





 Talent Detection (TD)

 Different Stages

 Date of the sport Stages

 Talent Identification(TID)

 (TID) Identification of individuals with potential to reach High Performance in a particular Sport. Might not be part of the Sport yet

 Talent Selection(TSE)

 (TSE) Selection of young athletes already part of the sport with high potential detected by achievement or indication of experienced coaches in talent development

 Talent Confirmation(TCO)

 (TCO) Training programs with athletes identified and selected as talents

to confirm the qualities in a training environment



Talent Detection

Benefits of TD Programs (Bompa, 1999)

• Reduce necessary time to achieve high performance level (gifted young athletes in the right sport);

• It eliminates big amounts of work, energy and talent from the coach;

•Reduce possible financial investment in athletes with limited potential;

• It increases the competition level and number of Athletes seeking for high performance (National Teams with high quality Athletes and many of them, are the ideal to development even more level);

• It increases Athlete self confidence (Competition results are usually better than other young Athletes with same training level);

• High Performance Coaching teams are more motivated to work even more when achieving good results;

Talent Detection

Need to implement Talent Detection Programs

• We all have limited resources (human, financial, time);

• High performance is very demanding and can not be achieve by everybody;

• As Coaches, we have the obligation to not create false expectation to young athletes. If we know from the beginning that they will not achieve certain level, we can't continue to create them "false" future scenarios (but for that we have to know it..);

• All kind of Triathlete is important for our sport, but for most part of them, high performance programs are not the right way;















Та	lent Dev	velopme	ent
Career Plan -	Sports w	vith late s	specialization Balyi, 1998
Stage Name	Girls	Boys	Goals
FUNdamentals Motor Skills	6-8 years	6-9 years	Diversification in FUNdamentals Motor situations
Learning to Train	8-11 years	9-12 years	Acquisition of "Sports" Motor Skill fundamentals
Train to Train	11-14 years	12-16 years	Development of Specific Sport abilities
Train to Compete (Start of Triathlon Specialization)	14-17 years	16-18 years	Specific training for acquisition/development of specific motor Skills to compete
Training to Win	18 years⇒	19 years⇔	Specific Training aiming High Performance
Retirement-Reconversion	When Level not enough	When Level not enough	Post Career Activity. Very important for Triathletes security after a Professional Sport career

Та	lent Dev	elopment	
Lor	ng Term Po	eriodization	
	Periodiza	ation	
General 6-14	Adapt. Bomp	a, 1999 Specializa 15	tion
Initiation 6-10	thletic rmation 11-14	ecialization 15-18	High Performance 19
Pre-puberty P	uberty P	ost-puberty dolescence	Maturity
Sport	Beginning Age	Specialization Age	High Performance Age
Swimming: Girls Boys	7-9 7-8	11-13 13-15	18-22 20-24
Cycling (road) Running (distance)	12-15 14-16	16-18 17-20	22-28 (38) 25-28 (35)

Talent Development

Long Term Development – 10-10-10 Rule



10 or 10.000 Hours Rule (Ericsson and Charness, 1994 and Salmela et al., 1999). This rule means more than 3 daily hours of training for 10 years to accomplish the **10.000 hours**;

- A young athlete is considered talented when situated in the upper 10% compared to his pears in specific abilities;
- This Rule means that we need 10 years to "build" a competitive Triathlete;
- This Rule means a maximum of **10 %** in training volume from one year to another is a good security;

					Ta	ler	nt Dev	elo	opn	nei	nt					
	Long	Tei	m D)ev	elo	opr	nent –	10	% lı	ncr	ea	se	Si	nulation	۱	
CAREER	1 Ye	ar		2	3	4	5 Ye	ars		6	7	8	9	10 Ye	ars	
AGE	16 Year	's Old	I	17	18	19	20 Year	rs Old	1	21	22	23	24	25 Years	s Old	
	Sessions	km	Time				Sessions	km	Time					Sessions	km	Time
SWIM	5-6 / 3-4k	20	6:30				5-7 /4-5k	30	10:00					6-8 / 4-6k	45	15:00
BIKE	2-3 / 40-60k	150	5:30				3-4 de 40-90k	240	8:30					4-5 de 60-120k	350	13:30
RUN	4-5 / 6-10k	40	3:30				5-6 / 6-16k	60	5:00					6-7 / 8-25k	100	8:15
COMPL.	2 / 30'		1:00				2 / 45'		1:30					2-3 / 45'-1h00		2:15
TOTAL	16:30 (2:45	i/day	x 6)	18:00	19:30	21:30	24:00 (3:30)/day	x 7)	26:30	28:30	31:00	34:00	37:30 (5:30)	day 3	(7)

✓ Simulation for a young Triathlete of 16 years old ready to support 16h/training/week (6 days /2-3h);

✓ Priority on Swimming. Priority can be different depending on

individual characteristics. Careful with the run!;

✓ Highest training volume week of the season;



		Tale	nt Development
	Lea	rning a	and Racing Progression
Stage Name	Female	Male	Training/ Racing Priority
FUNdamentals Motor Skills	(6-8)	(6-9)	Start in Swimming School Multiple sport experiences (team, combat,)
Learning to Train	(8-11)	(9-12)	Swim Training at Cibb level Start swim competition as priority racing Multiple sport experiences (team, combat,) Other sport competition as second priority Aquathion, Dutathion, Traithon for FUN and experience
Train to Train	(11-14)	(12-16)	Training and swim competition as priority Can start Triathlon Training if not interfering with swimming Regular participation in Aquathlon, Duathlon, Triathlon
Train to Compete	Juniors (16-19)	Juniors (16-19)	Specialization Fase I 1º Year:AquaDuaTeam Relays/TRI Super Sprint (4-6)+TRI Sprint(2-4) 2º Year:AquaDuaTeam Relays /TRI S.Sprint(4-6)/TRI Sprint(4-6) 3º Year:AquaDuaTeam Relays/TRI S.Sprint(3-4)/TRI Sprint(6-8)/OD (1-2) 4º Year:AquaDuaTeam Relays/TRI S.Sprint(3-4)/TRI Sprint(6-8)/OD (3-4)
Training to Win a)	U23 (20-23)	U23 (20-23)	Specialization Fase II 1º-2º Year:Team Relays+TRI S.Sprint (3-4)/Sprint(6-8)/OD (4-6) 3º-4ºYear:Team Relays+TRI S.Spri(1t 3-4)/Sprint(6-8)/OD (6-8)
Training to Win b)	Elite (24-36)	Elite (24-36)	Increase 1-2 Standards a year Keep Team Relays and Sprint distance races Máx. 8-10 Standard /year from 25-26 years old
Retirement Reconverting	Not Enough Level	Not Enough Level	Healthy way of life Age Group Racing? Star a new Job

High Performance Support

When Talent Development comes to an End...

- 8 -10 years Talent ⇔ Elite;
- 4 years as Junior + 4 years as U23;
- Still very big difficulties to race at Elite level after these 8 years;
- As Elite Triathlete, career is mostly orientated to Olympic Qualification and Olympic Games;
- At 24-25, 8-10 years to perform at top level

Factors to make triathlete stay in High Performance programs at 24-25

- Moment of many personal options
 - End of school?
 - Start to work?
 - Leaving parents house?
 - Family / mariage?
- Perspectives as professional Triathlete?;
- Possibility to stay in program financially supported?



High Performance Support

Needs aiming for a 6-10 years time frame



- "Squad" / National Team Identity;
- Training adapted to Individual needs of the athlete;
- Training focused on good mechanics rather than fitness;
- Access to Good equipment and facilities
- Appropriate and large competition opportunities;
- High quality coaching;
- Long Term Plan/Career perspectives;
- School must be the priority;

High Performance Support

Needs aiming next Olympic Games

- Country and National Team Identity;
- Training adapted to Individual needs of the athlete;
- Training focused on Top Elite standards references;
- Access to Top equipment and facilities;
- High Priority on Federation's Olympic Project calendar;
- Olympic Project Triathlete Focused on Olympic Goals;
- Triathletes Team Work Very important Strong/Weak aspects;
- High Quality Coaching;
- High Quality Team (Physio, Doctor, Massage, Nutrition,...)
- Triathlon as Full Time occupation (or almost);



Development Generic Model Supported on Talent Development Programs

Be aware To Changes

Accurate and Regular Sport Characterization

Implement strategies to Detect Talents with desired profile

Create conditions to develop all the potential of young talents

Give support once Development comes to an end





2. Swim Endurance

- \checkmark To be out of the water in the first group, (17:30-18:45);
- ✓ Swim technique in open water and group is very important;
- ✓ Know how to swim with or without wetsuit is important,
- ✓ Be able to swim in different conditions (temperature, waves, currents);
- ✓ Training speed changes during swim;
- What should we work on?
- ✓ Specific training for 17-19' after very hard start;
- ✓ Specific open water swimming;

✓ Training situations in groups / contact / swim tactics / positioning;







10 Chronological Stages

✓ Free your Body/arms from contact immediately from start;

- √1st buoy from 250-600m (2:30-7:00);
- ✓ Most part of starts are from a pontoon with 60-80 starters(60-80cm); ✓ Arriving among the firsts at the first buoy avoids contact and makes you able to control the race from the beginning,
- ✓ Swimmers must achieve 58"/1:04 in a 50m pool;

What should we work on?

- ✓ Training swim speed;
- ✓ Training swim starts;
- ✓ Specific training for 100-400m



10 Chronological Stages

 ✓ From swim exit to the 1st k on the bike 20"-30" can be recovered or lost;
 ✓ Changes from Horizontal position to vertical-seated;

 ✓ Change from arms-shoulders-higher back, to legs;
 ✓ 5 first minutes on the bike very violent

and decisive;

What should we work on?

✓ Cycling drills / mountain bike training?
✓ Training transition drills swim-bike,
✓ Training situation of 2-3' out of the

water without drafting in TT position to make the group;

✓ Training on home trainers (100-200m swim race pace + 2-4' hard on the bike after 50-100m running to the bike);



10 Chronological Stages A. Cycling Endurance 4. Cycling Enduranc

10 Chronological Stages

5. Transition 2

 \checkmark Have you notice they are "always" the same?

Winners are usually in front from T2;
 Changes from seated position to running position;

 ✓ Entering transition in front very important to have a clean view of TA and to avoid contact;
 ✓ Good transition ⇒ "slower "1st k;

What should we work on?

✓ Cycling Drills;

✓Training last k on the bike to enter T2 in front,
✓ Training Drills for T2 (bike shoes out / dismount / run with bike / bike raking / put running shoes / take out helmet);
✓ Training transitions on home trainer.







10 Chronological Stages

. Running Endurance

✓ 29-31'(2:55-3:05/km) for men / 33'-35'(3:20-3:30/km) for women;
 ✓ Body weight and body mass from fat very important for running, mostly in heat/humidity conditions and hilly courses;

 \checkmark Running changes on speed when in the group only possible when not running at top speed;

Final Run will define winner;
 Running volume important;

What should we work on? ✓ Training first speed and then endurance; ✓ Road running and cross country running very good; ✓ Running Biomechanics; ✓ Running volumes to

support needed speed for 10k;



10 Chronological Stages

8. Finishing Speed

✓ We assist more and more to sprint finishes;
 ✓ Sprint "not important" if not able to run 10km in 1st pack:

Cadence changes are very important;
 Positioning and timing to start the sprint is decisive;

What should we work on?

✓ Speed training part of program;
 ✓ Lactate Tolerance workouts
 ✓ Training Speed at the end of some sets;
 ✓ Training with group;
 ✓ Strength Training (speed);
 ✓ Sprint approach strategy;



10 Chronological Stages

10. Racing in Different Distances and Formats

✓ LD should come as late as possible!

✓ Mature Triathletes with a solid base can compete from sprint distance to longue distance (4h00) at good level?

✓ Triathletes with very good swim level can easier adapt to long distance due to reduced need to swim a lot;

 \checkmark Triathlon is getting more and more specific and it is really hard to be top level in different distances;

- ✓ Triathletes coming from ITU Series growing success in LD;
- ✓Faster athletes can usually race at good level in LD Training adaptations + Nutrition;
- ✓Not the case for slower athletes coming from LD to shorter drafting legal races;
- ✓ Duathlon can enhance certain benfits
 - Development; Non swimmers; 2nd Run specificity



10 Chronological Stages

9. Recovering after Racing

✓ Well prepared Triathletes recover faster;
 ✓ The faster you recover the better next session

 ✓ Time to recover is decisive on race calendar and number of races in the season;
 ✓ Older and experienced Triathletes usually recover faster;

What should we work on?

 ✓ Recovery techniques very important (ice, massage, stretching etc...)
 ✓ Training after racing must aim full recovery

before next hard sessions;

 \checkmark racing to much is one of the main reasons for injury and limited longevity in sport;



High Performance Support

Development aiming Olympic Games

	We need to learn from it!
	Profile?
	Age?
3	How fast do they SWIM-BIKW-RUN?
Ø	How many Races?
	Not only 1 trail!
,	These Triathletes already "exist"
	Many of them raced in 2016
2	Aprox, 18-30 years old at the moment:
1.1	Need to be ready for Olympic qualification in 2018:
Q.	Need to be professionals from 2018 / Priority to finish school before
	New Qualification ! Team Relay! National Team Strategy more impo
7 \	Can come from 2016-2020 projects;
5	Young talents can be discovered till 2018-2020;
	Aprox. 14-26 years old at the moment;
2024 Ç	Need to be ready for Olympic qualification in 2022
	Need to be part of a LTD Plan/Project from 2018-2020;

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High Performa	nc	e Support	
Learn from	th	e Past	
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	33y 06m 24d	170	55	25y 05m 03d	1 177	70		34y 05m 02d	163	52	33y 04m 30d	183	75
	31y 04m 09d	180	60	28y 03m 260	1 179	73		29y 02m 08d	168	53	27y 05m 30d	187	69
	29y 01m 07d	166	53	26y 11m 010	1 180	70	_	35y 03m 10d	165	58	23y 06m 01d	182	70
	30y 05m 15d	165	55	29y 06m 290	1 173	63	_	34y 08m 06d	164	56	32y 08m 24d	178	69
	25y 03m 02d	168	53	21y 04m 080	1 174	61		26y 08m 20d	173	56	24y 07m 12d	174	61
	31y 07m 01d	160	53	29y 05m 15c	1 176	72	_	31y 04m 03d	170	58	28y 01m 15d	184	72
	34y 04m 04d	1/0	60	2/y 08m 1/c	1 183	/3		36y 08m 30d	163	51	28y 10m 13d	187	/1
	29y 12m 05d	169	60	25y 08m 230	1 18/	70	_	18y 12m 11d	168	5/	31y 0/m 2/d	183	73
	21y 10m 0/d	167	50	29y 08m 040	1 192	76		35y U2m 24d	157	58	28y 04m 23d	18/	75
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	27y 03m 05d	161	49	27y 01m 01	d 192	76		30y 06m 27d	165	51	24y 04m 15d	184	70
	22y 12m 04d	168	57	33y 04m 05	d 177	70		27y 09m 10d	176	58	29y 05m 15d	178	69
	23y 12m 11d	171	56	31y 05m 23	d 187	69		27y 04m 03d	164	51	22y 04m 09d	180	68
	33y 04m 25d	175	56	25y 05m 27	d 178	69		30y 09m 07d	173	60	28y 07m 06d	184	68
	25y 03m 11d	160	56	29y 03m 11	d 174	61		28y 05m 28d	168	55	28y 06m 19d	185	67
	26y 07m 11d	165	51	30y 05m 30	d 186	75		28y 05m 28d	160	51	30y 12m 20d	192	76
	21y 03m 22d	1/6	59	32y 04m 16	a 18/	75		34y 01m 1/d	160	46	25y 04m 2/d	185	75
	26y USM 16d	160	51	32y 10m 06	a 18/	/1		21y 0/m 2/d	168	48	31y 05m 13d	182	70
	37y U9m 08d	165	53	2/y 12m 14	a 183	<u>/0</u>		34y 10m 08d	108	59	23y U3m 26d	100	- 59
21/17	25y 11m 10d	166 5	48 52.6	20y 0/m 05	d 1925	69.7	21/1	29y 06m 04d	167.2	52.0	24y 0/m 31d	192.5	69.7



High Performance Support Learn from the Past

Olympic 10K Triathlon RUN Stats

ſ		Sydne	y 2000	Athen	s 2004	Beijin	g 2008	Londo	n 2012	Rio	2016
	Rank		м	F	м	F	м	F	м	F	м
	1	35:13:00	30:53:00	33:48:00	31:46:00	33:17:00	30:46:00	33:41:00	29:07:00	34:09:00	31:09:00
	2	35:25:00	31:09:00	36:47:00	31:51:00	34:21:00	30:48:00	33:42:00	29:16:00	34:50:00	31:16:00
	3	35:49:00	31:21:00	36:41:00	32:11:00	34:46:00	30:57:00	33:42:00	29:37:00	34:54:00	31:50:00
	4	36:01:00	31:42:00	36:05:00	31:34:00	35:10:00	31:03:00	33:52:00	29:53:00	34:55:00	30:34:00
	5	36:24:00	31:48:00	34:56:00	32:34:00	35:05:00	31:14:00	34:10:00	30:01:00	35:21:00	30:38:00
	6	37:18:00	31:54:00	35:08:00	32:30:00	35:20:00	31:35:00	34:29:00	30:06:00	35:49:00	32:10:00
	7	37:35:00	32:53:00	35:10:00	32:32:00	35:31:00	31:40:00	34:47:00	30:10:00	36:06:00	32:21:00
	8	37:44:00	31:51:00	35:25:00	33:20:00	35:38:00	31:48:00	35:06:00	30:23:00	36:15:00	31:12:00
	9	37:52:00	31:59:00	38:04:00	31:30:00	35:36:00	31:41:00	35:13:00	30:33:00	36:18:00	32:47:00
	10	37:48:00	31:57:00	36:19:00	31:38:00	35:54:00	31:48:00	35:14:00	30:43:00	36:38:00	31:53:00
	TOP 10 avg	36:51:00	31:49:30	35:45:00	32:01:00	35:15:00	31:24:30	34:19:30	30:03:30	35:35:00	31:33:00
	Finishers avg	37:54:30	33:22:00	38:03:30	33:30:00	36:46:00	33:23:30	35:59:30	31:36:00	36:43:30	33:12:00

High Performance Support

Characteristics of Olympic Triathletes

- Height: Variable
- Age: Variable (19-36)
- Body Composition:
 - Women 12-18% fat body mass
 - Men 6-9% fat body mass
- Vo2 Max. consumption
 - Men 65-80 ml/kg/min.
 - Women 55-70 ml/kg/min.
- High volume capacity / Love to train and compete
- Low injury incidence
- Past in swimming / indicators that can swim in 1st pack
- Profile and indication that can run at Elite level;

High Performance Support Learn from the Past

Run Times | London 2011 Olympic Test Event

Fe	male			Mal	e
10km		%	%		10km
under 34:00	3	5,36%	8,47%	5	under 30:00
34:00-34:30	8	14,29%	15,25%	9	30:00-30:30
34:30-35:00	7	12,50%	16,95%	10	30:30-31:00
35:00-35:30	10	17,86%	23,73%	14	31:00-31:30
35:30-36:00	10	17,86%	16,95%	10	31:30-32:00
over 36:00	18	32,14%	18,64%	11	over 32:00

- Race victory decided on the run most part of races;
- Running levels improved a lot in last few years!
- Best Triathletes are "elite level" runners;











		High I	Perfor Learn 1	rm frc	nance om the I	Supp Past	oort		
1738		RIO2 * Gwen Jo	2016 B orgenser	ik (n, L	e Powe JSA, train	r Prof ingpea	ile ks.com		
	Gwen	Jorgensen			Power	MIN 0	AVG 200	MAX 674	w
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1:47	:34	23.4 mi	^{TSS} 89		Speed Pace Elevation	6.64 09:02 230	23.5 02:33 260	37.4 01:36 354	mph min/mi
Work NP El. Gain	717 kJ 238 W 951 ft	IF VI Grade	0.95 1.19 		Temperature	77	79	86	F
El. Loss W/kg	925 n 3.67	VAM	292 m/h					/ /	





<mark>G</mark> Tra	ener	ic Tra Volume	ainir e duri	Ig Ve ng Sta	olum ages (ie Trends? of Development
N	lale Athle	tes	Fem	ale Athl	etes	
Junior	U23	Elite	Junior	U23	Elite	
N=8	N=8	N=8	N=12	N=14	N=17	
5.6	5.9	5.9	4.7	5.3	5.3	Swim
±0.98	±0.70	±0.64	±1.62	±1.03	±0.71	Nr of Sessions/Week
2.0	4.0	5.4	2.0	4.0	4 7	±SD
3.8	4.0	0.1	3.2	4.0	4.7	Dike Na of Cossiste (Mosk
±0.87	±0.92	±1.13	±0.71	±0.87	±0.86	INFOI Sessions/week
1.5	64	69	12	53	5.9	±SD Run
4.0	14.60	0.3	4.2	10.0	0.0	Nr of Sessions/Week
±0.76	11.0Z	11.30	10.93	10.00	11.20	±SD
13.9	16.9	17.9	12.1	14.6	15.9	total
21	25	27	18	22	24	total hours/ Week*
Di	ifferen	t depe	nding	on D	evelo	pment Stages

*Adrian Bürgi, Denis Vanderperre, Federal Institute of Sport, Magglingen, 2012



Generic Training Volume Trends?

Maximal and Usual Swim, Bike and Run Triathlon Training Volume per Week



Spo	rts	Season Volume	Week Volume	Session Volume	Maximum Sessions/Week	Minimum Sessions/Wee
Continued	1500m	2300-2600	55-90	4-10	12-14	8-10
Swimming	Triathlon	800-1200	15-40	2,5-6	8-9	2-3
Cuoling	Road	28000-36000	600-1000	75-240	7-9	5
Cycling	Triathlon	10000-15000	250-500	40-150	5-6	1-2
Running	10k	6000-8000	120-180	10-32	12-13	6-8
Kunning	Triathlon	2500-3500	50-120	8-25	7-9	2
Total Tr	iathlon	900-1:100	15-35:00			

steady/ae	robic	tempo	o/hard/inte	S&C/physio		
<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>	<u>Saturday</u>	<u>Sunday</u>
80 min steady run 120bpm	Hard Swim	Aerobic swim	Strength swim	Mixed Pace swim	Run session 30 mins hard 160bpm	4 hrs easy bike
Drills S&C	40 min easy run	75 min easy run	60 min easy run	S&C	3.5 hrs easy bike	1hr 40 easy run
Easy Swim	1 hr easy bike	3.5 hr bike	2 hr easy bike 20 min efforts within this	60 min easy run	30 min easy run	Aprox.
2 hr easy bike	Track 15 mins hard 170bpm +3b30	+6b30	+4530	60 min easy bike	+5600	35h

Actual Training Volumes Applied

Actual Training Volumes Applied

Lisa Nordén - Training week | Feb. 2012 "normal week that month when we did a brush up of swimming"

SWIM - Up to 8 times/weeks

- a. Normally an introduction or skills swim first
- b. Then the same day a more quality workout, we may not swim the next day but then twice the next
- c. Volume near to 40 km/week.



Actual Training Volumes Applied

Alistair Brownlee–Typical Training Week|Feb. 2012



Actual Training Volumes Applied

Lisa Nordén - Training week | Feb. 2012 "normal week that month when we did a brush up of swimming"



	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.
Swim	am aero speed 1h30	am aero cap. 1h30	am aero 1h30	am Spec. 2h00	free aero pool or open water 1h00	am Spec. 1h30	
Bike		am aero 2h00	pm Spec. 2h00	am aero 2h00		am aero 2h00	am aero 4h00
Run	pm 50' aero+Tec.	pm 1h00 Spec.	am aero 50′	pm 1h00 Spec.	Aprox. 32h	pm 1h20 aero	pm 1h00 Spec.
Gym	pm 1h	pm 1h	pm 1h	pm 1h			
	± 3h30	± 5h30	± 5h30	± 6h00	± 1h00	± 5h00	± 5h00

Actual Training Volumes Applied

Actual Training Volumes Applied

Gwen Jorgensen - Example week | Late Feb. 2015

	SWIM	RIDE	RUN	т			
Mon.	Aero Swim/PULL 5k	Aerobic 90 min	am - OFF	± 3h30			
Tue.	Threshold set 2.4 km in 5k session	90min - Undulating Aerobic	am - 20min LSD easy run on flat trail - 5.30-5.15 pace	± 4h00			
Wed.	PULL 3km set in 4k session	2h00 - some Anaerobic strength pieces and some 4 min MMP pieces on 7-8% climb	am - 40min LSD easy run on flat trail - 5.30-5.15 pace	± 4h30			
Thu.	4k in 50m Ocean pool in wetsuit - 1.6k set of 50 and 200 pace efforts	20 min to and from Velodrome - Velodrome Session on track bike 88' gear - all under 1 min efforts in group with all recovery behind the motorbike	16.00 - 5km build session down to 5km pace / 5x 1km on 6.00 descend down to 3.05 pace	± 4h00			
Fri.	Open Water Threshold Swim in Ocean 2.4km set in 4k session	2h00 - with 1hr Motor-paced group session on 8x laps hilly course - Auckland Spec	Run Tempo build on soft surfaces 40 min - 4.00 down to 3.40 pace	± 4h00			
Sat.	PULL 3km set in 4k session	3h00 - bunch ride mixed pace and some hills	Late PM - LSD Run 6km on soft	± 5h00			
Sun.		90min - with 5x 4min climbs done at 80-90 % effort at lower cadence	am - long run 14km - 7km flat and last 7km up hill	± 3h00			
Aprox. Add: strength sessions 5x week massage 2x week physio1x							
	30h	*Jamie Turner, OCT 2015					

Actual Training Volumes Applied

Javier Gomez-Typical Training Week–January 2015



Actual Training Volumes Applied Gwen Jorgensen - Example week | Late Feb. 2015



Actual Training Volumes Applied Vanessa Fernandes 11-17Feb. 2008 Swim Priority / Cycling-MTB-Tec. Development													
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				Total	Natação	41000m	16:24						Total Corrida
	Т	otai	s Microci	clo	22 Uni.	326 km	30:47						
A	Week: 35h-26U / Swim: 9U-41K / Bike: 5U-10h / Run: 6U-65K Add: 3XStrength/GYM 3XCORDZ 2Xmassage Aprox. 35h												



Actual Training Volumes Applied

Vanessa Fernandes | 11-17Feb. 2008 Swim Priority / Cycling-MTB-Tec. Development











Planning Concept

- We could be hours talking about different Cycles and Models!
- You have to find yours!
- You need to adapt it to individual characteristics of each athlete
- Elite athletes need to be in good condition long periods of the year

Individual Undividual Undivi

- Base (low injury incidence)
- Work on weak aspects during this base period
- Find the "ideal" pre-comp mesocycle and apply it before important races
- Adapt this pre-competitive mesocycle to race characteristics and tactical aspects you want to implement on race day (breakaway out of water?, after 20k? Wait for the run? 73

Planning Concept

General Guidelines:

- Typical for European weather (Competitions APR-OCT)
- Mostly for Triathletes aiming or taking part in Longue Term
 Talent Development Projects or National Squad Projects;
- Individual characteristics must be the highest priority, even if the model can't be followed;
- Previous seasons and training principles very important to consider;
- Complexity, interaction and transfer between swim-bike-run verv important:



Planning Concept Winter (November-January/February) - Preparation Regular Volume Progression; Multiple goals in each mesocycle, but with very specific goals in certain moments (Swim-winter); General Base Fitness and low intensities; Speed work present almost from the beginning; General Strength work; Testing after few weeks start of the season; Some cross country or road running races, MTB marathons and Swim Club Competitions can be included;

Model

Triathlon "Traditional"

Planning Concept

• Spring (February-April) – Specific

- *Usually also appears in summer (July-August) when 2nd competitive period
 - ✓ Highest Volumes;

Model

Triathlon "Traditional"

- ✓ Intensity increases;
- ✓ Each session as a very specific goal;
- ✓ Lower number of goals in each mesocycle and microcycle (we exactly should know what each Triathlete need);
- ✓ Specific work increases;
- ✓ Specific Strength work increases;
- ✓ Competitions should be used as very specific training sessions (road running and Cycling, Duathlons and low priority Triathlons);
- ✓ Test to work in exact individual intensities/speed

Planning Concept

• Summer (April – September/October) – Competitive Period

*Usually April-July and September-October with 1-2 transition weeks before new Specific Period

✓ Microcyles aiming races or recovery;

Triathlon "Traditional" Model

- ✓ Selected races will define all microcycles;
- ✓ Mesocycles to "tune" for races (Pre-Comp Mesocycles)
 - 1-2 microcycles with more volume, technique and medium intensity;
 - 1-2 microcycles with more intensity and very specific competitive work;
 - 1-2 microcycles with recovery main goal, keeping high specificity and competitive workouts; 78

Planning Concept • Autumn (October - November) – Transition Period • Holidays (optimal moment to prepare school for students) • Only recovery intensity; • Time to do different things; • Time to prepare equipment for next season; • Time to think about next season; INME FOR COACHES TO PLAN EVERYTHING FOR NEXT SCASCIN!

Thank You