Nevrotransplantacij
dr. Sergio Canavero, Torino, Italia

HEAVEN: Head anastomosis venture
dr. Sergio Canavero, Torino, Italia

**HEAVEN: Head anastomosis venture**

Project outline for the first human head transplantation with spinal linkage (GEMINI)

[Surg Neurol Int 2013, 4:335](http://www.surgicalneurologyint.com/article.asp?issn=2152-7806;year=2013;volume=4;issue=2;spage=335;epage=342;aulast=Canavero)
Next Meeting

Join Us for the Academy’s 39th Annual Scientific Meeting
June 12-13, 2015 – Westin Hotel, Annapolis, MD

Due to the long standing relationship with the United States Section of ICS (ICSUS) the American Academy of Neurological and Orthopaedic Surgeons (the Academy) has once again designated the ICSUS Annual Surgical Update as the Academy Annual Scientific Meeting. Working closely with the members of the Academy to determine professional practice gaps and educational need, ICSUS planners representing our major surgical specialties are developing two days of programming that will provide approximately 12 hours of category 1 credit.

Click HERE to visit the ICSUS website and register for the meeting.

Preliminary Program

Keynote Lecture

HEAVEN-GEMINI: Head Transplantation: The Future Is Now
Sergio Canavero, MD, Director, Turin Advanced Neuromodulation Group, Turin, Italy  
(Click here to learn more)
Next Meeting

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**Preliminary Program**

**Keynote Lecture**

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Sergio Canavero, MD, Director, Turin Advanced Neuromodulation Group, Turin, Italy  
[(Click here to) (Click here to)]
Stairway to HEAVEN ...

1/ Poišči donorja (telo), ki ustreza prejemniku (glava)
2/ Anesteziraj in globoko ohladi donorja (D) in prejemnika (P)
3/ Prereži vrat D in P z namenom-ustrezno previdnostjo
4/ Zlepi hrbtenjači D in P npr. s polietilenglikolom
5/ Ohranjaj PD organizem negiben v komi nekaj tednov
6/ Med umetno komo električno draži hrbtenjačno anastomozo
7/ Vzdržuj visoko raven imunosupresije vse preostalo življenje
8/ Po 4 tednih zbudi in rehabilitiraj PD, da P glava začne uporabljati D telo
9/ Poskrbi za psihično prilagoditev P na D

“The person will wake up with the same voice, move, feel their face and learn to walk in a year.”
Stairway to HEAVEN ...

Jamstvo uspeha:

- minimalna okvara hrbtenjače z ultra-ostrim rezilom
- zadostnost delne vzpostavitve povezav za uporabno funkcijo
- lepljenje krnov z membranskimi lepili
- spodbudni učinki električnega draženja na funkcijo ...

Canavero: “Vse to že znamo!”
Stairway to HEAVEN ...
... or a highway to hell?

Problem 1: ne gre le za lepljenje krnov
... or a highway to hell?

Problem I: ne gre le za lepljenje krnov
Problem I: ne gre le za lepljenje krnov

... or a highway to hell?

Shi s sod., 1999 J Neurotrauma 16: 727-38
Problem I: ne gre le za lepljenje krvov

... or a highway to hell?

National Institutes of Health, Office of Science Education
URL home2.nsf/Educational+Resources/Resource+Formats/Online+Resources/
+High+School/41B8971F1A21A38F85256CCD00631593

descendentno

senzorno

spredaj

motorično

ascendentno
... or a highway to hell?

Problem 1: ne gre le za lepljenje krov

... or a highway to hell?

Problem I: ne gre le za lepljenje krvov

Observation of locomotor functional recovery in adult complete spinal rats with BWSTT using semiquantitative and qualitative methods

Y Zhang¹, S R Ji¹, C Y Wu², X H Fan¹, H J Zhou¹ and G L Liu¹
... or a highway to hell?

Problem I: ne gre le za lepljenje krnov

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... or a highway to hell?

Problem I: ne gre le za lepljenje krnov

Problem II: vseživljenjska imunosupresija

Problem III: deaferentacijske nevropatske bolečine

Problem IV: a whole new “mind-body problem” ...

Problem V: etika
- medijski nastopi pred strokovnimi argumenti
- zaupanje javnosti v znanost in medicino (Is this (bad) science ...?)
- vpliv na transplantacijsko medicino (umik donorjev)
- “There are things we should not do even if we could” ...?
Hvala za pozornost!