

## **History of the College of Reproductive Biology (CRB)**

It is hard to believe the College of Reproductive Biology (CRB) is well into its 19<sup>th</sup> year of existence. While the CRB may have been formed in 1997, its embryologic form took shape some 10 years before in 1987 when Brooks Keel, at the urging of Kevin Osteen, applied to the American Board of Bioanalysis (ABB) for certification. This small action set into motion a chain of events that culminated in the formation of the CRB.

In the late '80s and early '90s, virtually all ART labs were directed and staffed by individuals who had a great deal of reproductive biology knowledge, but had little to no experience in general clinical laboratory medicine. The involvement of clinical embryologists and andrologists with both the American Association of Bioanalysts (AAB), and especially the ABB, began quite innocently with a phone call from Brooks Keel to Mark Birenbaum in 1990. Brooks called the ABB to determine if they would consider offering certification to individuals in specific areas, like andrology and embryology, and judging the applicant's specific experience instead of requiring broad knowledge in areas such as hematology, chemistry, and microbiology. Mark was intrigued by the idea, and invited Keel along with Jeff Boldt to attend a meeting with several members of the Board to discuss this possibility. The meeting was to be held at the TWA Ambassador's Club at the Newark International Airport (not exactly a popular vacation destination) on February 27, 1991. In addition to Keel, Boldt and Birenbaum, John Boffa, Al Salton and Al Anouna attended.

"I remember this meeting distinctly," recalls Keel. "I was trying to make an impression. I knew Jeff well, but I had never met Mark or the others from the ABB. When I boarded my connecting flight in Chicago, my suit pants caught on the arm of the seat and I heard a loud rip. Trying to be nonchalant, I reached back to survey the damage, and felt half my...backside... hanging out. Fortunately, I had enough time in the Newark airport to buy a sewing kit and sew up my pants before the meeting with Mark and the others. It was a good thing that most of the meeting was spent sitting down."

The meeting was indeed very productive, and the ABB representatives invited Brooks to attend a full ABB Board meeting in Colorado Springs on June 11, 1991. It was here that Keel made a formal presentation and proposed that the ABB develop a certification program specifically for directors of andrology and embryology laboratories. Up until this point, in order to be certified, you had to have broad knowledge and experience in hematology, chemistry, etc. This made it almost impossible for most individuals in human IVF to obtain ABB certification. What the ABB Board was being asked to consider was something altogether different from what they had done in the past. The minutes from that Board meeting indicate that a motion was made by John Boffa, seconded by Al Salton, that the "ABB adopt in concept the institution of a new certification category for director and supervisor levels to encompass the discipline of in vitro fertilization and andrology laboratory directors and supervisors." The motion was approved unanimously. The Board also created a committee (composed of Boffa, Ted Passon, Salton and Mark Birenbaum) to work on the development of this certification.

In 1991, the only director certification the ABB offered that was applicable to the ART field was the Clinical Laboratory Director, or CLD. By this time, it became clear that the entire approach the ABB was using to certify individuals should be reexamined.

On December 5, 1991, Brooks, now a member of the ABB board, submitted a draft proposal on *Certification Criteria for Embryology and Andrology Laboratory Personnel* to the Board for consideration. These recommended criteria were drafted following the recently published guidelines for IVF, GIFT and related procedures adopted by the American Fertility Society (now the American Society for Reproductive Medicine - ASRM), and closely followed CLIA (Clinical Laboratory Improvement Amendments) personnel requirements. Interestingly, Keel proposed certification standards for an Andrology Laboratory Director (ALD) and an Embryology Laboratory Director (ELD), which was some 10 years before the ELD, as we know it today, was proposed.

On September 19, 1992, the ABB Board met in St. Louis to discuss the creation of this new type of certification and to determine how this would fit in with other certifications the ABB offered. After a great deal of debate, it became obvious there might be other clinical laboratory directors and supervisors who desired certifications in specific fields. The concept of offering certification along the CLIA-defined personnel descriptions and testing categories was therefore conceived, and the High Complexity Laboratory Director (HCLD), and Technical Supervisor (TS) in individual technical specialties, was born. "What impressed me the most was that we were not only modifying requirements to accommodate the ART folks, but that we were totally redesigning the way that all certifications would be offered by the ABB, and indeed radically changing the field of laboratory personnel certification nationwide," Keel remembers.

Over the course of the next two years, the details of the new certification requirements were more clearly defined and the final version was announced in the March 1994 *AAB Bulletin*. New application forms and certification standards were written, and the word spread. Hundreds of new applications began filing in and were reviewed by the ABB.

With a brand new certification available, the ABB needed to write new certification examinations. The first pool of ART examination questions came from numerous andrologists and embryologists. A committee was formed to finalize the questions on the examination. The ABB had a dilemma: they needed certified individuals to put the examination together, but how do you put together an examination when essentially everyone in the field is not yet certified? Since Kevin Osteen and Brooks Keel were already certified as CLDs by ABB's old system, they were, by default, grandfathered. The ABB then asked Jeff Boldt and Jeff May to join Osteen and Keel in preparing the original andrology and embryology examinations, and the examination requirement was waived for them (Lucky dogs!).

On August 26-27, 1994, the first Andrology and Embryology Review Course was held in Chicago in preparation for offering the first ART certification examinations. Rich Rawlins organized and chaired this first Review Course, and in attendance were more than 200 andrologists and embryologists. There were so many registrants that "overflow" space with lectures beamed in by TV was required to accommodate everyone. It was a proverbial Who's Who in ART. It was also quite a shock for the ABB and AAB staff when they participated in the

cocktail conversations. Some of the leading reproductive biologists were present discussing how they performed semen analyses on elephants and farm animals, not to mention all of the stories associated with human semen collection. Mel Bishop, who was AAB president at the time, attended one of those dinners. It was a dinner he will long remember – in fact, Mel claims his hair was black before that evening! This was just the first of many A & E Review Courses. Currently the Andrology and Embryology Review Course is offered on-line and is accompanied by the *Andrology and Embryology Review Course Manual*. The manual is over three inches thick and, for its comprehensive coverage of ART and management of the ART laboratory, rivals any text available.

Thirty days after this first review, the first Item Writers Workshop was held at the AAB Administrative Offices in St. Louis and the committee of Keel, Osteen, Boldt, and May put the final touches on the General Knowledge (for HCLD), Andrology, and Embryology examinations. Then, on November 4, 1994, the first certification examinations were given in San Antonio just before the ASRM meeting, proctored by the original examination committee of Keel, Osteen, Boldt, May and Mark Birenbaum.

More than 90 individuals took examinations that day. Many will remember this examination because of the fire alarm that went off in the early morning hours at the hotel where most examinees stayed. Stories of the early morning alarm and Rich Rawlins showing up for the examination wearing a coonskin cap have been retold many times over the years. What many people probably don't know was that some fun was had at Rich Rawlins's expense during the examination. Keel remembers: "Mark happened to have a copy of the Microbiology examination with him in San Antonio. We thought it would be great fun to see how Rich would react to this. So, as I was passing out examinations, I handed Rich the Microbiology examination. I guess he was so nervous that he failed to notice what examination he had until he was instructed to start the examination. I don't know how many questions he struggled through, but it was at least 10 minutes before he raised his hand for help. The examinees were instructed that once things started, we couldn't answer any questions so we put him off. With sweat breaking out on his brow, we couldn't contain our composure any longer, and we exchanged the Micro examination for the Embryology examination he was supposed to be taking. Only Rich could laugh off such a prank and not kill us in the process!"

Over the years, many in the CRB have stated that one of the real strengths of the Association is its ability to sponsor truly timely and cutting edge workshops. The first of these ART workshops, *State of the A.R.T. an Andrology and Embryology Workshop*, was held in St. Louis on March 10-11, 1995. Faculty for this workshop included Gerald Shatten, Brooks Keel, Brijinder Minhas, Diane Hammitt, David Ball, Chris DeJonge, Jeff May, Kathy Sharpe-Timms, Rita Basuray, Susan Rothman, Chad Johnson, Marybeth Gerrity and Jeff Boldt. Topics included guidelines for ICSI, interpreting sperm function assays, oocyte and embryo classification, laboratory QC and PT, and the business of directing multiple laboratories. It was widely successful, and the tone was set for many future workshops.

The "normal" AAB members received their first taste of this new group at the 1995 AAB Annual Meeting and Educational Conference held in Las Vegas. At this conference, there was only one ART talk given, and that was by Brooks Keel presenting, "*Do You Know What ICSI*

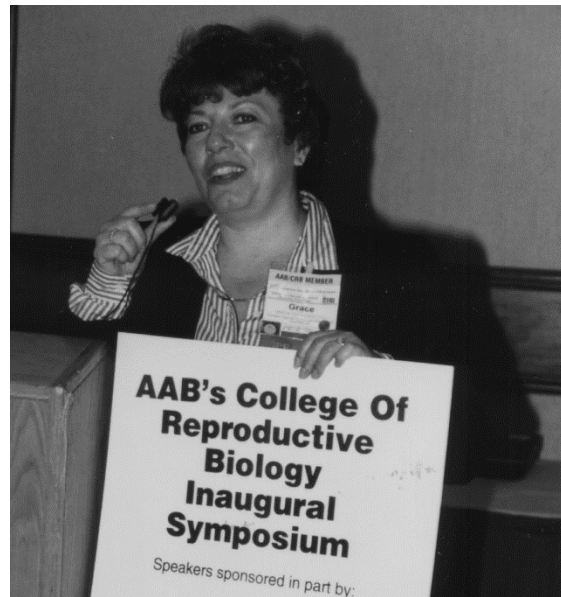
Is?” At this time, most of the audience did not. That would change with the very next annual meeting when the “Reproductive Crowd” would burst onto the scene of the 1996 AAB 40th Anniversary Annual Meeting and Educational Conference held in Albuquerque, New Mexico. This was the first time the ART group had a session of its own at an AAB annual meeting. It was only a one-day session on Saturday but it was packed with leaders in the field such as Rich Rawlins, Pat Quinn, Rusty Pool, Don Wolf, David Ball, and Lucinda Veeck. The ART group had reached its final stages of gestation and was anxious for birth.

As the number of individuals became certified and exposed to the many advantages that the AAB offered, more and more andrologists and embryologists began attending the AAB meetings and workshops. Many were talking about forming some kind of a special interest group within the AAB, similar to those in the ASRM. Although most of the ART members were already members of the ASRM’s Reproductive Biology Professional Group and the Reproductive Laboratory Technologists Professional Group, many felt that the AAB could offer something more specific to their needs. In September of 1996, Brooks Keel forwarded a letter to many of his colleagues asking for input and thoughts on creating a College of Reproductive Biology within AAB, with the overall purpose being “...to provide a more focused forum for andrologists and embryologists to communicate with each other, share ideas and knowledge, foster closer collaborations, and to provide a mechanism for ART laboratorians to provide expert opinion on legislative and regulatory issues that relate to the ART laboratory.” This was met with much enthusiasm and the next month, Keel forwarded a letter to the AAB Board introducing the concept of the College. The Board approved this concept at its November 16, 1996, meeting, and deferred action to the AAB Bylaws committee. That next month the Bylaws committee met by teleconference and proposed bylaws changes to allow the creation of “special interest groups” within the AAB, and in early January 1997 the AAB Board unanimously approved an amendment to the bylaws

<p><b>College of Reproductive Biology Original Petitioners for Formation</b></p> <p>Ashok Agarwal, Ph.D., HCLD(ABB)          John Brannian, Ph.D., HCLD(ABB)          Maria Bertero, M.D., HCLD(ABB)          Grace Centola, Ph.D., HCLD(ABB)          Robert Clark, Ph.D.          Toni Clinton, Ph.D., HCLD(ABB)          Elizabeth Critser, Ph.D., HCLD(ABB)          Russell Davis Ph.D., HCLD(ABB)          Christopher De Jonge, Ph.D., HCLD(ABB)          Alan Dubkiewicz, Ph.D., HCLD(ABB)          C. Funsho Fagbohun, M.D, Ph.D., HCLD(ABB)          Kristen Ivani, Ph.D., HCLD(ABB)          Chad A. Johnson, Ph.D., HCLD(ABB)          Joanne Kaminski, Ph.D., HCLD(ABB)          Brooks Keel, Ph.D., HCLD(ABB)          Iqbal Khan, Ph.D.          Luch Leykin, Ph.D.          Jeffery May, Ph.D., HCLD(ABB)          Alan Menge, Ph.D., HCLD(ABB)          Brijinder Minhas, Ph.D., HCLD(ABB)          Thomas Pool, Ph.D., HCLD(ABB)          Gail Prins, Ph.D., HCLD(ABB)          Tammie Schalue, Ph.D., HCLD(ABB)          Amy Sparks, Ph.D., HCLD(ABB)          Craig Turczynski, Ph.D., HCLD(ABB)Michael Vernon, Ph.D.,          HCLD(ABB)</p> <p><i>Certifications listed are those held at the time of signing.</i></p>
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permitting the establishment of special interest groups. According to the new bylaws, the process for formally establishing the College of Reproductive Biology required a petition signed by 25 AAB members. Later that month Brooks forwarded a letter to members asking for signatures on such a petition. On February 19, 1997, the AAB Board formally received the petition and unanimously approved the creation of the College of Reproductive Biology. Following approval, Keel forwarded a letter to all AAB members inviting them to join the College along with a ballot for officers.

The College of Reproductive Biology began life on May 2, 1997, at the AAB Annual Meeting and Educational Conference held in Houston, Texas. At this meeting, the “Reproductive Crowd” became the CRBers. The CRB educational sessions now extended to two days and included such prestigious names as Mark Hughes, Santiago Munne, David Schlessinger, David Mortimer, Larry Lipschultz, and Grace Centola. The science was outstanding and the reception outlandish. Few who were present can forget having photos taken on live steers or the skit with Rich, Brooks, and Mark. The CRBers may have thought AAB traditions such as the welcome gift packet put together by Shirley Lovelace and the skits were “quaint,” but it is these things that are remembered and retold over drinks again and again.



The CRB was growing quickly and becoming part of the AAB leadership as well. Brook Keel became the first CRBer to be president of AAB in 1998. He was soon followed by Pat Quinn (2003) and Rich Rawlins (2006). Most CRB members do not realize the time commitment it takes to become AAB president. When a person joins the AAB Board on track to become AAB president it takes eight years to become president of the organization. There is much to learn in running an association as complex as the AAB. This long service prior to taking over as president prepares them for the position but also asks a great deal of the individual.

AAB presents scholarship awards annually from AAB’s David Birenbaum Scholarship Fund to assist members, their spouses, and their children with tuition expenses. In 1999, Michael Centola was the first child of a CRB member to receive a scholarship award. Michael’s parents are Nicholas and Grace Centola of Macedon, New York. Since then, 25 awards have been presented to CRB members or their children.

Not long after CRB’s formation, the issue of CLIA coverage of ART laboratories came to the forefront when several female members of Congress forwarded a letter to then Secretary of Health and Human Services (HHS) Donna Shalala outlining their concerns over incidents of mishandled ART specimens. AAB sent representatives Brooks Keel, Grace Centola, and Rich

Rawlins to meet with Congressional staff to support AAB-CRB's view that ART laboratories should be regulated under CLIA. The issue of CLIA coverage of ART laboratories remained a hotly debated issue for the next several years. AAB representatives testified at Clinical Laboratory Improvement Advisory Committee (CLIAC) meetings in May and September of 1998. It was at the September 17, 1998, meeting, in which Brooks Keel, Tammie Schalue, and Mary Beth Gerrity testified, that CLIAC concluded that ART laboratories should be covered by CLIA. The following was noted in the minutes of this meeting:

*After hearing the Committee discussion and the public comments, Dr. Schwartz [Chairman of CLIAC] asked whether embryo laboratory procedures should be subject to the CLIA regulations. The CLIAC recommended that embryo laboratory procedures should be under the purview of CLIA, and that appropriate CLIA coverage should be defined.*

When by March of 1999 HHS Secretary Shalala still had not addressed the CLIAC recommendation for CLIA coverage of ART laboratories, the AAB-CRB brought suit against Secretary Shalala in an effort to force her to act, either for or against the CLIAC recommendation. It was a tumultuous year with a great deal of debate generated in the ART community. The issue of CLIA coverage of ART laboratories met with opposition by some in the ART community because they felt the CLIA requirement for a doctoral degree to become director would prevent them from continuing in their current position. AAB has long been an advocate of alternate routes to director and medical technologist certifications, but many andrologists and embryologists still feared they would be excluded if CLIA was implemented, and they acted to block CLIA coverage of ART laboratories. In the end, the court ruled that AAB was not the appropriate party to bring the lawsuit and the case was dismissed without a ruling on the issue of whether embryology is covered by CLIA, i.e., no ruling was made on the merits of the case. To this day, HHS has not acted upon the recommendation by CLIAC that ART laboratories be covered by CLIA.

Regulation was not far off, however. On January 19, 2001, the Food and Drug Administration (FDA) issued the first Human Cells, Tissues, and Cellular and Tissue-Based Products (HCT/Ps) ruling. This first ruling required only the registration of ART laboratories who handle donor tissue with the FDA, but it was just the beginning of FDA regulation.

Over the next several years, FDA rolled out additions to the rule, guidance, and question and answer publications associated with HCT/P regulation. With each of these, the anxiety in the ART community grew and many began to look fondly back at CLIA. In the subsequent years, ART facilities have grappled with implementing the FDA regulations into their laboratories and practices. It is an ongoing endeavor, but the publication of the *AAB HCT/P Manual* developed by Tammie Schalue made the process of compliance much easier. Over half of the ART facilities in the United States have used Dr. Schalue's manual to develop their laboratories' FDA Compliance Program.

During the period of time when CLIA coverage for ART laboratories was being discussed, an idea was beginning to be formed by Brooks Keel. In an effort for inclusion, Keel developed the concept of the Embryology Laboratory Director certification. In his April 22, 2002, proposal

to the ABB Board for a “*New ABB Certification*,” he states, “*The ELD will allow numerous non-doctoral degreed individuals not certified by the ABB the opportunity to receive certification for the job they are already doing.*” Secondary to this was the desire to take the certification worldwide and allow for a universal certification in embryology. The International Embryology Laboratory Director examination (ELD) would cover the biology of ART and related laboratory techniques including quality assurance and improvement, but not the regulatory component section which is unique to the USA. The idea is to further expand the credentialing of biologists working in the field and to provide improved dialog with our international colleagues. The Board considered the issue at its April 2002 board meeting and approved the addition of the ELD certification. Final requirements for certification and the examination were developed over the next several months. The official announcement of the new ELD certification came in the fall of 2002 and the first ELD examination was administered to twenty examinees on June 5, 2003, at the AAB Annual Meeting and Educational Conference in Denver, Colorado.

In 2001, the CRB leadership felt that the structure of the CRB officers was not working well for their special interest group. Up until this time the officers of CRB were patterned after the AAB, in that they were elected as regional representatives for CRB and then moved up through the ranks to finally become CRB Chairman. This required a large commitment from the individuals and it was felt that CRB didn’t need such a long “apprenticeship” process to lead the membership. Therefore, then CRB chair, David McCulloh and Chair-Elect Barry Behr suggested a change to the structure. The necessary CRB Standing Rules and AAB Bylaws changes were adopted by the membership. However, this process presented a bit of a problem. Because of the change there was no one to move into the position of CRB Chair until new elections under the adopted structure were put into place. The solution was that, for the transition year, David McCulloh and Barry Behr would serve as co-chairs of CRB, sharing the responsibilities.

The important contribution of CRB members to the AAB was recognized in 2003 when the AAB awarded Brooks Keel the prestigious Lucien Dean Hertert Memorial Award. The AAB Board of Directors established the Hertert Award in 1981 in honor of Lucien D. Hertert, a founding member of AAB and AAB’s first executive director. Mr. Hertert is generally acknowledged to have coined the terms “bioanalyst” and “bioanalysis.” The AAB Board specified that the Hertert Award be given to an individual who exemplifies the dedication, loyalty and service that Hertert gave to his profession. Keel is not the only CRB member to receive this award: Rich Rawlins was granted the Hertert Award in 2009. Only 20 individuals have been awarded the Hertert award from its inception in 1981 until 2013. Having two individuals from the CRB ranks to be so highly recognized by the AAB in the short existence of the CRB speaks volumes as to how the AAB feels about the leadership qualities possessed by individuals in the CRB.

Over the years, CRB and its members have been instrumental in developing many publications. The *Andrology and Embryology Review Course Manual* may have been the first of these publications but the *Quality Assurance Manual for ART Laboratories* developed by Brooks Keel and Tammie Schalue and the *AAB HCT/P Manual* soon followed. In 2010 on-line learning modules were added to the publications developed to assist CRB members in improving

knowledge of their field, earn CEU credits, and prepare for ABB and AAB Board of Registry (ABOR) examinations.

The College of Reproductive Biology's 10<sup>th</sup> Anniversary brought many exciting events. The CRB Symposia at the AAB Annual Meeting and Educational Conference was held in Orlando, Florida and once again brought together a Who's Who of ART professionals. The program now spans two and a half days, and for the first time oral abstract presentations will be part of the program. One of the biggest events for CRB in 2007 was addition of the CRB Chairman to a full voting position on the AAB Board of Directors. While there had long been "CRB type" individuals on the AAB Board, CRB would now have representation on the AAB Board that would specifically represent their views.

Another exciting development occurred in this same time period thanks to the efforts of Eduardo Kelly, who proposed providing financial support for Latin American reproductive biologists to take the AAB Andrology and Embryology Review Course and the ABB board examinations in order to achieve certification. After lengthy discussions, the AAB and ABB Boards approved further work on the idea. Tammie Schalue wrote the educational grant application for Merck Serono funding, and both Rich Rawlins and Eduardo Kelly met with officials from Red Latinoamericana de Reproducción Asistida (RED) and the Argentine Society of Reproductive Medicine (SAMER) in Mar del Plata and Buenos Aires in 2007 to seek the approval and assistance of these societies.

Both RED and SAMER officially approved the project and work was underway to implement the first phase of the plan, which was to bring interested biologist to the States for the review course and examinations. In March, 2008, the Serono grant was used to bring eight individuals from Latin American interested in an International Embryology Laboratory Director (ELD) certification to Dallas, Texas, for the Andrology and Embryology Review Course. Soon after the Dallas review course, the second phase of the plan was implemented. This involved AAB, ABB, CRB, RED, and SAMER presenting a joint Andrology and Embryology Review Course held in Buenos Aires, Argentina, in September 2008. The course and manual were both in Spanish. This could not have been accomplished without the assistance of Jorge Blaquier, MD, and his daughter, Isabel Blaquier. Together, Jorge and Isabel translated the entire Andrology and Embryology Review Course Manual and pulled together all the faculty for the review course. Tammie Schalue, Rich Rawlins, and Eduardo Kelly were on hand to assist during the course, but Jorge ran the show. Dr. Blaquier would not accept compensation for the countless hours he put into this project. He stated: **"I do this for the love of my field and my love of teaching. I need nothing more than to see the younger generation learn."**

The AAB and ABB Boards felt something had to be done to thank Jorge for his efforts, so in 2009 they invited him as a guest to the AAB Annual Meeting and Educational Conference in Orlando where they presented him with a proclamation thanking him for his dedication to the field.

In 2009, at the height of the swine-flu scare, Tammie Schalue traveled to Cancun, Mexico, to administer the first ELD examinations given in Spanish, and Dr. Blaquier was once again on hand to assist with proctoring the examination. The examination was held in conjunction with



the RED conference. Since this time, Spanish examinations have been administered in conjunction with meetings for AAB, ASRM, and SAMER. In 2012 Dr. Blaquier and Isabel repeated the process by updating the Spanish Andrology/Embryology Review Manual, and Jorge once again chaired the review course in Buenos Aires. The most recent Spanish examination was given after this review with Tammie Schalue, Rich Rawlins and Jorge Blaquier serving as proctors.

In addition to Spanish, the Andrology and Embryology Review Course has been translated into Portuguese by Cristine Allen and Kelly Wirka. There are plans to offer a review course in Brazil in the future and to offer examinations in Portuguese as well.

In 2010 under the direction of then CRB Chairman, Dean Morbeck, CRB felt it once again needed restructuring to better meet the needs of its membership. Dean proposed a sweeping change to the structure of the CRB officers and Committees. The principle of these was a name change for the leadership of CRB from chairman to CRB president. It was felt by the leadership of CRB that the name change would elevate the stature of the CRB leadership in the eyes of other organizations allowing them to better represent CRB on the national and international stage.

In addition to this, Dean proposed doing away with the regional representation on the CRB Board. It was felt that the CRB was such a mobile group that the regional designation could limit CRB from choosing the best qualified individuals to lead the membership. Also, the CRB membership didn't function as regions, but was more cohesive in structure. Therefore, the regions were not the best "fit" for CRB.

These changes were discussed and developed throughout Dean's tenure as CRB chair. This was a huge shift for the special interest group as well as AAB, and much deliberation and many hours of effort went into the final product. With this, the leadership of CRB would change from a chairman, chair-elect, secretary, and four regional representatives (Southern, Midwestern, Eastern, and Western) to that of a CRB president, CRB president-elect, secretary, director member representative, supervisor representative, and medical technologist/member at-large representative. In addition, the CRB past-president would have a greater role, in that the responsibility of chairing the CRB Symposia at the AAB Annual Meeting would shift from the CRB president to the past-president.

In 2011, during which Bill Boone was chair of CRB, the proposal for the changes in CRB's structure were finalized and presented to the AAB Board for approval at their fall meeting. The proposal was approved and changes to the CRB Standing Rules and AAB Bylaws were made. The membership of CRB and AAB voted on the proposed changes early in 2012 and the changes were put into effect with the 2012 elections.

The restructuring of the CRB certainly energized the CRB because 2012-2013 was a very productive year for the special interest group. Under the direction of Marina Gvakharia, the Publications Committee published its first *CRB Newsletter* since 1997. But Marina did not stop after one edition, producing a second newsletter within the same year. Marina's goal is that her efforts will result in regular publications of the *CRB Newsletter* in the future.

In addition, under the leadership of Stan Harris the Legislative Committee was more active than it had been in years. The Legislative Committee spent considerable time and effort in the development of a position statement on Personhood legislation that it hopes will be adopted by the CRB membership in the near future. And once again, the Meeting Committee, chaired by Bill Boone, provided the CRB membership with an excellent program at the 2013 AAB Annual Meeting and Educational Conference in Las Vegas, Nevada. While these were the most active CRB committees under the current CRB leadership, all the CRB committees were more active than they have been in several years.

This was all made possible by the progressive vision of the AAB Board and the determination and energy of the CRB membership. Without this dedication from the membership, CRB would not have flourished as it has.

But many challenges lie ahead: The potential for genomics, proteomics, pharmacogenetics, state rules, federal rules, shrinking revenues for the laboratory, and who knows what else impacting our field. It will take continuing commitment by CRB members to address these issues and solve the problems that will inevitably occur, but there is little doubt that CRBers will rise to the occasion.

**Past Chairmen/Presidents  
College of Reproductive Biology**

**Chairmen**

- 1997-1998 – Grace Centola, Ph.D., HCLD/CC/ALD(ABB)
- 1998-1999 – Richard Rawlins, Ph.D., HCLD/ELD(ABB)
- 1999-2000 – Kristen Ivani, Ph.D., HCLD/CC/ALD(ABB)
- 2000-2001 – Thomas Pool, Ph.D., HCLD(ABB)
- 2001-2002 – David McCulloh, Ph.D., HCLD/CC(ABB)
- 2002-2003 – Barry Behr, Ph.D., HCLD/ELD/CC(ABB) and  
David McCulloh, Ph.D., HCLD/CC(ABB)
- 2003-2004 – Barry Behr, Ph.D., HCLD/ELD/CC(ABB)
- 2004-2005 – Gary Smith, Ph.D., HCLD(ABB)
- 2005-2006 – David Battaglia, Ph.D., HCLD/ELD(ABB)
- 2006-2007 – Kathleen Miller, TS(ABB)
- 2007-2008 – Joseph Conaghan, Ph.D., HCLD/ELD/CC(ABB)
- 2008-2009 – Margaret Papadakis, Ph.D., HCLD (ABB)
- 2009-2010 – Kimball Pomeroy, Ph.D., HCLD(ABB)
- 2010-2011 – Dean Morbeck, Ph.D., HCLD/CC(ABB)

**Presidents**

- 2011-2012 – William Boone, Ph.D., HCLD/ELD/CC/ALD(ABB)
- 2012-2013 – Mark Dow, Ph.D., HCLD (ABB)
- 2013-2014 – Marina Gvakharia, Ph.D., HCLD/ELD(ABB), MT(AAB)
- 2014-2015 – Carli Chapman, ELD/TS(ABB)
- 2015-2016 – Stanley G. Harris, ELD/TS(ABB)
- 2016-2017 – Gerard F. Celia Jr., Ph.D., HCLD/TS(ABB)

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