip / Post code..... City .....

Country ..... State / Province.....

Tel. .... Email.....

**I will participate to the following day(s):**

1<sup>ST</sup> DAY (Thursday, June 29<sup>th</sup> 2017)  2<sup>ND</sup> DAY (Friday, June 30<sup>th</sup> 2017)  3<sup>RD</sup> DAY (Saturday, July 1<sup>st</sup> 2017)

**Contact person responsible for group registration(s)** .....

### REGISTRATION FEES (VAT INCLUDED)

	UP TO APRIL 30 <sup>TH</sup>	FROM MAY 1 <sup>ST</sup>
<b>INDIVIDUAL REGISTRATION</b>		
<input type="checkbox"/> PARAMEDICS		
<input type="checkbox"/> 1 DAY (Thursday, June 29 <sup>th</sup> 2017) .....	200€	300€
<input type="checkbox"/> STANDARD DELEGATES		
<input type="checkbox"/> 3 DAYS .....	800€	900€
<input type="checkbox"/> 2 DAYS* .....	650€	750€
<input type="checkbox"/> FELLOWS OR STUDENTS		
<input type="checkbox"/> 3 DAYS .....	450€	500€
<input type="checkbox"/> 2 DAYS* .....	350€	400€
<input type="checkbox"/> Social dinner (for all participants) .....	70€	70€

### GROUP REGISTRATION\*\*

<input type="checkbox"/> 5 TO 9 DELEGATES		
<input type="checkbox"/> 3 DAYS .....	770€	850€
<input type="checkbox"/> 2 DAYS* .....	620€	700€
<input type="checkbox"/> Social dinner .....	70€	70€
<input type="checkbox"/> 10 TO 14 DELEGATES		
<input type="checkbox"/> 3 DAYS .....	720€	800€
<input type="checkbox"/> 2 DAYS* .....	570€	650€
<input type="checkbox"/> Social dinner .....	65€	65€
<input type="checkbox"/> 15 DELEGATES & MORE		
<input type="checkbox"/> 3 DAYS .....	680€	750€
<input type="checkbox"/> 2 DAYS* .....	500€	600€
<input type="checkbox"/> Social dinner .....	60€	60€

### LOGISTIC PACKAGES (VAT INCLUDED, AVAILABLE UNTIL MAY 1<sup>ST</sup>)

<input type="checkbox"/> 1-NIGHT STAY .....	1100€
<input type="checkbox"/> 2-NIGHTS STAY .....	1350€
<input type="checkbox"/> 3-NIGHTS STAY .....	1650€
<input type="checkbox"/> 4-NIGHTS STAY .....	1900€

\* Please do not forget to indicate your choice in the registration form.

\*\* Please do not forget to indicate the contact person in the registration form.

### PAYMENT

- By Credit Card:** Visa, Mastercard (no other card)  
On protected payment Paybox online form, directly on the website [www.comnco.com](http://www.comnco.com). Please indicate your name + MLCTO 2017 in the part: "Additional details".
- By check enclosed**  
(make check in euro payable in France to Com&Co)
- By bank transfer to Com&Co SARL**  
Banque Chaix – 41-43, Bd Peytral – 13006 Marseille, France  
IBAN : FR76 1017 8000 2600 2626 3880 380  
BIC : CCBPFRPPCHX

**TERMS & CONDITIONS:** The agreement is formed and the two parties engaged upon receipt of the registration form by the client. The form must be duly filled in and signed by the client. All cancellations within 60 days prior from the date of the event will be rejected and this will result to the client the payment of the entire attendance amount to the organization. The entire amount must be imperatively paid 30 days before the date of the event. The payment for agreements concluded after that date will have to be completed before the start of the event. If the full payment is not made within the established period by mutual agreement or as agreed between the two parties, the company reserves the right to cancel the agreement and to refuse access to the event.

### RETURN TO COM&CO, MARIE METTLING, BY:

**Post** 15, Bd Grawitz – 13016 Marseille, France  
**Fax** +33 (0)4 96 15 33 08  
**Email** [marie@comnco.com](mailto:marie@comnco.com)

Agreed and signed – Date & signature



## INFORMATION

### Venue

**Palais de la Méditerranée**

13 Promenade des Anglais

06000 Nice, France

Tel. +33 (0) 492 147 736

Fax +33(0) 492 147 727

[www.nice.regency.hyatt.com](http://www.nice.regency.hyatt.com)

### Contact

#### General organization

##### StanMed

Morgane Airaudi

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[www.incathlab.com](http://www.incathlab.com)

#### Registration & logistics

##### comnco

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[www.comnco.com](http://www.comnco.com)