

Australian Institute of Orthopaedic Technologists Inc.

AIOT newsletter

June 2017

- **Letter from the President**
- **AIOT Brisbane Symposium Flyer**
- **Want to work for yourself?**
- **Photos from previous Symposiums**
- **Case Study- LIPUS**



For Sale Established Business Opportunity Hobart Tasmania

- Own boss
- Established business
- Lifestyle
- No stress
- Minimal hours
- Successful business
- Tassie fresh air
- No traffic jams

How would you like a life-change in the best Australian capital city, work for yourself, as much as 2.5hrs/day, 5 days/week and earn real money?

Now I have your attention, please read on.

Benefits are massive:

1. No public servants to answer to.
2. Nobody telling you how to mind your own business
3. Employ spouse/partner and share tax burden
4. Have weekends free, oh and take leave when you want.
5. Have your car and associated equipment offset by business expenses
6. Tell your boss to go jump every morning without fear of being dismissed

Like it so far?

If you are a current financial member of AIOT, have Cert (iV) in Cast Technology, the aptitude and work related history to apply for your own Professional Indemnity Insurance and Visitation Rights at private hospitals for bedside treatments and conduct on-going education sessions for other allied professional bodies/organisations.

YES? ----- You need to call Glenn Brown post haste at Glenn Brown Casting 0417133726 Hobart, Tasmania. Australia

He is retiring after nearly 40 years treating the sick and ailing. First standalone, sole trader profitable Casting business in Australia is up for grabs!

All contacts are set up, with SAV + equipment in price.

All bookwork available for your accountant to peruse and to wish you a most profitable future.

Letter *from the President.*

Hi Members,

Welcome to our first newsletter for 2017.

How quickly the year is flying past. I trust that all Technicians are working hard to help our patients on the road to recovery with their various fractures and medical conditions that continue to present to our Health Facilities.

The 2017 AIOT National Conference is fast approaching. It is to be held over the weekend of the 5th & 6th of August. I encourage members to make enquiries to our Secretary Pauline Miller for more information as there will be limited places available. The Program flyer will be distributed in the coming weeks.

In Education news, the AIOT has been informed that the Australian Industry Skills Committee (National Body) has approved the commencement of a work plan to reintroduce the Certificate IV in Cast Technology. The Health Training company Skills IQ have been seconded to review and update the Training package and the AIOT will be working closely with Skills IQ to have the course available within the next 2 years. We are hopeful that the time frame will be far less than 2 years.

Well members I must get back to work. Please give the newsletter editors any interesting information you would like published, we need to hear what's happening in your state and Health facilities.

I look forward to catching up with you at the National conference in Brisbane.

Regards,

Terry James
AIOT President.

How to contact us...

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Australian Institute of Orthopaedic Technologists Inc.



2017 AIOT National Conference

Saturday 5th - Sunday 6th August, 2017
Diana Plaza Hotel, South Brisbane

- A weekend of lectures, demonstrations, and practical sessions catered to all levels of casting.
- Industry representatives exhibiting the latest in casting materials, orthopaedic devices and tools.
- Opportunities for socialising and networking with orthopaedic casters from all over Australia.

Pricing and registration details will be sent out closer to the date with special prices available for AIOT members.

Please contact AIOT secretary Pauline Miller with questions or if you would like to be on the mailing list for further information.

paulineaiotsecretary@outlook.com

Also check out our Facebook page for updates and pictures of last year's fantastic event in Sydney.

AIOT CONFERENCE SATURDAY 5th August 2017

8.30 am Registration & Trade Displays

9.00am Welcome & conference Opening
Terry James AIOT President / Stan Beausang

9.15am – Guest speaker Anne Connel (Paediatric Radiographer)

9.45am – Guest Speaker Dr David Bade
Orthopaedic Surgeon

10.15am - Morning Tea & Trade Display

10.45am – Guest Speakers
Dr Ivan Astori (Orthopaedic Surgeon Mater Hospital Brisbane)
Mr Paul Buhle Representing (Lifehealthcare)

11.45am – Lunch & Trade Display

12.30pm- Breakout Practical session 1hr 30min.

Group One – Beginners practical session (upper & Lower limb Trauma slabs)
Full POP Casting colles / Smith' Greenstick/Buckle, Scaphoid,
Metacarpal, Humeral Slabs, Below Knee.

Group Two – Intermediate Breakout Practical Session 1hr 30min.
Full Synthetic casting Colles, Greenstick/Buckle, Scaphoid, Below Knee,
Metacarpal.

Group Three – Advanced Group Breakout session 1hr 30min.
Advanced casting PTB's, Total Contact cast's , hip Spika (Paediatric, adult ?)
Paediatric fractures , Vascular issues in casting.

2.00 pm – Afternoon Tea

2.30 pm –Continue Breakout Sessions, 1hr 30min

4.00pm – End of day one of Conference .

4.00pm - AIOT AGM – All AIOT Members Requested to attend

Saturday Evening AIOT Dinner function (Norman Hotel Woolloongabba)
6.30pm – 7.00pm Pre dinner drinks – 7.00pm – 11.00pm Dinner & Drinks.

SUNDAY 6th August 2017

9.00am – welcome back – Open forum Discussion, casting Demonstrations,

9.45-10.00am - Certificate Presentations.

10.15am –Morning Tea

10.30 am- Practical Group/ individual Break out sessions. 1hr.15min

11.45am – Annual National Scaphoid Race.

12.15 pm Close conference.

Accommodation Options

Conference Venue

Diana Plaza (Best western Hotel) 12 Annerley Rd Woolloongabba Ph 07 33912911

Central Hillcrest Apartments 311 Vulture St. Sth Brisbane Ph 07 38463000

Swiss-Bell Hotel 218 Vulture St Sth Brisbane Ph 07 31200800

Mater Hill Place 3 Allen st of Vulture st Sth Brisbane Ph 07 31633800

Sebel hotel 46 water st Sth Brisbane Ph 07 30078988

Rydges Sth Bank 9 Glenelg St Sth Brisbane Ph 07 33640800

Check out the photos from the previous two
AIOT symposiums!!!



Name; _____

Address; _____

Job Title; _____

Hospital; _____

Email; _____

Contact No; _____

Please circle your level of casting

Advanced

Intermediate

Beginner

Payment Option AIOT member: \$150

non-AIOT member \$200

If your AIOT membership fees are not up to date by 31st July you will have to pay full price for the educational workshop. If you are a non-member and would like to join please contact Pauline for more information about joining.

Please include your name and AIOT conference in your payment description

Australian Institute of Orthopaedic Technologists

Commonwealth Bank

BSB 063-349

Account number 10243159

Attending Dinner

YES

NO

Special Dietary Requirements -Please specify _____

Email; paulineaiotsecretary@outlook.com or 0411095042, fax number provided on request

Spaces are limited this year, so get your regos in soon.

Registrations close Friday 14th of July

Sydney 2016



Sydney 2016



Melbourne 2015



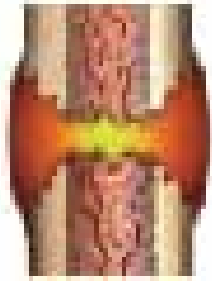
Melbourne 2015



Melbourne 2015



Bone Growth Stimulator



Case Study

A 94 year old female sustained a fracture of the lower third Tibia. Due to her age and comorbidities conservative management was her only option. She was treated in a long leg cast for four - five weeks due to her age, followed by the application of a Sarmiento type cast. The cast was removed for examination of the skin every 3-4 weeks. As the fracture was showing no sign of healing the surgeon requested the application of an Exogen Bone Growth stimulator. A 250 day device was chosen as the fracture was showing no sign of union. A new cast was applied with a window over the affected area to allow the device direct contact with the skin and underlying fracture. The patient was reviewed approximately every 4 weeks to check the skin integrity, and the usual fracture/x-ray review.



At the end of the 250 day period, a check x-ray was performed followed by a clinical review. The surgeon was extremely happy as the fracture had successfully united.

The patient did not have any other option to assist her fracture to heal. The use of LIPUS device allowed the patient to be discharged from hospital and eventually free of her cast of many months. Finally, she would walk again giving her back some of her independence.

An easy simple device, with a very successful outcome and a pleasing result for all! The following pages explains how works, take time to read it.

John Kinealy



Count on EXOGEN® to help heal fractures.

The new and improved EXOGEN system features a built-in treatment tracking calendar to help you stay consistent with your daily treatments.

About EXOGEN®

EXOGEN uses safe, painless low-intensity ultrasound waves to stimulate the body's natural repair process¹.

Proven Effectiveness

- 20-minute daily treatment
- 38% faster healing of fresh fractures^{2,3}
- 86% healing of non-unions⁴
- 91% clinically proven high treatment compliance⁵

Bone Healing at Every Stage¹



Inflammation

EXOGEN's ultrasound signal increases cell division among the periosteal cells in culture and upregulates growth factors that trigger the formation of new blood vessels¹¹.



Soft Callus

The ultrasonic treatment enhances the TGFβ-triggered differentiation of chondrocytes in culture and accelerates the formation of extracellular matrix^{12,13}.



Hard Callus

EXOGEN upregulates endochondral ossification^{14,15} and enhances osteoblast differentiation⁸ and mineralization¹¹.



Bone Remodeling

Accelerating both the formation and resorption of bone, EXOGEN ultrasound treatment yields faster remodeling of the mineralized callus¹⁶.

EXOGEN Mechanism of Action

Using low-intensity pulsed ultrasound (LIPUS) technology, EXOGEN activates a biological healing response at the molecular level⁶.

1. Stimulation

EXOGEN sends ultrasound waves through the skin and soft tissue to the fracture.

2. Activation

EXOGEN ultrasound activates cell surface mechanoreceptors called integrins, initiating an intracellular cascade that leads to upregulation.

3. Upregulation

EXOGEN ultrasound increases upregulation of genes and expression proteins and growth factors critical to bone healing.



COX-2⁶

Vital to the production of PGE2, critical for bone repair

<p>Cell Differentiation^{7,8} Convert stem cells to osteoblasts</p>	<p>VEGF^{7,9} Stimulates the growth of new blood vessels</p>	<p>BMP2⁶, BMP4⁶, BMP6⁶, BMP7¹⁰ Essential to the creation of new bone</p>	<p>Mineralization^{5,7} Increases bone mineral density</p>
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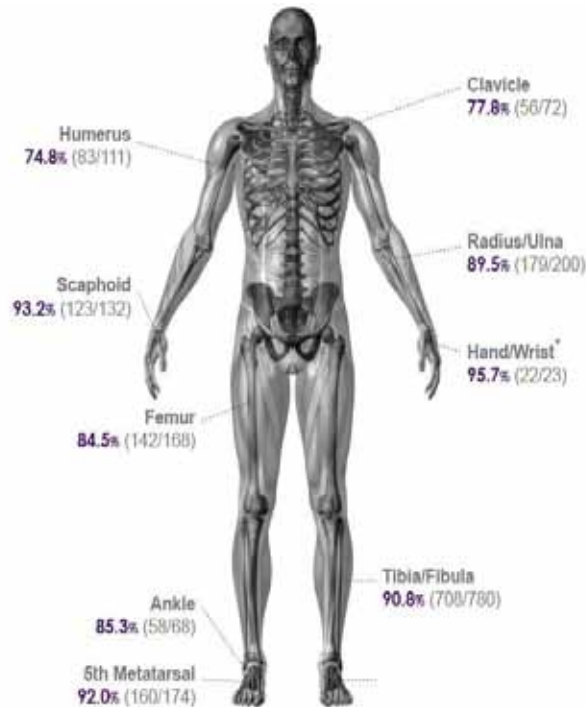


Who may benefit from EXOGEN

- Patients who have a recent broken bone and want it to heal as quickly as possible.
- Patients with a fracture that shows no signs of healing (non-union)
- Patients with certain risk factors that can slow the healing process such as advanced age, obesity, diabetes or smoking.

Common fractures at risk for non-unions and their heal rates

In many cases, EXOGEN may prevent the need for further surgery⁴.



Heal rates based on fracture age of 91–180 days.

*Includes metacarpal, carpal and hamate

**Includes talus, calcaneus, tarsal navicular, cuboid and cuneiform

System Components
Instructions for Use
Treatment Tracking Calendar

Click to view the [HOW TO USE EXOGEN VIDEO](#)

Click to read [OLLY'S EXOGEN STORY](#)

References

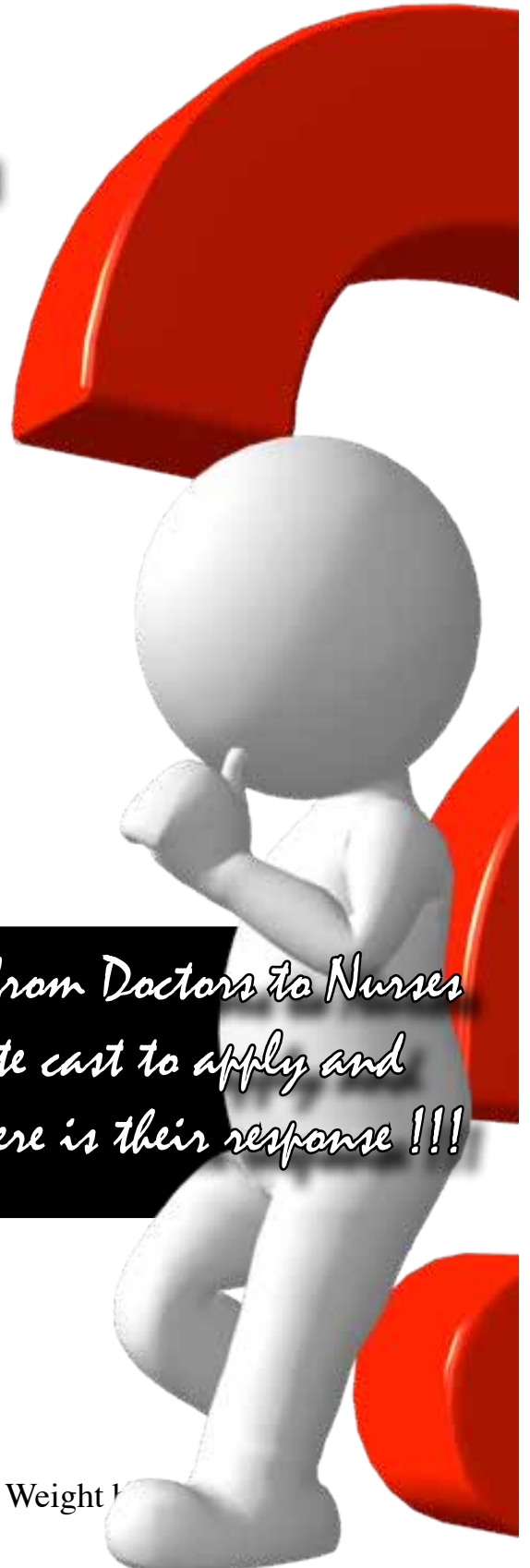
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Treatment takes
just 20 minutes a
day.

Jenny Dalton

What is your favourite and least favourite cast to apply?



I asked a number of people ranging from Doctors to Nurses to Technicians, what is their favourite cast to apply and what is their least favourite cast. Here is their response !!!

Dr. Pam Boekol.
Orthopaedic Registrar

Dandenong Hospital.

My favourite cast

BK walking cast (synthetic) with a plaster overshoe for Weight bearing

Why.

I really love this as an alternative to a CAM boot in patients who can weight bear but need their ankle joint immobilized (e.g. Zone 2 base of 5th metatarsal fractures). I've seen that patients can really struggle with how heavy and bulky the CAM boots are (especially when they need to stay on in bed or in the shower), which leads to poor compliance and potentially delayed or malunion. And don't get me started on the pressure sores those CAM boots can make!! BK walking POPs are lower profile, light, cheaper for the patient, plus they can re-

move their overshoe so that they don't get mud on their bedsheets!

In terms of plasters I don't like... hmmm... I suppose I'm not a huge fan of full plasters which are applied without any moulding, especially with synthetic cast material, because they just end up like a big round cylinder and allow even undisplaced fractures to deform. As the Orthopaedic Proverb goes "Bent cast = straight bone. Straight cast = bent bone"!

Kate Eherberg

Physiotherapist Austin Health Emergency Department.

My favourite is a charnley slab: because its easy, quick and effective!

My least favourite is shoulder hanging slab as not easy, not quick, and I think less effective than a brace.

Pauline Miller

Nurse caster St Vincent's Hospital Victoria

Favourite: Simple DR cast

Why: very satisfying

Least favourite:

Below knee U Slab because is so messy and heavy.

Nicole Mammone

Nurse caster & Victorian Medical Assistance team. Mildura

Love doing Bennett casts, dislike boxers

Kerry Jones

Nurse caster

Austin Health Victoria

Fav: not fussed

Dislike : Removing a hip spica.



Anton Lamers

Orthopaedic Registrar

Fav : putting on massive backstab on a non-compliant patient.

Least like: Contact cast (they usually have many feet)

Joyce Lloyd

Nurse caster Austin Health

Likes: below knee synthetic cast in neutral

Why: Just quick and easy

Dislikes Scaphoid casts

Have spent many years trying to get them and have given up. Can't do them.

Jenny Dalton

Love scaphoids.

Quick. Easy to apply and always in the same position.

Least. Above leg cast on a LARGE and tall adult male.

Heavy and hard work on the back. Needing extra hands to help hold. Hard to hold and keep position in a nasty unstable fractured tibia.

Hana Burian

Ortho Tech Western Hospital

Love below knee casts and achieving a good mould and well shaped.

Dislike Hanging U/slabs. Can be very difficult to apply.

Matthew Henderson

Ortho Tech Western Hospital

Love Colles's casts

Dislike Scaphoid casts but I'm coming around!





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SEE YOU THERE!!!

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paulineaiotsecretary@outlook.com

Also check out our Facebook page for updates and pictures of last year's fantastic event in Sydney.