Ian McLeod's book, "Swimming Anatomy," is an authoritative liftoff into the world of aquatic strength and conditioning.

here's real substance to the buzz surrounding Ian McLeod's new book, "Swimming Anatomy"—Human Kinetics' latest publishing gift to the world of sport science. Touted as an "illustrated guide for swimming strength, speed and endurance," the book is a practical exploration of the musculoskeletal system and its role in the four competitive swim strokes.

In reality, this 193-page resource is a catalog of swimming-oriented dryland and weight-room exercises. Think of "Swimming Anatomy" as the ultimate introduction to out-of-water strength and conditioning protocols. The content is

comprehensive, clear, accessible and a terrific reference. It will be especially welcomed by coaches without much background in physiology, athletic trainers with responsibilities for aquatics and self-trained athletes (think Masters swimmers). Veteran coaches will want this landmark book in their libraries as well.

The author is a physician's assistant in Phoenix. A certified athletic trainer and massage therapist, he was a member of the U.S. team's medical staff at the 2008 Summer Olympics, worked extensively with the sports programs at the University

of Virginia and Arizona State, and has provided athletic training and sport massage to the likes of Ed Moses, Kaitlin Sandeno and Natalie Coughlin.

"He remains, without question, the finest, most knowledgeable swimming and athletic trainer I have worked with in my 32-year head coaching career," says University of Virginia swimming coach Mark Bernardino. "He is devoted to making every swimming athlete whole and healthy. He is incredible."

McLeod has applied the same zeal he showed Bernardino to the crafting of "Swimming Anatomy," dividing his masterpiece into eight, well-organized sections.

Chapter 1, "The Swimmer in Motion," reviews the primary muscles used in the kicking, pull-through and recovery phases of the four basic strokes. In it, McLeod also addresses flexibility, strength and conditioning principles and their relation to swimming-specific dryland program design. The author champions the need for strong swimmer core, tackles the endurance versus strength conundrum and emphasizes the importance of dryland and injury prevention for younger swimmers.

Chapters 2 through 7 are organized by body parts—arms, shoulders, chest, abdomen, back, legs—while Chapter 8 discusses whole body training. Every segment contains detailed exercise descriptions and instructions, muscle identification and color-coded anatomical illustrations. The illustrations are not stick figures, but medical textbook quality works of art by Jennifer Gibas and Becky Oles.

Each exercise contains one or more paragraphs labeled "Swimming Focus," that succinctly explain the benefits and dangers of

SWIMMING

Anatomy

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improper technique and how the featured exercise transfers to in-water performance. The "Swimming Focus" sections are just one element that elevates "Swimming Anatomy" from a \$21.95 paperback to a priceless resource. And kudos to McLeod for indexing each exercise by page number for easy reference.

The book is not a step-by-step guide to designing a dryland program. And while McLeod acknowledges the importance of Olympic lifts in developing speed, strength and power, he eschews much discussion here since they require teaching and supervi-

sion by qualified personnel.

Your illustrated guide

speed, and endurance

for swimming strength,

It is, however, a perfect complement to Championship Productions' Richard Quick/ Brian Karkoska DVD, "Training for Explosive Speed & Power" (Quick, MD-3140D) that offers 130 drill-progressive and bodyweight-based drills.

Can't afford both? Buy "Swimming Anatomy" and treat it as the authoritative liftoff into the world of aquatic strength and conditioning. •

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"Swimming Anatomy" by Ian McLeod can be purchased online by visiting the SwimShop at www.SwimmingWorldMagazine.com.