

# Dynamic Neuromuscular Stabilization (DNS) according to Kolar

Basic course "A" Contact Hours: 18

Course date: July 19 - 21, 2024

Location: Movement Therapy 36 Young Street Wollongong NSW 2500 Australia

Instructor: Hans Lindgren, DC

Organizer: Back Care Program Backcareprogram1@gmail.com https://www.hanslindgren.com



www.rehabps.com

# **Tentative Course Program**

(the actual program will be sent to you by the local organizer)

Day 1 Friday – July	19, 2024
9.00 - 10.30	Developmental kinesiology, ontogenesis – basic principles.
10.30 - 10.45	Coffee break.
10.45 - 12.30	Developmental stages in the 1st year of life – physiological & pathological
	development.
12.30 - 13.30	Lunch.
13.30 - 15.00	Stabilization of spine, trunk and pelvis in sagittal plane, breathing stereotype (ideal
	and pathological models).
15.00 - 15.15	Coffee break.
15.15 - 17.00	Stabilizing system of the spine: DNS postural tests – assessment principles.

**Day 2** Saturday – July 20, 2024

9.00 - 10.30	Basic postural stabilization assessment and treatment principles.
10.30 - 10.45	Coffee break.
10.45 – 12.30	Postural stabilization: basic supine positions corresponding with developmental positions: assessment and treatment/self-treatment principles: theory and
	demonstration.
12.30 - 13.30	Lunch.
13.30-15.00	Postural stabilization: basic supine positions corresponding with developmental positions: hands on workshop.
15.00 - 15.15	Coffee break.
15.15 - 17.00	Postural stabilization: basic supine positions corresponding with developmental positions: hands on workshop.

#### **Day 3** Sunday – July 21, 2024

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8.30 - 10.30	Postural stabilization: basic prone positions corresponding with developmental positions – theory and demonstration: assessment and treatment/self-treatment principles.
	principies.
10.30 - 10.45	Coffee break.
10.45 – 12.30	Postural stabilization: basic prone positions corresponding with developmental positions: hands on workshop.
12.30 - 13.30	Lunch.
13.30 - 15.00	Postural stabilization: demonstration of higher positions corresponding with development 3-14 months: intro to DNS course B. Final discussion.

More information about the course:

https://www.rehabps.cz/rehab/course.php?c\_id=3191

# **Course Goals and Description**

- Improve understanding of the basic principles of developmental kinesiology with an emphasis on development during the first year of life
- Identify and describe key milestones in human development
- Introduce the three level of sensorimotor control in functional assessment and treatment
- Demonstrate the relationship between development during the first year of life and pathology of the locomotor system in adulthood
- Introduce new terminology pertinent to rehabilitation such as functional joint centration, punctum fixum, punctum mobile and the integrated stabilizing system of the spine
- Define ideal postural stabilization from a developmental perspective: intra-abdominal pressure regulation, dual role of the diaphragm in stabilization and respiration, stabilization via co-contraction
- Identify common stereotypes of faulty postural stabilization ("open scissors syndrome", forward drown posture, backward drown posture, "hour glass syndrome")
- Explain and demonstrate biomechanics of undifferentiated, ipsilateral and contralateral posturallocomotion patterns; closed and opened kinematic chains, stepping forward and supporting function
- Evaluate and correct poor respiratory patterns
- Demonstrate the correlation between poor respiration patterns and functional pathology of the locomotor system
- Assess the integrated stabilizing system of the spine both visually and utilizing dynamic functional tests
- Integrate corrective exercises based on the DNS functional tests and developmental positions: exercise in undifferentiated static positions; position transfer during locomotor function; exercise progression using unstable surfaces; increased difficulty of the exercises utilizing resistance, dual tasking and other challenges
- Clarify how DNS corrective exercises can integrate with other exercise strategies
- Cover the basics of application of DNS concept in sport training
- Provide basic clinical management explanation for clinicians to better integrate the DNS approach in their regular practice, including patient education
- Optimally prepare students for the next level of training (Course "B")

#### **OPTIONAL EXAMINATION**

Participants who would like to participate in the educational track towards becoming a certified practitioner can take this exam for an additional fee of 50 Euros.

The DNS A test is completely automatic and on line. As soon as you register, you will receive a unique link to start the test. The test is designed to sharpen your understanding and reinforce the concepts of DNS to make you a better trainer, therapist or physician. The test is comprised of 50 multiple choice questions, including 10 picture questions. You can spend as much time as you want to take the test.

To pass the test you must answer 35 out of the 50 questions correctly. You will get a maximum of three attempts to pass the test. As soon as you submit your test, you will receive your results immediately both on the screen and they will be sent to you via email.

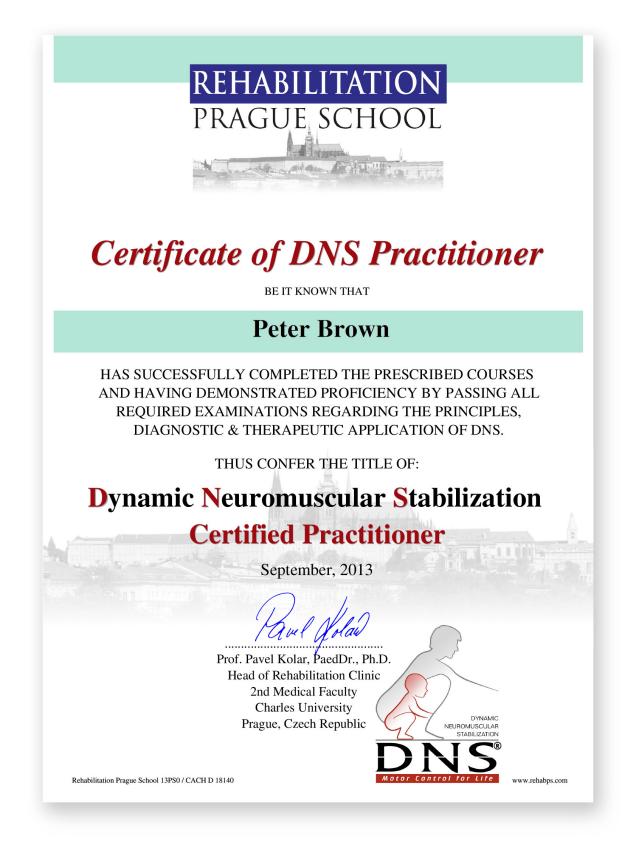
At the end of the course, a Certificate of Attendance will be awarded by local instructor.



Upon successful completion and passing of the DNS Test A, a Certificate of Achievement from Prague School of Rehabilitation will be awarded (electronic version by email).



Upon successful completion and passing of the courses A-D and tests, a Certificate of DNS Practioner from Prague School of Rehabilitation can be awarded. You will be recognized as a Certified Practitioner in the Dynamic Neuromuscular Stabilization approach. After obtaining the final diploma, you can be listed among **DNS Certified Practitioners** on the website of the Prague School for a fee of 20 EUR for an unlimited period. You are required to take at least one DNS course every 3 years to retain your certification status.



## **Course Instructor**



Hans Lindgren, DC

Hans Lindgren received his Doctor of Chiropractic Degree from Anglo-European College of Chiropractic (AECC), Bournemouth, England in 1984. Returning to his native Sweden, Hans worked in Stockholm before starting his own Clinic, the Uppsala Chiropractic Clinic, a well recognized Chiropractic centre incorporating both Chiropractic and Physiotherapy. Hans was directly involved in several rehabilitation projects with the Akademiska Hospital in Uppsala, and during his 9 years working as a Chiropractor in Sweden also wrote articles in 'B&K' the leading Body-Building and Training magazine, and worked as Sports Chiropractor for Ulltuna and Lidingö Men's Premier-League Volleyball teams. He was also responsible for the post-graduate program for the Swedish Chiropractic Association, and was appointed as a Chiropractic Consultant for the Company Health Care Programs of the Akademiska Hospital and Pharmacia Sweden. Hans ran his first course on 'How to Incorporate Gymtraining into Rehabilitation' for the Swedish Chiropractic Association in 1988.

In 1993 Hans moved to Brisbane, Australia where in 1994 he established both the Alexandra Hills Chiropractic Centre and Nordic Gym - a unique cutting-edge Fitness Centre specialising in one-on-one Personal Training and Rehabilitation. Nordic Gym became affiliated with the Australian Institute of Sport (AIS), preparing Australian Team Divers for the Commonwealth Games.

In 1999 Hans was introduced to the Prague School of Rehabilitation and commenced a long and rewarding journey with many of the world's leading Rehabilitation Specialists, including Professors Kolar, Janda and Lewit. After intensive study under Professor Pavel Kolar and completing all levels of the DNS Program, Hans was one of the first Chiropractors worldwide to be certified as a DNS Practitioner.

Hans has a long-held interest in Rehabilitation, Sports Medicine and Strength & Conditioning, and runs courses on Functional Stabilization for Health Care Professionals, Personal Trainers, and Strength and Conditioning Coaches. He is a member of the Australian Strength and Conditioning Association, first joining in 1996.

Hans has actively participated in as well as coached many competitive sports. He was the Assistant Coach, Sports Physician, and Strength and Conditioning Coach for the Australian Ice Hockey Team which travelled to the World Championships.

Hans has also successfully competed as a Natural Body Builder since 1999 winning several titles, culminating in his 2010 3rd placing at the Natural Universe Body Building Championships held in Los Angeles, CA. Following this success Hans turned his attention to Powerlifting, competing numerous times and resulting in Hans now holding 3 Australian Records in Drug-free Powerlifting.

Hans utilises DNS treatments in his daily clinical practice as it combines effectively treatment with functional rehabilitation and improved performance.

## Author of the DNS concept



### Professor Pavel Kolar, P.T., Paed. Dr., Ph.D.

Professor Kolar is a physiotherapist by training. His instructors, Professor Karel Lewit and the late Professors Vaclav Vojta and Vladimir Janda, profoundly influenced him in his evolution of DNS. He is the Director of the Rehabilitation Department, University Hospital Motol, School of Medicine, Charles University, Prague, Czech Republic. He also acts as an adviser to the Director of the Hospital and serves as vice-dean of bachelor and master study at Second Medical Faculty, Charles University, Prague.

As Director of the Rehabilitation Department, Professor Kolar oversees the following:

- 1. The Rehabilitation Unit for adult patients, both outpatients and in-patients.
- 2. The Rehabilitation Unit for children: outpatient and inpatient.
- 3. The Pain Management Unit: outpatient and inpatient.
- 4. The Spinal Unit.
- 5. The School of Physiotherapy.
- 6. Department of Sports Medicine.

Professor Kolar is renowned for his work in rehabilitation, in addition to his utilization of DNS methods to celebrities in the world of sports, politics and entertainment. He has been appointed team clinician for the Czech Olympic teams, Soccer team, Davis Cup tennis teams and national ice hockey teams. He gained wide recognition for his treatment of former Czech President Vaclav Havel, which included traveling and serving as the President's personal clinician when he went abroad. Because of the profound influence of DNS to rehabilitation in the Czech Republic, Professor Kolar was awarded the prestigious "Presidential Award for Professional Excellence" by Czech President Vaclav Klaus in 2007. This award is typically reserved for those in their later years after many decades of significant contributions to society, while Professor Kolar's contribution of DNS earned him the coveted award while still in his early 40's!!

Professor Kolar is currently directing an extensive research project in his department concerning developmental kinesiology and its application in early diagnosis of central nervous system disorder in newborns and infants. He and his trained therapists utilize DNS techniques in the treatment of newborns and infants with cerebral palsy. Professor Kolar is also currently involved in a second research project, studying "stabilization and respiratory function of the diaphragm" and its relation to conservative treatment of back pain syndromes.

In 2009 Pavel Kolar successfully completed his Ph.D. His thesis was: "Dynamic MRI and spirometric analysis of diaphragmatic activity". From 2009 to 2012 Prof. Kolar accepted an appointment as Adjunct Senior Lecturer in the Faculty of Health Sciences, Murdoch University, Australia.

Professor Kolar has taught DNS in numerous countries all over the world.

Professor Kolar resides in Prague with his wife and three children.