



Growing together in trauma care

Ten years of international medical links
between Rotterdam and Shanghai



在创伤医学中 一起成长

鹿特丹与上海十年以来的医学联系



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Credits

This book has been produced against the background of ten years of collaboration in the field of trauma care and acute medical assistance in the event of accidents and disasters between the twin cities of Shanghai and Rotterdam. The book marks the bonds of friendship and sets out our experiences over this remarkable and valuable period.

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Rotterdam, 31 October 2015

底页

此书是为了纪念上海与鹿特丹十年的创伤医学与灾祸的紧急医疗协助方面合作而写的。此书的目的是重申双方的友情，并展现双方宝贵关系中的美好与特别经验。

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鹿特丹，2015年10月31日



Preface

I'm delighted to present you with this booklet which marks ten years of medical collaboration between Shanghai and Rotterdam. As port cities we have been twin cities since 1979, and have a close bond. We have been collaborating in a variety of areas and acting jointly for more than 35 years, in areas including trade and economy, the port, culture and healthcare. Both our cities attach great importance to safety, healthcare and the relationship between the two. In this regard we are constantly in agreement, and can learn from one another.

Ten years ago Shanghai faced a major challenge: it was organising the 2010 World Expo with an enormous influx of people. Ruijin Hospital wanted to prepare thoroughly for disaster management, and decided to act in partnership for this with Trauma Centre South West Netherlands (Traumacentrum Zuid West Nederland), Erasmus MC, University Medical Center Rotterdam and our Rotterdam Rijnmond Safety Region's (Regional) Major Incident Medical Planning and Coordination Office (GHOR).

I believe that the exchange programme in the field of prehospital emergency care, trauma care and medical assistance in disasters has been one of the most successful programmes so far. It is a textbook example of how to create good international added value. The close bond and the intensive collaboration between all initiators also made this an important driver for other projects within the overall collaboration between our cities.

Together we have achieved a great deal with this project. Let us nurture our good relationship.

Ahmed Aboutaleb
Mayor of Rotterdam

前言

我非常高兴将这本上海与鹿特丹十年合作的书籍致赠给您。作为港口城市，我们自1979年就已经是姐妹城市，一直有密切的关系。无论是经贸、港务、文化或医疗方面，我们已经在各种领域中合作了35年，彼此支持。我们的城市十分重视安全、医疗以及双方的关系：在这些方面，我们每次彼此学习，保持友好的关系。

十年前，上海有一个重大的挑战：上海为主办2010年世界博览会、招待众多来宾做好准备。瑞金医院为求灾难管理方面的美好应变，与Traumacentrum Zuid West Nederland(荷兰西南部创伤医疗中心)、Erasmus MC (伊拉斯姆斯大学医院)、以及我们大鹿特丹 (Rotterdam Rijnmond) 安全区域的GHOR (区域医疗救助组织) 建立了关系。

我认为，入院前急诊照护、创伤医疗以及医疗与灾难协助交换项目是目前为止最成功的项目之一。这是一个国际创造增值的良好范例。由于所有发起人的紧密关系与密切合作，这也促进了两个都市之间的其他项目。

这项目让我们收获众多。我们必须珍惜彼此间的友好关系。

Ahmed Aboutaleb
鹿特丹市长



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十年的医学联系

上海与鹿特丹：差异与共同点

上海的飞速发展吸引了许多人的目光，2010年的世界博览会再为上海的神速发展添增了一臂之力。

最大的港口城市

上海是世界上最大的港口，而鹿特丹是亚洲之外的最大港口。两者各自为自己国内的第二大城市，但上海在人口、产业与港口规模三个方面都是鹿特丹的数十倍大。

人口与医院

根据最新估测，上海的人口超过2500万，而鹿特丹人口为61.8万。大鹿特丹地区拥有

120万人口、共有九所医院，而上海则有数百所医院。鹿特丹的公共安全接听点每日处理350次警报，而上海每日有超过两千个！

规模虽不同，却仍有共同点

虽然上海的规模远超过鹿特丹，但也有许多重要的相同点，因此双方可以相互学习。两个城市都居住了许多老年人，这些人可能在家里或住家附近发生意外。就如同鹿特丹的情况，上海也经常发生工业意外事故以及重型运输车祸等受害者多处受伤的事故。



Ten years of medical links

Shanghai and Rotterdam: similarities and differences

Shanghai is developing incredibly quickly, and is attracting many people. The World Expo in 2010 gave an extra boost to the metropolis's tumultuous development.

Largest port cities

Shanghai is the world's largest port. Rotterdam has the largest port outside Asia. Both are their country's second city, but Shanghai is many times larger than Rotterdam in terms of population, commercial

activity and the size of the port area.

Inhabitants and hospitals

According to the most recent estimates, the number of inhabitants in Shanghai exceeds 25 million, whilst the city of Rotterdam has 618,000. 1.2 million people live in the Rotterdam-Rijnmond region, and can call upon nine hospitals. Shanghai has one hundred hospitals. The Rotterdam control room gets 350 reports a day to process. In Shanghai they get more than 2000!

Similarities despite differences in scale

Shanghai's scale exceeds that of Rotterdam manyfold, but there are also important similarities, as a result of which they can each learn from one another. Both cities are home to many elderly people who suffer accidents in and around the home. Just like Rotterdam, Shanghai has a lot of industrial accidents and accidents relating to heavy traffic, whereby victims often suffered multiple injuries.



Ruijin Hospital

Ruijin Hospital is one of the top three hospitals in Shanghai. The gigantic complex is very well known for its effectiveness and performance, e.g. in the field of laparoscopic surgery, transplants and the treatment of burns.

Futuristic outpatient departments

The Dutch initiators found the Ruijin Hospital's outpatient department reminiscent of an airport. Lots of marble, light, flatscreens with information on the walls everywhere, escalators in a 26 story building with a helicopter platform on top. 7000 people a day visit these outpatient departments. The degree of organisation is incredibly high.



瑞金医院

瑞金医院是上海最大医院之一，也是在腹腔镜、移植与烫伤等许多领域中以行动力著名的超大型医院。

具有未来性的综合医院

对荷兰方面的发起人而言，瑞金医院的门诊所留下的印象像一座机场：许多大理石、光线充足、墙壁上的屏幕不断显示信息，整栋大楼有26层高，有多座电扶梯，屋顶上有直升机停机坪。每日有7000名病患者来门诊看病，各单位的组织化程度非常高。





1. How our collaboration began

The first meeting

The collaboration with Shanghai started in 2005 more or less by accident. The Rotterdam Regional Medical Officer Jan Christiaanse visited the twin city Shanghai with a delegation from Rotterdam Municipal Health Services (GGD) in connection with public healthcare. He came into contact with the director of the Ruijin Hospital, who showed him the special trauma wing of the newest hospital and introduced him to Lu Yiming, Chair and Professor, Department of Emergency Medicine and Traumatology Rui Jin Hospital, Shanghai Jiao Tong University School of Medicine.

Professor Lu had introduced trauma management at Ruijin Hospital in the mid-1990s. At the time of the meeting in 2005 emergency medicine and trauma

surgery were being brought together in one wing. Other specialisms also contributed to the development of the new wing.

World Expo as catalyst

Professor Lu had the task of organising the emergency medicine for the World Expo. The Expo was going to attract millions of visitors, and required a high level of readiness and degree of organisation of the acute medical care. The hospital was very well-equipped in many regards, but there was only a helicopter deck for acute medical care. This enable patients to be brought to emergency treatment more quickly using police helicopters.

Knowledge and experience of large scale medical assistance still needed to be

developed. The control room still needed to be adapted to this demand. Professor Lu therefore sought collaboration with people who had more extensive experience in this field, so that the hospital and the city were also optimally prepared for the Expo in medical terms. Professor Lu and Jan Christiaanse agreed to collaborate in order to learn from one another. The Expo lent an increased and practical importance to the collaboration, and was a major driver behind the ultimate success.

1. 合作伊始

初次见面

与上海的合作关系，是在2005年在缘分巧合下建立的。大鹿特丹地区医疗官员Jan Christiaanse与鹿特丹的GGD（公共卫生服务）单位的代表团到姐妹城市上海进行公共医疗参访。Jan与瑞金医院的院长会面，院长带他参观最新医院的特殊创伤部门，也将他介绍给急诊室主任、兼任上海交通大学教授的陆一鸣教授。

陆教授早在九十年代就创始了瑞金医院的创伤部门，在2005年的那次会面时，正是将急诊室与创伤外科合并的时候。其他专业对该部门的发展也有所贡献。

世博会成为催化剂

陆教授曾接过为世博会提供紧急医疗协助的任务。世博会将吸引数百万计的游客，需要将紧急医疗照护的需求和准备提升至相应的高度。医院在很多方面非常齐全，但急诊医疗的设备只有一块供直升机起降的停机坪。病患虽然可用警

用直升机快速送到急诊处，

但大型医疗援助的相关知识和经验仍待建立，接听点也必须进行调整以因应这个问题。因此，陆教授寻找的合作对象是拥有更多经验的单位，医院和市政府，以便在医疗上为世博会做好万全准备。陆教授和Jan Christiaanse于是约定要共同合作、相互学习。世博会让合作变得更重要且更具体，并为最终的成功扮演了背后的关键驱动角色。



No hesitation whatsoever

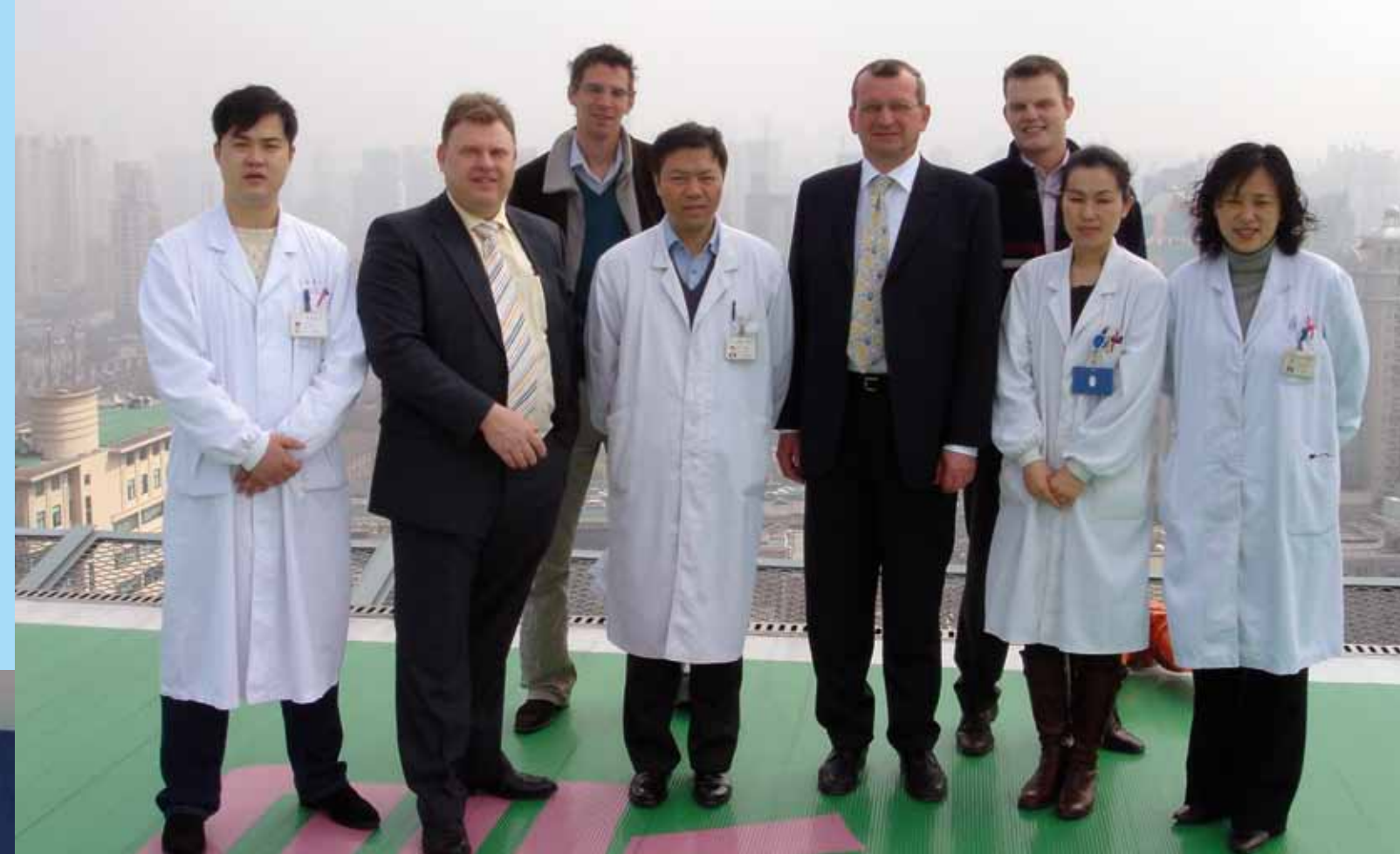
Back in the Netherlands Jan Christiaanse soon asked for the assistance of the then head of the trauma surgery section, Professor Patka. He was enthusiastic almost immediately. “Shanghai was developing rapidly. Rotterdam could learn a great deal from the enormous scale on which trauma care in Shanghai operates. There was a plentiful supply of patients and we saw good opportunities for collaboration both in terms of organisation of the care and for the exchange of doctors, nurses and students.” Professor Patka was unable to travel on the next trip. He would have preferred to have met the contacts in Shanghai personally, but thanks to a video recording he was at least able to greet them.

Development of a good idea

The Trauma Centre South West Netherlands and the Department of Trauma Surgery of Erasmus MC joined in the initiative. From 2006 onwards Dr. Dennis den Hartog (Head of the Trauma Centre and staff member in the Department of Trauma Surgery) was involved with the collaboration alongside Professor Patka. “In order to find out what we could mean for one another and implement the programme, I paid a visit to Shanghai in November 2006. I was Professor Lu’s guest for three weeks. We conducted all sorts of discussions and made the first steps in building the bond of trust between us. That bond has constantly grown over the years, because we were not just in contact via

email, telephone or post. We visited one another repeatedly.”

Dr. Dennis den Hartog: “We are exceptionally grateful that we were welcomed so hospitably. Over a period of ten years we have built up a true bond of friendship. From our side a total of 26 students, a trauma surgeon, an emergency medicine nurse and a nurse from the mobile medical team (also a paramedic) have taken part in the exchange. Our people were always more than welcome at Ruijin Hospital and were able to shadow the day-to-day activities. I find that very special, valuable and evidence of great trust.”



毫不犹豫

回到荷兰后，Jan Christiaanse立刻前去询问当时创伤外科部门的主任Patka教授，讨论合作一事。Patka教授当时立刻就对此作出热烈回应。“上海正在强劲发展，鹿特丹可以从上海的大规模创伤护理运作流程学到很多东西：在病患的种类、照护组织领域以及医生、护士和学生的交流方面，我们看到了良好的合作机会。”而接下来的行程Patka教授无法前往，他最希望亲自到上海与有关人员会面，但多亏了视频技术，他可以和合作伙伴们打招呼。

好主意的实现

荷兰西南部创伤中心（Zuid West Nederland, ZWN）和伊拉斯姆斯大学医院（Erasmus MC）创伤外科主动参与了合作计划。自2006年以来，参与协作的不仅有Patka教授，还有但Dennis den Hartog（创伤中心部门主任以及创伤外科部工作人员）。“为了探索我们可以为对方做的事情有哪些、能够实现的计划又有哪些，我在2006年11月花了三个星期时间访问上海。陆教授接待了我三个星期。我们商量的各种事项，并跨出我们彼此互信的第一步。这个互信的关系多年来变得越来越深厚，因为

我们不仅通过电子邮件、电话或信件联系，我们还一次又一次互相彼此来访。”

Dennis den Hartog表示：“我们非常感激受到这么热情的款待，这十年来我们已经建立了真正的友谊。从我们这边共有26名学生、一名急诊室创伤外科医生和一名巡回医疗队护士（也是救护车护士）参加了交流。我们参与交流的学员在瑞金医院总是受到很大的欢迎，也被允许参观临床医疗过程。我认为这是非常特殊、有价值的，这更是一个令我们充满自信的证名。”



2. The fruit that we harvested together

Over the ten year period Rotterdam City Council, Rotterdam-Rijnmond Safety Region / (Regional) Major Incident Medical Planning and Coordination Office, Erasmus MC and Trauma Centre South West Netherlands have achieved a great deal in partnership with Ruijin Hospital and Jiao Tong University in the city of Shanghai:

- Mutual exchange of medical staff:
 - 2 doctors from Ruijin Hospital visited Erasmus MC and the (Regional) Major Incident Medical Planning and Coordination Office
 - 3 doctors from Erasmus MC visited Ruijin Hospital
 - 1 nurse from Erasmus MC visited Ruijin Hospital
 - 26 students from the medical faculty at Erasmus University visited Ruijin Hospital
 - 1 Paramedic/MMT nurse from the Rotterdam-Rijnmond Safety Region visited Ruijin Hospital

- The signing of a Letter of Intent (2006) and a Letter of Cooperation (2008) by Ruijin Hospital and the Rotterdam-Rijnmond Safety Region/Erasmus MC
- 2 visits by the Mayor of Rotterdam and the board of the Erasmus MC to Shanghai
- 2 joint publications about public health in international journals
- 2 long-term research projects in the area of burns and falls by the elderly
- 2 trauma courses run by Erasmus MC in Shanghai
- 1 visit by the Dutch Minister of Public Health, Welfare and Sport to Shanghai (SINO conference)

Unexpected results

The exchange between Rotterdam and Shanghai has also resulted in a significant improvement in the collaboration between Erasmus MC and the (Regional) Major Incident Medical Planning and Coordination Office and Rotterdam-Rijnmond Safety Region.

The organisations already had a functional relationship in the Netherlands, but everyone got to know one another much better in Shanghai. This provided a firm basis for collaborating better in the Netherlands as well. Dr. Dennis den Hartog organised two trauma courses in Shanghai in 2009: “For the trauma course I took a delegation of experienced surgeons from various Rotterdam hospitals with me. The degree of understanding amongst this group of doctors is now much greater, and the bond has grown. That is tremendously valuable, and cannot be expressed in words or numbers. By meeting one another there, working on projects and spending time off together, we now work together even better. Our network here has been strengthened by going there.”

Language barrier or language benefit?

The lack of knowledge of Chinese amongst the Rotterdam students initially appeared to be an obstacle, but also turned out to have added value. It drew upon the students’ other qualities. There were forced to watch carefully and find other forms of communication. “They will need those skills as doctors in the Netherlands later as well,” explains Jan Christiaan. He now has a GP practice in Vlaardingen. At least one third of his patients do not speak Dutch. Words are therefore often insufficient in his practice.

Research and publications

Various studies were carried out by the students during the exchanges. The students learned about a different type of patient and how they are treated at Ruijin, and they learnt to put knowledge into practice. They carried out research, collected data, analysed it and reported.

2. 共获成果

十年来，鹿特丹市政府、VRR / Major Incident Medical Planning and Coordination Office、伊拉斯姆斯大学医院和西南荷兰创伤中心，与瑞金医院和上海交通大学取得许多成绩：

- 医务人员相互交换次数共计如下：
 - 2名瑞金医院医生访问伊拉斯姆斯大学医院和Major Incident Medical Planning and Coordination Office
 - 3名伊拉斯姆斯大学医院医师访问瑞金医院
 - 1名伊拉斯姆斯大学医院护士访问瑞金医院
 - 26名伊拉斯姆斯大学医学系学生参观瑞金医院
 - 1台救护车/大鹿特丹安全区域的移动医疗小组（Mobiel Medisch Team, MMT）护士参观瑞金医院
- 瑞金医院和大鹿特丹安全区域/伊拉斯姆斯大学医院签署一份意向书（2006）及一份合作书（2008年）
- 鹿特丹市长和伊拉斯姆斯大学医院董事2次访问上海
- 2次在公共卫生国际期刊联名发表文章
- 在烧烫伤领域和老年跌伤领域的两个长期研究项目
- 伊拉斯姆斯大学医院在上海开设两门创伤课程
- 荷兰卫生福利和体育部部长一次访问上海（SINO会议）

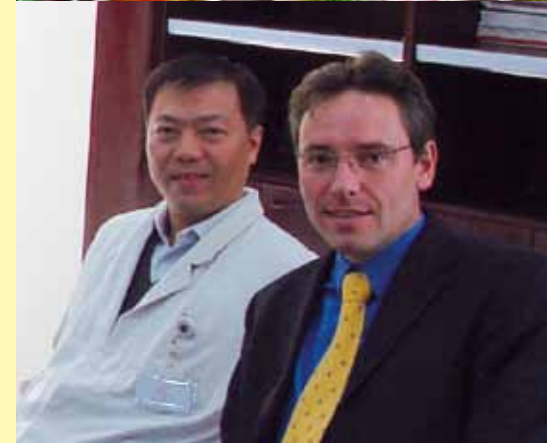
意外的收获

通过鹿特丹和上海之间的交流，也让伊拉斯姆斯大学医院和Major Incident Medical Planning and Coordination Office和大鹿特丹安全区域之间的合作大幅增加。这两个组织在荷兰已经拥有业务合作关系，但在上海，双方对彼此的理解则是更进一步。上海经验意外提供了双方坚实合作的基础，使双方在荷兰也能更好地合作。2009年，Dennis

den Hartog在上海举办了两次创伤课程：“为了创伤课程，我从鹿特丹各个医院找了有经验的许多外科医生组成代表团。这群医生之间的理解现在是非常深厚，他们之间的联系大为增加。这也创造了巨大的价值，而且不是用言语或文字就能表达的。通过在上海会面、携手合作项目、并度过一段闲暇时间，我们现在的关系比以往更加紧密了。我们的网络也藉由访问上海而更加强化了。”

语言究竟是障碍还是得益？

鹿特丹学生对中文知识的缺乏最初似乎是障碍，但后来证明还是有附加值：这体现了学生应具备其他的素质。他们被迫仔细观察四周的一切，并找到其他的沟通方式。“这样的技能在日后成为医生时也是必要的，”Jan Christiaan说。Jan Christiaan现在在弗拉尔丁恩（Vlaardingen）拥有一间家医诊所，上门的患者至少有三分之一不会说荷兰语，在临床门诊中，言语的功能往往不足。



In certain regards the Netherlands is simply too small to conduct well-founded scientific research. Hence the total number of burns victims in the Netherlands is far less than the number of victims in Shanghai alone. In the burns centre the students were therefore involved with collecting data from included patients, amongst other things. They examined the possible link between abdominal compartment syndrome and the total burnt body surface area. In the emergency medicine department they included as many possible new patients with the aim of getting a picture of the demographic characteristics of those aged 50+ who suffer a fall in China.

These studies led to two joint international publications which particularly focused on emergency medicine patients, the handling of the treatment process and the logistics behind it. Up until then there was little international knowledge about Chinese healthcare outcomes. Yet a great deal of noteworthy knowledge had already been accrued. This was reported in:

• Patient Demographics in Acute Care Surgery at the Ruijin Hospital in Shanghai (International Scholarly Research Network/ISRN Surgery Volume 2011, Article ID

801404) by Willem Folmer et al • Demographic Analysis of Emergency Department Patients at the Ruijin Hospital, Shanghai (Hindawi Publishing Corporation Emergency Medicine International, Volume 2011, Article ID 748274) by Wim Lammers et al

Basis for further collaboration
Jan van Leeuwen: “In 2011 I took over from Jan Christiaanse as head of the Regional Major Incident Medical Planning and Co-ordination Office. I visited the city of Shanghai and Ruijin Hospital with a delegation in order to meet everyone. This was my first visit to China. I was immediately impressed by the size of the hospital, the degree of organisation, the professionalism of the medical staff and Professor Lu’s dedication. He is particularly well-informed about medicine and has a very clear vision of where he wants to go with trauma care. This visit laid the basis for further collaboration. For example, it made it possible for a paramedic to do an exchange.”



研究和出版物

在这些交流中，学生们进行了各种不同类型的研究。学生们学习了如何了解不同类型的患者、他们在瑞金医院如何得到治疗，也学会了将科学付诸实践。他们做研究、收集与分析资料，然后制作报告。

在某些方面，荷兰要进行有根据的学术调查的实在样本太少了。比如说，荷兰全国烧烫伤患者总数远不及上海，因此学生们在烧烫伤中心专注于收集院内患者的数据信息，他们调查了腹腔综合征和烧伤身体表面积之间的潜在联系。在急诊室，他们涵盖尽可能多的新病患，以期打造中国50岁以上跌倒患者的病征图片库。

这两项研究最后成为了两份联名发表的国际出版物，其中特别关注的是急诊室中患者、救援过程的处理和其背后的物流程序。在那之前，中国的医疗成果在国际上鲜为人知，但许多有价值的知识已经开始累积起来，包括有下列出版物：

- Willem Folmer等人的“上海瑞金医院急诊手术病人的人口统计组合” (Patient Demographics in Acute Care Surgery at the Ruijin Hospital in Shanghai) ，（出版于International Scholarly Research Network/ISRN Surgery Volume 2011, 文章编号801404）
- Wim Lammers等人的“上海瑞金医院急诊室病人的人

口学分析” (Demographic Analysis of Emergency Department Patients at the Ruijin Hospital) ，（出版于Hindawi Publishing Corporation Emergency Medicine International, Volume 2011, 文章编号748274）

進一步合作的基礎

Jan van Leeuwen表示：“2011年，我接下Jan Christiaanse的任务，担任Major Incident Medical Planning and Coordination Office的主任。我和一个参访团一同参观了上海这座城市和瑞金医院，以和大家认识。这是我第一次到访中国。我立刻对医院的规模、组织化程度、医务人员的敬业精神和陆教授的



热情留下深刻的印象。他非常熟稔医学，也很清楚创伤照护的未来在哪里。这次的访问奠定了进一步合作的基础，例如未来救护车医务人员有机会前往实习。”







3. Looking to the future

Jan Christiaanse: “I hope that the relationship between the Trauma Centres in Shanghai and Rotterdam will continue, and that they will continue to exchange knowledge regularly. It is tremendously useful for students to see with their own eyes how a health system in another country operates. As a doctor you should not blindly focus on your own system. We still have a great deal to offer one another in the field of trauma medicine.”

Professor Patka: “This collaboration has expanded the medical social basis. The foundations have been laid. Use these positive experiences to further develop the relationship. Look for new joint research projects in organisational and medical areas which can aid the development of doctors and nurses. It seems to me to be valuable to further develop a higher degree of scientific collaboration.”

Dr. Dennis den Hartog: “I can look back on a valuable period in which we have developed a friendship and have gained knowledge on both sides. I hope that the contacts with Shanghai will be maintained, and that we continue to have access to one another’s hospitals and Trauma Centres. Our colleagues in Shanghai will always be welcome for a visit or an exchange. Friendship is valuable, and we should continue to meet and seek one another out in future.”

Jan van Leeuwen: “Over a period of ten years we have developed a very strong bond with one another. We are now past the project phase. Our strong foundation offers us the opportunity to involve one another in new developments in future. I hope that our futureproof relationship translates into a lasting friendship.”

Jolanda Trijselaar: “I was amazed by how dramatic and well-organised the development has been in Shanghai and at the Ruijin Hospital in the time between my visits. Our relationship and the collaboration that we have achieved fills me with pride. We greatly appreciate your contribution as colleagues and professionals. You are always most welcome in Rotterdam.”



3. 展望未來

Jan Christiaanse表示：“我希望，上海和鹿特丹的创伤中心之间良好关系可以存续下去，并且定期交换知识。这样的交流让学生大开眼界，并让学生亲眼目睹另一个国家的医疗系统运作；作为一名医生，你不能让被你身处的系统给蒙蔽。在创伤医学领域里，我们还有很多可以与对方分享的宝贵知识与经验。”

Patka教授表示：“这样的合作扩大了医疗界的支撑面，也从而奠定良好基础。我们可以利用这些正面经验的优势，进一步深化关系。寻找组织和医疗领域的新合作研究项目，并让它成为医生与护士的晋升机会。在我看来，这值得发展更高层次的科学合作。”

Dennis den Hartog表示：“回顾这段时光后，我发现我们发展出深厚的友谊，也彼此获得了许多宝贵的知识。我希望与上海的联系能继续维系下去，为彼此打开医院和创伤中心的大门。我们在上

海的同事始终对工作参访或实习表示欢迎。所以我们的友谊是很珍贵的，让我们在未来继续相见相学吧。”

Jan van Leeuwen表示：“10年来，我们彼此已经建立了牢固的关系。现在，我们已经历过合作项目期，我们营造出的坚实基础使我们有机会参与彼此未来的新发展，我希望我们前瞻的关系能转化为永恒的友谊。”

Jolanda Trijselaar表示：“让我惊讶的是，在我们每次参访之间，上海市和瑞金医院能获得如此具动力的发展和良好的组织程度。我们为彼此创造的关系与合作也让我非常自豪。我们也非常感谢你们的投入和专业素养，鹿特丹永远欢迎你们。”



Highlights

Letter of intent

In 2006 the Shanghai municipal committee for disaster management and the Rotterdam-Rijnmond Safety Region confirmed their initial collaboration by the signing of a Letter of Intent by their respective directors Fan Xianbiao and Don Berghuis.

Visit by doctors from Shanghai to EMC

In the spring of 2008 Dr. Dennis den Hartog welcomed Professor Lu Yiming (Chair of Department of Emergency Medicine and Traumatology), Erzhen Chen (head of IC SEH) and Zhenye Xu (trainee surgeon) to Rotterdam on behalf of Erasmus MC.

Letter of cooperation

In September 2008 the director of Ruijin Hospital Li Hongwei and the director of Rotterdam-Rijnmond Safety Region Don Berghuijs signed a Letter of Cooperation. This set out the following programmes

- 1. Strengthening the collaboration between the trauma centres and the medical faculties
- 2. Development of training programmes for medical staff, traineeships and the exchange of medical staff
- 3. Exchange and recording of protocols in the area of (preparation for) medical care in the event of crises, incidents and events

Trauma courses

On behalf of the Erasmus MC Dr. Dennis den Hartog has organised two trauma courses (in February 2009 and May 2010) dealing with the reception and treatment of (unstable) trauma patients. The content was comparable to the American ATLS (Advanced Trauma Life Support) and contain special elements for treating patients with life-threatening injuries. The course prepared the doctors in Shanghai for the Expo.

Plaque

In 2011 the initiators confirmed their relationship by unveiling a plaque on the wall of Ruijin Hospital. Photo: Professor Lu and Doctor Dennis den Hartog.

SINO / Visit by Minister Schippers

In September 2013 Minister Schippers (Public Health, Welfare and Sport) visited Shanghai. During the two-day SINO Dutch Healthcare seminar Erasmus MC and the (Regional) Major Incident Medical Planning and Coordination Office gave presentations, and the delegation visited Ruijin Hospital. This visit also included representatives of industry. The delegation consisted of 50 to 60 people.

特别收录

意向书

2006年，上海和大鹿特丹安全区域各自的灾害管理市委委员会由双方主任范贤彪和 Don Berghuijs一同签署了一份意向书，证实了他们最初的合作。

上海瑞金医院医生访问伊拉斯姆斯大学医院

2008年春，Dennis den Hartog 代表伊拉斯姆斯大学医院在鹿特丹接待了陆一鸣教授 (SEH主任)、 陈尔真(IC SEH主任)和徐振晔(在学中外科医生)。

合作书

2008年9月由瑞金医院李宏为主任和大鹿特丹安全区域主任Don Berghuijs签署了合作书。在合作书中确立了以下项目：

- 1. 加强创伤中心和医学系之间的合作
- 2. 实现医务人员的培训、交流与实习计划
- 3. 在（准备）危机、突发事件与活动的医疗照护危机方面交流，并确立流程表

创伤课程

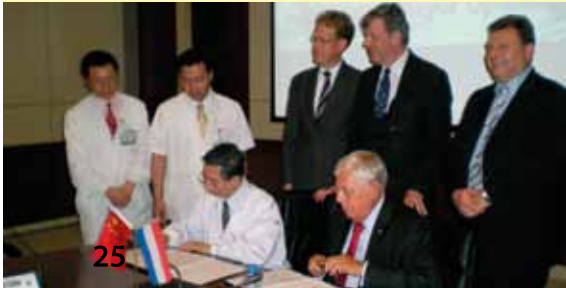
伊拉斯姆斯大学医院组织了两次（2009年2月和2010年5月）创伤课程，主要涵盖了（不稳定）创伤患者的护理和治疗，内容与美国ATLS（高级创伤生命支持）类似，并包含特殊细节，以治疗病人的生命危险。参与课程的成员包含在上海为准备世博会的医生。

匾额

2011年，双方发起人在上海瑞金医院外墙安置一块匾额，确立双方的合作关系。图：陆教授和Dennis den Hartog。

SINO会议 / Schippers部长访问

SINO会议 / Schippers部长访问
2013年9月，Schippers（荷兰卫生福利和体育部部长）访问上海。在为期两天的SINO荷兰医疗保健研讨会中，伊拉斯姆斯大学医院和Major Incident Medical Planning and Coordination Office进行了报告，代表团同时参观了瑞金医院。这次访问也参访了相关产业，代表团成员约有50至60人。



2005

GGD Rotterdam visits Shanghai

2006

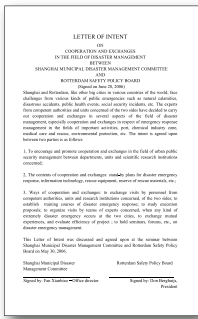
8 May: doctors Ruijin visits TC SWN and Burn Center Rotterdam in the context of GHOR

8 May: signing **Letter of Intent**

Nov: first medical students for research exchange program and first visit Dr. Dennis den Hartog to Ruijin

2007

Feb: 2nd group trainees (knowledge prehospital care)



2008

Spring: Prof. Lu Yiming (Head of Emergency Medicine), Erzen Chen (Head of Intensive Care and A&E Department), Zhenye Xu (Surgeon) visit Rotterdam

Li Hongwei (dir Ruijin) and Don Berghuijs (Gen. dir. VRR) sign **Letter of Cooperation**

Nov: Prepration course in Shanghai by Patka, den Hartog and Christiaanse

2009

Feb: first 'Rotterdam Erasmus Trauma Course' with faculty of trauma surgeons from Rotterdam

Nov: visit of A&E Department Nurse Erasmus MC for 3 weeks trainee Shanghai

Nov: visit Dr. L.M.M. Vogels, trauma surgeon Erasmus MC, for 3 weeks trainee

2010

March: visit for preperation on EXPO and 2nd trauma course



30 April 2010 official opening of the World Expo 2010

19 May 2010: signing **ceremony of Memorandum of Cooperation** by Mayor of Rotterdam

May: 2nd 'Rotterdam Erasmus Trauma Course'

2011

Visit VRR (Jan van Leeuwen, Jolanda Trijselaar, Jan Christiaanse) and Erasmus MC (Dr. Dennis den Hartog and Prof. Peter Patka) to Shanghai, **Placing the plaque**



First and second international publications in ISRN Surgery and Emergency Medicine International of scientific research conducted by Erasmus MC and Ruijin hospital

2012

Opening **new Ruijin hospital** in other district of Shanghai



2013

March: visit of the Burn Center, Dr. Liu, Jan van Leeuwen and Dr. Dennis den Hartog

18 April: visit of the Municipal Health Bureau Shanghai to Erasmus MC, Rotterdam with presentation of Prof. Jaap Verweij, dean, and Dr. Dennis den Hartog

Sept: **SINO** with minister Schippers and presentations on symposium of Dr. Dennis den Hartog and Dr. Stephanie Klein Nagelvoort- Schuit

Sept: Wim Breeman (ambulance and helicopter emergency nurse in Rotterdam) and Dr. Dennis den Hartog visit Shanghai for two weeks.

Sept: handing over abcd Sim serious game to Ruijin Hospital

2015

Oct. 2015: visit VRR / Erasmus MC to Shanghai, celebrating **10 years of collaboration** with a jubilee book



Portraits

Dennis den Hartog ▶

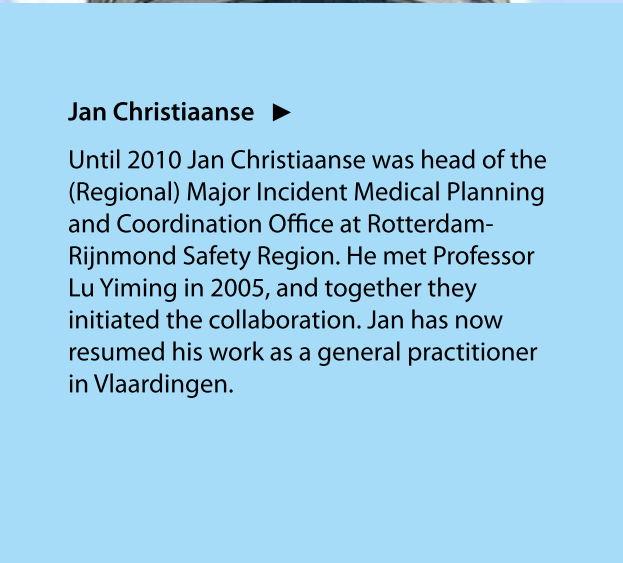
Doctor Dennis den Hartog is Head of the Trauma Centre South West Netherlands and a staff member of the Department of Surgery - Traumatology of Erasmus MC in Rotterdam. He was appointed as surgeon in January 2006, and started his specialist training in trauma surgery (CHIVO) at the same time. He has been involved with the collaboration with Shanghai since 1 October 2006.



重要人物

Dennis den Hartog ◀

Dennis den Hartog是荷兰西南创伤中心主任，以及鹿特丹伊拉斯姆斯大学医院创伤外科部门（手术部）研究员。他在2006年1月正式获任为外科医生，同时他也开始创伤外科（Chivo）的专项训练。2006年10月1日起，他参与了与上海方面的合作。



Jan Christiaanse ▶

Until 2010 Jan Christiaanse was head of the (Regional) Major Incident Medical Planning and Coordination Office at Rotterdam-Rijnmond Safety Region. He met Professor Lu Yiming in 2005, and together they initiated the collaboration. Jan has now resumed his work as a general practitioner in Vlaardingien.



Jan Christiaanse ◀

至2010年为止，Jan Christiaanse担任大鹿特丹安全区域事故和灾难的医疗援助主任。2005年，他与陆一鸣教授碰面，并和他们一起展开合作。同时，Jan在弗拉拉丁根再次开始担任执业医师。



Peter Patka ▶

Professor Peter Patka was appointed head of the trauma surgery of the Department of Surgery, head of Emergency Medicine at the Erasmus MC and professor at the Medical faculty in November 2004. Through contacts with the (Regional) Major Incident Medical Planning and Coordination Office he became involved with the collaboration with Ruijin Hospital in 2005. Professor Patka has now retired.



Peter Patka ◀

2004年11月,Peter Patka教授被任命为创伤学/创伤外科主任、伊拉斯姆斯大学医院急诊科主任，以及伊拉斯姆斯大学医学院医学系系主任。通过2005年与Major Incident Medical Planning and Coordination Office的接触，他也参与了与瑞金医院的合作。目前Patka教授已经退休。



Jan van Leeuwen ◀

Head of the (Regional) Major Incident Medical Planning and Coordination Office Jan van Leeuwen has been with the (Regional) Major Incident Medical Planning and Coordination Office since 2002, and became involved with the collaboration of Shanghai in 2011. As Jan Christiaan's successor he visited Ruijin and the city with a delegation in order to meet those involved personally. Jan noticed immediately that Shanghai takes the subject of safety very seriously. Safety is considered an important prerequisite for the economy in Shanghai. The two cities were very much of one mind on this issue.

Trudy Spit ▶

Trudy Spit is the management assistant at the (Regional) Major Incident Medical Planning and Coordination Office. She maintained contact with the partners in Shanghai by email for many years. She arranged visas, tickets and hotels for the colleagues sent to Shanghai. She also arranged the proper welcome for the colleagues and students visiting Rotterdam from Shanghai.

Jan van Leeuwen ◀

Major Incident Medical Planning and Coordination Office主任Jan van Leeuwen从2002年起就在Major Incident Medical Planning and Coordination Office任职，2011年起投入与上海方面的合作。身为Jan Christiaan的继任者，他与代表团一同拜会了瑞金医院和上海市政府，并亲身了解了当地情况。Jan很快就注意到上海方面对于安全的高度重视，安全被认为是上海经济发展的一个重要前提。在这一点上，鹿特丹与上海这两个城市都有共鸣。



Trudy Spit ◀

Trudy Spit是Major Incident Medical Planning and Coordination Office的管理助理。她常年通过邮件与上海方面的合作伙伴联系，她也负责前往上海的同事的签证、机票和酒店住宿事宜，她同时也负责来自上海、前往鹿特丹参访的同事与学员的接待业务。

Jolanda Trijselaar ▶

Jolanda Trijselaar has been working at the Rotterdam-Rijnmond Safety Region since 2006. As director of Risk & Crisis Management she is jointly responsible for the (Regional) Major Incident Medical Planning and Coordination Office, and as a result is involved with the collaboration with Shanghai. She has visited Shanghai several times. At the start of this century she visited the city for the first time as part of an exchange relating to incident prevention and disaster prevention. She did this as the representative of Rotterdam City Council together with Rotterdam-Rijnmond Regional Commander Don Berghuijs. In 2007 she took part in an international conference on the Civil Defence Strategy for the 21st Century at the invitation of the National Civil Defence Agency and the Shanghai Civil Defence Agency. In 2011 she visited Ruijin Hospital as delegation leader from the Rotterdam-Rijnmond Safety Region and Erasmus MC. Together with Jan van Leeuwen she stressed on behalf of the Rotterdam-Rijnmond Safety Region that she was taking over the baton from Jan Christiaan and Don Berghuijs.



Jolanda Trijselaar ◀

Jolanda Trijselaar自2006年起任职于大鹿特丹安全区域，作为总风险和危机管理部门主任，她也部分负责了紧急医疗服务，从而参与了与上海方面的合作。她参访了上海几次，在本世纪初，她第一次走访上海，主要为了交流事故管理和灾难控制领域的信息，同时以鹿特丹市政府代表的身份与大鹿特丹安全区域指挥官Don Berghuijs一同出席。2007年，她接受被美国国家民防局和上海民防局的邀请，参加了21世纪民防战略国际会议。2011年，她以大鹿特丹安全区域和伊拉斯姆斯大学医院访问代表团团长的身份参观了瑞金医院。她也已经证实自己和Jan van Leeuwen会接任Jan Christiaan和Don Berghuijs留下的位子。



Don Berghuijs ►

Managing Director of the Rotterdam-Rijnmond Safety Region and Regional Fire Service Commander Don Berghuijs was involved in the creation of the first Dutch safety region with a completely regionalised fire service. He was also the first chairman and Chairman Emeritus of the Netherlands Fire Services and Disaster Management Association. (Nederlandse Vereniging voor Brandweertzorg en Rampenbestrijding), and served for many years as commander of the Rotterdam fire service. In September 2008 he signed a Letter of Cooperation with the director of the Ruijin Hospital Li Hongwei in order to confirm the collaboration. Don Berghuijs died in January 2011 following a brief illness.



Don Berghuijs ◀

Don Berghuijs是大鹿特丹安全区域的总干事，也是区域消防指挥官，更催生了荷兰第一个具有完全区域化消防部门的安全区域。他长年担任鹿特丹消防局指挥官，也是荷兰火灾和灾害协会的第一任会长和名誉会长。2008年9月，他与瑞金医院主任李宏为签署合作书，确立双方合作的基础。2011年1月，Don Berghuijs在患病不久后不幸去世。





Organisations

Erasmus MC and Trauma Centre South West Netherlands

Erasmus MC is the university medical centre in Rotterdam, affiliated to Erasmus University Rotterdam. The hospital is the largest of the eight university medical centres in the Netherlands. Erasmus MC has been designated as a trauma centre since 1999. The Netherlands now has 11 trauma regions, which make up a network with national coverage.

The regions' task is to organise the trauma care in the region, which includes making good agreements within the chain about the reception and treatment of seriously injured patients (multi-trauma or poly-trauma patients). The trauma centre and also acts as a knowledge centre, organises referral evenings and is responsible for the (compulsory) national trauma register (LTR). It performs a specific

task with the Mobile Medical Team (MMT). There are four of these in the Netherlands, and the Lifeliner 2 is on standby at Rotterdam The Hague Airport.

(Regional) Major Incident Medical Planning and Coordination Office (GHOR) and the Safety Region

The (Regional) Major Incident Medical Planning and Coordination Office provides medical assistance in the event of accidents and disasters. As the hub between the care domain and the safety domain, the (Regional) Major Incident Medical Planning and Coordination Office manages the proper preparation for crises and disasters by all the care partners involved. The (Regional) Major Incident Medical Planning and Coordination Office also coordinates the optimum provision of medical assistance if a crisis or disaster occurs in the Rotterdam-Rijnmond region. The organisations that make up

the (Regional) Major Incident Medical Planning and Coordination Office chain include the ambulance service, the hospitals, Municipal Health Services, Trauma Centre South West Netherlands, the Joint Control Room, the Dutch Red Cross, Psychosocial Services and general practitioners.

Within the safety domain the (Regional) Major Incident Medical Planning and Coordination Office forms an integral part of the (multidisciplinary) assistance alongside the Fire Service, Police, Ambulance Service and Control Room, with a focus on medical and health aspects. The Safety Region deals broadly with aspects including risk management, incident prevention and crisis control in the Rotterdam-Rijnmond region. It does this through the joint efforts of operational services, organisations, citizens and businesses.

组织机构

伊拉斯姆斯大学医院和荷兰西南创伤中心

伊拉斯姆斯大学医院位于鹿特丹伊拉斯姆斯大学大学医学中心。这所医院也是荷兰8所大学医疗中心中规模最大的医院。自1999年以来，伊拉斯姆斯大学医院被指定为创伤中心，同时荷兰划有11个创伤区域，这些区域形成了一个覆盖全国的网络。

这些区域的任务是组织协调区域内的创伤护理资源，还有对严重伤患（多创伤或多发性患者）的收容和医疗进行连锁协定的任务。此外，创伤中心作为相关知识传递中心，还为国家创伤登记（landelijke traumaregistratie, LTR）负责组织参照之夜（refereeravonden，必修），并跟随移动医疗小组执行特定的任务。荷兰有4支移动医疗小组，其

中Lifeliner 2在鹿特丹海牙机场，随时做好行动的准备。

Major Incident Medical Planning and Coordination Office和安全区域

Major Incident Medical Planning and Coordination Office的意思是“重大事故医疗计划及协调办公室”，提供事故和灾难相关医疗援助。Major Incident Medical Planning and Coordination Office好比是护理领域和安全领域之间的桥梁，对区域中所有相关医疗合作伙伴的危机和灾害控制有着充分的准备。此外，Major Incident Medical Planning and Coordination Office也负责协调大鹿特丹地区在危机或灾难情况下能最优化地执行卫生保健。与Major Incident Medical Planning and Coordination Office连锁的组织还包含救护车派发服

务、医院、公共卫生服务单位、荷兰西南创伤中心、联合接听点、荷兰红十字会、社会心理支持和家庭医生。

在安全领域里，Major Incident Medical Planning and Coordination Office则与消防队、警察、救护车照护和接听点一同组成医疗卫生方面（跨学科）援助单位。大鹿特丹安全区域的概念着重于扩大当地的风险管理、意外防范和危机管理，并通过业务服务、各级组织、公民和企业的共同努力来达到目标。



