

ROCK Updates

- **Research Coordinator Transition:** Several sites have transitioned research coordinators this summer. **CJ Carcuffe (Craig.Carcuffe@uphs.upenn.edu)** and **Beth Howard (Beth.Howard@uphs.upenn.edu)** have taken over as interim research coordinators at Penn so you can reach out to them for any ROCK-related issues. Starting in September, there will essentially be a dedicated ROCK coordinator and a Penn Sports Medicine coordinator. However, these two positions will be cross-trained in order to minimize the impact of vacation and illness. Penn faculty and ROCK leadership are evaluating candidates now. Special thanks to **Connor Richmond, Ryan Fallon, and Eileen Storey** for all of their efforts supporting ROCK.

Prospective Cohort Updates

- **Incorporation of Focal Articular Cartilage Defects:** We have expanded the prospective cohort to enroll patients with OCD and/or other focal articular cartilage defects.
- **Conversion to REDCap:** The REDCap for the prospective cohort is built and has undergone testing at Penn/CHOP. We have set up external REDCap user accounts for all sites that responded and we plan to grant all ROCK members and coordinators access to begin using the REDCap at the end of this month. See the final page of the newsletter for a look at some features of the REDCap.
- **Updated Case Report Forms:** The updated CRFs that were reviewed at the annual meeting in January are now approved by Penn's IRB. We are making some final revisions to these forms based on the REDCap, but we plan to provide fully updated versions for all sites to start using in early August.
- **IRB-Approved Study Documents:** Penn's IRB has approved the incorporation of focal articulation defects and the use of REDCap for electronic data capture. We will distribute the IRB-approved protocol and consent form to all sites later this week to submit to your site's IRB. With this recent approval, we will also help get Children's Hospital of Colorado and the Mayo Clinic set up to start enrolling at their sites.
- **Follow-Up:** The earliest subjects enrolled in the prospective cohort are at the 2-year follow-up time point. Please remember to reach out to subjects at your site who are due for follow-up. In the future, we will use the REDCap to aid with tracking follow-up percentages and administering questionnaires to subjects no longer returning for care.

RCT Update

- The RCT needs a few more follow-up subjects to complete their questionnaires to halt enrollment. If your site has subjects overdue for follow-up, please try to get them to fill out these questionnaires.

Future Directions

- **Imaging Portal:** Greg Myer has ironed out the imaging portal issues so Eric Wall and Matt Milewski are planning to move forward gathering reviewers and setting up data collection.
- **ROCK elbow expansion (ROCKET):** Carl Nissen and Don Bae have made great progress setting up ROCKET. The REDCap forms are nearly complete and the web imaging portal is in the final stages of fine tuning. They hope to have a working REDCap and web portal by the end of the summer, which will then enable the group to start enrolling capitellar OCDs prospectively.

Prospective Cohort/RCT Update

PC Enrollment

Site	# Enrolled
Texas Scottish Rite Hospital	98
Children's Hospital of Philadelphia	85
Connecticut Children's Med Ctr	64
St. Luke's Intermountain	56
Hospital for Special Surgery	38
Cincinnati Children's Hospital	33
Medical College of Wisconsin	26
Rady Children's Hospital	25
Children's Ortho of Atlanta	23
Tennessee Orthopaedic Alliance	20
University of MN/TRIA	15
Penn	13
Washington University of St. Louis	13
Children's Mercy Kansas City	7
Boston Children's Hospital	0
Kaiser Permanente	0
Cleveland Clinic	0
Andrews Institute Children's Health	0
Children's Hospital of Colorado	0
Mayo Clinic	0
Hospital for Sick Children	0
University of Gothenburg	0
Asklepios Clinic St. Georg Hamburg	0
National University Health System	0

If you have any questions, please contact ROCK@uphs.upenn.edu If you are IRB approved and a Data Sharing Agreement has been fully executed, please begin enrolling and entering data in REDCap. If you are IRB approved but pending Data Sharing Agreement finalization, please begin enrolling, but do not enter data in REDCap.

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RCT Enrollment

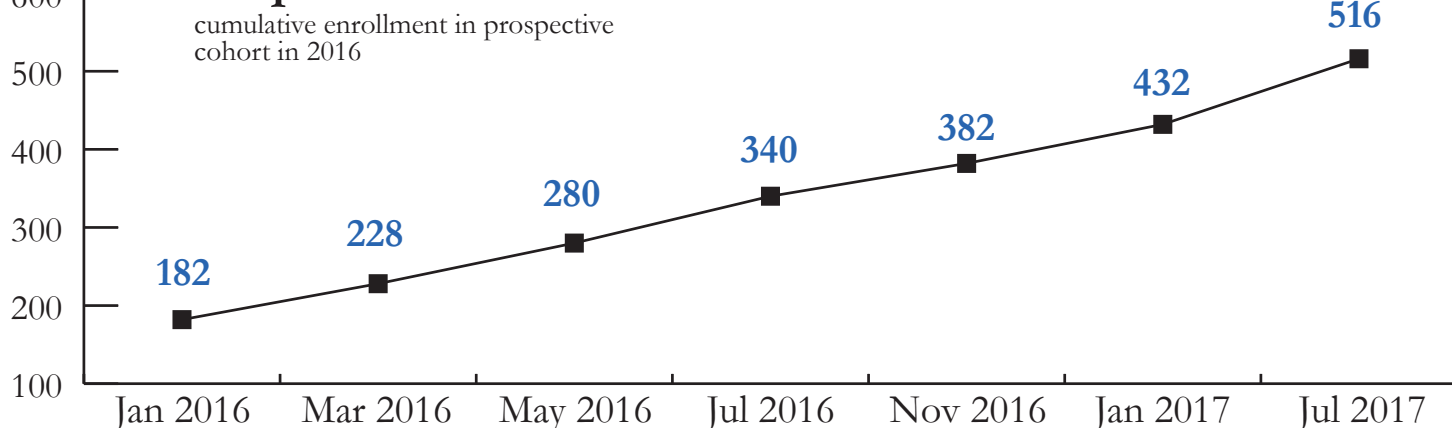
If you have questions, contact Elizabeth Liotta at BCH: elizabeth.liotta@childrens.harvard.edu || 857-218-3272

Site	Surgeon	# in RCT	# in past month
Boston Children's Hospital	Heyworth	22	0
Children's Hospital of Philadelphia	Ganley	17	0
Rady Children's Hospital	Edmonds	8	0
Connecticut Children's Medical Ctr	Nissen	7	0
Medical College of Wisconsin	Lyon	7	0
Cincinnati Children's Hospital	Wall	7	0
St. Luke's Intermountain	Shea	5	0
Rady Children's Hospital	Chambers	3	0
Hospital for Sick Children	Murnaghan	2	0
Connecticut Children's Medical Ctr	Milewski	2	0
Hospital for Special Surgery	Green	1	0
Kaiser Permanente	Weiss	1	0
Boston Children's Hospital	Kocher	1	0
Tennessee Orthopaedic Alliance	Anderson	1	0
Rocky Mountain	Polousky	1	0
Washington University of St. Louis	Wright	1	0
Washington University of St. Louis	Nepple	1	0
		86	0

Randomization

- Call Elizabeth Liotta (office number 857-218-3272) or Greg Myer (cell number 513-404-4382). Details are also available on the ROCK Website.
- Enroll and randomize yourself (option #1 may not be available without planning ahead)
 - Enroll patient
 - <https://rockstudygroup.research.cchmc.org/auth/login>
 - Select 'Enroll patient' from the tab on top of the page
 - Enter site, Patient ID (only include last 3 digits and laterality)
 - Select 'Consented'
 - Prompted to enter eligibility criteria, including activity restriction and NWB
 - Randomize Patient
 - <https://rockstudygroup.research.cchmc.org/auth/login>
 - Must use **SURGEON ACCOUNT** to randomize.
 - From login, select 'Patients' from tab on top of the page
 - Find the patient ID
 - Select corresponding blue 'Randomize Patient' button on the right side of the page

Prospective Cohort Enrollment Breakdown



Case of the Month

Surgeons: Dr. Ted Ganley, Dr. Peter Fabricant

Institution: The Children's Hospital of Philadelphia/Hospital for Special Surgery

- Powerpoint of past cases available at <http://kneeocd.org/category/case-discussion/>

Website Activity

Traffic Updates

- **2,567 sessions** (Jan 2017 = 2,132; July 2016 = 2,054; Jan 2016 = 2,285; July 2015 = 2,740)
- **1.47 pages/session** (Jan 2017 = 1.65; July 2016 = 1.73; Jan 2016 = 1.91; July 2015 = 1.38)
- **1,965 new users** (Jan 2017 = 1,570; July 2016 = 1,445; Jan 2016 = 1,572; July 2015 = 2,385)

Sites before kneeocd.org on google search

- **'knee ocd' = 8** (Jan 2017 = 17; Jul 2016 = 13; Jan 2016 = 21; Aug 2015 = 17)
- **'Osteochondritis dissecans' = 28** (Jan 2017 = 34; Jul 2016 = 23; Jan 2016 = 45; Aug 2015 = 40)
- **'knee osteochondritis dissecans' = 27** (Jan 2017 = 45; Jul 2016 = 25; Jan 2016 = 26; Aug 2015 = 36)
- **'osteochondritis dissecans of the knee' = 23** (Jan 2017 = 34; Jul 2016 = 26; Jan 2016 = 28; Aug 2015 = 25)

Recent ROCK Publications

<http://kneeocd.org/rock-members/literature-review/>

The Reliability of Assessing Radiographic Healing of Osteochondritis Dissecans of the Knee.

Wall EJ, Milewski MD, Carey JL, Shea KG, Ganley TJ, Polousky JD, Grimm NL, Eismann EA, Jacobs JC Jr, Murnaghan L, Nissen CW, Myer GD; Research in Osteochondritis of the Knee (ROCK) Group, Weiss J, Edmonds EW, Anderson AF, Lyon RM, Heyworth BE, Fabricant PD, Zbojniec A. Am J Sports Med. 2017 May;45(6):1370-1375.

Management of Osteochondritis Dissecans Lesions of the Knee, Elbow and Ankle.

Bauer KL, Polousky JD. Clin Sports Med. 2017 Jul;36(3):469-487.

High Rate of Osteoarthritis After Osteochondritis Dissecans Fragment Excision Compare With Surgical Restoration at a Mean 16-Year Follow-up.

Sanders TL, Pareek A, Obey MR, Johnson NR, Carey JL, Stuart MJ, Krych AJ. Am J Sports Med. 2017 Jul;45(8):1799-1805.

Insights into the Epiphyseal Cartilage Origin and Subsequent Osseous Manifestation of Juvenile Osteochondritis Dissecans with a Modified Clinical MR Imaging Protocol: A Pilot Study.

Ellermann J, Johnson CP, Wang L, Macalena JA, Nelson BJ, LaPrade RF. Radiology. 2017 Mar;282(3):798-806.

Quantitative susceptibility mapping detects abnormalities in cartilage canals in a goat model of preclinical osteochondritis dissecans.

Wang L, Nissi MJ, Toth F, Johnson CP, Garwood M, Carlson CS, Ellermann J. Magn Reson Med. 2017 Mar;77(3):1276-1283.

ROCK REDCap Preview

Use of defined events to capture data at appropriate study time points

Data Collection Instrument	Screening (1)	Baseline (2)	3 Months Post-Baseline (3)	6 Months Post-Baseline (4)	9 Months Post-Baseline (5)	1 Year Post-Baseline (6)	2 Year Post-Baseline (7)	5 Year Post-Baseline (8)	10 Year Post-Baseline (9)	25 Year Post-Baseline (10)	Interim Visit (11)
Screening And Eligibility	✓										
Visit Date		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Patient Questionnaires (survey)		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Surgeon Evaluation		✓	✓	✓	✓	✓	✓				✓
Imaging Form		✓	✓	✓	✓	✓	✓				✓
Surgery		✓	✓	✓	✓	✓	✓				✓

Automated questionnaires

Patient Questionnaires

Data Access Group: Children's Hospital of Philadelphia [?]
 Invitation status: Survey options

Editing existing Record ID 13-001-R
 Event Name: 3 Months Post-Baseline

Record ID: 13-001-R

Study Visit:

- Baseline
- 3 months
- 6 months
- 9 months
- 1 year
- 2 years
- 5 years
- 10 years
- 25 years
- Other

Date Completed: Today [P-D-Y] [reset]

Age: View equation

PEDI-IKDC

SYMPTOMS*
 *Grade symptoms at the highest activity level at which you think you could function without significant symptoms, even if you were not actually performing activities at this level.

Questionnaires can be completed in REDCap by coordinators or subjects:

All sites will have the option to either administer questionnaires on paper CRFs and then have coordinators enter in REDCap or have subjects enter directly on an iPad in clinic or at home.

Auto-calculated age field (hidden from survey view) to ensure correct questionnaires are administered:

Subjects will automatically be assigned the correct adult or pediatric versions of the questionnaires based on their age at the time they are filling out the surveys.

Expansion to OCD and FCD

INCLUSION CRITERIA

Diagnosis of OCD confirmed by X-ray or MRI? Yes No

Diagnosis of focal articular cartilage defects by MRI or arthroscopy? Yes No

Assess >1 lesion

How many lesions are you addressing? 1 2 3

Only assess number of es

Diagnosis of lesion 1

- OCD MFC
- OCD MTP
- OCD LFC
- OCD LIP
- OCD Patella
- OCD Trochlea
- FCD MFC
- FCD MTP
- FCD LFC
- FCD LIP

Coordinators: If you have not sent us the information on your site members that need access to the Prospective Cohort REDCap, please do so now.

