



**ABOUT THE COACH** Charles Howe has been involved in the sport of cycling since 1973 in numerous capacities, including tour director, race promoter, official (road, Cat. 2), club officer, and even (gasp!) as a recreational/competitive rider. A strong advocate of power-based training, his interest in cycling power output dates to the early 1990s, when he wrote a brief article which modeled the effect of weight reductions on bicycle performance for the now-defunct Cycling Science magazine. A frequent contributor to the [Wattage Forum](#), he has written [an FAQ on power-based training](#), as well as a free on-line training guide and numerous other training-related articles. After advising riders on an informal basis for several years, Howe founded Velodynamics in 2005 to meet increased requests for technical assistance.

## WHAT DOES VELODYNAMICS OFFER YOU?

- ▶ *An individualized, carefully structured approach to training, based on known concepts of exercise physiology, as well as individual rider goals, characteristics, and personality.*
- ▶ *Additional technical services, including one-time consultation, performance testing, bike fitting, and time trial position analysis.*
- ▶ *[Technical articles](#) that explain the principles which underlie your workout prescription.*
- ▶ *Event, team, and club consulting.*
- ▶ *Technical presentations to clubs and groups in Microsoft PowerPoint® format.*
- ▶ *Discounts on nutritional products, at local specialty retailers, and on physical therapy services (under negotiation, details TBA).*
- ▶ *Special rates available for juniors and collegiate/espire (under 23) riders, as well as for clubs.*

### For more information:

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# TECHNICAL SERVICES FOR ROAD CYCLISTS

# VELODYNAMICS



*Oh, the places you'll go! There is fun to be done!  
There are points to be scored. There are races to be won.*

*So . . . be your name Buxbaum or Bixby or Bray  
or Mordecai Ali Van Allen O'Shea,  
You're off to Great Places! Today is your day!  
Your mountain is waiting.  
So . . . **get on your way!***

– THEODORE GEISEL (DR. SEUSS)

*Velodynamics, LLC* is committed to helping road cyclists achieve their goals through a technically sound approach that is also in concert with good health, sportsmanship, safety, and fun. This involves several steps:

1. getting to know you, as a person and a rider, through a personal interview, a detailed written survey, a review of training records, etc. A bicycle-fitting session is also conducted at this time.
2. guiding you in the selection of meaningful goals that are realistic, challenging, and quantifiable
3. developing a periodized, progressive training program, based on sound physiological concepts and practical experience, that is tailored to your chosen goals, personality, training history/athletic background, work schedule and commitments beyond cycling, as well as other individual characteristics, with concurrent explanation of the principles that underlie each workout prescription
4. ongoing assessment of progress and adjustment, as necessary, of the training plan, through regular contact either by telephone, e-mail, in person, or a combination of these
5. genuine, unwavering, and heartfelt encouragement and inspiration

There are several aspects of preparation for any goal-event: general and specialized fitness, racing/riding skill, strategic/tactical judgment, and mental outlook.

My emphasis and area of special interest is training the systems that underlie performance in the event being prepared for, using power-measuring systems that allow intensity and training load to be precisely quantified and analyzed in ways that “make sense” physiologically. With these devices, training itself serves as testing, which allows for continuous fitness evaluation. A limited number of wheel-based PowerTap systems are offered for rent.

Beyond reaching your goals, the ultimate aim is to teach you to become self-sufficient in developing, evaluating, and executing your training program.

### TECHNICAL SEMINARS

The following multimedia slide presentations are offered to clubs, teams, and other groups. Each program is about 2 hours in length.

- ▶ *Power-based training (Part I and II)*
- ▶ *Technical aspects of road time trailing*

### EVENT CONSULTING

Since 1996, I have promoted 20+ road races in northeast Ohio, and raised more than \$18,000 in both cash and product sponsorship. I have also served as chief and assistant official at over 200 road races throughout the region, and directed a non-competitive tour in the area for several years as well. I know the opportunities, responsibilities, practical tasks, and pitfalls of event promotion at the local/regional level, and can guide you through the process of putting on your race or ride.

### PARTNERS

Discounts to clients on sports nutritional products, at local specialty retailers, and on physical therapy services are planned for a future date.

### CLIENT TESTIMONIALS

The following are uncompensated (but not unappreciated!) comments from several riders whom I feel so privileged to have helped:

*“Thank you so much for your support on all levels – not just technical, but emotional and moral as well. I have learned so much, and I couldn’t have done it without you!”*

GIANA ROBERGE, UCI WORLD MASTERS  
TIME TRIAL CHAMPION

*“You have helped me more than anyone else in this sport. I could always count on your for advice that was honest, unbiased, and well-informed.”*

FELICIA GREER, WEBCOR WOMEN’S  
PROFESSIONAL CYCLING TEAM

*“Without the sound beginning you have given me, I would have acquired many misconceptions early on and progressed much more slowly.”*

KEVIN LUTZKE, CAT. 4 OHIO/WEST VIRGINIA  
ROAD RACE CHAMPION

### COMMUNITY

Velodynamics is a proud supporter of the Nicole Reinhart Memorial Fund. Visit [nicolefund.org](http://nicolefund.org) for more information.

